THE JOURNAL

OF

MENTAL SCIENCE

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EDITED BY

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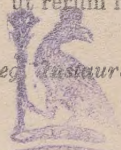
"Nos vero intellectum longius a rebus non abstrahimus quam ut rerum imagines et radii (ut in sensu fit) coire possint."

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.*

THE JOURNAL OF MENTAL SCIENCE.

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PART 1.—ORIGINAL ARTICLES.

On the Treatment of the Insane sixty years ago as illustrated by the Earlier Records of the Dundee Royal Asylum. By JAMES RORIE, M.D., Physician and Superintendent of the Dundee Royal Asylum.

Having been invited by our indefatigable Secretary to give a contribution to the present meeting, and having been recently engaged in looking over the earlier records of the Old Asylum of Dundee, it occurred to me that a few remarks on the early history of this institution and the means then in use in the treatment of the patients might not prove uninteresting, as the Asylum was erected at a very important period in the history of psychological medicine, namely, that period when it had dawned on the public mind that harshness and chains were not the proper remedies for the insane, but that much might be done in the treatment of this affliction by kindness, gentleness, and especially by healthy occupation. The circumstances, then, which led to the erection of the Dundee Asylum, as described in a report published in 1815, were as follows :—

Dundee, which, as to population, ranks the third in Scotland, had no public institution for furnishing medical and surgical aid to the poor till 1782, when two gentlemen, a clergyman and a surgeon, commenced a subscription for the establishment of a dispensary. Their laudable zeal was liberally supported by an annual contribution and by the gratuitous assistance of the medical gentlemen in town, who, having divided the town into districts, not only prescribed to such as called upon them, but visited the poor at their own houses. The good effects of this infant dispensary was very sensibly felt by the poor; but it was limited in its means, and the want of a house for the reception of patients greatly diminished its usefulness. Under these circumstances the contributors resolved to make an effort to procure the means for building an

infirmary. It was in attending to the affairs of the infirmary that the managing committee had to witness several cases of mental derangement, and to regret that the institution did not enable them to afford any relief to the unhappy persons. The subject was not only impressed upon the attention of the infirmary directors, but also excited much interest in other parts of the country, with the result that a liberal support was given to the movement by public bodies and inhabitants both in town and country. A committee of contributors being appointed, about three and a quarter acres of ground were purchased about half a mile north of the town in an elevated situation, sloping to the south, with a dry soil and the air free and unconfined.

As the plan then furnished "had the unqualified approbation of the best judges," the following outline, as representing the views then entertained on this subject, may not be uninteresting. This plan possessed in a high degree the following advantages :—It admits of a very minute classification of patients according to their different ranks, characters, and degrees of disease. It secures to every room the freest ventilation, and provides for the diffusion of heat through the building. Under one general management it separates the different classes of inhabitants from one another as completely as if they lived at the greatest distance; and it enables that system to be executed which every asylum ought especially to keep in view, that of great gentleness and considerable liberty and comfort, combined with the fullest security. The plan which I now show you, and which is one of the original plans, exhibits a building, consisting of a central building and four wings—the letter H plan. At each end of the building was a room for the superintendents, having on one side a day-room for the patients which communicated with the adjoining wings and with the airing-grounds, of which there were two at each end of the building. At each of the eastern and western extremities of the airing-courts the plans showed wards for ten patients, with attendant's room and two day-rooms, and two airing-courts, all separately enclosed, but communicating with the main house by a covered passage. This portion was intended for violent and epileptic patients, but was never erected. It is of interest, however, as indicating the separate block system with communicating covered ways, but in a somewhat rudimentary stage of development. The front court was occupied by the entry to the house, and on each side by a walk and shrubbery. The back court, embracing kitchen and laundry, were laid out in a similar manner. Such were the general arrangements of the

building, whose foundation stone was laid in 1812. This ceremony attracted much attention at the time, the whole town being *en fête*. The stone was laid by the Right Hon. Lord Viscount Duncan, and with usual Masonic honours and accompaniments. The object of the institution, as inscribed on the parchment roll, was "to restore the use of reason, to alleviate suffering, and lessen peril where reason cannot be restored."

Next in importance to the stone and lime arrangements of a charitable and public institution is the constitution of its directorate, which, in the present instance, was as follows :—Under a Royal Charter in 1819, all contributors over certain sums to the infirmary or asylum funds were incorporated into one body, "the Dundee Infirmary and Asylum," but providing that this corporation should consist of two separate establishments, with distinct and separate estates and funds, the Infirmary and the Asylum; and in order to secure a thoroughly public and representative direction of the affairs of the asylum, the following directorate was established :—The Lord Lieutenant of the County, the representative in Parliament for the county, the Sheriff Depute of the county, the representative in Parliament of the burgh, the Moderator of the Synod of Angus and Mearns, five life directors appointed by the contributors, the Provost Eldest Bailie and Dean of Guild for the time being, three persons chosen by the nine incorporated trades, one by the three united trades, four by the Guildry, one by the fraternity of seamen, one by the chairmen of contributing lodges or societies, two by the Kirk Session, two by the Presbytery of Dundee, four by the freeholders and commissioners of supply, and eight by the governors of the infirmary. It would have been difficult to have selected a more judicious and representative directorate, and the harmony which has always prevailed in the administration of the affairs of the institution is the best proof of the sagacity and wisdom then displayed in their choice.

Accustomed to hear so much of the great improvements which have of late years been effected in the amelioration and treatment of the insane, one turns with a feeling of something more than ordinary curiosity to the earlier reports of such venerable institutions as the Scotch Chartered Asylums to ascertain the views then entertained as to the nature of insanity and its means of cure; but it is to be feared few nowadays realize the advance that had then been made. The earlier reports of the Dundee Asylum are full of interest in this respect, showing, as they do, that at the date of erection and

opening of the institution for the admission of patients in 1820, the idea that the insane belonged only to the dangerous classes of society, and required nothing but safe custody for the benefit and safety of the public, had already given way to more humane, benevolent, and enlightened views. The fact that insanity was after all a disease, and capable of medical treatment like other diseases, was now admitted, and the great benefit of kindness, gentleness, and careful attention fully recognized; but few will be prepared to hear of the extent to which amusements, occupation, and recreation were regarded already as indispensable to the successful treatment of the insane. Nevertheless, in the first report of the asylum, published 1st April, 1820, we find this subject treated of as follows:—"The means of cure, though resting mainly on the moral regimen and general management of the house, have a constant reference to the medical art, as the functions of mind are immediately dependent on bodily organization, and insanity is thus often found intimately connected with, or the obvious result of, disease in the general system, which at all times sympathizes deeply with mental distress. Hence the application of medicine has been of decided and effectual service in many instances in the experience of this institution." But not only the value of medicinal, but also the importance of the moral agents was fully recognized. Thus we find the enclosing of the ground referred to not only as of consequence in respect to economy, but also "to the enlarged field of amusement which this would open up to many of the patients. Manual labour and innocent amusements form an agreeable recreation to those in a certain state of convalescence, and by abstracting the mind from the subject of erroneous thought, and improving the general health, have been always found a powerful means of remedy, while they add so much to the comfort and enjoyment necessarily abridged by this sad calamity. Many of the patients fill up a tedious hour by reading on various subjects, books, newspapers, &c." The views held in regard to such matters as the use of restraint would also seem to have made considerable advance, for although at this date regarded as absolutely necessary, mechanical restraint was employed with much caution and reserve. Thus it is said—"In cases of violence, restraint is necessarily had recourse to; but this is done as seldom and with as little severity as possible; and when the paroxysm that has rendered restraint necessary subsides, it is immediately withdrawn. Indeed, restraint even in cases of violent paroxysm is often superseded by those personal atten-

tions on the part of the keepers, who, with a quick discernment —the fruit of experience—can often anticipate outrage, and counteract its force, before it is thoroughly evolved. Certain discipline, indeed, without harshness, is, in general, sufficient to overawe the more violent; and habit confirms the fortunate association which produces tranquillity, and this, aided by the powers of nature and other subsidiary means, often leads to a happy issue." No regular attending physician would appear to have been at first appointed, the only officers being a treasurer, secretary, lay superintendent, and his wife acting as matron. In the second report, however, we have the visiting physician recognized as one of the regular officers of the institution.

In this second year's report for 1821 we have evidence of the recognition of the importance of the removal of the patient from old habits and associations, and especially the advantages presented by a public asylum for the treatment of the poor, and those of limited means and unable to pay for special attendance.

"One of the first steps," writes the reporter for the year ending May 31st, 1822, "towards the successful treatment of the insane was the establishment of Lunatic Asylums. In few private familes can a course of judicious treatment ever be successfully followed out. Many conveniences must always be wanting in them, which are to be found in every well regulated public establishment, while change of scene, and of those associations by which alienation of mind is often aggravated and confirmed, besides other things of very powerful influence on the health, comfort, and recovery of insane persons—all unite in recommending the removal of persons labouring under insanity from home, and a temporary separation of them from their relations. The time is happily gone by when it was thought enough to prevent the patient from doing violence to himself or to those around him. To security are added comfort and the means of cure. No longer condemned to drag out a miserable existence in filth and wretchedness, in solitude and nakedness, perhaps in darkness and in chains, the spirit of the times respects the feelings of the unhappy sufferer, fans the latent spark of reason in his mind, soothes him under his strongest excitements, and by means the most gentle and humane, either restores him to himself and to the world, or at least renders his situation infinitely more comfortable than was formerly attempted or even contemplated."

"If these observations," continues this reporter, "will apply

to the treatment of the more affluent, they are still more applicable to that of the insane poor. The rich may contrive to surround their suffering relatives with many sources of comfort, and to provide for them the means of recovery in private, although seldom, if ever, with that success which attends an institution conducted by those who are familiar with the application of the proper means of soothing and restoring the insane. But the poor have no resources: their friends have not the means of providing for them what is necessary for their security and still less for their recovery. An attempt to do so, indeed, continued for any length of time, is often fatal to the very object they have in view, as it confirms the false impressions indulged by the patient, and renders recovery more precarious. Nor will asylums conducted for private advantage, however skilfully and successfully managed, meet the exigencies of the poor. To the poor an institution conducted on public principles, and with a view eminently to the accommodation of a class of persons whose circumstances, and those of their friends, render the lowest possible terms of board indispensably necessary, is the only refuge. Such an institution is the Dundee Lunatic Asylum."

These views, so well expressed, may well commend themselves to the careful consideration of practical philanthropists of the present day. That the humane treatment was now thoroughly understood is also seen from the medical report of this year, 1821-22. After remarking that "it is almost needless to repeat what is so obvious and so well confirmed by universal experience, that the numbers of cures, other circumstances being equal, holds a direct ratio to the recency of the attack," an axiom which has been well quoted since, the report goes on to say "that severity and corporal punishment are here unknown, and it is surely very satisfactory to announce that not a single patient has yet been confined during the day to restrain fury or prevent mischief above an hour or two, and that very rarely during the past 12 months." And as showing how close we are here to a very different state of things, it is added: "Several who had known only chains and solitary confinement for many years experienced immunity from all restraints," and one case illustrative of this is given of an elderly man who had been confined for 15 years in the prison of one of the northern counties (being a criminal maniac), and whom, to use the language of the report, "continued violence and furious outrage had condemned to perpetual chains, but who, in a very short time, recovered the use of his senses in a very con-

siderable degree, and was enabled to join in the amusements and recreations that belong only to those advanced in convalescence, or of a milder class." In this report a strange intimation is made, namely, that "the whirling chair has only once been employed, but without decided benefit. Further trials warranted by the experience of other institutions are yet awanting here to determine its value." This is the only notice of this curious instrument which I have found in connection with the Dundee Asylum, and, indeed, we rarely find it referred to even in the literature of that age, far less at any subsequent time, and the only description of one I have been able to discover is that of Sir Alexander Morison in his book of cases published in 1828. Its action is thus described: "The excitement of certain emotions or passions is sometimes of use in mental treatment, in particular the agreeable emotions of hope and of religious consolation, and the disagreeable ones of shame and fear. To excite the latter, in a moderate degree, certain mechanical means have been employed, as the rotatory machine and the douche of cold water." These whirling chairs would seem, therefore, to have belonged to the same category as the bath of surprise, an arrangement whereby a patient walking along a corridor suddenly found the floor give way and himself tilted into a cold bath. They would seem to have been variously constructed. In some by mechanical arrangements the top of a low table, on which a chair could be placed or where the patient could be laid on his back, was made to revolve with greater or less speed. In others, as in the one described by Sir A. Morison, an ordinary arm-chair is made to turn by ropes and pulleys moved by a small wheel. The chair, with straps to secure the patient, was then suspended from a cross-beam, and by lowering or raising the different ropes the patient could be placed at any inclination or position desired. The only effect that I ever heard to result from whirling chairs was in some cases to produce severe diarrhœa. The following account, extracted from the Report of 1824, gives a very good idea of the extent to which occupation and amusement were employed and valued as curative agents:—"Seventy-four patients," says the reporter, "still remain in the house, and though no general description can apply to cases that must be almost infinitely diversified, yet, at this moment, it can be stated that none of the patients are confined to their apartments, that in fine weather they are generally found in the airing-grounds" (indeed, it was a standing order about this date that the doors leading into the airing-courts should stand open

from morning to night, so that the patients might go in and out when they liked), "pursuing those avocations or amusements to which they are directed by their former habits or tastes. Some are engaged in reading, some in playing on musical instruments, some in drawing; some are employed in manual labour in the garden—here a party is seen at cards, there a couple are intent at backgammon. Some females are sewing, some knitting or spinning, some voluntarily engaged in the work of the house, while it must be added, with regret, that there are others from whom the eye of the keeper must not wander." Indeed, from this time constant attention seems to have been given to the occupation and employment of the patients, although it was not till several years afterwards, 1837, that the development reached its fullest extent. By this time weaving and other workshops had been erected and fitted up, and yards for stone-breaking, &c., specially set apart for industrious patients, and the general result is thus referred to by the Directors in their Report:—"The spade, the hammer, the hoe, the loom, the spinning-wheel, the needle, have been found most efficient expedients for dispelling the gloom of the melancholy, and of diffusing serenity and contentment throughout the different departments of the establishment." "The cheerfulness and alacrity with which the patients engage in their labours is a proof of their anxiety to obtain relief from the burden of inactivity. The pleasure with which they regard the fruits of their labours, and the attachment they gradually form to their various kinds of occupation, prove the value of manual labour to be a remedial measure of the greatest importance." As great misunderstanding now exists in the minds of many as to the extent to which the patients were then employed, it may not be out of place to give the following facts:—In 1835 the daily average of pauper patients resident in the Dundee Asylum was 96, and of these 92 were constantly employed, principally as follows: 14 men and 6 women were engaged teazing hemp and oakum; 10 men and 2 women weaving sheeting; 14 men gardening; 14 women spinning, and the rest were occupied in shoemaking, tailoring, mat-making, cutting firewood, mangling, pumping water, shoebinding, dressmaking, shirtmaking, knitting, quilting, upholstery, staymaking, flowering, fringe-making, repairing clothes, and assisting in laundry, scullery, kitchen, and general housework, the annual outcome presenting such results of work done as 642 webs of sheeting and 23 of bagging woven, 400 spindles of hemp spun, 211 cubic yards of metal broken, &c. About the same period 100 out of 130 patients

are referred to as attending chapel. Now I think it must be frankly admitted that these are not the ideas we are apt to form of the state of the Scotch asylums during what are now regarded as the dark ages of these institutions, that is before the abolition of restraint.

Now let us look for a little at the position of the officers, and especially the medical staff. At first, when the asylum was opened in 1820, no regular physician would seem to have been appointed, the only officers being a treasurer, secretary, superintendent, and matron ; but in the report published in 1822 we find Dr. Ramsay occupied the position of visiting physician, and continued so till his death in 1835. The resident officers were a lay superintendent, with his wife acting as matron, the visiting physician being the principal responsible officer, and visiting the institution several times a week as required. Indeed, it was not till 1829 that the Act of Parliament was passed rendering it imperative that a medical officer should be resident in Asylums, and that only when the patients exceeded 100 in number. In accordance with this arrangement, it will readily be understood that the superintendent was merely a house steward, carrying out the instructions of the physician as principal officer. Accordingly, in the rules then in force, the physician kept the register of admissions ; no patient was allowed to leave the precincts of the house without particular permission and instructions given to the superintendent by the physician. The physician had to keep the case-books, and so on.

The superintendent superintended the whole establishment, had authority over and power to dismiss the male servants, kept accounts of all provisions received and of moneys expended. The matron had similar authority over the female servants and female side of the house.

In addition, however, we find rules drawn up for an apothecary, who was never appointed, but whose duties were to be discharged *ad interim* by the lay superintendent. His duties were to get full information in regard to patients' histories for the physician's information, entering into case-books reports and physician's prescriptions, to faithfully administer every medicine ordered by the physician, but except in cases of sudden emergency to prescribe nothing.

Indeed, the efficiency of a lay superintendent was so thoroughly believed in, and the management seems to have been so satisfactory, that when the Act was passed in 1828, enacting that " Wherever there are 100 patients or upwards in

any asylum there shall be a medical gentleman resident in the house," the directors resolved, "That as the house cannot, in its present state, afford comfortable accommodation for more than 100 patients, this number should not be exceeded in the meantime, the directors being fully satisfied that the appointment of a resident medical gentleman, while it brought additional expense to the establishment, would not contribute to the real welfare and comfort of the patient." The necessity of appointing a "resident physician and surgeon" was thus for the time got over, but only by adopting a policy which, had it been persisted in, would have certainly brought disaster on the asylum, and which was several times afterwards temporarily adopted, but never without serious consequences. Indeed, no policy can ever be so hurtful to any institution, situated as the asylum then was, as that of restricting the number of patients to be admitted to the available accommodation, instead of extending the buildings.

A consideration of the position of the medical officers naturally leads us to examine the medical treatment then in vogue, and at the present time, when the question of adopting the best means for keeping alive the true spirit of the medical profession in asylums is under review, we turn to our early records with feelings of more than ordinary curiosity, and we find there that the direct influence of medicinal treatment would seem to have been much more believed in than even at the present day. In the report for the year 1824 it is said : "Within the last twelve months there have been examples of the successful application of medicine in dispelling some of the most unhappy illusions of the senses and perversion of the natural feelings. One man having the idea of a consuming fire in his vitals, was rendered miserable beyond conception by this notion, which perpetually haunted his imagination, and had rendered him obstinate in refusing food and drink, as, in his estimation, adding only fuel to the flame within him. After the use of appropriate medicine in correcting great and manifest disorder of the stomach and bowels, this idea gave way to more correct thought. He is now convalescent and happy." Again, the experience of the year following is thus recorded :—"Some of the worst varieties of madness, with all its revolting accompaniments, have given way to the use of active remedies—but experience justifies the remark that it is neither by an exclusive moral treatment nor the use of remedies alone drawn from the medical art, that the cure of lunacy is to be effected. It is best accomplished by a happy combination of both, and the discriminate application of

their principles to the specialities of every individual case." And in another report (1837) we have the remedies specified thus :—"As a general rule, every individual case requires a different plan of treatment ; various remedies are employed, but we find that there is no specific for the cure of insanity. Topical blood-letting is of the greatest service. So is dry cupping. Blisters, and a liniment composed of the tincture of cantharides, the spirit of hartshorn, and croton oil, applied twice or thrice to the shaven scalp, have also proved beneficial. General blood-letting is very rarely resorted to. Baths of all kinds and cold lotions are in constant requisition, and are used with great advantage. Calomel, jalap, salts, rhubarb, tartar emetic, colocynth, croton, and castor oil are in general use." Although we find the bleedings referred to as topical, still, from the extent to which they were carried, they must have had a pretty general effect, as 20 leeches to the head, and cupping from the neck to the extent of 12 and 14 ounces, and this often repeated, was very generally practised. The following cases, which I have extracted from the 1st Case Book—indeed, they are the cases of the 121st and 272nd patients admitted—will give a much better idea than can otherwise be done of the practice and pathology of these days and as they are cases of intrinsic value, I have the less hesitation in inflicting them on your attention at present.

Cases.—Case No. 12. A. B., admitted 22nd June, 1820, æt. 40 ; manufacturer ; sanguine temperament, fair complexion, blue eyes, married ; with usual signs of furious mania, requiring very close restraint to prevent injury to himself and others; face flushed, eyes very wild and staring, p. 100, rather full. Copious perspiration, apparently from his struggles and incessant motion. B. costive. Tongue white and foul. Temporal artery beating full. Takes his food tolerably well, and sleeps none.

Complaints began about a fortnight before his admission, apparently from having taken more spirituous and fermented liquor than usual. He was bled, his head was shaved and bathed frequently with cold water and vinegar. Strong cathartics were given, and his diet regulated accordingly. For a few days he seemed to recover, but again relapsed, and had his head blistered without apparent benefit. Spare diet enjoined, and the antiphlogistic regimen in general, with occasional purgatives.

July 20th.—Has now gradually become more calm, and less subject to fits of ungovernable fury, less loud talking and quarrelling with ideal objects. Countenance evidently indicates the approach of convalescence. Walks out regularly to the airing-ground, and joins in the society of the day-room ; middle diet.

December 22nd.—Little improvement in his mental faculties, though he is more tranquil and much less subject for these last two months to any fits of irritation. Pulse calm, countenance cheerful, t. clean, appetite good, belly natural. Sometimes he becomes affected with severe diarrhœa, which has occasionally been relieved by magnesia and rhubarb. From 1 to 2 grains of tartrate of antimony dissolved in ℥i. to ℥ii. of water has done much on several occasions to tranquillize his mind and relieve those fits of irritation to which he has been subject ever since his admission.

January 6th, 1821.—Continues to improve.

January 31st.—Is still subject to occasional fits of irritation and violence, particularly in tearing or otherwise injuring his clothes or person, but keeps free from febrile symptoms; P. calm, countenance generally composed, health greatly improved.

February 28th.—Is greatly improved in all respects, but given to sallies of mischief in tearing his clothes, or throwing stones, or tearing up the plants in the airing-ground, but seems otherwise of placid temper, and conscious of everything about his person.

June 15th.—For the last three months his state has been somewhat more variable than before, and after some brighter periods he seems to relapse into greater derangement of his ideas, with less command over them, and without any obvious connection with the state of bodily health, which, on the whole, has continued good, the bowels, however, often requiring medicine. On the 16th May he was seized suddenly, in the morning, with epilepsy, which recurred several times during the day, and left him in the evening under coma resembling apoplexy. P. slow, and neither hard nor full, face rather pale, pupils contracted, bowels easy. Temporal arteriotomy was performed to 8oz., head shaved and blistered, sinapisms to his feet, Ol. Ricini and several enemata of senna immediately exhibited. A quantity of roots of grass and much fæculent matter were discharged. The coma was evidently relieved by the remedies employed, and gradually gave way to the entire restoration of his consciousness, and of as much reason as he has of late enjoyed. In the two successive days he has had a slight return, but without coma, and he is now, without any particular remedy (though with a restricted diet and constant attention to his bowels), in a convalescent state.

July 10th.—Has had no return of fit, but is equally mischievous and destructive of his clothes, &c., as ever, but attends to his natural wants. There is some degree of weakness, resembling paralysis, in his left leg and arm, but to no severe degree.

August 10th.—Ceases to attend to his natural wants, and seems not to regain any portion of his mental faculties. He is silent and stupid. Health good. No return of fits.

September 12th.—No return of fits, and his paralytic affection is much gone, but he remains insensible to the calls of nature, and has become extremely dirty. In a few days after last report he had

another lucid interval, and was left free of restraint, but he soon relapsed into his present state. Appetite good. Sleeps ill. Some sores about the genitals threatening gangrene from the irritation of the urine healed up under the linseed meal poultices.

September 25th.—Was attacked with epileptic fits at 3 p.m. Hab. dos. Cal. et Jalap cum Ol. Ricini, &c. Opus sit et enemata.

September 26th.—Free of fits. Medicines operated freely.

October 3rd.—Is now convalescent. No further occasion for medicine.

October 12th.—More stupid than ordinary, and has that expression of countenance indicating the approach of a fit. B. costive. T. whitish. Appetite good, P. calm, sleep variable. Hab. dos. Cal. and Jalap.

October 13th.—Medicine operated powerfully, and with evident good effect.

November 10th.—Particularly noisy during the night.

November 14th.—Still continues in the same way.

November 24th.—Again attacked with fits about 7 p.m., which continued with little intermission until next evening, when he died quite comatose. Body not opened.

Here we have a very well reported case of general paralysis running its usual course.

The following shows also how a case of organic brain disease was then described and treated.

No. 27. Mr. M.P., from Edinburgh, æt. 42. Spare habit, dark complexion. Innkeeper. Some of his relatives are known to have been affected with derangement.

Admitted on the 6th January, 1821, with symptoms of very manifest derangement of intellect, occasioned by a long course of hard drinking, particularly of spirituous liquors. Quick and lively in his expressions, but free of violence. His mind is naturally turned towards the objects of his usual pursuits, but perfectly confused and extravagant on this or any other topic that engages his attention. Pulse calm, T. clean. Appetite bad, B. irregular.

General health indifferent for some time past owing to frequent excesses. Has been formerly subject (about seven years ago) to epileptic fits from the same cause, but of short duration, and no great violence. The dyspeptic symptoms resulting from continued intoxication had been so violent as to give rise to the suspicion of schirrus of pylorus. Purgatives and laudanum ether and assafœtida were said to have been useful in his former attacks of what I apprehend to have been more allied to the delirium tremens than any settled attack of the maniacal kind. Hab. Pulv. Rhei c. Magnes.

January 7th.—A very violent diarrhœa came on prior to the use of the powder, accompanied by retching and vomiting. P. very calm.

Mind more serene and collected, but still very manifest incoherency of thought and unnatural elevation of spirits.

January 17th.—Had remained in a state of convalescence in all respects until within these two days, when he became irascible and quarrelled with his keeper on the slightest occasions. At 2 or 3 a.m. he was seized with a very violent fit of mania after a restless and sleepless night, requiring the strait waistcoat and very strict confinement. During the whole day the fit raged with unabated fury, when he again became calm and was released from strict confinement. P. a little quickened, eyes bright and sparkling, countenance flushed, T. whitish, spits often, attempted to burst from confinement with most violent and unceasing exertions towards morning, and refused for some time to take food. Thirst urgent.

19th.—Violent and tranquil by turns, but has been out to the open air in the course of this day. Low diet. Hal. Sol. Tart. Emetic ℥i.

January 20th.—This operated violently, and occasioned severe diarrhœa.

January 31st.—Is still under confinement from the frequent recurrence of violent agitation and fury ; P. on the whole calm ; heat of skin varies ; eye bright and unsettled ; pupil much contracted; headache; B. again costive ; appetite indifferent ; much thirst ; T. clean.

February 1st.—Abrad. Capillitium et appr. Capiti raso Emplast. vesecator amplum. Capiat dos. in Mag. c Rheo.

February 2nd.—Blister has risen well. Is more tranquil ; P. and heat of skin natural. Is still under the restraint of the jacket.

March 1st.—Continues nearly as in last report. The paroxysms have been equally frequent and violent, dependent on no perceptible cause, and very uncontroulable by any means employed to abate them. A second blister seemed rather to do harm. The pulse generally small and natural in frequency ; the pupil of the eyes still remarkably contracted ; appetite good ; B. regular, and at all times very sensible (sensitive) to the operation of purgative medicine.

Requires constraint almost constantly from his disposition to injure himself and destroy his clothing, as well as the furniture of the room. Cont. Sol. Tart. Antim. vel Pulv. Rhei c. Magnesia, pro re nata.

June 12th.—Within the last three months his case has been nearly uniform in many respects. In consequence of the command of his relatives, his board was reduced, with—patient put into another ward—the manifest effect of inducing a change for the better in the violence of his paroxysms, probably from his attention being strongly abstracted from his own feelings and erroneous ideas, and fixed on those more striking objects with which he was now surrounded, and from the effect of sympathy and imitation. But at no time was it ever for a moment safe to leave him free of restraint, from certain danger to himself and those around him. His mind never regained tranquillity, nor became subject to reason. It dwelt on the business of his former life with an imagination full of caprice, varying every

hour, and quite beyond the power of volition. He was always irascible and prone to mischief, artful and exceedingly expert. Was restless, and slept ill during the night, which was often spent in talking loud or singing, or raving with passion and resentment against imaginary enemies. P. seldom or never quick, or full or hard, even under severe paroxysms, though his face then was red and swollen, his eyes staring wildly, gnashing with his teeth, and equal desire to bite and tear his clothes, &c. Heat of skin only on such occasions increased, seldom with perspiration. Bowels unequal, but easily moved by any medicine, even the gentlest, as rhubarb and magnesia, &c., T. always clean. No headache or throbbing at temples; no affection of vision, eyes always animated; pupils closely contracted at all times. Within these six weeks his appetite, which was always keen, became voracious, while he became more emaciated and pale, and apparently under the power of some visceral disease, though nothing perceptible was to be discovered either about the thorax or abdomen. He became covered with patechiæ, many of which about the back and lower extremities went into sloughs, leaving small foul sores. He passed dark-coloured offensive stools. Œdema about the limbs succeeded to an attack of erysipelas in both, and afterwards more generally over the body.

These symptoms had just begun to leave him entirely when he was seized, without obvious cause, with epileptic fits on the morning of the 12th. They proved severe, and returned at short intervals during the day (about five in number), the last at half-past four p.m., when he fell into a comatose state, and expired about three a.m. on Thursday. No practice was or could possibly avail in a case so utterly hopeless. About seven years ago, prior to marked insanity, he had been affected with convulsions, and afterwards with delirium tremens of drunkards.

On opening the head, there was found unusual turgescence of the veins and sinuses, with considerable effusion of serum on the surface of the brain everywhere. The four sinuses were distended with water—the left containing more than an ounce, the others rather less. The choroid plexus very vascular, and thicker than common. Veins running over the surface of the lateral ventricles uncommonly turgid and beautifully ramified. On the right side of the crista Galli a very evident disorganization had taken place in a portion of the anterior lobe of the cerebrum, adhering to the bone, and of a soft pultaceous consistence and yellowish colour, lying over and evidently in contact with the right optic nerve. The origin of the nerve seemed sound, as well as the nerves themselves. Cerebellum entire. A large quantity of water issued from the spine, and the medulla spinalis seemed remarkably small. The brain was undoubtedly extremely firm two days after dissolution.

In abdomen, liver sound; stomach diseased about pylorus, thickened and firmer than natural; colon large, and distended with flatus;

omentum absorbed; much bile effused; intestines seemed vascular. No other signs of disease.

Remarks on this case.—From the history and appearances after death, it is obvious his disease must have been incurable by any means of art.

Now, when we consider that these were the ideas then entertained before it was considered necessary that there should he a resident medical officer in asylums, it must be admitted that insanity was even then fully recognized to be a disease—indeed, the frequent use of the term Hospital instead of Asylum in these early reports fully bears this out.

And now the question naturally presents itself to us: Has there been any great change in the views of asylum physicians since those days; and, if so, to what are they to be ascribed? and secondly, Is the present system of asylum administration the best that can be adopted? The first part of this query must, I think, be admitted, and answered in the affirmative. We do not bleed, and blister, and cup our patients so vigorously as in the days of old; leeches have almost disappeared, and setons seem a thing of the past. And what are the reasons? Partly, no doubt, this is due to increased knowledge and more enlightened views, but in a great measure, I am convinced, to other causes which have not been sufficiently recognized. Shortly after the days to which I have referred, the great discussion arose as to the abolition of restraints, and raged through the profession with a force and fury of which we have now little conception. This naturally diverted men's minds from attending to the purely medical or medicinal elements of treatment at that time. Again, the physician of the asylum had to become resident, and, from motives of economy, had added to his medical functions certain duties in no ways connected with the medical profession, such as general supervision of the institution, government of servants, attendants, regulation of stores, &c., which could have been equally well, if not better, discharged by a lay superintendent. These all tended to kill the physician's medical interest in his patients; and of late years we have had added the introduction of what may be termed the gregarious mode of treatment so strongly advocated by a late Commissioner in Lunacy, and which seems to have been developed from an idea that the insane, with few exceptions, require no further treatment than good food, good clothing, good lodging, and suitable mild occupation and recreation. Now, I humbly think such ideas may be carried too far. By all means

let us have these general principles carried out so far as they can be done, but not to the exclusion of the individual treatment; and year by year I am becoming more and more convinced of the correctness of what we have seen so strongly advocated in these early reports, that there is no panacea for insanity, but that every individual case ought to be judged of, and treated in all its individual bearings. And this brings me to query number two: Can this be done in asylums as at present officered? Judging from my own experience, namely, of an asylum with about 300 patients annually resident, and a general movement represented by about 150 annual admissions, and the same number leaving the institution, I believe that a principal resident medical officer and an assistant are insufficient, especially when, in addition, they are hampered with the discharge of duties which could be equally well, if not better, performed by a lay general superintendent. For a population such as the above, and one so constantly changing, I am becoming more and more convinced that the medical staff ought to be relieved of many fiscal duties, and materially increased, say by the addition of clinical clerks, before proper justice can be done to the patients.

Since writing the above, I have had my attention directed to a paper which exactly embodies many of my views of the subject, and consequently leaves me little to do but endorse them. I refer to Dr. Strahan's paper read before the Psychological Section of the British Medical Association, at Brighton, and an abstract of which is published in the Journal of 25th September, 1886.

Referring to the necessity for more medical officers in asylums, Dr. S. writes as follows:—"With asylum medical staffs at their present strength, little more can be done than we are doing for the insane. Our asylums are splendid places for the care of the incurable insane; and so long as they are looked upon as mere retreats, the present staffs will suffice: but the moment we attempt to change them into hospitals, where every case is to be studied, we must augment these staffs, and so make the change a possibility. At present an asylum with 700 inmates has generally but two medical officers. The superintendent must give the greater part of his time and thought to fiscal duties. There is a fast-increasing custom of abolishing the office of steward in asylums. This makes the superintendent the universal provider and adds to his fiscal duties, and it must directly tend to the extinction of the medical spirit."

Now, this has been precisely my experience. When ap-

pointed to the Dundee Asylum, in 1860, there had been for many years about 200 patients resident, with an annual admission and discharge of about 40 to 50 patients; but when the lunatic wards of poorhouses were opened in 1864, the number resident fell to 153, and the admissions suddenly rose to 101. Then ensued violent fluctuations, the resident population rising rapidly to 350, and the annual admission in one year reaching 150 cases.

Now, although in the old asylum I had neither steward, medical assistant, nor head-attendant, and consequently the greater part of these duties devolved upon myself, so long as the resident number kept about 200 and the admissions under 50, I had no difficulty whatever in keeping myself thoroughly acquainted with the individual histories of all the patients, and so doing them full justice; but when the admissions rose to 100, 120, and 150, I felt myself no longer able to individualize the cases as I could have desired, and had to be content with a more general acquaintance with the patients' varying peculiarities. Now, how is this to be remedied? and it is on this point that I am specially desirous of eliciting the opinion of this meeting. Dr. Strahan suggests the separation of the curable from the chronic, but in our case this has already, to a great extent, been done; at least, the useful and harmless have been pretty thoroughly separated from the recent, violent and degraded. Since 1864 no fewer than 521 cases have been transferred from the asylum to the lunatic wards of the Dundee poorhouses; during 1884-5-6 no fewer than 156 have been disposed of in this manner. Now, in the first place, it will be seen from the above that the functions of the chartered asylums, at least in Scotland, have of late been very materially changed from what used to be the case; and it seems extremely desirable that what is to be expected of them in future should be clearly defined. When the Dundee Asylum was opened in 1820, its duties were defined to be "to restore the use of reason, and to alleviate suffering where reason could not be restored." It was, therefore, a curative hospital for the curable, a place of detention for the dangerous, and a place of residence for the incurable; and it is of importance to bear in mind that these were the views held by the Commissioners in Lunacy at the time of the appointment of the Lunacy Board, and for several years subsequently. But now these views have materially changed. It has now been considered that suitable accommodation for a large number of the incurable patients can be found in poorhouse wards, and the functions of the asylums

have altered accordingly. These institutions are now looked upon as hospitals for the curable, places of detention for the dangerous, and places of residence for the rest of the incurable only who are degraded and dirty in their habits, and neither curable nor dangerous, but simply expensive to look after. I have never, however, seen any reason why the last class should not be as easily provided for in the lunatic wards of poorhouses as the incurable of more cleanly habits. It seems to me that if this succursal arrangement for disposing of the harmless insane in poorhouses is to be acknowledged as satisfactory, then all incurable, not dangerous, should be admissible into these wards; and, if so, there seems to me to be no reason why similar wards, on equally good grounds, should not be established in connection with our local prisons, similar to the wards in connection with the General Prison, Perth, for the incurably insane who are dangerous, and the asylums would then be left free to discharge what, I think, everyone will admit is their proper function—the treatment and cure of insanity and allied diseases. From an instructive table given in the last Report of the Commissioners in Lunacy for Scotland it will be seen that few patients would require to remain over five years in the Asylum; for of 1,319 new cases admitted into establishments, it was found that while 305 were discharged recovered within the next twelve months and 209 the following year, 51 recovered the 3rd year, 38 the 4th, and only 26 the 5th.

But to carry out the idea of a curative hospital thoroughly, the medical staff would require to be increased in number, and relieved of all mere fiscal duties; and if in addition to the treatment of the insane in the asylum a certain control of the district, by appointing them also local inspectors, were conferred on the asylum officers, patients suitable for being boarded-out, and for being sent to lunatic wards, &c., would be much more satisfactorily selected than at present, and also the anomaly of asylums being converted for convenience into receptacles for degraded cases requiring only careful, though it may be expensive, supervision as to cleanliness and ordinary comforts, would be prevented.

Illustrations of normal and defective development of the multipolar cells of the cerebral cortex; of their degeneration in senile insanity, and of certain albuminoid or protoplasmic exudations commonly found in the neighbourhood of the junction of the white and grey matters of the convolutions in cases of general paralysis and ordinary mania, in which the symptoms have been more or less acute. By Edward Palmer, M.D., Medical Superintendent, County Asylum, Lincoln.

(Concluded from p. 471.)

9.* *Acute Mania.*

Case.—J. P., a travelling hawker, aged 53, of whose history previous to his insanity nothing could be ascertained. His mental condition was one of almost continuous wild and incoherent excitement from the commencement of the attack to the day before his death, when he suddenly collapsed and became unconscious, and so remained to the last. The whole duration of the attack was just eleven weeks.

Post-mortem examination.—Body much emaciated; rigor mortis strongly marked; calvarium thin, in some places almost transparent; dura mater firmly adherent to the calvarium along the longitudinal sinus; considerable effusion into the sub-arachnoid tissue; the membrane itself very opaque, especially over the frontal lobes; the brain generally much congested; kidneys large, the left nodulated; both, under the microscope, showed lardaceous infiltration of the Malpighian bodies, hypertrophy of the muscular coats of the arteries, and commencing cirrhosis; spleen also lardaceous, nearly all the blood-vessels being imbedded in the filtrate. Right lung:—old pleuritic adhesions; nodules of cheesy tubercle and a large cavity in the middle lobe. Left lung emphysematous. Other organs apparently healthy.

Fig. 9.—Protoplasmic exudations from the arterioles in the outer portion of the white matter of the left middle frontal convolution.

a. Distorted arteriole.
b. Nuclei of the nervous tissue.
c. Exudations attached to arteriole.
d. The same detached and enveloping the nuclei.

* These numbers refer, as in the previous article, to the Figs. on the lithographic plates accompanying the paper.

Fig. 9.

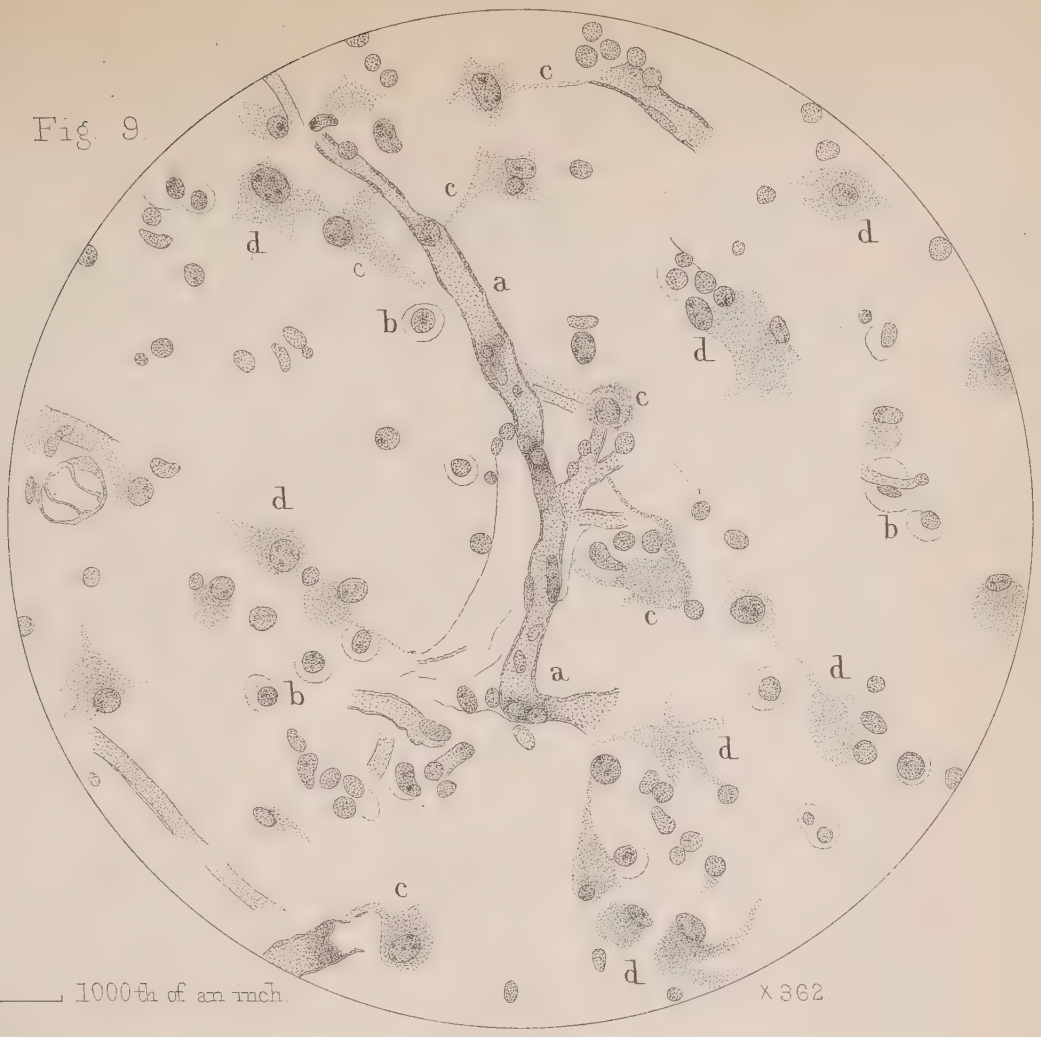

Fig. 10.

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TO ILLUSTRATE DR PALMER'S PAPER.

From the comparatively great bulk of the exudations (see also Figs. 10 and 12), and the large size of the detached portions and of the nuclei contained within them, they can scarcely be regarded as ordinary leucocytes, although they are most probably protoplasmic in character. They appear to have issued almost in streams from the arterioles, and then, following the tracts of least resistance—the lymphatic channels—to have invaded the lymph-spaces around the nerve-nuclei. As far as my observations have extended they have only been found in cases where the symptoms had been actively progressive and accompanied with delirium, and there can, I think, be no doubt that they form part of the phenomena of inflammation. It is remarkable, however, that they are generally limited to the innermost layer of the cortex and the immediately subjacent portion of the white matter, occurring only in a modified form in the external layer, and but rarely in any intermediate part.

10 *and* 11.—*Recurrent Mania.*

Case.—J. G., a fisherman, aged 41, of dissolute habits; had been three times under treatment in the asylum for mania, and twice discharged apparently recovered, but on each occasion relapsed in two or three months after his return home. His attacks were all characterized by noisy, incoherent raving, extreme restlessness, turbulence, destructiveness of clothing and furniture, and disposition to personal violence; and in his last, which ran its course in three months, he also displayed some of the grandiose notions of a general paralytic, but had no paretic symptoms beyond slight tremor and jerkiness of the tongue when protruded. His pupils were always abnormally large, and frequently unequal in size, though not persistently so. Latterly he had albuminuria, with œdema of the face, hands, and legs. He became emaciated, and his physical powers steadily declined; but he was still noisy and boisterous, and so continued up to within a few hours of his death, which was preceded by coma.

On post-mortem examination the brain was found to be firm in substance and much congested, the arachnoid opaque and adherent over the frontal and middles lobes on each side, and there was an excess of fluid in the arachnoid sac. Both kidneys were fibrous, and all the other abdominal organs in a more or less pathological condition. The lungs and heart were healthy.

Fig. 10.—Protoplasmic exudations from the arterioles in the

outer portion of the white matter of the left ascending frontal convolution.

a. Arterioles.
b. Nuclei of the nervous tissue.
c. Exudations attached to arteriole.
d. The same detached and enveloping the nuclei.

Fig. 11.—From the third layer of the same convolution.
a. Molecular degeneration of multipolar cells.
b. Blood-stasis and nuclear proliferation of arterioles.
c. Nuclei of the nervous tissue.

It is to be observed that there is an entire absence of protoplasmic exudation in any form.

12, 13 *and* 14.—*General Paralysis* (*acute.*)

Case.—G. H., a coal-higgler, aged 38, stated to have been insane for one month only before his admission; no further particulars respecting him were furnished. He was a stout, well-nourished man; his features heavy and void of expression; right pupil permanently larger than the left; conjunctivæ congested; tongue and lips tremulous; deglutition impaired; gait staggering, and pulse thready and feeble.

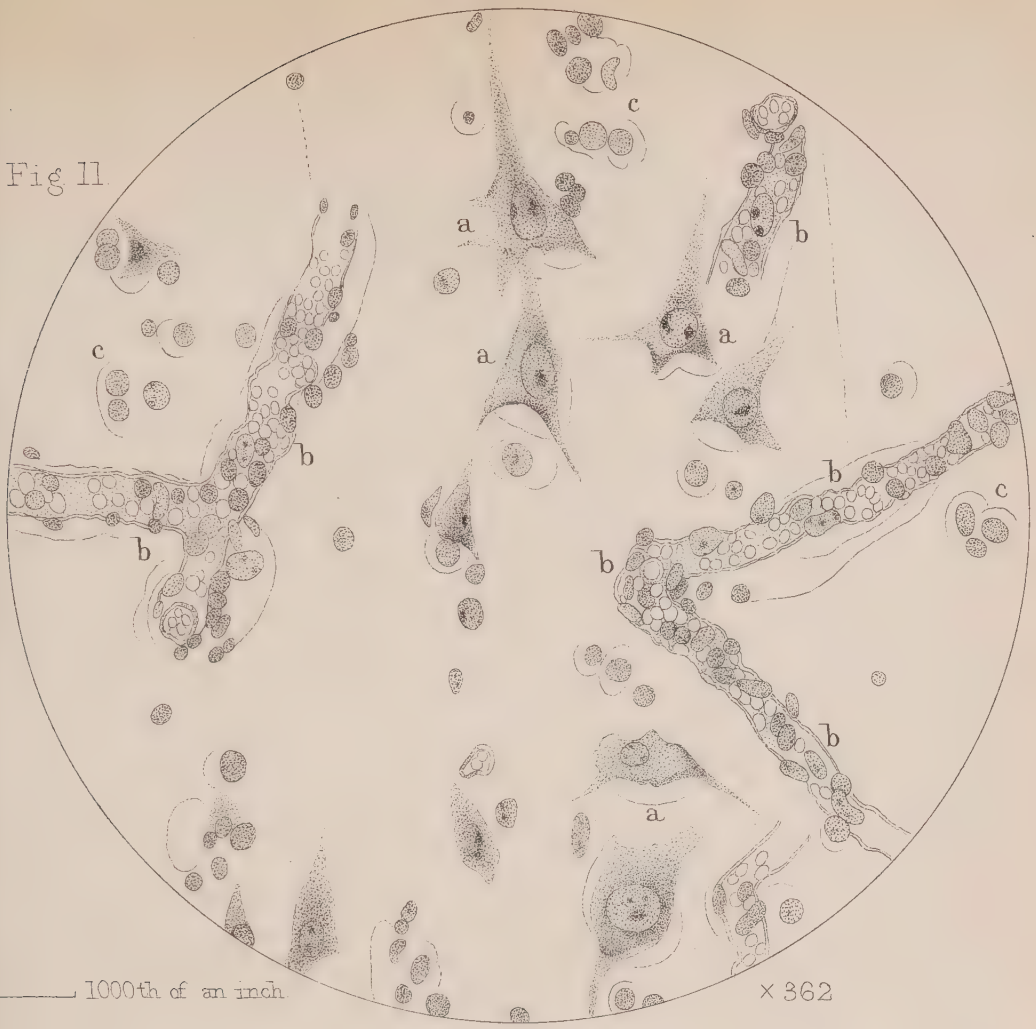
Mentally, he was at first dull, confused, timid, and suspicious, and had auditory hallucinations, often fancying that "he heard someone tell him that he was going to be shot." This condition subsequently alternated with one of restless, noisy excitement, during which he considered himself to be quite well and strong, but he never manifested any delusions of grandeur. All his symptoms became rapidly worse; he fell into a state of dementia, had convulsive twitchings of the left arm and leg, and died comatose six months from the commencement of his insanity.

Post-mortem:—Calvarium very thin; arachnoid milky and infiltrated with serum; brain congested, somewhat shrunken over the lateral ventricles, which were distended with fluid. Patches of recent lymph on the peritoneal surface of the small intestines. Other organs apparently normal.

Fig. 12.—Protoplasmic exudations from the arterioles in the outer portion of the white matter of the left superior frontal convolution, showing the various stages in their transit from the blood-vessels to the nerve-nuclei.

a. Protoplasmic masses within the vessel, in one place bulging out its coats.
b. Large protrusions of them beyond the walls.
c. Their first contact with the nuclei.

Fig. 11.



1000th of an inch. × 362

Fig. 12.

1000th of an inch. × 362

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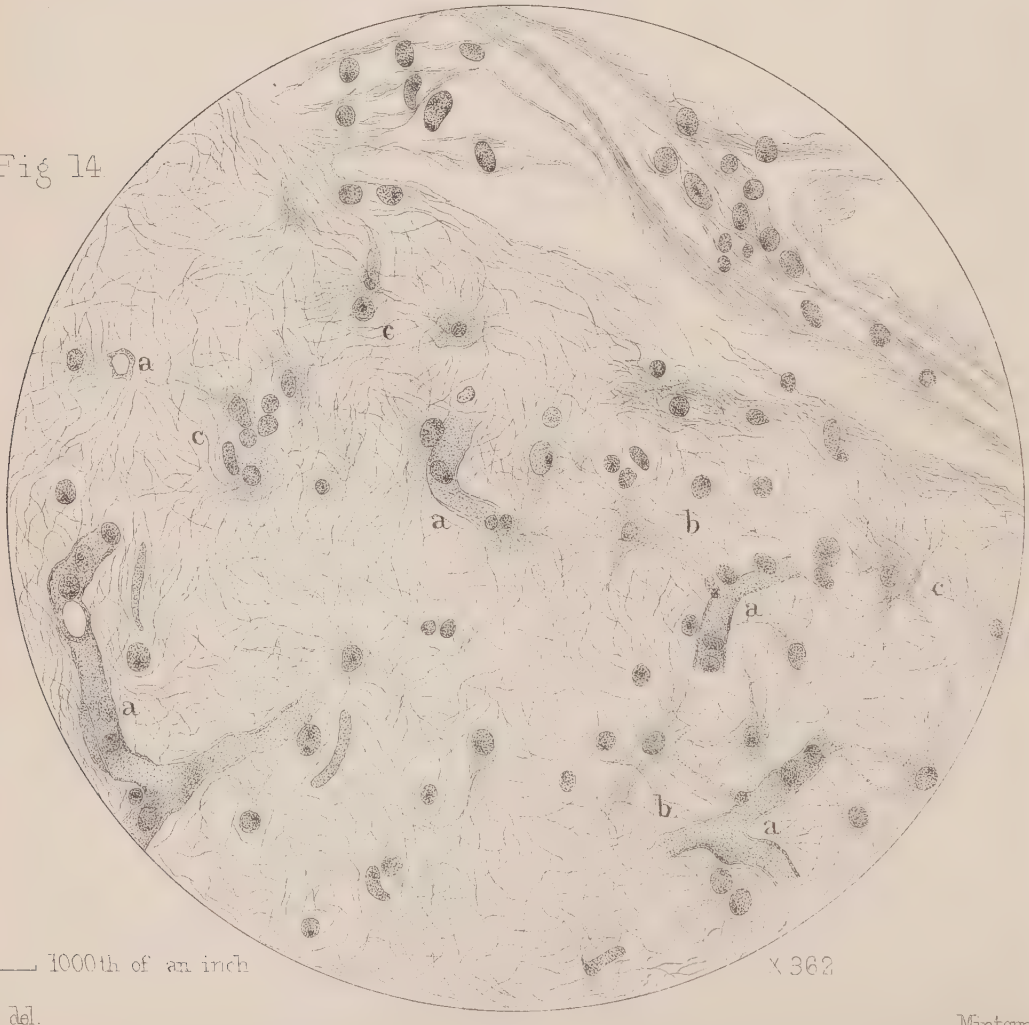
Fig 13

1000th of an inch. X 362.

Fig 14



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d. The nuclei surrounded.
e. The drawing out and final separation of the exudate from the vessel.
f. Nuclei of the nervous tissue.

Fig. 13.—Molecular degeneration of multipolar cells and nuclear proliferation of arterioles in the third layer of the grey matter of the same convolution. No trace of exudation.

a. Degenerated multipolar cells.
b. Arterioles.
c. Nuclei of the nervous tissue.

Fig. 14.—Coarse neuroglia and protoplasmic exudation, in the form of Deiters' cells, from the external layer of the same convolution. The membranes, containing large nuclear bodies, were torn and partially detached in making the section.

a. Arterioles.
b. Protoplasmic exudations attached to arterioles.
c. The same detached.

15 *and* 16.—*General Paralysis* (*chronic*).

Case.—(This case so well illustrates the progress of chronic general paralysis, without the intervention of acute symptoms, that it may be considered worth recording somewhat *in extenso*, and this I am enabled to do through the kindness of Dr. Russell, who has favoured me with an abstract from the case-book of the Lincoln Lunatic Hospital, where it was under treatment in the earlier stage.)

E. G., a farmer's wife, aged 45, was admitted into the hospital in *May*, 1876; she had been under treatment at home for an attack of insanity during pregnancy five years before, and had recovered in three months after a premature confinement. The certificate in her admission paper speaks of her dislike to her husband and familiarity with strangers; also of her talking of buying property and building houses for herself and son (aged 14) to live in; of her volubility, incoherence, and disregard of truth; and of her threatening to poison herself and child. She showed no sign of organic disease, except feeble heart-sounds. She talked in a flighty, boastful manner; her memory seemed good, and she manifested no delusions. In *October* she was childish and weak-minded. In *December* she continued childish, and was constantly grumbling at her detention, and her husband removed her. Her friends were able to take care of her from this time to *October*, 1879, when she was admitted into the Lincoln County Asylum. She was then a stout, pallid woman, with iron-grey hair, hazel eyes, small and equally con-

tracted pupils, and extremely thready pulse. Her gait was tottering; she was unable to walk without assistance; her tongue was tremulous and her speech mumbling; deglutition impaired; hands very unsteady; and habits wet and dirty. She talked almost incessantly, frequently repeating her name in answer to a question; was elated with the fancied possession of fine silk dresses and other expensive articles, also of an abundance of money. Her conversation was simple and rambling, and her words were uttered in a very imperfect and hesitating manner. In *November* she is noted as being restless at night, and often also during the day, requiring constant watching to prevent her from falling. Her mind was entirely absorbed with her delusions. In *December* the restlessness had quite passed off; she was cheerful and tractable, but had become very imbecile. Her paralysis had increased, and she could not stand without support. In *May* she was cheerful, childish, and delusional, chiefly with regard to her imaginary fine clothes. Her paralysis was advancing; she could only swallow with difficulty, and was losing flesh. In *August* she had an attack of right hemiplegia (transient), followed by further impairment of speech. In *November* she was nearly speechless, and could only swallow liquids carefully administered. In *December* she had a second right hemiplegic attack, which left her bedridden and helpless, with barely sufficient mental power to enable her to recognize those in attendance on her. Her inability to swallow steadily increased, bed-sores made their appearance, and she gradually sank, dying, comatose, in *February,* 1881, rather more than five years from the onset of her special symptoms.

Post-mortem:—Calvarium thick and heavy; the diplöe obliterated; dura mater firmly adherent over the anterior part of the cerebrum; a large quantity of serum in the arachnoid cavity; semi-gelatinous infiltration of the sub-arachnoid tissue; the membrane opaque and almost as thick as the normal dura mater; the whole brain much atrophied, especially anteriorly and in the left hemisphere; the left lateral ventricle very full of fluid.

Fig. 15.—From the posterior part of the left inferior frontal (Broca's) convolution.

a. Arterioles, of which one is atheromatous.

b. Degenerated and wasted multipolar cells.

c. Amyloid destruction of multipolar cells, a very small remnant of the nucleus being all that is left of the normal structure.

d. Nuclei of the nervous tissue.

Fig. 15

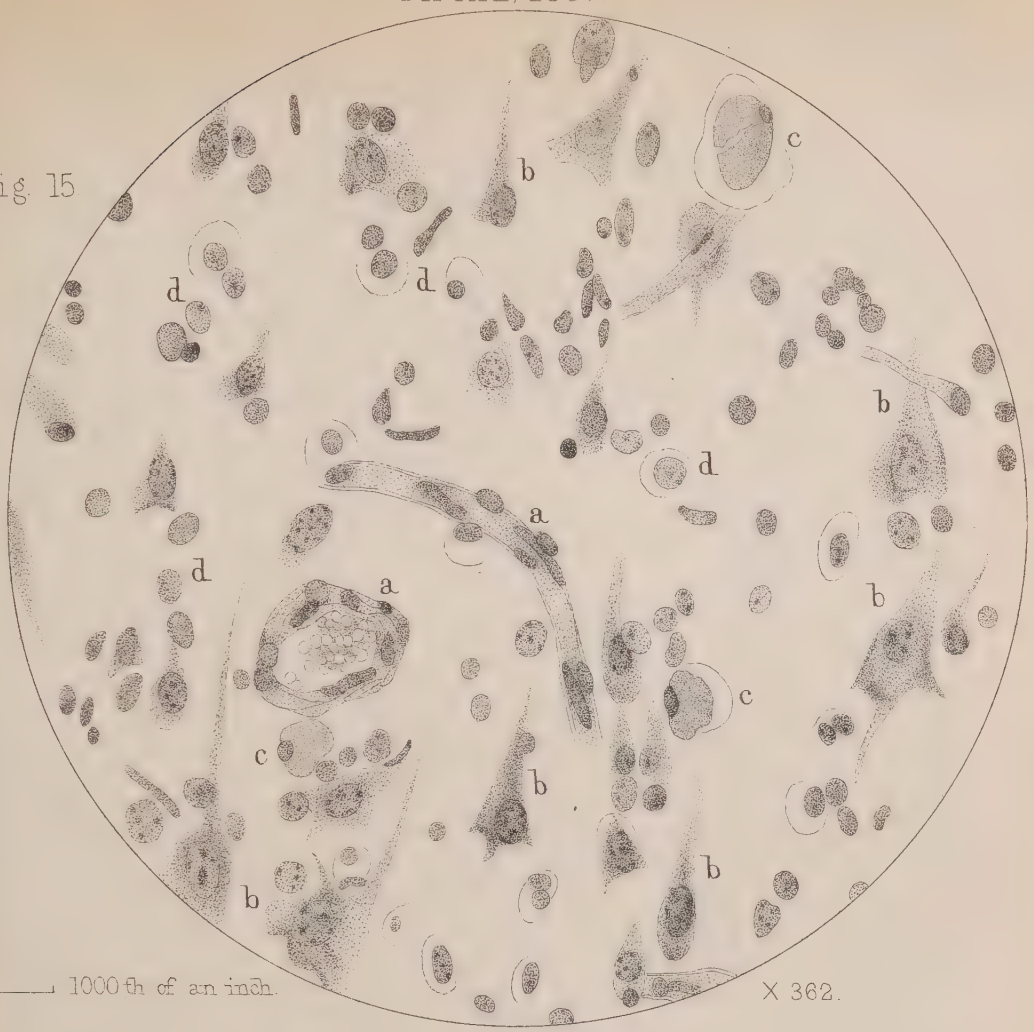

Fig. 16.

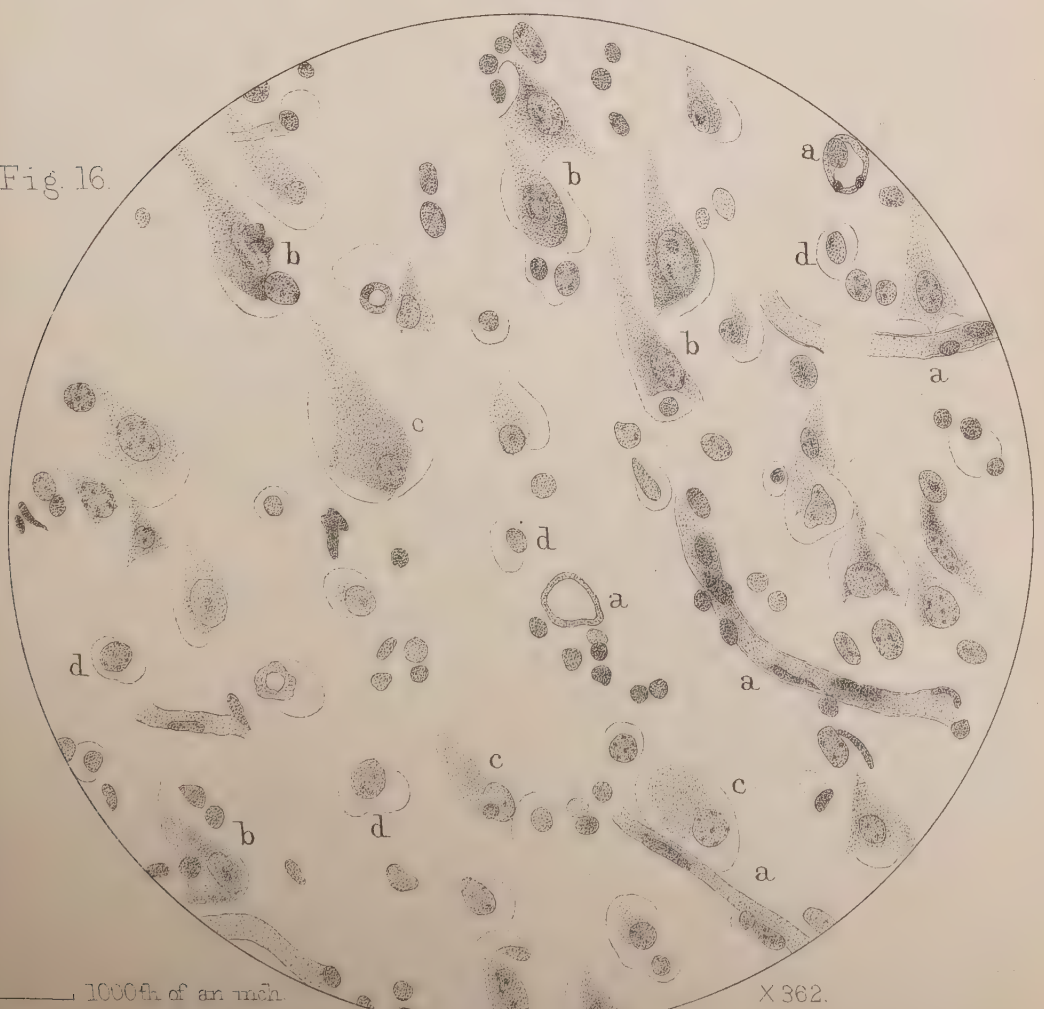

Fig. 16.—From the lower part of the left ascending frontal convolution.

a. Arterioles.
b. Molecular decay of multipolar cells.
c. Progressive amyloid degeneration of ditto.
d. Nuclei of the nervous tissue.

In this case, corresponding with its slow progress and the mildness and short duration of the mental excitement, no protoplasmic exudation was found in any part of the cortex, or in the underlying white matter. The amyloid degeneration, however, was present in other convolutions in each hemisphere.

It has not been sought in this paper to enter minutely into the development and pathology of the brain-cell, but simply to illustrate with accuracy some salient points of interest connected therewith, and to describe with sufficient detail a mode of preparing sections which materially facilitates their study under the higher powers of the microscope.

Remarks on Evolution and Dissolution of the Nervous System.

By J. Hughlings Jackson, M.D., F.R.C.P., F.R.S., Physician to the London Hospital and to the National Hospital for the Epileptic and Paralysed.

(1) *The Universal Symptomatology of an Epileptic Fit owing to discharge beginning in some part of the highest cerebral centres.*—There is but little doubt that in a severe epileptic paroxysm ("genuine epilepsy") there are effects, although very crude ones, produced in, or referred to, all parts of the body, animal and organic. Speaking figuratively, there is an endeavour to develop activity of all parts of the body excessively, and of all of them at once,* and as rapidly as possible.

Consciousness begins to cease, that is to say mind begins to cease, at or soon after the onset of the paroxysm; equivalently there is no warning, or a transitory one. I take this as proof that the correlative physical event, the sudden and excessive discharge which produces universal effects, begins in some part of the "organ of mind" or physical basis of consciousness—that is to say, in some part of the highest centres of the cerebral system. It is well to give other

* I have gone into this matter at length in the Bowman Lecture, delivered Nov., 1885, and published in "Ophthalmological Society's Transactions," Vol. vi. I do not mean that there is demonstration that literally all parts are involved.

synonyms, so we add that the discharge begins in some part of the latest evolved (the continually evolving) centres—highest level of evolution of the cerebral system.

The severe epileptic fit is dissolution, universal or nearly so, being effected. The post-paroxysmal condition, post-epileptic coma, is such dissolution effected. There is not total dissolution unless the patient dies. The patient universally convulsed in the paroxysm is after it universally, not totally, paralysed, and is insane, viz., demented. Perfect dementia, or, I suppose I should say, amentia, is, to my thinking, synonymous with absence of all consciousness and with total mindlessness (Section 14). Dementia is chronic persisting coma; coma is acute transitory dementia.* Recovery from post-epileptic coma is re-evolution from universal and almost total dissolution (from what is often nearly, if not quite, psychical death, and from what is nearly physical death).

(2) *Different Epilepsies (The Scale of Fits; "Discharging Lesions").*—Before going further I would remark that, although I shall continue to speak for the most part of epilepsy as if there were one such clinical entity, there are really many different epilepsies (I mean what would be called "varieties" of "genuine" epilepsy), each dependent on a "discharging lesion" of some part of the highest centres. Epilepsies are only one class of fits (Highest Level Fits). To prevent confusion, I must mention the other classes, and thus complete what I call the Scale of Fits. There are, as everybody admits, different epileptiform seizures from "discharging lesions" of different parts of the middle motor centres (Middle Level Fits). There are, I think, different fits (bulbar fits, laryngismus stridulus for one example) dependent on discharges beginning in different parts of the lowest level of central evolution (Lowest Level Fits).

I use here the most general term I can find, "fits," advisedly, because I do not, as I should when working clinically, care, as an evolutionist, to know whether any paroxysm is or is not "a case of epilepsy," nor how near it approaches

* Certain qualifications will be given to these statements later on. "Coma is a fulminant form of insanity; insanity is a lingering form of coma. Pathologically, coma is loss of function of the nervous centres, beginning in the highest centres of all; in those centres, which are the substrata of consciousness which effect the adjustment of the organism as a whole to its environment, which represent, first and most, the most precise and elaborate bodily movements, and which represent in some degree every part of the organism."—*Dr. Mercier, Brain, January,* 1887, p. 483.

the clinical type of "genuine" epilepsy. As an evolutionist, I wish to learn how cases shew *departures from normal states*, and how the three classes of fits resemble and differ as results of discharges beginning on three different evolutionary levels. Whether consciousness is lost or not is not the matter of first moment; it is lost in severe fits of each class. Obviously the comparative study indicated is involved. For in a severe epileptic fit, to take that as an example, the discharge beginning in some part of the highest level will discharge parts on the middle and next parts, on the lowest level, and finally the muscles will be discharged. So that such a paroxysm is triply compound, or quadruply, if we take into account the discharge of the muscular periphery, the real lowest level. The paralysis after such a fit will be very compound.

Certainly there are as many epilepsies (Highest Level Fits) as there are paroxysms setting in with different "warnings." The "warning" is a sign of the locality of the "discharging lesion" ("physiological fulminate"); it is the first event in the paroxysm occurring from, or during, the incipient discharge. The "discharging lesion" I hold to be a persistent local change of some nervous arrangements; the few cells making it up varying in their degree of tension from that of very high instability, permitting sudden and excessive discharge, to that, after their discharge, of stability far below normal. In all cases of epileptiform and epileptic seizures the "discharging lesion" is supposed to be of some small part of one half of the brain, and is thus, so to speak, doubly local. A very small local "fulminate" in but one half of the brain, when suddenly and rapidly discharged, can, by overcoming the resistances of healthy nervous arrangements, set up discharges of so many of these healthy nervous arrangements, associated collaterally and downwardly with those altered into the fulminate, that severe universal convulsion results.

(3) *Different Insanities; Local Dissolutions of the Highest Centres.*—Similarly we should, in strictness, speak not of varieties of insanity, but of insanities; for obviously there are different kinds as well as degrees of insanity—that is, there are dissolutions beginning in different divisions of the highest centres. Melancholia (posterior lobes?) and general paralysis (anterior lobes?) signify different *local* dissolutions of the highest centres as certainly as brachioplegia and cruroplegia signify different local dissolutions of the middle motor

centres, or as ophthalmoplegia externa and ordinary progressive muscular atrophy signify different local dissolutions of the lowest motor centres. Here is hinted at a "scale of paralyses," on which we speak later. (Sections 10 and 18).

(4) *Evolution and Dissolution always coexist or occur in alternation; Different Levels of Evolution left in different Dissolutions of the Highest Centres.*—I particularly wish to urge that in post-epileptic insanities the dissolution is local in the sense that it preponderates in the highest centres of one half of the brain. If so, it follows that the level of evolution remaining is a lower one in one half of the brain, and a very high collateral one in the other. This is important with regard to post-epileptic cases in which the dissolution is not so deep as in coma, cases of post-epileptic unconsciousness with mania for example; the mania is the outcome of activities on the levels of evolution remaining. And I submit that the seeming exceptions to the law of dissolution which some of these cases present (the coexistence of great negative affection of consciousness with highly special actions) is accounted for by the hypothesis of there being deep dissolution in one hemisphere, and a high level of evolution in the other. If general paralysis be a dissolution beginning in the highest motor centres, ultimately on both halves of the brain, the positive mental symptoms arise during activities of the intact posterior lobes, posterior level of evolution, and of what is left intact of the anterior. It is only in such dissolutions as that produced by alcohol that we can expect anything like a uniform dissolution, and simply a lower level of evolution. But even here no doubt some divisions of the highest centres will begin to "give out" before others, and thus, early in the poisoning by alcohol, there will not be an uniform dissolution, and thus not an even lower level of evolution remaining.

We have instanced—it may be taken hypothetically—four local dissolutions and one uniform dissolution of the highest centres. We have implicitly urged that, in each case of insanity, indeed in all nervous diseases, we have a problem in evolution as well as in dissolution. The levels of evolution vary in the different kinds of insanity. Indeed, in healthy states there is a rhythm of evolution and dissolution. But keeping to cases of insanity, I would remark that disease, in the strict sense of pathological process, produces the negative physical change dissolution only, answering to negative affection of consciousness; disease is not the cause of positive mental symptoms. He who is studying the physical

conditions of positive mental symptoms in any case of insanity is dealing with evolution. The physical process during an illusion is as certainly an evolutionary process as that during normal perception is; the illusion is the insane man's perception, and is part of the mentation going on on the lower levels of evolution remaining (his *then* highest levels), of a nervous system mutilated by disease. The qualifications stated in this section are to be borne in mind when the term insanity is used.

(5) *The Hierarchy of Nervous Centres.*—I am supposing the nervous system to be a sensori-motor mechanism, from bottom to top; that every part of the nervous system represents impressions or movements, or both. (Under the head of movements we place effects produced through motor nerves to glands, and through inhibitory nerves.) The further hypotheses are that the highest divisions of this sensori-motor mechanism, "organ of mind" (1) represent impressions and movements of *all parts* of the body; (2) in most complex, &c., combinations; and (3) triply indirectly. We must now say something of lower centres in order to see how the constitution of the highest centres is, so to speak, achieved.

It is not possible at this stage to do more than state, in incomplete outline, the evolutionary hierarchy of the nervous centres. Qualifications will be given and additions made later. The periphery is the real lowest level; but we shall speak of three levels of central evolution. (1) The lowest level consists of anterior and posterior horns of the spinal cord, and of Clarke's (visceral) column, and Stillings nucleus and of the homologues of these parts higher up. It represents all parts of the body most nearly directly. (It is at once the lowest cerebral and the lowest cerebellar level of central evolution; the periphery being also cerebro-cerebellar, and the lowest level of the whole organism). (2) The middle level consists of Ferrier's motor region, with the ganglia of the corpus striatum, and also of his sensory region. It represents all parts of the body doubly indirectly. (3) The highest level consists of highest motor centres (præ-frontal lobes), and of highest sensory centres (occipital lobes). They represent all parts of the body triply indirectly.* These highest sensori-motor centres make up the "organ of mind" or physical basis of consciousness; they are evolved out of

* My hypothesis is that the middle and highest motor centres are only *chiefly* motor, and that the middle and highest sensory are only *chiefly* sensory.

the middle, as the middle are out of the lowest, and as the lowest are out of the periphery; thus the highest centres re-re-represent the body—that is, represent it triply indirectly. I wish to bring prominently into notice objections to the view here taken as to the highest sensory and motor centres.

(6) *The Highest Motor and Highest Sensory Centres.*—I have long held the hypothesis that the whole of the anterior lobe is (chiefly) motor. But that the præ-frontal lobes are motor is a doctrine held by few. Ferrier and Gerald Yeo ("Proc. Royal Soc.," January 24th, 1884) have concluded, from experiments on monkeys, that the præ-frontal lobes represent some movements, and significantly these are lateral movements of the eyes and head—the most representative of all movements. But I have now to say that whilst Ferrier agrees with me in thinking that the whole anterior part of the brain is motor, and that, to use his words, "mental operations, in the last analysis, must be merely the subjective side of sensory and motor substrata" ("Functions of the Brain"), as I have long earnestly contended, he does not agree with me in thinking there to be a division into middle and highest cerebral motor centres; and he thinks that what I call the highest motor centres represent only movements of the eyes and head, and not movements of all parts of the body, as I do.

Ferrier combats the view I take in the second edition of his "Functions of the Brain," p. 460 and seq. For the contrary opinions of such a man I have a most profound respect. I do not suppose that there is such a decided division between middle and highest centres as there is between lowest and middle. Indeed, Ferrier has found that there is some wasting after ablation of the præ-frontal regions in monkeys descending to the medulla oblongata, but no further. This may tell in favour of his opinion that there is no division into middle and highest motor centres, or may show only that the division is not absolute. It may shew that some direct connexions exist between the highest centres and some of the lowest centres, without the intermediation of the middle.*

I have long held that the posterior part of the brain is (chiefly) sensory, and have for some years called the occipital lobes the highest sensory centres. But now I have mis-

* Some time ago ("Med. Times and Gazette," March 1, 1879) I suggested that "there are movements, organic and animal, concerned during emotional states, which will have an exceedingly wide representation in the cerebrum, *and probably more directly in the highest centres than any other class of movements.*"

givings as to the occipital lobes being the highest sensory centres, consequent on reading Gowers' masterly work, "Diseases of the Brain," especially pp. 22 and 174. However, I shall have little, if anything, directly to say of the cerebral sensory centres. The morphological position of these centres is a very important matter, but does not concern us much for the things to be discussed in this paper.

(7) *The Process of Evolution.*—Each of the levels is universally representing, and thus we have yet to state the evolutionary differences between them beyond that of degrees of indirectness of representation. I do little more than give the formula of process of evolution. "Following out hints furnished by Linnæus, K. F. Wolff, Goethe, and Schelling, this great embryologist [Von Baer] announced in 1829 his great discovery, that the progressive change from homogeneity to heterogeneity is the change in which organic evolution essentially consists" ("Fiske's Cosmic Philosophy," Vol. I., p. 342). The modern doctrine of evolution goes further than this. There are, according to Spencer, other factors in evolution. I state four factors. Illustrating by movements and with reference to the three ranks of motor centres, we say that there is from lowest to highest centres, (1) increasing complexity (differentiation), representation of a greater number of *different* movements; (2) increasing definiteness (specialization), representation of movements for more particular duties; (3) increasing integration, representation of movements of wider ranges of the body in each part of the centres*; (4) the higher the centres the more numerous the interconnexions of their units (co-operation).†

* The formula of evolution states a doctrine of localization, and one very different from the current one. Integration, a very important factor, is ignored by the current doctrine. It is an exceedingly important factor. It is admirably and very simply stated by Dr. Mercier, who, in an article to be referred to again presently, p. 480, writes: "Such centres [lowest centres] represent a limited part of the body very strongly; they represent little else, and that little but feebly. But in the highest regions each centre represents a large part of the organism preponderatingly, a still larger part in less degree, and the whole of the organism in some degree. And in the intermediate centres the representation is intermediate in character, a larger or smaller area being preponderatingly represented, and the halo of partial representation being larger or smaller, while the intensity of representation is less or more, according as the centre is more or less elevated in the hierarchy of the nervous system."

† I have used terms more familiar to medical men than those Spencer uses. For this change, of course, Spencer is not answerable, nor must he be held responsible for the correctness of my statements and applications of his formula of evolution. I should consider it a great calamity, were any crudities of mine imputed to a man to whom I feel profoundly indebted. It is for this reason that I do not quote Spencer in other parts of this article, although I believe it to be pervaded by Spencerian ideas.

Thus, to recapitulate, the highest centres are the most (1) complex, (2) most special, (3) most integrated sensori-motor centres, with (4) most numerous interconnexions. They represent all parts of the body in the ways mentioned, and represent them triply indirectly. They are the anatomical substrata of consciousness. I say *anatomical*. The anatomy of nervous centres is not to be confounded with their morphology. Indeed some parts of the cord, and of the bulb too, do not belong to the lowest level of evolution. The patient who has "idiopathic" lateral sclerosis has "disease of the cord," but not of the lowest level of evolution, although of part of a plexus or strand of fibres between motor centres on the lowest and on the middle level.

It will have been noticed that the evolutionary scheme of centres ignores morphological divisions. Any centre, bulbar or spinal, which represents a part of the body most nearly directly and in simplest ways is a lowest centre. Lowest centre is a proper name, and hence we may speak of two lowest centres. As said, Section 3, ophthalmoplegia externa (wasting of cells of some lowest centres in the floor of the aqueduct of Sylvius) is a lowest level paralysis as much as the ordinary type of progressive muscular atrophy is.

To give an account of the anatomy of any centre is to give an account of the parts of the body it represents, and of the ways and of the degree of indirectness in which it represents them. The anatomy of the highest centres or "organ of mind" is given, although most generally, in the recapitulatory statements just made.

(8) *The Dynamics of the Chain of Centres.*—A way of speaking of degrees of indirectness of representation (Section 5) more fully, is to say that nervous evolution does not imply insensible gradations, but occasional stoppages, which are re-beginnings. For example, the lowest motor centres are connected by a plexus or strand of fibres, pyramidal tract, with the middle centres, which are the lowest centres, suddenly "raised to a much higher power." Hence centres are not only "reservoirs of energy," but also "resisting positions." Ignoring the resisting side of the function of centres prevents our seeing clearly the differences between the physical processes during faint and during vivid states of consciousness in health and in disease. The highest sensory centres are triply detached from (protected from) the sensory periphery. The muscular periphery is triply detached from (protected from) the highest motor centres. Were it not for

these "protections" there would be no physical basis corresponding to the differences between faint and vivid states of consciousness. Thanks to the "protection," activities of the highest centres can go on uninterfered with by the environment, and without producing reactions upon it; psychically there can arise trains of thought, faint states of consciousness, independent of present experiences. There is internal evolution. For these and other purposes we should note that the evolutionary ascent, from lowest to highest sensory centres, is a passage, not only from the simple, &c., to the complex, &c., but from the most towards the least organized—from centres easily transmitting accustomed stimuli and resisting novel stimuli, up to centres which have to be forced into activity. The peripheral impact being strong enough, all sensory centres are overcome in order, there is a multiplication of energy liberations upwards, and finally great irradiation in the highest sensory centres and "survival of the fittest" states. Thus from a very local peripheral change we have ultimately changes induced in many nerve units of the highest centres, each of which represents the whole organism, although they represent by far the most the part of the periphery engaged. Consequent on the strong discharges of the highest sensory centres the connected highest motor centres are next put in great activity.

The passage next is not only from the most complex motor nervous arrangements to the most simple, but from the least organized to the most organized, from centres capable of being forced into new kinds of activity to centres acting in ways they have been trained to act in, and resisting new ways of acting; the stage of "effecting of the possible." Here is a narrowing of energy liberations downwards, so that from energizing of motor nervous arrangements of the highest centres representing the whole organism, there results movement of but the part most specially represented in those motor nervous arrangements.

The resistance offered by middle to highest centres is important with regard to the differences between *les petits maux* and *les grands maux*, and with regard to differences in degrees of post-epileptic states. Above all, it is important with regard to differences in the physical conditions during faint and vivid states of (object) consciousness, ideation and perception for example. In speaking of resistances by centres we suppose there to be degrees of resistance, the smaller cells of the centres resisting least.

(9) *Recapitulation and Recommencement.*—The highest centres are, we repeat, nothing else than centres of universal and most complex, &c., representation, or what is equivalent of universal and most complex, &c., co-ordination. There is nothing else for them to represent than impressions and movements. Using old-fashioned language they are potentially the whole organism; the whole organism is "potentially present" in them. They are the unifying centres of the whole organism, and thus the centres whereby the organism *as a whole* is adjusted to the environment. Anticipating, they are, although the most complex, &c., the least organized, the ever organizing, and thus the centres whereby new adjustments of the organism, as a whole, to the environment are possible, that is, the centres in which evolution is most actively going on. Correspondingly they are the least automatic, or most imperfectly reflex, centres.

I have long since come to the conclusion above stated, that the cerebrum (I now say highest centres of the cerebral system) is universally representing. Nearly eighteen years ago I wrote: "We have now, then, to add to the constitution of the units of the cerebrum nerve fibres to the heart vessels and viscera, or rather possibly to regions, of the sympathetic system from which these parts are supplied. The inference we have now arrived at is that the units of the cerebral hemisphere (in the region of the corpus striatum, at least) represent potentially the whole processes of the body" ("Medical Mirror," Oct., 1869). Some years ago I asked the question, "Of what 'substance' can the organ of mind be composed unless of processes representing movements and impressions? And how can the convolutions differ from the inferior centres except as parts representing more intricate co-ordinations of impressions and movements in time and space than they do? Are we to believe that the hemisphere is built on a plan fundamentally different from that of the motor [and sensory] tract?" ("St. Andrew's Med. Grad. Reports," 1870). These are crude statements, but I have since given, I hope, clearer accounts of the hypothesis.

In "Brain," January, 1887, there appears an article by Dr. Mercier on "Coma," already quoted from, which deals with insanity realistically and in a very masterly manner. It is a great satisfaction to me to find that Dr. Mercier agrees with me in many of the opinions I have formed on insanity, considered as dissolution beginning in the highest centres

of the cerebral system. These centres he agrees with me in thinking to be sensori-motor, universally representing and most complex. When dealing with the physical condition in coma, Dr. Mercier writes, "Thus we arrive at this most important conclusion: that the highest nervous processes, which form the substrata of the most elaborate mental operations, represent at the same time not only the most elaborate forms of conduct and muscular movements, but also *every part of the organism* (italics in orig.) in some degree." Ribot, in his remarkable and most valuable work on "Personality," writes, "Nous pourrons dire que la conche corticale représente toutes les formes de l'activité nerveuse; viscérale, musculaire, tactile, visuelle, significatrice." In another part of his book Ribot writes, "Le moi est une co-ordination." The assertion I make is that the *physical basis* of the Ego represents—that is, that the highest centres represent—or co-ordinates the whole organism in most complex, &c., ways. Just as the consciousness of the moment is, or stands for, the whole person psychical, so the correlative activities are of nervous arrangements, representing the whole person physical.* In this connexion I would refer to a very able paper ("On the Pathology of Mania") by Dr. Wiglesworth, "Journ. Mental Science," January, 1884.

(10) *Representation and Co-ordination—Disorders of Co-ordination with Negative Lesions.*—A statement made (Section 9) that representation and co-ordination are the same thing, is contrary to current opinion. Although co-ordination or representation is always sensori-motor, I shall arbitrarily limit present illustration to motor centres. I should say that the highest motor centres (præ-frontal lobes) co-ordinate movements represented in the middle centres (Rolandic region) only in the sense that the former represent over again in more complex, &c., ways, the movements represented by the latter; just as the latter represent over again and in more complex, &c., ways, what the lowest motor centres have represented in less complex ways, and just as these lowest centres represent the muscles in least complex ways. In short, all centres of all ranks are at once co-ordinating and representing. I have a particular reason for this recapitulation. I assert that negative lesion of

* This sentence implies more than has been expressly stated, viz., that each unit of the highest centres is a miniature highest centre, that is, represents in some degree the whole organism (Factor Integration), no two units representing it in just the same way (Factor Differentiation).

any centre never produces "disorder of co-ordination;" it produces paralysis, sensory or motory, or both, and nothing more. The doctrine of nervous evolution will not be understood unless it be seen clearly that centres do not represent muscles but movements of muscles. Thus, referring to the illustration given (Section 3), there is in progressive muscular atrophy loss of simplest movements (in this case, it is true, nearly approaching loss of muscles), in cortical monoplegias there is loss of more complex movements, and in cases of general paralysis there is loss of most complex movements. Motor paralysis from negative lesion of any motor centre is always loss of movements.

There *is* something more than paralysis in inco-ordination from negative lesions, but this something more is not produced by the negative lesion, not by disease in the proper sense of pathological change. When we speak of evolution it is understood (Section 4) that there is evolution with dissolution. Dealing only with dissolution from disease, we say that in the cases of inco-ordination from negative lesion of lowest motor centres, for example "professional cramps," there is loss of some most special movements (dissolution) of certain muscles, and from over-activity of levels of evolution left, there is forcing of other more general movements of those muscles. There is on a small scale what there is on a large scale in insanity (Section 4). In fact, the formula of all inco-ordinations due to negative lesions, from the duplex symptomatology of cases of paralysis of ocular muscles up to the duplex symptomatology of cases of post-epileptic unconsciousness with mania (the physical condition), is that there is loss of some (most special) movements with forcing of other (more general) movements. This is assuming that there is paralysis from the negative state of the highest centres which is implied by the negative affection of consciousness.

(11) *Consciousness and the Physiology of the Highest Centres.*—So far we have said nothing, except incidentally, of consciousness. To the assertion that the highest centres are only the latest developed and most elaborate part of a sensori-motor mechanism, it may be rejoined that "they are for mind." So we have taken them to be *in the sense that they are the physical basis of mind.* But they are "for body" too; strictly they are for nothing else—for nothing else than for co-ordinating or representing the different parts of the body in relation to the whole in most complex, &c., ways.

It may be said that "consciousness is a function of the brain" (highest cerebral centres). This I deny. Function is a physiological term; it has to do with the dynamics of the nervous system, with things physical only. It has to do with storage of energy (the taking in of materials having potential energy),* with nervous discharges (or liberations of energy) by nerve cells; with the rates of the liberations, the resistances encountered, and the degrees of those resistances. The "organ of mind" is only the most complex, &c., part of what is anatomically a sensori-motor machine, and there is nothing going on in it, other than nervous discharges, overcoming lines of resistance in order, from least towards most; there is no interference by volition, emotion, &c. We cannot take a too brutally materialistic view of the "organ of mind," but in order to do so we must not take a materialistic view of mind.

(12) *Several Doctrines as to the Relation of Consciousness to Activities of the Highest Centres.*—I am not competent to discuss the metaphysical question of the *nature* of the relation of mind to nervous activities. There are three doctrines (1) That mind acts through the nervous system (through highest centres first); here an immaterial agency is supposed to produce physical effects; (2) that activities of the highest centres and mental states are one and the same thing, or are different sides of one thing. A third doctrine, (3) one I have adopted, is that (*a*) states of consciousness (or synonymously states of mind) are utterly different from nervous states of the highest centres; (*b*) the two things occur together, for every mental state there being a correlative nervous state; (*c*) although the two things occur in parallelism, there is no interference of one with the other. Hence we do not say that psychical states are functions of the brain (highest centres), but simply that they occur during the functioning of the brain. Thus in the case of visual perception, arbitrarily simplifying the process, there is an unbroken physical circuit, complete reflex action, from sensory periphery ultimately through highest centres, back to muscular periphery. The visual image, a purely mental state, occurs in parallelism with—*arises during* (not *from*)—the activities of the two highest links of this purely physical chain (sensori-motor elements of highest centres)—so to speak, it "stands outside" these links.

(13) *The Doctrine of Concomitance.*—It seems to me that

* Perhaps this storage is better described as being part of the nutritive process.

the third doctrine, that of concomitance, is at any rate convenient in the study of nervous diseases. A critic of my Croonian Lectures, who in all other respects dealt with my opinions very good-naturedly, says that I state this doctrine in order to evade the charge of materialism. It, or an essentially similar doctrine is held, so far as I can make out, by Hamilton, J. S. Mill, Clifford, Spencer, Max Müller, Bain, Huxley, Du Bois Raymond, Laycock, Tyndall and Herman. The critic referred to says that the doctrine of concomitance is Leibniz's "two clock theory." It may be; it matters nothing for medical purposes whether it is or is not. The evolutionist does not, however, invoke supernatural agency. As Fiske says, "The assertion of the evolutionist is purely historical in its import, and includes no hypothesis whatever as to the ultimate origin of consciousness; least of all is it intended to imply that consciousness was evolved from matter." ("Darwinism and other Essays," p. 67.)

The doctrine of concomitance will seem unsatisfactory to those who seek an explanation of mental states. But no explanation is intended in any part of this paper. Supposing the account given of the constitution of the "*organ* of mind" to be more thorough and quite accurate, it would be no explanation of the mental states correlative with its activity. The second doctrine seems to give an explanation, or rather complacently assumes that there is nothing to explain. It, like the two others, is a metaphysical doctrine, although I imagine some holders of it would consider it a very realistic and most practical statement of the facts. To merely solidify the mind into a brain, is to make short work of a difficult question. And if we go on talking of the "brain mind" essentially in the same way as the popular psychologist does of the mind—"emotional centres," "volition producing movements," &c.—we help nothing in a scientific study. Further, supposing the doctrine of crude materialism be true, it does not go far enough. For to give a correct materialistic account of mind—I mean, granting for the moment that such an account can be given—is not to give an anatomical account of brain, which (Section 7) is to show what parts of the body it represents, and the ways in which it represents them.* The first doctrine seems to me to be the least worthy of attention.

* For many medical purposes I could adopt the second doctrine if it were formulated that the brain had two functions—one mental, and the other that of co-ordinating parts of the body.

To put the matter in another way, let it be granted for the sake of argument that the separation into states of the highest centres, and what we called the utterly different and yet concomitant states of consciousness, is known to be erroneous, and that the doctrine (2) is ascertained to be the true one. I then ask that the doctrine of concomitance be provisionally accepted as an artifice, in order that we may study the most complex diseases of the nervous system more easily. There can be no difficulty in understanding the *statement*. It is as easy to understand the *statement* that states of consciousness simply occur *during* activities of the highest parts of the nervous system, as it is to understand the *statement* that states of consciousness occur *from* such activities. It makes it neither more nor less difficult that the activities are of centres which represent or co-ordinate impressions and movements in the ways several times mentioned.

Our concern as medical men is with the body. If there be such a thing as disease of the mind, we can do nothing for it. Negative and positive mental symptoms are for us only signs of what is not going on, or of what is going on wrong, in the highest sensori-motor centres.

(14) *The Range of Concomitance.*—What is the range of concomitance? For my part I think the whole body is "the organ of mind," as I have in effect asserted (Section 8) when speaking of the dynamics of the chain of centres. I shall, however, continue to speak of the highest centres as being the "organ of mind." Here the question recurs: "How far down" in the highest centres is there consciousness attending nervous activities?

A distinction is made by many between mind and consciousness.* I suppose they would say that consciousness shows activities of the highest and mind activities of the lower nervous arrangements of the highest centres. I take consciousness and mind to be synonymous terms (Section 1); if all consciousness is lost all mind is lost (Section 2). Unconscious states of mind are sometimes spoken of, which seems to me to involve a contradiction. That there may be activities of lower nervous arrangements of the highest centres, which have no attendant psychical states, and which yet lead to next activities of the very highest nervous arrangements of those centres whose activities have attendant psychical states, I can easily understand. But

* I admit the distinction into Subject and Object consciousness, and also that into faint and vivid states of consciousness.

these prior activities are states of the nervous system, not any sort of states of mind.

There is one way in which this question directly concerns us. After some epileptic fits the patient is "unconscious," and acts elaborately. Is he really void of all consciousness? Some might say that the fact of his remembering nothing of his actions on recovery (this is the rule) is proof of entire absence of consciousness; others would say that the elaborateness and the purposive seemingness of the patient's actions show that he had some consciousness remaining. Each opinion has consequences, as we shall see. To say that the patient had unconscious or latent states of mind does not, I think help us. As evolution progresses, consciousness is, so to speak, "raised higher;" it may be that in dissolution the activities on the lower level of evolution have attendant states of consciousness which in normal conditions they had not, or that their normal slight states of consciousness become more vivid.

(15) *Consequences of Accepting the Doctrine of Concomitance.*—Those who accept the doctrine of concomitance do not believe that sensations, volitions, ideas, and emotions produce movements or any other physical states. These expressions imply disbelief in the doctrine of conservation of energy*; movements always arise from liberations of energy in the outer world, and it would be marvellous if there were an exception in our brains, marvellous if, for example, The Will, an immaterial agency, interfered in the activities of nervous arrangements of the highest centres.† They would not say that an hysterical woman did not do this or that be-

* It may, however, be said that it has not been shown that the principle of conservation of energy does apply in physiology. On this matter I quote from Daniel's "Principles of Physics," p. 45: "There is one case in which the principle of the conservation of energy is not as yet definitely established. This is in the domain of Physiology, but the words of Clark Maxwell may, in this connection, be quoted: 'It would be rash to assert that any experiments on living beings have, as yet, been conducted with such precision as to account for every foot pound of work done by an animal in terms of the diminution of the intrinsic energy of the body and its contents; but the principle of Conservation of Energy has acquired so much scientific weight during the last twenty years, that no physiologist would feel any confidence in an experiment which showed a considerable difference between the work done by an animal and the balance of the amount of Energy recovered and spent.'"—"Nature," Vol. xix., p. 142.

† I mean that they would not in scientific exposition. I no more object to the statement that "fright makes the heart beat," or that "mind influences the body" at a clinical conference, than I do to the statement that the "sun rises in the east" in ordinary talk. But the mind does not influence the body, although the highest centres affect the rest of the body, and the sun does not rise in the east.

cause she lacked will; that an aphasic did not speak because he had lost the memory of words; and that a comatose patient did not move because he was unconscious. On the contrary, they would give, or try to find, materialistic explanations of physical inabilities. They would not use the term sensation convertibly with active states of any sensory elements. They would avoid such expressions as "Physiology of the Mind," "Psychology of the Nervous System," and "Dissolution of the Mind." They would not use such compounds of (1) psychological, and (2) anatomico-physiological terms, as (1) "ideo- (2) motor," (1) "voluntary (2) movement" "(1) ideas of (2) movements," (1) "psycho- (2) motor," &c. They would not speak of "(1) voluntary (2) centres," (1) "emotional (2) centres." They would not use "most voluntary" as the proper opposite of "most automatic." Automatism is a purely physical thing. There are degrees from most automatic, not up to the most voluntary or to volition, but to least automatic. During activities of the least automatic centres (highest centres), Will and other elements or states of (object) consciousness arise. They would not in scientific exposition make piebald classifications of symptoms, *e.g.*, *sensory*, *motor*, emotional, and intellectual. The two words italicised are names of physical states; the other two of psychical states. Such classifications, perhaps allowable clinically, are, for scientific purposes, as unjustifiable as a classification of plants into endogens, graminaceæ, kitchen herbs, ornamental shrubs and potatoes, would be. They would not compare, nor even contrast, loss of consciousness in cases of disease of the highest centres with paralysis from disease of any lower centres.

The term subjective is used in different senses in medical writings. It is sometimes used for psychical states in contrast to the correlative nervous states, which latter are then called objective; sometimes for faint states of consciousness, as in ideation, in contrast to vivid states of consciousness, as in perception, which are then called objective; sometimes very crudely, for mind and brain together in contrast to "real things," that is, objects in themselves coloured, shaped, &c., which are then called objective.

(16) *Recapitulation.*—I speak now in recapitulation both of the sensori-motor mechanism and of states of consciousness. The assertion is not simply that states of consciousness attend activities of nervous arrangements. Nor is it enough to say that they attend activities of highest nervous

arrangements of the highest centres unless it be understood that these nervous arrangements represent, or co-ordinate, parts of the body in most complex, &c., ways. A morphological account of the physical bases of psychical states does not suffice; we must give an anatomical account. Whilst a man is thinking, or even dreaming, of a brick, he is having a purely psychical state; the correlative physical state is slight discharge of some complex, &c., nervous arrangements of his highest centres. So far, the statement as to the physical process is only morphologico-physiological. But we go on to add *representing parts of his body*—certain retinal impressions and particular ocular movements—that is, an anatomico-physiological account of the physical process. So far for the faint state of consciousness, thinking of the brick (ideation); the physical process is confined to the highest centres. In perception, seeing the brick vivid state of consciousness (see Section 8), the highest centres are acted on from the periphery, and react upon it; here at any rate is sensori-motor action, exceedingly compound reflex action.* Similarly, *mutatis mutandis*, for vivid and faint mental states of other kinds and for the anatomy of their physical bases. Repeating, in effect, a former statement (Section 1), the epileptic convulsion is nothing other than a sudden, excessive and nearly simultaneous development of the motor element in the anatomical substrata of crowds of psychical states (in their totality, states of consciousness), with next development of less evolved motor elements of the middle and lowest centres.

I will now try to show the bearing of the remarks in Sections 14, 15 and 16 by a particular case.

(17) *Analysis of the Symptomatology of Slight Fits of Epilepsy.*—A slight fit (*le petit mal*) of epilepsy proper is owing to a slighter discharge beginning in some part of the highest centres than that which produces the severe fit (Section 1). The discharge being resisted by the middle motor centres, produces slight peripheral effects, but irradiating widely in the highest centres, there may be seemingly absolute loss of consciousness. Apart from the particulars of this speculation, let us consider the differences in what we put together clinically "as symptoms of epilepsy." We shall take symp-

* The illustrations are arbitrarily simplified. The nervous arrangements discharged during any mental process no doubt represent the whole body (Integration), although some part of it most (specialization); during visual perception those discharged represent most especially the retinal and ocular parts of the body.

toms of slight fits from cases of several patients. I wish to suggest that the proper analysis of this complex symptomatology is impossible unless, among other things, we distinguish between the psychical and the physical. We have also to note degrees of positive and superpositive states of consciousness in these cases from the crudest to the most elaborate, and to consider the physical conditions of them. We have also to consider separately negative affections of consciousness and degrees of them. We have also to distinguish between physical conditions, especially between convulsions and movements ordinarily so-called. In things so complex as epilepsy and insanity, generalizations are worthless without prior analysis. As was shown, Section 1, the epileptic paroxysm is an exceedingly complex thing.

(1) There is sometimes a "warning" of crude sensation, *e.g.*, a stench comes into the nose. As the term sensation tells us, this is a mental state, it is superpositive. It is a very crude and excessive state, and implies the correlative physical condition of sudden, &c., discharge of many central olfactory elements at once, and is our clue to the seat of the "discharging lesion." (2) There is the emotion of fear. (I do not mean a fear of the fit, but "fear which comes by itself.") This is a very complex psychical state, and, I submit, does not occur during sudden, &c., discharges, but arises during slight discharges of very complex nervous arrangements representing parts of the body, especially organic parts, concerned in the manifestations of fear.* (3) There is sometimes the "dreamy state," so-called "intellectual aura;" for example, there rises a feeling "of being somewhere else." This is an exceedingly complex mental state, and cannot, I submit, arise during discharges at all comparable in degree with those which produce convulsions. Consider how vastly it differs in degree of elaborateness from a crude sensation, the physical condition for which crude sensation *is* comparable to the sudden, &c., discharge of motor elements from which convulsion results. So far we have spoken of positive and superpositive states of consciousness, urging that there are great differences in their degrees of elaborateness, and alluding to their physical correlatives. There are negative states of consciousness.

There is very often a stage of (4) defect of consciousness

* My belief is that what are called the manifestations of fear are really after-effects of a discharge. Fear is anger broken down, and is antithetical to anger in that sense.

before what we call (5) loss of consciousness. These negative affections of consciousness occur during the sudden, &c., discharge; for whilst consciousness arises during slight sequent discharges, it ceases during sudden, &c., discharges of many nervous arrangements at once.*

We have (6) convulsions of the eyes, face, hands, and other parts; these do arise from sudden excessive discharges developing many movements of the several parts simultaneously. I submit that they occur especially from discharges beginning in motor elements entering into the anatomical substrata of visual ideas, of words, of tactual ideas, and of other psychical states (Section 16), and from next discharges of connected motor elements of middle and lowest centres. (7) Pallor of the face, arrest of heart, flow of saliva, passage of fæces and urine, are results of sudden, &c., discharges beginning in motor elements entering into the anatomical substrata of emotions and other psychical states. Some of these, however—*e.g.*, the passage of fæces—are the indirect results of such discharges—are owing to permitted over-activity after exhaustion of inhibitory nervous arrangements by the epileptic discharge.

Convulsion is the "running up" of very many movements into a fight. But (8) there are sometimes in the slight epileptic paroxysm movements properly so-called, *e.g.*, clutching at the throat, rubbing one hand with the other, chewing and tasting movements. These arise, I submit, as an indirect result of comparatively slight epileptic discharges of sensory elements. Thus the chewing movement (so often associated with the "dreamy state") is, I submit, the indirect result of an epileptic discharge of gustatory elements (Ferrier finds that faradising a monkey's gustatory centre produces such movements). Now for the post-paroxysmal state.

After a slight paroxysm of *le petit mal*, in many cases the patient may be (9) simply confused for a short time, that is defectively conscious; physically there is exhaustion of very few elements of his highest centres, and correspondingly, I submit, he is slightly paralysed consequent on this exhaustion. For it is of the motor and sensory elements in the physical bases of mental states, and of connected elements of lower centres. The condition is, however, described

* When there is the "dreamy state" there is double consciousness ("mental diplopia"), there being remains of consciousness as to present surroundings (remains of object consciousness), and increase of consciousness as to some former surroundings (increase of subject consciousness).

popularly as "prostration," &c. After a severer attack of *le petit mal* there (10) remains what is called (Section 14) "loss" of consciousness, implying, it is suggested, still deeper exhaustion, and, correspondingly, more paralysis. But often there is (11) with the "unconsciousness" a concerted series of elaborate movements of all parts of the body (mania for one example) which are the physical counterparts of what are psychically actions or conduct. Now, contrary to some physicians, I submit that these are not the result of anything like an epileptic discharge, but that they arise during activities on the lower level of evolution remaining (Section 4). The prior epileptic discharge has left exhaustion of, say, the highest "layer" of the highest centres (dissolution); the series of movements result from activity but super-normal of the second, the no longer controlled layer. Here is a phenomenon of the same order as increased rate of cardiac action after section of the vagus.

(18) *Suggested Scheme of Work.*—Before going further I make the following statements, partly in recapitulation and partly to give an outline of future exposition. We have to show how the following superficially different sets of phenomena occur from disease of the "organ of mind," and how they are explicable on the principle of dissolution.

(I) *From* sudden, rapid, and excessive discharges beginning in some part of the "organ of mind" we have universal or widespread convulsion or its equivalents. Although consciousness arises during slight sequent discharges of nervous arrangements of the highest centres, it ceases during the sudden, &c., discharges thereof.

(II) After the fit there is often insanity. We make three degrees of post-epileptic insanity. There are correspondingly three depths of exhaustion (dissolution) effected by the discharge in the prior paroxysm, each depth being proportionate to the severity of the prior discharge. To these negative physical states the negative mental symptoms, defects of consciousness, marked (*a*) correspond. There are correspondingly three shallows of evolution; the positive mental symptoms, the patient's mentation, marked (*b*) correspond to what are physically activities on these lower levels.

(1) After, or in, a slight fit, there is (*a*) defect of consciousness as to present surroundings with (*b*) increase of consciousness ("dreamy state") as to some former surroundings. (See Section 17.) These are selected cases of *le petit mal*, and the nature of the physical condition for the symptoms is dis-

puted, it being held by some that the two opposite mental states occur during a slight epileptic paroxysm. Hence, beyond now stating (1) as provisionally a first depth of dissolution, I shall say no more of it. (2) After a severer fit, or on partial recovery or re-evolution from the effects of a severest one, there is (*a*) so-called (Section 14) "loss" of consciousness with (*b*) actions (post-epileptic "unconsciousness" with mania for one example). Here is a second depth of dissolution with a less high level of evolution remaining. (There are sub-degrees of this degree. There are, speaking only of the positive element, degrees from most elaborate and highly special actions to the simple and very general actions of sprawling on the floor.) (3) After a severest fit there is (*a*) coma. Here there is no positive mental state according to current opinion; there is acute dementia. There is a lower level of evolution; there are, as outcomes of its activity, of course, certain "vital" movements (circulatory and respiratory), or the patient's dissolution would be total. But these "vital" movements being physical things are not comparable and contrastable with (*b*) in (1) and (2). Here is a third depth of dissolution with a very shallow level of evolution remaining.

Everybody regards No. 2 as insanity (middle depth of dissolution with middle level of evolution remaining), but scarcely anyone takes No. 1 and No. 3 to be insanity. Sometimes (2) occurs on partial recovery from (3); even then, although 2 is called insanity, 3 is not. My contention is that from a scientific, I do not say from a clinical standpoint, 1, 2, and 3 are insanities; 3 is temporary acute dementia. That each is a departure from the patient's normal mental state is enough for us as evolutionists to whom all three are insanities; for us as clinicians, 1 and 2 do not approach standard clinical types of insanity, and are thus, for the clinician, not insanities.

(III) These degrees of insanity have to be compared and contrasted with three degrees of the physiological insanity of sleep:—(1) Sleep with dreams; (2) Deeper sleep with actions (somnambulism); (3) Deep so-called dreamless sleep. Also with three degrees of drunkenness (Mercier makes four). They have to be compared and contrasted with degrees of insanity in acute non-cerebral disease (pneumonia for example); with degrees of insanity from poisoning with belladonna, cannabis indica, &c. Finally, they have to be compared and contrasted with degrees of chronic cases of insanity ordinarily so-called. (As before said, there are

different kinds of insanities, physically dissolutions of different parts of the highest centres.) Besides this kind of comparative study, there is another far more important to the evolutionist.

(IV) Insanities* considered as diseases of the highest centres have to be compared and contrasted with diseases of middle and lowest centres. To this end we have to find the physical condition correlative with the insanities.

(1) The assertion is that negative affection of consciousness, both in the acute transitory insanities spoken of in (II) and the acute and the persisting insanities spoken of in (III), implies paralysis, the paralysis being proportionate to the degree of negative affection of consciousness. On this basis we may compare and contrast not negative affection of consciousness, but paralysis from negative lesions of the highest centres, *which the negative affection of consciousness implies*, with paralysis from negative lesions of middle and lowest centres. To give an illustration, some of the statements being hypothetical: progressive muscular atrophy, paralysis agitans, and general paralysis of the insane are alike in being owing to wasting of cells in the order of their size from smallest towards largest; they are different in that the wasting occurs respectively on the lowest, middle, and highest levels of motor evolution; there is loss of simplest, of complex, and of most complex movements.

(2) Now for positive mental symptoms. These make up, or are to us the present signs of, the patient's mentation or consciousness, and are the lower homologues of his normal mentation or consciousness. We have to try to show how sensori-motor activities—activities of most complex, &c., sensori-motor nervous arrangements, those of the highest centres—are correlative with states of consciousness. To do this we shall accept the artificial analysis of (object) consciousness (we neglect for the moment subject consciousness), into Will, Memory, Reason, and Emotion, and then try to show the anatomy of the physical bases of each—that is, what parts of the body the physical bases (sensori-motor nervous arrangements) of each represent most specially.

In this attempt we must have constant reference to lower centres out of which the highest are evolved. The following is an imperfect sketch, among other things, ignoring In-

* As remarked when speaking of different varieties of epilepsies, of epileti-form seizures, and of bulbar, &c., fits, there are fits from discharges of different levels of evolution. These have to be compared and contrasted, and also the paralyses after fits of each kind.

tegration: What on the lowest level are (1) centres for simplest movements of the limbs become evolved in the highest centres into the physical bases of volition; what on the lowest level (2) are centres for simple reflex actions of eyes and hands are evolved in the highest centres into the physical bases of visual and tactual ideas; what on the lowest level are (3) centres for movements of the tongue, palate, lips, &c., as concerned in eating, swallowing, &c., are in the highest centres evolved into the physical bases of words, symbols serving us during abstract reasoning. (4) What on the lowest level are centres representing the circulatory, respiratory and digestive movements are evolved in the highest centres into the physical bases of emotions. So to speak, the lowest level does menial work; the highest level, evolved out of it, becomes in great degree independent of it and is the anatomical basis of mind.

Negative affections of consciousness are supposed to imply paralysis consequent on loss of the motor (or sensory) elements in the most complex of all sensori-motor nervous arrangements, those entering into the physical bases of the four "faculties" (really four different aspects of object-consciousness) (dissolution). The positive mental symptoms are supposed to be the lower homologues of the patient's normal Will, Memory, Reason, and Emotion (object-consciousness). They are the mentation going on on the lower, but then highest, level of evolution, &c., and imply slight sequent activities of less complex, &c., sensori-motor nervous arrangements representing parts of the body, than those lost.

East Riding Asylum, Beverley. Plans and Description of a Detached Hospital for Cases of Infectious Disease. By M. D. Macleod, M.B. Edin., Medical Superintendent.

Among the descriptions which have appeared from time to time in the "Journal of Mental Science" of buildings arranged for the treatment of the insane, I have not observed any which show details of a building, in connection with an asylum, set apart for cases of infectious disease.

The plans of the building here shown were drawn by Messrs. Smith and Brodrick, of Hull, architects, under whose supervision it has been erected. The plans have received the official sanction also of the Secretary of State through the Commissioners in Lunacy.

JOURNAL OF MENTAL SCIENCE.
APRIL 1887.

EAST RIDING ASYLUM YORKS.

NEW DETACHED HOSPITAL.

Dr MACLEOD. MEDICAL SUPERINTENDANT.

FRONT ELEVATION

N.B. THERE ARE 2 BED ROOMS OVER KITCHEN & SCULLERY. FOR THE USE OF CARE-TAKER

PLAN.

SCALE 32 FEET TO 1 INCH

SMITH & BRODRICK
ARCHITECTS. HULL.

This hospital is situated at a distance of 130 yards to the south-east of the asylum, that site being for local reasons the best available on the estate.

The building will accommodate seven male and seven female patients, or about five per cent. of the average inmates in the asylum. There are rooms for two nurses, and the hospital is complete with stores, kitchen, scullery, wash-house, and laundry. Over the kitchen and scullery are two bedrooms for servants. Attached to the laundry is a stove for disinfection of clothing and bedding by heat.

The hospital proper is a single-story building, having at each end a dormitory for five beds. These dormitories are separated from each other by a spacious entrance hall and two short corridors. The nurses' rooms and store-rooms are placed in these corridors, so that separation of the sexes is amply provided for in the event of there being patients of each sex in the hospital at the same time. The dormitories are fourteen feet high, well lighted on each side, and warmed by open fire-places, having thus good provision for natural ventilation. Ventilation is also further provided for by means of Boyle's ventilators in the roof to exhaust foul, and wall-tubes to admit fresh, air from outside.

At the farthest end of each ward is a passage, into which open two single rooms. These single rooms are warmed by a stove placed at the end of the partition-wall between them, and separated from the rooms by perforated terra cotta bricks.

Behind each dormitory and attached to it is a small annexe in which the closets, baths, and sinks are placed. These are divided from the wards by a passage having windows on each side, obviating the entrance of emanations into the wards from the closets. The closets are on the dry-earth system, but the arrangement is equally suitable for water-closets. The hot water for the baths is provided for by a boiler connected with the kitchen range.

The building is constructed of red bricks, and has hollow walls. Ornamental effects are got by lines and arches of white bricks, and the cornices and eaves gutters are moulded to suit the general effect of the main building.

The roof of the hospital is boarded and felted under the slates, which will make it a warmer building in winter and a cooler one in summer.

The cost of construction will amount to £1,600, or about £114 a bed.

The building looks well, and has all the requirements of an hospital arranged in a simple and efficient manner.

The wards on this plan can be made larger, and the whole building made to accommodate more patients by adding additional wards to each end, the offices being arranged in suitable proportion in their present position.

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*Concerning a new form of Mental Disturbance, having well-defined characters both clinically and pathogenetically.** By Dr. Meschede, of Königsberg.

In the classification of the different forms of insanity, it has been agreed to distinguish two chief groups—the first including those recent and curable psychoses, to which the term diseased *process* is of a truth applicable—the second including those incurable cases which have run their course, and which, indeed, scarcely merit the term diseased *process,* representing rather, as they do, permanent vices, the results of past disease. Since, in the first group, the psychoses affect principally the emotional and psycho-motor elements of the nervous system, the diseases belonging to this category have been described as of the character or temper (in its older sense) as against diseases of the intellect, which constitute the second category—these latter being marked chiefly by failure of the intellectual powers.

In consequence of this somewhat schematic arrangement, the conception has gained footing that the disturbances of the intellect are to be considered as for the most part consequential, excepting those forms of so-called primary dementia* which result from direct damage to the brain, excepting also idiocy, which depends on arrest of development. Hence, one has become accustomed to regard all cases of *recent* and *curable* psychic affections as a species of character—or emotional—insanity, and to look upon this, the emotional element, as the essential and determining one; whilst in cases of intellectual insanity one lays less stress on this form of unsoundness, and, as a rule, treats of it as a secondary phenomenon.

This conception I cannot admit as adequate in all cases, for not in all cases of recent and curable insanity does the character or emotional element play the chief part; indeed, in not a few is it just precisely the intellectual upset which is chief, and to be considered as protopathic, *i.e., independent of any emotional*

* In England, Dr. Meschede's cases would be grouped under primary dementia, or mental stupor.—[Eds.]

upset which may be also present. In cases of this kind, indeed, we find that symptoms belonging to the will, or generally to the character, if present, are so feebly marked, and of such variable form, that it is difficult to determine whether to refer them to either type—of depression or exaltation. On the other hand, the intellectual disturbance is from the first well-defined, and in the further course of the disease maintains its independence of the ever-varying emotional phenomena. From this we perceive how greatly we should err did we attempt to deduce the graver from the lighter disturbance—the more constant from the varying.

From among the comparatively large number of yearly admissions into the Town Asylum of Königsberg, I have observed cases of *recent* insanity of the above-described kind—cases which, as well in their clinical features as also in their etiology, present so much in common, and so much that is characteristic, that I consider they must form one group. This group is characterized principally as follows:—*That primarily and independently of any emotional disturbance, whether simultaneous or preceding, there occurs a grave disturbance of the powers of presentation, and generally of the intellect, consisting especially in the sudden disappearance, as it were at one stroke, of whole tracts of memory, also of current and therefore familiar mental processes.* Hence it results that the patient, so to speak, loses his bearings to the outer world, and gazes around him amazed and confounded as if he had opened his eyes for the first time. The condition is analogous to that recently described as psychic blindness.

This state of mental loss of vision—otherwise to be described as memory-failure—is—note the second characteristic—*curable;* it is therefore not a blindness in the sense of an irreparable defect such as one meets with in certain forms of dementia and of grave brain disorder.

Thirdly, characteristic of this form, is the fact that anomalies of the will or emotions are either completely wanting, or so slight and untypical that they cannot be admitted as determining pathological factors; such emotional disturbances as may be present, or even prominent, are mostly very changeable, and appear to be reactionary processes; not infrequently they fall within the limits of the normal.

A fourth criterion is furnished by the etiology of the affection, as also by the suddenness of the onset. In all cases observed by me, a sudden fright or analogous psychic impression brought about the disturbance. It is this very agreement

in relation to the nature of the cause, and to the immediate effect of this cause, which, together with the similarity in the characters of the psychosis, justify the separation of these cases into a special group. The powerful effect that fright is capable of producing is sufficiently well known, more especially also the fact that even paralytic states may be induced thereby. A fundamental characteristic of the disturbances which fright is capable of effecting is inhibition of vital motor processes, showing itself in spasm or paralysis; after an analogous manner its effect on the psychic organ (Seelenorgan) is to be conceived. However, this is not the place in which to treat of the theoretic side of the question, since the present contribution has in view only the establishment of the etiological and clinical unity of a series of cases observed by me; as an example and type, I beg leave to bring forward in brief one of these same cases:—

A servant maid, having previously enjoyed mental and bodily health, falls without warning into a deep pit. She is drawn out without having sustained bodily hurt, but mentally there is a disturbance, characterized chiefly by loss of the recollection of former perceptions. Being sent into the town on errands, she is unable to remember her commissions, and she appears unable to find her way in streets familiar to her for many years. She is equally incapable in her housework, seeming not to understand the use of the various utensils. For this reason she is brought to the Königsberg Asylum, and amongst other symptoms presents the following:—The patient behaves *like one who has come into new and unfamiliar surroundings, the significance of which she is unable at once to fathom;* she looks at things around her with a partly astonished, partly meaningless gaze. In taking off her clothes she is at fault, and in the process makes all sorts of blundering movements, just as though she understood not the meaning or the fashion of the garments, and could not recollect how they were fastened. When taken to the bed assigned to her, and told to lie down, she obeys truly, but lays herself across the bed. *It was clear that this and other failures resulted solely from want of intellect, and did not follow on any instinctive initiative.* The emotional sphere showed neither marked exaltation nor depression; on the contrary, there was in general a condition of quiet indifference, though now and again emotional excitement cropped up. Thus, on immersing the patient in a bath, there was some vigorous shouting and groaning, much as happens with children not accustomed to bathing. The patient answered questions seldom, those concerning her health she did

for the most part, whilst those relating to objects held before her, she mostly left unanswered, or replied only by a shake of the head or a smile.

She repeatedly complained of pains in the back. In addition, the following points were determined: hyperalgesia along the spine, sensitiveness of the limbs to touch, acceleration of the pulse without febrile exacerbation, *halitus ex ore*, neuroparalytic erythema of the skin.

For some three days the condition persisted unchanged, thence onwards a rapid improvement set in, so that by the end of nine days the patient had completely regained her sanity; at the end of three more weeks she was dismissed quite cured.

If I have sketched thus shortly the history of a case, typical of a group of mental affections, this has not been done under the impression that something absolutely new has been brought forward, for I take for granted that similar cases have come under observation more or less frequently, and are probably not wanting in medical literature. However, to my knowledge, such have not been regarded from the point of view of a definite clinical entity, and been raised to the dignity of a special group, rather have they been described in part along with the group of *melancholia attonita* or *stupida*, in part have they been included in the category of *primary* or so-called *acute dementia*; perhaps also they have been referred to other forms.

Such an apportioning seems to me to be rather perplexing, and at any rate not likely to promote a proper valuing of the facts. From the history of the case above given, it is evident that it does not fit in with the group of the melancholiacs, or in that of dementia, for the conception which the term dementia carries with it is, according to present usage, that the defective state is permanent; it is hence not applicable to any temporary upset of the intellectual faculties.

In conclusion, to restate precisely my position, it is, that, on the ground of personal observations I have endeavoured to establish the occurrence amongst the recent curable psychoses of cases in which a primary disturbance of the intellectual faculties plays the chief part (in contradistinction to the majority of curable psychoses in which an emotional disturbance is *the* feature), then further to state my conviction that certain of such cases may be grouped together by reason of a common pathogenesis (fright), as also by reason of the special features of the psychosis (wholesale vanishing of familiar mental processes, psychic blindness, etc.), and that such is more conformable to reason than the reference of these same cases to the groups of either dementia or melancholia.

Suggestions on the Construction and Organization of Hospitals for the Insane. By SANGER BROWN, M.D. (Late Assistant Physician to the Bloomingdale Asylum, New York.)

It is not my purpose to discuss in detail hospital organization and construction, but simply to call attention to some defects in both, which, I think, ought to be carefully pondered by those who have an interest in the care and treatment of the insane. My observations are intended to apply, for the most part, to those hospitals mainly devoted to the treatment of recent cases of insanity, and where no considerable number of incurable cases is allowed to accumulate. But with some slight modifications they apply with equal force to all hospitals and asylums for the insane.

Within the past ten or fifteen years there has been throughout this country (America) almost a revolution in regard to the care and treatment of the insane; and while, as happens always in revolutions, some doctrines may have been advocated, and some practices adopted, which are unsound, yet it will be generally conceded that much actual improvement has taken place.

When patients are properly classified and subclassified, and kept *constantly* under the supervision of well-trained and competent attendants, it is found that they do not often develop into "unmanageable" cases; and that after a few weeks of judicious management, they become able to conform to routine hospital requirements with more or less facility. But while constant and careful supervision by competent attendants is of the greatest importance in the treatment of the insane, it is most difficult of accomplishment.

Various demoralizing influences are more rife, and accidents happen to patients much more frequently, while the house work is being done than at other times; and, indeed, under the present system patients must obviously suffer more or less from neglect while the attendants' time and attention are occupied with housekeeping. Manifestations of disease will not conform to the regulations of house-keeping, and regulations are almost indispensable to proper house-keeping.

Both house-keeping and the care of patients are constant and fairly invariable factors in hospital organization and work. House work can be efficiently performed by people of comparatively inferior moral and mental cultivation; while the proper duties of an attendant demand a person of very

superior moral and mental qualities, who has been long and carefully trained for his work. Under the present system of organization the two duties are performed by the same person—a person who feels above doing house work, but is forced to do it, and who is too often, both in mind and morals, far below what an attendant ought to be. By separating the two lines of work, both might be more efficiently and more economically performed. A better class of attendants would be developed, and only enough of them would have to be employed to give proper and constant attention to patients; while the house work might be effectively done by ordinary servants, though this latter class should not come into general contact with patients.

With some unimportant architectural modifications, the typical hospital of to-day is constructed according to a plan devised and adopted about thirty years ago, when views and methods of treatment and management were very different from those now in vogue; and, while the present edifices certainly reflect credit upon the men who contrived them, and upon the various legislative bodies who have in many instances made such liberal appropriations for their erection, they fail certainly in some ways to meet more modern demands of treatment.

As to organization, the only change which I wish now to suggest, consists in the employment of a superior class of specially trained people to perform the duties of attendants proper, and an inferior and cheaper class of people to do the ordinary house work. And in order that this may be properly accomplished, suitable day-rooms ought to be provided for the patients while the house work in the sleeping rooms and corridors is being done. I need hardly to call attention to the fact that this provision of day-rooms is also in accordance with the most approved hygienic conditions. The next alteration I would suggest consists in the provision of associated dining-rooms contiguous to the kitchen. By this plan, food might be served in a more palatable form, the amount wasted might be reduced to a minimum, patients might receive better attention while eating, and reparation to the dining hall thrice daily would afford some additional relief to the monotony of hospital residence. As many of the necessities of classification are as actively in operation while patients are eating as at other times, I cannot approve of a single large common dining hall, but rather an aggregation of a sufficient number of rooms to

permit of much the same classification as is carried out in the wards. To those few patients who from various reasons might be unable to go to the dining-rooms, and who would be entirely confined to the infirmary and refractory wards, food might be conveyed by a subway directly from the kitchen, this same subway being used as a passage for patients to and from the dining-rooms in very inclement weather.

Lastly, there is needed in those wards set apart for the treatment of noisy and refractory patients, some more efficient provision than now generally exists, for the temporary isolation of such cases as may be, for the time being, much more highly excited than their fellows. It is from these noisy and refractory wards that most recoveries are drawn, and therefore, in them, patients should be relieved as far as possible from all influences which might seriously interfere with recovery. It often happens, in these wards, that a majority of the patients is disturbed by day and kept awake at night by, perhaps, one or two who are, for the time being, noisy. Unless suitable provision is made for isolation of such noisy patients, the question has often to be decided, whether it will do less harm to allow the more quiet patients to be disturbed or kept awake than to administer so much of some potent sedative to the noisy patients as shall render them noiseless. The consideration of such a question must always be most painful to a conscientious medical officer, but on the principle of the greatest good to the greatest number, if such provision is not made as I have referred to, he may feel it his duty to prescribe what he feels may prove positively injurious to one patient, for the benefit of others.

The appended diagram is intended as a mere suggestion as to how these alterations might be effected. Neither the dimensions of the sleeping-rooms nor, indeed, the exact accommodation of the different wards, have been carefully considered, as that did not seem necessary to my present purpose. It will be found, however, that about eight hundred cubic feet have been allowed for each patient, both in the day-rooms and sleeping-rooms,

It might be objected that the original cost of such a hospital would be greater than that of one constructed according to the plan now generally adopted. To this I would reply, that the difference in the original outlay need not be great, and might be more than counterbalanced by

Plan referred to in Dr: Brown's paper.

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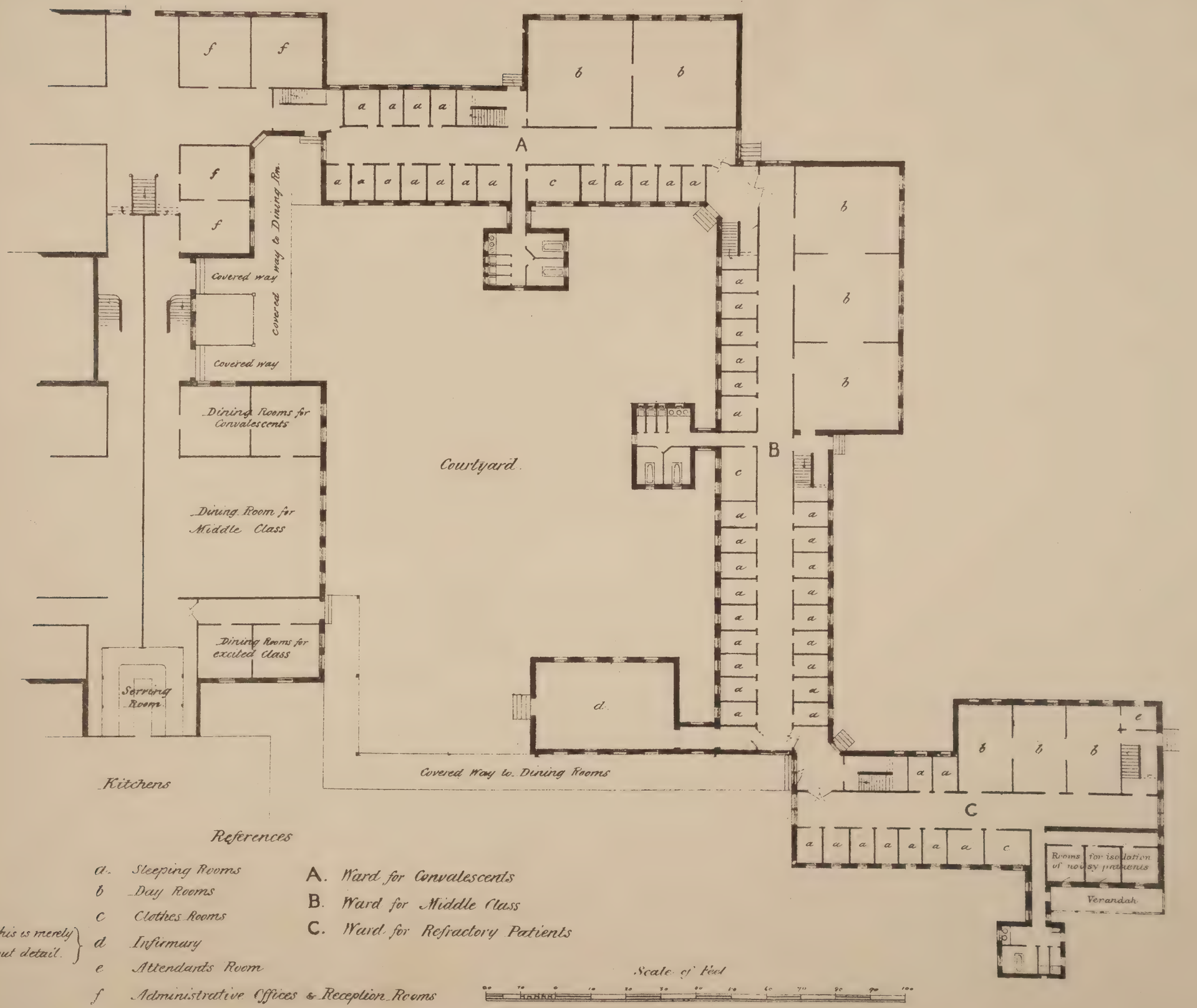

Whiteman & Bass, Photo-Litho. London.

the current economy of administration. Indeed, the abolition of ward dining-rooms would effect a considerable saving in plumbing, lifts or dumb-waiters, pantries, etc., as well as a saving of labour and food. If the advantage to patients should prove as great as I have anticipated, the number of recoveries would be increased and the number of violent and refractory patients diminished, a consummation devoutly to be wished for, both from a humanitarian and economic point of view.

CLINICAL NOTES AND CASES.

Cases of Masturbation (Masturbatic Insanity). By E. C. Spitzka, M.D., of New York.

With few exceptions,* the classical writers on insanity regarded masturbation as an important and frequent factor in its ætiology. Ellinger,† after a careful study of the patients at Winnenthal, concluded that twenty-five per cent. of them owed their condition to this cause. More modern writers, while admitting it to be an element in the production of mental disease, do not assign anything like so high a proportion, and it is probable that the distinguished alienist cited, must have failed to discriminate between those cases in which masturbation precedes and provokes insanity and those in which it accompanies, follows, and results therefrom. Bucknill and Tuke place insanity from masturbation, or masturbatic insanity, under their Somato-Ætiological classification of mental disorders.‡ The latter (Hack Tuke) says "Reliable facts are of course most difficult to obtain, and such figures reveal little of the real truth, the extensive mischief done [by masturbation] of which there can be no doubt whatever.§ Savage‖ states that masturbation may occur as a cause in either sex, but that it is far less frequently a cause than a symptom of mental derangement. Folsom¶ regards it as an exciting and predisposing factor, creating a morbid psychical state by exalting the sensibility

* Parchappe and Guislain.
† "Allgemeine Zeitschrift für Psychiatrie," ii., p. 22.
‡ "Manual of Psychological Medicine," 4th Edit., p. 346.
§ *Op. cit.*, p. 98.
‖ "Insanity and Allied Neuroses," p. 64.
¶ "Pepper's System of Medicine by American Authors," Vol. v., p. 119.

of the youthful nervous system; but adds that it does not often do so. The views of both these, the most recent writers of systematic treatises in the English language, are in accord with some of the leading German authorities. The latter do not recognize a special form of masturbatic insanity in their tables. Schüle* speaks of onanistic insanity in the same sense in which Maudsley uses that term, but gives it no place in his classification, disposing of it in a few lines of the text. Krafft-Ebing† recognizes the vice to be an ætiological factor, and speaks of such-and-such forms of insanity as being developed on a masturbatic basis. He, as well as Schüle, with the majority of recent German writers, follows Ellinger in attributing to the *masturbatic neurosis* a relation to the causation of insanity, analogous to heredity and the great neuroses, such as hysteria, epilepsy, and alcoholism. I am unable to find any dissent among the Germans from the statement approvingly cited by Emminghaus‡ from Krafft-Ebing, that the clinical forms growing out of this neurosis are too numerous and widely different to permit the erection of a special form of insanity, such as that which the renowned somato-ætiologist Skae§ attributed to, and named after, the vice in question. This criticism appears to acquire some support from the lack of unanimity among those writers who have defined and attempted to demarcate such a type. While Skae speaks of a peculiar imbecility and shy habits as characterizing the disorder among the youthful, and suspicion, fear, scared looks, cardiac palpitations, the delusion of having committed the unpardonable sin, and feeble bodies, as found in older victims of this habit, his most distinguished follower|| attributes to it exaggerated self-feeling, conceited, shallow introspection, frothy emotional religious notions, and a restless, unsettled state, with foolish hatchings of philanthropic schemes.

Luther Bell,¶ who, with Isaac Ray, was among the first to direct special attention to insanity caused by masturbation, furnishes a very faithful picture of certain cases, whose particular features he states to be a tendency to dementia, loss of self-respect, a mischievous, dangerous disposition, and

* "Handbuch der Geisteskrankheiten" in "Ziemssen's Cyclopædia," p. 308.
† "Lehrbuch der Psychiatrie," Vol. ii., p. 182.
‡ "Allgemeine Psychopathologie," p. 377.
§ Morisonian Lectures, "Journal of Mental Science," October, 1873.
|| Clouston, "Mental Diseases," p. 484.
¶ Annual Report of the McLean Asylum, 1844, cited in "Bucknill and Tuke's Manual of Psychological Medicine," 4th Edit., p. 346.

an irritable, depressed state of mind. Griesinger* states that the majority of cases are marked by a profound dulness of sentiment and mental exhaustion, by religious delusions, and hallucinations of hearing, and a rapid transition to dementia in the event of incurability; which latter is the usual destiny. Schüle recognizes two phases of onanistic insanity, in the brief paragraph alluded to. The first consists in a persecutory delusional insanity, usually with an erotic or lascivious tinge; the second is a moral insanity, marked by a mean hypochondriacal egotism and a loss of the normal emotions. Savage† speaks of sexual hypochondriasis as one form of insanity due to masturbation, but also attributes this disorder to marital excesses and unsuccessful marital performances. Elsewhere he refers to a form of adolescent insanity due to "masturbation and the onset of sexuality."‡ Folsom§ asserts that most of the primary dementia in asylums is classed in some institutions as insanity of masturbation ("masturbatic insanity").

In writing on this subject some years ago, I stated‖ that stuporous insanity, the so-called "primary dementia" of some asylum tables, is attributable to masturbation as a direct cause in some cases, adding that under these circumstances the prognosis is much worse than in the average of this ordinarily favourable group. Regarding the association of masturbation with insanity of pubescence, I suggested that the vice, while a frequent accompaniment, and perhaps a result of insanity of pubescence,¶ is not its cause, however much this habit may ultimately modify the character of that psychosis.* At the time of making these statements I regarded the following† as expressing the general opinion among alienists:—

"While there is no special form of insanity attributable to masturbation, yet those psychoses accompanied and modified by this vice seem to have certain characters in common. Melancholia, stuporous insanity, katatonia, and insanity of pubescence, are the forms most frequently found in masturbators, and the essential characters of these

* "Mental Pathology and Therapeutics." Wood's republication of the "Syd. Soc. Translation," p. 122.
† *Op. cit.*, p. 64.
‡ *Ibidem*, p. 11.
§ *Op. cit.*, p. 164.
‖ "Insanity, its Classification, Diagnosis, and Treatment," pp. 159-160.
¶ "Hebephrenia."
* *Op. cit.*, p. 177.
† *Op. cit.*, p. 379.

psychoses are always recognizable under these circumstances. The ordinary characteristics of the masturbator are, however, found in addition. Thus such lunatics are usually retired, shy, suspicious, hypochondriacal, mean, and cowardly. . . . A variety of primary deterioration, marked by moral perversion, is observed in young victims of the habit, which yields to treatment if it be discontinued. If unchecked, the disorder culminates in complete fatuity; this has been observed by the writer in subjects between the eleventh and twenty-third year, and is one of the numerous conditions which passes under the designation of 'primary dementia;' it is the only one to which the term insanity of masturbation can be properly applied."

Of those who have furnished figures indicating the frequency of insanity from self-abuse, Clouston* observed it in 46 cases, during nine years' experience with the large insane population of Morningside. Burr,† of Pontiac, bases his monograph on cases selected from 158 whose disease was attributed to masturbation, in a total population of 1,474.‡ Bucknill and Tuke state that out of 603 *male* admissions into the York Asylum, the cause was attributed to masturbation in 15 instances. In my private practice, I find that in 362 case-records of insane males, accumulated since I discriminated regarding this ætiological factor, the psychosis regarded as masturbatic by the English and American writers cited, occurred in 41 cases. Of 401 females, it occurred in eight. Seven years ago, through the kindness of James G. Kiernan, lately of the Cork County Asylum [U.S.], I made a statistical study at the large pauper asylum for insane males on Ward's Island.§ At that time I was compelled to apologize for assigning to one common, or rather mixed group, the forms known as insanity of pubescence or adolescence and insanity of masturbation. This was partly due to the fact, that not all of the cases were under repeated or continuous observation by myself, partly to the imperfect nature of the records, and above all, to my inability to distinguish between them in their various phases. The occurrence of both forms at nearly the same period of life, the frequent co-existence of self-abuse and pubescent insanity, and the modifying effects of the former on the latter, all contributed to this uncertainty. It is these confusing

* *Op. cit.*, p. 491; the total number does not appear to be given.

† The Insanity of Masturbation, reprinted from the "Physician and Surgeon," Ann-Arbor, Michigan, 1885.

‡ Biennial Report of the Pontiac Asylum, for the term ending September 30th, 1884.

§ Race and Insanity, "Journal of Nervous and Mental Diseases," 1879.

features that cause me to institute further inquiries, with the object of determining the precise merits of this clinical form, its limitations and its differential characters.

The effect of masturbation on the nervous system varies according to the age at which the habit is commenced. Like other agents which are injurious to the developing brain, such as epilepsy, alcohol, and syphilis, its effect is most rapid and serious in younger children,* less so in adolescents, and least so in adults. To produce anything like the ravages in the adult brain which it effects in immaturity, it must be greatly protracted. In very young infants it causes a profound deterioration, manifesting itself in convulsive or choreic disorder and imbecility. In those who masturbate between the fifth and tenth years, the effects seem to be chiefly manifested in arrested brain nutrition. Spontaneity of thought and action is rare in such children; they do not play as their comrades do. Here a noteworthy difference is observed between the two sexes. The boy masturbator usually becomes shy, and above all when in presence of female company. The girl masturbator, while shy in general society, seeks out persons of the opposite sex, makes advances to boys, and may even seduce them. To some extent this difference between the two sexes is maintained throughout later life. The adolescent and adult male masturbator, with a few exceptions later alluded to, has in the earlier period of his vice a shyness before, and in later ones an aversion to women. The adolescent and adult female onanist usually entertains ideas of an erotic character, develops foolish marriage notions, and may throw away all reserve before males. It is a singular feature of these cases that there should exist a very great difference between these females as regards the fruition of their expectations. Lombroso† relates the case of one who began masturbating at ten, continued the habit excessively up to her marriage, and at her fourteenth year indulged in the reading of lascivious literature. She intended to become the

* The statement of A. Jacobi, "American Journal of Obstetrics," Feb. and June, 1876, that masturbation is practised by very young children, was, I think, a surprise to many physicians. I am, however, not only able to confirm it, but to add a more remarkable observation than any I have yet found recorded. I was consulted regarding peculiar grimaces and movements in a male infant *eight months* old. I witnessed a so-called "seizure," and found that it was nothing but an act of self-abuse, performed by femoral friction, and accompanied by passionate facial distortion. Scarcely a waking hour passed without an attempt. A cure was easily effected.

† "Archivio di Psychiatria e di malatie nervosi," Anno vi., Fascicolo 4.

"Messalina" of her husband, had countless privileged lovers, but found no gratification, and becoming disappointed in her anticipations, developed into a quarrelsome, irritable, and cruel vixen. A similar experience is recorded in the histories of two of my married female patients, one of them continuing her unnatural practices till she developed a melancholia, from which she recovered.*

The older the victim of self-abuse, the more likely is he to develop an unpleasant irritability or hypochondriacal egotism. In those rare cases where the habit is continued into or commenced late in life, organic brain-disease is a possible sequence. Whether this be a sole result, or merely a consequence of a precipitation of existing pathological changes, or of premature senility, I am unable to say. It is recognized by a number of writers that masturbation may be—like natural sexual excess—a contributory cause of paretic dementia. There is another form of brain-trouble found as a result of self-abuse when continued through a lifetime, to which reference will be made.

Among the factors modifying the clinical picture of masturbatic insanity is the original disposition of the patient. If this were sanguine or choleric, we find conceit, project-building, and aggressive meddlesome behaviour; if the opposite temperaments exist, we find timidity, anxiety, melancholic and hypochondriacal tendencies. Commonly there is some dovetailing of these different states. Not infrequently is it found that they alternate somewhat like the phases of an irregular cyclothymia. Thus, a patient on his reception in the asylum is found depressed, afraid of others, suspecting that they can read his crime in his face, or is filled with an unaccountable dread of death. After a few weeks or months, however, he who sat motionless in one corner, with cold hands, a pale, careworn, anxious countenance and crouched body, who could scarcely be induced to open his mouth when visited by his relatives, meets the latter with a firm or even swaggering demeanour, shakes hands energetically, his eye is brighter, and his expressions positive and loud.† The relatives are gratified at the change, even physicians have been, to my knowledge,

* I have also observed one marked exception to the above. A girl of seventeen, who was brought to me suffering from this same psychosis, was married before her entire recovery. The orgasm recurred from six to ten times during coitus, and she again sought medical advice in consequence of the weakening effect of this.

† This is frequently found in cases of mingled masturbatic and pubescent insanity.

ANALYSIS OF CASES.

(Dr. Spitzka's Article, p. 63-4.)

Case.	At what age vice commenced.	At what age marked symptoms occurred.	Other circumstances.	Clinical character.	Result.
1	Infancy.	9 years.		Imbecility; weakness chiefly noticed in the sphere of memory, occasionally unclean, marked moral perversion.	Habit broken, slight improvement of memory and intellectual status, moral perversion continued.
2	Infancy.	14 years.		Reserved quiet demeanour, then silly acts and expressions, indecency, gradual development of feeble-mindedness, initiated by a katatonic spell.	Progressing to dementia.
3	Infancy.	26 years.	From 12th year, voluptuous imagery; twice married; diurnal seminal losses; spinal irritation; neurotic ancestry.	Sexual perversion, egotism, persecutory paranoia.	Remission of symptoms, then relapse.
4	Infancy.	18 years.	Spermatorrhœa; promiscuous intercourse at 16; at 17½ acquired syphilis; mitral insufficiency; alcoholic excesses determined outbreak.	Anxious delirium during secondary fever of syphilis; jumped from an excursion steamer into New York Bay to escape a "pursuing prostitute who wanted to marry him." Gradual disappearance of delirium; hypochondriacal notions about his brain and genitals take its place, loss of moral sense, development of general inertia and feeble-mindedness.	Slow progress to dementia.
5	Infancy.	18 years.		Timidity, fear of passers-by, fear of dogs, of objects falling, of trains derailing, of steamers exploding; character becoming mean and selfish.	Stationary.
6	Infancy.	62nd year.	Married at 22, still practised self-abuse, and resumed it altogether at 60th year; cerebro-spinal irritation and exhaustion.	Suspicion of marital fidelity, hypochondriasis, gradual mental enfeeblement, character become mean and cowardly, sexual perversion, manustupration of girls.	Slow progress to dementia, blending with the senile state.
7	4th year.	36th year.	Married at 24, discontinued his vice then; one sister has had two attacks of puerperal mania; no other family features.	Morbid fears, timidity, suicidal impulses which patient is too cowardly to obey; hypochondriacal paranoia.	Stationary.
8	10th year.	12th year.	Excellent antecedents; parental stock unusually vigorous and sound. Has since recovery passed through a typhoid without impairment.	Timidity, mendacity, loss of memory, abstraction, general tremulousness.	Recovery.
9	12th year.	22nd year.	Seminal losses, at first only nocturnal, then diurnal as well.	Cowardice, morbid fears, hallucinatory confusion, then obstinate mutism.	Dementia.
10	12th year.	19th year.	Mother rather weak-minded; seminal losses.	Morbid impulses, then depression, fear of death, alternation of excited and depressed periods of about two months each, marked by hallucinations of hearing.	Slightly depressed. Hallucinations becoming fainter, and are corrected.
11	12th year.	16th year.		Alternation of depression and maniacal excitement, with an intermediate period of relative sanity—this recurs twice—gradual development of a treacherous, obtrusive character.	Slow progress to dementia.
12	12th year.	27th year.	Illegitimate child, heredity probable (?), strolling occupation.	Hypochondriacal paranoia.	Stationary.
13	12th year.	52nd year.	Married at 30, occasionally resumed habit, and recently yielded himself up to it altogether, heredity.	Obtrusive, selfish, meddlesome, and vacillating character, hypochondriacal paranoia, then irritability, spells of fury, hectic, and signs of cerebral irritation, followed by brain-wasting, as described by Crichton Browne.	Death.
14	14th year.	17th year.	At ninth year had had connection with girls slightly older; early spinal exhaustion.	Failure of memory, silly expression of countenance, sensuality, glycosuria.	Convalescing.
15	13th year.	21 years.	Spermatorrhœa, sexual excesses, acquired syphilis.	Inability to concentrate thought, loss of memory, suspicion and morbid fears, record of temporary glycosuria.	Stationary.
16	13th year.	23rd year.	In his 18th year developed a remarkable *bulimia*, followed by anorexia, still continuing.	Inability to concentrate ideas, imperative conceptions, and *folie du doute*.	Incipient phthisis.
17	13th year.	18th year.		Lassitude, refusal to leave his bed in the forenoon, vague delusions of poisoning, of assaults on his genitals, of venereal infection. Complete recovery. Six years later, when about to marry, *folie du doute* on the subject of marriage, great anxiety and confusion.	Under observation.
18	13th year.	18th year.	Prepuce unusually long; seminal losses, diurnal.	Depression, dread of people in the street, thinks they suspect his vice, leaves work because his employer and others are speaking about him, anxiety, panphobia.	Convalescing.
19	14th year.	22nd year.	Natural and unnatural sexual excesses, alternating with alcoholic ones.	Fits of hypochondriacal depression, suspicion that he is detected to be addicted to sodomy through his countenance, persecutory delusions, erratic behaviour, complication by alcoholic delirium, after whose disappearance a katatonia-like state.	Recovery.
20	14th year.	25th year.	A weak-minded mother.	As a bank clerk morbidly particular as to his accounts, *folie du doute*, then suspicion that he committed errors, delusions of persecutory tinge. Mixed hypochondriacal and persecutional paranoia.	Stationary.
21	14th year.	22nd year.	At second year a vertebral disease, resulting in moderate kyphosis.	Vague sensations of oppression, interpreted as if someone were sitting on him. This delusion is directed against various persons, including his relatives. Mixed hypochondriacal and persecutional paranoia, with very weak systematization. Refuses to rise in forenoon; peculiar grimacing.	Stationary.
22	14 years.	24 years.	Father attempted suicide and was peculiar; mental overstrain [examination] acted as exciting cause of first, and vexation of second attack.	In 23rd year depressed condition, during which masturbation was continued with shameless publicity. Complete recovery. Eight years later a second attack, with peculiar motor symptoms. Character remains unchanged.	Recovery.
23	16 years.	28 years.	Heredity denied, but grounds for suspecting it. The second attack provoked by moral causes. Patient had taken charge of property which was bought in at the sale of a receiver of stolen goods. The premises were actually watched by detectives, and this was falsely interpreted. Had an attack of the same nature three years before.	Mixed persecutional and hypochondriacal paranoia.	Remission.
24	16	51	Spermatorrhœa continued through married life.	Spinal irritation, hypochondriacal paranoia, loss of both knee-jerks, and indications of pre-senile involution of the brain.	Deterioration.
25	16	54	Sister peculiar; patient certainly continued his vice beyond his 40th year.	One of the most intense cases of hypochondriacal paranoia observed. The patient approached the condition of those mediæval hypochondriacs who, because they did not die of the numerous fatal diseases with which they supposed themselves afflicted, deemed themselves doomed to wander the earth for ever, and thus gave rise to a belief in the wandering Jew.	Death.
26	16th year.	20th year.	Family nervous; all members show signs of premature senility. Patient had hebephrenic character in childhood.	In consequence of masturbatory excesses acute melancholia, which was recovered from, and then a full-blown hebephrenia developed.	Deterioration.
27	20th year.	23rd year.	Genitals not well developed. Remarkably unsophisticated youth; was "instructed" at a public bath by another masturbator in his 20th year. Remarkably fine physique, aside from the above-mentioned deficiency.	Criticized his sister's demeanour at a ball, suspicions of others attempting her virtue, delusion that she was a confederate against his protecting intentions; then delusion that to seal up his lips the inmates of a bad house had mysteriously infected him with syphilis. Mixed persecutional and hypochondriacal paranoia.	Recovery.
28	21st year.	32	Had some infantile eclamptic affection; recovered therefrom. His cranium remarkably smaller than the family type. The Morosini elopement occurred shortly before.	Paranoia of hypochondriacal tinge. Accusation against his mother and sister of attempting to imitate the *affaire Morosini*, and thus to disgrace him and break down his health.	Stationary.

deceived by it. But in the course of an otherwise connected and able conversation, he drops an expression whose abrupt silliness betrays the abyss of developing dementia, in which he is about to sink. The patient who demonstratively asserts what "a good boy" he always has been, who never "broke his word," nor "did a dirty thing," is found to possess the credulity of a child, and attempts to impose assertions on others which imply the same infantile credulity on their part.

Another important modifying factor is of a more strictly psychical nature than the elements just alluded to. The age between twenty and thirty-five is pre-eminently the period of somatic introspection. It is at this period, if at any, that the average man begins to think of his bodily condition. At this age men weigh themselves, discover—or think they do—that they have too much or too little flesh, develop slight gastric disorders, reflex nervous symptoms, indulge in excesses in tobacco, *in baccho*, and *in venere*. They are consequently on the watch for cardiac, renal, or venereal disease, or of sexual disability. At this period, too, the remote consequences of masturbation are felt by the victim of that habit. The prevalent tendency of his age, and his associates of the same age, tinctures his depression with a veritable *nosomania*. Possibly, under the advice of physicians or laymen, he attempts coitus, and fails. Body and mind react on each other in a vicious circle; spinal irritation in the domain of the former, and hypochondriacal insanity in that of the latter, being a frequent result. Of 88 tabulated cases of insanity among military men at Allenberg,* eight were assigned to masturbation, five of these being classified as hypochondriacal paranoia, one as hallucinatory paranoia, one as melancholia with imbecility, and one as mania.† This illustrates the preponderance of hypochondriacal states among those who develop masturbatic insanity at the age mentioned. I believe similar proportions obtain in all asylums where the clinical principles of classification are adopted. In the following table I have attempted to give a brief outline of the history of 28 of my own cases, whose ultimate termination could be learned, or who were at the time of writing this paper under observation.‡

* Sommer: Beiträge zur Kenntniss der Militärpsychosen, "Allgemeine Zeitschrift für Psychiatrie," 1886, p. 32.

† This was the only case terminating in recovery.

‡ Borderland cases, and such with obscure antecedents, or seen but once, are excluded from this table. The female cases are discussed elsewhere.

While the above table demonstrates the preponderance of hypochondriacal insanity in middle life, as a result of masturbation, as well as of other influences adverted to, it may be desirable to pourtray in more detail the various forms represented in it. The following is a pure and typical case of insanity in a youth, resulting from self-abuse practised in early years, and without any complicating factors, such as heredity, hebephrenia, or over-work. It has been selected from among the others, because I am able to submit the patient's own writings, than which a better means of exposing the mental state is not at my disposal.

I.—*Self-abuse practised at puberty, increasing at the 17th year; retired disposition, then silly conduct; vague delusions of persecution; indecency; remarkable relationship between exacerbations of mental disorder and recurrence of habit, or of seminal losses; tendency to dementia; the latter being varied by an attack of stupor, and subsequently by impulsive acts. No heredity or complications.*

George F—, no regular occupation, single, now aged twenty-three years. Seven years ago he developed a marked change of character. Previously of a quiet disposition, he was noted to ask questions in the midst of conversation with which they had no possible relation. He also showed a habit of laughing in a peculiarly silly manner for considerable spells of time, and without any discoverable cause. This continued for nearly three years, when he developed vague delusions of persecution, claiming that people were about to kill him. He was removed to a Western asylum, where it was found necessary to place his hands in muffles to prevent his practising self-abuse. His history at the institution was that he was depressed, silent, inactive, irresolute, indolent, indifferent, and showed very little anxiety to return home. At times he was very capricious. This condition continued some weeks. At home he would sit brooding for hours in one place. At table he would demonstratively decline wine, but after dinner would attempt to obtain some in secret. He positively refused to enter society, inclined to think the worst of other people, and suspected that he was despised or mocked at by the rest of the community. Within six weeks after his return home, while under the treatment of a general practitioner, he improved very much, both physically and mentally. He answered questions rationally, and for some time nothing abnormal could be detected in his conversation or acts. But when in the street he began picking up worthless objects, such as stones, tin-foil, scraps of paper, and even horse-dung. These he would carefully wrap up, and his pockets at home were found filled with parcels of this kind. On one occasion he offered some horse-dung, broken pieces of tobacco-pipe, and coal to his favourite canary, all the while exhibiting a vacant expression, and giggling, while the

saliva ran out of his mouth. As his health improved, an unpleasant disposition became manifest. He would suddenly break out in a fit of scolding, and severely abuse his mother, with foul epithets, when he suspected or saw that she was watching him. His mental state in his 19th year may be gleaned from a letter addressed to his cousin, in which he complains that he has been scolded for not drawing water at the well as ordered, and intimates that he may require a squad of police to protect him. In another he says :

> We are having splendid weather here now, for the last week, we have had a moderate temperature and the sun which makes Spring with its mild and refreshing winds, seem so celestial, has been regular in its appearance every morn. I like to get up early in Spring and enjoy the effects of the climate.

Over this letter is the superscription, "Burn this when you have read it ; " but unless it were the above-cited passage, there is nothing in it to justify that injunction. As the period of his asylum sojourn approached, his spelling, handwriting, and syntax deteriorated rapidly. In one letter written from the asylum, and covering four pages of letter paper, the sentence "let me hear from you" recurs on almost every line of the first page. He asks how the "flowers on his grave are growing," and then argues that he is not insane because he is a good shot at quail. He desires to go home, not because he is dissatisfied with the asylum, but because the duck-shooting season is about to open. This letter is written in German, but the English term "concubines" is used to designate the persons responsible for his asylum incarceration. He speaks in almost the same breath of "rock-candy," asks for "licorice," then adds that he does not know who is more beautiful, Louis T— or Louisa S—, crossing the letter S so as to resemble the symbol of the United States dollar, and accuses Cousin Emma of lying in his body. It appears from the same note that his delusion about concubines is based on his having heard their old gardener speaking of them while attending to the flowers, and it is probable that he misinterpreted the word "columbines." In another letter, English words, in almost microscopical characters, are written over the German ones of the letter proper. Thus, over the German, "I am sorry that I stand thus in the world" is written "ink," and over "I am very much afraid, but trust soon to return," is written "Photograph." Subsequent letters, dated after his removal from the asylum, show considerable variation from meaningless scribbling, without cohesion for a single line, to such as are fairly well written and coherent throughout. A number begin well and wind up badly, of which the following is a specimen :—

> Please write me a few words of your kindness goodness and your friendship, and let me know how you are getting on a few days ago I had some, and said that the impossibilty to go to E— was a lie. having been made redreamed. I atmired the building and the Grain work and believed it conscienceously your humble servant considering the weather was I ink was made very oh: by Atmosphere and was

After his relapse at home, I placed him on restorative and tonic

treatment, directing special attention to calming sexual excitement, and for a time he improved considerably. His conversation became perfectly rational, and some of his letters of this period are the best he ever wrote in his life. But again he relapsed, became impertinent to his mother, and unpleasantly disposed as indicated in the following :—

We have a nice honey-suckle growing on the side of the house, we had some nice cherries on one of our trees, Z— picked, them, all, off, and ate them with Louisa. Hogish as hxll, then all at once he went off again like a Blunder Bus: with his head tossing about with his old black cane with a big white fad on it, as he went strutting up and down the side walk, thinking of a — — [chamber-utensil], as he thought of a white button, it made me think he was God almighty, he: thought, himself Big, cause, he got the permits from my father to take me walking But I didn't care for any body but himself they all feel, so d—d big to come over me, but, that will stop anyway he comes here to eat Ice-cream and Strawberries. I think the Gooseberrys Give him the Stomack acke. I close signing my name.

Two months later, in a relapse brought on by a recurrence of his habits, he portrayed the confused state characteristic of such patients in the following letter addressed to the same person :—

Seeing that good news from me pleases you I will take pains to give you a deliberate and pleasant view of all my case, doings, and pastimes, you know that I am always happy to hear from, you and unwilling to answer letters of that kind letters of pleasant and modest declines are always welcome, and virtue is the mother of the world. Glad to hear good news always sorry for news of Illmeaning sure to answer all letters of any kind for that is my character in life or death: see myself amiably seated at O— with Father and Mother at Home, for O— is our home you know in Reality. furthermore I would like you to know that letters of that kind are always unwelcome and troublesome to defray seeing that you would like to know further and closer particulars. * * * * * * * * *

A part of a daily record kept of his condition at this time may serve to illustrate the routine variation of such cases :—

Date.	Forenoon.	Afternoon.
June 3rd.	Saucy, obstinate, capricious.	Good-natured; speaks in a silly, babyish way.
„ 4th.	Insolent and capricious.	Quiet and dull.
„ 5th.	In excellent spirits; worked about the house.	Quiet and depressed.
„ 6th.	Quiet and depressed.	Quiet and depressed.
„ 7th.	Quiet and depressed.	Quiet and depressed.
„ 8th.	Obstinate and depressed.	Mute, apparently introspective.

At the time of his discharge from the asylum he confounded persons with whom he had been familiar. Under the treament instituted, he discontinued the habit of picking up worthless objects, no longer confounded persons, and during July and August again improved, being strictly watched day and night. On one occasion he left the bed to lie on the floor, evidently to elude observation; but obeyed on being ordered back. He began to take interest in his father's business, and the variations in his condition alluded to ceased. Supervision then became less rigid. September 12th, he was noticed on arising to have a very imbecile expression, and began to indiscriminately collect fruit, vegetables, and other edibles, saying that he must have something more *piquante* than the prescribed diet. With this the silly laughter, which his parents had already learned to regard as an ominous sign, recurred. In the afternoon he exposed his person before his mother, and, when remonstrated with, explained it away. On the whole, however, he continued to improve, and as the symptoms marking his relapses were usually noticed to be most marked in the morning, I had his bedding examined, and it was found, on every subsequent occasion, when his expression on rising was vacant, listless, and silly, or when causeless laughter occurred, that it presented the evidences of seminal emissions. Careful watching was resumed, and revealed that the patient still masturbated. Confronted with the evidences of his misdemeanour, he defiantly replied to the question why he persisted in so damaging a vice, "because I want to;" and when his mother, with tears in her eyes, implored him, if he cared naught for himself, at least to think of the misery caused his parents, he said, "I don't care a ——." A jacket with endless sleeves had meanwhile been made. The first time it was applied, he manifested a child-like willingness to have it. He recognized its purpose; but indulged in laughter and bravado in speaking of it, a fact which filled me with serious apprehensions. For two months this device fulfilled all expectations; neither voluntary nor involuntary seminal discharges occurred. He continued improving, and during this entire period there is no record of a single foolish act or word. He voluntarily worked as a type-setter in his father's printing establishment, where a small paper, of which the latter was editor, was published. After this period, it began to be noticed that he would frequently stand in one spot gazing at vacancy. Examination showed that he had succeeded in provoking the orgasm by femoral friction. The knee-pieces which I had originally suggested, but which the local physician had delayed obtaining, were now applied. Unfortunately, they failed; the patient had become able to effect his purpose without any friction whatever. I then had him taken—he was at this time not under my direct observation—to the nearest large city (St. Louis), where Dr. Bauer performed an operation on the prepuce, calculated to interfere with or to stop his vice. For four months thereafter the latter was not resumed, but the mental state did not improve as before. On his re-

turn, the patient manifested great bitterness of temper, complained that he was looked down upon, that everyone took him for a fool, and if he met his former companions would reply to their questions by mere monosyllables. He also complained that he had never been like other children in his infancy, and in the midst of conversation relating to other subjects would break in with questions about that period of his life. Shortly after, he manifested a little more ambition, entered society, and for a few days again encouraged the hopes of his friends, but soon he became petulant and taciturn, refused to join the family at table because "strangers" were present—these being invited neighbours—and again manifested the silly laughter alluded to. On one occasion, while engaged in cracking open some nuts, a task he had volunteered to assume for a relative, he suddenly became motionless and mute; in the midst of this frozen attitude he smiled vacantly, and repeatedly laughed out loud. After each such fit of laughter, a look of terror stole over his face. He showed some indications of catalepsy that evening, which deepened until complete *flexibilitas cerea* was established. At times he subsequently emerged from this condition, manifesting the same childish manner as before, and having to be fed and put to bed like an infant. When he was allowed to leave the house, he would run around in the garden or street filling his pockets with trash, as after his return from the asylum. On repeated occasions he would suddenly open a button of his coat or trousers with lightning-like rapidity, and when asked his reason, replied, "Don't know." His mouth became filled with saliva, distending his cheeks, and continuing to accumulate until he was ordered to void it, when he let it run out slowly, complaining the while that it "drew his mouth together." He rapidly lost flesh, and his hands became blue and moist. During the past three years his physical condition, after a slight improvement, remained stationary. He has frequent spells of moodiness and obstinacy, on each of which occasions signs of a seminal emission during the night previous were found. It was definitely ascertained that most of these were involuntary, occurring thus about twice a week, or less frequently. On one occasion he escaped from home on a bitterly cold night, broke through the ice in crossing a ditch, and returned covered with ice from head to foot. Apparently his bodily health did not suffer from this, remaining fair up to date, and his only somatic complaint has been constipation. At times his conversation was rational, to become by abrupt transitions irrelevant or absurd. He would repeat the question, "What time is it?" over a hundred times on certain days. He retains such musical acquirements as he had—limited to singing, whistling, and performances on the jew's-harp—and is, as a rule, docile. When ordered to do a thing, he either does it immediately, or, apparently forgetting the order, complies after a repetition. In the course of work requiring protracted efforts, he has to be repeatedly urged to continue, otherwise ceasing in the midst of it, and remaining in whatever posi-

tion—however uncomfortable—he may happen to be at the moment. On one occasion his father—who had abandoned medical advice after a bad prognosis had been given—administered corporeal chastisement during an outbreak of angry excitement on the patient's part. This seems to have had the effect of restraining him, but he has become more timorous. Occasionally he has spells of craving for tobacco, and when he is smoking his pipe throws it away violently, so that it breaks into numberless fragments. Apparently this act is involuntary or impulsive; when remonstrated with, he appears to have no knowledge of the circumstance. He has no other destructive tendencies.

An almost exact counterpart of this history was found in the earlier accounts of three patients who had passed into terminal dementia. All of them exhibited considerable salivation; their demeanour is marked by silly laughter and confusion, alternating with spells of atony. Occasionally they appear to recognize their own condition, and as weak as their memory is for most matters of importance, some of their recollections are quite vivid. A remarkable feature of these cases is the occurrence of rational and continuous conversation for brief periods in the midst of the dementia; indeed, rapid and abrupt transition from one mental state to another is characteristic. It is only where the mental disorder ensues very early that passive and uniform dementia results. When it begins in the adolescent period, it seems as if the conservative forces more frequently made head, however ineffectually, against the overwhelming onset of mental exhaustion resulting from the vice. The greater irritability shown in dementia from masturbation as compared with ordinary forms of terminal dementia, is probably a result of the same conflict between the productive tendencies of youth and the destructive ones of the disease.

One of the exploded superstitions of a past era is that the simple and radical remedy for nervous and mental disorders resulting from masturbation is the resorting to natural gratification of desire. How utterly erroneous this is, the following case shows:—

II.—*Self-abuse at puberty; later, natural indulgence, imperative impulses, terrors, melancholia followed by maniacal excitement, followed by apathy and fading hallucinations.*

P. L., aged 19; no heredity, but has a very foolish mother; did not learn to speak before his fourth year; he is a shipping clerk in his father's business. Self-abuse commenced at the fifteenth year, and was carried out both by manipulation and by rubbing against wooden

pillars, lamp-posts, &c. During the past few months has, on the advice of a friend who discovered his habit, indulged in coition repeatedly, and claims since then to have ceased masturbating. This was, however, found not to be true. On March 19th, 1885, the history was given that he had appeared normal, until about two months ago, when he had spells of terror accompanied by heart-beating. He had a fear that God was going to punish him for having cut someone with a knife. It was subsequently learned that he had had the morbid impulse in the street to cut passers-by, and had at times to struggle with such an impulse for a year past. On one occasion, after an attack of terror, he obtained a "century almanac" to find what day of the week he had been born on. He found it was a Tuesday—the following day, and the nineteenth of the month, which also happened to be the case on that day. Hereupon he remained in bed, saying that he was to die that day. When he heard the house-bell ring, he said "The people are calling to see if P. is alive yet." He seemed to take leave of the world with regret, and his eyes were noticed to wander sadly from one to another of a series of engravings on the wall representing distinguished rabbis. When convinced that midnight of the error of his apprehension, he said, "It is the next nineteenth that I shall die on; all our family die on the nineteenth." This latter statement had some basis, for all deaths that had taken place in the patient's recollection were on the nineteenth of the month, and the fact had been commented on by others.

A week ago his father purchased so-called "fire-extinguishers," glass bombs intended to be thrown into the flames of a beginning fire. Two of these were placed in each room of the house, but they had to be removed, as the patient became greatly agitated, and entertained the fear that he would have to be burned up if they remained.

He answered in a low voice to questions, his answers were responsive, though reluctant; he had an abstracted look, and at times smiled vacantly. Thoughts of death were continually passing through his mind, and he was very apprehensive that I would perform some serious surgical operation on him.

My advice, confirmatory of that of the family physician, Doctor Isaac Oppenheimer, was to place him in a large asylum where proper supervision and classification of such cases were carried out, but it did not satisfy the mother, and the patient was for six weeks treated by another physician. The patient finally reached the lowest rounds of the ladder to *melancholia anxiosa*, and was sent to one of the numberless "homes or halls for the insane," which, under more or less specious titles, are, in the majority of cases, but country boarding-houses, with a little extra gloom and a little worse fare than the ordinary resorts of that name. As the patient's father learned that no attention had been paid to the question of self-abuse and seminal emissions, he again brought him to me, and transferred him to the Bloomingdale Asylum. On this occasion he was in a complaining

mood, asserting that his relatives did not care for him, that they had not visited him often enough, and spoke in an exaggerated and rather maniacal way. He was going to travel around the United States, had eaten three lobster salads, &c. The expression of his eye, which previously was one of terror, now was piercing and glaring. His pupils reacted well, but there was great tremor of the hands. During his sojourn at the "hall" he had been permitted to indulge inordinately in tobacco. He was covered with acne rosacea. At the Bloomingdale Asylum he steadily improved, with the exception of slight relapses, which I found to be connected either with seminal losses or repetitions of self-abuse. He developed auditory hallucinations, hearing his father's and brother's voices; but latterly these "voices" had become less distinct. The patient exhibited a marked variation in his state during the day, being entirely normal in the forenoon, and becoming monosyllabic towards evening. At this latter period his eyes resumed the expression alluded to, and the brows became corrugated. He then slowly improved, the sole discouraging feature being a pronounced apathy. On removal from the asylum to test the effect of home and business life, he rapidly improved. For a time he manifested a boyish dislike towards his parents for placing him in the asylum; but his hallucinations disappeared, and he is now as well as he ever has been, with the exception of occasional spells of "the blues." He has had natural (illicit) connection since his return without the depressing results previously complained of.

In a second patient a more rapidly favourable result was obtained, the case differing mainly in the earlier and more extensive addiction to indulgence with the opposite sex.

III.—*Doubtful heredity, early masturbation, subsequent liaison, confusion of ideas, silly conduct, profound moral deterioration, partial recovery.*

P. S., aged 17 years; good business and musical education; at the time employed in the wholesale department of his father's business. He was strongly suspected of having practised masturbation, and admitted having done so extensively in earlier years. His mother is neurotic, and a brother of hers is at present in an asylum in France suffering from a form of insanity which, according to the physicians, had also been brought on by self-abuse.

Since his fifteenth year the patient has been considered a little peculiar. He made grimaces occasionally, which at first were regarded as childish attempts to make fun; but occasionally a remark would escape him that startled the family, and when in addition to this he refused to leave his bed, ceased to attend to his business duties, and displayed a state of mind inimical to his parents, they consulted me. I at first observed the patient in his business, and the following evening examined him at his residence. He had a most intensified

expression of diabolical meanness. His brows were strongly corrugated, and his eyes sharp and piercing; but he rarely looked at his interlocutor directly, and then seemed unable to do so for more than a moment. As he refused to follow out the treatment recommended, and the family were loth to send him to an asylum, a nurse was employed. To this nurse he took the greatest dislike, not allowing him to approach, kicking, struggling, and screeching at the top of his voice when he came near. My arrival only made matters worse. I found him sitting on the middle of the stairs holding on by the supports of the banisters, and resuming his cries as I entered. He called on a chambermaid by name, and I suggested she be sent for. She came, and the patient followed her as quietly as a lamb, and consented to take the medicine at her hands. This seemed, at least, singular to me, and the apparent mutual understanding between them led me to cross-examine the girl as to her acquaintance and relations with P. She exhibited such innocence and naivity that I did not feel justified in making any pointed inquiries, and informed the family that my misgivings had been removed. As it turned out, however, I had been egregiously duped. The mother of the patient searched the girl's rooms, and a number of presents and letters from the patient were found in her trunks. A confession was then extorted. Her mistress then purchased a ticket for her, and herself saw her on board the steamer which took her to Germany. Unfortunately the exact nature of the sexual relations between the two was not ascertained. The patient remained mute on this subject. A written confession of the girl states that she had been guilty of seducing P. to the commitment of natural and unnatural sexual acts. My impression is that the *liaison* resulted from her discovery of his solitary crimes. He was taken to a private asylum, and there enjoyed the character of being the most troublesome patient they had had in many years. He was equally mean, insulting, and selfish. He would write letters to his parents brimming over with filial loyalty, and in the same hour indite another to his uncle accusing them in the vilest terms of having placed him at the asylum in order to appropriate the piano which he had purchased from his own money, as well as his money at the bank, all of which had been given him by his father in the first place. He also called his family "a pack of liars and swindlers." He improved, however, in other respects, and, being taken out on *parole*, behaved himself so well that he was not returned to the asylum, and has ever since—that is, nearly three years—conducted himself so well that a recommitment has not been found necessary. On a former occasion, when he had been paroled for a day, he walked from his residence to the asylum, through the central park, and destroyed as many flowers as he could reach, replying to his companion, who endeavoured to prevent him, "They can't do anything to me as long as I am in the asylum." On being taken from home, when committed, he gave the girl in question his keys to keep for him, and told her that in three

years he would take her and his piano to their own house. On his return from the asylum he regularly went to business, and sent letters to the girl, which were intercepted. He became much depressed on getting no answer, and ate no dinner nor breakfast on one day, stating that he could not afford it. It was ascertained that some vague notion of saving money for the girl was the motive for this statement. The next moment he said he would like to have a dog-cart and carriages. That evening he began to conjugate "*hic*, *hæc*, *hoc*" very loud, on which his sister said, "Shut my door, P.," and he ceased. At present he has spells of indolence, in which he is moody and makes singular or irrelevant remarks. But such spells are less frequent and less protracted than formerly. His facial expression is greatly improved.

(To be continued.)

Supplementary Note on a Case of Mental Stupor. By the late Dr. Geoghegan. Case reported in the "Journal of Mental Science," April, 1881. (Under the care of Dr. Bland, Medical Superintendent of the Borough Asylum, Portsmouth.)

The Editors are indebted to Dr. J. D. Mortimer, Assistant Medical Officer of the Borough Asylum, Portsmouth, for the following brief notes made by the late Dr. Geoghegan, subsequent to the report of the case made by him in the Journal of the above date :—

May 28, 1881.—Perpetually "on the go." Walks and waltzes about ward when he has nothing to do. Can make mattresses, set up a tennis-court, do fretwork, &c., &c. Always good tempered. Speaks only when spoken to. Will acknowledge to no English port, but if any foreign port is mentioned where he has been he can tell the name of some well-known person there.

Aug. 28.—Has steadily improved. Acts and talks with much fewer mannerisms. Up to yesterday week he spoke a nigger gibberish, or answered questions by signs or writing. This morning, on being told that champagne would be given the attendants of his ward if he spoke normally, he spoke perfectly rational English. Is still reserved on his past career.

Sept. 28.—Has steadily improved. Cannot remember (or will not tell?) anything of the period since he was admitted here as a patient. Appears quite convalescent. Still works industriously.

Oct. 10.—Discharged recovered, and engaged as assistant upholsterer.

When so engaged we had an opportunity of examining him, and found him apparently well in mind. He was reticent as to his mental state when silent.

Dr. Mortimer informs us that the patient has had no relapse, and for some two years or more he has satisfactorily filled the post of storekeeper in the asylum. The patient evades any questioning in regard to his condition when he was in a state of stupor, or in respect to his former life. He is of an excited temperament, and rather egotistic. He is very steady in his habits.

A Case of Moral Insanity. By Colin M. Campbell, M.A., M.D., Medical Superintendent, Perth District Asylum.

M. E., 49, single, formerly a merchant, was admitted into the Perth District Asylum on May 19, 1885. He was stated to have been insane for some weeks; not epileptic nor suicidal, but dangerous to others.

The medical certificates stated that "He spends most of his time in a dark outhouse, smoking, and in a melancholy condition, refusing to work, and bursting out at times in uncontrollable passion, complaining of his sisters' ill-usage, which was untrue, and of his own condition being unbearable, whereas he was most comfortable. He was shaky, nervous, and partially incoherent in speech. That he had threatened his sisters' lives, had actually laid hands on them, and had said that he would do for them, and take seven years for it."

Along with him were brought some letters, recently written by him to his sisters, of a threatening character and insane expression; and the Inspector of Poor stated that he had been directed by the Procurator Fiscal to remove him to the asylum as dangerous.

Previous History.—His father and mother were in comfortable circumstances, and he received a good education. No history of positive neuroses in his family has been ascertained, but his father seems to have been a somewhat peculiar, though ingenious and successful man; and his sisters, both of whom are older than himself, are of an emotional, fussy, and suspicious temperament. His mother is said to have died of "decline." His parents and sisters spoiled him as a boy, and he was of a timid, sulky, and suspicious disposition, and very lazy, though with fair natural abilities and some mechanical turn. At an early age his father started him in a good business of his own as a grocer, and in this

he did fairly well for a year or two, guided by his father and living at home. But his moroseness grew upon him; he smoked heavily, avoided society, was found afterwards to have been given to quiet tippling, and is supposed to have been addicted to self-abuse. After a year or two of this life, he suddenly disappeared with a company of strolling players. This took all who knew him by surprise, as he had always been reserved and self-righteous, and his joining them turned out to be against the players' wishes, as he had no aptitude for the stage. He had taken all the money with him he could scrape together, and as long as it lasted he was allowed to travel with the company. The manager had, finally, to negotiate with his father to take him home, as he would not leave them of his own accord. After this he led an unsettled life for many years, at home and in America, sometimes with employment for a short time, oftener depending for support on contributions from his parents. Of this period of his life particulars are not known, and he himself is extremely reticent about it.

His last occupation was as an electrical mechanician in London. This situation he lost through unsteadiness and some quarrel, six years before admission; and he then returned to his native village, to his sisters' house, his parents having died a year or two before. His share of their property had, evidently with good reason on their part, been left to trustees for his benefit. He had attended his father's funeral, and, on hearing the first clauses of the will, appointing trustees for him, read, he left the room in indignation, and could never be induced to listen to or recognize the will thereafter.

For nearly six years previous to admission, then, he lived with his sisters, alleging ill-health—which was not very serious, although it is probable that at this period some lung mischief was active—as disabling him from earning his own living, and persuading them that it was their duty to support him. At first he did a little work, assisting them in a shop they kept; but he gradually became more and more lazy, ill-tempered, and tyrannical, lying in bed, exacting great attention, and becoming very angry and abusive when not supplied with all the tobacco and money he desired. When supplied with money, he used to consort with low characters, and spend it on drink in a secret manner. He abused his sisters for cruelty, and for appropriating his money, to all he could get to listen, although they appear to have treated him with even foolish indulgence, and to have been not a little afraid of him.

His share—one-third—of his parents' legacies was paid by his trustees to his sisters for his support during this period, the expenses of which it by no means covered. Latterly, he demanded to be supplied with money to live in Edinburgh, away from his sisters' cruelty; and this they, with great misgivings, finally consented to do, about six months prior to his admission. He had declared he

could easily get work at Edinburgh, and for a time he did act as a commission agent for several small ventures, but did hardly any business, and quarrelled with his various employers. He seems to have spent most of his allowance in Edinburgh on drink, and to have suffered some real privations in consequence. His drinking habits throughout were quiet, and he was hardly ever incapably drunk. After a few months of this life, and on his sisters refusing to increase his allowance, he wrote the threatening letters already referred to. Failing thus to gain his point, he ventured to his native village, billeted himself again upon his sisters, whom he greatly alarmed by the violence of his language and his threats to "do for" them and for himself also. They were, therefore, obliged, after a few days, to take the steps resulting in his committal to the asylum.

The threatening letters referred to are nine in number, and cover a period of three weeks prior to his leaving Edinburgh. They are written in a large and shaky hand, and are all in the same strain. One, dated May 1st, is a fair sample. It runs as follows :—

My Dear Sister,—I wrote you on Saturday last, and have waited till to-day expecting a reply—as none has come to hand I see you intend to carry out your line of action to the *bitter end—well* and *good.*

I make this *last* appeal and I do so in the hope of thus saving you as well as myself from *utter ruin. Mark well* what I now write. If you persist in the course you have adopted in regard to me I tell you again as I told you before and as I also told *your friend,* Mr. S— the last time you kindly sent me to him, I had already done three years of solitary confinement, and if I am compelled again to return to B— I am *quite prepared* and *will* do 5 or 7 years more in a different manner—*but remember this,* and I earnestly pray of you—*Beware!* this is now a case of Life or Death with me ; I am quite regardless which ; but if I have to die, *remember we Perish together.* I know you have the *Law* on your side, but all I demand is *Justice.* This I will have or perish in the attempt of obtaining it.

I can live here no longer than to-morrow or Friday. Mr. P. has now left his work, and is almost gone in consumption. They have a child who is daily expected to die with Dropsy in the head, a most pitiable case indeed ; if you have no pity for me, let me beg of you to consider others—you have never had to go hungry—I do so now every day of my life ; this I care not for, I have been long inured to it in former years, but even with the greatest economy I can exercise it is impossible to live on the wind. I can get no steady work, and you are well aware I am not able to do labouring work now as I did formerly, and even if I could it cannot be got here at present. I have worked very hard for a week past and as I told you in my last letter have made little or nothing of it. I have not been able to go out yesterday nor to-day ; we have had rain all day so I was compelled to remain indoors. My situation is to me a very *horrible* one, and I could not wish the greatest enemy I ever had to undergo a similar fate. Alas! Alas! well may poor Burns exclaim—

"Man's inhumanity to man
Makes countless thousands mourn."

I have never disgraced myself nor you so much as your wicked and cruel father has done me. I pray the Lord to forgive him.

If you see your way to reply to this appeal which is my *last one from here,*

do so at once *on receipt*—should I not hear from you by Friday night—you may expect to see me on Saturday. I will require to leave everything behind me as I cannot pay this week's bill.

My brain seems on fire. I can write no more. You little know, and I do sincerely trust never may experience the torture and suspense I have lately endured.

If I have written anything to give offence, all I can do is to ask your pardon, my language may be strong, but *dire necessity* alone compels me to use it.

Trusting you are still in moderate health, and keeping well, I remain, ever,

Your affect. but disconsolate Brother,
M. E.

I am far from being well, but this of course is of little moment. M.E.

Condition on admission.—On admission, M. E. was found to be a tall, well-built man, somewhat emaciated, with bright brown eyes, very sallow complexion, well-developed cranium, good upper features, and iron-grey hair, a full beard of which concealed a weak mouth and chin.

His teeth were greatly discoloured by smoking, his digestive functions were somewhat feeble, his heart sounds weak and occasionally irregular, and the breath sounds over the left apex harsh, but he had no cough, and the lung mischief was evidently quiescent.

His expression was exceedingly sulky and morose; he appeared depressed, and kept his eyes down while speaking. He did not converse freely at first, but answered all ordinary questions in coherent language, and in a rational manner. His memory was fairly good. He became somewhat agitated as he spoke of being put into the asylum, maintaining his sanity, and, when his sisters were referred to, he became much excited; his lips turned blue and trembled, his palpebral muscles twitched, and his fists were clenched, as he worked himself up, inveighing, with strong language, against what he called their cruel and unnatural treatment of him. His abuse was in very general terms, though his expressions were very strong, and he evidenced considerable command of language. He shifted his ground adroitly when pressed to bring definite serious accusations against them, and all that could be clearly made out amid his flood of invective was that they had treated him with less respect and indulgence, and had given him less money than he desired. His peculiar appearance, and the uncontrollable passion and agitation he worked himself into while speaking of them, gave one the impression that he concealed some definite delusions of suspicion regarding them.

He was extraordinarily unreasonable in discussing this subject: He indulged in fierce invective, in high-flown language—the delivery of long sentences appearing to give him some satisfaction—but he could not be brought to the point, nor induced to state definitely in what way his sisters were cruel, why he had lived with them if he did not like them, why he had threatened them, what

he thought of his present position, or what he would do if and when discharged. The following is an example of this:—

One day, when he had been abusing his sisters for defrauding him of his share of his parents' property, I succeeded at length in nailing him down to the admission that he had not seen the will, but had gone out of the room when he heard its first clauses read appointing trustees for himself. He immediately seized on the fact that he had not seen the will, and made this the basis of a fresh complaint of injustice, and the subject of a long tirade against his family and their business men: I then suggested that I would try to get a copy of the will for him to read. This proposition appeared rather to disconcert him, and he became sulky and said it was no use. A few days afterwards I brought him a copy of the will, obtained from one of his trustees. He utterly refused to read it, or even to touch it! After some floundering, apparently in search of some excuse for this refusal, he triumphantly stated that he would read it if he were out of the asylum, but that it was useless for him to read it while an inmate, as a patient could not take action in a court of law, adding, with a sniff, "and you know, or ought to know, that yourself." Having thus furnished himself with a fresh text, he proceeded to enlarge on the injustice of his detention in the asylum, &c., &c., and, as usual, adroitly evaded the subject on hand. He gave one the impression that he was unwilling to read the will, for fear its provisions took from beneath his feet the ground on which he had based his accusations of injustice.

His language and conduct in this instance were very characteristic of his mental state for the first twelve months of his residence in the asylum: This extraordinary perversion of reasoning power, simulating the exaggerated wilfulness of a spoilt child, characterized all his sayings and doings with reference to his treatment by his family. It was an interesting leading symptom, and added seriously to the gravity of his threatening language and behaviour in the same connection prior to admission, and to the dangers of further developments and serious results following premature discharge, while he continued to manifest a vindictive sense of injustice and cruelty, and displayed such agitation when the subject was mentioned.

For long it was thought that some positive delusion must underlie such marked symptoms of uncontrollable agitation, but, during numerous prolonged and exhaustive interviews, none such could be discovered to exist.

He was a quiet and orderly patient, but sulky and disdainful to those around him. He expressed great contempt for the asylum, its inmates, and management, and used to incite other patients to complain and to little acts of rebellion. He himself complained of his food, clothing, bedding, want of tobacco, disturbance by other patients, &c., constantly. He would not work outside, though pressed to do so, but did some ward work, and occasionally paraded

little acts of attention to the sick and feeble. He always spoke of his own health as very delicate, and made a great fuss over one or two very trifling attacks of indisposition. He smoked as hard as he could with the limited supply of tobacco. He was not observed to masturbate. He displayed no active religious sentiment. He ate and slept well as a rule.

With tonics and fresh air his general health improved, and, as regards his mental condition, by July, 1886, he had become somewhat milder in temper and more reasonable. Taking advantage of this improved state, and anxious to discharge him if possible, I pointed out to him his position, and when, as usual, he violently maintained his sanity past and present, I told him that though I believed him insane, I would if he liked treat him for a time as if he were sane, and that, in the first place if his conduct towards his sisters did not indicate insanity, it did indicate a very selfish, lazy, and cowardly disposition; in the second place, that his threats and violence were inconsistent with personal liberty, and must be regarded as either insane or criminal; that his apparently uncontrollable hatred of his sisters, and his impaired reasoning power with reference to his family relationships, prevented his discharge, but that if he showed that he possessed what he claimed to possess, a sane power of self-control and reasoning, for a short definite period, I should feel justified in trusting him again outside. I also pointed out to him that if he acted again when he got out as he had done before admission, he would almost surely be sent back to the asylum. I also told him a few unpalatable truths regarding his natural disposition, which he relished very little.

I deliberately adopted this tone with this patient, and maintained it for some time. In no other case I have treated, have I employed, or been tempted to expect benefit from the employment of, moral suasion with such decided plain speaking.

For about a fortnight after this. M. E. was decidedly more reasonable, and I was congratulating myself on this result, when he rather discouraged me by effecting his escape.

In view of his extraordinary perverse clinging to false grounds in his accusations, I venture to suggest the conclusion I felt almost compelled to come to, that he planned this escape in order to evade the appearance of acquiescence in past proceedings, and the implied promise as to future good behaviour, which waiting for, and as it were accepting, his promised discharge might predicate.

He was absent for a fortnight, and made his way to Edinburgh, where he succeeded in interesting a lawyer in his case, with whom he planned taking legal proceedings against his sisters. He admitted this when brought back, but he could not be got to allow that the will, such as it was, was binding, or that he acted unreasonably in trying to institute legal proceedings regarding it when he was not only ignorant of its contents, but actually refused to acquaint himself with them. As was his habit, he evaded these

questions, and worked himself into a state of insane agitation over his hard fate, and the injustice with which he had been treated, just as before. This escape, and apparent sympathy he obtained from the lawyer in Edinburgh, and his recapture, acted prejudicially apparently at first, and for a time he was additionally moody and reserved. By degrees, however, he became more communicative, and as he did so it became apparent that his condition, while similar in character, had become decidedly modified in degree. Agitation and invective diminished greatly, and, while he maintained their injustice, he could speak of his sisters quietly.

I continued to treat him as we had arranged, on the hypothesis of his sanity, and by consequently uttering unpalatable truths; and this mode of treatment, I believe, along with the moral effect of the failure of his escape and plans for litigation, aided him in regaining the self-control which began to be apparent. He got out, too, a good deal in the fresh air during this summer season, and his general health and spirits showed some improvement also. This was in August, 1886.

This improvement continued for several months. In November he was still morose, but much less markedly so. He adhered to his accusations of unnatural illtreatment by his sisters, but he did not enlarge thereon, and was almost quite free from agitation when discussing them. He said all he wished was never to see or hear of them again, and he agreed that he would not return to his native village nor hold any communication with them. An interview with one of his sisters, both of whom he had violently refused to see before, was arranged for, to test his power of self-control. The lady was unfeignedly alarmed at the prospect of his possible discharge, and afraid to see him, but was at length prevailed on to do so. He received her in sulky silence, but without any sign of agitation. He said, in a dignified manner, "I wish to have nothing to do with you again," and refused to converse further. His appearance indicated comparative indifference.

The gain in self-control evidenced at this interview, together with his general improvement, were judged sufficient to justify his discharge. Arrangements were made for him to go to Edinburgh, and there, and there only, receive a weekly allowance through the inspector of poor, and he was accordingly discharged as technically "recovered" on Nov. 15, 1886, after eighteen months' residence in the asylum.

Since discharge he has lived in Edinburgh, receiving his allowance, and occasionally getting light work, which he throws up in a few days as too trying for his health. He has held no communication of any kind with his sisters. I believe he makes frequent attempts to interest the lawyers again in his case, but with no result as yet that I have heard of.

To recapitulate briefly: among the salient points of this interesting case there stand out:—

1. Eccentricity of father, death from "decline" of mother, and parallel eccentricity of sisters.

2. Indulgence as youngest child and only son. Reserved and timid boyhood. Premature establishment in business. Drinking habits. Self-abuse (?) Sudden outburst in running off with acting company. Erratic, lonely, and semi-dependent subsequent life. Disappointment about father's will. Probable onset at this time of phthisis. Lazy, self-indulgent life, with sisters themselves eccentric. Over-smoking, idleness, and further drinking. Exacerbation of symptoms; insane unreasonableness, egotism, and hypochondria. Struggle for living in Edinburgh. More drink and subsequent privation. Threats of murder and suicide. Violent language and conduct. Action of Procurator Fiscal. Committal to asylum.

3. On admission, moroseness, egotism, hypochondria, violent language regarding sisters, agitation and loss of control, aggravated by extraordinary perversion of his reasoning powers on this and allied subjects, and peculiar half-conscious self-deception, amounting to quasi delusions of suspicion, illustrated by his conduct and language about the will. Absence of any definite delusion. Delicate general health.

4. Slight improvement, mental and physical, after considerable time, from discipline, air, exercise, tonics, reduced tobacco, and enforced alcoholic abstinence. Effect of unusual treatment by moral suasion. Escape. Attempt to start a lawsuit. Moral effect of failure of escape and collapse of legal proceedings. Progressive gain in self-control, diminished violence of hatred, less perversion of his reasoning powers, and general health and spirits, test interview with sister, discharge, and subsequent behaviour indicative of improvement.

I have called this a case of "Moral Insanity," following Prichard and subsequent legal authorities. There was of course in this case no special defect of "moral sense," and the term, "Affective Insanity" would perhaps more correctly indicate the morbid condition.

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*Ataxo-Spasmodic Tabes (Ataxic Paraplegia), occurring in a case of Primary Dementia.** By R. S. Stewart, M.D., Senior Assistant Medical Officer, Glamorgan County Asylum.

It is only within comparatively recent times, especially in England, that a distinct place in the nosological classification of diseases of the spinal cord has been granted to ataxic paraplegia, and that it has been separated, on the one hand, from spastic paraplegia, and on the other from ataxic tabes. Ross† classifies it as a compound form of lateral sclerosis, and Bramwell‡ mentions it as owing its origin to an occasional extension of the lesion from the postero-external columns in locomotor ataxia, while Erb (Ziemssen's "Cyclopædia") regards it as tabes complicated by lesion of the lateral columns, or lateral sclerosis complicated by lesion of the posterior columns, according to the preponderance of the symptoms of one or other disease. On the other hand, the most recent English work on diseases of the spinal cord, that of Gowers,§ devotes a separate section to the consideration of the affection, while on the Continent, especially in Germany and France, it has attracted considerable attention. In the "Archives de Neurologie" for March, May, and July of last year, a detailed description of the symptomatology, pathology, diagnosis, and treatment, with a tabulated *résumé* of 33 cases followed by autopsy, described by various French and German authors, is given by Grasset.

The following case, both from a clinical and pathological point of view, presents many of the features of this form of disease of the spinal cord.

Summary:—History of intemperance in the father. Commencement by speech-embarrassment and mental enfeeblement. Ataxic gait. Absence of knee-jerk. Retention of superficial reflexes. Partial anæsthesia. Absence of lightning pains. Gradually advancing motor failure. Rigidity of limbs. Fibrillary tremors. Emaciation. Muscular atrophy. Bedsores. Diarrhœa. Increasing loss of con-

* It may be questioned whether these terms, the introduction of which into our nosology is of dubious wisdom, are justified by the case here reported. It is not yet, we think, sufficiently recognised, how frequent is the combination of lateral and posterior column changes in General Paralysis. [Eds.]

† "Treatise on the Diseases of the Nervous System," 2nd Edit., Vol. ii., p. 80.

‡ "Diseases of the Spinal Cord," 2nd Edit., p. 224.

§ "Diseases of the Nervous System," Vol. i., p. 341.

sciousness. Temporary improvement. Affection of taste and smell. Auditory hallucinations. Returning loss of consciousness; coma; death 16 *months from commencement. Degeneration and atrophy of nerve-cells of cerebral cortex and spinal cord. Primary lateral and posterior spinal sclerosis.*

James B., aged 24, a smith's striker, native of Cardiff, was admitted on Nov. 25th, 1885. Up to within 12 months of his admission, according to information given by his wife, he had been an active, steady man, kindly-dispositioned, of temperate habits, and of uniformly good health. At that date he had been unable for some time to obtain employment, and it was observed that he was becoming dull and reserved, that his speech became slow and hesitating, his movements uncertain, and that his memory began to fail. During the 12 months prior to his admission these symptoms became gradually more and more marked. Very little information could be obtained as regards family antecedents, beyond the fact that his father was an habitually intemperate man. Patient himself had been married two years, and there was one child.

His condition on admission was as follows:—

He is a poorly-nourished man, pale and sallow, and of medium height; height 5ft. 4½in., weight 9st. 4lbs.; features emaciated, head well formed and amply developed anteriorly; hair dark; irides light blue. The pupils are much dilated, but equal and responsive to light. The tongue is pale, flabby, indented at the edges, and slightly coated, and voluntary attempts to protrude it take place in a highly tremulous and uncertain fashion. Speech is also very hesitating and drawling, amounting to little more than mere mumbling. There is nothing noteworthy as regards the heart, lungs, or abdominal viscera; urine, specific gravity 1011, acid reaction, straw colour, mucous sediment, no albumen.

The mental condition is one mainly of stupor; his expression is vacant and unintelligent; to many commonplace questions he is unable to give a rational reply, though he responds to such simple requests as asking him to put out his tongue, to walk a certain distance, &c.; memory both for remote and recent events is very much impaired, and his habits are defective.

His gait, though by no means characteristic, approximates to that of locomotor ataxia rather than that of spastic paralysis. The knee-jerk is completely absent on both sides; the plantar and other superficial reflexes are normally active. Sensation as regards painful impressions is very much blunted, and the same applies to the localization of touch, and the discrimination by touch of different objects or parts of objects—such as the head from the point of a pin. There is considerable diminution of voluntary motor power, and some ataxia, both of the lower and upper limbs, manifested in the walk and such actions as touching

the tip of the nose with the fore-finger. There is likewise swaying of the body when the eyes are closed and the feet approximated. In both upper and lower extremities there is considerable rigidity, and resistance to passive movement. As he lies in bed the legs are strongly flexed and adducted, and the arms flexed and closely applied to the chest wall. Fibrillary tremors very generally distributed, and affecting the superficially placed muscles, are noted.

Three weeks after admission, owing to increasing helplessness and stupidity, he had to be confined to bed. Consciousness became more and more involved, until he became almost comatose. He lay on his back all day unless moved, the saliva dribbling from his open mouth. He paid no attention to remarks addressed to him, nor could he be roused by vigorous slapping of the face. Evacuations were passed in bed, and there was considerable paralysis of deglutition.

On January 12th it is noted as follows :—There has been a considerable change for the worse. He is still very confused and stupid; he has become very emaciated, the muscular masses are much atrophied, and bedsores, dry, superficial, and leathery in character, have formed over the sacrum and left trochanter (a water bed has been in use all along). The knee-jerk is still absent; the plantar reflex active. He suffers from an intractable form of diarrhœa, not yielding to large doses of bismuth, but controlled to some extent by a combination of tincture of opium and aromatic sulphuric acid.

February 2nd.—A considerable improvement is indicated by the note made at this date. He has become bright and observant, noting what is going on around him. On testing the special senses, it is found that hearing is normally acute, but that taste and smell are both affected, more so the latter. For example, quassia tastes "sour," acid "sweet," sugar "sweet," and salt "salty;" oil of cloves smells "like gin," turpentine "like rum," and assafœtida "like cocoa-nut." Auditory hallucinations have lately developed; he hears his father and mother outside, and he often holds conversations with them. Although he has begun to gain both flesh and strength, a loss of 31 lbs. has taken place since his admission (three months). The eschars exhibit healing action and are improving rapidly. The appetite improves, and he takes large quantities of food without any apparent difficulty as regards swallowing, while the diarrhœa has quite disappeared. This improvement has taken place during the administration of the opium and sulphuric acid, and to these are added cod-liver oil and Parrish's syrup.

In the early part of March he was able to be up part of each day, but by the middle of the month he was again confined to bed. There he remained, and the further progress of the case was steadily and progressively downward. Emaciation and muscular

wasting became extreme; his face became haggard and ghastly, and for two days prior to his death, which occurred on March 31st, 1886, a little over four months after his admission, he gave little sign of life beyond slow regular breathing and a feeble pulse.

The autopsy was performed 40 hours after death, and the following notes were taken.

The spinal cord weighs 17 drams, and its measurements are as follows:—*

	Transverse.	Sagittal.
Cervical	13	10
Dorsal	10	8
Lumbar	10	9 mm.

The cerebro-spinal fluid is in considerable excess. The cord itself is firm throughout, but more especially so in the lumbar enlargement. The dura is normal. The soft membranes are congested, particularly over the posterior aspect of the lumbar enlargement, where, in addition, they present a grayish appearance. On section, the central gray matter appears slightly congested. In the lumbar region a grayish patch is apparent in each postero-external column, while the postero-internal division is also grayer than normal, and somewhat pink. No other change is apparent to the naked eye.

The skull-cap weighs 10½ozs., and is thin generally. The dura mater is normal. The encephalon weighs 53½ozs.; the right hemisphere, 22½; the left, 22; the cerebellum, pons, and medulla, 7. The soft membranes are gelatinous, opaque, and tough; but they are nowhere adherent, being separated from the underlying convolutions by a considerable quantity of subpial fluid. The brain tissue is œdematous and soft; the cortex is congested in a somewhat patchy manner, but not apparently atrophied. The ventricular fluid is slightly increased, but the walls are perfectly smooth. The central medullary substance is of a pure white colour.

The heart weighs 7ozs.; its cavities are contracted; its tissue pale and firm, and its orifices normal. There is rather extensive atheroma of the ascending aorta. The left lung weighs 10½ozs., the right 24ozs.; in the latter there is basal congestion; otherwise both are normal. Spleen 2ozs.; left kidney 3½ozs., right 3ozs.

* The average weight of the spinal cord in 73 male insane persons dying under the age of 30 is given by Boyd ("Table of Average Weights of the Body and Brain") as 1·1 oz. The weight of the cord varies, according to Quain ("Anatomy," 8th Edit.), from 16 to 28 drams. The measurements of the normal cord are:—

	Transverse.	Sagittal.
Cervical	13 or 14	10
Dorsal	10	8
Lumbar	12	9 mm.

— Erb in Ziemssen's "Cyclopædia," Vol. xiii., p. 11.

Liver, 55ozs., is slightly fatty. Intestines normal. Enlargement and caseation of mesenteric glands.

Microscopic examination.—Brain. In sections taken from the upper end of the central convolutions, and stained with carmine, the large pyramidal nerve-cells of the third layer of the cortex present evidences of a considerable degree of atrophy and degeneration. They are smaller than normal, and they have indefinite outlines and withered-looking processes; they have a generalized yellow-granular appearance, and in many instances the nucleus is completely obscured. In sections stained with osmic acid ($\frac{1}{6}$ per cent. sol.) the degenerated nerve-cells take on a dark stain, varying from a deep brown to almost complete black. The vascular walls are nowhere thickened, but the perivascular sheaths in many of the smaller arteries is occupied by hæmatoidin particles, lying free or enclosed in granular cells.

Crura cerebri.—The nerve-cells of the locus niger are filled with brown and often quite black pigmentary particles, so that the nucleus is only exceptionally to be detected. Hæmatoidin particles occur in the perivascular sheaths, but as regards the medullary substance no material alteration is to be noted, and in particular no sclerotic process either in the region of the pyramidal tract or elsewhere.

Cervical cord.—The microscopic appearances indicate a degree of generalized sclerosis, with specialized areas of degeneration of greater intensity. The supporting connective tissue over the whole section is coarser than normal; the neuroglia-cells are large and prominent; the vascular walls are considerably thickened, and hæmatoidin particles occur occasionally in the walls and perivascular spaces. In carmine-stained sections, the areas of more advanced sclerosis are indicated by a deeper staining. These areas (Fig. 1) affect the lateral and posterior columns. That in the lateral columns assumes a triangular form; it has badly-defined outlines; it is separated externally from the periphery by a narrow zone of more healthy tissue; posteriorly it touches the posterior cornu, and anteriorly it reaches as far forward as the level of the central canal, shading off gradually into the more normal tissue of the anterior root-zone. In this area the nerve-fibres are diminished in number, but many of those remaining are of normally large size. This description applies to both lateral columns, the degeneration being strictly symmetrical. In the posterior columns the degeneration is less intense; it affects the whole extent of the internal divisions, but only a small portion of the external divisions, forming a wedge-shaped area which reaches quite to the periphery, but is separated from the posterior cornua and central parts of the gray substance by a zone of more healthy tissue.

The smaller nerve-cells of the anterior cornua of the gray substance seem fewer in number than normal. The large multipolar

corpuscles are extensively degenerated and slightly atrophied; their outlines are wanting in definition; their processes are shrunken-looking, and their interior is occupied in varying proportion by brownish granules, collected sometimes in one or other of the polar recesses, or distributed more generally through the cell-substance, more or less completely obscuring the nucleus. In carmine-tinted sections these degenerated parts of the nerve-cells do not take on the staining, but appear as brownish-yellow areas, and in sections stained with osmic acid they assume a tint varying from deep brown to black. The vessels are numerous and dilated, and the central canal is obliterated and replaced by a mass of round cells.

Lumbar cord.—In this region there are also evidences of a generalized slight sclerosis, and localized areas of more advanced degeneration. The area (Fig. 2) of lateral sclerosis is here much diminished, and it is confined to the posterior extremity of the column, reaching quite up to the periphery, but separated from the central gray substance by a zone of comparatively healthy tissue. The posterior sclerosis does not affect the deeper parts of the columns, nor, except at the extreme outer part of the external divisions, the parts lying towards the periphery. It extends transversely over the whole extent of the columns in their middle three-fifths, and it varies somewhat in intensity. Here also the nerve-cells of the central gray substance are extensively degenerated, and it is noticeable that the smaller bipolar cells of the posterior cornua share in some degree in the degeneration. The central canal is normal.

In several of its features, *e.g.*, the tremor of the lingual muscles and the speech-embarrassment, this case resembles one of general paralysis, but never, during the whole course of the affection, either before admission, so far as could be gathered from the history, or during his residence in the asylum, did he manifest any symptoms of that mental exaltation which is so common a characteristic of the early stage of confirmed general paralysis. On the other hand, the prevailing mental condition was one of more or less progressively advancing enfeeblement, pointing rather to primary dementia.

The physical signs indicate a widespread affection of the whole cerebro-spinal nervous centre, but from the point of view of the affection of the spinal cord, the case presents the features mainly of ataxic paraplegia. The gradual failure of motor power, the rigidity of the limbs, and resistance to passive movement, indicate an affection of the lateral columns, while the absence of the knee-jerk, the ataxia, the diminished sensibility, and the deficient equilibra-

tion on closure of the eyes, constitute the symptoms of posterior sclerosis. It must be remarked, however, that the case involves more than the question merely of sclerosis of the posterior and lateral columns. Symptoms indicating extension of the morbid affection to the gray substance are not awanting. The gradual wasting of the muscles, and the fibrillary tremors, indicate a tropho-irritative affection of the nerve-cells of the anterior cornua, and the dermic necroses an irritative affection of the posterior parts of the central gray substance.

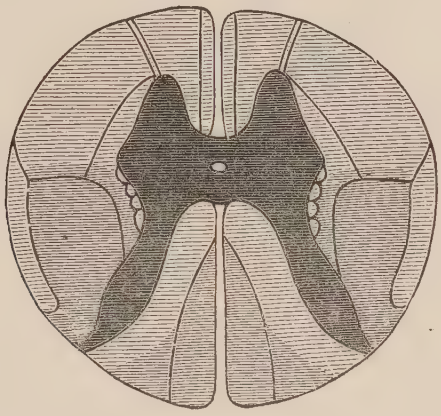
There is on some points a discrepancy of opinion between the two most recent writers on this subject—Grasset and Gowers. From a perusal of the section devoted to the description of this affection, I should say that probably the latter had not, at the date of publication of his work on "Diseases of the Nervous System," seen Grasset's article in the "Archives de Neurologie." While Grasset's article comprises three cases observed by himself, and a tabulated summary of 33 other cases, in all of which autopsies had been performed, Gowers says "a few pathological observations have been published." According to Gowers, the knee-jerk is in the majority of cases quick and extensive; in Grasset's 33 tabulated cases explicit reference is made to the condition of the patellar tendon-reflex in 19 instances, and of these abolition is noted in 12, exaggeration in 7. In the case here described, in a case of melancholia which I have elsewhere* described, and in a case of general paralysis whose cord I have recently examined, in all of which there was found, *post-mortem*, sclerosis, both of the lateral and posterior columns, the knee-jerk was abolished, so that I am rather inclined to adopt the view of Grasset, viz., that "abolition is much more frequent than exaggeration."

The facts of this case, so far, at least, as regards the lower extremities, are not altogether in accordance with the view expressed by Westphal and Zacher, viz., that in a combined lesion of the pyramidal and posterior columns the spastic phenomena are not developed in the superior or inferior members when the lesion of the posterior columns affects the posterior radicular zones in the corresponding sections of the cord.

Grasset, who proposes for this form of disease the name *Combined Tabes*, classifies it as one of the *Mixed Myelitis*, in-

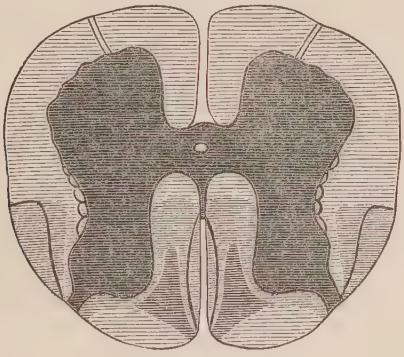
* "Glasgow Medical Journal," October, 1886, p. 250.

cluding under that term those myelites which are at once *diffused* and *systematic*—the posterior sclerosis being systematic, the lateral diffuse. The lateral sclerosis I look upon as *primary*, as contradistinguished from secondary descending degeneration, the anatomical features approximating more to those of the former than the latter.



Cervical (J. Bradley).

Fig. I.—Spinal cord; cervical region; from a case of ataxic paraplegia; degeneration of lateral and posterior columns.



Lumbar (J. Bradley).

SPINAL CORD.

Fig. 2.—Spinal cord; lumbar region; from a case of ataxic paraplegia; degeneration of lateral and posterior columns.

Note.—The writer may here mention that Grasset considers that the description of the cases collected in his tables affords a reply to the question raised by Dr. Bramwell in the foot-note of page 224 of the second edition of his work on "Diseases of the Spinal Cord" as to the condition of the knee-jerk in cases of locomotor ataxia which have become complicated with lateral sclerosis.

*Cases of Typhoid Fever in the Insane.** By R. Percy Smith, M.D., M.R.C.P., Assistant Medical Officer, Bethlem Hospital.

The following cases of typhoid fever have occurred recently in Bethlem Hospital. The first was an isolated case, occurring in the summer of 1885, in a female patient who had been eleven weeks in the hospital, the source of infection not being clear, although at that time drainage-defects undoubtedly existed. The other cases occurred in the autumn of 1886; they all arose within a few days of one another; the patients were all females, and at the time of attack were in the same ward on the ground floor. All apparently originated from a local drainage-defect, and one attendant suffered at the same time. The origin of the disease in food or water-supply would appear to be negatived by its limitation to one ward, in which there was undoubtedly an escape of sewer gas, possibly emanating from an old cesspit infected by the evacuations from the first case, although there was an interval of more than a year between that case and the next. The epidemic has led to a thorough overhaul of the drainage of the hospital, and practically the relaying of a great part of it.

I shall give a brief summary of each case, and then append a few remarks.

Case 1.—F. W. B., æt. 28, single, governess; admitted into Bethlem Hospital June 1st, 1885, suffering from an attack of acute mania of three weeks' duration.

She had had two previous attacks of insanity, in each of which she was depressed, but she had never been under certificates before. She was at first playful, excited, and restless, singing, dancing about, and decorating herself with flowers and leaves; but about the beginning of August became noisy, violent, and using foul language. On August 15th she menstruated for the first time since admission, and then complained of great headache, and became much quieter. The bowels were confined. Four days later she was sick in the morning, and had general abdominal pain and tenderness. The temperature was found to be 102° F. She also had epistaxis, and was slightly deaf, and had some diarrhœa. She passed through a mild attack of typhoid fever, the temperature reaching 104° F. during the second week of the disease, and becoming normal both morning and evening by September 12th,

* Read at the Quarterly Meeting of the Medico-Psychological Association, held at Bethlem Hospital, February 23rd, 1887.

the duration of the attack being between three and four weeks, and there being no complications.

With regard to the mental condition of the patient, with the onset of the fever the excitability and violence disappeared almost suddenly; there was no delirium associated with the attack, but she became sleepy and quiet, and was perfectly tractable and manageable. The excitement did not return with the abatement of the fever, and she was soon sent to the Convalescent Hospital. She subsequently passed through a rather prolonged period of dulness and apathy, from which, however, she eventually recovered.

Case 2.—M. A. S., widow, æt. 41; admitted December 7th, 1885, suffering from acute mania, following the death of her husband and of a favourite child. She had had a previous attack at the age of 20. She was extremely violent, noisy, and destructive on admission, and although her general condition improved somewhat, as a result of plenty of food, she remained for eleven months one of the most troublesome cases in the hospital, her excitement not yielding to hyoscyamine, bromide of potassium, or chloral hydrate.

On November 19th, 1886, nearly twelve months from her admission, she complained of some pain in her left side, and it was remarked that she had looked rather ill for two or three days. She had become much more manageable, although still incoherent and deluded. Her temperature was found to be 103° F., and she had some crepitation at the base of the left lung. At first the case was regarded as one of commencing pneumonia, but the persistence of high temperature, with a morning fall and evening rise, and the non-development of any further lung-signs, except slight general rhonchi and crepitation, led one to suspect typhoid fever. There was now no difficulty whatever in keeping her in bed, and she had quite ceased to be destructive or dirty. During the first week her temperature reached 104° nearly every evening, and the maniacal excitement had been replaced by a drowsy condition, with periods of restless, quietly talkative delirium.

Spots appeared at the end of the first week.

During the second week there was a great deal of abdominal pain, tenderness, and distension, with some retching, associated with small, feeble pulse and a rather rapid fall of temperature, but no diarrhœa. Her condition gave considerable anxiety as to the onset of peritonitis, but she was kept under the influence of morphia, and the serious symptoms disappeared. Her temperature finally became normal, both morning and evening, early in the third week after she was first noticed to be ill, except for a rise a week later, lasting two days, and associated with pains in the elbows and knees. The bowels were confined throughout, and had to be moved by enemata every three days. For the first week after the abatement of the fever she was quiet, talked fairly rationally about her illness, and attributed it to the death of her

husband and child; the improvement, however, only lasted a few days, and she again became noisy, destructive, and sleepless, and by the end of December had become as bad as ever.

She was finally discharged uncured, and went to a County Asylum.

Case 3.—B. A., æt. 20, single, no occupation; admitted October 21st, 1886, with a first attack of acute mania, lasting ten weeks before admission, and attributed to a sudden cessation of the catamenia from bathing in the sea. She was slightly deaf as the result of an attack of scarlet fever in 1880, during which she was very delirious and excited. On admission she was very excited, incoherent, violent, and destructive. She remained in this condition for a month, and on November 20th she was noticed to be quiet and rather out of sorts. Her tongue was furred, and she complained of some giddiness, and was more deaf than on admission. She had some discharge from the left ear.

Her temperature was found to be elevated, and slight general rhonchi were heard over both lungs. She became quiet and rational from the first onset of the fever, and gave no trouble at all. Spots appeared at the end of the first week. The bowels were slightly relaxed, and the only cause for anxiety in her attack was the very abundant crepitation which existed all over both lungs for about a fortnight. The temperature during the first two weeks ranged between 102° and 104° F., and during the succeeding week came down in the typical manner. In a month from the onset of the attack she was convalescent.

During the period of high temperature she wandered somewhat at night, but she passed the greater part of the twenty-fours in sleep, and had no manical excitement, and after the abatement of the fever she remained well mentally.

She menstruated on January 3rd for the first time since admission. She has been to our convalescent home, and has to-day been discharged "recovered," looking fat and perfectly well.

Case 4.—S. B., æt. 37, deaconess; admitted January 28, 1886, with an attack of melancholia lasting fourteen days, characterized by great restlessness and agitation, religious doubts, self-accusation, and refusal of food. She improved very little, and by the middle of November the only change was that she was taking food fairly well, was fatter than on admission, and not quite so restless, occupying herself with needlework, &c.

Two or three days after the commencement of the attacks of typhoid fever in the cases just narrated, it was noticed that her appetite had failed, and that she was much less agitated, and talked less about her delusions. She complained of feeling ill, and her temperature was found to be elevated. She passed through a mild attack of typhoid, not attended by diarrhœa or lung complication, but associated with considerable abdominal

pain and tenderness. In a fortnight her temperature was normal both morning and evening.

During the attack she was perfectly quiet, had no agitation, and recognized that she had had delusions, and seemed to remain fairly well mentally till the end of the year, one month from the onset of the febrile symptoms.

Early in January, however, she became restless and miserable again, and finally relapsed into her old condition, and was eventually discharged uncured.

Case 5.—M. A. F., æt. 47; single, no occupation; admitted January 26, 1886, with a first attack of melancholia, with delusions of being watched by policemen and others, and hallucinations of hearing, suicidal attempts, and refusal of food. The attack followed the death of her mother.

By the middle of November she was practically unchanged. On December 4th she had slight sore throat and abdominal pain, was sick, and had some diarrhœa. At the end of the second week of the fever the temperature became normal for two days, and then a relapse followed lasting three weeks. There was some diarrhœa, principally towards the end of the relapse, but this was easily controlled by starch and opium enemata. Persistent vomiting about the same period gave considerable anxiety. With regard to the mental condition it may simply be remarked that there was no improvement whatever. During the whole attack she was obstinately resistive to everything that was done for her, was constantly trying to get out of bed, and even when the temperature was at its highest utterly failed to realize that she was at all ill. This condition of course gave us considerable anxiety, as the quiet so essential in the treatment of typhoid fever was absolutely unattainable in her case, even in spite of the administration of sedatives and narcotics, and the relapse was probably due to this constant restlessness, for no solid food had been given before its occurrence. However, she became convalescent at the end of five weeks from the onset of the fever, as far as that was concerned, but remained mentally in the same condition as on admission. She has since been discharged uncured. I think her recovery from typhoid fever may be fairly attributed to the very great care displayed by those who nursed her, for she certainly was a most unfavourable subject for an attack of a disease beset with so many dangers.

Case 6.—E. J. P., æt. 27, single, dressmaker; admitted July 20th, 1886, with a second attack of melancholia lasting ten days. She had practically been unstable from October, 1885, and had been in Bethlem Hospital from then till June, 1886. The existing attack had followed her sudden discharge from employment, and she was restless, suspicious, depressed, and had been wandering about Highgate Ponds with suicidal intent. She passed into an almost stuporous condition, refusing food, and

being always wet and dirty in habits, and frequently grovelled on the floor, never speaking or taking interest in surroundings.

In the middle of November her head was shaved for the purpose of blistering the scalp, but she improved slightly after the shaving, so the application of any blistering material was deferred. In ten days she was much better, and was taking food well, and gaining flesh and looking brighter.

On December 2nd she was sick, and complained of pain in the right iliac fossa. Her temperature was elevated for only a few days, but the chart was characteristic of the end of a mild attack of typhoid fever, and she was treated for that disease. Had it not been for the other cases occurring in the same ward, the possibility of her having a mild attack of typhoid might have escaped recognition. She had no diarrhœa, but her tongue resembled that common in typhoid fever, and she had abdominal pain lasting some days. The mental improvement which had begun before the febrile process was discovered progressed, and seemed intensified by it, and she is now at our convalescent home remaining perfectly well.

Remarks.—In reviewing these cases one may first note the difficulty sometimes experienced in detecting diseases of this nature in the insane, the patient frequently making little or no complaint until noticed to be looking ill or to be losing appetite or to be manifestly feverish.

Secondly, with regard to the alteration in the mental condition with the onset of a fever the matter is referred to in the works of Griesinger, Ball, and Bucknill and Tuke, and Dr. Campbell, now superintendent of the Murthly Asylum, reported twenty-two cases occurring at the Durham County Asylum in the "Journal of Mental Science" for July, 1882.

It may be summarized briefly that in two cases (No. 1 and No. 3) a definite, sudden abatement of maniacal symptoms appeared concurrently with the onset of the fever, and the mania did not recur. In Case 1 the attack was followed by a certain amount of temporary depression, but this was in all probability due to the patient's unstable nervous system, and was not quite the same as the alteration of mental condition sometimes seen in the sane after an attack of typhoid. This is rendered the more probable as she had had two previous atacks of insanity.

In Case 3 it is interesting to note that the patient had previously had an almost maniacal delirium during an attack of scarlet fever.

In one other case (No. 6) the patient had entered upon mental convalescence before the discovery of any febrile

process, but the mental improvement progressed concurrently with the latter and was certainly not delayed by it.

In the remaining three cases (Nos. 2, 4, and 5) there was no permanent benefit.

In Case 2, however, the maniacal excitement, which would have been a source of real danger to the patient, happily abated during the fever, thus rendering her treatment comparatively easy; and in this case it was interesting to notice the quieter delirium of typhoid fever replacing the intense excitement she laboured under before.

In Case 4 there was merely a temporary remission of the depression the patient suffered from, and there was no delirium during the fever.

Case 5 was the most anxious one in consequence of the extreme restlessness and obstinate resistance of the patient during the whole of the attack, and, as remarked before, there was no mental improvement whatever. Why this occurred in this case only is not very apparent. It may, perhaps, be looked upon as unnecessary to report these cases, as the fact of remission or cure of mental disease is such a common occurrence in association with the development of physical disease; but I am not aware that any good explanation has yet been given of the reason of this, although the fact is referred to in nearly all works on Insanity, and, therefore, it can hardly be superfluous to report cases where a common cause acts upon patients mentally diseased. It may be remarked that two of the patients (Nos. 2 and 4) had previously during their stay in the hospital suffered from local inflammations, the one an abscess in the temporal region and the other suppuration of some severity about one finger, but with no mental improvement.

At present typhoid fever is too dangerous a disease to the patient to suggest that it should be administered medicinally. Perhaps at some future date, when the specific fevers have been rendered manageable, acute attacks of insanity may be cured by inoculation. All that can be said at present is that in some cases of insanity an attack of typhoid fever appears to cut short the mental disease.

It may be remarked finally that only those cases which one would have expected to get well under any circumstances actually did recover; the others were looked upon as in all probability cases which would be of very long duration even if eventually recovering.

OCCASIONAL NOTES OF THE QUARTER.

Superannuation-Pensions of Medical Officers of County Asylums.

Recent discussions at Quarter Sessions have brought the important question of superannuation prominently before the notice of asylum medical officers. Anyone who has read reports of the proceedings of Dorset, Norfolk, and Berkshire Quarter Sessions in January cannot fail to be impressed with the very unsatisfactory state of matters as regards the superannuation of asylum medical officers, and the uncertainty of their position in this respect, for the agitation against pensions appears to be chiefly directed towards obtaining a reduction in the amount proposed to be granted to the medical superintendent, some even going the length of advocating the total abolition of pensions.

Let us briefly state a few facts in proof of this assertion.

1. The Dorset Asylum Committee recommended a pension of £600 a year, being two-thirds of total estimated value of office, to their able superintendent, who has served 32 years. The various Boards of Guardians organized an agitation against the pension as excessive in amount, which was so successful that the Magistrates at Quarter Sessions rejected the Committee's recommendation by the large majority of 39 to 13, suggestions being thrown out that a reduced amount should be asked for at the April Sessions.

The Earl of Eldon remarked, "he did not like to give his consent to the doctrine that when a man had served a certain time, he was entitled to a pension as a matter of course. He must protest against Mr. Glyn's argument that they must give Dr. Symes something for his 30 years' service."

Lord E. Cecil remarked, "I am not hostile to the pension, but I plead for the sake of the ratepayers."

Mr. Montagu Guest said, "it seemed to him the public feeling was against this pension being granted. He thought it was an excessive proposal to make under the circumstances."

Major Groves said, "he much regretted that he felt bound to oppose the granting of the pension of £600, not upon the ground that Mr. Symes had not done his duty, but

because he objected to the argument which was so much spoken of, that because a man had done his duty he was to receive a very large pension. He had heard not only the opinions of the ratepayers, but those of almost all other classes in the county, and they were all decidedly against the pension."

If Mr. Symes, with such efficient and lengthened service of 32 years, is not worthy of and entitled to the maximum two-thirds pension, it is hard to tell who is. Such observations and decision, emphatically expressed at the Dorset Quarter Sessions, tend to discourage asylum officers, and are calculated to shake their confidence in the sympathy and generous dealing of the County Magistrates towards them in the matter of a retiring allowance.

Surely a medical superintendent, who has to combat the risks, worries, and anxieties of asylum life, is worthy of and entitled to at least as much consideration as officers in Her Majesty's service and Civil servants, who are free from the uncertainties and anomalies of our permissive system of superannuation, and are not subjected to suspense or the indignity of begging for their recognized pension.

The question may be asked, when, and for what length and quality of service, may a medical superintendent reasonably expect the maximum two-thirds on retirement under our present system? And what amount may he reasonably expect for any period after 15 years' service?

2. The Committee of the Norfolk Asylum recommended a pension of £600 a year, being rather less than two-thirds of total estimated value of office to their superintendent after a meritorious service of 25 years, which was confirmed at the January Quarter Sessions, although not without a grumble and an attempt to obtain a reduction in the amount.

"Lord Wodehouse thought that £600 was an enormous sum to give. He thought that £500 a year would be amply sufficient, and he moved accordingly," but this amendment he subsequently withdrew.

The Earl of Kimberley said, "it was open to remark that Dr. Hills was 59, whereas with other services a man must be 60 years of age before he was pensioned. Nothing was so burdensome as pensions, and nothing required such careful consideration as the amount of a pension which was given."*

* Ever since the Norfolk pension has been granted, Boards of Guardians in that county continue to agitate and protest against what they consider an excessive pension, as the following resolutions will show:—

3. The Committee of the Asylum for the County of Berks, Borough of Reading, and Borough of Newbury, recommended a pension of £400 a year, being one-half of the total estimated value of office to their medical superintendent, who resigned on account of ill-health after a service of nearly 17 years. This amount has been confirmed by the Berkshire Quarter Sessions, and the two boroughs named, the Chairman at the Berkshire Sessions, however, remarking that "the whole of the superannuation allowance was £400, undoubtedly a large sum."

The foregoing facts are significant, and seem to indicate that the time has arrived when a combined, earnest, and practical attempt should be made to alter or modify the permissive system, and to get the superannuation of asylum officers and servants placed upon a more satisfactory basis, according to some fixed scale and period of service, on the lines of the Medico-Psychological Association Resolutions of August, 1879, or otherwise, as may be thought best.

In connection with this subject, the Suggestive Report of the Parliamentary and Pensions Committee of the Medico-Psychological Association, dated December, 1882, and signed by the Chairman, Dr. Lockhart Robertson, is well worthy of serious consideration. It suggests a scheme of readjustment of the 4s. grant, which, instead of going to the Unions, should be paid to County Financial Boards towards County Asylum expenditure, including salaries, wages, pensions, repairs and enlargement of the fabric.

As Editors of the Association Journal we wish to help forward this good and just cause, and we naturally look to

Erpingham.—Protest against Dr. Hills' Pension.—At a meeting of Guardians of this Union at Beckham, on Monday, February 14th, it was unanimously resolved: "That this Board, having heard that a retiring pension of £600 per annum was recently granted at the Norfolk magistrates' meeting to Dr. Hills, lately Medical Superintendent to the County Asylum, desire to express their opinion that such a sum is excessive, and they desire to protest against such large sums of the ratepayers' money being voted away for that and similar purposes."

The Ailsham Guardians and the late Medical Superintendent of Thorpe Asylum.—At the usual fortnightly meeting of the Guardians of this Union, held on Tuesday, February 15th, Mr. J. S. Hickling presided. The usual business having been disposed of, the following resolution was carried: "Resolved unanimously that the superannuation allowance of £600 a year recently granted by the Court of Quarter Sessions to Dr. Hills on his retirement from the post of medical superintendent of Thorpe Asylum, is, in the opinion of this Board, excessive, having regard to the present depression of the agricultural interest, and the heavy burden now imposed on the ratepayers by the county rates, and this Board desires to protest against such large pensions being granted by the county magistrates in future."

the Lunacy Commissioners to show their sympathy with asylum officers in a practical way by bringing the question of pensions under the notice of the Government, either in connection with the proposed County Boards Bill or the Lunacy Bill now under discussion in the House of Lords. It is to be hoped that the large-hearted sympathy of the late Lord Shaftesbury with the staff of asylums still permeates the Lunacy Board. Perhaps the Commissioners would be disposed to receive a deputation on the subject.

As is well known, medical officers in the prison departments have seven years added to service. Further, the Treasury would allow "an injury allowance" in addition to this, should a medical officer be obliged to retire in consequence of receiving an injury whilst in the performance of his duty.

Lord Monkswell's amendment to the Lunacy Bill now before Parliament, and adopted by the Lord Chancellor, will, if the Bill become law, allow superintendents to reckon their service in more than one asylum in the same county, a principle adopted in the Police Superannuation Bill of the late Government. Dr. Murray Lindsay, who has done more than anyone in advocating the claims of superintendents, has for years maintained the justice of counting service in different asylums towards a pension, whether in the same county or not.

Dr. Rutherford and his Assistant Medical Officer.

We have deferred commenting on the unhappy incident which has occurred at the Institution at Dumfries, of which Dr. Rutherford is the esteemed Superintendent, until in possession of the official Report upon the charges made against the management of one of the houses of the asylum by the Junior Medical Assistant, Dr. David Lennox. It may be briefly stated that on June 11th, 1886, this officer resigned after seven months' service. When Dr. Rutherford became aware, a week afterwards, of this fact, he at once suspended him, a proceeding which was confirmed by the Board of Direction. The result was an official inquiry into the above charges by the Scotch Lunacy Board. The following is the memorandum made by this Board for the Trustees and Directors of the Crichton Royal Institution as to the inquiry by the Board, under section 11 of 20 and 21 Vic., Cap. 71, into the charges brought against the management

of the second house of the institution by the late Junior Medical Assistant in a letter to Sir Alexander Jardine, Bart., dated 11th June, 1886, a copy of which letter was on the same day transmitted by the said Junior Medical Assistant to the Board :—

I. On the 21st day of July, 1886, the Board met in Edinburgh —all the members and the Secretary being present—and the following persons, who had been duly cited to appear, were examined on oath :—

1. The Junior Medical Assistant who had made the charges leading to the Inquiry.
2. The Secretary and Treasurer of the Institution.
3. The Medical Superintendent.

II. On the 22nd day of July, 1886, the Board again met in Edinburgh—all the members and the Secretary being present—and the following persons, who had been duly cited to appear, were examined on oath :—

4. The Senior Medical Assistant.
5. The Matron of the Second House.
6. The Matron of the First House.
7. The Head Male Attendant of the Second House.
8. The Head Male Attendant of the First House.
9. The Steward.
10. The Housekeeper.

III. On the 29th day of July, 1886, the Board met at Dumfries. Present—Sir John Don Wauchope, Bart. (chairman), Sheriff Guthrie Smith, Dr. Arthur Mitchell, and Mr. T. W. L. Spence for the Secretary. The following persons were examined, and, with the exception of the two patients, they had been duly cited to appear and were examined on oath :—

11. Nine Female Attendants or Servants.
12. Five Male Attendants.
13. Three men formerly in service as Attendants in the Second House.
14. Two patients.

IV. Altogether 29 persons were examined at the three special meetings of the Board. The persons examined included all whom it seemed to the Board necessary to examine, and also, with the exception of three patients, all whom the late Junior Medical Assistant, who made the charges under investigation, desired to have examined, as persons whose testimony would support the charges. Of the five patients he had named, the three who were not examined were considered by the Board unfit for examination, partly on evidence given orally by the Senior Medical Assistant, and partly on evidence given in the Case Books by the late Junior Medical Assistant. There was besides, in the opinion of the Board, a sufficiency of evidence from sane persons.

V. Though the inquiry was not made at the instance of any parties, the Board sanctioned the presence during it of agents and counsel, representing (1) the Trustees and Directors; (2) the Medical Superintendent; and (3) the late Junior Medical Assistant. At the two meetings in Edinburgh all the three were represented; and at the meeting in Dumfries the Trustees and Directors were represented. The gentlemen who attended as representatives were informed that, while the Board could not allow them a general right of cross-examination as in a contested case, they would be permitted to suggest or put questions as through the Board, and they freely availed themselves of this privilege by questioning the persons under examination.

VI. At the meeting in Dumfries the Board closed the inquiry, and gave instructions that the two Medical Commissioners should visit the Second House, and report as to its management at the time of their visit, with special reference to the discipline of the House, and the feeding of the patients and attendants.

VII. The conclusions which the Board have come to as the result of the inquiry into the charges brought against the management of the Second House of the Crichton Royal Institution by the Junior Medical Assistant, in his letter to Sir Alexander Jardine, Bart., of 11th June, 1886, are as follows :—

(a) That the charge of want of discipline in the Second House of the Crichton Royal Institution has been proved to their satisfaction to be unfounded. The conduct, however, of the late Junior Medical Assistant during the time he held that position was shown to have been subversive of discipline.

(b) That as regards the quantity of food supplied to the patients in the Second House, many of the figures in the letter referred to are shown to be erroneous; and that the statements in it generally in reference to the quantity of food and the condition of the patients are undeserving of confidence.

(c) That both as regards patients, attendants, and house servants, the food supplies of the Second House have been of good quality, but that the cooking of the food appears to have been on a considerable number of occasions unsatisfactory.

(d) That the estimate of the cost of the food of the patients in the Second House, given in the letter referred to, is unsupported by facts, and shows an ignorance of the cost of the food of patients in other asylums.

(e) That the charges in the letter referred to against the management of the Second House have been prepared, and have been brought forward, in a way which deserves strong censure.

VIII. The following is a copy of the Report by Commissioners

Mitchell and Sibbald after the visit which they were instructed to make :—

"16*th September*, 1886.—According to instructions from the Board, we visited the Second House of the Crichton Royal Institution to-day for the purpose of inquiring into, and reporting on, its management at the time of our visit with special reference to the charges lately brought against the management by the Junior Medical Assistant. We have now to report as follows :—

"(1) We looked carefully into the question of discipline, and nothing came under our observation to show that it was in any respect defective. On the contrary, the management and discipline appeared to us to show ability, in view of the difficulties arising out of the extensive structural changes at present in progress, which have made it necessary to remove all patients from more than the half of the female side, and to use the kitchen as an ordinary passage, and which have necessitated for the time being many make-shift arrangements. There seems at present to be no failure on the part of the staff to co-operate loyally with the Superintendent in overcoming these unavoidable difficulties.

"(2) We also made careful inquiries as to the quality, quantity, cooking, and serving of the food of the patients and attendants, and we came to the conclusion that they are all satisfactory. No complaints were made to us regarding the food, either by patients or attendants. The dinner served during our visit was, in our opinion, excellent in quality, abundant in quantity, and well cooked, and it was served in an orderly manner.

"(Signed) W. FORBES, *Secretary.*"

General Board of Lunacy,
Edinburgh, 3*rd November*, 1886.

We sincerely congratulate the able Superintendent of the Dumfries Asylum on the result of the investigation into the charges preferred against his administration, and sympathize with him in the unjustifiable annoyance which he has been made to suffer. It need hardly be said that if the management of an asylum were justly open to grave censure, it might become the duty of even a Junior Medical Officer to bring under the notice of the Board the abuse which he considered existed, and, if he thought proper, to resign his post. But nothing can justify the course which Dr. Lennox pursued in the present instance, wanting as it was in openness with the Superintendent, and loyalty to him as his Chief, who, moreover, had treated him with singular kindness and

consideration. The publication of private letters without permission also deserves the severest censure.

The one point in the official report which at all favours Dr. Lennox's charges has reference to the cooking of the food, which "appears to have been on a considerable number of occasions unsatisfactory." Doubtless, had this defect been brought under Dr. Rutherford's notice by the assistant, he would have been thankful for the information and acted upon it. Unfortunately, however, the Lunacy Commissioners report that the conduct of Dr. Lennox during the time that he held office "was shown to have been subversive of discipline," and his statements in reference to the quantity of the food and the condition of the patients "undeserving of confidence," while his estimate of the cost of food in the institution "shows an ignorance of such cost in other asylums."

We hope that it will be long, indeed, before Dr. Rutherford is subjected to similar annoyances, which must for the time being seriously interfere with the proper work of a medical superintendent, and add very unnecessarily to the already sufficiently heavy strain under which he has to perform his daily duties.

Idiots Act, 1886.

The above is the name of an important Act which passed through Parliament last year, simplifying the certificates and removing restrictions affecting the admission of idiots and imbeciles into Training Institutions, and which we have not found room to notice before. Previously, Training Institutions for Idiots and Imbeciles were regarded, in the eye of the law, either as licensed houses or registered hospitals for lunatics. Before a patient could be received into them it was necessary for the parent or guardian to fill up an order, stating that the child was a lunatic, an idiot, or a person of unsound mind, and to reply to a series of questions totally unsuited to the case. In addition to the order and statement, two medical certificates, the same as were necessary for the admission of insane persons into lunatic asylums, and quite inappropriate for idiots and imbeciles, were required from independent practitioners.

Now, since all training institutions for idiots and imbeciles are really *schools*, in which the patients are educated

and trained for the duties of life, and so prevented from becoming useless members of the community, it is clear that difficulties should not be thrown in the way of parents seeking education for their feeble-minded children. Again, many parents object to having their children called idiots; in some cases because the children are of a much higher mental standing, in others from sentimental reasons. The writer of these remarks has for some time past advocated the removal of the word idiot, and the substitution of the word imbecile in its place. The term imbecile can then include all cases of mental defect, whether congenital or acquired, and avoids difficulties of classification, such as sometimes occur when the words idiot and imbecile are used, it being at times difficult to say under which heading a patient should be placed, especially when demonstrating cases to persons unacquainted with the subject. By this Act the word imbecile becomes a legal term, and therefore there is no legal objection to its use.

The first step in drawing attention to the restrictions affecting the admission of idiots and imbeciles into training institutions under the Lunacy Law, was the issue by the Central Committee of the Royal Albert Asylum, of a "Memorandum of Suggestions for the Modification of the Lunacy Acts as they affect Institutions for the Training of Imbeciles" to all who were interested in the subject. Meetings were called to discuss the question at Lord Winmarleigh's house; certain decisions were arrived at, and the Lord Chancellor eventually decided to bring forward a Bill bearing the above name.

The chief alterations of those previously in force are:— The registration of all hospitals, institutions, or licensed houses in which only idiots and imbeciles have been or are intended to be received; the requirement of one medical certificate instead of two, such certificate stating that the patient (an infant or of full age) is an idiot (or has been imbecile from birth, or for some years past, or from an early age), and is capable of receiving benefit from the institution; a simpler statement by the parent or guardian of the patient; the non-application of certain provisions of the Lunacy Acts to the Idiots Act; and the power given to committees to grant superannuation allowances to officers or servants employed in hospitals, institutions, or licensed houses registered under this Act.

The Act itself is appended.

49 & 50 VICT., CHAP. 25.

A.D. 1886.

An Act for giving facilities for the care, education, and training of Idiots and Imbeciles. [25th June, 1886.]

Whereas it is expedient to make provision for the admission into hospitals, institutions, and licensed houses of idiots and imbeciles, and for their care, education, and training therein :

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

Short title.

1. This Act may be cited as the Idiots Act, 1886.

Extent of Act.

2. This Act shall not extend to Scotland or Ireland.

Commencement.

3. This Act shall commence from and immediately after the thirty-first day of December, one thousand eight hundred and eighty-six.

Hospitals, institutions, and licensed houses for idiots and imbeciles.

4. An idiot or imbecile from birth or from an early age may, if under age, be placed by his parents or guardians or by any person undertaking and performing towards him the duty of a parent or guardian, and may lawfully be received into, and until of full age detained in, any hospital, institution, or licensed house, registered under this Act for the care, education, and training of idiots or imbeciles upon the certificate in writing of a duly qualified medical practitioner in the Form One in the Schedule that the person to whom such certificate relates is an idiot or imbecile, capable of receiving benefit from such hospital, institution, or licensed house, accompanied by a statement in the Form Two in the Schedule signed by the parent or guardian of the idiot or imbecile, or the person undertaking or performing towards him the duty of a parent or guardian.

Retention and admission of idiots and imbeciles after full age.

5. Any idiot or imbecile who has while under age been received under this Act into any hospital, institution, or licensed house, registered under this Act may, with the consent in writing of the Commissioners in Lunacy, be retained therein after he is of full age, and an idiot or imbecile from birth or from an early age may be received into any hospital, institution, or licensed house, registered under this Act after he is of full age upon the certificate in writing of a duly qualified medical practitioner in the Form One in the Schedule, accompanied by a statement in the Form Two in the Schedule signed by the parent or guardian of the idiot or imbecile, or the person undertaking or performing towards him the duty of a parent or guardian.

Order of discharge by Commissioners in Lunacy.

6. The Commissioners may at any time, by order, direct any person of full age retained in any hospital, institution, or licensed house, registered under this Act to be discharged therefrom, and such order shall specify the reason or reasons for such discharge and the date thereof.

Registration of hospitals, institutions, and licensed houses under this Act.

7. The managing committee or the principal officer of every hospital, institution, or licensed house, in which idiots or imbeciles are intended to be received under this Act, shall apply to the Commissioners to have the hospital, institution, or licensed house registered in the office of the Commissioners, and the Commissioners, if satisfied upon inquiry that the hospital, institution, or licensed house, is a proper one to be registered, shall issue a certificate of registration accordingly; and no idiot or imbecile shall be received into any hospital, institution, or licensed house, under this Act, until the same hospital, institution, or licensed house has been duly registered.

Provision for existing hospitals, institutions, and licensed houses for idiots or imbeciles.

8. Any hospital, institution, or licensed house, which at the passing of this Act is devoted exclusively to the care, education, and training of idiots or imbeciles, may be registered under this Act, and all idiots and imbeciles lawfully retained therein at the passing of this Act may continue to be so retained without further certification.

Notice of reception to be sent to Commissioners in Lunacy.

9. When any idiot or imbecile is first received into a hospital, institution, or licensed house, registered under this Act, the superintendent or principal officer thereof shall, within fourteen days, certify in writing under his hand to the Commissioners in the Form Three in the Schedule the fact and time of his reception, specifying his name and age and the names and addresses of the persons placing him in such hospital, institution, or licensed house, and that he is alleged to be capable of deriving benefit from the treatment to be received therein.

Notice of death or discharge.

10. When any idiot or imbecile dies in any hospital, institution, or licensed house, registered under this Act, or is discharged therefrom, the superintendent or principal officer thereof shall forthwith notify in writing such death or discharge to the Commissioners.

Certain provisions of Lunacy Acts not to apply to this Act.

11. The provisions of any Act relating to the registration and regulation of hospitals, asylums, and licensed houses for the reception of lunatics, to the orders, certificates, or reports necessary for the reception, detention, or treatment of lunatics, and to the care, treatment, and visitation of lunatics, and the books to be kept and the reports to be made concerning lunatics respectively, shall not apply to any hospital, institution, or licensed house, registered under this Act, or to any idiot or imbecile received or to be received therein under the provisions of this Act.

Inspection by Commissioners.

12. The Commissioners shall at least once in every twelve months visit and inspect every hospital, institution, and licensed house, registered under this Act, and all the children and other persons under treatment therein.

Medical journal to be kept.

13. A medical journal shall be kept in every hospital, institution, and licensed house, registered under this Act, in such form as the Commissioners may from time to time direct.

Residence of medical practitioner.

14. In the case of any hospital, institution, or licensed house, registered under this Act, the Commissioners may by order in writing direct that a duly qualified medical practitioner shall reside therein.

Grants of money to guardians of the poor.

15. Nothing in this Act shall operate to deprive the guardians of the poor of any union of the power of sending pauper idiots or imbeciles to hospitals, institutions, and licensed houses, registered under this Act, or from receiving in respect of such idiots or imbeciles such sums of money as shall from time to time be granted by Parliament towards the maintenance and care of pauper lunatics as if the same idiots and imbeciles were pauper lunatics.

Power to grant superannuation allowance.

16. The committee of management of any hospital, institution, or licensed house, registered under this Act, may grant to any officer or servant who is incapacitated by confirmed illness, age, or infirmity, or who has been an officer or servant in the hospital, institution, or house, for not less than fifteen years and is not less than fifty years old, such superannuation allowance, not exceeding two-thirds of the salary, with the value of the lodgings, rations, or other allowances enjoyed by the superannuated person, as the committee think proper.

Definition.

17. In this Act, if not consistent with the context,—

Commissioners.

"Commissioners" means the Commissioners in Lunacy for the time being.

Idiots or Imbeciles.

"Idiots" or "imbeciles" do not include lunatics.

Lunatic.

"Lunatic" does not mean or include idiot or imbecile.

Hospital and institution.

"Hospital" and "institution" mean any hospital or institution or part of a hospital or institution (not being an asylum for lunatics) wherein idiots and imbeciles are received and supported wholly or partly by voluntary contributions, or by any charitable bequest or gift, or by applying the excess of payments of some patients for or towards the support, provision, or benefit of other patients.

Licensed house.

"Licensed house" means any house licensed by the Commissioners in Lunacy, or by the justices of any county or borough, for the reception, care, education, and training of idiots and imbeciles.

THE SCHEDULE.

A.D. 1886.

Form 1.

Form of Medical Certificate.

I, the undersigned *A.B.*, a person registered under the Medical Act, 1858, and in the actual practice of the medical profession, certify that I have carefully examined *C.D.*, an infant [*or* of full age], now residing at , and that I am of opinion that the said *C.D.* is an idiot [*or* has been imbecile from birth, *or* for

years past, *or* from an early age], and is capable of receiving benefit from [the institution (describing it)], registered under the Idiots Act, 1886.

(Signed)

Dated (full postal address).

FORM 2.

Form of Statement to accompany Medical Certificate.

[If any particulars in this statement be not known, the fact to be so stated.]

Name of patient, with Christian name at length.

Sex and age.

When and where previously under care and treatment.

In any asylum or institution.

Whether subject to epilepsy.

Whether dangerous to others.

I certify that to the best of my knowledge the above particulars are correctly stated.

(Signed) Name and full postal address.

[To be signed by the parent or guardian of the idiot or imbecile or the person undertaking and performing towards him the duty of a parent or guardian.]

FORM 3.

Form of Certificate of Reception.

I hereby certify that aged was admitted into on the day of , 18 , on the request of of and of and that he [*or* she] is alleged to be capable of deriving benefit from the treatment he [*or* she] will receive herein.

A.B.

Superintendent or Principal Officer.

Dated this day of 18 .

To the Commissioners in Lunacy.

Honours Examination in Psychological Medicine.
The Gaskell Prize.

As will be seen from the advertisement, an examination for Honours in Psychological Medicine will take place in London next July. It was a fortunate circumstance that shortly after the establishment of the Pass Examination for the Certificate of Efficiency in Psychological Medicine, undertaken by our Association, a fund was placed at its disposal,

through the generosity of Mrs. Holland, the sister of the late Mr. Gaskell, in whose memory she desired to hand over to the Association the sum of £1,000. When Mr. Wilkes, one of the executors of the former Commissioner of Lunacy, communicated to a member of the Council, Mrs. Holland's wish, it was at once felt that no better appropriation of the fund or one more in accordance with the wishes of Mr. Gaskell could be devised, than the encouragement of the practical knowledge of mental disorders on the part of medical men entering upon this special department. For this end it was made a primary condition of candidature that there should have been a residence for at least two years in an asylum for the insane in the character of a qualified medical officer. Another condition was that the candidate should have attained the age of twenty-three.

It is essential that a candidate for Honours should have passed the Examination for the Certificate of Efficiency. Money and a medal, gold or silver (total value about £30), will be awarded to the successful candidate, the Council being left free under certain circumstances to confer prizes on one or more candidates in addition. The examination, it is stipulated, shall be always held in London, but will not be restricted to those who have obtained their Certificate in the Metropolis. The locality of the asylum in which candidates have filled an official post is not limited by narrower bounds than those of the British Empire and her Colonies. Further, the two years' service required need not have been continuous in any one asylum, but may be in different ones.

The Honours Examination will be held annually.

The subjects upon which candidates will be examined are as follows:—

1. Healthy and morbid histology of the brain and spinal cord.
2. Clinical cases, with commentaries.
3. Psychology, including the senses, intellect, emotions and volition.
4. Written examination, including questions on the diagnosis, prognosis, pathology, and treatment of mental diseases and their medico-legal relations.

The examiners reserve the right of withholding the prize in the event of the qualifications of candidates appearing to them to fall short of the standard regarded by them as fairly representing an Examination for Honours.

University of London M.D. Examination.

Many inquiries have reached us in reference to the new Psychological Examination at the London University. It may be as well, therefore, to state that in lieu of the examination in Logic and Psychology, the Senate introduced for the first time at the M.D. Examination in November, 1886, the subject of "Mental Physiology, especially in relation to Mental Disorders." On the occasion referred to, a candidate had his option as to taking the new or old subjects of examination, but in future, Logic and Psychology will disappear from the Examination. This is certainly an important step in the right direction, and aims at a much more practical class of subjects—a class far more useful to the physician. We should have been better satisfied, however, if the terms of the subject now introduced had been differently expressed. It is no doubt the result of a sort of compromise—a little new wine in old bottles—but we hope that before long only two words will remain, namely, Mental Disorders. As it is, an examiner is hampered by the sense that he cannot ask questions which do not more or less directly spring from the cardinal point of Mental Physiology, whereas it is to be desired that he should be able to examine on the same lines as the pass examination of the Medico-Psychological Association. We have no wish to see the examination made a difficult one, but questions should be asked in regard to the diagnosis and treatment of Mental Disorders, similar to those asked in the examination about other diseases. This would not only be better for the candidate, but would extend the area of subjects for the examiner, who otherwise will find it almost impossible to ask fresh questions from time to time.

The following Questions were asked at the Examination in November:—

1. Mention phenomena occurring in health and disease which indicate that mental operations can be carried on and actions be performed, automatically, whether (*a*) consciously or (*b*) unconsciously.

2. What would lead you to conclude that one person is merely the subject of an optical illusion or sees ocular spectra, consistently with mental health, and that another has visual illusions or hallucinations in consequence of mental disease?

3. In a person presumably sane and managing his own

affairs, what circumstances, personal or otherwise, would induce you to suppose that he has an insane diathesis?

4. Distinguish between the erroneous beliefs of a sane, and the delusions of an insane man.

5. Contrast the mental characteristics of the idiot with those of the insane.

6. What perversions of healthy sensation (common and special) are frequently met with in the insane?

The Lunacy Bill.

As we write, the Lunacy Acts Amendment Bill, which was ordered to be printed January 31st, 1887, has passed through Committee in the House of Lords, several amendments having been accepted by the Lord Chancellor. What alterations the House of Commons may introduce, it is impossible to foresee.

As is well known to our readers, the new Bill closely resembled that introduced by Lord Herschell, but a new clause, upon which Lord Halsbury specially prided himself, in reference to the notice served upon every patient before he could be placed under care, giving him power to appeal to and appear before a magistrate, has been withdrawn, and a less perilous provision substituted for it. A more objectionable enactment could scarcely have been devised by the wit of even a Lord Chancellor. Happily, both Lord Herschell and Lord Selborne perceived its mischievous character. Lord Grimthorpe, in moving the substitution of other words for Clause 3, pointed out that it would facilitate the escape of alleged lunatics from the country, or even from the world. The noble lord had received a letter from a medical practitioner stating that he had never known so many suicides of alleged lunatics as had occurred during the last two years; the result, he believed, of the fear of publicity. Lord Selborne maintained that the clause as it stood in the Bill would be absolutely destructive of its main object, namely, the prompt placing under restraint and supervision the alleged lunatic before he could injure himself or others. To proceed against such a person as a criminal and to put him upon his defence would be a perversion of the whole law of lunacy. He considered the proposal a most ingenious device to defeat the objects of the Lunacy Act. Lord Herschell, with every desire to support the Bill, was unable to do so in

regard to the proposed alteration. He did not think they were justified in running the risk of the alleged lunatic putting an end to his life, or assaulting those around him, or escaping, in consequence of the serving upon him the notice proposed by the Lord Chancellor, who, in reply, observed that he did not know why an examination before a magistrate should be more injurious to the lunatic than that of medical men before signing a certificate. His lordship was at a loss to understand why a magistrate should not be quite as competent to decide the question with a judicial mind as a medical man! This is quite consistent with the general style of lawyers, and notably of Lord Bramwell, who, as we know, thinks that it does not require a surgeon to decide whether a man is lame or not—in oblivion of the fact that Sir James Paget would be more capable than Lord Bramwell of deciding whether lameness, in a particular instance, were real or feigned.

Lord Monkswell moved an amendment, which was very properly accepted and added to the Bill, providing that a justice upon information that a person within his jurisdiction, not a pauper and not wandering at large, is deemed to be a lunatic, and is not under proper care or control, or is cruelly treated or neglected, shall "either himself visit the alleged lunatic, or, whether making such visit or not, shall direct two qualified medical practitioners to visit and examine the alleged lunatic." This is a valuable addition to the Bill, which will be one of its good points to set against a good many which are either uncalled-for or positively detrimental. Among the clauses of the Bill which will meet with the approval of medical men engaged in lunacy, is the provision in Clause 39 for commitment of the estate only and not of the person of the lunatic, to which in Committee the Lord Chancellor made some important additions. With regard to private asylums, although new licenses will not be granted, existing asylums can be transferred, and the vested interests of the proprietors are studiously respected. Although they will still have to compete with registered hospitals, they will not have anything to fear now from the establishment of other private asylums, and in this sense they will enjoy a very valuable monopoly. Thus the fear which at one time weighed heavily upon the minds of the proprietors of licensed houses is fortunately removed, and they will in future enjoy unmolested that position of happy tranquillity and assured rest, for which they will no doubt feel

deeply thankful after the troublous times of agitation, disturbance, and attack to which they have been subjected for several years—that is assuming that the Bill passes into law, and that the clauses providing for the future regulations for private asylums remain in their present form. Other clauses in the Bill advantageous to medical men, but clauses by which those who sign certificates in lunacy in good faith are protected from legal action will prove very beneficial, and will restore the confidence lost by the numerous actions brought in recent times against members of the medical profession in consequence of signing these certificates.

As we have pointed out in the first "Occasional," Lord Monkswell succeeded in introducing an amendment, good as far as it goes, in regard to the pensions of superintendents.

PART II.—REVIEWS.

The Life of Percy Bysshe Shelley. By Edward Dowden, LL.D. 2 vols. Kegan Paul, Trench, and Co. London, 1886.

Surely, if there ever were a subject for psychological study, it is to be found in the mental organization of Shelley. Standing in the first rank of poets, even if inferior, as Matthew Arnold says, to Wordsworth, he is a great deal more than a poet in the estimation of large numbers; and in this character he attracts the interest and excites the admiration of many who have but little taste for poetry, and do not really admire Shelley because he was a poet. The fact is, Shelley's mental constitution finds a response in organizations similarly constituted, *quoad* his peculiar temperament, but destitute of his poetic gift. It is, we must admit, a misfortune that a nature like his magnetizes many whose dispositions do not require to be fed with the food which Shelley's restless nature supplies, but require, on the contrary, precisely opposite aliment.

Some, we suppose, will experience a sort of repugnance to subjecting so transcendent a genius to the cold analysis of psychological science. But what if it be found that such a study throws great light upon Shelley's career?

The grandfather of the poet, Sir Bysshe Shelley, was a handsome gentleman, clear-witted and wilful. When of

age he married Miss Michell, the only child of a clergyman. Her guardian not consenting to the marriage, a runaway match took place, and the wedding was celebrated by the parson of the Fleet. Nine years after her death, Bysshe Shelley eloped with Elizabeth Jane Sidney. He was a wealthy and avaricious man, but was indifferent to his personal appearance and to his style of living. He was a victim to gout. Although he passed some of his time in the taproom of the Swan Inn, at Horsham, it was not for the drink, but for the purpose of arguing in politics and mixing with the frequenters of the hostelry. He wore a round frock. His townsfolk thought him melancholy. "He invited no friendships and lived apart from persons of his own station, fearing not God nor regarding man, but enlarging his rent-roll, and adding to his thousands in the funds—so fine a gentleman, yet buried alive under his settlements and his indentures" (p. 4). Shelley himself writes of his grandfather that he "acted very ill to three wives." One biographer, Captain Medwin, writes: "Two of his daughters by the second marriage led so miserable a life under his roof that they eloped from him—a consummation he devoutly wished, as he thereby found an excuse for giving them no dowries; and though they were married to two highly respectable men, and one had a numerous family, he made no mention of either of them in his will." Then, again, he was unfortunately on ill-terms with his son by his first wife (Miss Michell), Timothy, the father of Shelley. This Timothy was tall, very fair, and had the blue Shelley eyes. Although his heart was better than his father's, his head was not so clear.

"He had a wrong-headed way of meaning well and doing ill; he had a semi-illiterate regard for letters, a mundane respect for religion; his views on morals were of the most gentlemanly kind, but not exactly touched with enthusiasm; he dealt in public affairs without possessing public spirit, and gave his party an unwavering vote when a member of the House of Commons; in private life he was kindly, irritable, and despotic; in manners, an aspirant of Chesterfield, yet one who could on occasions bustle and fret and scold; when least venerable he insisted most on his paternal prerogative; he was profoundly diplomatic in matters of little consequence. Mingling with his self-importance there was a certain sensibility, genuine though not deep, and tears of tenderness or vexation came readily to his eyes; a kindly, pompous, capricious, well-meaning, ill-doing, wrong-headed man" (p. 5). So writes Dr. Dowden, and we assume with good reason.

Mr. Timothy Shelley's wife, Elizabeth Pilfold, was beautiful. Although a woman of strong good sense, "Her temper was violent and domineering. . . . She had a special grievance against the boy (Shelley) because he was little of what every country gentleman ought to be—a follower of field sports." We give this on the same authority.

The poet was the first child of his parents, and was born on the day on which it was decreed by the National Assembly that all religious houses in France should be sold for the nation's benefit (August 4, 1792). His self-consciousness as a child is revealed in the following passage, to which he refers in his earliest recollections: "Let us recollect our sensations as children. What a distinct and intense apprehension had we of the world and of ourselves! . . . We less habitually distinguished all that we saw and felt, from ourselves. They seemed, as it were to constitute one mass." This confounding of the subjective and objective world points to a constitutional tendency the reverse of healthy, and liable to pass into a distinctly morbid phase of mental life, if allowed to develop unchecked by wholesome training and education. It was fortunate for Shelley that he had sisters to play with, and it would have been still more so had he had brothers. He showed abundant imagination and love of mystification, and entered heartily into childish pranks and jests, although some of his biographers say that he never laughed.

Shelley began to learn his Latin grammar from a Welsh parson in his own parish, Warnham, Sussex. At ten he went to Sion House Academy, Isleworth. Here he was sadly teased by the boys because he preferred solitude to entering into their games. It is stated that he "was highly sensitive to pain, easily excited, and subject to paroxysms of passion when thwarted or provoked" (p. 15). Although he was really amiable and generous, "he passed among his schoolfellows as a strange and unsocial being." There seems to have been a curious inconsistency of character in the schoolboy, who is described as gazing at the passing clouds during school hours, and indulging in such waking-dreams as were followed by "much nervous excitement, during which his eyes flashed, his lips quivered, his voice was tremulous with emotion, and a sort of ecstasy came over him;" we say there seems a kind of contradiction between this character and the schoolboy who would "blow up the boundary paling with gunpowder, or his desk-lid in

mid school-hours, to the amazement of masters and boys" (p. 16). Then, again, his neurotic constitution is indicated by the following :—

"His sleep was afflicted by frightful dreams." [He was a somnambulist.] "One summer night he came gliding by moonlight into Medwin's dormitory, open-eyed, but wrapt in slumber. He advanced to the window, which was open; his cousin sprang out of bed, seized his arm, and waked him. 'He was excessively agitated, and after leading him back with some difficulty to his couch, I (Medwin) sat by him for some time, a witness to the severe erethism of his nerves which the sudden shock produced'" (p. 17).

The supernatural had powerful attractions for the youth. "He had faith in apparitions and the evocation of the dead" (*l.c.*). Shelley formed a romantic attachment with a boy about his own age. His friend's tones of voice were so soft (Shelley's voice was painfully shrill) that every word pierced into his heart; and in listening to him, says Shelley —

"The tears have involuntarily gushed from my eyes. I remember in my simplicity writing to my mother a long account of his admirable qualities and my own devoted attachment. I suppose she thought me out of my wits, for she returned me no answer to my letter" (p. 19).

Unfortunately, during play-hours, when he ought to have been engaged in games, he was occupied in morbidly sentimental talk with this youth, whose name has not come down to us, though it may have been a fellow-countyman, Rennie, who was regarded, like Shelley, as "a peculiar character."

From Sion House Shelley went to Eton.

"An ordinary mortal," says Dr. Dowden, "would have learnt what is called experience; he would have parted with some of his singularity, practised the art of making concessions, held his better self in reserve, and kept his secret; or he would have learnt that there is a time for all things. . . . Shelley was inaccessible to such lessons of experience; he remained what he was, or advanced upon lines of his own. . . . He stood convicted as a rebel against authority, while to boys of his own standing, except a few chosen friends, his refusing to join in the common sports, his shyness, his singularity, his careless attire, his interesting strange studies, his gentleness, united with an unusual excitability of temper, pointed him out as a proper victim on whom to wreak all the exuberance of their animal spirits. Singly they dare not attack 'Mad Shelley.' Once, in a paroxysm of rage, he seized the nearest weapon, a fork, and stuck it into the hand of his tormentor."

It is related by an eye-witness that "an access of passion made his eyes flash like a tiger's, his cheeks grow pale as death, and his limbs quiver." For such a boy as Shelley, the heartless baiting which was thus carried on by his fellow-Etonians must have operated most injuriously. Reference should here be made to an incident which occurred during Shelley's holidays, immediately bearing, as it does, upon the psychological inquiry in which we are engaged. It appears that he was attacked with a fever which affected his brain, and that his father had entertained the idea of sending him to a private mad-house. When Shelley heard this intention from one of the servants, he communicated with Dr. Lind, of Windsor, who had shown him kindness at Eton. The doctor advised Sir Timothy not to adopt this extreme measure. The strange instability of his character and his perusal of books, like Godwin's "Political Justice," now led Shelley to preach a revolutionary gospel to his school-fellows. The natural consequence followed. He was twice expelled from Eton, but was, through the intercession of his father, reinstated.

In some of his poems Shelley has depicted the romantic speculations with which his brain was filled. He remembered the hour in which his spirit woke as from a sleep, and he wept he knew not why, and clasping his hands he vowed to be free and just. Thenceforward did he "heap knowledge from forbidden mines of ore." In his "Hymn to Intellectual Beauty" he tells us how, while yet a boy, he sought for ghosts amidst caves and ruins and starlight woods, hoping to converse with the departed dead. Then it was that the shadow of Intellectual Beauty fell upon him, and he shrieked and clasped his hands in ecstasy, vowing that he would henceforth dedicate his powers to her.

This precocious mental condition, continually fostered by the youthful Shelley on account of the exquisite pleasure which it no doubt afforded him, was to some extent relieved on his removal to Oxford, where his bodily health appears to have been good and his spirits buoyant. During the Christmas holidays, 1809-10, accompanied by his cousin Medwin, he walked with a gun upon his shoulder in the Sussex woods in search of something more substantial than the ghosts of the departed he had previously chased. Still, with an intense craving for authorship, he was far too much given to lead a subjective life. His biographer very clearly recognizes this danger —

"Being urged as a boy by his own fervid thoughts and fancies to give them utterance in prose or verse, he must forthwith put them in a book and present that book to the world. He lived intensely in his own imaginings, wise or idle, beautiful or feebly extravagant, and was insensible to those checks of common sense which come from a power of passing in and out of our own imaginings, and seeing many things, even imperfectly, at a single view. He did not consider how crude in feeling and conception, how chaotic through lack of motive and design, how feeble in expression his work might be. . . . It was his misfortune as a boy to fall under the influence of detestable literary models, and to these he abandoned himself with single-hearted zeal. With what is robust and realistic in eighteenth century fiction, Shelley was out of sympathy" (p. 42).

Our space will not allow us to describe the various attempts at authorship made by Shelley, but it should be recorded that while yet a schoolboy he was the author of a romance for which a publisher, so it is said, gave the sum of £40.

His affections were, while at Oxford, centred for a time upon Harriet Grove, his cousin, when both were about 18, but the attachment ended in disappointment.

It was at Oxford that Shelley became acquainted with Hogg, with whom his friendship was of the warmest description, although their mental characteristics differed exceedingly. Hogg has left on record that Shelley's aspect was even then remarkably youthful. He was thoughtful and absent, ate little, and had no acquaintance.

"His figure was slight and fragile, and yet his bones were large and strong. He was tall, but he stooped so much that he seemed of a low stature . . . then his gestures were abrupt and sometimes violent, occasionally even awkward, yet more frequently gentle and graceful. His complexion was delicate and almost feminine, of the purest red and white. . . . His features, his whole face, and particularly his head, were in fact unusually small; yet the last *appeared* of a remarkable bulk, for the hair was long and bushy, and in fits of absence, and in the agonies of anxious thoughts, he often rubbed it fiercely with his hand or passed his fingers quickly through his locks unconsciously, so that it was singularly wild and rough. His features were not symmetrical—the mouth perhaps excepted—yet was the effect extremely powerful. They breathed an animation, a fire, an enthusiasm, a vivid and preternatural intelligence, that I never met with in any countenance. Nor was the moral expression less beautiful than the intellectual, for there was a softness, a delicacy, a gentleness, and especially that air of profound religious veneration that characterizes the best works

and chiefly the frescoes of the great masters of Florence and of Rome. But there was one physical blemish that threatened to neutralize all his excellence—his voice, which was excruciating. It was intolerably shrill and harsh, and discordant, of the most cruel intension; it was perpetual and without any remission; it excoriated the ears" (p. 62).

In the foregoing description the reader will have observed three striking facts, first the asymmetry of Shelley's face, secondly the unusually small head, and thirdly the discordant, unmusical voice. This want of unison in the physical features of the poet indicated but too truly the strange contradiction between certain mental characteristics and others.

We next have our attention drawn by Hogg to another very remarkable peculiarity —

In the evening Shelley would be "overcome by extreme drowsiness, which speedily and completely vanquished him; he would sleep from two to four hours, often so soundly that his slumbers resembled a deep lethargy; he lay occasionally upon the sofa, but more commonly stretched upon the rug before a large fire like a cat, and his little round head was exposed to such a fierce heat that I used to wonder how he was able to bear it. . . . His torpor was generally profound, but he would sometimes discourse incoherently for a long while in his sleep.

"When this lethargy ended, Shelley would suddenly start up, and rubbing his eyes with great violence, and passing his fingers swiftly through his long hair, would enter at once into a vehement argument, or begin to recite verses, either of his own composition or from the works of others, with a rapidity and an energy which were often quite painful." It should be added that after supper "his mind was clear and penetrating, and his discourse eminently brilliant" (Hogg, quoted by Dowden, p. 67).

He was inconceivably careless with pistols, with which he amused himself in firing at some mark on a tree, so much so that his friend Hogg found it necessary to secretly abstract Shelley's powder flask. The trick was discovered by Shelley, who was much offended.

There was much to admire in Shelley's character at Oxford; he was gentle, and detested cruelty to animals. It is said, indeed, by Thornton Hunt, that he had seriously injured his health by "tampering with venal pleasures," but this was followed by a reaction marked by horror (p. 77). Again, he was generous in charity, and if he had no money of his own would borrow from others. It is recorded also that he did not lose his affections for his relations, and

received a letter from his mother or sisters with manifest joy (p. 78).

Shelley tested the doctrine of man's pre-existence in a way which exposed him inevitably to the suspicion of being altogether beside himself. Thus one day he and Hogg met a woman with her baby in the middle of Magdalen Bridge. The youthful Platonist seized the child, which the mother held all the faster in her arms, in no little fear lest it should be thrown over the bridge. Then with his alarmingly shrill voice he asked "Will your baby tell us anything about pre-existence, Madam?" To this question, when repeated, the astonished parent, having more mother-wit than the academic questioner, replied, "He cannot speak, sir." Shaking his long hair about his face, the disappointed undergraduate exclaimed "Worse and worse, but surely the babe can speak if he will, for he is only a few weeks old. He may fancy, perhaps, that he cannot, but it is only a silly whim. He cannot have forgotten entirely the use of speech in so short a time; the thing is absolutely impossible" (p. 82). As the couple walked on, Shelley, sighing deeply, exclaimed "How provokingly close are those new-born babes! But it is not less certain, notwithstanding the cunning attempts to conceal the truth, that all knowledge is reminiscence. The doctrine is far more ancient than the times of Plato, and as old as the venerable allegory that the Muses are the daughters of Memory; not one of the nine was ever said to be the child of Invention." To this doctrine, translated into the modern teaching of organic memory, Dr. Wilks has already referred in the pages of this Journal, and it does not fall within the scope of the present article to enter upon its consideration. All that we are concerned with is the extraordinary and eccentric proceeding of Shelley, which, while it certainly made him a companion whom we should have preferred to the common run of Oxford undergraduates, at that period, can hardly be brought within the ordinary range of sane acts.

We have spoken of the odd contradiction which Shelley's character and actions presented. Here is another instance. He appears to have been an in-born gentleman.

"Yet with his grace of bearing there was strangely united," says his biographer, "a certain awkwardness," and he quotes the following from Hogg: "He would stumble in stepping across the floor of a drawing-room, he would trip himself up on a smooth-shaven grass plot, and he would stumble in the most inconceivable manner in ascend-

ing the commodious, facile, and well-carpeted staircase of an elegant mansion, so as to bruise his nose, or his lip, on the upper steps, or to tread upon his hands, and even occasionally to disturb the composure of a well-bred footman" (p. 83).

And as if this contradiction were not enough, another presents itself, for in contrast with this *gaucherie*—

"He would often glide without collision through a crowded assembly thread with unerring dexterity a most intricate path, or securely and rapidly tread the most arduous and uncertain ways" (*l.c.*).

His appearance was singular, not only from his dress and bare throat, but from his uncut locks "streaming like a meteor," and Hogg says that "the air of his little round hat upon his little round head was troubled and peculiar" (p. 84).

There is a curious reference in one of Shelley's prose fragments to what he speaks of as a remarkable event which occurred to him when at Oxford. He was walking in the neighbourhood, engaged in earnest conversation, when having suddenly turned the corner of a lane, a commonplace scene presented itself, but yet an unexpected effect was produced on him. He suddenly remembered having seen the exact scene in some dream; and here the narration abruptly ends, the reason assigned being "Here I was obliged to leave off, overcome by thrilling horror." In reference to this, Mary Shelley afterwards wrote: "I remember well his coming to me from writing it, pale and agitated, to seek refuge in conversation from the fearful emotions it excited." This incident would alone mark the excessive susceptibility of his organization. As is well known, it is in the neurotic, and often those actually epileptic, that the weird feeling of having been in precisely the same mood and place at a previous time of life, more especially arises. We have no doubt that Shelley often experienced it, and that it originated the doctrine which for him possessed so intense a fascination, that, namely, of pre-existence, and of all knowledge being merely reminiscence. The genesis of a dogma is here seen.

A review of one of Shelley's works in which the author was reproved as a corrupter of youth and immoral, or some other circumstance, opened his father's eyes to Shelley's tendencies, and the consequence was a letter to his son, who thus expressed himself with the exaggeration of morbid youthful egoism: "My father wrote to me, and I am now surrounded, environed by dangers, to which compared the

devils who besieged Saint Anthony were all inefficient. They attack me for my detestable principles. I am reckoned an outcast; yet I defy them, and laugh at their ineffectual efforts. . . . My father wished to withdraw me from College; I would not consent to it. There lowers a terrific tempest; but I stand, as it were on a pharos, and smile exultingly at the vain beating of the billows below." So wrote Shelley to his friend Hogg in regard to his elders—he a youth of eighteen! His cousin, Harriet Grove, was, like his father, alarmed by his views, and he now regarded her as leagued with others against him. The result of "the twofold misery of domestic strife and disappointed love" was "to throw his whole nature into a state of nervous agitation." He wanders alone in the snow, and is "cold, wet, and mad" (p. 99). He himself is conscious of his "delirious egotism." For nearly a whole night he paces a churchyard. Writing to Hogg, he queries whether suicide is wrong, and relates how he slept with a loaded pistol and some poison, but did not die. When Harriet, failing to recognize Shelley's fitness for married life, was lost to Shelley, he writes excitedly, and now vents his rage upon "the wretch Intolerance." He writes to Hogg: "Here I swear, and as I break my oath, may Infinity, Eternity, blast me—here I swear, never will I forgive Intolerance!" And so he raves on. His sister Elizabeth thought it necessary to watch her suicidal brother narrowly, and he subsequently confessed that had it not been for her and the sense of what he owed to Hogg, he would have ended his days with his own hands.

Then comes the expulsion of Shelley, in consequence of his pamphlet in praise of Atheism, which affected him very greatly. "I have been with Shelley," writes Hogg, "in many trying situations of his after-life, but I never saw him so deeply shocked and cruelly agitated as on this occasion. . . . He sat on the sofa, repeating with convulsive vehemence the words, 'Expelled! expelled!' his head shaking with emotion and his whole frame quivering." Hogg's expulsion, which followed, was intentionally precipitated by a generous desire to throw in his lot with Shelley. Mr. Ridley, a Junior Fellow, writes: "I believe no one regretted their departure, for there were but few, if any, who were not afraid of Shelley's strange and fantastic pranks." It appears from the same contemporary that "they had made themselves as conspicuous as possible by great singularity of dress, and by walking up and down the

centre of the quadrangle as if proud of their anticipated fate."

About this period, Shelley, in writing to a Mr. Merle, says that he has been recently much troubled with dyspeptic symptoms, and tormented with visions. Hogg, in reviewing in after years, Shelley's escapade, does not speak of Shelley as having suffered as a true martyr to his conscientious convictions. Youthful bravado had much to do with the incident. It was thought by Shelley to be consistent with his convictions to take the Sacrament at church and write of this as a capital joke.

Mr. Sharpe gives an account of Shelley at Oxford, under date March 15, 1811, in which he says that the author of certain poems (Mr. Shelley) is a great genius, and if he be not clapped up in Bedlam or hanged will certainly prove one of the sweetest swans on the tuneful margin of the Cherwell (p. 125). It may be remarked, in passing, that there would have been nothing inconsistent in Shelley graduating at the Royal Hospital of Bethlem, and being a sweet singer also, had its management and condition been then what they are at the present day, when some of the inmates are poets, and a literary magazine has from time to time been conducted within its walls by the patients themselves.

The biographer, Dr. Dowden, regrets, with his usual judgment, that Shelley was thrown upon the world when under nineteen, "as he might have obtained to juster views of the world and human society." A further storing of his mind and a more prolonged check upon his will "might have saved others and himself from much future suffering."

Medwin has recorded Shelley's arrival at his door in the Temple at four o'clock in the morning the second day after his expulsion. "I think I hear his cracked voice, with his well-known pipe, 'Medwin, let me in; I am expelled!' Here followed a sort of loud, half-hysteric laugh, and the repetition of the words, 'I am expelled,' with the addition of, 'for atheism!'" Lodgings had to be obtained after breakfast, about which Shelley was more capricious and hard to please than a young beauty. When, however, rooms were found to his taste, he must stay there *for ever*—an expression which afterwards became a joke, as no matter how erratic were his movements they were always to conduct him to some resting-place "for ever" (p. 127). Mr. Timothy Shelley, a kindly, and sorely puzzled, father, endeavoured to separate the two friends Shelley and Hogg, who now resided

together, and desired to place his son under a tutor, but failed in his endeavour. Shelley altogether refused his assent, and wrote of his father—who is "old kill-joy," and an "old buck"—in a way that does not raise him in one's estimation. "A poetical epistle to Graham referring to his father in odious terms is in existence," says Dr. Dowden; a circumstance scarcely comporting with the "modesty, delicacy, generosity, and refinement of soul" which, according to his admiring companion Hogg, characterized Shelley, but if we may judge from Hogg's subsequent conduct, he would attach somewhat different ideas to these adjectives from what most people do. Shelley took a fancy at one time for medical studies, but beyond attending some of his Abernethy's lectures, he does not appear to have made any progress in medicine. His father destined him for Parliament, but his unsettled and unpractical views rendered this impossible. About this time Shelley apostrophized the Prince Regent in relation to a magnificent ball at Carlton House in an ode, which, when printed, the poet flung into the carriages of persons calling on the Prince after the ball. Shelley was now alone; he was in want of funds and his sisters supplied him with their own pocket money.

Shelley is, however, at home again before long, through the kindly intervention of his uncle, Captain Pilfold. He was to receive £200 a year, without any conditions, in the first instance, as to his place of abode or his friends—not an illiberal allowance for his father to make.

For a time Shelley was at Cwm Elan, in Radnorshire, the residence of his cousin, Mr. Grove, from which place he wrote many letters, full of enthusiasm and visionary philosophy. Among these were epistles to his future wife, Harriet Westbrook, then a girl at school, and only 16 years of age. One of Shelley's sisters was her schoolfellow. He had advised her to resist her father's wishes and opinions, and undertook to lecture the father himself for the measures which he adopted, or which Shelley supposed he had adopted, in order to influence his daughter. Harriet, wishing to escape from the necessity of returning to school, and also desiring to be free from paternal control, was only too willing to escape, and to place herself under the protection of a youth like Shelley, who took coach for London, and speedily made his way to the damsel, with the natural result not only of chivalrous protection, but of mutual love and engagement. Of legal wedlock Shelley did not approve.

Hogg, it appears, wrote to him, urging that it was desirable to have a legal marriage, out of regard to Harriet, who would otherwise obviously suffer. They were married in Edinburgh, August 28, 1811, having eloped from London on the 25th. In his usual style, Shelley had written three weeks before, "Gratitude and admiration all demand that *I should love her for ever.*" Nor was this surprising, for we are told that she was young, beautiful, and of a sweet and pliable disposition. On these points all seem agreed.

Writing two months afterwards to Miss Hitchener, of whom he became a passionate admirer, he says: "Blame me if thou wilt, dearest friend, for *still* thou art dearest to me; yet pity this error if thou blamest me. If Harriet be not at sixteen all that you are at a more advanced age, assist me to mould a really noble soul into all that can make its nobleness useful and lovely" (p. 175). Mr. Timothy Shelley was naturally indignant when he heard of his son's precipitate flight and clandestine marriage. He stopped the supplies. Shelley had already been driven to borrow money of Hogg. It was not to be expected that the bride's father, Mr. Westbrook, should assist a youth who had encouraged his daughter's disobedience and eloped with her. Uncle Pilfold, ever indulgent, came, however, to the rescue.

Very shortly after settling in York, and during Shelley's absence in Sussex, his friend Hogg proved treacherous, or was believed by Shelley to have been so, and endeavoured to win Harriet's love. When Shelley returned to York, all his romantic attachment to his Oxford chum received a severe shock, for had he not said that he had sometimes gazed on his countenance till he had fancied that the world could be reformed by gazing too? Dr. Dowden, in passing from this revelation of Hogg's real character, and stating that Harriet Shelley rose in her husband's esteem, adds that "now he could no longer expend the wealth of his idealizing imagination on one friend, he poured all its extravagant treasures around the other, his heroine of a day-dream, Elizabeth Hitchener." Writing to her, he says: "I could have borne to die, to die eternally, with my once-loved friend (Hogg); . . . earth seemed to be enough for our intercourse; on earth its bounds appeared to be stated, as the event hath dreadfully proved. But with you—your friendship seems to have generated a passion to which fifty such fleeting, inadequate existences as these appear to be but the drop in the bucket, too trivial for account. With you, I cannot submit to

perish like the flower of the field" (p. 193). There is much more written to this lady in the same rapturous, high-flown strain which might be quoted, but this will suffice for our immediate purpose, that of showing the strange and exaggerated attachments which Shelley formed, and the sentimental effusions which flowed from his pen.

(To be Continued.)

Insanity Curable. Mental Disorders, and Nervous Affections of recent origin or long standing. Their causes are now successfully treated by a new especial method. By GEORGE MOSELEY, F.R.C.S., L.S.A., etc., etc. London: J. and A. Churchill, 1886.

One is almost weary of the painful uniformity of favourable reviews and in this Journal the tendency to commend rather than blame can hardly be denied. But there are limits to the forbearance and kindly consideration of the reviewers of even "The Journal of Mental Science," and we must confess it to be impossible to preserve in the present instance our almost uniformly favourable notice of books falling within our psychological domain. Mr. Moseley informs us in his preface that his object is to explain the rise and progress of insanity in the human body, and the certain methods of treatment that have for their object not only the alleviation, but the *absolute cure* of the malady. It was hardly necessary for the author to state what is so very obvious on every page, that the book is "designed for the perusal of non-medical persons." Mr. Moseley's opinion of the medical profession cannot be said to be very flattering when he asserts that "undoubtedly, its present feeling with regard to actual treatment in such cases (those of insanity) is that not much more can be done for the unfortunate sufferer than the securing of healthful surroundings and proper guardianship." Of those "responsible for the treatment of the insane," our author's estimate is still less flattering, for he declares that "the intimate relationship that is known to exist between the state of the brain and the mode in which the various bodily functions are performed, seems to be almost ignored by them."

Among the original discoveries of our author are: the curability of insanity, the greater probability of its being cured if treated early, and the fact that insanity is not a

disease of the "Spiritual Essence," or "Abstract Principle of Mind."

Mr. Moseley has discovered, too, that certain symptoms of insanity frequently originate in "failure of function in some one or more of the Blood-making or Blood-purifying organs of the body." Hence, absolute cure or relief may be obtained from remedies which secure "the rapid oxidation and purification of the blood; and the alleviation of those processes that are concerned in the excretion of waste deleterious matters from the system." Many years and much labour has the late surgeon in the Royal Artillery Barracks at Shorncliffe devoted to the study of Mental Disease, and he now successfully combats it with ordnance charged with his own "special and peculiar methods of treatment." It is altogether contrary to the practice of this heroic practitioner merely to prepare for the enemy and await his action. For the listless, do-nothing treatment, known as "The Expectant," he has no patience. He only mentions it to condemn it. The foe must be attacked and dispersed by the roar of cannon and the discharge of artillery.

That some of Mr. Moseley's remedies, including counter-irritation, galvanism, and baths, are useful in the treatment of insanity, is quite true; but we were under the impression that they had long been in use by medical men. Had he urged their being used more frequently than they are, we should have agreed with him. When we are on the brink of expectancy as to what constitutes Mr. Moseley's "New Especial Method" by which mental disorders are "*now*" successfully treated, our hopes are blasted by the statement that the "use of all kinds of medicinal remedies in the treatment of insanity is too wide a subject for discussion within the limits here at my disposal." We get no further than the statement that the blood is the true seat of mental disease, and that our measures for its relief must be shaped accordingly. There is nothing very new or special in the direction that measures must be employed to raise the vital tone of the brain; to suppress diseased action in those bodily organs which evidence diminished or perverted activity; to induce the blood-making and blood-purifying viscera to take on healthy action, or, lastly, to promote the transference of congestion and irritation of the sympathetic ganglia to the skin. A douche may be usefully applied to the head with or without putting the legs in very hot or cold water. Artificial eruptions on the skin, as in "Baunscheidism," are recommended.

Also the Turkish bath, Sitz-baths, the application of mustard, prolonged warm baths, wet packing, &c. "Perhaps the reader will think," concludes our author, "that in this direction lie the remedies that will remove chronic insanity out of the *opprobria medicinæ.*" Perhaps the reader will also think, say we, that although this conclusion is the result of a "confidence inspired by constant experience on the living subject," what is true in this production of sixty-three pages is not new, and what is new is not true.

Hume. William Blackwood and Sons, Edin. and London. 1886.

This is another carefully prepared biography of philosophers in the Classics for English readers, edited by Professor William Knight, with a frontispiece representing an apparently excellent likeness of David Hume. The present volume is written by the editor, who sketches the philosophy of Hume with fairness and lucidity. He recognizes the psychological inadequacy of the philosopher's explanation of many things. Take his contention in regard to Personal Identity. Hume requires to be shown the "impression" from which arises our "idea" of self. If this cannot be done the alleged idea falls to the ground. Again, he demands how all our distinct energies can belong to and be connected with the pretended self. Each of these may exist separately, and where is the need of anything to support their existence? A man cannot enter into what he calls *himself* without stumbling on some *particular*. Similarly, mankind is "nothing but a bundle or collection of different perceptions which succeed each with an inconceivable rapidity, and are in a perpetual flux or movement." The identity of plants or animals is analogous to ours. Hume held that men confound the notion of a succession of objects which are in relation with the continuance of an identical object. The following passage cited by Professor Knight contains the pith of the contention on Hume's side :—"We feign the continued existence of the perceptions of our senses to remove the interruption ; and run into the notion of a soul, and self, and substance, to disguise the variation." Hume perceived that the plant and the berry, the man and the child, were, notwithstanding their different periods of growth, one and

the same. For all that, he maintained that their identity was a figment of the brain, an imagination, and that the oneness was not real. He supported his position of the fictitious identity of the human mind by his doctrine of there being no real causation amongst phenomena, only an association of ideas, the result of custom. The memory of the past and the union with the present is the main source of personal identity, but only in the sense that it discloses it, the disclosure itself being a mere illusion. The notion of causation is acquired from such memory. Professor Knight regards Hume's position as inadequate, and as displaying analytic poverty and helplessness. He says, "A succession of states of mind *has no meaning*, except in relation to the substrata of self that underlies the succession, giving it coherence, identity, and intelligibility. The states are different, but the self—whose states they are—is the same. . . . If all that I *am* is this series of successive and detached 'impressions,' which I subsequently recall and bring back upon the stage of my experience as ideas—how are they *my* impressions—and *my* ideas? To make them *mine*, 'I' must exist beneath them or within them, and in a sense before them" (p. 178). This may serve as an illustration of the intelligent manner in which this little book is edited.

In concluding his philosophic sketch, the editor expresses his opinion that the antidote to the one-sidedness of the philosophy of experience as propounded by Hume, is to be found not so much in its opposite—Idealism—as the Philosophy of History, proving as it does that no narrow sectarian theory of knowledge suffices our human needs, and the study of the chief idealistic poets, from Dante to the poet who so greatly influenced John Stuart Mill, and who is able to hear "authentic tidings of invisible things." "Every materialistic movement must sooner or later be followed by an idealistic one, and every destructive theory be succeeded by a constructive one" (p. 238.)

What Hume said of Shakespeare, that he was a "disproportioned and misshapened giant," might perhaps be applied with more truth to Hume himself.

We have, in conclusion, only to speak in terms of praise of this publication.

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*The Philosophy of Art.**

This little book, with its simple title, will be found to afford food for great and complicated reflections. It is a translation of some of the preliminary statements of Hegel and Michelet concerning the science of Æsthetics, and is a forerunner of a more exhaustive treatise on the same subject. The translator, who has wrestled successfully with the difficulties of Hegel's style, writes with enthusiasm of the great German master whose introductory remarks it is the purpose of this book to set forth. In spite of this success, however, the mind of the reader will occasionally revert to that passage in the preface which speaks of "the common light fading" as one "advances into the deepening chiaroscuro of Hegel." From this obscurity the reader partly emerges when he reaches the second part, translated from Michelet. But all such difficulties will only deter the frivolous; the earnest student they will but put upon his mettle.

If, at the risk of speedy annihilation, one may venture to cross swords with such renowned champions, it would be to suggest that their subject is sometimes treated in too abstract a manner. For instance, on p. 60, we read: "While the Greek colonnades which ran round the temple maintained their relation to the outer world, the Gothic columns and pillars were transferred to the interior of the building, on account of its idea of seclusion from the surrounding world." Now, we venture to say that no such abstract and philosophical idea actuated the Gothic builders; but that, on the contrary, their arcades were the result of practical considerations, and were evolved from a plain, solid wall through various stages, the first of which is to be found in Romanesque architecture, where the solid piers are as wide as the open arches. As the desire for more spacious interiors grew, and as the builders increased in knowledge of construction, so did the piers lessen and the arches increase. It cannot be supposed that the Gothic architects adapted the idea of piers and arches from a Greek colonnade, for they never saw one; and it is rash to assume that they had any but constructional and practical motives for the leading characteristics of their work. But philosophers are apt to

* "The Philosophy of Art, an Introduction to the Scientific Study of Æsthetics," by Hegel and C. L. Michelet. Translated from the German by W. Hastie, B.D. Edinburgh: Oliver and Boyd. London: Simpkin, Marshall, and Co.

read much more into the work they criticize than ever was in the mind of its authors. This, however, does not detract from the interest of the book, for it is but dull reading where you cannot sometimes disagree with your author.

On some forms of Paralysis from Peripheral Neuritis. By Thomas Buzzard, M.D. Lond. J. and A. Churchill, 1886.

The present small volume embodies the Harveian Lectures delivered by the author in 1885, and subsequently published in the "Lancet." Much, however, has been added to these same lectures.

The subject of Peripheral Neuritis is one of very considerable interest; moreover, it is new. Dr. Buzzard gives us first a few anatomical and physiological considerations, of which one may say they are admirable in their clearness, and of material assistance in leading up to the subject proper. Neuritis is then defined both as to its morbid anatomy and morbid physiology. With regard to the first, the two forms of lesion, interstitial and parenchymatous, are described, and, as it seems to us, very fitly. Dr. Buzzard suspends his judgment "as to the propriety of the parenchymatous form being considered as certainly of inflammatory character."

The author then leads off with a case of neuritis which is so striking, so typical, that one jumps to the right conclusion at once—paralysis, altered electrical reaction of the muscles, pains, hyperæsthesia, trophic changes in the skin, all are present. One is sanguine, but, unfortunately, all cases of neuritis are not thus stamped; and on p. 21 we find the important statement: "We are not yet in a position to explain this important fact, but there would seem to be no doubt that sometimes the motor, at other times the sensory, and, perhaps, on the whole, least commonly, the vaso-motor fibres, bear the brunt of the attack, with a corresponding contrast in the symptoms." This is, indeed, an important statement, and, if true, as seems likely from the evidence adduced, it offers another instance of the marvellous tissue-affinities of disease. On p. 22 the author applies the doctrine, and states: "But even in mixed nerves, I feel sure that neuritis may occur without pain."

Gout—that protean disease—is then considered in relation

to attacks of pain and numbness not uncommonly met with. With this pain and numbness may be associated more or less loss of power (and even trophic changes). Dr. Buzzard thinks that many such are instances of a peripheral neuritis of gouty origin, and he holds that electrical examination of the muscles supports this view. Cases in illustration are given.

The first chapter concludes with a quotation from Graves, in which he describes a curious epidemic which occurred in Paris in 1828. The symptoms of the disease consisted in pain, hyperæsthesia, then anæsthesia and powerlessness, even to general paralysis. At the post-mortem no central lesion was discoverable. The objection, of course, to this evidence is, as Dr. Gowers points out,* that the means of investigating the nervous system at that time were not very efficient.

In Lecture II. multiple neuritis is considered more in detail. Cases with a syphilitic history, and yielding to syphilitic remedies, are given; but no particular cases are instanced in which the chief morbid factor appeared to be alcoholism. The group of symptoms which characterize cases of alcoholic multiple neuritis present many resemblances to the group of symptoms belonging to tabes. Thus pains may be present, especially in the lower limbs, numbness, ataxy, loss of knee-jerk. The resemblance, indeed, may be so close that only the further course may permit of the diagnosis being made. A conclusive sign against tabes is, according to Dr. Buzzard, recovery of the knee-jerk. Stress is also laid on the symptom, "dropped feet," as very suggestive of alcoholic paralysis; in fact, it is considered by the author as almost as suggestive of this poison as dropped wrist is of lead.

In Lecture III. instances of peripheral neuritis from other causes are given; thus in sequence to malaria, to enteric fever, and, notably, as following diphtheria. Of course, diphtheritic paralysis is comparatively seldom fatal, and its morbid anatomy is gathered from rather scanty materials; but the view that it is really the result of peripheral neuritis seems a very likely one.

In this chapter some space is given to the diagnosis of multiple neuritis, and it demands it, for, with all care, the disease, as it at present stands, will tax the diagnostic powers even of a specialist.

* Gowers, "Diseases of Nervous System," Vol. i.

We must add, in conclusion, that the subject of peripheral neuritis is of the greatest interest, and that it promises to make plain much that has hitherto been obscure in nervous affections. True, the disease is not just yet in sharp focus, but that will come. Meanwhile, we must express our indebtedness to Dr. Buzzard for his valuable contribution to this department of pathology.

Druitt's Surgeon's Vade-Mecum: A Manual of Modern Surgery. Edited by Stanley Boyd, M.B., B.S.Lond., F.R.C.S.Eng., Assistant-Surgeon and Pathologist to the Charing Cross Hospital, and Surgeon to the Paddington Green Hospital for Children, &c. 12th Edition, with 373 wood engravings. London: Henry Renshaw, 356, Strand. J. and A. Churchill, 11, New Burlington Street. 1887.

Although this work may seem only remotely related to Psychological Medicine, it is very certain that the medical superintendents of asylums, as well as others, will find a handbook of Surgery of essential use, and we know of no book so well adapted for the purpose as the long-established favourite — Druitt's Vade-Mecum. The present edition, almost rewritten, enlarged, and most ably and carefully edited, by Mr. Stanley Boyd, leaves nothing to be desired, and we confidently commend it to the favourable notice of our readers.

The chapter, "Injuries of the Head," deals with injuries of the scalp, the skull-bones, general injuries of the brain, including concussion, compression, injuries of intracranial vessels, local injuries of the brain. The arrangement of centres in the motor area is shown by a figure, and includes a reference to the results reached by Horsley and Schäfer. Inflammation of the brain and its membrane, intracranial abscess, traumatic epilepsy, and tumours of the brain are next treated of, and operative interference in the light of recent experience is duly noticed.

Now that Surgery is being more and more applied to the alleviation of cerebral affections, it becomes of more immediate interest and importance to those engaged in the treatment of diseases of the brain than at any former time.

We predict a very wide circulation for this useful manual. It is admirably illustrated, and the letterpress is excellent.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *Scandinavian and French Retrospect.*

By Dr. Hack Tuke, F.R.C.P.

A. The Copenhagen Congress.

Congrès Périodique International des Sciences Médicales, 8me Session. Copenhague, 1884. *Compte-Rendu Public au nom du Bureau.* Par C. Lange, Secrétaire-Général. Tome III. Copenhague, Librairie Glydendal (F. Hegel et Fils), 1886.

This volume contains the Report of the Section of Psychiatry and Neurology at the Copenhagen Congress, and extends over nearly 160 pages. Professor Steenberg, the superintendent of the St. Hans Asylum at Copenhagen, presided, and among the vice-presidents were Professor Kjellberg (Upsala), Professor Laehr (Berlin), Professor Ball (Paris), Dr. Magnan (Paris), Professor Obersteiner (Vienna), Dr. Ramaer (Hague). Of the four secretaries Dr. Pontoppidan (Copenhagen) is known to many in this country, having visited some of our best asylums since the Congress.

The President contributed a valuable sketch of the asylums and the insane in Scandinavia, the population of which amounts to 10,400,000. Of these 18,000, or 17·4 per 10,000, are insane, and are thus distributed:—

	Population.	Insane.	Per 10,000.
Sweden ...	4,600,000	7,100	15·6
Norway ...	1,800,000	3,160	18·5
Finland ...	2,000,000	4,400	21·2
Denmark ...	2,000,000	3,300	16·6

In Sweden 24·2 per 100 patients are in public establishments; in Norway 32·9 per cent.; in Finland 10·1; in Denmark 56·1.

Sweden has 10 hospitals with 2,250 beds; Norway 10 hospitals with 1,040 beds; Finland has two hospitals, a house of reception, and a new hospital at Knopiv; Denmark four asylums with 2,000 beds.

Thus Scandinavia has too few public establishments. Even in Denmark there is only room for half the number of the insane, whilst in England 61·5 per cent. and in Scotland 75·6 per cent. of the insane are in public institutions.

Patients who are outside asylums are mostly in their houses or with their relatives, and most frequently are well treated and cared for.

The difficult problem of the best location for chronic lunatics is discussed. Experience proves that frequently many of this class can live comparatively happy outside the asylum. On the other hand experience also shows that many who in an asylum are quietest and best workers have scarcely gone out of hospital before they are attacked with an exacerbation of their disorder, and are sent back to the asylum in such a state that the greatest regret is felt that they were ever allowed to leave it. The abuse of brandy is chiefly the cause of this, but it must be admitted that the homes of the patients are sufficiently unfavourable to cause an increase of the symptoms.

In the middle ages the insane in Sweden were placed in the "Maisons du Saint-Esprit," monasteries administered by certain brotherhoods and supported by donations. When, in 1527, the reformation abolished the monasteries, the above-mentioned Maisons alone remained in the same state, and in the course of years they imperceptibly changed into asylums for the insane. In 1773 the *chevaliers* of the celebrated order of the Seraphims undertook the duty of caring for the insane. They have acted with great energy and ability, thanks specially to the well-known Dr. Magnus Huss, a member of this order, and subsequently Director-General of all the asylums in Sweden. This remarkable order of Seraphims was dissolved in 1877, and the administration of all matters pertaining to the insane was confided to medical control.

Passing to Norway, a Royal order in 1736 compelled all hospitals to provide one or two wards where the insane poor might be treated or protected. But it was only in 1845 that Norway began to perform its duty towards the insane by purchasing the domain of Gaustad, near Christiania, and constructing an asylum there. In 1871 another asylum was built at Ratvold, near Trondhjem, and in 1881 another was erected at Ey, near Christiansand. Professor Steenberg says these three institutions are excellent, and are built according to the enlightened principles of the present age.

For Finland there were, in 1771, 40 beds for the insane, provided in connection with the old leper hospital at Sjäkló. It was only on the foundation of the asylum at Lappvik in 1841 that the insane began to be treated, and at

the same time some cells in all hospitals were provided for the temporary care of the insane. In addition to these two old asylums there are five houses of reception and a new hospital at Knopiv.

Lastly, in Denmark Christian the Fourth, in 1632, ordered provision to be made for the insane to the extent of 30 cells in the St. Jörgensgard. This house of St. George was intended for lepers, and was dedicated to the patron saint of these unfortunates, St. Jörgen. Towards the middle of the 16th century leprosy began to decline, and this house became the hospital of St. Hans (John), and was appropriated to the insane and the patients suffering from contagious diseases. It was situated near Copenhagen, but after having been destroyed by fire, once by the Swedes and once by the English, it was transferred in 1816 to Roeskilde, where it now is. Later on the Government has shown its solicitude for the insane by establishing several asylums.

There are no inspectors of asylums in Scandinavia. In Sweden all relating to the insane depends upon medical government. In Norway, State Asylums are placed under the ministers of justice, whilst all the Communal Asylums are conducted by the commune to which they belong. This holds good for Denmark also. In Finland all the asylums are under State control, and depend upon the medical administration. Sweden possesses only two small private asylums.

As to lunacy legislation, Norway, Sweden, and Finland have laws, it is true, but these are principally concerned with the forms necessary to be observed in admitting or discharging patients. Sometimes they maintain the rights of society in regard to lunatics; but no law exists which maintains the rights of the insane in regard to society, which, as is pointed out, is a great defect. There is wanting a law to decide in what manner and up to what point the insane even when they are interred in an asylum may employ their fortune as they wish, and dispose of it by will.

Denmark has no lunacy laws, a happy state of things, it may be thought, by those in England who are worried by fussy legislation relative to the insane calculated to cramp the action of medical men.

In Sweden the study of psychiatry is obligatory, and students cannot pass their last examination without possessing a certificate of having attended a psychological *clinique*. As early as 1859 a course of lectures in psychiatry was de-

livered in the hospital of Upsala, and later in the hospitals of Stockholm and Luna.

In the other three countries of Scandinavia medical psychology is not obligatory; but courses of insanity are delivered for the benefit of the students. Especially young medical men have had the opportunity of attending the post of *interne* in the chief establishment of the country. Nevertheless there is a general desire among the mental physicians of Scandinavia that psychiatry should form a part of the University examinations.

A map representing the distribution of the insane and idiots in Scandinavia is given, and will be of great use to any of our readers intending to visit that region.

Our space allows of little more than an enumeration of the papers read at this section :—

1. *Anatomical Changes in Tabes Dorsalis*, by Prof. Adamkiewicz (Vienna).
2. *Morphinism and its Treatment*, by Prof. Obersteiner (Vienna).
3. *Psychological Analysis as a basis for Psychiatric Diagnosis*, by Dr. Ramaer (The Hague).*
4. *On the Religious Exaltations of the Orient*, by Dr. Zambaco (Constantinople).

(We hope to find room for this interesting paper in a future number of the Journal. It forms a most important contribution to the study of Hysteria.)

5. *The Value of Agricultural Colonies in the Treatment of the Insane*, by de Paetz (Alt-Scherbitz).
6. *The Influence of Schools in inducing Mental Diseases*, by Prof. Kjellberg (Upsala).
7. *The Curability of Tabes Dorsalis*, by Prof. Eulenburg (Berlin).
8. *Influence of Heredity in General Paralysis of the Insane*, by Prof. Ball (Paris).

The author concludes that direct heredity is rare. The families of paralytics generally present very characteristic features, namely, longevity of ancestors; a large number of children; infrequency of mental diseases properly so-called; great frequency, on the contrary, of cerebral diseases; high rate of mortality among the children. General paralytics inherit, then, a special tendency to brain trouble, but do not inherit the special malady with which they are attacked; and their families, taken as a whole, are in several respects distinguished from the population by which they are

* Reviewed in this Journal, January, 1886.

surrounded. General paralytics are the outcome of a noble not a degenerate race.

9. *The Rôle of Syphilis in General Paralysis*, by Dr. Rohmell (Copenhagen).

The author attaches great importance to the etiology of Syphilis, but concludes that specific treatment seems only to retard the progress of the disease. Hence he presumes there is some special modification of Syphilis. Dr. Rohmell considers it highly important to employ anti-syphilitic remedies assiduously if the disorder is seen in its early stage. Professor Steenberg maintained in the discussion that paralytic dementia has only syphilis for its cause. This is what he says he has been compelled to conclude from his large experience. "He who has never had syphilis will never be attacked by general paralysis." It is hardly necessary to say that the conclusions of Rohmell and Steenberg were combatted by other speakers, as Ramaer, Magnan, and Lunier.

10. *The Vaso-Motor and Trophic Neuroses*, by Prof. Eulenburg

11. *The Local Treatment of Chronic Congestion and Exudations of the Meninges by Ventouses Vésicantes*, by Dr. Baraduc (Paris).

12. *Wasting Palsy and Amyotrophic Lateral Sclerosis*, by Wladimir Roth (Moscow).

13. *Anatomical Lesions in Amyotrophic Lateral Sclerosis, and its relation to Wasting Palsy*, by Dr. Friedenreich (Copenhagen).

14. *On the Histological Character and Development of the Secondary Degeneration of the Spinal Cord*, by Dr. Homén (Helsingfors).

15. *On Compression and Lesions of the Brain*, by Prof. Adamkiewicz (Cracow). *On the Rôle of the Dyscrasies in the Etiology of the Neuroses and Psychoses*, by Dr. Otto Müller (Blankenburg).

16. *The Rôle of Exercise in the Treatment of Mental Diseases*, by Prof. J. Kjellberg (Upsala).

17. *On the Psychic Equivalent of Epilepsy*, by Dr. Fr. Hallager (Viborg, Denmark).

The author maintains that the so-called psychical equivalent of an epileptic attack is not proved, and that careful examination would reveal unobserved epileptic attacks.

18. *On the Pathogenesis of Epilepsy*, by Dr. P. Rosenbach (St. Petersburg).

19. *On the Etiology and Treatment of Megrim and Nervous Headache*, by Dr. O. Storch (Copenhagen).

20. *On Salivation in Nervous Diseases; Physiological Examination of the Secreted Fluid*, by Dr. Gilles de la Tourette (Paris).

The whole forms a very valuable collection of articles,

is of practical importance in the treatment of the insane, and for the most part possesses permanent interest.

B. French Psychological Literature.

L'Encéphale. Journal des Maladies Mentales et Nerveuses.

This journal continues to supply its readers with excellent articles. In the first number of 1886, which, by-the-bye, is the 6th year of its existence, are articles on "A New Region of Grey Matter at the Base of the Brain," described by Luys; "Syphilomata of the Encephalon," by the same physician; "Syphilitic Myelitis," a case which recovered under iodide of potassium and mercurial inunctions, by G. H. Roger; "Hystero-traumatic Paralyses," by H. Poupon; "Study of the Mental Condition of Louis Riel," by H. Gilson; and "The Insane Painted by Themselves," by Régis.

The article on Riel is full of information, and should be carefully read by those who doubt his unsoundness of mind and irresponsibility. He was in daily communication with angels, and never took any decision without consulting them. Even his companions in arms blame him because he placed obstacles in the way of the most rational military operations, on the pretext that his voices had ordered it. One day when he was present at mass, he understood the sermon in a sense very different from the preacher's. After the mass, Riel passes through the congregation and the sanctuary, mounts the steps of the altar, takes up the Gospels, and, turning towards the congregation, says: "When the priests tell you the truth, they put this book on this side—" showing the Gospel—"and when they wish to humbug you they show you that"—pointing at the same time to the Epistles. He had the following conversation with Father André: "I ask you a favour, Father, and I venture to hope that you will not refuse it." "And what is that?" enquired the priest. Riel replied, "It is to require Mgr. Taché to permit me to celebrate the mass." "But who has ordained you?" "The spirits!" answered Riel. He constantly opposed the plea of insanity raised in his favour. Four physicians were consulted as to his insanity; two pronounced in favour of it and two against it.

The comment made by the author on the execution of Riel, is that "it shows once more the imperfection of the English law in questions of insanity. The English alienists are, besides, in accord with ourselves upon this point. Let us then recognize and say to the non-medical public that the insane are better protected in France than anywhere else, for in our country a man like Riel would be still living, but placed in an asylum and protected by the law."

M. Régis, in the article whose title we have given, reports a case which he classifies as *manie raisonnante* or *folie morale*. The patient, who was an inmate of the Sainte Anne Asylum in Paris, prepared a work with the title of "Natural Philosophy," in which he

treated of the origin of worlds, the atomic state, magnetism, sound-waves, and the theory of inductions. Moreover, 200 pages were devoted to "insanity," in which there were chapters on the mind, the theory of material propagation of thought, reflection, and ideas, hallucination, mental communications at a distance, natural causes of insanity, nervous disorders, delirium, extravagance, rambling, dementia, general paralysis, divorce, &c.

A long extract is given from his description of inductive correlation which is very curious, and justifies the description of *folie raisonnante*, illustrating, as the author maintains, how the mind may be disordered without the syllogistic faculties and the reason being affected. The case also shows how patients' productions may betray them when a very long conversation fails to elicit their mental trouble. M. Régis well may ask how we can wonder at the extra-medical public obstinately refusing to see anything unreasonable with such patients, when even some specialists themselves do not hesitate, for want of sufficiently attentive study of these insane persons, to declare them sane. This particular patient was transferred from the clinique in the asylum to another division, in the same mental condition, and was shortly set at liberty as not being (legally) insane.

No. 2 contains an elaborate article by M. Jules Soury, on the functions of the brain, as held by Goltz. The subject has been now so frequently discussed, and in our opinion with the result of disproving these particular doctrines, that we do not think it necessary to analyze this article. The number of experiments upon animals by Goltz and by Munk appear to be endless, and, in consequence of the manner in which they are performed, inconclusive and contradictory. It has now, in fact, become a matter of mere personal feeling and pique. A more pitiable exhibition of temper than that witnessed at the recent meeting of German physicians and naturalists, cannot well be conceived, and the worthy Dr. Watts's permission to dogs to "delight to bark and bite," appeared to be by a singular Nemesis transferred from the subjects of the experiments to the experimenters themselves. Professor Ball makes an editorial note that he dissents from the views of M. Soury on the subject of cerebral localization, and prefers to follow his master, Brown-Séquard.

An article upon *la folie à deux*, by Ball, raises the question whether insanity is contagious. Two opposite opinions are noted. For the general public it is fully established that one becomes a lunatic himself who listens to the ravings of others, and that it is sufficient to be shut up in an asylum to completely lose one's reason. Altogether opposed to this is the opinion of specialists. The insane usually feel an antipathy to one another. Hence the appropriateness of the French *aliéné*—a stranger to the world in which he lives. But do they not exert an influence on the *sane?* Many facts, including the apparent immunity of doctors and attendants, in spite of being constantly thrown among them, seem to favour a negative reply. Lasègue and

Falret have, however, by their works added to the nomenclature of mental disorders, by recognizing the influence under certain circumstances of a lunatic upon the sane. Régis has contributed an able thesis on the *folie à deux* of these authors, when it is developed simultaneously, and it receives the name of *folie-simultanée* from one writer. When twins are insane, we have the term *folie gémellaire*. Again, M. Chpolianski presents us, in a thesis, with *suicide à deux*. The type described by Lasègue and Falret may be thus indicated: It usually arises from the influence exerted by one person over another, and is due to the intimacy of family life. Generally the one who exerts the influence occupies a superior position to the other. A master, for instance, affects his servants, or the better educated and more energetic brother or sister affects the other members of the family. The passive subject is only the feeble echo of the agent. Again, it is needful that there should be a certain amount of coherence and plausibility in the lunatic. A general paralytic or a dement would fail to exert an injurious influence. It is the systematized delusionist or the mystical preacher who produces conviction. The passive agents, on the other hand, are in general those easily influenced by their surroundings, the feeble-minded children, old people, and the *effacés*. According to M. Régis, this form of insanity happens to those who are badly organized, and who have already a proclivity to the disorder. If in the same family there are, in short, two heads in the same bonnet, and apart from heredity, the facts brought forward by Lasègue and Falret preserve their value, while the simultaneous insanity in two predisposed persons, as prominently indicated by M. Régis, forms an interesting variety. Professor Ball hesitates to admit Dr. Kiernan's idea of the communication of insanity to several by the transmission of illusions, among the *insane*, for, as already pointed out, lunatics do not feel drawn to one another, but the reverse.

The conclusion arrived at by Dr. Ball, is that the contagion of insanity is one of the most indisputable facts, and ought to be recognized, but does not favour the common notion that this occurs inside asylums. The only efficacious treatment is the complete separation of the two affected persons. We agree with Dr. Ball's conclusions.

We pass over the new experiments in reference to the intracranial motion of the brain by M. Luys, who shows that in the horizontal position of the head, its relation to the skull is not the same as in the vertical position, these movements being favoured by the subarachnoid fluid. The next article is by M. Motet, on the boundary lines of insanity, in which he reports a case of a man found guilty of swindling. M. Motet could not say that he did not know that he had done wrong, but that he thought that at the moment when he swindled he was in the midst of an attack of excitement, of which there were proofs of his having had similar attacks in the past. The tribunal accepted these conclusions.

Dr. Descourtis contributes a valuable article on the cephalic thermometer. He draws the following conclusions:—

1. Along with the rare cases in which the temperature reaches its maximum in 15, 20, or 30 minutes, there are others in which it follows an ascending scale during one, two, three, and even four hours.

2. Sometimes the temperature follows a pretty regular line, either horizontal or oblique from below upwards; sometimes it presents actual oscillations.

3. The oscillations usually follow no rule. However, there remain cases where they seem to follow at regular intervals.

4. There are sometimes considerable and sudden falls of temperature, which nothing so far explains.

5. Instead of pursuing a parallel course, the temperature of the left and that of the right side are often independent of each other.

6. The temperature may remain stationary on one side of the head, whilst it undergoes variation on the other.

7. The same oscillations may occur inversely, the temperature rising on one side while it falls on the other.

8. There is a certain relation between the deep cephalic temperature and that of the axilla. When the one rises or falls the other rises or falls, although not exactly in the same proportion.

9. Usually, the discrepancy between the axillary temperature and the frontal is less considerable in proportion as the former is elevated.

10. It is even possible that the difference of temperature between the left and right side of the head may be more accentuated in low temperatures.

11. The degree of temperature, the relative superiority of the left or the right side, the characters of each curve, the discrepancy which they present, vary with the activity or the repose of the brain, with health or disease, and form of the disorder.

12. In general paralysis and inflammatory affections of the brain or its membranes, the temperature appears to be invariably high. It is the same in mania. On the contrary, in melancholia and mental stupor, there is sometimes a rise and at others a fall of temperature without any apparent reason. The latter fact is of great importance in regard to treatment.

We are glad to observe that Dr. Descourtis confirms the results arrived at by Lombard, and pays a high tribute of praise to his extreme accuracy.

Artificial Somnambulism.

Le Somnambulisme Provoqué; Études, Physiologique et Psychologique. Par H. Beaunis, Professeur de Physiologie à la Faculté de Médecine de Nancy. Paris, 1886.

This contribution to the literature of hypnotism has already attracted considerable attention, and ought to be read in connection with Cullerre's work, *Magnétisme et Hypnotisme, exposé des phénomènes*

observés pendant le sommeil nerveuse provoqué, au point de vue clinique, psychologique, thérapeutique et médico-légal, avec un résumé historique du magnétisme animal. Paris, 1885.

M. Beaunis acknowledges the influence of Charcot, Richet, and others, in obliging men of science to take up the study of hypnotic phenomena instead of foolishly leaving them to charlatans and pseudo-scientific observers. The author controverts the popular notion that the hysterical only are susceptible to hypnotism, whereas it can be readily reduced in men of all temperaments, the old and children. It is worthy of remark that he has not been able to reproduce Charcot's three states of hypnotism, witnessed in the hystero-epileptic at the Salpêtrière. As regards neuro-muscular hyperexcitability and sensation in artificial somnambulism, the author does not enter upon the former, and his observations of the latter have been somewhat variable. He is acutely alive to the disturbing element of suggestion—that perpetual source of fallacy unless due precaution is taken—and he adopts Bernheim's motto, *Méfiez-vous de la suggestion.*

To produce sleep by the various methods in vogue it suffices that the subject has present to his mind the idea of sleep. The sleep of somnambulism is not, however, the natural normal sleep. Can the former be induced in a person asleep without first waking him? It is possible. Hence, as the hypnotic sleep is produced with difficulty among the insane, it might be hoped that this could be done with greater facility during sleep. In spite of the opinions of Braid and Bernheim to the contrary, M. Beaunis holds that persons may be hypnotized against their will, it being a condition, however, that they have been previously hypnotized. For some of these, resistance becomes impossible, although they may avoid the gaze of the operator. Even in such cases, however, it is sufficient to suggest to them that no one can send them to sleep during a certain time to prevent any attempt being successful.

The non-susceptible are in a minority. Possibly with sufficient perseverance there is no one who might not eventually be thrown into the hypnotic sleep. Not that we desire this.

As to the dangers of hypnotism, the greatest is that of making anyone absolutely subject to the power of some hypnotizer. This is no doubt a real moral danger. The only answer to this objection is that everything may be abused; that, for example, we cannot prevent ill-disposed people employing the poisons which medical men make use of for curative purposes. As to the dangers to the individual arising out of frequent experiments made upon him or her, they appear to consist of a little headache, flying pains, nervous attacks, and a tendency to syncope.

Sphygmographic tracings are given showing the effect of hypnotic suggestions upon the beats of the heart. The first tracing is taken in the waking state, and is very regular. The pulsations were 96 per minute. Sleep being induced, the character of the pulse becomes that

of high tension, its fulness is diminished, and the tracing is scarcely dicrotic. Pulsations are now 98·5 per minute. A few moments afterwards, it was suggested to the somnambulist that the pulse had become slower. The tracing then taken shows at two points—the beginning and the end of the suggestion—a more accentuated slowing and a sort of arrest of cardiac pulsation. The pulse was 92. Suggestion is no longer made, and the pulse returns to its normal condition. The pulse beats 102 per minute, the subject being still asleep. The suggestion was made that the pulse was more frequent, and now the tracing shows scarcely the slightest dicrotism. The pulse rises to 115. The subject's pulse then returns to its normal state, and on being aroused it is found that the pulsations number 100. In short, slowing and acceleration of the pulse immediately succeeded suggestion. The author records several interesting instances of voluntary acceleration, but not slowing, of the heart's action, without hypnotism, but he does not believe that these cases belong to the same category, and he insists upon the instantaneous influence of suggestion under hypnotic conditions, which, according to Beaunis, acts upon the inhibitory centre rather than upon that of acceleration. The mind of the subject, in ready obedience to the suggestion made, acts immediately in exciting or in paralysing the centre of cardiac inhibition, and produces in the former case slowing, and in the latter increased frequency of the heart. Great stress is laid upon the *instantaneous* effect of suggestion upon the heart.

Experiments causing a blush of the skin by hypnotic suggestion are given. This is done by saying to the subject that on waking there will be a red spot at the point then touched. Ten minutes after, a blush, at first very slight, appears, which increases gradually, and after having lasted for about a quarter of an hour, slowly disappears. By conditions it could be made to last much longer, namely, for 24 or 48 hours. Vaso-motor changes cannot, of course, be induced voluntarily in ordinary conditions, but it is well established that in some susceptible persons analogous results follow emotional excitement directed in a certain channel without hypnotism. Again, suggestion will produce not only local vascular congestion, but considerable swelling. Still more striking is the production of a blister by the same mental influence. A remarkable instance of this is given, in which every precaution seems to have been taken to prevent deception. It is vouched for by Professors Bernheim, Liégeois, as well as Beaunis, Drs. Liébeault and Simon, and two other witnesses.

Most if not all of the secretions have been excited by suggestion. The lachrymal secretion was excited on only one side through the same influence. Again, epistaxis and sanguineous perspiration on areas determined by suggestion, have been induced; the latter experiment being, of course, full of interest in relation to the well-known "stigmata" of past and present days. These are splendid results.

Experiments made with the dynamometer before artificial sleep is

induced, during its presence and after waking, show that the grasp is feebler during the sleep than before it. And, as the sleep is deepened the proportion of the cases in which the force diminishes during the sleep becomes less. In the majority of cases tested after waking the force was greater than before the sleep was induced, as well as greater than during the sleep. To some extent that marvellous agent, "suggestion," could be made to augment the dynamometric force.

Acuteness of hearing is usually intensified during the sleep.

Tactile sensation requires further elucidation.

We now come to the state of the memory in artificial sleep. M. Beaunis concludes (1) that the memory of conscious states (sensations, acts, thoughts, &c.), during artificial sleep, is abolished when the patient wakes, but this memory may be revived by suggestion either temporarily or permanently. (2) That the memory of conscious states during artificial sleep returns when the subject is again hypnotized; but it may be suspended by suggestion. (3) That the memory of conscious states during the period of being awake, or of natural sleep, remains during the hypnotic condition; but this memory may also be suspended by suggestion either temporarily or permanently. It is scarcely necessary to observe that the forgetfulness (on waking) of the acts performed during the hypnotic sleep holds good for the most part in natural somnambulism.

Memory, we know, may be rendered more acute by natural somnambulism, as in the example of the servant who in this condition talked Hebrew which she had heard from her master. So likewise in the hypnotic sleep the memory is intensified, the subject remembering the details of events which entirely escaped the memory when awake. The question is discussed whether there is more than an exaltation of recollection, or whether the facility with which impressions are fixed in the brain is increased. So far as M. Beaunis' experiments have gone, there is no evidence of an augmentation of the latter faculty.

As the author says, the facility with which temporary amnesia can be induced is one of the most curious features of hypnotism. As is well known, the subject may be made to forget vowels, consonants, numbers, or powerless to count beyond a certain number fixed upon, made to lose the notion of substantives, names, and even his own, and to no longer remember whole periods of his life, to cease to have any notion whatever of his own identity, and, in a word, wholly part with his memory. Every form of difficulty of speech now so well known in clinical medicine, can be produced instantaneously, as the experimenter in suggestion may desire. More singular still are the phenomena of unconscious memory. An act is suggested during artificial sleep to be performed when the patient is awake, at a period fixed upon by the hypnotiser. An instance is given of this occurrence 172 days after the suggestion. This is much more extraordinary than the common experience of a name suddenly occurring to us which we have forgotten

for the hypnotic suggestion is realized at a fixed moment, neither sooner nor later.

The facility with which, on certain conditions, various mental faculties and feelings, such as anger, pride, jealousy, &c., are aroused, is a fact of obvious interest to the psychologist, and it is maintained that not only temporary modification of character may be induced, but that the same may be even rendered permanent. Thus, a young lady who had melancholy ideas, became much happier after she was hypnotized, and was well aware herself of the change which had occurred. Again, M. D. was a great smoker and beer-drinker, so that his health gave way and his friends were alarmed. He was hypnotized, and it was suggested to him that he should not smoke or drink any more. The result was excellent, although all the advice of his friends, combined with his own will, had been unable to bring it about! The author is indeed convinced that hypnotism will one day become a powerful friend of morality and education. We are sorry we cannot feel equally sanguine.

A chapter is devoted to the well-known condition of sleep-walking, that condition of biologized subjects which, to some extent, affords a parallel to insane conditions, for the eyes of the subject are open, and he looks and walks about very much like ordinary persons, but may have at the same time some extraordinary delusion, one having sole reference to a suggestion impressed by the operator upon the subject, or there may be a partial loss of memory. M. Beaunis cannot tell us what changes have taken place in the brain; all he can say is that the condition present differs from the merely incomplete hypnotic sleep which is observed in some subjects.

Suggested hallucinations, especially those of hearing and sight, have been induced in a very definite and interesting manner, and the phenomena raise many interesting questions, such as whether they have the clearness of sensations caused by external stimuli. Four experiments were made in order to decide this point. One was on a peasant woman, who probably had never made an attempt to draw before M. Beaunis suggested to her to sketch a dog, when she was hypnotized. When awake it was with difficulty that she succeeded in tracing a rough outline in which it is hard to recognize the form of a dog. The second experiment was made upon a young lady who could not draw, and to whom Punch was suggested. The result was almost *nil*. In the third experiment the result was rather more successful. Beaunis suggested to Louise a bird, and she drew a very imperfect sketch, in which, however, some of the features of the animal appeared. Then followed an experiment of control. M. Beaunis made her draw a design representing a dog; it was executed pretty well. Then he said to her that she must sketch a bird without a copy, from her own idea. She made a very rough drawing, but one which resembled a bird, and of which the proportions were fairly preserved. The fourth experiment was made with Madame H., who had not learnt to draw,

but had good taste and natural abilities, and to her Beaunis suggested a dog standing, and in profile. The result was better, namely, an animal somewhat heavy in appearance, but not badly executed. All that could be inferred from these experiments was that a suggested hallucination does not possess the reality and clearness of an objective image, and that the subject's imagination plays a considerable *rôle*. The author compares a visual hallucination to the general view which one has of a person or object at which one looks in passing. One has a general impression, but the details escape us. He thinks it possible, however, that by practice these hallucinations may acquire the precision of reality, as sometimes happens in a dream, and doubtless with the insane. It is rare that a suggestion succeeds fully in producing a hallucination the first time it is attempted. One thing is clear, that to go on suggesting very long would not be right, inasmuch as it might cause a really insane hallucination.

(To be continued.)

Insanity and Degeneration.

Du Délire chez les Dégénérés : Observations prises à l'Asile Sainte-Anne, 1885-1886. Par le Dr. Legrain. Paris, 1886. A. Delahaye.

Dr. Legrain proposes to substitute for hereditary insanity the term degenerative insanity (folie des dégénérés). The book, an octavo of 290 pages, contains a careful study of a variety of cases falling under this definition. He describes the physical marks (stigmata) and the mental peculiarities which accompany such patients. It cannot be held that these stigmata are uniformly present in all cases of hereditary insanity, and when Dr. Legrain assures us that the mental symptoms of the degenerated offer a clinical aspect which is characteristic, we naturally look for a definition by which they might be recognized. The degenerated may, he says, present all the possible varieties of mental derangement. A fit of insanity coming on suddenly, progressing rapidly, and often ending by a speedy recovery, is pathognomonic of the state of degeneration. This form of insanity evolves slowly and progresses in an irregular manner, taking on different forms, succeeding one another more or less quickly with delirious ideas suddenly interjected. It often ends by recovery, but is liable to relapses. Sometimes, again, it falls into dementia. The heirs of this degenerative tendency often inherit a predisposition to drink to excess, which again acts as an exciting cause of insanity. There is no question about Dr. Legrain's close acquaintance with insanity. His descriptions of particular cases are vivid and life-like, but his generalizations are somewhat vague. We do not say that another observer could have given them better definition, but one expects him to make good his claim of indicating something distinctive in hereditary insanity.

2. *American Retrospect.*

By D. Hack Tuke, F.R.C.P.

The Curability of Insanity.

The Curability of Insanity. A Series of Studies by Pliny Earle, A.M., M.D. Philadelphia: J. B. Lippincott and Company, 1887.

We have so frequently taken notice in the pages of this Journal of the valuable researches of Dr. Pliny Earle in regard to the results of care and treatment of the insane, that it is scarcely necessary to do more than to draw the attention of our readers to the collection in one volume of the essays on the "Curability of Insanity," extending to two hundred and thirty pages. The volume forms, as a whole, an important contribution to the study of mental disorders—that branch of it which is, indeed, of radical import, for it grapples with the questions to what degree insanity is curable, whether it is cured to the extent which has been generally believed, and whether the results of treatment are more or less favourable than they were formerly. These essays extend over a period of close upon ten years. There is amongst us a singular and exclusive employment of the word "scientific," which would seem to refuse to comprise within its circle statistical inquiries. This is surely as unfair as it is absurdly unfounded. We have no hesitation in including investigations and carefully-drawn conclusions like those of Dr. Earle, under the head of Scientific Work; and were he in our own country, such work ought to entitle him to the coveted letters granted by the Royal Society as much as minute observations on a drop of water taken from a dirty pond. How such distinctions as to what constitutes the claim to be a successful worker in one department of knowledge rather than another can be made, we have always been at a loss to understand.

In the January number of the Journal for 1886 will be found a brief summary of the chief scientific results arrived at by Dr. Earle; but we may, in conclusion, and with the advice to our readers to possess themselves of a copy of this now classical work, cite from the last page of this book the following paragraphs :—

"The most important general conclusions to be derived from the statistics included in this study are, first, that the old claim of

curability in a very large majority of recent cases is not sustained, and that the failure to sustain it is more apparent and more striking than at any antecedent time; and, secondly, that the percentage of reported recoveries of all cases received at the hospitals in this country still continues to diminish.

"It is believed that this diminution is, in part, to be attributed to the admission of a larger proportion of chronic cases, and of cases of greater degeneracy from their origin; in part, from the increasing—though, as there is good reason to believe, still far from universal—practice of not reporting, as *recoveries from insanity*, either mere restorations from a drunken debauch or forced temporary suspensions from habitual intoxication; and in part, perhaps, from the adoption of a higher degree of improvement as the standard or criterion of recovery. It may be that there is still another cause of the diminution. Drs. Bucknill and Tuke, in their treatise upon insanity, mention what they call 'cooked' statistics. It is possible that in the United States this class of published results is decreasing, and that the reported statistics are more generally given to the public in the spirit of a conscientious loyalty to scientific truth. In conclusion, I would express the hope that the time is not far distant at which the American Association of Superintendents will so perfect its statistical system as to make a distinction between persons and cases, and enable the reader to learn how many of the reported recoveries are first recoveries and how many subsequent to the first. This improvement was made in the Massachusetts statistical tables, as already mentioned, in 1879; and in those of the British Medico-Psychological Association in 1883. Surely the American Association ought not to lag far behind in the matter. It ought to have been the pioneer."

The Question of Increase of Insanity in Massachusetts.

We have before us the Report of the Massachusetts Board on Lunacy, which treats of the number and accumulation of the insane in Massachusetts for the last thirty years, along with tables in the appendix which relate to insanity and are referred to in the text of the report. They are of great interest, based, as they are, upon returns of the insane much more exact since 1880 than any which have been collected in America for so long a period as seven years. Mr. F. B. Sanborn, the able Inspector of Charities appointed by the State Board of Lunacy and Charity, to whom we are indebted for the report, informs us, in an important letter received from him, that the statistics of New York and Pennsylvania are, perhaps, equally exact now, but for a shorter time. He observes that the Massachusetts figures appear to show that there has been a considerable increase, even in recent insanity, out of proportion to the gain in population. This he ascribes chiefly

to these causes: the great increase of our urban population and the accumulation in Massachusetts of recent immigrants and their children. The Irish and Scandinavian races, which make up so large a part of this immigration in Massachusetts, are peculiarly liable to insanity in their native country; emigration appears to develop this tendency, and the change of life from rural districts, where they were bred, to crowded cities in this country, intensifies the risk of insanity. Statistical tables have shown for some years a great excess of commitments in cities and large towns over the rural districts; and they also exhibit an increase in the insane of foreign parentage, coincident with the general growth of insanity. According to the reports of the New York State Board, the increase of insanity in that State is *mainly* ascribed to foreign immigration, the result of accumulation, to which the increase of insanity in England is so properly ascribed, not being sufficiently recognized in New York. It appears that it is fashionable in the United States just now to regard the insane of foreign parentage as having been brought directly from Europe, but the Massachusetts figures do not indicate this to any great extent, and Mr. Sanborn cannot believe that things are very different in New York or Michigan.

Mr. Sanborn says that what is most needed in the United States, and he supposes in Great Britain, is an exact registration of the insane, wherever they are brought, in a separate list and easily accessible for reference, when cases present themselves in the hospitals, etc., as "recent." He proceeds:—"Had we such lists we could easily strike off from the catalogue of recent cases those who stood on the register as chronic cases; but until we have such means of correction we cannot escape uncertainty in this matter. The new census of Massachusetts for the year 1885, although it will not give the number of our insane accurately, will furnish us with a register of about 5,200 different persons, who on the 1st of June, 1885, were enumerated as insane, with such particulars that we can readily trace back cases assumed to be recent to this list. I myself established a list of about half this number seven years ago, which I have been watching during the intervening time, with results that may be of interest. The whole number of persons named in this list was 2,598, and these were, on the 1st of October, 1879, actually resident in our four State hospitals at Danvers, Northampton, Taunton, and Worcester, and in the two chronic asylums at Tewksbury and Worcester. Seven years afterwards, 1,230 of these patients were still living in these same establishments, and 119 were known to be living in other asylums and almshouses; so that more than half the original number, after a lapse of seven years, were still insane in public establishments. Of the known deaths in seven years, 752 in all, not less than 711 had died in some one of the six establishments where they were living when the list was made out; 21 had died in almshouses

and 20 in other places. Of the original 2,598, fourteen have been boarding in families as insane persons (under a new policy), and 12 were thus boarded last October. At that date then, 1,361, or 52 per cent. of the whole number, were known to be living in a state of insanity, which had continued in their case for at least eight years, although in some instances there had been lucid intervals, during which they had gone forth only to return again to the hospitals. All those who died may be said to have died insane; so that no less than 2,113 persons out of 2,598 did not recover during a period of seven years. Of the other 586 the majority were discharged from the hospitals unrecovered, and there is no reason to suppose that more than 200 of them did recover.

"In addition to the figures given on page xciii. of the report, I have collected the figures for a dozen years earlier, as regards first admissions, and I have also tabulated for the same years the number of discharges, *without recovery*, from all the hospitals and asylums in Massachusetts, with the readmissions in each year, and I now send the figures. As the readmissions include a considerable part of the 'discharges without recovery,' and, in particular, include persons transferred by the State Board from one establishment to another during the year, it will be safe to deduct an average of 175 a year from the second and the fourth columns for duplication:—

	Whole number admitted.	First admissions.	Discharged without recovery.	Readmissions.
1868	1021	616	370	405
1869	1142	695	563	447
1870	1324	813	605	511
1871	1344	854	695	490
1872	1372	784	737	588
1873	1282	739	747	543
1874	1321	828	774	493
1875	1255	838	623	417
1876	1350	852	681	498
1877	1310	884	586	426
1878	1754	959	969	795
1879	1297	849	577	448
1880	1388	900	632	488
1881	1445	949	722	496
1882	1605	1005	755	600
1883	1633	1101	736	532
1884	1634	1093	837	541
1885	1642	1100	755	518
1886	1845	1120	1017	677
	26964	16979	13381	9913

"It will be observed that the figures of first admissions, though far from uniform, and varying for reasons which it is a little difficult to explain, do show an increase, in 19 years, of 504 per year; which is about 80 per cent. on the first admissions of 1868.

Or, if the first two years are averaged, and the same is done with the last two, the increase in first admissions will be from 656 to 1,110, that is, 454, which is an increase of 69 per cent. Now during this period the population increased in the whole State less than 35 per cent., so that the gain in first admissions was double the gain in population. Now observe further that the increase in *readmissions*, if the first two and the last two years are averaged, is only from 426 to 609, or 42 per cent., which is but little greater than the gain in population; from which I infer that the increase of insanity during the period, *beyond the ratio of population*, was mainly in the first admissions.

"I will not comment at present on the discharges without recovery, which in the 19 years aggregate 13,381, further than to say that about 3,500 of these were probably transfers from one institution to another; 1,900 were persons removed from Massachusetts by the State Board, and 1,100 were persons removed to town almshouses and other establishments, corresponding to the English workhouse asylums. This would leave 6,700 (nearly) who remained in the community of Massachusetts subject to readmission; while, applying the same reduction to the aggregate of readmissions, so far as it is allowable, the latter become 6,413 readmissions from the general community. It is to be noticed, however, that what are here called 'readmissions' are persons previously admitted to some other hospital *anywhere in the world*, so that they must include at least 500 persons who were never in any Massachusetts Hospital before. This would reduce the Massachusetts readmissions from the general community to about 5,900, or an average of 311 in each of the nineteen years, while the annual average of first admissions would be 893."

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital, on the 23rd February, 1887, the President (Dr. Savage) in the chair. Present: Drs. Robert Baker, T. W. Brushfield, D. Bower, H. Chapman, E. East, C. T. Ewart, J. E. M. Finch, S. Forrest, B. B. Fox, T. D. Greenlees, H. Hicks, W. M. Harmer, M. MacLean, J. D. Mortimer, James M. Moody, P. W. MacDonald, H. Hayes Newington, A. Newington, J. H. Paul, S. R. Philipps, H. Rayner, G. M. Robertson, A. H. Stocker, H. Sutherland, H. Stilwell, D. Hack Tuke, D. G. Thomson, T. Outterson Wood, E. S. Willett.

The following gentlemen were elected members of the Association:—G. Dickinson Symes, M.R.C.S., City of London Asylum, Stow, near Dartford; Rothsay C. Stewart, M.R.C.S., Ass. Med. Off., The County Asylum, Leicester; William Harding, M.B., C.M.Ed., Ass. Med. Off., County Asylum, Lancaster; G. M. Robertson, M.B., C.M., The Palace, Falkland, Fife; John Kennedy Will, M.B., C.M., Bethnal House, Cambridge Road, E.; Fred. W. Melson, M.D., Ass. Med. Off., Durham County Asylum, Sedgefield.

Dr. BAKER exhibited a model of a crib-bedstead which he had seen in the

Utica Asylum. He said that he had never seen such a bedstead in England, but he believed there was one in Scotland. In America, where, in company with Dr. Hack Tuke, he visited the asylums, they were very largely used, many of the superintendents there defending their use as being highly beneficial, especially in cases of restless senile dementia. The bed being made, the side is taken down for the patient to get in, and all being complete, the bed is closed up again, the lid coming over and fastening by a spring lock at the top. He (Dr. Baker) had seen one of these beds in occupation, and had conversed with the patient confined in it. It was very much like talking to a wild animal in a cage. The patient was, undoubtedly, in a very excitable condition, but when he asked her questions she said she was very comfortable, and, as far as he could learn, she was quite happy ; so that in this particular case in which he witnessed it in operation, he did not think that the bedstead was doing any harm, and it might have been doing some good. He was not saying this with the belief that it would ever be used in English asylums. Anyone who had visited a country where restraint was used in asylums would come back with the feeling that, as a rule, for the body-politic, it was a mistake.

Dr. HACK TUKE said that Dr. Baker had forgotten to give his personal experience of the crib-bed. Having seen Dr. Baker himself enclosed in one at the Utica Asylum, New York, he should like to say that he looked quite as comfortable as the patient referred to had appeared to be. Dr. Gray, of Utica, who had now gone to his rest, had taken some little exception to the reference to this incident which he (Dr. Tuke) had made in his book on the American asylums, but what he had written was, of course, meant only as a joke. He might mention that he had been informed, on good authority, that the use of the crib-bed is now discontinued at this asylum. No one could say that there was any sin in using such a thing occasionally. Certainly not. But the cage-like appearance made it undesirable. In some cases of senile dementia it might no doubt be of use, and might do no harm, so long as the patient was not neglected. As showing how much a thing of this sort might be abused, he might tell them that at one asylum in America he counted fifty crib-beds, exactly similar to that now exhibited by Dr. Baker. A short time ago, however, he had received intelligence that this bed was no longer in use in this institution. In fact, the superintendent, who had not been many years in office, had not introduced them, but found them in use.

Dr. BRUSHFIELD said that he well recollected an engraving* of a crib-bedstead, very similar to that now exhibited, which was invented by Dr. Wood at Bethlem Hospital, for use in certain cases.

Dr. SAVAGE said he would take an opportunity of looking at it. Probably the remarks which he was about to make in his paper on strong clothing would apply to the question of the crib-bed. He had now to submit to them for their inspection two samples of material for strong clothing. Coarse reality did not look so well as a pretty little model, and when one came to look into these dresses the subject was rather repellent. Of course, if it were decided that no one in future should use strong clothing, the patterns now submitted might be sent to the British Museum, but he thought that some kind of clothing which would not readily tear might still be required, and the patterns before them might therefore be worth examination. The materials were of two sorts. One, which Dr. Hack Tuke had taken a great deal of trouble about, was specially made for the purpose at Belfast (Messrs Ewart). The result had been a material which was eminently satisfactory so far as strength and appearance were concerned. It was hoped at one time that the colour would last, but it was found on further experience that, although it washed better than many dresses, the colour did wash out before long. The second sample washed better, and was therefore, to that extent, more satisfactory.

Dr. SAVAGE then read a paper on the question "Whether there is ever sufficient reason for the use of strong clothing and side-arm dresses."

* See "Journal of Psychological Medicine," Vol. v. (1852), p. 395.

Gentlemen,—The first object of this paper is that it should be really practical in its bearings. We are, perhaps, usually too ready to discuss the political and more general aspects of our branch of the profession, neglecting the more domestic details. I think this is due to several causes, some of which will be alluded to in the following paper. As a rule each superintendent either inherits or develops certain principles of management, which he gets to look upon as perfect, because they are very rarely if ever met by perfectly unbiassed criticism.

The position of the superintendent is rather likely to produce dangerous self-satisfaction from his autocratic power, and his isolation. I write thus, as I feel the danger even in a large city with constant visitors, and I write it, further, because I feel that the paper has its real origin in such outside criticism. Sons returning to their parental home are in the habit of finding the quiet domestic habits old-fashioned; and in my asylum-life I have frequently found that old Bethlem students, having started in other spheres, when they return are in the habit of finding some faults with their early home. Of late, so frequently has the complaint been of the same kind that I found it necessary to ask whether it was not probable that I was wrong and old-fashioned.

The form of complaint was that they, in their new homes, never saw the use of strong clothing, and what I wish now is not so much to discuss the reasons for or against as to see what the alternatives are, and whether they are the best, for I pledge myself to follow that which I find to be for the good of the patients. I shall avoid going into the whole question of non-restraint, and accept as axiomatic that theoretically "non-restraint" is desirable, though in practice cases may possibly arise in which some mode of restraint has to be followed.

The next axiom I insist upon is that none of us would willingly give a powerful narcotic with no other object than that of producing quiet. I know here the practice differs widely, so that one superintendent's habit, I was going to say conscience, allows him to give a great deal of quieting medicine, while another allows none at all. Both are at fault.

It being granted, then, that much liberty and little depressing medicine be given, the next object must be to make the patients as comfortable as possible, and this involves making them as neat and tidy as one can, not alone for themselves, but for their neighbours as well, who may suffer by seeing others in discomfort or restraint.

As to dress, I think we should all prefer to have our patients dressed as nearly like their old selves as we can, but here at once we meet with difficulties, for the pauper patient may be happy in moleskin, while the refined person would look upon this as strong clothing.

First of all, as a question, I want to know what must be done with patients who persistently remove or destroy their clothes? I find, in

the latter case, the greatest difficulty is that the friends of patients in a hospital, having to provide the garments, complain very strongly if they are frequently called upon to replace what has been destroyed. They would be at once ready to go in for any amount of restraint to save their pockets. This is not unnatural. There being this difficulty, I find it easier and productive of better feeling toward me, and also toward the patient, by his friends, if I provide some clothes which are sufficiently strong to resist the ordinary destructive patient. In such strong clothing it is impossible, I think, to get anything like a good fit, and thus all such clothes approach the sack sooner or later; and, this resemblance is increased by the fact that though we have tried far and wide for all sorts of materials which would resist violence, easily wash, and yet retain a pattern, we have failed; so that without great cost, I fear, these dresses must look repulsive.

We have then got to this, that if strong clothing be used we at once get an unpleasant appearance introduced, and those superintendents who pride themselves on the outward look specially, are necessarily adverse to its use, and would do away with it altogether. In looking at the two sides I admit frankly that this strong clothing is often uncomfortable and irritating to the patients or their fellows, always unsightly, and some would say unnecessary.

What I have to say on the other side is that I do not consider that the slight amount of discomfort and unsightliness are worthy of serious consideration, if any greater end is attained by its use. I believe, however, that in using it I am able to give a greater amount of liberty, and this is my chief defence. Anyone who has been much about Bethlem must have seen many very contented, but eminently grubby, patients in strong clothing in our airing courts. They do just what they like from breakfast time till near dinner time, when they are washed and redressed. After dinner they are allowed once more to make a mess of themselves, if they like, and after tea they are usually quite ready for bed. I think these people, though not pretty objects, yet sleep better and eat better than if they looked prettier. Some will say we might attain the same end if we sent them walking round the grounds with two attendants for some hours a day. Well, I must say I do not like the look of the troops of such cases I have seen marching about like the wild elephant between the two tame ones, and I do not think the washing of clothes so costly as extra attendants.

But still more I think the freedom from control is the very best treatment. As a rule, of course, I admit there are some patients in whom we wish to break through bad, and establish new and good, habits, and in such it may be better to try the walking parties rather than the freedom of strong clothes.

We shall differ, I suppose, as to which is most irritating to the patient: the manual control, or the control by clothes; and each of us surely can decide separately which will serve best in different cases

without being angry because others do not quite agree with him. Strong clothing is needed, I think, in cases in which the chief symptom is the constant stripping ; either you must have the constant, ever-watchful attendant, or you must have locked boots and locked gowns. Well, I again have an aversion to the rows of patients sandwiched with attendants on long forms. I should prefer to see the patient occupied, even in trying to get out of her things.

Each asylum must differ as to its needs, and, without for a moment wishing to speak apologetically, I must say that at Bethlem I believe strong clothing is, if not necessary, at least useful, and a saving of time, energy, and irritation.

First we have daily admissions of acute cases, in the earliest stages of their disorder ; then, though we have a large staff of attendants in proportion to patients, we have an enormous area in which the patients have freedom to move. This means either more attendants than are really needed to control patients, or a greater crowding together of the insane. I think that we have in the very long galleries, with the scanty population, the very best means for curing the acutely insane ; for, whereas we can have several groups of patients, each independently occupied, there is space for exercise as well.

To proceed, I consider that there are certain patients who must not only have strong clothing by day, but need also side-arm dresses at night.

Some will deny the necessity, and for those I have simply no answer, as I cannot manage without their use from time to time.

What is to be done with a case who will endeavour to gouge out her eyes, or for the man who wishes to emasculate himself? I do not think a man suffers any more from the restraint of a dress than that of four hands.

I claim the freedom, then, to use such restraint as I think will give the patients the best chance of recovery.

I know that restraint and its beginning is like wrath, and letting out of water. The danger is in the beginning it, the natural tendency of attendants being to do mechanically what will save them trouble. I would sum up, then, that in my opinion some such restraint as has been suggested may be useful, provided the higher restraint of the superintendent is constant over the attendant's.

Dr. RAYNER said that he had received a letter from Mr. Rooke Ley (Prestwich Asylum), in which he wrote as follows :—

"Who proposes to defend strong dresses and other ingenious mechanical contrivances? I was under the idea that such appliances were things of the past, out of fashion, out of harmony with modern psychological opinion. Is their revival the outcome of the *scientific spirit* about which so much twaddle has been written and spoken of late? I am by no means opposed to restraint, when there is a purely medical purpose to justify its use, and then I stipulate that it shall be

used 'in camerâ,' in the privacy of a single room. To see a patient stalking about in a modified strait-jacket offends my taste."

Dr. HAYES NEWINGTON said that he probably used as little strong clothing as anyone, being able to substitute other means. The subject was a very difficult one, but he thought that Dr. Savage had looked at it in the right way. As regards Mr. Ley's letter, he should agree that their ingenuity should be shown in the direction of devising means of avoiding strong dresses, rather than in devising the construction of such dresses. There were, of course, many objections to using these distressing dresses, but still it did seem necessary sometimes to use them, however rarely. One additional reason for their occasional use was to deter patients, by the sight of them, from bad habits.

Dr. S. R. PHILIPPS said that he had had the honour of opening the last hospital for the insane, and his experience there was that restraint, more or less, was absolutely essential; partly from the reason suggested, that friends were unwilling to pay for the expense of new clothing, which must fall upon them if the hospital funds were limited, and partly because they had so many suicidal patients. He had several attendants who sat up all night, but they had at the present time two ladies with whom no two nurses were willing to sit up unless there was some sort of restraint, such as a jacket or other dress. In the daytime, with ladies, a shawl of loose and simple texture thrown lightly round the jacket took off the disagreeable effect. With gentlemen it did not so much matter, and in some cases an example might do good as a deterrent. Speaking of the crib-bedstead, which was on all-fours with the subject of Dr. Savage's paper, he said he had under his charge an old lady for whom that bedstead would be invaluable, as, although an attendant sat up with her, it was almost impossible to keep her in bed unless she had a jacket on.

Dr. FOX said that the question was very interesting, but, as an asylum superintendent, it seemed to him that one was almost without an alternative. The test which he might propose with regard to the justification of restraint would be, if they could find any asylum in England which entirely disused restraint, and took a fair average of acute cases—and to compare the results of treatment in that asylum (proportion of cures and so forth) with any other asylum under like conditions which used the ordinary modes of restraint. He was bound to say that, until he was satisfied that constant struggles with attendants and seclusion in rooms did not do more harm than wearing a garment of a particular texture or cut, so long should he continue to make use of strong clothes. Would not a man walking with attendants on each side of him be more likely to struggle with those attendants than he would be to struggle with a mechanical contrivance which he must feel was his master for the time being? His own experience had taught him that any manual restraint, or physical encounter with attendants, not only did very great harm, raising difficult relations with those with whom, above all others, patients should be on good terms, but also, in many cases, aggravated maniacal attacks. It was much better to let a patient be clothed and run about and have his liberty than let him have constant struggles, and he believed that an asylum adopting Dr. Savage's practice would have a much better record to show than an asylum which shut up its destructive patients within four walls all day long, and never let them go out without an attendant on each side of them. Referring to the crib-bed, he said that in the early years of the present century—about 1810—there was in use at the asylum with which he was now connected a much ruder contrivance, in the form of a padded box which slipped up and allowed the patient's head to move freely. The tradition remained that the patient always spoke gratefully of that treatment, but of course it was handed down as a curiosity, and he should be very sorry to see any such mode of treatment introduced now.

Dr. MOODY said that, having been an assistant medical officer under Dr. Brushfield, he had been taught to use restraint as little as possible; in fact, he thought that the only restraint used at Brookwood during his six years there

was in one case for surgical reasons. At Cane Hill he found no need for it, and his recovery rate was 47 per cent., with few accidents. In certain cases strong clothing was necessary. He found that the moral effect was very good, for when it was put on for a short time the other patients laughed the wearer out of his habits.

Dr. BRUSHFIELD said that he came simply as a spectator and not as a speaker, but, as he had been asked to say a few words, he might say, in the first place, with respect to the paper, that he thought it was one of a class of papers which would do very great good to the Medico-Psychological Association, especially in the way of exciting discussion. He thought that such a paper was rather new in the annals of the Association. Certainly, in past times, they had papers on mania and acute forms of insanity, but not papers of the sort now under discussion. No one could have heard Dr. Savage's paper without coming to the conclusion that he had made out a very good case for the use of strong dresses in certain classes of cases—recognizing it as an exceptional form of treatment. In his younger days (which took him back to Dr. Conolly) one of his first superintendents was a regular "restraint man." The number of dresses was wonderfully large, and he (Dr. Brushfield) attributed it to the principle of restraint being then in vogue. Directly he became superintendent he abolished a very large proportion of the strong clothing, finding that by giving more liberty in the wards and airing-courts there was far less need for it. Strong clothing was certainly very unsightly, but this was due partly to the circumstance that, as a rule, it was not made for the individual, but for the class, and if any patient required it the stores would be ransacked for the best-fitting garment that could be found. It should not, moreover, be forgotten that it was not used *per se*. It should be rather superadded to than replace common clothing. He (Dr. Brushfield) had certainly very rarely had cases of acute insanity requiring such treatment. His custom had been rather to order it for *chronic* cases. While a superintendent might be driven to use strong clothing, it did not follow that the patient should continue in that clothing for any length of time. He should be tried with ordinary clothing again and again. He recollected that at Hanwell the patients used to be taken to the store and allowed to choose their own dress, which was a very good plan. Wearing strong clothing gave a larger amount of liberty, if the patients were out more in the sunlight, and were thus able to enjoy exercise and digest their food better. It was frequently a remedy to use instead of employing opiates and seclusion.

Dr. HACK TUKE was bound to say that, looking back some forty years, he could remember asylums in which the abuse of strong dresses at that time was very marked, and the effect very unpleasant. Since that period he had been much gratified to see the improvement in this respect, and therefore, without at all condemning their use, he might say that he thought that in visiting asylums the large resort to strong dresses would strike one unfavourably in estimating the character and management of a given asylum. If, on the other hand, one went to an asylum where the use of strong dresses was small, and they were made as neat as possible, where the patients were at the same time well looked after by attendants, and where there was not over much grovelling on the ground in the courtyards, one's opinion would be more favourable than in regard to those asylums where patients in loathsome strong dresses might be seen roving and raving about of their own sweet will in the galleries or airing-courts all the day. Besides, patients in strong dresses are often in seclusion also. It was certain, at all events, that strong dresses might be abused. One thing certainly puzzled him: where no strong dress was used it might be supposed that the proportion of attendants would be much greater, and the amount of seclusion much larger. Now, in regard to Prestwich Asylum, he had once visited it with great pleasure, and he had the impression that the percentage of attendants was not extraordinarily large, and that seclusion was not more resorted to than in other asylums. He was rather at a loss, therefore, to understand how Mr. Ley could do without strong dresses, and yet not have a larger number of attendants to look after the patients to keep them in order.

Dr. RAYNER said that it was to be gathered from Mr. Ley's letter that he used strong dresses, but objected to their use while the patient was about, saying they should be used *in camerâ*.

Dr. HACK TUKE thought he remembered that in going through Mr. Ley's asylum he saw scarcely any patients either in the airing-courts or in seclusion in strong dresses, and yet Mr. Ley had, as he believed, no more attendants than were required elsewhere. In regard to the patterns of the strong clothing material, that from Belfast was from Ewart's extensive manufactory there, who had, at his suggestion, taken great interest in the production of a satisfactory material. Fresh samples, which, it was hoped, would wash better than those first tried, were now being tested by the Steward of Bethlem Hospital, who was a little conservative as to the past, and sceptical as to the future. He had informed him to-day that he thought the new patterns were more likely to succeed than the old ones, but he was not altogether satisfied yet. He (Dr. Tuke) was at the Dublin Asylum some few days ago, and the medical superintendent, Dr. Conolly Norman, had found that the dress in use there, of which he now showed a sample, did not wash well, though it was very neat. Dr. Norman had at the present time 580 female patients under care, and only four had strong dresses. Many were of an excited class. The other patterns which he exhibited were mainly from Dr. Deas, who spoke strongly of their washing quality. They did not seem, however, to be very strong in texture. He (Dr. Tuke) did not dissent from the view expressed in Dr. Savage's paper, that strong dresses should occasionally be used, and it was for that reason he desired to see them, not of the ticking material and looking like a sack, but with a neat pattern, and easily washed. He was not speaking of the strait-jacket, but simply of dresses of very strong material, for these were distinct subjects, and ought not to be confounded together. The latter, in fact, would lessen the necessity of resorting to the former.

Dr. RAYNER said he could have wished that Mr. Ley, or some gentleman present, could have given them some information as to the best mode of avoiding the use of strong dresses, and overcoming the habit of destructiveness in patients. To some extent, strong dresses were not avoidable. Even Mr. Ley acknowledged that he must use them under certain conditions. They were all agreed that they should be used as little as possible, and they must also agree that there were cases in which it was very difficult to break through destructive habits. At Hanwell, he had two or three cases at the present time which were chronically destructive. One man had periods of destruction. The cases he referred to were old cases, which had come to him second-hand. He had tried his very best to break them of the habit, but without success. He had frequently found that in cases of this sort great attention to health would be successful. Sometimes improvement could be effected through nutrition—making them fat. In other cases—the most numerous class—ill-looking individuals, with no capacity for fat, something had been done by putting their energies into the best directions. He had, however, at that time an imbecile he could neither get fat nor in any other way break of his destructive habits. This patient had been put under special care, but, in spite of everything, he would, whenever he had the slightest opportunity, destroy his clothing. It had not been possible hitherto even to make a break in his tendency. In acute cases of insanity, the use of strong clothing might be absolutely necessary, and he quite agreed with Dr. Savage that it was much better to let the patient get into any amount of dirt rather than keep him living in a close room. Sometimes a patient might get out too soon, but, as soon as a patient was fit to get out of doors, it was much better that he should go out in a strong dress than remain some time longer in a single room because it was thought to be discreditable that he should be seen in strong clothing.

Dr. SAVAGE, in reply, said that he fully realized the advantage of having more than one course open in the treatment of patients of destructive habits. To say continually, "No restraint! no restraint!" would be to imitate those people who, not having very strong faith, repeated the Creed constantly. It

was necessary, however, to remember what restraint had meant in times past, and he felt a certain danger in approaching such a subject as he had done that day, lest, by so doing, he should loosen the better feeling which now prevailed in regard to it. Undoubtedly, enormous harm had been done in the past. There were still patients in Bethlem who could tell of a time when on Saturday night a patient would be chained to a pallet of straw, and there left with a cruise of water and a crust of bread till Monday morning. He need hardly say more than that he fully appreciated the criticisims and suggestions which had been made. He regretted the absence of Mr. Ley, with whose remark that strong clothing was bad taste he could to some extent sympathise, but when Mr. Ley went on to say that it should be used only *in camerâ* he must disagree. He could agree with Dr. Rayner as to not stirring up a patient too soon. It was a disease, and could not be talked into order. The first treatment should be a certain number of days in a padded room. The patient would make a nice mess, but would very likely eat well and sleep well, and at the end of a certain period the patient went out of doors in strong clothing. He quite agreed with Dr. Hayes Newington as to the effect of strong clothing looked upon as a "bogey" dress. Patients frequently had to be treated as children, and a "bogey" dress mightfrighten a patient into self-control.

Dr. PERCY SMITH read a communication on "The Results of an Epidemic of Typhoid Fever in the Insane." (See "Clinical Notes and Cases.")

Dr. SAVAGE said that the paper just read was one in which he, of course, felt deeply interested, but, unfortunately, in one respect it did not bear much discussion. It was a most lucid description of what had occurred. The success in the cases which Dr. Percy Smith had modestly attributed to nursing, was largely attributable to Dr. Smith, and certainly the care with which the cases had been recorded made them standard cases. It was an extremely interesting question, why, under certain conditions, should fevers effect cure or facilitate recovery, whereas in other cases they did not do so at all. Of course, there were the dogmas which he had laid down in his Presidential address, and which would seem to show that except in cases in which organic disease of the brain did not take place, they could not expect events like fever to do any permanent good. He had never yet seen a case of general paralysis benefited by fever. He had seen one or two cases of general paralysis attacked by scarlet fever or small-pox, but he had never seen any definite gain. The only case he could cite in this connection was where improvement in a general paralytic case followed immediately upon the development of an enormous carbuncle, and it seemed to follow that, as a rule, improvement only occurred in the so-called functional or emotional instances. In one of the present month's medical papers, there was a paper on anti-pyrin. It was stated that this was not only good in cases where the temperature was high. He should be inclined to try it in some cases of delirious mania. The only real point of encouragement in their recent troublesome experience at Bethlem was that good had come out of evil. They had gone through a great deal of trouble and anxiety, but they had got the drains put right, at any rate for the present.

Dr. HACK TUKE referred to the cases reported by Dr. Colin M. Campbell as having recovered at the Durham Asylum, which he had always thought of great interest. He said that there was in the early experience of the York Retreat a striking case which had been placed on record in the history of that institution. Dr. Maudsley had thought it of sufficient importance to employ it as an illustration in one of his works. It was another proof of the influence of fever on the insane. This case was one of fatuity or dementia, in which a young woman for a time recovered her mind entirely, and then, when the fever passed away, the insane condition returned. The practical lesson seemed to be that as we were not warranted in giving patients fever, or in having bad drainage, counter-irritation in some cases was useful, and ought to be tried. Why it was useful in some cases and not in others, in which there was no more evidence of organic disease, it was impossible to say.

Dr. Fox quoted a case of a man undoubtedly suffering from brain disease. He had not only all the symptoms of general paralysis, but they were able to watch the conditions of his gradual declension. He had a well-marked attack of pyæmia. His friends were summoned to see him die, but they stayed long enough to see him walk across his room, and well enough to be a certain pleasure to them, and to have regained a certain amount of mental power. There was no doubt that to a great extent enormous improvement for a time in this case of general paralysis did follow a very well-marked attack of pyæmia.

Dr. Moody said that he could recall sixteen cases of typhoid fever, and in many of them a marked improvement took place, and was permanent. He also remembered a case of pneumonia, where the patient had been in an asylum fully a year. The patient quite recovered. There was also a case of general paralysis in which the patient showed a marked improvement after an ulcer of the leg, and he (Dr. Moody) was so impressed with this that he put large blisters on to keep it open.

Dr. Hayes Newington said it was quite possible that the mental disorder frequently resulted from the effects of retention of abnormal material in the blood. He could quote a case where the patient gradually got more silly, becoming water-logged, and getting those heavy, stuffy features which one sometimes saw. At length, to his (Mr. Newington's) great alarm, it was found that the patient had passed a large quantity of blood, but from that time he was quite a different man. He began to write letters, and improve in many ways. Next time that patient got into a similar state it would perhaps be desirable to try the effect of bleeding him.

Dr. Percy Smith said that he had referred to Dr. Campbell's paper alluded to by Dr. Hack Tuke, and he found that out of twenty-one cases, at least four, appeared to have commenced mental improvement during the course of the fever which proceeded to ultimate recovery, and there was marked improvement in other cases.

SCOTTISH MEETING.

A Quarterly Meeting of the Medico-Psychological Association was held in the Hall of the Faculty of Physicians and Surgeons, Glasgow, on the 10th March, 1887.

There were present Dr. Wickham (Newcastle), in the chair, Dr. Campbell Clark (Bothwell), Dr. Clouston (Edinburgh), Dr. C. M. Campbell (Murthly), Dr. Dodds (Montrose), Dr. Carlyle Johnstone (Melrose), Dr. Keay (Maribank), Dr. Ireland (Prestonpans), Dr. Blair (Lenzie), Dr. Alex. Robertson (Glasgow) Dr. Rutherford (Dumfries), Dr. Skae (Ayr), Dr. Yellowlees (Glasgow), and Dr. Urquhart, Secretary.

Byron Bramwell, M.D., F.R.C.P. Ed., 23, Drumsheugh Gardens, Edinburgh, was elected a member in conformity with the Rules of the Association.

The minutes of last meeting were read, approved of, and signed by the Chairman.

The Secretary gave notice of the regulations respecting the Prize Dissertation and the examination for the Certificate in Psychological Medicine to be held in Edinburgh in July next. He also intimated that the Gaskell* and Elliot Funds are not applicable to Scotland.

A letter from Dr. Conolly Norman regarding the forthcoming British Medical Association Meeting in Dublin was laid on the table. It was resolved to hold a meeting on some convenient day next summer at Aberfoyle, or some such place, where the insane are boarded out in considerable numbers.

* The examination is restricted to England, but Candidates who have passed the Pass Examination in Scotland or Ireland are elegible.—[Eds.]

A letter of apology for non-attendance from Professor Gairdner was read by the Secretary.

Dr. YELLOWLEES read a paper entitled "Moral Perversity or Insanity?"* It set forth in graphic detail the life histories of two young men.

Dr. WICKHAM said that he happened to have had personal experience of a case very similar to the first referred to by Dr. Yellowlees. It was a lad who came to the Newcastle Asylum with a circumstantial story of his being an adopted son of another asylum superintendent. He kept the youth for a day or two, when he proved a clever musician and an amusing story-teller. On his departure, however, he found that he was the son of a patient born in the asylum from which he said he had come, and that he had been going the round imposing on other people, had afterwards been placed in a reformatory, and ultimately completely disappeared.

Dr. C. M. CAMPBELL then read a clinical study of a "Case of Moral Insanity" (see "Clinical Notes and Cases").

Dr. IRELAND said that the expression "moral insanity" suggested a doctrine that he thought it would be difficult to uphold logically. Were morals intuitive or utilitarian? Utilitarians considered it was the best plan of life for a man to behave in a moral manner, that it was to his best interest to do so, and hence morality was an intellectual exercise, and the man who behaved so badly as to be brought into an asylum would be a grossly stupid person. There were cases, no doubt, where moral perversity was much more marked than intellectual deficiency, but so far as he knew there was no case where there was not some intellectual weakness, or if not that, there was a deficiency of the will power. He believed that all such cases, when carefully examined and analysed, showed such intellectual deficiency. Dr. Yellowlees, for instance, recorded that "C. S. A." got fifteen overcoats from a tailor "because he was going to Africa." That was surely a proof of intellectual weakness. A man might be moral as the result of training, as the result of holding certain theories, or as perceiving proper conduct to be to his best advantage. If those failed to control him, there must be a mental deficiency; his mental system must have a flaw in it.

Dr. ROBERTSON agreed with Dr. Ireland that in cases of moral insanity some intellectual defect could be almost always ascertained—in his own experience he never failed to find such to be the case. The name "moral insanity" had often brought lawyers and doctors into conflict; and he would not advise anyone to use it in a court of law for his own comfort. He had noted the top-coats incident, and believed that it indicated intellectual weakness. The judgment in these cases was not up to the standard, and they therefore used the word "moral" by way of excluding the other faculties of the mind. He had generally found these cases, when occurring in youth, to be hereditarily predisposed to insanity, and was surprised that Dr. Yellowlees found no such tendency. He would lay some stress on the fact of the forceps having been used at the birth of one of the cases. Dr. Robertson went on to refer to cases of simple mania where there was not much intellectual derangement and scarcely any delusion, but merely mental instability and an inability to look at things in their proper light. In childhood this generally showed itself in erratic conduct, and in such children as had fits he often recognized a certain amount of perversity. Where there had been previous attacks of insanity a twist in the mental nature was often left—sometimes leading on to criminal actions, as in the case of Tierney. And, in conclusion, there were cases where the moral power was markedly deranged during a long preliminary stage of mania or general paralysis.

Dr. CLOUSTON believed that not many had set up moral insanity as existing absolutely without intellectual deficiency. He thought that the general opinion was that moral perversity, lack of self-control, impaired volition, and perverted moral impulse together constituted a case. The intellectual power would be such that the man, but for the moral perversity, would be regarded as a sane member of society. He might be a little deficient in intellect—all were

a little deficient in intellect; he might be perverted volitionally—all were perverted volitionally; but the deficiency and the perversity would not amount to legal or medical insanity. The moral perversity constituted the essence of the case, and the only part that was really insanity. Looking at morality in a practical way, they found the moral sense a physiological brain quality, developed as the muscles were developed, perfected as the muscles were perfected yet differing in different individuals. Certain predisposed children were capable of development intellectually and morally to a certain extent only. Their brains did not seem capable of attaining to the finest moral sense which constituted the mind of the present day. They were only capable of development up to a kind of semi-savage stage in this direction, while their reasoning powers were as acute as those of other children. It had been long recognized that the moral powers were the first to go in an attack of insanity. Dr. Clouston referred at length to De Quincey and Shelley, whose intellectual abilities were far above the average, but whose moral qualities and volitional powers were twisted and perverted. He would regard Dr. Campbell s case as belonging to that class which Dr. Robertson had referred to, where the actual attack of insanity (probably in that case mild melancholia) had left a mental twist.

Dr. YELLOWLEES briefly replied. He had not used the expression "moral insanity," and did not feel bound to defend it. It was a term he rarely employed. He thought, however, that moral insanity was a brain disorder which took the direction of immoral developments, and that it might do so together with an intellectual disturbance by no means sufficient of itself to constitute insanity.

Dr. ROBERTSON read a paper on "A Case of Catalepsy with observations on the Mental Condition in the Cataleptic State."*

Dr. CLOUSTON referred to a case of catalepsy in a boy in whom that state supervened after an attack of convulsions. He said that he had often had what Dr. Robertson proposed to call cataleptoid cases, where any position in which the patient might be placed would be maintained for a considerable time. He described two kinds, where the patient would readily assume the attitude to which he might be moulded, and where the patient strongly resisted any change in the position assumed by himself. The question was, in the latter class, was the brain condition the cause of the rigidity, or was it owing to a delusion? The case he described was probably conscious during the whole time, but it would not be the same in every case. Its connection with epilepsy would rather point to a pathological condition, and he believed that many of them primarily owed their origin to a derangement in the convolutions.

Dr. URQUHART thought that there was very great difficulty in assigning cataleptoid conditions to the influence of a dominant delusion. His experience had led him to believe that, if a patient assumed a rigid attitude, it was most probable that he was under the influence of such a delusion, while, if he were plastic and could be made to assume and preserve attitudes, no such influence could be proved.

Dr. IRELAND believed that Dr. Robertson had proved the existence of consciousness during the course of the case, and that there was a certain delusion. He went on to refer to the hypnotic state and the analogies between that and catalepsy.

Dr. YELLOWLEES referred to a case of cataleptoid nature at present under his care. The man had a want of volitional power, and seemed unable to complete actions which he had begun. He would remain with a foot in the air, poised, until someone touched him, and he required to be stimulated similarly when at meals.

Dr. ROBERTSON replied briefly. At first the pricking of the skin in his case was not followed by bleeding, but afterwards such wounds bled freely. There was no doubt great torpidity of the circulation in the early stage of his malady, but he believed that it was caused by the nervous disorder. Notwithstanding the

* These papers will appear in the July number. –[EDS.]

application of heat and cold to the head had been followed by benefit. Dr. Robertson showed the original apparatus for this purpose he had devised and shown at a former meeting of the Association here some sixteen years ago.

Dr. DODDS read clinical notes on "A Case of Epilepsy."

Dr. WICKHAM said that he had tried everything that was recognized as a remedy in the treatment of epilepsy with very different results in different cases. He had found nitrite of amyl of service in one case, and in another it was a complete failure.

Dr. YELLOWLEES asked if anyone had tried the plan of bleeding during a succession of fits as advocated lately by Dr. Wallis?

Dr. URQUHART had bled a patient quite lately. He was admitted labouring under alcoholic insanity, with an enlarged liver and an engorged circulation. Shortly after his arrival he had a succession of epileptic fits, which were promptly stopped by venesection to six ounces. Unfortunately he developed double pneumonia some time after and died.

Dr. YELLOWLEES showed a skull-cap with very great and irregular thickening in its anterior half. The bony deposit occurred in rounded wavy protuberances, and the thickness of the cranial vault at two of these was $\frac{1}{16}$ths of an inch. A similar condition, though not so well marked, is figured in Dr. Clouston's book. Such thickening of the bone is usually regarded as compensatory for loss of brain substance, and it is supposed to occur only with prolonged dementia. In this case the patient was not demented, but exceptionally intelligent. She died from abdominal disease at the age of 57 in her second attack of melancholia, the previous attack having been climacteric. There was no paralysis of any kind, and although the convolutions were flattened by the bony growths, there was no disintegration or manifest wasting of brain substance.

The members dined together at the Bath Hotel after the meeting.

The next business-meeting of Scottish Members will be held on the second Thursday of November.

THE LUNACY ACTS AMENDMENT BILL.

The following has been addressed by the Honorary Secretary of the Medico-Psychological Association on behalf of the Parliamentary Committee, to the Lord Chancellor:—

To the Right Honble. the Lord Chancellor.

MY LORD,—I am instructed by the Parliamentary Committee of the above Medico-Psychological Association respectfully to submit for your consideration their views with regard to some of the provisions in the Lunacy Acts Amendment Bill (1887).

The most important is the provision in Clause 3, s-s. 9 (p. 4, l. 7, *et seq.*), that notice of petition be given to the alleged lunatic by the magistrate, &c. This procedure the Committee is of opinion would be most inimical to the welfare of the insane, and would lead in some cases to the suicide of the patient, in others would induce homicidal assaults, and in many would enable the lunatic to escape from the jurisdiction of the magistrate.

The extent of the jurisdiction of the various magistrates, &c., and their power to control an alleged lunatic under petition, would appear to require definition, as well as the power of friends to exercise control over an alleged lunatic during the consideration of a petition.

This sub-section (Clause 3, s-s. 7) appears to the Committee to reduce the question of insanity to a legal prosecution, in which the relative or friend is the prosecutor, the sick man is the defendant or criminal, and the magistrate is the judge, in the place of being the guardian of the patient's interest.

This treatment of bodily infirmity as criminality would greatly obstruct and delay the prompt and early treatment of the diseased condition of which insanity is a symptom, and would lead to evasions of the law, neglect of treatment, more frequent suicides, and other deplorable results.

The power given to the magistrate of postponing the petition in any doubtful case would appear to give every necessary protection to the alleged insane person.

If this clause is allowed to stand, some provision should be made for the care of patients in the interval between petition and examination, as well as during the postponement of a petition, and for defining the status of the alleged lunatic during such intervals.

This Committee beg to reiterate their objection to the power given to the magistrate to interview the sick person as unnecessary and undesirable.

Cases of insanity after child-birth may be taken as examples.

This provision would seem to indicate to the magistrate that his duty consisted in determining the question of the presence or absence of disease, or of determining whether a certain line of treatment should or should not be adopted, and it is probable that if, consequent on such a decision, a suicide or homicide occurred, public opinion would be strongly expressed on the decision of a medical question by a legal authority.

The following points are also suggested for your lordship's consideration :—

Clause 3, s-s. 7 (p. 3, l. 30).—The exclusion of the signatory of an urgency certificate from signing a certificate on the subsequent petition, is objected to. It is not in accord with the Scotch practice from which this is copied. It would involve obtaining the services of three medical men, difficult in country places.

Clause 3, s-s. 15.—A penalty for the infringement of this clause would appear to be desirable.

Clause 3, s-s. 19.—Does 'delivered' include 'by post'?'

Clause 3, s-s. 8.—Does this prevent consultation after one certificate has been signed?

Clause 4, s-s. 6.—By whom is the copy of urgency order to be sent?

Clause 8, s-s. 3 (p. 11, l. 18).—The member of the Managing Committee may certify for any other asylum: the omission of this clause is suggested.

Clause 27.—Protest is made against the houses of medical persons being singled out, and the opinion is expressed that this clause would greatly militate against the welfare of the patients, who are specially benefited by this plan of treatment.

The clauses (45 *et seq.*) relating to hospitals are specially recommended to your lordship for consideration, as in many ways militating against the welfare of these institutions.

Clause 53.—The power given to the Lunacy Commission, compulsorily to close hospitals, is specially commended to your lordship's attention, and it is suggested that such closure be only effected by the Home Secretary after special inquiry, on a report from the Commission.

The Committee ventures to suggest that a clause should be introduced to facilitate the removal of patients from Hospitals and Licensed Houses to County Asylums, which at present is attended with great difficulties. This might be met by giving power to the Superintendents of these institutions, to give notice to the relieving officer of the district in which the patient's friends reside, on which the relieving officer should act within seven days, as if the patient were resident in the district.

I have the honour to be,
Your obedient Servant,
H. Rayner
Hon. Gen Sec.

Hanwell, 18th February, 1887.

On the order for the third reading of this Bill, (March 17).

The LORD CHANCELLOR said he intended to move the insertion of a new clause, the general effect of which was the result of an understanding which had been arrived at between himself and other noble and learned lords. He should do no more than ask their lordships to adopt the clause. He could not accept the amendment of which Lord Selborne had given notice.

On the question "That this Bill do pass,"

The LORD CHANCELLOR moved the insertion of the following clause:—

Page 8, after Clause 4, add a new clause:

1. When a person has been received as a lunatic in an asylum, hospital, or licensed house, or as a single patient, under an order of a judge of county courts, magistrate, or justice, without having been personally seen or examined by such judge, magistrate, or justice, the person shall (subject as hereinafter mentioned) have the right to be taken before or visited by a judge, magistrate, or justice, other than the judge, magistrate, or justice under whose order he has been received, except so far as the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the house, or the medical attendant of the single patient, within twenty-four hours after his reception, in a certificate signed and sent to the Commissioners (in the Form 3*a* in the First Schedule), shall state that the exercise of such right would be prejudicial to the person so received.

2. Subject to any such certificate, the superintendent or proprietor of the asylum, hospital, or house, or the person having charge of the single patient, shall, within twenty-four hours after reception, give to the person so received as a lunatic a notice in writing, in the Form 3*b* in the First Schedule, and shall ascertain whether he desires to exercise such right as aforesaid; and if he, within seven days after his reception, expresses his desire to exercise the right, such superintendent, proprietor, or person shall procure him to sign a notice in the Form 3*c* in the First Schedule, and shall forthwith transmit it by post in a registered letter to the judge, magistrate, or justice, who shall thereupon arrange, as soon as conveniently may be, either to visit the person giving the notice, or to have him brought before him by the superintendent, proprietor, or person as the judge, magistrate, or justice may think fit. After any such personal interview, the judge, magistrate, or justice shall send by post to the Commissioners a report thereupon, and the Commissioners shall take such steps as may be necessary to give effect to the report.

3. For the purposes of this section, the notice shall be sent to, and the jurisdiction exercised by, any judge, magistrate, or justice, other than the judge, magistrate, or justice who made the order for reception, then present within the petty sessional division or borough where the person received is, who shall be in such notice named by the person desiring the interview, or if no judge, magistrate, or justice is so named, any justice who shall, under arrangements which shall be for that purpose from time to time made amongst themselves by the justices in such division or borough, undertake such jurisdiction; and the notice shall, in such last-mentioned case, be sent to the justices' clerk of such division or borough for transmission to the justice.

4. The judge, magistrate, or justice shall be entitled, if he desires so to do, before making his report, to see the medical certificates and any other documents upon the consideration of which the order for reception was made.

5. If any superintendent of an asylum or hospital, or any superintendent or proprietor of a licensed house, or any person having charge of a single patient, omits to perform any duty imposed upon him by this section, he shall be guilty of a misdemeanour.

The Earl of SELBORNE moved to omit from sub-section 3 (lines 2 and 3) the words "any judge, magistrate, or justice other than." The effect of the amendment was to require the magistrate who had signed the order for the detention of an alleged lunatic to perform the subsequent duty of examination.

On a division the Earl of Selborne's amendment was negatived by 40 to 22.

Lord HERSCHELL took exception to that part of the Bill which provided that the magistrate who should be required to make the examination should be selected by the alleged lunatic himself. He was of opinion that the county court judge, magistrate, or justice should be selected by the justices of the county or borough. He moved the insertion of words modifying the measure in this sense.

The LORD CHANCELLOR assented to the amendment on the understanding that Lord Herschell had satisfied himself that the alteration could be effected without injuring the machinery of the Bill.

The amendment was agreed to.

Several verbal amendments were agreed to, and the Bill passed.

LUNACY REPORT OF THE SCOTCH COMMISSIONERS.

On reference to Appendix A of the last Scotch Lunacy Blue Book, the Commissioners, in dealing with percentages, give only those for males and females, but no totals. (See Tables 7, 8 and 9.) Now these tables contain most of what the reader wishes to know for purposes of comparison, but we cannot compute the totals of percentages without knowing the general figures upon which they are calculated. This leads to considerable inconvenience, and we feel sure that when attention is drawn to the fact, it will be corrected by those who prepare these tables. It is because we attach so much value to the Statistical Tables which the Scotch Commissioners prepare, or cause to be prepared, that we venture to make a suggestion which, if adopted, would add to their usefulness.

Obituary.

ROBERT BRYCE GILLAND, M.D., L.F.P.S. Glasgow, M.R.C.S., AND L.S.A.

We record with regret the death of Dr Gilland, late Medical Superintendent of the Berks County Asylum, at the age of 49.

He was born in Ayrshire, and graduated at the University of Glasgow in 1860. He was then appointed house surgeon in the Royal Infirmary there, and published reports of many interesting surgical cases in the local medical journal. In the year of his graduation he was placed on the staff of the Glasgow Royal Asylum by Dr. Macintosh, and he served in that institution till 1864, when he resigned in order to prosecute his medical studies in Paris for a year. On his return Dr. Gilland was appointed assistant medical officer to the Essex County Asylum, and from that post was chosen medical superintendent of the Berks County Asylum in 1870. He was fortunate in securing that appointment before the building was completed, and he forthwith set about developing the resources of the institution over which he was placed, with the careful solicitude of his painstaking nature.

How he succeeded is best known to those with whom and for whom he worked. His was not a temperament to be known and read of all men. He never had more than a few intimate friends, and the absorbing cares of his asylum engrossing his time and thought more and more as years passed away, steadily diminished the circle of his acquaintance. The asylum became his only interest in life, and the constant care fretted his sensitive mind beyond endurance. For some years he avoided society, and gave up attending the meetings of the Association. In the autumn of last year his health broke down completely under the continuous strain, for he felt it to be impossible for him to take a holiday of anything like sufficient duration. Evil days had come upon him. The matron and the assistant medical officer, who had ably and devotedly aided him for years, had both resigned on account of ill-health. The end came speedily. In spite of the services of the best medical skill and nursing art, he died on the 8th March, worn out and exhausted while yet in the prime of life.

Correspondence.

TO THE EDITORS OF *The Journal of Mental Science.*

SIRS,—Will you kindly allow the following correction of the report forwarded to you of my remarks on "An Asylum Service Provident Scheme" in the Journal for January (p. 624, top paragraph). I made no such sweeping assertion regarding the arbitrariness of asylum superintendents as is attributed to me. What I meant to imply and said was, "that the difficulty referred to by Dr. Ireland of discharging an attendant who had a vested interest in his situation was not altogether a drawback, for *some* superintendents were too arbitrary in the discharge of attendants, and it might be well if *they* were

hampered in the manner spoken of by Dr. Ireland." These are probably not the exact words, but they convey the sense of what I meant. I should be sorry indeed to convey such an impression as the report of my remarks appears to me to do, and I regret that they should have been so misconstrued.

Yours truly,

Glasgow District Asylum, A. CAMPBELL CLARK.
Bothwell, 17th February, 1887.

EXAMINATIONS OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The PASS EXAMINATION for the Certificate of Efficiency in Psychological Medicine will be held for England and Wales at Bethlem Royal Hospital, July 25 and 26, 1887.

The HONOURS EXAMINATION will be held at Bethlem on the 29th and 30th of the same month. (See "Occasional Notes of the Quarter.")

The Pass Examinations for Scotland and Ireland will be held in due course, in the month of July. Candidates should communicate with Dr. Urquhart, Murray Royal Asylum, Perth, Honorary Secretary for Scotland, and Dr. Courtenay, District Asylum, Limerick, Honorary Secretary for Ireland, from whom further particulars can be obtained. For information in regard to the English examination, application should be made to Dr. Rayner, Hanwell, W.

Appointments.

DOUTY, J. H., M.R.C.S., appointed Med. Supt. of the Berks County Asylum *vice* R. B. Gilland, M.D.

FINDLAY, G., M.B., C.M., appointed Assist. Med. Officer to the James Murray's Royal Asylum, Perth.

FITZGERALD, B. A., M.B. B.C. Cantab., M.R.C.S., appointed Jun. Assist. Med. Officer to Cane Hill Asylum, Surrey.

GRANT, JOHN, M.B. and C.M. Edin., late Assistant Medical Officer, Inverness District Asylum, Inverness, has been appointed Assistant Medical Officer to the East Riding Asylum, Beverley, Yorks.

GRAHAM, WM., M.D., Roy. Univ., Irel., L.R.C.S.Ed., appointed Med. Supt., of the Armagh District Lunatic Asylum.

GREENLEES, T. D., M.B.Edin., Assist. Med. Officer, to the Counties Asylum, Carlisle, appointed Assist. Med. Officer to the City of London Lunatic Asylum, Stone, near Dartford.

HILL, H. G., M.R.C.S., L.S.A., appointed Sen. Assist. Med. Officer, Surrey County Asylum, Cane Hill, Purley.

LITTLE, A. N., M.R.C.S., L.S.A., appointed third Assist. Med. Officer to the Worcester County and City Lunatic Asylum.

MACDONALD, P. WM., M.D., C.M. Aberd., appointed Med. Supt. to the Dorset County Asylum, *vice* J. G. Symes, M.R.C.S.

MENZIES, W. F., M.B., C.M. Edin., appointed Assist. Med. Officer to the County Asylum, Rainhill, Lancashire.

REYNOLDS, G. H., M.B., C.M., appointed Jun. Assist. Med. Officer to the Hospital for the Insane, Barnwood.

SPENCE, J. B., M.A., M.B., Assistant-Physician Royal Edinburgh Asylum, appointed Medical Superintendent of the Ceylon Asylum.

SYMES, G. D., M.R.C.S., appointed Assist. Med. Officer to the Lancashire County Asylum, Rainhill.

THOMSON, D. G., M.D. Edin., Sen. Assist. Med. Officer, Surrey County Asylum, Cane Hill, appointed Med. Supt. of the Norfolk County Asylum, Thorpe, near Norwich.

TYRELL, E. M., M.B., C.M. Edin., appointed Jun. Assist. Med. Officer to the Counties Asylum, Garlands, near Carlisle.

THE JOURNAL OF MENTAL SCIENCE.

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PART 1.—ORIGINAL ARTICLES.

Ætiology, Pathology, and Treatment of Puerperal Insanity.

By A. CAMPBELL CLARK, M.D. Edin., Medical Superintendent, Glasgow District Asylum, Bothwell.

Puerperal Insanity has been my chief clinical study for the last seven years, and the present paper comprises the results of this experience. My observations will be founded on a minute study of forty cases.*

First as regards Ætiology.

All conceivable contributory causes have been quoted in the literature of the subject; but their relative value as factors of the disease has been loosely stated or simply ignored. The precise influences which tend to produce it are sometimes difficult to ascertain, and their name is legion. At the very threshold of the inquiry we are met with such explanations as heredity, previous attacks (puerperal or otherwise), epilepsy, diseases of pregnancy, the use of instruments, accidents of labour, exposure to cold, and so forth.

Unfortunately these are mere outposts of the inquiry, and it is clear that they are indiscriminate elements of the causation rather than the causation itself. The laws of cause and effect have not been clearly appreciated here; many of the factors on record may separately be regarded as coincidents, while under other circumstances and in certain serial combinations they undoubtedly operate in the scale of causation.

The question must be studied on definite lines. Is the disease purely cerebral in its inception and development; or is it essentially peripheral in its origin? A moment's consideration shows the instability of either of these positions;

* In a large number, the histories—prepared on a uniform plan—were kindly contributed through the courtesy of many medical friends engaged in private practice.

for if the first is sound the disease is not puerperal, and the designation *puerperal* is a misnomer; while if the latter has weight then like conditions of the parturient and puerperal state must invariably produce like results, *ergo* puerperal insanity must be a frequent and necessary sequel of puerperal irritations.

A scheme of causation and development can only be framed on reflex principles of the utmost complexity; and a reference to the phenomena induced by peripheral stimulus of the decapitated frog, furnishes a rudimentary analogue of the mechanism of causation in puerperal insanity. It is a mere truism to state that exposure to cold can no more be regarded *per se* as a cause of puerperal insanity than the pinch of a frog's foot can be regarded as the cause of its convulsions; yet under cerebral conditions, which we shall presently consider, it is as surely an excitant as the stimulus of a pinch in the case of a decapitated frog. While in either case the central condition is always the same, there is nothing specific in the peripheral stimulus; for we may substitute for exposure to cold, laceration of perineum, pelvic peritonitis, post partum hæmorrhage, constipation, piles, and a host of other peripheral excitants as numerous as those of experimental physiology. The seductive sophistry to which we are exposed in reasoning from analogy is here kept in view, and we know as a matter of fact that the phenomena of physiological experiment and pathological processes are in many respects *sui generis.*

If the peripheral stimulus cannot be defined as specific, it can yet be regarded in respect of its intensity and duration, and these attributes are of special significance as bearing on the question of causation, for it will be found on analysis of the subject that the same peripheral irritant is operative at one time and abortive at others, in proportion to its momentum and the degree in which it is involved with other momenta acting in a like direction.

The frog's convulsions are a definite effect of a definite stimulus; the stimulus and effect are of the simplest reflex character; the sequence is certain and invariable; and the intervening pause is momentary. Yet, in so comparatively low a type as the frog, we know that the resultant of the stimulus is expressed in something more than convulsions, though that *something more* may elude the vigilance not only of the unaided senses but even of microscopic research. The irradiation of nerve-force does not merely enter the muscular

system, nor is the cessation of visible movement a sufficient indication of the normal calm of the nervous system.

If the inherent complexity of the experimental process is greater than at first sight appears, how much greater must it be in the higher organization labouring towards puerperal insanity? Here the peripheral excitant is less definite in its quantity and quality; it is not specific or certain in its execution, and it is contributory but not all-sufficient. It is only operative in proportion to its intensity and duration, and yet more so in proportion to the sum of its morbid associations.

These are of two kinds: *(a)* peripheral, *(b)* central; the former comprising all peripheral irritants capable of inducing morbific centripetal currents; the latter embracing all unstable conditions of the central nervous system. The various lights on the subject are here brought to a focus, and we proceed to consider in detail the peripheral and central elements in the ætiology of the disease.

Let it again be affirmed that there is a multiformity of peripheral stimulus. It is of no genus or species; it is an intrinsic factor of no fixed quantity, of varying intensity and duration, and of varying complexity in respect of the centripetal currents which may arise from it. Moreover, these may reach the brain through vascular as well as nervous channels.

The vascular system generally, and therefore the cerebral circulation, may from peripheral sources be poisoned or impoverished, and as a matter of experience, either or both of these conditions are exceedingly frequent in puerperal pyrexia and notably rare in its absence.

Toxæmia may be the result of (1) diminished, arrested, or altered secretions and discharges; (2) septic absorption; (3) zymotic infection; (4) alcoholic excess; and the first of these may be secondarily induced by any of the others. Using the term in its broadest sense, blood-poisoning is extremely prevalent as an antecedent and concomitant of puerperal insanity.

The catalogue of arrested secretions and discharges includes the following: the mucus and digestive, but notably the bile secretion; the urine and sweat, the lochia and milk. In 80 per cent. obstinate constipation or very exceptional diarrhœa preceded the mental attack; the stools were as a rule hard and stony, usually very dark, more rarely clay-coloured—dry, irritant, or putrescent, and of extremely offensive odour. They lacked the antiseptic action of the bile,

and the mollifying influence of the intestinal mucus. The gaseous products of putrefaction are themselves of no small account in this connection. An examination of the urine demonstrated bile in several cases, yet not so frequently as I was led to expect from the colour of the skin and the putrefactive state of the fæces. Sometimes where little else was found, pigmentary deposits were sparsely distributed over the microscopic field. Bile vomits have not been infrequent in the early history of my puerperal cases, occurring very soon after labour, and not being always explicable in the same way. The stomach was in such instances very irritable, and bile was more frequently ejected than anything else; nervous reaction, portal congestion, or a loaded colon and rectum, separately or in combination, probably accounting for this.

The pharynx and fauces were often found relaxed, atonic, and irresponsive to reflex stimulus, the same conditions probably existing in all the involuntary muscles. The tongue was, with rare exceptions, pale and flabby; in 40 per cent. creamy; in 10 per cent. brown, dry, and "typhoid;" in 4 per cent. red and irritable. The mucus tract from mouth to anus was natural or clogged with inspissated and greenish mucus. The effect on the other secretions of such altered mucus is known to be serious, and it is not unreasonable to expect chemical instability of the gastro-intestinal fluids, and putrefactive changes in the fæcal accumulations, especially where these persisted, as they sometimes did, for ten days or a fortnight in the colon and rectum.

Retention or very scanty urine was found in over 60 per cent. on admission; it was high-coloured, and of high specific gravity. The percentage would certainly have been greater if taken earlier or before the onset of the attack. Albuminuria was found transient in 30 per cent. on admission—too late to find the maximum statistic, the early histories in this respect being defective.

The skin was frequently dry, sallow, or jaundiced, and sometimes had a repulsive odour. A very uniform state on admission was a profuse crop of acne pustules over the buttocks, but rarely extending further. The milk in 70 per cent. was arrested; the lochia scanty or suppressed in 75 per cent.; profuse in 6 per cent.; and when it existed at all in any degree it was intolerably offensive.

The changed appearance of these secretions and discharges was found to have a varying significance with reference to

causation in different cases and under different circumstances. The effect was more evident and indisputable in the case of the secretions of the *primæ viæ*, kidneys, and skin; but for simple retention of urine an hysterical cause, as might be expected, was usually found. These abnormal conditions usually precede the mental outburst by days or weeks, and may be taken as evidence of a widespread neurosis of the visceral reflexes; they may have a central origin, but they react through vascular channels as well as nervous; and as a general rule where they do exist, they have antedated the mental attack. The arrest of milk and lochia is either premonitory or coincident; and only where induced previously by pelvic or other inflammations can it be regarded as having a causative relation.

The late Sir James Simpson directed attention to the frequency of albuminuria at the outbreak of puerperal insanity. He found it in four consecutive cases before suggesting this track of investigation; and observing how quickly albumen disappeared from the urine after the mental symptoms had developed, he endeavoured to account for it metaphorically thus:—"The fire of disease goes on burning in these cases of insanity after the lighted match is merely applied, and the strange morbid clockwork runs on, as it were, after the key that wound it is withdrawn." His theory has been frequently disputed, sometimes with good reason, but his facts have been proved again and again. Out of his suggestion has grown a broader conception of peripheral causation than was previously obtained; it has brought clearly into relief somatic views of the subject; and opened up more logical methods of investigation. That an arrest of any of the renal secretions can account materially for the onset of the disease is an idea which is now excluded without reserve; nor is it conceded that a general arrest of secretions can alone account for it. Yet it cannot be denied (1) that there is a fertility in the sources of puerperal blood poisoning, and (2) that in proportion to the number of the sources —and more serious still—to the intensity of the poisoning is the ratio of potentiality of mental disease.

Septic absorption has been credited with a considerable share in the production of puerperal insanity. In some cases I have found septicæmia and insanity develop almost coincidently, and except on the theory of direct nervous propagation, it was difficult to prove their relations as cause

and effect. In one series of cases it was evident that septic absorption appreciably preceded the mental overflow, while in another series it was equally evident that the mental symptoms were pre-existent and became intensified after the inception of the septic process. My collection includes records of eight well-marked cases of septicæmia out of a total of 40; and of inflammations affecting the uterus or its neighbourhood, with or without mild septicæmia, in 10 more. In addition were two cases of acute phthisis pulmonalis (with extremely offensive lochia), which in a sub-acute form preceded parturition, and after it, made rapid and fatal progress. In a series of clinical papers published in the "Lancet," Volume ii., 1883, I regarded these as possibly septicæmic considered in the light of Koch's researches on the tubercle bacillus which have since attracted so much notice in this country.

Typhoid and scarlet fever were each associated with one case. Both had neurotic histories, especially the scarlatina case; and the typhoid patient had insanitary surroundings and an exciting puerperium. It was impossible in either case to fix the date of infection; but it is almost certain (*a*), judging by a very full history, and a post-mortem examination, that the typhoid patient succumbed to fever induced some days before the mental attack appeared. Intestinal ulceration was far advanced at death; she lived only 19 days after the first mental symptoms were evident; and the typhoid incubation is believed to be usually about 21 days; (*b*) that as the scarlatina patient was admitted after the mental attack had lasted 14 days, and the fever only appeared after admission, it is obvious that she had become infected subsequent to the invasion of mental disease. Such cases are probably more frequently associated with puerperal insanity than is generally supposed. The clinical phenomena of the respective exanthematous types were not accurately or even approximately produced in either case. The typhoid characters of the one were not conclusively demonstrated till post-mortem; and the scarlatina patient presented symptoms in irregular sequence, and, despite a medical consultation, the diagnosis was not absolutely clear till the stage of desquamation was reached.

Alcohol is the last of the blood poisons, with the exception of certain drugs, which, however, do not call for notice here. In the lower ranks of life alcohol is a favourite prescription with the patient and her friends. I have clear

evidence of its influence in precipitating puerperal insanity in two cases. One patient, with a well-marked hereditary history of insanity and suicide, developed an intense craving for stimulants after the birth of her last child, and, not many hours after labour, obtained and drank an inordinate quantity of whisky (two pints within a few hours); while another was intoxicated by an indiscreet relative with wine and whisky. Insanity appeared after the indulgence in both cases, but most probably the dipsomania in the one case was the first symptom of mental unsoundness, as I have found the drink craving a frequent symptom of puerperal insanity.

The effect of any or all of these arrests or poisonings is to overcharge the blood with excrementitious matter; septic absorption intensifies the blood poisoning more than the others; and alcohol, for the time being, if in large quantity, so far as the brain is concerned, intensifies most of all. Whatever the poison or poisons and whatever the intensity or duration, the result is to poison structures functionally active and to induce irritation of the nervous system. Puerperal delirium and hallucinations, whether or not they amount to insanity, are due to cerebral toxæmia, as the evidence of asylum practice and private practice can abundantly testify. The experience of private practitioners will furnish illustrations of toxæmia with hallucinations of the special senses, sometimes coherent, often delirious. Thus a lady heard a bell ringing in one ear, and a railway whistle in the other, while another had on one side hallucinations of the sound of paddle wheels, and bagpipe music on the other. They were both cases of puerperal fever, exanthematous and septicæmic respectively.

With a view to confirm or correct my conclusions regarding the mutual relation of mental disease and blood poisoning, particularly that due to septic absorption and zymotic contagion, I consulted the tables of the British Medical Association Collective Investigation Committee on Puerperal Pyrexia. They furnish three kinds of evidence bearing upon the present inquiry, and as they are not prepared with reference specially to mental disease, the evidence cannot be regarded as garbled. Symptoms of the first kind are in the order of their appearance mental-pyrexial, of the second pyrexial-mental, and of the third mental-pyrexial-mental.

In 65 cases out of 354 (18·3 per cent.) the mental antecedents of puerperal pyrexia were unfavourable. These

appear under the names of (1) previous insanity; (2) insanity of pregnancy; (3) hereditary history of insanity; (4) mental depression; (5) shock or emotion; (6) mental worry; (7) nervous excitability; (8) illegitimacy, causing nervous excitement; (9) anxiety and overwork; and (10) news of the death of a friend in childbed.

The classes of pyrexia, and the percentages of mental antecedent are as follows:—

			Total Number.	Mental Antecedent.
Class	I.	Of local origin	42 cases—	19 per cent.
,,	II.	After difficult labour ...	18 ,, —	22·2 ,, ,,
,,	III.	Originating in or after exposure to contagion ...	162 ,, —	13 ,, ,,
,,	IV.	After cold and exposure ...	13 ,, —	7·8 ,, ,,
,,	V.	After shock or emotion ...	6 ,, —	100 ,, ,,
,,	VI.	From unassigned cause ...	114 ,, —	21 ,, ,,

The ratio of the second and third kinds is less than what has now been given. Of cases of well-pronounced mental disorder following on puerperal pyrexia the proportion is eight per cent.; and of alternating mental-pyrexial-mental cases, the proportion is 4·3 per cent.

The last of the blood-conditions which we have to consider is a state of poverty and anæmia. Such a condition, in order to keep within the range of the argument, must either be parturient or puerperal in its origin; and it is obvious that it will find most typical expression in anæmia resulting from accidental hæmorrhage, placenta prævia, post partum hæmorrhage, and puerperal abscess formations. Anæmia usually complicates the blood-conditions already described, and increases the excitability of the nerve-centres, inducing sleeplessness, giddiness, headache, irritability, emotionalism, mental lassitude, loss of memory, and incoherence. The physical signs of it are unmistakable; occasionally but not always, hæmic murmurs were audible over the heart, and the *bruit de diable* over the veins at the root of the neck.

The consideration of nervous routes of centripetal disturbance opens out a wide vista of ordinary visceral and special sense irritations, the scheme of which is limitless, but sufficiently intelligible by means of typical illustrations. Laceration of the perinæum and cold shock are examples of the first; clots in the uterus, pelvic inflammation, and constipation of the second; and disagreeable tastes, smells, sounds, and sights of the third. The gravity of any of these

will depend on its intensity and persistence, and even more so on the degree of emotional disturbance which it calls forth.

It will be already evident that one single peripheral stimulus may be productive of others. A stimulus of cold produces: 1st, the sensation of chill; 2nd, fright; 3rd, possibly inflammation, septicæmia, or both; 4th, arrest of secretions and discharges. In proportion to its sequences is its potency, and especially so in proportion to its emotional effects. Three clinical illustrations will suffice: (1) a case of flooding, which, exciting alarm, was followed by a chill (probably a reaction of fear), then by inflammation, septicæmia, and finally insanity; the patient had a mild neurotic heredity, and the history of the case clearly marked the sequences described; (2) a case of chill after first childbirth without serious consequences to mind or body; after second parturition she had a chill on third day, followed by pelvic inflammation, arrest of lochia, and gradual excitement, culminating by 8th day in an attack of acute and violent mania; no hereditary history was ascertained beyond intemperate habits of father; (3) a patient had rigor on 6th day, within an hour after she burst into a paroxysm of hysterical excitement; abscess of mamma soon after appeared; the child was illegitimate.

Apart from the question of insanity, the susceptibility of the puerperal female to rigors is well-known. They may be due to septic or central causes, or to caloric deficiency; but an intimate acquaintance with the subject will clearly establish the fact that there is an inherent tendency—central in its seat—which in nervous cases is almost phenomenal, and which is remarkably prevalent, either as a primary factor or as a secondary symptom (possibly both), in the history of puerperal insanity. Rigors, generally anticipated by sleeplessness, often precede the mental attack: they frequently signify an infective process or a simple inflammation; but in a large proportion of cases, whatever their direct significance, they appear in advance of the mental symptoms. Moreover, they recur frequently as accompaniments of the insanity, not only where there is septicæmia, but where either it does not exist or its existence is extremely doubtful. When mental disease is fully established, a chill arrests for a time the psychic paroxysm; this has been seen even in acute delirious mania. A chill occurring before the liberation of the mental discharge, will pro-

bably operate by conduction upwards from the medulla to the cerebrum, and by peripheral conduction as well. The pathology of rigor is however, outside the present question; and the corollary of cortical disturbance as a result of the nervous discharge (of rigor) in the medulla oblongata can be affirmed from clinical evidence as well. Indeed, taking the rigor as the equivalent of an epileptic seizure, puerperal insanity might in many cases be regarded as a psychic epilepsy.

Of visceral irritations, those having their seat in the uterus or its neighbourhood, naturally take a leading place, and none is more serious than the retention of clots in the cavity of the uterus. A case of sub-acute depression—the "dregs" of a previous puerperal attack—came under my care when again pregnant. History repeated itself, and she miscarried. Her mental condition thereafter was an accurate mercurial expression of the uterine conditions. The uterine cavity retained clots from time to time, and it was invariably observed that with the retention of a clot excitement rose, with its expulsion a calm ensued. Cause and effect were never more strikingly demonstrated. The mania transitoria of labour is an example of fleeting delirium occasionally seen during the third stage, and marking the effect of peripheral irritation; but I have one case recorded where the mania began in the second stage, and lasted for many weeks after labour. During labour it was acute, but soon after, dementia ensued, and ultimately recovery was established. A loaded rectum is a more serious visceral irritant than might be supposed; many cases are excited or exaggerated by this condition; some recover promptly on removal of the cause, and many are much relieved by evacuation of the bowels. I have frequently observed the first refreshing sleep occur after defæcation. The results of treatment of local conditions, such as those described, as also pelvic inflammation and mammary abscess, give indications calculated to strengthen the belief that in these peripheral states we find grave sources of irritation.

By reason of their close anatomical relation with the higher brain-centres, and their almost psychic functions, it will easily *à priori* be expected that the special senses may have much to answer for in the production of puerperal insanity. Their functions are inseparably associated with mental functions, and the whole well-being of the organism depends so much upon the impressions which they receive

that their share in the causation should as far as possible, be carefully ascertained. The ear takes in bad tidings, and at this critical period conducts noises intensely; the eye is open to distressing sights and exciting literature, and the functions of taste and smell are apt to be disordered. The nerve-centres of special sense are hyper-æsthesic. The most usual excitements of this class are those affecting sight and hearing. One lady's temperature rose, and she became excited for twenty-four hours, without inflammation, as a result of reading an exciting novel, and another puerperal lady, hearing outside the voice of a most unwelcome visitor, was similarly affected. One patient was upset by hearing "a neighbours' row" on the stair, another by a quarrel between the husband and his mother-in-law. The perverted state of the nasal and oral secretions is apt to give rise to a bad smell and taste, which can readily be misinterpreted in the querulous and irritable state of the patient.

In proceeding to consider the morbid associations of central origin, which may be productive of the disease, it must be recognized at the outset that it is not possible to absolutely separate the one group from the other. Anæmia, for example, must again be considered; but in this instance a distinction can easily be drawn between post-parturient and ante-parturient, the former occurring rapidly, the other a slow undermining pathological condition.

The cerebral conditions in the puerperal female, preparatory to an outbreak of insanity, find expression in the following symptoms: (1) acuteness of sensory impressions; (2) a state of nervous tension; (3) emotional irritability—easily induced—worry, anxiety, peevishness, and fretfulness, explosions of passion, extremes of feeling; (4) loss of memory; (5) diminished self-control; (6) restlessness; (7) sleeplessness. The relative antagonism of force and resistance is altered by excess of functional activity, nutritive deficiencies, or probably both; resistance is yielding before the hitherto latent energies which are accumulating in excess, and insanity is on the verge of precipitation. The physiological resistance to explosive discharges, in nerve-structure, whether these be motor, psychic, or otherwise, is revealed in the inhibitory strength of the individual. Erratic ideas of the most extravagant kind, morbid thoughts and impulses, absurd motor suggestions are physiological to humanity at large; but not less so is the inhibitory antagonism to these impulses, which is the physiological safeguard

of sanity. There is no absolute identity of mental habit in all cases; there are diversities of emotional, moral, and intellectual character, of appetites and desires, and of self-control, and a complete mental analysis is therefore out of the question in our present inquiry.

The following statement embraces all that need be said upon the subject: (*a*) sensory perceptions are accentuated or perverted—frequently both; (*b*) emotional impressions are extremely acute and variable; (*c*) there is a partial suspension of the action, *i. e.*, a disturbance of the balance of inhibitory forces; (*d*) there is loss of intellectual vigour, and transient blank of consciousness. Thus a condition is obtained nearly allied to insanity or widely removed from it, according to the sum of these results; a condition which waits the events of the parturient and puerperal condition to prove abortive or otherwise. This potentiality may be of recent acquisition, or it may be a morbid habit gradually acquired or inherited. In its simplest and least dangerous form it is induced only during pregnancy; in its graver significance it is the result of previous attacks of insanity, or it is the insane diathesis of heredity.

A natural tendency is noticed, especially in neurotic subjects, to nervous and mental disorders during pregnancy. These are usually of the mildest character, and rarely do they find expression in actual insanity of pregnancy. If prolonged, they react injuriously on the highest centres of the nervous system, and seriously affect the prognosis when labour is imminent. I found that mental causes were insidiously at work for weeks or months of pregnancy in many of my puerperal cases. A morbid habit was created, a disposition to brood over and magnify the anxieties, disappointments, and bereavements of the past, or to foster the religious emotions up to a state of morbid exaltation. When a mother had lost a child the subject was sure to engross her thoughts, to prey upon her mind with the intensity of disease, and to colour her delusions afterwards. I was struck with the remarkable frequency of such bereavements in the history of my puerperal cases. The other causes of mental disturbance not amounting to insanity during pregnancy were: (1) desertion by husband; (2) poverty; (3) illegitimacy; (4) fright; (5) dread of confinement; (6) various disorders of health during pregnancy; (7) insufficient pause or none after lactation, and frequent pregnancies; (8) frequently recurring miscarriages.

In 7 cases of puerperal insanity out of 40 there was a history of hysteria, and in 6 others of previous attacks of insanity, 3 of which were puerperal. It does not by any means follow that where insanity had occurred previous to marriage, and was completely recovered from, it should reappear with the first pregnancy or puerperium. It is well known that it misses many opportunities of breaking out afresh, but yet the *à priori* inference is sound that these crises are of grave import, and must not be lightly regarded. The insanities of puberty and early womanhood are very apt to relapse, and they are grave antecedents in puerperal cases.

The question of heredity in the literature of puerperal insanity has received considerable attention from Dr. Batty Tuke and others. I found it difficult to get a full and candid statement on the subject when ascertaining from the friends the history of each case, but by inquiries pursued further afield, and information afforded after recovery by the patient herself, I have been able to prepare a reliable statement of hereditary histories so far as it goes. It is not so exhaustive as it might be, had questions suggested by a study of some later cases been anticipated earlier.

Heredity may be studied in: (*a*) the history of progenitors and collaterals; and (*b*) in the health of the progeny. The history of progenitors and collaterals must be regarded beyond the mere question of nervous disease and intemperance; uterine and allied affections must also have a place in this calculation; for, undoubtedly, whether latent or active, they originate a nervous impression in the mother which finds expression in the nervous formation of the offspring. Out of 40 cases, many of which could not be satisfactorily investigated in this respect owing to lapse of time or otherwise, I found four well-marked cases of uterine disease in the mother of the patient, two being cases of cancer; a fifth (cancer of throat in the mother) may be regarded as irrelevant.

Where an hereditary history of insanity could not be traced in preceding generations, heredity became almost a certainty by reason of the collateral evidence of insanity in other members of the same family, insanity or an insane diathesis being known in one or more sisters of six cases. Further, in some cases a suspicion of heredity was aroused, either on admission or after recovery, by the size, form, and symmetry of the cranium, the facial development and ex-

pression, the physique generally, the degree of intelligence and mental vigour evinced on recovery. Two of the patients who recovered could never, at their best, be very much exalted above the type of educable imbeciles, although their mental and physical development were sufficient to allow them "a bare pass" in the world at large.

In the health of the progeny there is often a foreshadowing of the future nervous history of the mother, a latent neurosis in the latter finding early expression in the child, years before there is any suspicion of mental disease in the parent. In this vicarious way, what is potential in the parent becomes kinetic in the child; and in my more recent inquiries into family histories this progenetic feature has been sufficiently frequent to render it probable that had the matter been as thoroughly sifted in the beginning as at the end, evidence of this kind would have considerably increased. Putting aside primiparous cases, which numbered 13 out of 40, and 7 multiparæ, whose histories are in this respect defective, it was found that out of the remaining 20 multiparæ 9 showed in their families distinct evidence of neurotic disease. Idiocy, imbecility, epilepsy, acute hydrocephalus, and cerebral congestion were the varieties recorded, hydrocephalus being the most frequent. This represents forty-five per cent. of gross neurosis in the progeny of multiparous cases; but I am disposed to look on it as a minimum.

Having regard to all these phases of the question of heredity, I have prepared the following tabular statement of the facts which I have been able to ascertain. (See pp. 184-185.)

Heredity is here represented from many points of view, and in a variety of combinations, which do not however include epilepsy, of which in its hereditary form I have no statistics. The sum total of heredity is probably still under-estimated despite all my efforts to get at the root of the matter. The "nervousness and excitability" which was sometimes sparingly conceded by informants, have in my experience been another name for mild attacks of insanity which were transient, and had been successfully treated at home.

Twenty-six out of a total of thirty-eight known cases had therefore a basis of heredity great or small, and yet I must repeat that I consider this statement is an under-estimate for the reason that it has been amplified from time to time after the patients in question had passed from under our

care. Many additional facts were incidentally communicated by strangers or discovered by personal investigation made at the patient's home. Dr. Batty Tuke found heredity in 22 out of 73 cases, and he found what the foregoing statement does not determine, that in a greater proportion of cases it exists on the female side of the family.

There are many acquired brain-conditions which may precede and aid in developing puerperal insanity, and which might appropriately be dealt with here. Such are for example epilepsy, brain-injury, and meningitis; but, as they have not come within my experience, and as I believe they have only a rare connection with puerperal insanity, they need not occupy further notice.

In determining cause and effect we cannot always grasp mathematical certainties. Puerperal insanity is not so beautifully simple as a case of irritant poisoning, nor so definite in its sequences as a case of zymotic disease. The lines of causative conduction are so innumerable, reflective, and interminable, that finality of research is not to be looked for. Holding in his hand the various threads of causation, so far as they are disentangled, the physician's power of directing the puerperal course of his patient is greatly increased. He can anticipate and thus avert strokes of causation, or minimise their force and effects.

I now pass on to the pathology of puerperal insanity.

This has been the least investigated branch of the subject, and many of the older records are of doubtful value. The earlier writers on this disease inferred the pathology from the clinical features; some contended that furious mania, which was their only conception of puerperal insanity, was a convertible term for meningo-cerebritis; while Gooch laid down the law rather paradoxically, "that the disease is not one of congestion or inflammation, but one of excitement without power." Tyler Smith observes: "No constant morbid changes are found within the head, and most frequently the only condition found in the brain is that of unusual paleness and exsanguinity. Many pathologists have often remarked upon the extremely empty condition of the blood-vessels, particularly the veins."

Simpson's suggestion that there is an essential connection between puerperal insanity and renal disorder has already been referred to. He supposed it probable that certain changes in the renal secretion might induce secondarily chemical changes in the blood. Several theories have been

No.	Heredity Direct.		Heredity Collateral.		Children Neurotic.	Uterine Diseases in Mothers.
	Male.	Female.	Male.	Female.	Number.	
1	Father intemperate	—	—	—	—	—
2	—	—	Paternal aunt and cousin insane and both suicidal	—	2	—
3	Father nervous and very excitable	—	—	—	—	—
4	—	—	—	Maternal uncle insane	—	—
5	—	—	—	Sisters insane diathesis	—	—
6	—	—	—	Sisters insane diathesis	—	—
7	—	—	—	Sister insane	—	—
8	—	—	—	—	3	—
9	—	Mother deaf mute and very peculiar	—	—	—	—
10	—	—	—	Sister insane	—	Mother died of uterine cancer
11	—	Mother nervous and very excitable	—	—	—	—

12	—	Mother a chronic drinker	—	—	—	—
13	Father intemperate	—	—	—	1	Mother died of uterine cancer
14	—	Mother nervous and excitable	—	—	—	—
15	—	Mother was insane	—	Maternal uncle insane	—	—
16	—	—	—	Sister insane	—	—
17	Father intemperate	—	—	—	—	Mother suffered from uterine disease
18	—	—	—	Sister insane	—	—
19	—	Mother hemiplegic for 18 years	—	Maternal aunt insane	—	—
20	—	—	—	—	1	—
21	—	—	—	—	—	Mother suffered from uterine disease
22	—	—	—	Family all nervous and easily excited	2	—
23	Father insane	—	—	—	1	—
24	Father insane, chronic alcoholism	Mother very irritable	—	—	1	—
25	Father insane	—	—	—	1	—
26	—	—	—	—	2	—

In two of these cases (Cases I. and XIV.) there was in the patient herself an inferior type of mental development.

evolved from this idea, giving prominence especially to the supposed septic action on the brain of urea and carbonate of ammonia. Sir James gives prominence to this view of the subject as follows:—"In the blood of the puerperal female, greatly modified as it is in the normal states of pregnancy and delivery, and containing, as it does after parturition, the effete elements of the involving or disintegrating uterus, and the materials for the new lacteal secretion, ferments and agents may possibly exist, which are more apt to develop special morbid poisons out of the retained renal secretions than happens in other states of the system. But I repeat the whole subject is yet quite dark and conjectural, and will remain so till pathological chemistry is able to cast some light upon it."

My observations on the pathological aspect of the question will be arranged as follows:—

I. A study of the naked eye and microscopic appearances of the brain; II. A report of urine analysis and microscopic examination; and III. A statement of pathological complications.

The conclusions hitherto arrived at regarding the condition of the brain have been mainly obtained by inference from clinical evidence. Nor was the inference of common acceptance sound, because general anæmia and exhaustion cannot legitimately pre-suppose local anæmia where functions are abnormally active, or where there exist seats of irritation, septic or otherwise. Asthenia does not contradict congestion and inflammation; it rather favours the development of such pathological processes. Witness the inflammatory conditions of low asthenic types; erysipelas in exhausted and moribund cases, congestions of trophic origin, hypostatic pneumonia, tonsillitis, stomatitis and other inflammatory varieties induced in depressed states of the system. That a sthenic phrenitis does sometimes prove the pathological equivalent of puerperal insanity has been too evident to be disputed; but the great bulk of cases, as a rule, have been classed pathologically under cerebral anæmia. There is no certain or sufficient evidence to justify this statement, the inferences from symptomatology are not to be depended on without pathological confirmation.

It must however be admitted that it is easier to mistake anæmia for congestion than the converse, by confounding the venous with the arterial system, especially in an ex-

amination of the pia-mater; but on the other hand, though less evident, it is no less true that congested zones and patches may be overlooked in brains, which are in many convolutions anæmic. My post-mortem records include three cases of cerebral congestion (one with meningitis), two of which will be more particularly detailed afterwards, especially with reference to histological appearances. The late Dr. Boyd, of Somerset Asylum, in three out of five post-mortem examinations found cerebral congestion (one with meningitis). He was a careful brain pathologist, and his statements are worthy of reliance.

When the disease becomes chronic, or death ensues from pneumonia, or some other serious inflammation in the body cavity, or as in one of Dr. Boyd's cases, where the patient is literally reduced to skin and bone (she weighed 52 lbs.), it is not surprising to find paleness and exsanguinity. Further, where heredity is strongly marked, without prolonged acute excitement, hyperæmia is probably rare. But where, *as is the usual experience*, mental and motor excitement, delirium, and hallucinations of the special senses are prominent symptoms, especially with concomitant toxæmia of some kind or another, I believe the facts of pathology abundantly demonstrate cerebral congestion, and sometimes phrenitis.

My most exhaustive record of puerperal brain pathology is furnished by the typhoid case already quoted. The naked-eye description is as follows:—

Cranium. Removed with difficulty, owing to dura-mater adhesions of recent origin. Bone appeared normal, but inner table was blood-stained around the terminals of the blood-vessels.

Dura-mater. Flaccid; a little escape of arachnoid effusion when opened into anteriorly. No notable structural or vascular changes.

Pia-mater. Extreme congestion in parts; normal condition in others. Very fine network of arteriole injection, almost invariably over left cerebrum, being scarcely noticeable however on inner aspect of occipital lobe. On right cerebrum the congestion was rare, and chiefly observed over angular gyrus and calloso-marginal convolution. The consistence throughout very good.

Section. The marked congestion of left cerebrum, as compared with right, is still more evident, especially affecting the inner cortical layer of grey matter, but it is again absent

in the inner occipital convolutions. The right cerebrum before and after section was laterally, and at its base, with the exceptions above noted, found to be pale.

Weights. Cerebellum, pons, and medulla, $5\frac{3}{4}$ oz. Right cerebrum, $20\frac{1}{4}$ oz. Left cerebrum, $23\frac{1}{4}$ oz.

After naked eye examination, the brain was preserved for section by Hamilton's method, viz., in Müller's fluid and spirit for three weeks, changing it weekly. After three weeks it was preserved, week after week, in the graduated solutions of bichromate of ammonia, recommended by Hamilton; it was then treated with a saccharine solution, and afterwards placed in mucilage, according to the same direction. Finally, it was cut into sections, by means of ice and ether microtomes. Some of these were mounted unstained; others were stained with carmine, logwood, aniline, and chloride of gold, rendered semi-transparent with oil of cloves, and mounted in dammar. The most successful stains were those of carmine and aniline.

Sections were made of all the convolutions, so that no part should escape scrutiny. The cerebellum, pons, and medulla were in like manner prepared and examined. The result is brought out as follows:—

(*a.*) Extreme vascularity extending from the pia-mater inwards, particularly noticeable in the innermost, and by its effects on the outermost layer of the grey matter; this statement is susceptible of modification with regard to the anæmic convolutions, notably those of the right hemisphere.

(*b.*) Tortuous and irregular vessels, but no thickening or other morbid alteration of coats, often found extremely engorged, almost to absolute blocking.

(*c.*) Dilatation of perivascular spaces so marked as in some parts to give an almost honeycomb appearance; walls of spaces dense and fibroid.

(*d.*) Perivascular sheaths loaded with small cells, and here and there impregnated with crystals and pigment granules; minute extravasations seen in the brain substance near the vessels.

(*e.*) The nuclei of neuroglia exceedingly numerous, appearing in linear, circular, or semi-circular clusters along the course, or near the bifurcation of the blood-vessels.

(*f.*) In several convolutions the superficial layer of grey matter was densely crowded with neuroglia cells.

(*g*.) Except in the medulla, there was no evidence of nerve-cell degeneration; the nuclei were prominent and distinct, and the cell processes were well defined in their length and branches.

(*h*.) There was no evidence of gross lesion, but in the nerve-structure were scattered very minute, finely-granular clusters, which stained with carmine.

(*i*.) The changes in the medulla oblongata were less marked, but not different in kind from those already stated, with this exception, that in the medulla the nerve-cells were undergoing fuscous degeneration. It is no uncommon thing to find this latter change in the medulla, while the integrity of the cerebrum is unimpaired. The cells were also unshapely and irregular in many instances. The enlarged perivascular spaces were here unusually frequent, and involved the folds of the olivary body.

(*j*.) The changes in the cerebellum are a faint reflex of what has been already described; they are purely vascular.

The lesion is, therefore, widespread; it is in some parts more accentuated than in others, and microscopically the congestion is more evident than the naked eye appearances would lead us to expect. I was led from the clinical symptoms (hallucinations especially of sight and hearing) to expect a greater intensity of congestion, and its effects in the convolutions believed to subserve the functions of special sense, and it was found on reference to the sections of the angular gyrus and superior tempero-sphenoidal convolution and tip, that congestion and its concomitants were extremely well marked.*

(*To be concluded in the next number.*)

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* It would be mere iteration to go over the histology of the second case, for the condensed statement immediately preceding would, in all important particulars, identify the second case as well. The latter was one of puerperal septicæmia, with maniacal symptoms; the vascularity was even more extreme than in No. 1, and the capillary hæmorrhages more marked and frequent. There were many attenuated and vacant spaces, mostly perivascular, which were densely surrounded by neuroglia tissue.

*American Problems in Psychiatry, Illustrated by a Study of Cook County Insanity Statistics.** By Jas. G. Kiernan, M.D., Chicago, Ill.[1]

(*Read before the Chicago Philosophical Society, Nov. 13, 1886.*)

The problems which present themselves to any community in regard to insanity at the present day, are much more complex than that presented to primeval society—which was simply self-protection. Primeval society canonized or exterminated the insane as they were given to ecstatic visions or violence. Even in Anglo-Saxon lands at the present day, while one portion of the community starves and freezes the insane and calls out for their blood, another portion makes them its religious leaders.

With the evolution of the virtues of which Jesus Christ was the best exemplar and the development of law and order, Spartan creeds ceased to dominate public opinion, and it dimly dawned on society that even madmen had rights it was bound to respect. But the only right recognized down to the middle of the eighteenth century was that of bare existence. Shut off from the outside world by thick, high walls, mouldering in dank, dark cells, chained to cold stone floors, lashed into alternate rage and submission by callous, ignorant attendants, mediæval madmen presented that hardly credible picture of fury of which Cibber's raving madman at Bethlem's gate was a feeble representation.

Half a century ago many insane were thus treated in Great Britain and on the European continent, and are thus treated to-day in most county and even some State institutions in the United States. Under the pressure of the teachings of Chiarrugi, Pinel, Tuke, Rush, Gardner Hill, Conolly, and Dorothea Dix, the world was driven to concede that the insane had a right to comfort, medical treatment, and to the protection of character, property, and life against the consequences of insanity. Around these rights of the insane must centre all discussion of the many problems connected with insanity in a given locality.

The history of insanity in any locality in the United States is an epitome of psychiatrical history in the country as a whole. The increase of insanity, its causes, its prevention, the

* By Cook County, Dr. Kiernan implies Chicago and its suburbs.—[Eds.]

provision made for the insane, the protection given the sane and insane members of the community against the consequences of insanity, constitute problems which interest every community.

Insanity is increasing enormously in Cook County. Of every 360 denizens one is insane. The causes of such increase are best studied through an analysis of the psychoses which make it up, and for which provision is needed. Insanities are roughly divisible into three great classes. First: Psychosis arising from an acquired or congenital neuro-degenerative taint transmissible in diverse forms to descendants. Second: Those which are isolated phenomena in the life of the individual or his family; usually of a curable nature. Third: Those which are the secondary consequences of a primary brain disease, not directly transmissible to descendants, but permanently destructive of life and mentality. The influence of Cook County is traceable chiefly in the production of the second and third classes, since for the production of any large number of the first class more than one generation is needed.

Cook County customs and business habits have produced a disproportionate increase of the third class: paretic dementia, paralytic dementia, typhomania, primary mental deterioration (the atheromatous insanity of Voisin, the male climacteric insanity of Clouston, Skae, Bucknill, and Tuke), etc. That the increase in these psychoses is mainly due to Cook County influences, is demonstrable by their disproportionate increase among certain races as compared with themselves elsewhere. Paretic dementia, as Dr. Ashe and others have shown, is rare among the Irish in Ireland. It is twenty times more frequent among them in Cook County than in Ireland, and twice as frequent as in New York.[2] Irish women are free from this psychosis in Ireland, but in Chicago are attacked twenty times more frequently than in New York. Negroes free from it in the South suffer from it ten times more frequently in New York, and naturally so since all races are equally exposed to a speculative emotional business atmosphere. The struggle for precedence in school, academic, financial, and political honours, produces its natural result, and is aided by the tendencies it fosters to excessive emotionalism arising from alcohol, sexual vice, and religiosity, agencies having much in common, resulting from a disturbed emotional equilibrium, and alternating in the *rôle* of cause and effect in connection with insanity.

Financial misfortunes, resulting from the blunted moral tone consequent on these psychoses, frequently befall the community. More than one business firm—more than one bank—has fallen victim to the insanity of its head, who exhibited, conjoined with moral obliquity in the earlier stages, a brisk buoyancy which saw every speculation in a rose-coloured light. So long as the struggle for financial existence is carried on amongst the bulls and bears, so long will these psychoses disproportionately increase. The curable psychoses are relatively insignificant in the burdens they throw upon a community. They form less than one-fifth the whole.

The first class of psychoses always presents the most serious problem to a community, since these psychoses are chronic or rapidly recurrent, and hence entail an enormous financial burden, which, however, might be borne with complacency, were it the only evil resulting from them. The institutions of Cook County make the victims of such psychoses as these the ready tools of unscrupulous politicians. More than one county election has been carried by the aid of the insane. That such dangers are possible will readily be admitted when the character of the chief neuro-degenerative psychosis paranoia is remembered. [So designated by Kohlbaum.][3]

Paranoia, a high-sounding but not a new term, has been used for centuries in nearly its present sense. It consists essentially in a twist of the intellect, which, however, is a more serious matter to the individual and the community than the seemingly more terrible raving madness, since the man with a mental twist can see distorted things only, while the raving lunatic very likely sees everything straight but cannot control his unruly ideas, emotions, body, limbs, and tongue. The raving maniac is soon put where he can do least harm, and very likely recovers, while the man with the twisted intellect remains free to ruin a family, a commercial enterprise, or found an eccentric, dangerous, political or religious sect. It is a form of insanity manifesting itself in "primary dissociation of the mental elements, in a failure of the logical inhibitions or in both." That is, there is a "twist" (the Teutonic word "krank" means twist) which may involve the will, the perceptive faculties, the judgment, or all of them. These people have a peculiar tendency to perceive things crooked, and to govern themselves accordingly. Between these beings and the imbecile, idiot, congenital criminal, born pauper, or "ne'er-do-weel," there are numerous con-

necting links, and the same family often gives birth to all of them. Gifted though many of these beings are in special directions, yet their minds are openly or insidiously controlled by the twist.[4] "There is a mental undercurrent of perverted action peculiar to the individual noted, running like an unbroken thread through the whole mental life; obscured, it may be, for these people are often able to correct and conceal their insane symptoms, but it nevertheless exists, and only requires friction to bring it to the surface. Because an individual of this type imagines himself watched, he concludes he must be a person of some importance." "Some great political movement takes place, he throws himself into it either in a fixed character that he has already constructed for himself, or with the vague idea that he is an influential personage. He seeks interviews, holds actual conversations, with the big men of the day, accepts the common courtesy shown him by those in office as a tribute to his value; is rejected, however, and then judges himself to be the victim of jealousy or of rival cabals; makes intemperate and querulous complaints to higher officials, perhaps makes violent attacks upon them, and being incarcerated in a gaol or asylum looks upon this as the end of a long series of persecutions."

These degenerated lunatics hence constitute serious social dangers, not only for the reasons just mentioned, but for other reasons of a more serious character. As Macaulay[5] has pointed out, they are the agents chiefly chosen by political conspirators, to effect political changes by means of assassination. Henry IV. fell a victim to the paranoiac Ravaillac, expelled from his cloister because of insanity; Mr. Percival was killed by the paranoiac Bellingham; President Jackson was shot at by the paranoiac Lawrence, whom "Old Hickory" looked upon as a tool of the great monopoly of the day, the United States Bank; President Lincoln was shot by the paranoiac Booth;* President Garfield was killed by the paranoiac Guiteau; President Hayes narrowly escaped the same fate at the hand of the paranoiac "prophet" Meyers.[6] Only a timely arrest prevented the paranoiac Macnamara from killing Mr. Blaine;[7] the paranoiac Pinchover[8] from killing Mr. Randall; and the paranoiac Allen[9] from killing President Cleveland. Nor is this danger lessened by the fact that mock deference will

* My childish recollection of Booth associates with him decided insanity of manner.

render the paranoiac the unflinching slave of party leaders. Their egotism, pertinacity, and plausibility enable these people to impose their delusions on large communities. More than one religious, political, social, and financial convulsion has thus been brought about. Europe, as Dr. Spitzka has said, poured out its best blood for decades in crusades under Peter the Hermit. John of Leyden controlled large communities, and offered up human sacrifices; as did in the later part of the nineteenth century, in civilized Massachusetts, the paranoiac Freeman, of Pocasset.[10] The paranoiac "Mother Anne" founded the Shakers; the paranoiac Ludowick Muggleton founded another sect;[11] the paranoiac Noyes founded the Oneida community; the paranoiac Say[12] offered his mother up as a sacrifice, and imposed his delusion on several people. A female paranoiac is to-day worshipped as God in Cincinnati, Ohio. In Troy (New York) a family were arrested by the police who had eaten nothing in several days, although there were plenty of good provisions in the house. The father and his wife said they would neither eat nor sleep until God told them to, and both said they were not hungry. The house was neat, but bad air permeated everything. God had told them not to open the doors or windows. The children said they were not very hungry. The whole family spent the time in praying and shouting all day and all night. The father said he would kill his whole family and himself if the Lord told him to do so. On any subject, other than religion, he and his wife talked intelligently. In the police-station the man and woman stood on their feet in about one position for nearly four hours, and force had to be used to compel them to be seated. They said God had told them not to sit down.[13]

Dr. Clouston[14] has called attention to the fact that a lunatic under his charge, but on parole, was able to dupe sane people into buying his "elixir of life," and the career of a patent medicine man just closed is additional evidence of the gullibility of the public in this particular. "Dr." S. A. Richmond, an epileptic paranoiac, has for years been manufacturing and selling a remedy for "fits and nervousness," called the "Samaritan Nervine." This remedy, probably originally prescribed for "Dr." S. A. Richmond's own epilepsy, had an immense sale in the West. That it never cured "Dr." Richmond is evident from the fact that he recently shot Col. J. W. Strong during an attack of epileptic fury, and has just been acquitted of murder on the ground

of insanity. An utterly illiterate epileptic paranoiac, "Dr." Richmond was yet able to realize an immense fortune from preying on the misfortunes of epileptics, the most gullible and afflicted of mankind. From the profits of his "Samaritan Nervine" he was able to build a magnificent hotel at St. Joseph, Mo., where unfortunates like himself were treated under his special supervision. The paranoiac Patterson founded the Bank of England; the sagacious men of business associated with him therein soon discovered his twist, and quietly got rid of him. He devised the Darien scheme, and nearly ruined half Scotland. The paranoiac Meyers established the Chicago Beehive Bank; by joining a paranoiac real estate speculation to this bank, he ruined a large number of the working classes, and did much to engender the labour riots of 1877.

Other paranoiacs have more directly brought about revolutions. Marat, Billaud, Lebon, and Carrier were, as Lombrosa has shown,[15] degenerated lunatics, who, aided by Burke's attempts to bring about a "White Terror,"[16] by Marie Antoinette's inventively-stupid mendacity, by the selfish partition schemes of Austria and Prussia,[17] were able to impose their suspicional delusions on the French people and produce the undue severities of the "red" Reign of Terror. Most historians and novelists have recognized the part paranoiacs play in revolutions. Bulwer-Lytton[18] made Edward Ferrier a conspirator against Napoleon the Little. "Thoroughly sincere, his father and grandfather had died in a madhouse." A Bohemian paranoiac who believed himself the real heir to all the Talbot estates and said the working classes should be kept down with dynamite, was able to impose himself on the Chicago University Faculty, the Chicago Public Library Officials, and, after his public trial and escape from an insane-hospital, on the Harvard University Officials, as an able, promising young man. Another paranoiac patient of mine had been Surgeon Dentist to Queen Victoria, a General in the second French Republic, a leader in an Australian attempt at revolt, and in London riots, and a candidate for the New York Comptrollership. His mind, perverse from the start, was rendered still more perverse by the unjust treatment received from court officials, who malignantly persecuted the word of honour of Lady Flora Hastings, the poor victim of an ovarian tumour whom this lunatic as chivalrously defended.

Neuro-degeneracy in the palace has stamped itself on

history in letters of blood. The crimes of the Cæsars were the outcome of neuro-degeneracy in the Julian and Claudian families. Claudius, Caligula, and Nero were degenerative lunatics at once masters of Rome and the world.[19] Richard II. of England, Henry VI., and James I. were paranoiacs whose insanity resulted in the "Wars of the Roses" and the first English Revolution. They drew their tainted blood from the same source as Charles V. of Germany and the Spanish line descendant from him.[20] To the same taint the English Church owed its existence, for this taint evinced itself in the death of most of Catherine's children in convulsions. Henry VIII., stimulated by his love for Anne Boleyn and the Tudor dread of a disputed succession, not unnaturally looked upon this as a judgment on an illegal marriage made with a brother's wife. Mary Tudor owed her duplicity, cruelty, and delusions about childbirth to the Arragon taint.

To the insanity of Charles VI., derived from the same source, France owed the misery from which she was relieved by the paranoiac Joan of Arc. The same taint led indirectly to the massacre of St. Bartholomew. The paranoia of George III. lost England the American Colonies. The taint which led to all these blood tints of modern history was, like that of Otto and Ludwig of Bavaria, derived from the Burgundian family, which ascended the Portuguese throne in 1095. To it the numerous paranoiacs, congenital criminals, and imbeciles who have reigned in Europe are due. The Romanoffs have had a similar taint since the days of Joan the Terrible, at whose deeds even a barbaric people stood aghast.

Neuro-degeneracy is hence far-reaching in its consequences. American and Australasian Anglo-Saxon lands, upon whose shores are flung the mental wrecks of European civilization, are brought face to face with the necessity of preventing the incoming of these as well as the home manufacture of these and other lunatics. The Arabian-Night-like prosperity of Cook County has thrown a herculean task of this kind on it, and its business and social habits have added to this task.

The first psychiatrical problem before the sociologist is the prevention of home-made insanity. On the text, "He that ruleth his spirit is greater than he who taketh a city," Spurgeon might have preached the sermon he once did against religiosity, as he terms that disturbance of the emotional balance which so frequently associates sexuality

and religion. Undue emotionalism is the great cause of most home-made insanity in Cook County. The thirst for ascendency swings the mind between the hyperæmia of joy and the anæmia of despair, and breaks down the vaso-motor balance which results in the curable and incurable psychoses of the last two classes. Nor is this the only way such influences produce these psychoses. "He that maketh haste to get rich shall fall into a snare," and the snare the business man falls into in the present case is mental destruction, followed by destruction of fortune, family happiness, and personal character from insane crimes and misdemeanors. His wife, broken down by anxiety from financial and domestic misfortune and resulting privation, often becomes insane. The *employés* dependent on the business man are thrown out of work by his bankruptcy, and they or members of their families thereby become insane.

The neuro-degenerative psychoses are largely the result of physical causes. Even crime often has, as the learned devout Baxter[21] pointed out, a physical basis. These causes have as yet not produced much effect in Cook County, but it is none the less necessary to heed Lord Beaconsfield,[22] who has said that unless modern civilization looked to the physical aspect of morality it would have the fate of that of the Greeks of the Lower Empire. Anything which saps the mental balance of the citizens of the state tends to destroy that state. "Liberty without good morals is impossible," and good morals are impossible without a well-balanced mind. Modern civilization is actively manufacturing its own enemies. Mechanical arts crowd the population into towns; overcrowding creates foul air, which engenders *ennui*, resulting in debauchery and alcoholic excess; from the inter-action of these causes neuro-degenerate beings result with equally degenerate descendants. Idiots and imbeciles born from these people are least burdensome to the community, but the congenital criminal, pauper hysterical, nymphomaniacal and paranoiac scions of such a stock are essentially savages born in the midst of a civilization which has sharpened their claws for its own destruction.

Cook County, not content with manufacturing these savages, is importing them in large numbers, and these importations naturally seek the defective classes in marriage. The foreign population furnishes thrice its proportion of criminals, paupers, and lunatics. The somewhat defective Cook County statistics show that the foreign born insane of

this class are quadruple the proportion found whence they come.[23] The degenerative lunatics weighed down by real or fancied European tyranny flock to American centres of life and bustle as sea-birds to lighthouse lanterns on a dark, stormy night.[24] In the rush of Cook County life an active bustling paranoiac whose insane egotism makes him keen in business, long passes muster, perhaps never reaches an insane hospital, but is regarded as an energetic, able man, one of the leaders of the community. Guiteau's father, a paranoiac like the assassin, was regarded as one of three ablest men of an Illinois town. While the majority of the children of these people die in infancy, enough survive to sap the mental stamina of future generations.

The tables on opposite page show the natality of paranoiacs in the Cook County Insane Hospital.

In consequence of the enormous importation of the insane, Cook County has suddenly found itself saddled with the problem of how to provide for these insane. Its citizens have paid munificently for such provision, but one of the greatest wrongs has been done the insane and the State. More than two million dollars (£400,000) has been wasted during ten years.* This waste has resulted from very obvious causes. The Cook County Insane Hospital has been, and is, regarded as a place[25] "where the vilest politicians and their female acquaintances are provided for under the pretext of serving as attendants, and the higher offices have been filled by drunkards, gamblers, and ex-concert saloon-keepers. The unfortunate insane have been delivered over to the tender mercies of the most vile, filthy, and brutal of their species." The Cook County insane for decades remained in the same condition; the other Illinois County insane are to-day chained, naked, and filthy, in dungeon with only an opening in the door-top for air, light, and heat, through which food was pitched as to a dog.[26] The Cook County insane remained in this state for decades after Conolly had lived and laboured without remonstrance from the resident clergyman, member of the State Board of Charities, and unheeded by the business man wrapt up in financial cares, but who had paid munificently for their support.

"Treat the insane man *as a patient,* and let him see that you recognize in him a human being, if you would cure and

* For ten years it cost three times as much to keep the pauper insane in Cook County as in New York, although everything is cheaper in Cook County.[26]

Table I.

Civil Condition.	Male.	Female.	Total.
Married—childless	12	8	20
„ children born dead	9	2	11
„ majority died infants	18	11	29
„ „ survived infancy	4	5	9
Unmarried	19	11	30
Total	62	37	99

Table II.

Children in Family.	No. of families.	Survived infancy.	Died in infancy.
5 children in family...	3	7	8
6 „ „ „	2	5	7
8 „ „ „	7	19	37
9 „ „ „	8	20	50
10 „ „ „	11	31	79
11 „ „ „	2	5	17
12 „ „ „	1	3	9
13 „ „ „	1	2	11
16 „ „ „	1	3	13
17 „ „ „	1	4	13
22 „ „ „	1	3	19
Total	38	102	263

not *render worse* his insanity! Thus might be briefly interpreted the pith of the appeal made by all great teachers of morbid psychology, against the prejudice, the indolence, and conservatism of their day."[27] But no one in Cook County came forward to make such an appeal. The insane were only "pauper cranks." The insane hospital was needed to support the friends of politicians and the impecunious scions of plutocrats, who provided for them at the expense of the insane. The plutocrat and the "boodle"[28] politician made common cause, as in the New York Tweed ring, and the gambler-plutocrat, who rules the county, formed a natural connecting link. It was cheaper for a financial magnate to pay a "boodle" politician for a place for a termagant cousin in the insane hospital than to pay her board. Waste, corruption, and brutality naturally followed.

Dr. Folsom,[29] free from Cook County social and political ties, free from fear of the gambler-dictator of county common to the medical, legal, clerical, and journalistic professions, made a rigid investigation, and found drunken male and female rowdies in charge, who handcuffed and tossed into dark corners men and women, delicately brought up, with sensibilities rendered more keen by disease. Stung by the picture drawn by Dr. Folsom, Dr. Jewell induced Drs. Brower, Lyman, Chas. Gilman, Smith, and others of the Chicago Medical Society to join in an investigation, which corroborated Dr. Folsom's results.[30] They found drunken male and female *employés* dancing orgies, called amusements, incompetent physicians, drunken commissioners, poor food, fuel, and clothing. No change was made for three years despite all efforts, and within a very short time, *maugré* the handcuffs, the institution resumed its old aspect. Within the next three years the same story was thrice retold.[36]

In 1883 Dr. Clevenger was elected special pathologist. With him a new era in the history of Cook County's insane dawned. Attempts at reform in their care came from within the hospital walls for the first time. Through Dr. Clevenger, the Chicago Woman's Club became interested in the female insane. Through his and their efforts a self-sacrificing female physician was appointed at the salary paid the rowdy female attendants. Despite the taunts of the superintendent, and the consequent discourtesies of his subordinates, this lady effected wonderful improvement in the condition of the female insane. The death-rate fell, under

her care, eight per cent. Of the scene of her labours she has drawn the following picture :—[31]

From the first I was struck by the lack of system or organization that prevailed. No histories of cases by the physician in charge were kept; no census, and very meagre records of any description. The visits of the superintendent to the wards were few and hasty. In each ward was kept a bottle of whisky and a bottle of strong sleeping medicine of bromides and chloral, which the attendants dealt out at their discretion. Many times, on being called to a patient, I received this history of the case: "I gave her a drink of whisky and then a dose of sleeping medicine, but she did not get any better, so I called you."

It took some time to impress the idea that I preferred to be called before the ever-ready remedies were used. Evidently a physician had been a luxury, and only called as a last resort. I have known of attendants hiring patients to work for them by giving them whisky and sleeping medicine, which they (the patients) had come to crave as the opium-eaters their opium. The amount of this sleeping medicine used on the female wards alone was enormous, as was also the whisky. It is safe to say that the amount used on the female wards alone, with less than three hundred patients, was twenty times more than is used in the entire institution of over fourteen hundred patients at Kankakee, and the noise at the latter institution is much less than at the Cook County Asylum.

That the attendants, both male and female, helped themselves quite largely from the ward whisky bottle, which was filled whenever they desired, is beyond doubt. The real needs of the patients seemed to call for no thought. They had no bath towels, and the attendants were in the habit of putting the clothing on the patients without drying the skin. The wards were frequently cold, and the patients had no winter clothing. Many who would have been benefited by outdoor exercise did not leave the ward once in six months, because there were no wraps. No system was adopted with regard to clothing, and no account taken of what patients brought to the hospital. The bedding was at one time insufficient.

Restraint was used at the discretion of the attendant; I have seen a patient jacketed, unable to use her hands, eat her food from her plate like a wild beast. The food is almost beyond description. Where is the State Institution in which you will find deaths from scurvy frequent? Where, but at the Cook County Asylum, will you find two patients fiercely fighting for a small potato given only as a Sunday luxury? Where will you find a hog's head, hair and all, given to the patients? I have often picked out the half of a hog's ear with the hair on it from a dish set before the patient to eat. I have picked out bunches of hair half as large as my little finger from other patients' food. Dying patients, if fed at all, were fed on sour milk. The milk, which is so great a necessity in the treatment of the insane, was almost never fit for use. They had meat never more than once a day, and often not that. The scurvy alone will speak for the vegetables; whisky and sleeping medicine seemed to be the only articles of diet which never failed.

The drug-room was the greater part of the time turned into a saloon. Often I have had to wait for a prescription, which was needed for an urgent case, until the druggist had served with beer, port, sherry, or whisky a roomful of men. I never visited the drug store but with trepidation, and always breathed more freely when I left its degrading atmosphere.

Mrs. Dr. Lowell, an ex-attendant, adds to this picture a fitting pendant: "The attendants on the female side of the house indulged freely in stimulants, and I have on more than one occasion observed at least three of them under the influence of liquor. Some of them used in the presence of the male attendants decidedly coarse language. In every

ward a bottle of sedative mixture and a bottle of whisky were kept, and these were administered freely by the attendants. It was a common remark: 'It is no use doing anything for these cranks!' The physician was called only as a last resort, and though diarrhœa and scurvy were very frequent, butlittle attention was paid to the diet; sick patients were fed with the same food as the others. The great article of diet was pigs' heads boiled without being shaved or cleansed. The meat frequently stank. The clothing and cleanliness of the patients received but little attention. For weeks and weeks we were without fine-tooth combs, and scrubbing brushes were used instead." Typhoid-fever patients five days before death were jacketed for refusing to work on the ground of illness.[33] In consequence of the practice of entrusting males with keys to the female wards at least one female patient became pregnant.

The number of attendants in the Institution were of necessity insufficient since accommodations are limited. They are still more numerically reduced by the practice of allowing every other afternoon off duty; a practice unknown to other institutions, and productive of neglect of the patients since the morning is devoted by the attendant to preparing for the afternoon's recreation.

Although I had occupied, through examination, the position of assistant physician to the New York City Insane Hospital during the dying days of the Tweed ring, I was unprepared for the den in which I found myself when elected medical superintendent. To aid in destroying the discipline, there are two drinking-houses, licensed by the County Board, in the immediate vicinity of the Hospital, which are places of resort for the *employés*, and a female attendant had taken two female patients, at different times, and treated them there; she is still in the employ of the Hospital.* The liquors at Dunning were and are kept in the drug-room, and are dispensed with great freedom to visitors, officers, and even *employés*.[33] The Institution was in much the same condition it had been for years. Drunkenness, scurvy, brutality, starvation, filth and cold[33] were the portion of the insane. Not a single attendant seemed to have any idea that the insane were human beings.

* The Institution in 1884 and 1885, with 1,164 patients, used 3863.68 dollars' worth of liquor (£733); the four State Institutions, with 5,167 patients, in 1884 and 1885, used 2,167 dollars' worth (£434).

Restraint was and is used by the attendants at their own discretion. In April, 1886, a quiet, hard-working patient was beaten, jacketed, and starved for forty-eight hours, and the authorities never found it out until he escaped, when the "Daily News" detailed his misuse for their information. Men from the slums were and are entrusted with keys to the female wards, and in January, June, September, and December, 1885, were detected in partial dishabille therein after midnight.

Female attendants guilty of neglect, brutality, unseemly conduct, and denounced for wilful manifest perjury by the medical members of the State Board of Charities, were and are still in the employ of the insane hospital. Such is practically the condition of things to-day.

Nor is it surprising, since the institution is run on a purely political basis. The warden and superintendent are gang politicians. The last was an assistant marshal in a low political procession of 1884. The superintendent, in defiance of Conolly, avows as a settled principle that he does not believe in watching *employés* who have equal rights with the insane.

Why well-disposed county *employés* do not expose misdeeds, will be readily understood from the fate which befell my conscientious first assistant, Dr. Koller. Indignant at the unseemly conduct of the housekeeper, a rough, brutal woman, proven to have admitted men at unseemly hours to her sleeping apartment, he charged her with misconduct with a commissioner. The grand jury* was packed with *roués* to indict him for criminal libel. The court bailiff, an admirer of the woman, picked the trial jury, and had their care. The State's attorney neglected a murder case to vindicate this woman. By the expenditure of hundreds of dollars of the State's money, and by charges which disgraced the bench, Dr. Koller was found guilty; but the judge, fearful of an appeal, only fined him five dollars (£1) for an offence punishable by at least a 250 dollar (£50) fine and six months' imprisonment. Neither Judge Gary nor his subordinates exacted this fine until nearly a year after, when Dr. Koller testified to abuse of the insane.†

* The county commissioners choose the grand jury.

† The character of the woman whom the county thus vindicated at such a cost may be judged from the following extract from the 1886 State Board of Charities Report:—"The housekeeper took a patient suffering from some female disorder out of her ward and set her to scrub in violation of orders; when Dr. Kiernan expostulated with her, she replied, 'I do not propose to have anything

Although patients had been suffering from a lack of clothing, this housekeeper and other *employés* had many of them at work on quilts and fancy work for their own use. Anxious to get the patients clothed, I urged them, instead of doing fancy work, to put their time on sewing and knitting;[31] but this was forbidden by the commissioners for reasons which will soon appear. Prior to my advent the patients had been starved, beaten, and drugged[33] into making "fancy work," which attendants took to the Women's Exchange and sold for their own benefit. The work of patients on their own behalf interfered with these perquisites of the attendants, and hence there are now no restrictions on fancy work, which places the patients, as before, at the mercy of the attendants.

Contractors who for decades supplied filthy and rotten meat and sour milk,[33] still supply the same.

Nothing better could have been expected from the humanitarianism of the men who rule the County Board. Its "boss," a man chiefly noted for his brawls in low dens, taunted the brother of a poor Scandinavian woman who hanged herself through neglect of one of his appointees, with his poverty, when he dared to remonstrate against the neglect which caused his sister's death.*

Bad as is the provision for the insane in the insane hospital, the provision for them in the gaol, whither they are sent to await trial for insanity, is still worse. They are in charge of an "experienced nurse," who openly avows brutality as a means of treatment. A medical politician has their care who has several times been refused membership to the Chicago Medical Society.

The only bright tints in this dark picture are the arduous attempts at reform of Drs. Folsom, Jewell, Brower, Lyman, Clevenger, Koller, and Mrs. Helen S. Shedd, and, brightest of all, the self-sacrificing labours of Drs. Delia A. Howe and Harriett C. B. Alexander. Of the labours of Dr. Howe, I

to do with you or your orders.' The whole medical staff united in a request for her discharge, but it was refused; Commissioner Leyden said that if Dr. Kiernan continued to insist upon it he would make it hot for him."

* As this case illustrates the discipline of the institution, a citation from the State Board Report[33] may be permitted:—"There was a Miss Finerty, who had been cautioned that a certain patient was not to be left alone in the ward, but taken out when the rest were; she disobeyed, left her in her room, and while there she hung herself. In consequence of this suicide, there was an investigation by the Committee on Charities, when the warden and Commr. Van Pelt said that she should be discharged, but Commr. J. J. McCarthy said that she should not be, and she was not."

have already spoken. Great as was her self-sacrifice, that of Dr. Alexander was, if possible, greater. It was a great sacrifice for a refined lady to enter the den of coarse males and females, which the Cook County Insane Hospital was, and is; but Dr. Howe had been a missionary in China, and somewhat inured to such experiences. It was a greater sacrifice for a woman of the world, from a sense of duty, to leave refined society, to entail upon her family inconveniences, and to expose herself to the insults of coarse rowdies, more especially when it is remembered that the objects for which she was appointed brought her somewhat in conflict with myself.[35] The picture, however, relieved by these bright tints, remains very sombre. The institution is still a den of lazaroni, and more decided action should have been exercised by the supervisory body, the Illinois States Board of Charities. The law says that this Board shall visit these institutions annually, but for two years prior to November, 1885, no member of the Board had entered the precincts of the insane hospital, despite the public exposures of abuses in 1884, made by myself, then medical superintendent, Drs. Clevenger, Howe, and Koller, then my assistants, despite a written request for investigation addressed to the Board by Dr. Clevenger and Secretary Ambler, of the Chicago Citizens' Association.[34]

In 1883, when the insane hospital was a scene of drunken revelry, brutality, scurvy, and starvation,[33] the Board said: "Dr. Spray deserves credit for having entirely dispensed with the use of restraint." . . . "This institution is conducted in the same manner as the Illinois State Hospitals, and the same regard is had for cleanliness, ventilation, and the care and comfort of patients. In most respects this asylum compares favourably with the State institutions;" a laudation which, as its 1886 report[33] demonstrated, was absolutely false.

Despite the publicity of the charges made in 1885, it required the powerful direct and indirect influence which the Chicago "Daily News" brought to bear on the Governor of the State, and the Governor's order to compel it to do its plain duty, which, it confesses, it was "reluctant" to do. Even after drunkenness, brutality, starvation, scurvy, had been proven, it did "not attribute deliberate and wilful unkindness to any of the County Commissioners, or of the officers, or *employés* of the insane hospital." It neglected to indicate how far what ordinary mortals call brutality must go to constitute deliberate or wilful unkindness, since

dragging sick women out of bed against medical protest, jacketing typhoid fever patients, slapping and striking them, kneeling on their stomachs, feeding them on filthy and rotten badly-cooked meat and sour milk,[33] were not evidences of deliberate, wilful unkindness. Anything less than the Seven Stages of Cruelty of Hogarth evidently would not disturb the Board's composure.

The law under which the insane are sent to the hospitals in Illinois disgraces humanity. Family secrets are exposed to public view; ignorant juries discharge homicidal lunatics, who murder their friends on their return home. The law does not protect the sane, since it places in the hands of venal politicians powers which it denies reputable physicians. It does not allay the apprehensions of the insane, for as many of them (demonstrably tried) deny trial as in New York they deny medical examination for certificates. It does not protect property, for this question is not investigated, and the issue of insanity has to be retried in the Probate Court. The trial is hence only an inquest, and the verdict is subject to revision by the medical politicians of the insane hospital. Two of them, ex-porters, just graduated from a Chicago diploma-mill, recently turned loose as sane a paretic dement, who had been wasting his estate, in full defiance of the opinion of two leading alienists, thereby entailing a retrial, with increased cost to the family, who were subjected to unkind criticism during the interregnum by the press. It does not protect the property of the insane in the hospital, for insane persons in the county insane hospital have signed orders for money deposited in books for the benefit of unscrupulous people, and to their own loss. It does not provide for the protection of the public against the chronic insane with homicidal tendencies. More than one such patient has been discharged, and committed fresh assaults.

No lunatic, guilty of murder, assault, or any other crime, should be discharged except upon a retrial to determine recovery. No lunatic should be permitted to roam at large unless someone is legally responsible for him. In such event the so frequent crimes by "harmless" lunatics would cease, since that tender spot, the pocket of the lunatic's guardian, would suffer. No lunatic having property should be discharged as recovered from the insane hospital until the question of his recovery has been retried before the Probate Court Judge. More money is stolen from lunatics taken out of hospitals than ever was stolen by the mythical

method of putting sane men therein. One phase of the subject is a disgrace to modern civilization. The average layman looks upon the recovered insane with fear, mistrust, and suspicion. Many a poor mortal is driven back into an insane hospital by the weight of the crime of having once suffered from a curable insanity. This cruelty is hardly surprising when it is remembered that among the lower Irish and Italians insanity is still looked upon as a demon possession, and from exorcisms certain local clergymen reap a golden harvest. An Aid Society for discharged patients is needed in Cook County.* Many a man and woman could be saved from lifelong insanity thereby. The history of insanity in Cook County shows:—

First: That the speculative emotional element and its resulting struggle for precedence should be driven from its school, academic, business, religious, and political life.

Second: That the social life of the population needs attention. The sanitary surroundings and social conditions of the poor should be improved, nor do the sanitary surroundings of the rich need less attention.

Third: That these improvements, while diminishing insanity, crime, and drunkenness to a certain degree, just skim the surface of the evil. Most degenerate lunatics are imported. Prevention must begin ere the immigrant, whether of his own accord or at the mandate of his Government, leaves Europe. No one should be permitted to immigrate to the United States who cannot give a clean bill of health as to hereditary, nervous, or other disease, criminality, pauperism, in himself and his immediate maternal and paternal ancestry. The Government of the United States was founded by well-balanced men, but unless measures of this kind be taken Americans will sink to the level of the Romans, who cared for nothing but "bread and circuses." Circuses are common enough in our legislative halls, but are not yet regarded as necessary elements of government.

Fourth: All laws respecting the insane need revision, and to secure proper revision the whole question of provision for the insane requires thorough legislative investigation. More perfect inspection than that performed by the Illinois State Board of Charities is needed. All restraint should be registered (as required by law in other States) in a book open to public inspection, giving date, reasons, and dura-

* Like the English After-Care Society.

tion. Restraint should be applied only on prescription of the physician. When practicable, all restraint should be abolished.

Fifth: That all county insane should be placed under the care of the State, since under the existing state of things the insane are maltreated, and their maintenance costs enormously, since universal experience in the United States has shown that county care is synonymous with brutality.

Sixth: That strict and frequent supervision of the insane is absolutely necessary. Mr. Geo. William Curtis has said: "The surest defence of every great public interest is the turning on of the great public light. To every community as to every individual, with a persistence that cannot be denied, calling out of the divine heart comes the old question, Where is Abel thy brother? John Howard heard and answered. Chiaruggi, Pinel, and Tuke heard and answered. Gardner Hill, and Conolly heard and answered. Elizabeth Fry and Dorothea Dix heard and answered. The conscience and good sense of other communities have heard and answered. We hear the question, let us take care that we answer promptly, bravely, wisely."

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[1] "Ill., Mass., New York, Ohio, and Pa. States Board of Charities' Reports," 1868-1886; "Anchorage (Ky.) Lunatic Asylum Investigation Report;" "New York Legislative Documents," 1882-84.

[2] Compare Spitzka, "Race and Insanity," "Jour. of Ment. and Nervous Disease," 1880; and Kiernan, "Alienist and Neurologist," 1886; "Journ. of Ment. and Nervous Disease," 1886; "Neurological Review," 1886.

[3] "Klin. Ahbandl. über die Psych. Krankh.," 1874. The term was first used in this connection in English by Spitzka ("Jour. of Ment. and Nerv. Dis.," 1878, p. 532).

[4] Spitzka, "New York Medl. Gazette," May 15th, 1880.

[5] "History of England," "Remarks on Grandral."

[6] Godding, "Two Hard Cases."

[7] "Chicago Med. Review," Vol. iv.

[8] "Jour. of Ment. and Nerv. Dis.," 1883.

[9] "Jour. of Ment. and Nerv. Disease," 1886.

[10] "Boston Med. and Surg. Jour.," Vol. ii., 1880.

[11] "Alienist and Neurologist," 1883.

[12] "Amer. Jour. of Nerv. and Psych.," 1883.

[13] See also "Forensic Aspects of Folie à Deux," "Alienist and Neurologist," 1883.

[14] "Mental Diseases."

[15] "L'uomo Deliquente."

[16] "Letter to the Emigrant Princes."

[17] "Burke's Letters to his Son."

[18] "The Parisians."

[19] "Suetonius."

[20] "Macaulay, "Hist. England;" Green, "Hist. English People;" Jacoby, "Studies in Selection;" Ireland, "Blot on the Brain."

[21] "Saints' Rest."
[22] "Lothair."
[23] "Neurological Review," Vol. i., No. 1.
[24] Carlyle describes France during the Revolution as having the same attraction for paranoiacs as the U.S. have permanently ("French Revolution").
[25] "Chicago Med. Journal and Examiner," April, 1886.
[26] *Ibid.*, Nov., 1885.
[27] Dr. E. C. Spitzka, "Cooper Union Address," Dec., 1879.
[28] Macaulay, "Political Georgics," 1828:

"... And *boodle's* patriot band,
Fresh from the leanness of a plundered land."

[29] "Boston Med. and Surg. Journ.," 1875.
[30] "Chicago Daily Times," Dec., 1875.
[31] "Chicago Med. Jour. and Ex.," Nov., 1885.
[32] *Ibid.*
[33] "Report Ill. State Board of Charities," Jan. 28th, 1866, p. 6-16.
[34] Chicago Dailies, Oct. to Dec., 1884; "Chicago Daily Times," Oct. 25th, 1884; "News," Nov. 16th, 1884; "Tribune," Nov. 29th, 1884.
[35] "Alienist and Neurologist," Jan., 1887.
[36] "Chicago Staats Zeitung," 1881; "Daily Times," 1882-3.
[37] "Neurological Review," Vol. i.

Folie du Doute. By P. J. Kovalewsky, Professor of Psychiatry and Neurology at Karcov.

Every "psychiater" knows that "psychoses" are divided into two great groups: primary "psychosis" and hereditary "psychosis." These two groups differ very much in their manifestations, in their course, and in their final issue. Such a classification can therefore be considered as rational, logical, and satisfactory.

But even with such a division each separate group constitutes a very complicated whole, embracing a great number of varieties, hereditary or acquired. It would be interesting to study the connection existing between these varieties and their extent. Such a genesis and affinity can only be based on clinical observations, which, though apparently abundant, are nevertheless still insufficient.

For the present I limit myself to studying and following up the genesis of one small branch of "psychosis" known by the name of "delusion of doubt" (*folie du doute*).

Hereditary "psychosis," or "psychosis" by degeneracy, we divide into two great groups. The origin of one lies in modifications in the central nervous system, permanent organic modifications which admit of macro- or micro-scopic investigations, and of others resulting from modifications which in most cases are not accessible to the present methods of investigation, and are, in consequence, better known

under the name of dynamic modifications. To the first group we apply the denomination idiocy, from which spring idiotism, cretinism, imbecility (imbecilitas), and frequently moral insanity. The second group has for its basis the neurasthenia, which gives rise to an indefinite number of various kinds of psychosis and neurosis.

Neurasthenia is not in itself psychosis. It is only the soil from which grow up degenerative psychosis or neurosis. It forms the background from which we can draw the clinical picture of every nervous degeneracy.

Indeed, when emotional phenomena prevail in neurasthenia, pathophobia or fits of morbid fear are developed, mental derangements will predominate, uncontrollable obsessions (Zwangsvorstellungen, Westphal; Grübelsuche, Griesinger) will be developed. Vital senses, when disorganized, produce hypochondria or hypochondriacal lunacy; when reflex disorders prevail epilepsy is developed; when emotional (emotif) and vaso-motor derangements prevail, hysteria shows itself, &c. It is questionable, I think, whether hysteria and neurasthenia can exist together. These two kinds of neurosis are certainly very closely connected. They are sisters. They can exist together, and they can transfer themselves from one to the other, but whether one forms part of the other, or whether the two constitute two distinct illnesses, is a question which remains to be solved. It is indisputable that neurasthenia is more common in men, as hysteria is in women, but it is impossible to assert that it exclusively depends upon the peculiarities in the organization of the sexes, as we often meet with neurasthenia in women, and hysteria, in all its forms, in men.

Children of psychopathic and neuropathic parents inherit from them either a decided organic modification of the central nervous system or only a predisposition of the central nervous system to psychosis and neurosis. In the first case they must be classed in the group of idiocy, whilst in the second case, neurasthenia or hysteria spring up from them.

Many neurologists attribute the cause of neurasthenia to the bad nutrition of the nervous system, from which results unstableness in its functions, which would seem to show that this state of the nervous system is very apt to undergo a transition leading to more serious disorders.

I allow myself a small digression. I do not consider neurasthenia as purely hereditary, for it may be the con-

sequence of drunkenness, syphilis, venereal excesses, intellectual overwork, an excited life, conditions of social life, physical exhaustion, traumatism, &c. But, firstly, in a great majority of cases, these influences may be considered as of an auxiliary nature in individuals with a hereditary predisposition; and, secondly, they appear as the primary and essential causes in a very small number of cases. We shall bear in mind only the cases of hereditary neurasthenia.

Neurasthenia is a very common disease. Beard * calls it the American disease, in consequence of the large number of people suffering from it in America. But this is not quite correct, for at the present time we Russians, as regards the number of neurastheniacs in our country, could not find a rival anywhere else, and we could, therefore, with more right call neurasthenia a Russian disease.

Having inherited from their parents an unstable nervous system, neurastheniacs preserve during their lifetime a predisposition to serious neurosis and psychosis of all kinds. Fortunately, the largest majority of such individuals under the influence of favourable conditions of life, or of successful treatment, remain with the predisposition, but with nothing worse. The large majority of men continue to live without falling ill of permanent neurosis and psychosis, and die in "a normal condition of mind." It is clear that in all such cases the nervous affection remains in a latent state. However, although they themselves, in consequence of favourable circumstances, have not suffered from these diseases, they can transmit them to their progeny, and therein lies the explanation why neurosis and psychosis can be transmitted by the grandfathers to their grandchildren.

But in consequence of the unstable state of their nerves other neurastheniacs cannot support the battle of life, and they are subject to serious affections.

On such a pathological soil the neurastheniæ can develop themselves, or only the elements of an abnormal state of the mind, such as uncontrollable obsession (Zwangsvorstellungen), or morbid fear, agoraphobia, claustrophobia, oicophobia, and, or only, hallucinations, &c.; but sometimes we meet with neurosis and psychosis completely developed, such as "hebephrenia," primary insanity, *folie du doute,* &c.

If we study these two categories of the subsequent manifestations of neurasthenia, namely, the primitive elementary

* Beard, "Nerreenschneäche."

disorders, and complicated psychosis, we find that there are more cases of the former than of the latter.

It is likewise a noteworthy fact that complicated psychosis and neurosis engendered on neurasthenic soil almost always go through a stage of elementary disorders, and seem to be the further development and the completion of these disorders brought to a state of perfection.

Thus, the case presents itself as follows:—In consequence of an hereditary taint in a very great number of cases, instability of the nervous system shows itself, *i.e.*, neurasthenia. This is the first stage of nervous degeneracy of mankind in the shape of abnormal nervous phenomena.

With most of these neurasthenic patients these pathological phenomena do not become developed further. With others these disorders continue to progress, and they enter the second stage of pathological manifestations: impulsive ideas, morbid fear, anxieties, præcordialis, &c. Thus the second stage of nervous degeneracy consists in the manifestation of elementary disorders of mental activity on a neurasthenic soil. The possibility of the development of pathophobia on neurasthenic soil (in the shape of agoraphobia, &c.) has been shown by Beard, Tamburini,* Troitsky,† A. A. Takoblew,‡ and others.

In the great majority of cases this class of patients recover, but with some the illness progresses and enters into the third stage of degeneracy—fully developed psychosis and neurosis, such as primary madness, *folie du doute*, &c. Thus degenerative psychosis constitutes the third or final stage of degeneracy in general, and before running its course it almost always goes through the first and second stages.

Such is the general view which we take of degenerative psychosis. Each of them, until the last stage, pursues a more or less known course.

For the present we shall limit our task to the study of one of these morbid states, "*la folie du doute*," which has been so admirably treated by Professor Legrand du Saulle.§ First of all, we consider the delusion of doubt as a degenerative psychosis, and, therefore, as the third stage of nervous degeneracy, and, according to our opinion, it must be preceded by the first stage, neurasthenia, and by the second,

* Tamburini, "Rivista Sperimentale, di freniatria," 1883.
† Troitsky, "Russian Medicine," 1885.
‡ A. A. Takovlew, "Arch. Psych.," vii, 2.
§ Legrand du Saulle, "La folie du doute," 1875.

pathophobia, *la folie du doute* itself constituting the third stage.

We shall not stop to describe neurasthenia, as this morbid state is known to everyone. It appears in early childhood, embracing the whole nervous system—the mind, the vital senses, the organs of sense and motion, and the vegetative functions. On this background of continually-changing nervous anomalies, there appear from time to time short attacks of fear, which have something particular, and have their own peculiar physiognomy. These phenomena were, for the first time, carefully described by Westphal * under the denomination of agoraphobia. Flemming † thinks that this morbid state was first described in the year 1832, and Höring‡ ascribes it to Alexander Balbinus Lombardus, who, in 1512, observed the vertigo in public places. However, the first careful clinical description was made by Westphal, and, amongst French authors, it is Legrand du Saulle§ who has masterly treated this subject. This state generally occurs when an agorophobic crosses a place or a street, when he feels intense fear that he will not be able to accomplish this act. The respiration becomes short. The throat is seized as it were by nippers. The heart palpitates, and gets benumbed. The hands, feet, and the whole body tremble. The knees bend. The patient is ready to fall. He would cry, but he is deprived of his voice. He feels as if he was far away from the whole world; and has an everlasting feeling of intense horror; and, at the same time, he is perfectly conscious of the absurdity of what he feels. A trifling circumstance is often sufficient to free the patient from this dreadful state of fear—the presence of a child, be it even a year old (Cordes ||), a passing carriage, a stick, an umbrella, the light of a lantern (Legrand du Saulle). Patients fall into this state at the sight of open places, broad streets, churches, theatres, large rooms, &c.; others when they find themselves near an open window, looking into a square, or even at the only thought of open places. Considering that in all these cases the causes of fear were open places, Westphal called this disease fear of open places, agoraphobia (Platzfurcht).

* Westphal, "Archiv. für Psychiatrie und Nervenk.," Vol. iii., No. 1.
† Flemming, "Allgem. Zeitsch. f. Psychiatrie," Vol. xxix., No. 2.
‡ Höring, "Allgem. Zeitsch. f. Psychiatrie, Vol. xxix.
§ Legrand du Saulle, "Etude clinique sur la peur des Espèces," 1878.
|| Cordes, "Arch. Psychiatrie," Vol. iii., No. 3.

However, further clinical observations showed that such fears manifest themselves not only in the presence of open spaces, but that there are likewise some neuropates who are liable to the same fears at the sight of enclosed places, a closed room, a workshop, &c. Professor Ball * described this state of morbid fear under the name of claustrophobia, and Raggi † (Milan) under the name of clitrophobia. This same pathological state had been already described by Morel,‡ one of whose patients could not bear the sight of the rooms in the lower floor.

As this same kind of fear shows itself in patients at the sight of open, as well as enclosed places, it would be more rational to unite these two diseases under one common denomination. This Beard did, calling them " topophobia," fear of places.

But this is not all. In many cases morbid fear shows itself under circumstances which have nothing in common with spaces. Brück relates the case of a clergyman who fell into a state of terror when his head was uncovered. Whilst under a tree, or an umbrella, he ceased to be subject to this state of fear. Cordes'§ patients were subject to the same fears in crowds. A patient of Krafft-Ebing feared to break her teeth. I knew the case of a young lady who was in a state of terror whenever she was in a carriage. She fancied that her mother and children were under the wheels. The uncle of this patient is an agoraphobic, her grandmother had a morbid fear of water, even in a glass. With certain patients the same fear prevails at the sight of needles, glass, dirt, &c.

I know a lady who during her pregnancy could not bear the smell of tobacco, and subsequently the sight of her husband, whose presence caused her to fall into a state of prostration and despair, and brought on vomiting. Soon after she feared water, whilst washing or drinking, and soon after the mere thought of water brought on fits of fear and anguish. Subsequently she could not bear the sight of her own hands. When she saw them suddenly she used to have fits of agitation, anguish, fear, and despair. Such a state of things lasted the whole second month of her pregnancy.

* Professor Ball, " De la Claustrophobie Annal. Medical. Psychol.," 1879.
† Raggi, " La Clitrophobie," " Gazette des Hopitaux," 1878, No. 49.
‡ Morel, " Du délire émotif. Arch. génér de Medecin," 1866.
§ Cordes, " Arch. f. Psychiatr. und Nervenk.," Vol. x., No. 1.

A great many other cases of morbid fear have been described by several authors. According to the circumstances under which these cases of fear were subjected to observation they received different names. Thus appeared the denominations of agoraphobia, fear of open spaces; claustrophobia and clitrophobia, fear of enclosed spaces; topophobia, fear of space; astrophobia, fear of lightning (Beard); anthopophobia, fear of crowds; monophobia, fear of solitude; panphobia, fear of everything; misophobia, fear of dirt (Hammond); vikophobia, fear to return home (Salemi-Pace); hypsophobia, fear of heights (Arndt); botophobia, fear of cellars, &c. And until now some authors are describing various morbid fears, to which new denominations are given, and will continue endlessly to be given.

The feeling of fear is natural to man (impulse, unpropitious circumstances), and when there are reasons for it, has nothing pathological in itself. It may be considered pathological only when the causes which brought it on are in disharmony with it.

In the present case, its pathology consists in the fact that the fits of fear are caused by an absurd and abnormal impulse, the patient being perfectly conscious of their absurdity. These phenomena come within the full meaning of impulsive feelings (Zwangsempfindung). We have already seen that morbid fear can be produced in different people by various causes and circumstances, and we should be obliged to give distinct names for each kind of morbid fear, but as the number of cases and phenomena in the world is infinite, we incur the danger of rendering endless the terminology of morbid fears; and we suggest, therefore, to bring all these different kinds of morbid fears under one denomination—pathological fear, or pathophobia.

In some individuals the cause which brings on an attack of fear continues to be the same throughout their lives; whilst with others the causes change. I have, for instance, observed a case * in which the patient had attacks of fever in open and enclosed places. The aforementioned case of a lady who feared her husband, water, and her hands, is an instance of fear brought on by different objects.

I shall quote another case which has come within my own personal observation. A lady belonging to the aristocracy,

* P. J. Kovalewsky, "Arch. Psychiatr." Vol. vi., p. 2.

very nervous, with psychopathical heredity, had a child. She had the imprudence to let this child go to her parents, a considerable distance off. This made her very anxious. She could neither sleep nor eat well. A fear of dirt made itself manifest in a short time. She used to wash her hands constantly. Everything she touched soiled her, and required to be cleaned. The skin of her hands began to pain her, as she used to wash them more than 200 times a day. The contact of any object, whatever it might be, even her own body, and the mere thought of touching something implied the necessity of washing. She soon began to wash her dresses; first her cotton, and then her silk and velvet dresses; the uniforms of her husband, and fur coats. It became necessary to put her under restraint. However, six days later the child returned, and she recovered.

We shall mention another case of Dr. Baillarger. A gentleman on meeting women invariably asked his companion whether the lady was pretty or not, and, in order to tranquillize the patient, it was necessary to answer in the negative. However, on one occasion, when starting for a long journey, at the time the train left he omitted, on meeting a lady, to put the usual question. When he was settled in his place late at night he put the question to his companion, who had the imprudence to say that he had not noticed the lady. The dreadful consequences which this answer produced could only be calmed by returning to Paris for the specious purpose of ascertaining the fact concerning the lady.

These cases prove how the phenomena of pathophobia can become more and more complicated, and pass over into the third stage of degenerative psychosis—the delusion of doubt (*folie du doute,* Legrand du Saulle).

Before describing this third stage I shall point out another fact which, until lately, stood isolated, but which must be considered as a link in the chain of stages previously mentioned.

It has long ago been known that in the pathology of mind there are cases when patients did not move their hands or feet under the influence of a false idea that their limbs were made out of wood or glass, and that they would break them. I know of a case, which came under my personal observation, of a patient refusing to work because his hands were of gold.

In 1867 Russell Reynolds * published a case of paraplegia resulting from a sickly fancy or fear of an illness. Analogous cases were observed by Prof. Erle,† Prof. Tchiriew,‡ and others. It is remarkable that all these patients could move their paralyzed limbs whilst they were in bed, but were unable to walk. Charcot § observed similar phenomena in hysterical subjects, and I noticed them in many persons that were in a state approaching to hysteria. Dr. Sovetow‖ described the case of a patient who could freely move his feet in bed, could go up and down a staircase, could walk on a floor (divided into squares), but who fell when he had to walk over a smooth floor. He was unable to walk from the fear of falling. Sovetow, with the view of forcing this patient to walk, had a stick made with a transverse piece of wood adjusted at the end in the shape of a cross, so that at every step the patient had to overstep this transversal piece of wood. By these means the patient was made to walk.

I had under my personal observation ¶ a case of tabes dorsalis, the cause of which was the fear of falling ill of this malady. The patient was decidedly neurasthenic from childhood, and during the last five years had undergone great misfortunes. His brother-in-law, father of eight children, died of tabes. The sight of this living corpse struck so forcibly the imagination of my patient that he had a constant dread of being seized with the same illness, the symptoms and development of which were well known to him by the sad case he had before him, and by the study of books. He was constantly watching for similar symptoms in himself. He soon felt pains in the back, and sudden and violent pains in the extremities, and unsteadiness in the gait. He could not stand with his eyes closed; pains round the waist, and disorders of the sphincters. After a careful examination of the patient, it became evident that the illness was of an illusionary character, which had been brought on by the dread of falling ill. In a month, under the influence of an anti-neurasthenic treatment, the patient completely recovered.

We believe that these cases can be justly considered as

* Russell Reynolds, "Brit. Med. Journ.," 1867, 5.
† Erle, "Ziemssen's Handbuch Special Pathologie."
‡ Prof. Tchiriew, "Medical Messenger," 1884. (Megucaseckia Brocmunkr.)
§ Prof. Charcot, "Le Progr. Médical," 1885, and others.
‖ S. N. Sovetow, "Arch. Psychiat.," Vol. iii., 2.
¶ P. J. Kovalewsky, "Centralblatt f. Nervenheilkunde," 1885.

forming links between pathophobia and *folie du doute*. It is possible that we may still be in want of some intermediate links, but we hope that clinical investigations will soon complete our knowledge on this point.

The delusion of doubt is not new in science. Cases of this kind were known to Esquirol.* Falrét, *père*,† described them under the name of "*folie du doute*," and so did, after him, the French savants, Parchappe, Trélat, Baillarger, Falret, *fils*, and others.

Something of the kind has likewise been described by Griesinger‡ under the name of "Grübelsucht," or "Fragesucht." But this is not *folie du doute* in its full meaning; it only constitutes part of it. The patients are tortured by a series of absurd questions. For instance, why has man one nose and not two? Why is his hat in his right and not in his left hand? &c. "Fragesucht" is frequently observed in the "*folie du doute*," but it does not characterize the general aspect of this disease.

It is to Legrand du Saulle§ and to Prof. Ball‖ that we owe a complete clinical investigation of this disease.

We shall not give here a full description of this alienation. We shall limit ourselves to stating that the disease presents a series of pathophobic phenomena, often accompanied by uncontrollable obsessions, "Anxietas præcordialis," tic. (Prof. Charcot).¶ The characteristic symptoms of this disease are, according to Ball: (*a*) The presence of consciousness (Doyen** is of the same opinion); (*b*) absence of hallucinations; and (*c*) an imperative want of the confirmation of the patients' doubts by other persons.

(To be continued.)

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* Esquirol, "Maladies Mentales."
† Falret, J., "De la folie morale," 1866.
‡ Griesinger, "Arch. f. Psychiatr.," Vol. i., No. 1.
§ Legrand du Saulle, "La folie du doute."
‖ Prof. Ball, "L'Encephale," 1882, No. 2.
¶ Prof. Charcot, "La Semaine Médicale," 1886.
** Dr. Doyen, "L'Encephale," 1885, No. 4.

The True Theory of Induction. By the Rev. W. G. Davies, B.D., Rector of Llansantffraed, Abergavenny, late Chaplain of the Joint Counties' Asylum, Abergavenny.

It has been said that recognition will come sooner or later to the man who can wait. With the gratifying exception of his long connection with this Journal, the writer cannot say that this has been his experience. In a work named "The Alphabet of Thought," &c., published twenty-five years ago, was contained what he fully believes, after painstaking subsequent research, to have been the foreshadowing, at least, of one of the most important Laws of Thought. The late Dr. Mansel, Dean of St. Paul's, was acquainted with the writer's views, the work mentioned and the chief contents of this essay having been submitted to him, and the writer would here record his gratitude to the late Dean for the unusual courtesy with which he examined their contents. Since, however, the writer's views were strongly opposed to the Dean's, he never expected from that gentleman anything but adverse criticism. This fact has, however, completely failed to shake the author's confidence in conclusions which for nearly forty years he has submitted in vain to the most pitiless scepticism he could bring to bear upon them. Most of Mansel's strictures, together with the passages to which they refer, are here presented to the reader, and also extracts from letters received from the same gentleman bearing on the chief point herein discussed. Replies to both are given, combined with the later views at which the author has arrived.

1. That it is of the highest importance to ascertain how first principles are obtained will readily be acknowledged by every one who is keenly alive to the influence which ideas exert upon the advancement of the human race. To describe the origin of such principles is the object of the following discussion.

The inconceivableness of the negation is by many held to be the test of necessary truth. J. S. Mill, however, in his controversy with Whewell, contends that certain beliefs were once held to be indubitably true, their negation being inconceivable, which beliefs—for example, that the earth could not be round, else objects would fall off its surface at the Antipodes—are now exploded, and, therefore, that such inconceivableness is no criterion of the necessity of a truth.

Herbert Spencer, on the contrary, says:—"Mean what we

may by the word truth, we have no other choice but to hold that a belief which is proved by the inconceivableness of its negation to invariably exist is true."*

After some controversy on this point between these two able psychologists, Herbert Spencer, having been brought to see the variety of meaning which is attached to the term inconceivableness, defines more clearly the cognitions of which we cannot entertain the negation, namely, those "of which the predicates invariably exist along with their subjects."† . . . "The discovery that the predicate invariably exists along with its subject is the discovery that this cognition is one we are compelled to accept." This position, with one modification, Mill accepts. This modification is thus stated by him :—"If the invariable existence of the predicate along with its subject is to be understood in the most obvious meaning, as an existence in actual Nature, or, in other words, in our objective or sensational experience, I, of course, admit that this, once ascertained, compels us to accept the proposition; but then I do not admit that the failure of an attempt to conceive the negative proves the predicate to be always coexistent with the subject in actual Nature." Inseparability between the predicate and the subject in thought, or to the conceptive faculty, Mill holds, does not prove a corresponding inseparability in fact or perception, for the former has often existed, and afterwards proved erroneous, in more than a few instances.

Now if we seek to know the source from which both J. S. Mill and Herbert Spencer derive these, our most irresistible beliefs, we shall find a clue in these forcible words of the latter :—"If there be, as Mr. J. S. Mill holds, certain absolute uniformities in Nature; if these absolute uniformities produce, as they must, absolute uniformities in our experience, and if, as he shows, these absolute uniformities in our experience disable us from conceiving the negations of them, then, answering to each absolute uniformity in Nature which we can cognise, there must exist in us a belief of which the negation is inconceivable, and which is absolutely true."‡ From this conclusion Mill, however, dissents. "If," says Mill, "all past experience is in favour of a belief, let

* "Principles of Psychology." Introduction.

† As in : A straight line is the shortest distance between two points.

‡ The discussion between Mill and Herbert Spencer on this point is ably set forth in the 7th chapter, Book II., "Of Reasoning"—Mill's "Logic," latest edition.

this be stated, and the belief openly rested on that ground, after which the question arises what that fact may be worth as evidence of its truth? For uniformity of experience is evidence in very different degrees. In some cases it is strong evidence, in others weak, in others it scarcely amounts to evidence at all. . . . In the few cases in which uniformity of experience does amount to the *strongest possible proof*, as with such propositions as these, 'Two straight lines cannot enclose a space,' 'Every event has a cause,' it is not because their negations are inconceivable, which is not always the fact,* but because the experience which has been thus uniform *pervades all Nature.*" Mill is here alluding specially to the Law of Causation, the notion of cause being, with him, the root of the whole theory of Induction; but this notion he interprets in the same way as Hume does.

Hume, in his essay entitled, "Of the Idea of Necessary Connection," it is well known, holds that every idea must be derived from an impression, and that in a case of causation we have no impression of necessary connection between the consequent and the antecedent. Whence, then, does the feeling of necessary connection take its rise? Hume's answer is as follows:—"As this idea" (necessary connection) "arises from a number of similar instances, and not from any single instance" (note this), "it must arise from that circumstance in which the number of instances differ from every individual instance." He then points out that customary connection is the only circumstance in which the former case differs from the latter, and this, consequently, must be the sole origin of the feeling of necessary connection. This doctrine, which, in all essential respects, remains with the *à posteriori* school as Hume left it, J. S. Mill endeavours to fortify against criticism, and to expand to fuller dimensions.

Hume's famous doctrine let us proceed to discuss. It is true that in an instance of causation we have no impression or direct perception of necessary connection; but it does not follow that we have no indirect perception of the same. On the contrary, our contention is that we have. J. S. Mill, believing with Hume and Brown that the feeling of necessary connection is due to long-continued association, observes:—"When we have often seen and thought of two things together, and have never, in any one instance, either seen or thought of them separately, there is, by the primary

* This must mean "not always the fact" in a certain class of cases, but it is always the fact in the class of cases here mentioned.

law of association, an increasing difficulty, which, in the end, may become *insuperable*, of conceiving the two things apart."* According to this view, the belief in necessary connection, so called, is the result of habitually finding two things together and never apart. This does, indeed, as in cases of causation, lead to a very strong expectation of future connection between two things, but, as Mill strongly contended, does not establish necessary connection between one and the other. In reference to such attacks as were made upon Hume's doctrine by Reid, Mill argues as follows:—"If there be any meaning which confessedly belongs to the term necessity, it is unconditionalness. That which is necessary, that which *must* be, is that which *will* be, whatever supposition we may make in regard to all other things." To the same effect he continues:—"Invariable sequence is not, therefore, synonymous with causation unless the sequence besides being invariable is unconditional. There are sequences as uniform in past experience as any others whatever, which yet we do not regard as cases of causation, but as conjunctions, in some sort, accidental. Such, to an accurate thinker, is that of day and night."† What Mill holds, then, is that the belief in so-called necessary truth springs from the habit of perceiving that connections exist, notably in causation, which are not only invariable but unconditional, the way to establish this fact being by the Method of Difference, "by which alone," he says, "we can ever, in the way of direct experience, arrive, with certainty, at causes."‡ Thus, then, according to Mill, is that uniformity of experience ascertained which amounts to "the strongest possible proof" and which "pervades all Nature."

J. S. Mill, in his exposition of Induction, exhibits, to our mind, two facts which are specially noteworthy, firstly, that the implicit process of Induction operating in all minds is forcibly drawing him as closely to the correct method as his theory, stretched to the utmost, permits, but, secondly, his theory being only a partially explicit statement of inductive thought, all he succeeds in accomplishing is to bring his sailing ship, so to speak, to tack very closely to the wind,

* Mill's "Logic," People's Edition, p. 157. This is also the view which Prof. Huxley, in his Sketch of Hume ("English Men of Letters") takes of this question. He regards the axiom of causation as "a purely automatic act of the mind, which is altogether extra-logical, and would be illogical, if it were not constantly verified by experience" (p. 123).

† "Logic," People's Edition, p. 222.

‡ *Ibid.*, p. 258.

but no more. It is the steam-ship of fully explicit Induction alone that can tear along into the mouth of the wind—fully explicit Induction being that which is expressed in a perfectly formal dress, and accurately sets forth the spontaneous Induction taking place in the mind of every human being. As a pioneer in exploring the region of Induction, Mill, we believe, has no equal. But a pioneer cannot do more than open a way for others to follow.

2.—Having thus opened the question, we proceed to state our view of the origin of what is called necessary and universal truth. After patient research, extending over a period of nearly forty years, we have arrived at the firm conviction that necessary truth so-called is obtained by a form of reasoning which may be expressed as follows :—

If it is perceived that *this* is connected with *that,* as 4 with $2+2$;

And if it is also perceived that *this* without *that* cannot exist, as 4 without $2+2$;

Then it is mediately perceived that *this* is necessarily connected with *that,* namely, 4 with $2+2$, *i.e.,* cannot (absolutely) exist without it.

This form, we call the Canon of Induction, a Law of Thought constantly in operation, and of a most important character. It is expressed more briefly in the following formula :—

This A is *b* (*e.g.*, $4=2+2$) ;

Minus this *b* is *minus* this A ;

Therefore, this A is necessarily (or *sine medio*) *b.*

Observe that the Canon is a form of reasoning. We have in it a positive and a negative premise; for example, $4=2+2$, this is directly perceived; take away the $2+2$ and you take away the 4, this is also *directly* perceived; but it is by *indirect* perception, by comparing the above data, that we get to know the necessary connection existing between 4 and $2+2$. The Canon, then, seems to be the criterion of necessary truth. According to it, there is no alternative save for a connection among facts, whether of the mental or the physical world, to be proved necessary in character, or not necessary, that is, contingent.

In reference to this Canon, Mansel puts the following question :—"How does the conclusion differ from the second premise? What is the difference between *cannot exist without,* and *is necessarily connected with?* Can we perceive (empirically) *cannot?* We can only perceive *is not.* To go from *is*

not to *cannot,* or from *is* to *must be* requires an *à priori* intuition."

Answer.—The *cannot* is a perceived or empirical *cannot,* just as when one says "I cannot lift this stone;" the difference between *cannot exist without* in the premise and *is necessarily connected with* in the conclusion is this: the former is *directly* perceived, the latter *indirectly;* it is a succinct mode of expressing what has been stated in the two direct perceptions which precede it, the contents of which it summarises. All reasoning is mediate cognition, and the conclusion of an argument, if fully, that is, explicitly stated, should clearly convey this idea. We invite attention to this statement, because it seems to elucidate the fact that the conclusion of the Canon given above means, in explicit language, that *this* is so connected with *that* as not to be able to exist apart from it.*

It has always been held that a necessary truth is virtually universal. Now, it appears that the universality of a necessary truth is inferred from the fact that its contradictory cannot be thought true. Who can think that 2 + 2 (our 2 + 2) can ever equal 5? Let us proceed to explain the reason of this. If it is proved by Induction according to the Canon that 4 must equal 2 + 2, then when, by an effort of conception, we multiply cases of $4 = 2 + 2$, if we would not subvert our *principium*—a conclusion proved by Induction—we are compelled to conceive each case as precisely similar to this, our model. Out of the mould of Victoria sovereigns we can never believe that spade guineas can ever issue. "You say," remarks our critic, in words, the discussion of which is calculated to throw some light on this question, "you cannot conceive that the fact $2 + 2 = 4$, *while thought of as such,* can be also thought of as $2 + 2 = 5$. This is perfectly true, but it is not what I meant. Why cannot I cease to think of the 4 and begin to think of the 5? No one holds that I can believe two contradictory judgments *at one and the same time,* but why, in this case, can I not do it at different times?" My critic admits that $2 + 2 = 4$ *while* thought of as such, cannot also be thought of as $2 + 2 = 5$, but asks "why cannot I cease to think of the 4 and begin to think of the 5?" We answer, because, on his theory (as, of course, he would contend), an *à priori* intuition, and on ours, an induction, would have to be negatived. No one believes two contradictory

* Hamilton's postulate, "That we be allowed to express in language what is contained in Thought," here applies.

judgments at the same time, but why, in this case, our critic asks, "can I not do it at different times?" Because such an alternative is excluded by the nature of the case; for when at any time the supposition is made that $2+2=5$ then will also, without fail, be the time when we shall think of $2+2=4$ as the only believable judgment. At no time can we suppose the negation without being confronted by the correct induction $2+2$ must equal 4, for, indeed, that which contradicts involves that which is contradicted. It seems, then, to be undeniable that every case of this kind proves to be one of attempting, at one and the same time, to hold contradictory judgments, with the result that the inductive judgment is found to be one of the most irresistible and indestructible of even speculative or final beliefs. The law here involved we name the Law of Universalization.

We would here point out a source of ambiguity in the language of the question with which we have to deal. Any truth, it has been urged, if it be in reality what it professes to be, is necessarily true. To say that a truth is contingently true implies that it may be untrue. This, however, is not what is commonly understood by a contingent truth. Contingency is rarely used as a synonym for probability, because many a so-called contingent truth is true beyond all doubt, is, indeed, necessarily true. For instance, it is as undeniably true that a man is smoking while he is doing so, as it is that a whole is greater than its part, and the former of these we call a contingent truth. By a necessary truth, then, must be understood a necessary connection between one thing and another, and by a contingent truth a connection which is not necessary. When by inductive reasoning a connection cannot be proved to be necessary, it is contingent. Necessity and contingency are thus related terms, the whole universe of connections among things, or thoughts, being exhausted by these two alternatives. There are, therefore, in Nature, two kinds of uniformity—the one kind is that which rigidly satisfies the demands of the Inductive Canon, the other that which fails to do so, and yet to which no exception is known. Thus, in the induction—a triangle is a trilateral figure; without being trilateral, it cannot (empirically) be triangular; therefore, a triangle is necessarily a trilateral figure—we have the basis of a notion of uniformity, the negation of which, indeed, cannot be conceived without involving a *subversio principii*, *i.e.*, the subversion of an induction admitting only of the above conclusion. But in the induction—the Atlantic

Ocean is salt, we can conceive the possibility of its losing its saltness without ceasing to be an ocean—indeed, we are able to separate the salt from portions of its volume—so we are forced to infer that there is only a contingent connection between the Atlantic and its saltness.

Having now indicated how necessary and universal connections are known, let us, by way of more clearly elucidating the position herein maintained, proceed to indicate the relation in which it stands to J. S. Mill's doctrine.

3.—That the general is derived from the particular, we hold as strongly as J. S. Mill does. When, however, he contends that necessary connections have not, as a separate class, any existence, we are compelled to part company with him. The source and only source of these truths, he contends, is association, specially controlled by the Method of Difference. We allow that it is impossible to deny to association much of the force which Mill and others claim for it. But we must hold that association cannot be thought sufficient to account for the inconceivableness of the negation of quite recently ascertained instances of necessary connection, say, the few first times that a youthful student of geometry realizes some of the elementary truths of that science. Mill, when arguing in favour of association as the origin of our firmest beliefs, makes use of such expressions as these:—"Long-established and familiar experience;" "old familiar habits of thought;" "when we have often seen and thought of two things together, and have never in any one instance either seen or thought of them separately;" "in cases in which the association is still older, more confirmed, and more familiar;" "a sufficient repetition of the process." Now all these expressions imply that it is not possible to have the notion of a necessary connection without much repetition of experience, and a very considerable lapse of time. But this, we must think, is not true. For we hold that, from a single instance of inductive reasoning, a necessary connection can be inferred; and this can legitimately be extended to a universal connection. Even in early youth, long before oft-repeated and familiar experience can be gained, we feel confident of many instances of necessary connection. That $2+2$ must make 4, the youth, by the implicit action of his reasoning power, very soon feels as certain as he ever will in the course of years. Now it is here maintained that truths thus known do not depend on long-continued association for their necessity, but are known to be necessary connections by Induc-

tion, that their necessity is as evident when first inferred as at any subsequent period; and that the incapacity for conceiving the negation of them to be true is not acquired by habit, association becoming insuperable, but proceeds from the constitution of the human mind, as much as Judgment and its expression by a subject, a predicate, and a copula, proceeds from the same constitution.

Be it known, then, that Induction commences with the establishment of individual cases of necessary connection. Inference from a conclusion thus derived to a similar case, or a number of such cases, involves generalization, but such inference is not formally valid, unless the remotest possibility of an exception is most completely excluded, and this end is not secured, except, as has been described above, by universalization from one or more instances of necessary connection. Particulars can only with perfect validity be derived from particulars, when the latter are instances of necessary connection inductively proved to be such, and, therefore, warranting a universal conclusion that embraces every particular. Thus is the passage from inductive to deductive logic bridged over.

Having thus paved the way for the examination of J. S. Mill's views—more with the object of elucidating our own by comparing them with his, than of criticising the latter—let us proceed to inquire where inference commences in his system. Mill emphatically insists that all inference is essentially from particulars to particulars without the intervention of general propositions. It may prove more satisfactory to acquire these, but they are not indispensable as part of the reasoning process. Coupling this view with his violent denial of the existence of such an important class of connections as the necessary, his inductive system differs materially from that propounded above. Induction, according to Mill, is purely and simply generalization from experience, resulting from the irresistible force of association.

In both the Canon of the Method of Agreement and that of the Method of Difference—in which, if anywhere, we ought to find the formulation of the essential points of his system—J. S. Mill requires *two* or more instances, but at least *two* which agree with or *resemble* each other. In explanation of the Method of Difference—the more cogent of the two Methods—Mill makes the following statement:—"The two instances which are to be compared with one

another must be exactly *similar* in all circumstances, except the one we are attempting to investigate."* So there can be little doubt that similarity is, by him, made the ground of inference. Indeed, his reiterated declarations that all reasoning is essentially from particulars to particulars, *i.e.*, from these to their *like*, admits of no other conclusion. "In the strictest induction, equally with the faintest analogy," he plainly declares, "we conclude, because A *resembles* B in one or more properties, that it does so in a certain other property."† "It seems, then," says Jevons, "that the universal type of the reasoning process wholly turns upon the pivot of resemblance,"‡ according to Mill, he here means; and of himself, the inventor of that ingenious toy —the Logical Abacus, this is doubly true. But this doctrine, be it known, seems to us quite erroneous.

4.—Since the Laws of Association have obtained full recognition, the Law of Contiguity is found to occupy a leading place among intellectual processes. Under the head of this law come Differentiation, the Whole of Comprehension, the Singular or the sphere of Things. It is true that this law never operates apart from the Law of Similarity, but the latter, as we shall see, has two fields of operation, one in advance of the other. The Law of Contiguity, as such, has but a singular number, whereas the Law of Similarity has both a singular and a plural number. Now the theory broached in this essay implies that, fundamentally, Induction does not involve the comparison of two or more similar cases, but can be realized in the Whole of Comprehension, in which all thought, all reasoning, is strictly singular, there being no generalization from this case to that like case. This latter process is the *second* step in inductive reasoning, not the *first*.

"It must be acknowledged," says Reid, "that the objects we perceive are individuals. Every object of sense, of memory, of consciousness, is an individual object." "This," observes Hamilton, "Boethius has well expressed—*Omne quod est, eo quod est, singulare est.*"§ "As the multitude of common nouns," says Cardinal Newman, "have originally been singular, it is not surprising that many of them should so remain still in the apprehension of particular indivi-

* "Logic," People's Edition, p. 256.
† "Logic," People's Edition, p. 365.
‡ Mill's "Philosophy Tested," "Contemporary Review," Jan., 1878, p. 263.
§ Hamilton's "Reid," p. 389.

duals . . . . The terms of a proposition do or do not stand for *things*. If they do, they are singular terms, for all things that are are units."* To the priority, in the Order of Evolution, of the singular to its related general knowledge, we have thus drawn special attention, because our contention is that the first step in Induction is not generalization from experience, but reasoning solely in the singular Whole of Comprehension.† We are fully aware that, in Singular Judgment, as in every other mental process, the Law of Similarity is prominently operative; that is, the conscious manifestations of the present moment are judged to be identical with the latest, later, late existence of the same; an essential condition of all knowing and feeling being this manifestation of past and present consciousness in one present picture composed partly of presentation, partly of representation, partly of perception, partly of memory. But here take special note, that in analyzing the inductive process a broad line should be drawn between likeness as occurring in individual continuity relative to past and present, and likeness as occurring among a plurality of individuals. Although the singular can be realized solely as a continuous thread of similar presentations, yet the fact must not be overlooked that the general involves two or more such singulars or chains of identity. There is, therefore, a higher degree of logical evolution to be detected in the latter than in the former, namely, that which in grammar takes the form of the plural number, in logic, of generalization and classification.

(*To be continued.*)

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* "An Essay in Aid of a Grammar of Assent," p. 22.

† See the writer's latest article in this Journal, "The Border Land between Physiology and Psychology: Singular Judgment," July, 1880.

Cocaine in the Treatment of Mental Disorders. By Dr. C. Heimann, of Charlottenburg, Berlin.

Paper read at the 59th meeting of the Association of German Scientists and Physicians in the section of Psychiatry and Neurology.

Certain therapeutic effects upon the human organism ascribed to cocaine,* occasioned me to make use of the drug in suitable cases of psychosis and psycho-neurosis. Stimulant action and exhilaration (Euphoria) on the one hand, and on the other depression of undue sensitiveness, these were the effects I looked for from the alkaloid. Unfortunately, I am able to record scarcely a single case of certain and permanent cure following the use of the drug.

In melancholia, without hallucinations, cocaine was ordered in doses of 0·01 gramme thrice daily; the dose was increased up to 0·06 gramme (in English weights gr. $\frac{1}{7}$—gr. $\frac{6}{7}$). At the end of a fortnight the treatment was obliged to be abandoned on account of failure of health, due to anorexia; the drug had been quite without effect on the psychosis. No secondary effects were witnessed with the exception of acceleration of pulse and dilatation of pupil, both of which lasted some 3-4 minutes. The small doses were chosen in order to avoid the production of hallucinations.

In melancholia with hallucinations cocaine was given in doses of 0·2 grms. (3 grains) about thrice daily, again without success. One of these latter patients suffering from hypochondriacal delusions, stated that for a very short time after taking the drug (1-2 minutes) he felt easier. After 14 days, when no advance had been made, but on the contrary, complete anorexia had supervened, the drug was stopped. Another, a young man, who during three months that he had been in the asylum had not spoken a word, and had had to be fed, though without resistance, and in general was completely apathetic, the same in the third week of treatment became suddenly the subject of strongly-marked delusions, began to speak to his fellow-patients, and developed a much livelier manner. The improvement continued from that day, and this in spite of discontinuance of the drug; the patient was in a short time discharged cured. Possibly in this case the improvement was accelerated by cocaine.

* Wallé, "Aphoristic Contributions to the subject of Opium Antidotes;" Aschenbrandt, "Physiological Action of Cocaine;" Hepburn, of New York, "A Few Observations on Cocaine Action;" Obersteiner, "Concerning the Internal Use of Cocaine;" also Marselli, Buccola, and others.

To a young woman, who for a period of eight months had suffered from melancholia, and had made the most serious attempts at suicide, and resisted being fed with all her energy, so that the continuous use of the stomach or nasal tube was necessitated, supplemented or replaced by nutrient enemata, all other likely methods of treatment having failed, cocaine was administered subcutaneously in doses of 0·02 grms. ($\frac{2}{7}$ grain). The patient expressed herself as feeling better, "so light in the head." Five minutes from the injection an acceleration of pulse amounting to 30-40 beats in the minute occurred, and the patient became very maniacal. This condition of excitement was taken advantage of to administer food in the natural way; this was done successfully. The excitement lasted for about $\frac{1}{2}$ to 1 hour, after which the patient relapsed into her former state. The repetition of the experiment gave the same result on the second and third days, but after that it failed even with increasing dose. In the sequence, the patient had to be watched in order to prevent suicidal attempts, and forced nutrition was required, but about fourteen days after the drug had been suspended improvement set in, and proceeded ultimately to a complete cure; but, as is clear, this was spontaneous, and in no way related to the use of the drug.

To test the vaunted influence of cocaine on the motor centres, the drug was administered subcutaneously in doses of 0·2 grms. (3 grains) per diem, to two patients suffering from katatonia; the drug was continued for several weeks without the slightest effect.

Finally, even in cases of hypochondriasis, neurasthenia, and hysteria in which I looked for great success, having regard to the exhilarant effects described, even here there was complete absence of any obvious or permanent improvement. The hypochondriacal patient, who hails with gladness every new remedy, was soon obliged to complain, and with justice, of anorexia. The subject of neurasthenia complained more and more of weakness, being unable to take sufficient nutriment. In hysterical patients besides anorexia, which, by-the-bye, is not to be disregarded, owing to the frequent coexistence of anæmia, there occurred attacks of vertigo, which soon lessened their faith in the medicine. From these, my observations, I am constrained to deny to cocaine a place in the therapy of mental disease.

Concerning the use of cocaine in the treatment of the opium habit, I am able only in part to corroborate the

experience of Erlenmeyer.* On the other hand, my experience does not quite accord with that of Smidt.† The subjects of the combined morphia-cocaine habit received morphia in rapidly diminishing quantities, whilst the cocaine was increased till the morphia craving had disappeared. Then the cocaine was diminished down to zero. Symptoms due to the withdrawal of the morphia were, on this plan, observed only during the first few days, and were only very slight, *e.g.*, chilliness, sneezing, insignificant attacks of diarrhœa, which disappeared of themselves. On the withdrawal of the cocaine, there was no immediate appearance of any new symptoms, but a few days later an insatiable hunger. As to relapse, my experience was that the morphia-cocaine habit, or the morphia habit simply, was resumed. I must add that hitherto I have been unable to determine a permanent advantage from this mode of treatment; on the contrary, the use of cocaine during the withdrawal of morphia soon manifested its deleterious effects on the mental state.‡

These deleterious effects are of the following nature:— After the protracted use of cocaine in larger or smaller doses, subcutaneously or by the mouth, also after the use of coca leaves, the first symptoms to arise were, according to the statement of the patients, who, for the most part, were colleagues, an increased secretion of the sweat and sebaceous glands, also desquamation. A constant accumulation of dirt under the nails, probably in consequence of the above, was observed, and this in spite of frequent cleansing. Complaint was also made of an itching of the skin, suggesting the presence of vermin; failing to discover such, the patients soon become persuaded (hallucinations making their appearance) that the itching is produced either by an external invisible power or by organisms which go in and out of the skin. Larger and smaller insects of variable colour would then become visible, and in two cases (both colleagues) these were actually seen under the microscope (microscopic visual hallucinations!). A third, also a colleague, was unable to make this observation since the people at his lodgings had damaged his microscope of a purpose!

* "On Cocaine Craving."

† "On Cocaine Craving and Further Observations on the use of Cocaine in Morphia Habit."

‡ Geissler, "Instances of Poisoning from Cocaine;" Comanos Bey, Cairo, "The Effects of Large Doses of Cocaine on the central Nervous System;" Heuse and others.

In fact, the microscope was unusable, owing to extreme dirtiness, such as characterizes the belongings of cocaine eaters in common with other demoralized beings. Hallucinations of hearing would now, as a rule, appear, the patients hearing remarks made about the creatures infesting them. The perverted sensations, as also the hallucinations of sight and hearing, become more and more marked. The patients seek continually for new explanations of their symptoms, and arrive at the most absurd conclusions. They think they see holes in the walls and ceilings, they see wires in the air, which are drawn by invisible power in all directions, and again these disappear; they are conscious of electric and hypnotic effects, &c. Hallucinations of taste and smell do not arise constantly. On the basis of these illusions of the senses, there gradually arise fixed ideas of insanity which are in process of time built up into a system. These delusions appear at first sight to be of the nature of persecution, but on a more close examination they are found to differ essentially from the current ideas of persecution. The patients think they are being followed, it is true, but they do not think that this is with a view to harm them, but on the contrary that it is for their own advantage or for that of the world at large. Thus one patient was under the impression that he was being constrained to undergo treatment for his morphia habit. As, however, he objected to interference with his own freedom on any grounds whatever, he sought to withdraw himself. To throw dust in the eyes of his pursuers, he even presented himself at our asylum and arranged about his reception. Thereupon, in the dusk, he left the asylum, did not return home, but passed the night in an hotel. Since, however, his symptoms did not diminish in the new abode, he fetched his personal effects from his dwelling, went to the station and took a ticket. Then, having seen his effects off to their destination, he drove to another station, and took train in an opposite direction. Another patient thought he was being forced into making a grand discovery. He had already detected the cocaine insects, and having also seen them on the hands of those with whom he had come in contact, he had thus discovered the contagious nature of the disease. Patients thus infected, and himself also, he treated by subcutaneous injections of weak salt solution, which effectually disposed of the insects. A third thought himself pursued by Indians, who wished to make him marry a rich Bolivian lady. I have already spoken of the microscope which was out of order

and had been purposely damaged by the people of the house in order that the patient might not distress himself by a clearer vision of the supposed insects. The same patient travelled from place to place, thinking himself pursued by the authorities, who were endeavouring to put him in ward so that his property, which was being drained by the large expenditure for cocaine, might be preserved for his children. Patient was touched by this thoughtfulness on the part of authorities, but could not bring himself absolutely to sacrifice his own personal freedom. Another patient discovered that the people around him broke, bent, and blocked the needles of his Pravaz syringe, that he might thus be prevented from administering the drug to himself. It is true they knew well how much good the injections did him, how much they strengthened him mentally, how, by virtue of them, he was enabled to work miraculous cures, but the police had called upon them to prevent the injection of the drug. Many patients of his had given him hints by looks and words. He had also cast out the same, it not being necessary, thank God, for him to practice. In the end he took down his professional plate from the door. Asked why the police were pursuing him, he answered: "If nowadays a man do not practice and prescribe exactly according to the rules of the art, the authorities are of opinion that they must protect the public." That he might give no ground for offence to the authorities, he removed his doorplate and gave up his practice.

To be brief, the patients, in the sequence, become more and more excited, they finally resort to weapons to protect themselves and to frighten their persecutors, and their condition may develop into acute mania. The patients are dangerous to the public, and they are mostly sent by the authorities to a *closed* asylum.

The appearance of the cocainists is as follows: The tint earthy, the pupils widely dilated, the eyes deep-set and showing circles around them. In their deportment they manifest increased self-importance, they overrate their own powers, and furnish frequently excellent examples of the well-known punning spirit of maniacs, *e.g.*, a colleague, who, on account of his violence, had to be isolated, asked if it was intended that he should thus study a new cellular pathology? !

On discontinuing the cocaine, the patients become quieter, fresh delusions cease to appear, but the older ones only disappear very gradually. The patients believe in the reality of their hallucinations longer than is apparent, since they

soon learn to conceal them. The insane fixed ideas fade in like manner only gradually.

When these morbid symptoms have quite ceased the patients do not show any special defect in the spheres of thought and judgment, and no gaps are apparent in their memory. In like manner their discursiveness in speech and writing disappears almost completely.

Nevertheless, especially in cases of prolonged use of the poison, the cure may have to be regarded as relative only, as a cure with so-called defects. In the spheres of sensation and of volition considerable damage has been sustained, the patients lie when they open their mouths, they steal on the first opportunity, and they desire to do that which they are unable to perform. They are irresolute in their action, and, should they have begun anything, their activity is of the shortest duration. In their being they become apathetic, indifferent to everything, untidy in their belongings, unclean in their person, in short, they are demoralized.

I have said the cure appears to be one with defect, but indeed the disease is of too recent a date to permit of a definitive prognosis. It is possible that the last named qualities, which are the expression of a diseased mind, should gradually become effaced. On the other hand, these very qualities lead the patients again and again to recur to the poison, for which there is a very decided craving.

Accordingly, we can only say that from our experience the disease is curable, so long as no permanent psychic defect has been established. This, again, appears to be dependent on the size of the doses habitually taken, and still more on the length of time during which the drug has been persisted in.

The treatment consists in the gradual or sudden withdrawal of the drug. I should recommend the former in the case of morphia-cocainists. I have never observed any symptoms due to abstinence follow the sudden withdrawal of the drug.

Now, although the patients, by their demand for cocaine, reveal at once that they have been taking it, and although the whole course of the disease, as well as the sum total of the symptoms above described, is sufficiently characteristic to strike the difference between it and any other psychosis, *e.g.*, paranoia hallucinatoria, mania, delirium, and even from the abstinence-symptoms of the morphia habit, yet, with the assistance of my friend Dr. Kleimann, of the Royal Polytechnic at Charlottenburg, Berlin, I have tested the urine of these patients.

With regard to the chemical analysis of the urine in these cases, it was necessary, in the absence of any literature on the subject, to first determine whether it was possible to detect the alkaloid. To solve this, 0·23 grms. of hydrochlorate of cocaine were added to one litre of normal urine. The acid urine was then rendered faintly alkaline by the cautious addition of bicarbonate of soda, and then digested with ether. In view of the free solubility of the base in ether it was to be expected that a single extraction with ether would yield a sufficient quantity of the alkaloid for the purposes of testing. In point of fact there remained on evaporation of the ether a not inconsiderable syrupy residue, which, placed on the tongue, gave a characteristic effect, and, further, when heated with concentrated sulphuric acid, yielded the characteristic smell of benzoic acid. Repeated shaking up of the urine with ether did not increase the amount of extract, and although in this way the quantity of cocaine obtained was but a fraction of that used in the first place, yet the proof was obtained that in the above way small quantities of cocaine, such as would certainly be present in the urine of an organism habitually taking cocaine, were capable of detection, provided, of course, that the cocaine were excreted as such. The urines of cocainists were now examined. They were first rendered faintly alkaline, then shaken up with ether. In this way an emulsion was formed, which only on prolonged standing separated into an upper, ethereal layer, and a lower, watery, stratum. The ethereal extract was evaporated in a watch glass, at the temperature of the atmosphere (in order to prevent any decomposition), and gave a slight residue which was bitter to the taste, and caused numbing of the corresponding portion of the tongue. The bitter taste is not sufficient evidence, but solely the numbing of the part, for normal urine treated in the above fashion yields to the ether small quantities of a bitter principle.

From numerous experiments made, as above, the conclusion seems justified that of the total quantity of cocaine consumed, only very small quantities appear in the urine, for the quantity extracted by the ether sufficed only for the testing by the tongue, and was always far too small to permit of chemical tests (formation of benzoic acid by treatment with concentrated sulphuric acid). On the other hand, the quantities were always large enough to allow of the performance of an exact physiological test, *e.g.*, the ethereal residue was treated with hydrochloric acid, and then, again,

evaporated. In this way the hydrochlorate of cocaine was formed, a salt readily soluble in water. The aqueous solution dropped into the eye of a rabbit caused complete anæsthesia of the same, so that for 10-15 min. the cornea could be rather roughly handled without causing the slightest blinking, whilst the non-anæsthetized eye blinked even at the approach of an object. This experiment was checked by using normal urine, and applying its ethereal extract, treated as above, to the eye.

In conclusion, I must accentuate the following points concerning cocaine :—

1. That cocaine acts similarly whether taken internally or injected beneath the skin;

2. That the coca leaves exert almost the same effect as the alkaloid.

This statement is based, firstly, on historical data. Coca played a prominent part in both the social and religious life of the ancient Peruvians, it being said of the plant that it stayed hunger, gave new vigour to the fatigued and exhausted, and caused the unhappy to forget their troubles. These are the same properties with which we have become acquainted in the alkaloid itself. We say of cocaine, that it renders us insensible to hunger and thirst, causes anorexia, it excites, it exhilarates, &c. Similarly the evil effects of the use of coca leaves were well known to the inhabitants of South America, and they stated that the plant was of idolatry and witchcraft, and only appeared to give strength by the deception of the Evil One; that it did not possess any real virtues, and that it spoiled the lives of numbers of Indians, who, at the best, only escaped with mind and body unhinged. In like manner we also record of cocaine that it produces, amongst others, symptoms, not without danger, of a paranoia hallucinatoria. It seems that the coqueros, like our own cocainists, are recognizable by their uncertain manner, the loose skin of earthy tint, the hollow lack-lustre eyes, surrounded by violet-brown circles, the tremor of the lips, the style of speech, the suspicious, hesitating, false, crafty character. Similarly to our cocainists, they are insensible to hunger and thirst, are often under the influence of delusions, and, mentally, they not infrequently are degraded to complete imbecility (an experience which truly darkens considerably our above-stated prognosis). A case, however, occurring in my own practice, of the establishment of the above psychosis by the use of coca leaves, corroborates my statement. Apart from the actual resemblance of the effects

of coca leaves and of cocaine, the other substances present in the leaves, which might be held to be effective, are in too small quantities to be really credited with observable effect. Moreover, the method adopted by the Indian in chewing the leaves proves that it is the alkaloid alone that he seeks; he uses, viz., the ashes of plants—caustic lime, in a word—basic substances whose action will be to set free the alkaloid.

The third and last point concerns the question whether the described psychoses result from the use of cocaine alone, or only when it is conjoined with morphia. I am quite willing to admit that morphia may beget a certain predisposition to our psychosis, but, after all that has been said, in particular after the last-mentioned proof of the similarity of effect of coca leaves alone with those of cocaine, there can be no reason to assume that only the conjunction of the two poisons will be effectual.

I am unable to conclude without again insisting on the, at least, doubtful advantages which cocaine offers to us as a medicine in mental affections. On the other hand, I must draw attention to the disadvantages which not infrequently attend the use of the poison.

CLINICAL NOTES AND CASES.

Cases of Masturbation (Masturbatic Insanity). By E. C. Spitzka, M.D., of New York.

(*Continued from p.* 73.)

There are exceptions to the rule that all male masturbators are shy with regard to the female sex, and at all times. It is true that the majority are so in the earlier periods of their vice, and as long as definitive mental disease has not set in. In some cases where such disease has become established, a sudden transformation from bashfulness to brazen effrontery, and from timidity to bold, insulting and lascivious demeanour, is noticed. These patients exaggerate the characteristic, so happily drawn by Oliver Goldsmith in "She Stoops to Conquer," of a certain class of men who are heroes before barmaids and cowards before refined females. In exceptional instances, the masturbatic lunatic is as brutally indecent to those of a higher as to those of a lower station. Godding relates a case of this kind in graphic language in his "Two Hard Cases."

The picture presented by masturbatic lunatics of advanced years is, perhaps, as revolting a one as occurs within the alienist's experience. The common type of whining hypochondriasis it is not necessary for me to delineate, as characteristic cases may be found in the works of Bucknill and Tuke, Krafft-Ebing, Clouston, and other writers. In the following case, however, one feature is added which is usually absent in hypochondriacal paranoia due to masturbation, namely, a tendency to increased indulgence in the habit in advanced life.

IV.—*Heredity (?); masturbation continued through married life; hypochondriacal insanity at twenty-seventh year; recovery; outbreak of selfish hypochondriasis in fifty-second year; mental and physical deterioration.*

P. B., aged 52 years, married happily, has always been a strict man of business. A younger brother is insane since thirty years, and an older sister committed suicide; a second sister is "slightly deranged." The patient himself had an attack of hypochondriacal insanity in his twenty-seventh year—attributed, as was also the disease of his brother, to self-abuse.

Since his twelfth year the patient has masturbated considerably, and occasionally resumed this practice during his married life. Since about a year, he has developed a dislike for normal indulgence, and practised his bad habit daily. This being discovered, through his brother-in-law, a physician, who was aware of the cause of insanity in other members of the family, he was placed under supervision in an orthopædic establishment! Here it was found that he masturbated at night, and passed into a sort of frenzy during and after the act, as well as when prohibited. He was in the habit of boring physicians, particularly neurological specialists, to whom he had access through the medium of his brother-in-law, himself eminent in another branch of the profession. He was also brought to me, and I ordered him to be transferred to the private retreat at Greenmont, under Dr. Ralph Parson's care. Many of the facts of this history were furnished me by this alienist.

His demeanour was obtrusive, mean, and selfish. He sat out all my other patients on the morning he called, withdrew to the waiting-room, under indignant protests, when I represented to him that I could not keep a physician accompanying patients, who had come a great distance, waiting any longer, he having already consumed two hours. He came in repeatedly, and, finally, after I had finished, he took possession of the field, and as I hurried off to my much-delayed lunch, he exclaimed, "Hurry up, doctor, do not be long; I have a great deal to tell you yet. My case is of more importance than any other you ever had; I am the most important man in my family." Altogether he was seven hours in my house, of which fully four were

occupied by lachrymose and exaggerated accounts of suffering, attributed, as is usual in such cases, to all sorts of circumstances other than his vice. A pointed and long continued cross-examination failed to reveal the nature of these alleged sufferings, but they related to his bowels, stomach, "circulation," "thoughts," head-sensations, and general prostration. Above all, he attributed much of his misery to his brother-in-law, who, he alleged, had delayed too long to take him to nervous specialists. Then he declared that those of the latter whom he had already seen were swindlers, but again consulted two of them the following day. On returning to me, he bitterly denounced them for having given him hypnotics, and to his brother-in-law, denounced me for failing to do so. He denied having any passage from his bowels, but it was proved that he had had such at least every other day. He manifested intense hatred to those who contradicted his claims or revealed their fallacy, and appeared to be developing a feeble and unsystematized delusion that his brother-in-law's neglect was connected with his wife's aversion, and that the latter must have exercised some influence calculated to bring on his bad habits. After his arrival at Greenmont, he had a fit of depression, and insisted on going to the city to see his wife, whom he had accused two days previously of being the cause of his misfortune. At bed-time he tried to get the attendant to leave the room, and failing in this, wished to remain in bed while the latter went to breakfast. He became very much excited after he failed to accomplish his purpose, reviled the attendant, said he was ignorant, and developed an intense antipathy to him, so that the latter requested to be relieved of his disagreeable charge. During the following month he was always dissatisfied; he complained to the physician about the attendants, and to the latter about the former. On being requested to specify his complaints, he was unable to do so, but rejoined that he did not wish to be in an asylum. It was then suggested that he should go home, to which he demurred, and on making other propositions to him it was found that he had no definite aim, and concluded to stay where he then was. It transpired accidentally that in order to comply with the legal forms, certificates of insanity had been prepared in his case. He became very indignant, telegraphed to his family to learn if it were true, and then insisted that they should prove him to be—as they claimed—his own master, by taking him home. This was complied with, and there was not one person at the asylum, physician, patient, attendant, or servant, who did not breathe freer after his departure. Four days later he reappeared at the institution with numerous large trunks, but had scarcely entered before he urged the necessity of consulting another specialist in the city he had just left. He suffered from nausea and headache, and carried out his project of seeing the specialist in question, obtained a written guarantee from him, subsequently found in his pockets, that he did not require asylum treatment, and took the next train to Dr. Parson's

institution. Here he claimed to suffer from sleeplessness, not resting a second all night. But observation showed that he slept from five to nine hours. Finding that no attention was paid to his statement, and that the vigilance of the attendants defeated his purpose of exciting sympathy, he made presents to them, and tried by every indirect means to get them to report in favour of his theory. Whenever in presence of other patients or visitors he moaned and cried as if in great distress. Finally, after all his complaints had been shown by convicting evidence to be without material foundation—except as far as spinal irritation was concerned—he discovered that the expenditure involved in his stay at an asylum was too great, and returned home. During his stay he showed no regard for the other patients, but pursued the phantom of his own creation in a selfish way, disregarding the feelings and privileges of others. On one such occasion he rushed into the room of a debilitated and bed-ridden patient to deliver a harangue against one of the attendants, full of mean insinuations and hypocritical diatribe. He subsequently developed an irritable condition, marked by flushed cheeks, myosis, and great absent-mindedness. Thus he went about from one physician to another until he became, as I learned from one of them, bed-ridden at times, and at the last report was supposed to be afflicted with some organic affection of the brain, without focal symptoms, which is being treated in a German sanitarium.

The history of this patient is well supplemented by that of the convict Graves, whose execution at Newark offered me an opportunity of studying the morbid changes occurring in a person who had been addicted to onanism over sixty years.

James Graves was born in England in 1818, and came to this country in 1825. He became a wool-corder, and during his younger years composed a sort of autobiography, which indicates that he had been an onanist from his earliest years. The main part of its contents relates to that practice, of which he speaks with cynical coolness. The following are fair specimens of confessions of shyness before females, and general timidity, while in addition some egoistical exaltation is discoverable.

"The next day i sent her a valentine, i wrot on it these lines o dear o me—what can the matter be—the matter is i want a wife—in fact i am tired of a single life. in a few days i took her to exebition, i may here remark that my sexuel desires was so great and i thought so much about giting maried, that i did not sleep much nights, as a consequence i begun to git nervous, so that the night i took my girl to exebition i nervous and dejected. . . . At parting i made bold to kiss her but i think i made a poor job of it i was so nervous i did not half kiss her. . . . At this place i was called a very likely and engenuous man and the best corder they ever had, and I had better health than i ever had scince i was a man. i also menedged my help to a charm bouth girls and men. 9 pounds of flesh *as i walked up and down my room with an easy and plesent and stern manner i thought i that i was the nepolion of cor-*

*ders.** . . . if i saw a man and woman walking together it would nearly set me cryeing. . . . so i paid my bill at the tavern and went to bed as i was to start at 3 o'clock in the morning i felt very nervous and figitty as i Thought in was in danger of being taken up as a rober, but i went out in my stockings and did not create any alarm i do not think that a rober ever felt as nervous in robing a hous as i did in going honestly out of that tavern. . . . i tryed to find out whare the —— houses of the city ware, i had heard that there was some but i did not mix in the company of young men enough to get introduced to one of them, my habits were to soletary, and i was to timed, *this was much agrivated by my high sense of honor, and justice and my disgiust of the meanness and perfidy of the inhuman race as a whole.*"

Graves † was a little of everything, a poor joiner, an indifferent tinker, and a worse machinist. After failing in several lines of invention he settled down as a pump maker. Down to the time of his death he was in ill-health, dyspeptic, and melancholy. About two years before his death he again evolved a project, of a musical character. He intended to hire a hall to play the violin in, and actually went about the streets playing that instrument—of which he had but slight if any knowledge—his face the while being covered by a mask, which he wore because he was afraid to show it. He carried his head in a peculiar sidelong way, and appeared to be continually muttering to himself, working his mouth as if chewing his tongue. He was, from his singular appearance, known as "Monkey Graves" or "Crazy Graves," and persecuted by the children of the neighbourhood, one of whom he deliberately shot and killed in retaliation, saying that he had "fully counted the costs of his undertaking." He was permitted to testify in his own behalf, with the usual result of convincing a jury unprepared to recognize any other form of insanity than that found in novels, that he was perfectly sane. He showed considerable defect of memory, a tendency to wander away from the subject, and a silly demeanour. I examined him about a year after the trial. In his bent attitude the height of the patient was less than five feet, originally it probably had been five feet two inches. His weight was between eighty and ninety pounds. The skull was proportionally large, and there was not a vestige of hair on any part of his scalp or face, and his pupils were unequally myotic. His vision was very weak, the colour sense uncertain, his expression vacant, and complexion sickly. Two large scars, one on the forehead and a second over the mastoid region, indicated the sites of previous carbuncles. On compelling him to walk across the room, he shuffled along, in evident pain, moaning constantly. I suspected a hemi-contracture, but owing to the patient's feeble-mindedness and general prostration was unable to obtain any satisfactory evidences of this or of paresis.

* See "Proceedings of the Society of Medical Jurisprudence and State Medicine," Vol. ii., pp. 15-20 ; reprinted from the "Am. Journal of Neurology and Psychiatry."

† He made some inventions, which were exhibited before the Society of Medical Jurisprudence, which he had tried to introduce to notice by means of doggerel poetry reproduced in the paper referred to.

The impairment of his memory was profound. But as his history was known for seven years back, in which he had presented no signs of acute disease or seizures, and had never mentioned such, and, furthermore, his motor peculiarites had been noticed to develop gradually, it is reasonable to assume that he cannot have had any apoplectiform attacks. He had had visual phantasms, indicated by his daily repeated expression "And still the sparks fly upward." He was irritable under examination. The nurse reported him to be unclean, but constant attention restored his control. He had glycosuria, and consequent frequent and profuse micturition. After his execution I found a remarkable diminution of the relative area of the cauda equina and lumbar spinal cord, without any structural lesion disconnected from his age. The weight of the brain was $41\frac{1}{2}$ ounces, while proportionately to the skull-capacity as measured, it should have been at least 53. There was both internal and external hydrocephalus. The sulci gaped widely, there were large pockets of the arachnoid between the gyri, which were filled with serum; there was an enormous amount of this in the general expanse of the arachnoid, six ounces being collected, as well as in the dilated ventricles. The posterior horn of the left lateral ventricle was so much dilated that the occipital lobe was reduced to a mere bag, and a cicatricial induration of brain substance, of almost cartilaginous hardness, surrounding a greenish discoloured softened area of the white substance underlying the inner end of the left calcarine fissure, was found. The cortex here was wasted and indurated. A similar spot was symmetrically situated on the right side, also a third one of the diameter of $1\frac{1}{2}$ centimetres in the supra-capsular part of the white substance of the left frontal lobe. All the tissues of the brain, particularly the pons and oblongata, were unusually firm, there was intense pigmentation of the larger ganglion cells (senile), and evidences of pigmentary disintegration of the vagus and auditory as well as the facial nuclei. A large number of small cysts were situated in the cortex. The patient was in his seventieth year, but neither his symptoms nor the lesions found correspond to those of ordinary senile dementia. Another singular feature is the comparative latency of large destructive lesions in the brain, a feature not infrequently found in dements, who do not seem to react, as previously normal persons do, to coarse brain-affections.

The results of masturbation as far as they involve disturbances of the spinal and cerebral centres, are usually regarded as of a functional character. The older physicians were more inclined than the moderns to regard organic wasting of the cord or brain as a possible result. Aside from the positive findings in the above case, and the corroborative symptoms observed in others which did not reach the autopsy table, there are a number of facts which indicate the necessity of a renewed examination of the subject. These are the presence

in excessive masturbators, particularly in those who in addition to their voluntary losses suffer from involuntary ones, of symptoms not ordinarily found in purely symptomatic states. Among these the following are the most important found in the histories of 219 cases of nervous disorder based on self-abuse :—

1.—*Sudden electric-like shocks.* These occurred in two cases during the orgasm, the latter being provoked by the patient while standing. In one case the patient fell down powerless, and two weeks elapsed before he regained his normal power of walking. The knee-jerks were at first completely abolished, and returned with the motor power. Analogous, though less intense phenomena occur when coitus is arrested by withdrawal.

2.—*Paresis of the lower extremities.* The physical results are particularly localized in the lower extremities. Many masturbators are weak in walking. In 1 of 17 females, and in 23 of 202 males, this weakness reached the degree of a paraparesis. It was noticed that it increased with increased excesses, to improve when they were suspended. That it is not a part of general weakness is shown by the fact that neither in man nor the lower animals are the anterior extremities involved to such an extent, or in the same way. Pfisterer, in his annual report of veterinary matters at Rastatt, reports the case of a stud foal, aged two years, suffering from paralysis of the hind-limbs brought on by onanism, and radically cured by castration, which was rendered necessary as all other means tried to check the vice failed.*

3.—*Exaggeration, abolition, and asymmetry of the knee-jerk.* Among 202 males the knee-jerk was found exaggerated in 6, abolished in 3 (aged respectively 29, 33, and 41 years), and in 2 diminished on the left side alone. In two of the cases of abolition the phenomenon returned after about a year's treatment of coexistent spermatorrhœa. In all of them there had been rheumatoid and fulgurating pains, which in the two cases where the knee-jerk was least marked on the left side, were most marked on that side. The same distribution of the associated paræsthesias was noticed.†

4.—*Ataxia.* A feeling of unsteadiness and swaying is usually found in those cases where the lower extremities are

* "Thierärztliche Mittheilungen," August, 1884.

† The case of acute loss of the knee-jerk is not classified herewith. The disappearance as well as the return of the jerk was noted to be marked by a stage in which it was excessive enough, but halting, as it were, in the "go-back."

weak, and is probably due to the weakness. In one case, however, a marked tabic gait was found, the limbs were thrown about violently, interfering so as to throw the patient off his balance.* The knee-jerks were exaggerated, and the superficial reflexes diminished. No other signs pointing to organic disease were found. For two years the patient improved in all the respects mentioned, but was lost sight of in 1884.

5.—*Bladder-symptoms.* Both the bladder and rectum were the seat of intense boring pain—compared in two cases to the forcing of a wedge † or of flatus through a gut—in three patients, one of whom had abolished, one exaggerated, and one normal knee-jerks. None of these patients had other indications of organic disease. Difficulty of retaining the urine and impaired expulsive power ‡ are recorded in 32 male cases.

6.—*Retina.* Asthenopia was found in all masturbators, male and female, who had passed the fortieth year and continued the habit beyond that time. In two cases I recorded concentric limitation of the visual field; in one this was limited to the colour sense, in the other confirmed by Mittendorf; the visual fields, with the exception of a minute central area, were entirely amblyopic. The optic nerve was pale, but showed no signs of atrophy or other disease. The patient's age was twenty-seven.§

7.—*Pupils.* In young onanists the pupils are usually dilated and very mobile; but in those who have gone very far in their excesses there is often myosis. This is often the case in irritable dementia.‖ The pupillary reactions are

* This was first observed in the 15th year, and had slowly increased to the 35th, the period of the examination.

† I have been unable to find a reference to two cases described, either in 1869, 1870, or 1871, of young men who had been extreme onanists, and suffered from the same pain. A fibroid growth was found in the cerebellum of one of them, but whether it was regarded as an accidental coincidence or not I have forgotten.

‡ According to Dr. H. G. Lyttle, a genito-urinary specialist, stricture is developed in some onanists, so that we cannot be positive in our interpretation of their bladder-symptoms.

§ A. Schiele, "Archiv für Augenheilkunde," xvi., p. 145, believes that asthenopia, as well as consequent limitation of the visual field, may be due to exhaustion of the gray matter in the occipital lobes as a result of functional as well as of organic disease. It is noteworthy that in Graves a symmetrical lesion should have been found in this very district.

‖ The palpebral aperture often becomes narrow, the brows overhang in connection with the habitual corrugation of the eye-brows, and the *tout-ensemble* is not unlike the expression of a vicious baboon, a resemblance heightened in some by pouting lips and a sparse irregular growth of hair on the chin.

usually normal, rarely sluggish, and were undemonstrable only in the case of Graves, which is not included in the tables. Inequality was noted in eight cases, in three being quite marked.

8.—*Glycosuria.* Sugar occurred in the urine in varying quantities in 17 out of 202 males. Remarkably often I found an unusually low specific gravity coexisting, and this in cases where the presence of sugar was easily demonstrable and in large quantities. The supposed characteristic signs of diabetes are usually absent; thirst, bulimia, rapid emaciation, and other general indications of this disorder, were present in but one case, and even here the diabetes appears to have been a temporary condition, as, notwithstanding the patient's return to an ordinary diet after a year's treatment, sugar has not reappeared. In the case of Graves, not included in this computation, there was a history of repeated attacks of furunculosis in connection with glycosuria.

9.—*Other symptoms on the part of the cranial nerves.*—In three out of 29 subjects of the masturbatory neurosis under the age of fourteen, all males, I found deviation of the tongue to the left, and the left pupil narrower. In two of these cases the evidence of the family attendant showed that the inequality of the pupils was acquired.

10.—*Trophic disorders.* In one case, that of a youth, aged eighteen, a herpetic patch following a peculiar drawing sensation in the left supraorbital distribution, together with anæsthesia of that side of the face, was observed after every excess. On several occasions this patient experienced a sensation like the report of a pistol, accompanied by a sense of "being overwhelmed" previous to the artificial orgasm. In an earlier case, where a similar subjective sound was experienced under like circumstances, it was followed by left-sided choreic twitching, and the skin and hair changed colour on that side.* Burr mentions a lightning-stroke sensation, followed by severe dorsal pain in one case. It was one of the paranoiac type, in which similar subjective sensations are by no means rare.

The above symptoms indicate the presence in a small

* Kiernan describes the same patient in two papers on trophic disturbances, "Journal of Nervous and Mental Diseases," 1878, and "Alienist and Neurologist," Vol. vii., p, 474, as one of hebephrenia, and inclines to attribute the trophic changes to a deep abscess, which might have involved the sympathetic. The pistol-shot sensation in the head which the patient complained of occurred while he was indulging in his unnatural practice.

proportion of excessive onanists, sane and insane, of a condition which is on the border-line between organic and symptomatic (functional) nervous disease. Their presence should render us cautious in following the routine practice of treating all the onanist's complaints as necessarily hypochondriacal or imaginary. It has a bad effect—one ruinous to the moral management of the patient—when he discovers by exact and convincing evidence that the physician does not discriminate between his real sufferings and his apprehensions. On the other hand, the removal of any one of his causes of complaint often inaugurates a rapid progress to improvement in other respects. This has been frequently illustrated in my experience in the favourable effect of an initial large dose of the bromides in those cases where there is a tickling or running sensation in the urethra or a rubbing sensation on the glans. Imperative conceptions and hypochondriacal fears have been rapidly and favourably influenced after its disappearance, and relapsed on its return by some mysterious morbid association. I may mention here that I regard these peripheral sensations as one of the indications justifying the exceptional use of the bromides in these patients. As a general thing they have no good effects.

Among the commoner subjective symptoms of the masturbatory neurosis is occipital headache. A dull and tired feeling is noticed, especially after rising; and this is apt to be associated with the sensation of a tight band around the head, which may seem to the patient to pulsate. As the day progresses, the dulness and heavy or clogged feeling disappears, while the head-pressure is liable to become aggravated at any time by mental exertion. In some the ache or pulsating pain in the nucho-occipital region is greatly aggravated by a repetition of the vice or by coitus. The majority of masturbators become shy and nervous, and develop morbid fears, or at least an exaggeration of those fears to which men and boys are liable. Thus they become greatly alarmed in a railroad train as it shoots a curve, in a steamboat as the steam is let off; or they are anxious in passing high buildings, particularly when scaffoldings are erected on them. They fear dogs, and are afraid of this or that "rough customer" hitting them. One of these patients crossed over regularly to the other side of the street because he dreaded that he might be caught in the whirling belt of machinery in a closed building, and his

agony finally became so great that he selected another street—though at some loss of time—to pass through. In those who discontinue the habit at this time, the morbid timidity may continue through life, growing fainter with advancing years, and may remain the only residue of damage done the nervous system. In others, some one or several topics of fear or of morbid brooding tyrannize the mind as imperative conceptions. Of eighty-nine classified male cases of imperative conceptions, only eleven had not been confirmed masturbators. In some instances the development of an imperative conception from a morbid fear is very clearly shown. Thus a patient had the vague fear of dogs generally from his eighteenth to his twenty-ninth year. About this time the "New York Herald" contained terrifying announcements about hydrophobia. A dog passed the patient while he was thinking over this matter, and, as usual, he diverged from his path to give him a wide berth. But the dog having passed over the line which the patient would otherwise have taken, he began to speculate that some froth must have struck a certain part of his trousers and penetrated to the skin. He could, like all sufferers from such distressing conceptions, reason himself out of the *belief*, but was unable to rid himself of the *speculation* on this topic. And the morbid concentration of his mind became fixed by the development of a congested spot on his right tibial region, which flushed up when his thoughts were most intense, nearly disappeared when they were otherwise engaged, and ultimately led to pigmentation of the affected area. This and other varieties of the *folie du doute avec délire du toucher*, usually manifesting themselves in dread of venereal contagion, appear as frequently to be based on masturbation in males, as imperative conceptions, *folie du doute*, and morbid impulses in the female are found associated with those uterine disorders which are accompanied by weakening discharges. They are of importance, in so far as they furnish a groundwork for the development of delusions in paranoiac onanists.

Timidity and the development of morbid fears are particularly marked in cases complicated by spermatorrhœa. This condition appears to be by itself competent to produce these symptoms. A healthy, broad-shouldered frontiersman from Texas, aged thirty-eight, who, as overseer of a large cattle-range, had been almost constantly on horseback during the day, became afflicted with both diurnal and

nocturnal seminal losses—aggravated by sexual excesses. His words were: "Before nothing could startle me, but now I am as nervous as a lady."

An instructive case, illustrating developing morbid timidity, with ensuing *folie du doute,* is related by Höstermann. The youth, after committing excesses in this direction, became very shy and nervous, exceedingly scrupulous as to hurting the feelings of others. This was manifested more especially in regard to conventionalities; thus he was morbidly particular as to not having his hands in his pockets. Finally, he could not be induced to shake hands with ladies; and in his toilet assumed the most unusual and constrained positions in order to avoid touching his genitals, or bringing them in contact with anything his hands might touch. He was continually examining himself to see if he were properly buttoned up. He became excessively religious, and it was possible to detect in his countenance, while engaged in religious devotions, that he fought down thoughts of a different character. He developed that common form of imperative conceptions which manifests itself in a repeated examination of the premises, to see if they are not on fire, and if the doors are properly locked.*

In the following series of cases there were certain complications present which modified the psychosis. But the fundamental character of the patient's mental state appears to have been determined by the vice of onanism.

V.—*No hereditary taint; two attacks of inflammatory rheumatism at* 8 *and* 14*; onanism from fifteenth to nineteenth year; imperfectly cyclical alienation.*

P. H., aged 20, student in a Catholic seminary, no ancestral taint, examined June 28th, 1884. He has a sodden countenance, and sits still in a corner, looking distrustfully and timidly at his interlocutor. He is greatly depressed, his hands are cold, and the capillary circulation imperfect. Two years ago it was found advisable to submit him to asylum treatment, but at that time the father's means did not permit of this being done in any other than a pauper asylum. Here his condition became rapidly worse, both physically and mentally, and his memory, which had been somewhat impaired before admission, was said to have been almost abolished by the time of his removal. He was placed under tonic regimen by the physicians of his native

* "Allgemeine Zeitschrift für Psychiatrie," Vol. xli, Heft. 1, p. 26-27. Wille, in his paper on "Imperative Conceptions" ("Archiv für Psychiatrie," xii.), states that of seven males suffering from them, four were onanists; of nine females but one was so addicted.

place, and improved in health. He now answers questions with some reluctance, and after a great deal of suasion responsively and correctly. Masturbation once *per diem* for the past four years is acknowledged. He has had two attacks of acute articular rheumatism at the ages of eight and fourteen, and Dr Seneca Powell, who referred the patient to me, says that a very distinct mitral murmur could be made out a year ago. At present there is an accentuation of the second sound at the apex.

As a boy he was quarrelsome among those of his age, but at home so remarkably subdued and quiet that his father thought him fitted for the priesthood, and—although a labouring man—he devoted all his energies to the one aim of his existence: that of giving his son that education which would fit him for saying "a mass for his father's soul." This expectation, I need not add, is not destined to realization, and the father's despair and disappointment constituted one of the saddest of the numerous minor tragedies in which a consulting alienist's experience is so rich.

The patient continued under my treatment, which consisted in restrictive watching, the administration of cannabis indica during the spells of worst depression, of warm sitz-baths in the evening, and a regulation of the somatic functions generally, including a tonic regimen and phosphates for four months, during which time he rapidly improved, so that by August 3rd he presented a normal condition. Previously it had been observed by himself and by others that he would awake in a bewildered state in the morning, and become clearer as the day advanced, so that in a day, where morning would find him confused, amnesic, and dazed, he would be bright, active, and intelligent in the evening. The relief of his nocturnal emissions, which the warm sitz-baths (before retiring) and atropine gave, was probably the cause of his increasing clearness in the morning. His complexion, which had been disfigured by acne, cleared up, the puffiness disappeared, the hands became warm and moist, instead of being, as previously, cold and bluish. At times they would become hot. On the first of September he was entirely normal, physically and mentally, and then did not report for nearly two months, when (Oct. 20th) he was brought to me in a typical state of incipient mania. His physical condition was excellent; his speech, which was very emphatic, was accompanied by active gesticulations. It lacked but little, and he would have pounded his statements into his auditors' heads with his fists. His loud and boisterous assertions related chiefly to the credit which he claimed was due to him for having the ability to control his bad habits, and for controlling them. "There are few would have done it" were his last words as he left me on his road to the asylum. Dr. Wm. Hardy, since deceased, informed me that at the pavilion of Belle Vue he broke out in a genuine maniacal attack, reiterating the above statements at intervals, and passing into expansive delirium before he left his charge. He was egotistical, and

emphatically announced himself as "a good boy." The case was then lost sight of.

In the next case we have an impure type to deal with. The case is one modified by the coexistence of a fundamental neurosis developing on the basis of spinal irritation, all, however, due to early masturbation. This history, like some of the preceding, teaches that the views of those who believe that the accomplishment of coitus does away with all ills provoked by self-abuse is erroneous. It may modify, but rarely cures.

VI.—*Neurotic heredity; masturbation practised very early and excessively; cerebro-spinal irritation and exhaustion with spermatorrhœa; marriage; sexual excesses; systematized delusions of persecution; sexual perversion.*

Albert L. L., aged 27 years, a lawyer and stenographer by occupation, examined June 13th, 1884. His father, the only member of the family presenting a neurotic history, is said to have had an attack of trance of a death-like character and lasting more than eleven days. His brother, one of the then leading neurologists of Germany, happened to have crossed the Atlantic to visit him at this time, and is said to have either pronounced life extinct or about to become extinct; but recovery ensued, and he is to-day in fair health. He had also, prior to his trance, passed through the Civil War with a good record.

The patient had a peculiarly conceited and at the same time shy expression of countenance. His face was flushed, and the temperature of his head appeared (objectively) raised. His cranium was far inferior to that of other members of his family, and narrow as well as retreating in the frontal region. During the summers of 1882 and 1883 he complained of a feeling of pressure and burning in the occiput, which sometimes recurs. During April, 1883, he consulted the distinguished ophthalmologist Knapp for a burning sensation in the eyes, which was attributed by the latter to overwork. At this time he also suffered from trembling, which was apparently relieved by medication.

In his early youth this unfortunate person had been demoralized by a servant-girl, and his mother stated that he had complained of sharp pains through both hips in his seventh year. From his seventh to his eleventh year he masturbated daily. He remembers having been ashamed of this practice. After his twelfth year voluptuous imagery was indulged in at night, then masturbation—at least as a voluntary act—ceased; but he had from three to seven seminal emissions on most nights, and at least one on the others. At this time he clandestinely consulted a physician. Another medical adviser removed a phimosis in the patient's eighteenth year. Shortly after, a woman who frequented the house—of whom it was well established afterwards

that she had a husband living in Germany—worked on his sexual weaknesses with the result of accomplishing a secret marriage. His imagination was kept at the highest strain by licentious books when his natural resources failed him. He claimed that he became divorced from her in secret, the cause being jealousy on her part; she accused him of having relations with her lady friends, and would put them to the proof when they asserted their innocence by requesting them to look into the patient's eyes while she observed both parties. At other times she urged her husband to excite their passions. From the father's account, it is evident that this woman was an unbalanced, if not actually insane, nymphomaniac. The marriage, as well as the informal "divorce," were successfully kept from the parents' knowledge for years; and the witnesses of certain transactions above alluded to had not even suspected that the two were man and wife. Five years ago he married again; in the interval of two years between the divorce and second nuptial transaction he had relations with prostitutes on about twenty occasions. He claims that such relations, in contradistinction to those with his legitimate partners, were revolting to him. He descants at length about the purity and dignity of his present wife. He has indulged in what—with his weakened sexual organs, imperfect erections, and continuing seminal emissions—must be regarded as marital excesses for the first year of the second married life.

The special occasion which led to my opinion being asked was that the patient had acted strangely, not venturing into the street, becoming very restless, and complaining of being followed. He stated that he had had an undefinable feeling of being shadowed by persons unknown for over a year. Three weeks previously he had accompanied his wife to Astoria, and suspecting that certain persons on the ferry-boat were watching him, he returned by way of Greenpoint Ferry—distant some miles—and still found the same persons on the boat. This convinced him that he was the object of a pursuit. A few days later, while amusing himself with his canary birds, he noticed some grown-up girls and women watching him. That same afternoon he identified one of these women in a horse-car, who was dancing a baby up and down in the seat directly opposite his. He claimed that this was done to attract his attention: she had seen how kind he was to his canaries, expected him to become interested in the child, then entrap him into a flirtation, compromise him, and thus cause his arrest.

As he had been for several years engaged as clerk in the publishing department of a prominent firm of medical booksellers, and was—like most of his class—an omnivorous reader, I asked him if he had ever read of people who imagined themselves the victims of a conspiracy. He instantly brightened up, and said that he knew very well to what I alluded; he recognized that the insane entertained such beliefs, and based them on similar impressions to his own; but he had committed an act which was punishable, and justified his being pursued by the

officers of the law. He then proceeded to relate an immoral occurrence, as to whose reality I might have remained in doubt had not confirmatory evidence shown that it must have occurred nearly as the patient related it. About a year ago, and up to May 25th of this year, when he claims it subsided, he developed an "impulse" to question young girls, between the ages of thirteen and fifteen, in a disgusting manner. He claims that he did not do this from erotic motives, but merely to make "physiognomical studies." He states that he put such questions to thirteen or fourteen groups of girls in the Central Park, and that, with one exception, they turned away or ran from him. Of one instance and all its abhorrent details he speaks with cynical coolness. He claims that, in public conveyances, he frequently corresponded with women by rubbing his knees together, on which they would respond by the same motion.

Complaints had been made of such a person as the patient, and alluded to in the public prints. About the same time a detective had shot a man who had been followed to a letter-box, into which he had been in the habit of throwing blackmailing letters, after attempting to abduct a young girl. All these facts served to strengthen the patient's delusion. When I asked him why, if the detectives were assured of his identity, they did not arrest him at once, he said "The parents of some of those girls may be so wealthy that they could easily afford to pay a high figure to run me down and prolong my agony. They want cumulative evidence, and the longer the detectives can keep it up, the heavier will be their bills." The patient manifests no real shame or contrition, though he claims to feel remorse at the prospect of a "low life" and "public disgrace." He is, however, much afraid for himself. Some weeks ago he thought of suicide to escape his fate, but abandoned it, for the reason that, as the detectives had already tracked him, they would expose him after death. Yet he was an atheist. He added, "I then saw no other refuge than to make myself insane, so as to become irresponsible." On asking him whether he was, in his own opinion, insane, he indignantly repudiated that notion. He was, during the four days I had him under observation, exceedingly mobile in his emotions—at one moment hilarious, at another deeply depressed. It was impossible to induce him to attend to his favourite canaries, except after nightfall. He presented the typical signs of spinal irritation, and there was a certain degree of dulness of the memory noticeable on repeated and prolonged examination, which appeared to relate equally to remote as to recent events. I strongly urged the patient's commitment to an asylum. His relatives, however, claiming that my compelling him to analyze the basis of his belief in persecution had led to his abandonment of the latter, took him to the Catskill Mountains. There he wrote lengthy statements of his case, which were submitted to me. They were hypochondriacal and exaggerated in tone. He was then taken to another part of the country, his spinal irritation increased,

he again had voluptuous imagery, and, finally, became excited, and was reported to me inofficially as restrained in an institution eleven months ago. Since that time I have obtained no further details of his history.

It had been noted that for years this patient had not perspired, and Russian baths had been used in vain to bring on the cutaneous secretions. Under the treatment instituted—probably a mere coincidence—they became normal again. At this time it was observed that with every attack of occipital headache, his "neck would swell," and this measurably so. As in most patients of this class, constipation was a feature greatly complained of, and a headache was the never failing signal of an accumulation in the colon.

(To be continued).

A Case of Imbecility with Choreoid Movements. By Fletcher Beach, M.B., M.R.C.P., Medical Superintendent Darenth Asylum.

(With Illustrations.)

F. P., aged 17, was admitted May 17th, 1875, with the following history:—Parents healthy, temperate, not connected by consanguinity. His maternal grandfather and a cousin on the mother's side are paralyzed. He is the eldest of six children, of whom two are dead, one succumbing from scarlet fever, the other soon after birth. The rest are healthy. His mental condition is said to have been good up to the age of ten years, when, during a fight with a boy, he was struck with a key in the face. Disease of the jaw followed, and on recovery he was noticed not to be so bright, having been a good scholar before. Twelve months afterwards he was knocked down and became insensible, and some months after he fell and struck the back of his head. He has been getting gradually duller. Four years ago he had an epileptic fit, affecting both sides of the body. He was taken to the Hospital for Epilepsy and Paralysis, and, while there, had two fits. He became excitable and tried to stab a patient, and his removal became necessary. After he was taken out of the hospital he became quiet for a time, but the excitability reappeared. He was taken to the Hampstead Asylum, and subsequently removed to the one at Clapton.

The following was his condition on admission:—

He is well nourished, of a dark complexion. Head symmetrical, and of fair size; circumference 22 inches, transverse diameter $14\frac{1}{4}$ inches, antero-posterior $14\frac{1}{2}$ inches. Width of forehead $4\frac{1}{2}$ inches. No sign of rickets, syphilis, or scrofula. He is good-natured, obedient, and obliging; somewhat talkative. Mental capacity fair. His powers of observation, imitation, attention, and memory are good for an imbecile.

After admission he had at times epileptic fits, which at first did not produce any loss of power on either side. Eleven months before his death he had a number of very severe ones, and, on recovery, the left side of the body was found to be weaker than the right. There was no spasm, and gradually the left arm and leg gained power. Three months afterwards another series of epileptic fits supervened, leaving him again with loss of power on the left side, the arm being more affected than the leg. The loss of power in the left side remained, and a month afterwards continuous spasm of the left hand and arm was noticed.

The following description was taken at the time:—As he sits in a chair he holds the tremulous left hand in the right. On uncrossing them, and letting the left hand and arm hang by his side, the whole arm is seen to be continually in action, and the hand is undergoing rather quick spasmodic movements. The thumb is extended and the fingers flexed, the fore and middle ones completely into the palm, the ring and little ones to a less extent. This is the usual position, but the position of the fingers changes, and the ring finger is at times less flexed. He can extend his arm and hand in front of him, and when he does so the movements increase. The fibres of the flexors of the fingers, of the biceps, triceps, and some of the scapular muscles can be felt twitching, and the scapula, arm, forearm, and fingers are constantly moving. Sometimes the triceps pulls the arm backwards; at other times the biceps pulls it forwards. The movements are not attended with pain, cease during sleep, and are not increased by attention being directed to them. The hand is not pronated, abducted, or adducted, but hangs by the side of the body in a straight position. When he attempts to take hold of an object the hand is brought forwards with the fingers extended, and the fore and middle ones widely separated, but they soon become spasmodically clenched. They go round the object, but cannot at first get close to it; after repeated trials they do so, and then, by an effort of the will, he opens the hand, though only for a moment, and grasps the object with a clutch. He has a fair amount of power in the left hand and arm, and can grasp my hand and pull me towards him. There is, however, considerable loss of power, when compared with the opposite (unaffected) side. All the toes, but especially the third and fourth, of the left foot now and then twitch, but to a much less extent than the hand. When he attempts to use his hand the great toe is drawn upwards and the other toes flexed into the sole, as is seen in cases of athetosis. The movements of the hand do not increase when he walks. There is a good deal of power in the left leg, but not so much as in the right. He walks as steadily with his eyes shut as when they are open. His speech is fairly clear, and has not been altered by the epileptic seizures. His tongue is tremulous when he puts it out, and very often, while doing so, his head is drawn backwards and directed upwards. It does not move at any other time. There are no movements of the face.

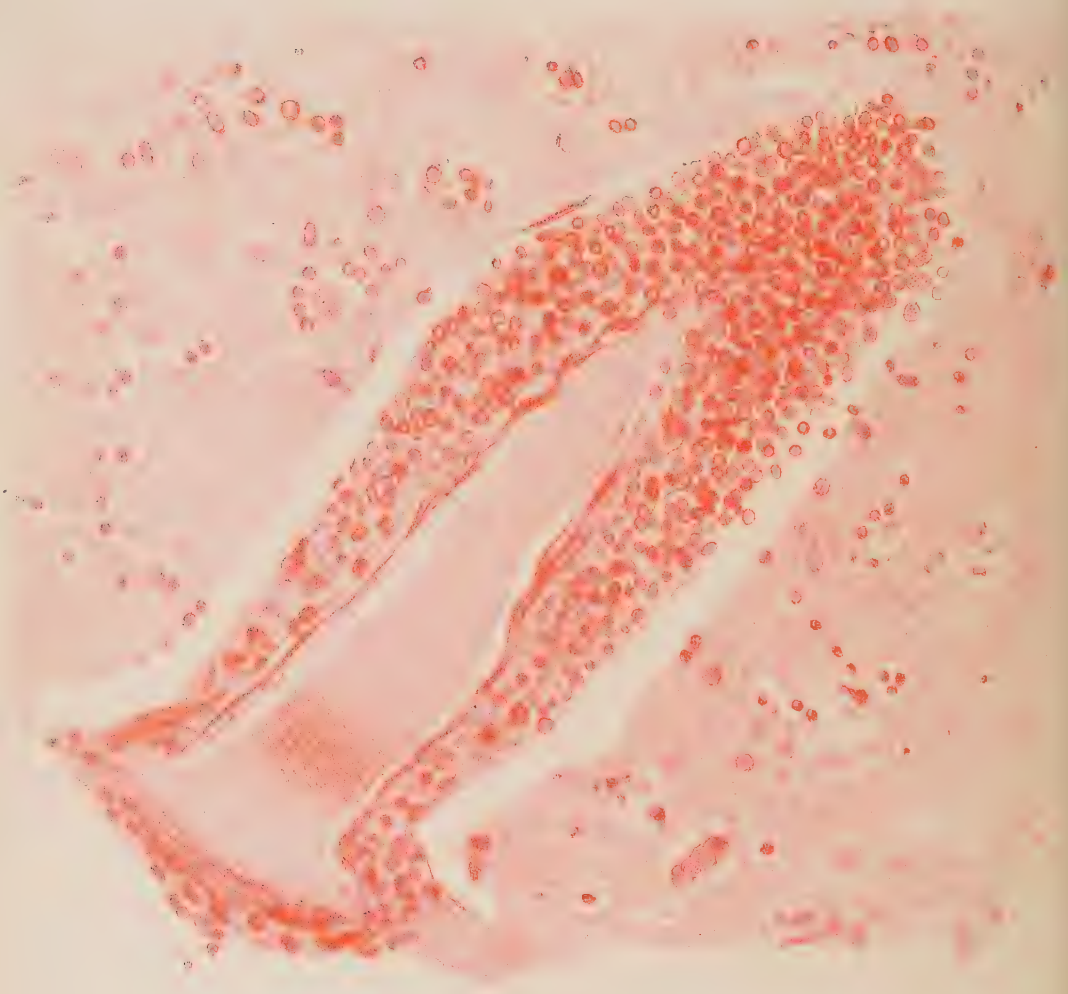
Sensation is diminished on the affected side, and the limbs measure less in circumference. A measurement, taken at the same points on both arms, shows the left arm to be one inch and the forearm half an inch less than the right. There is no shortening. Shortly before death he experienced another attack of epileptic convulsions, and a semi-conscious state followed. He took no notice of what was going on around him, but would answer "Yes, sir," and "No," in answer to questions spoken in a loud voice. He lay in bed with his legs extended rigidly, and his arms and hands stretched out on either side of him. The movements before described ceased. At the end of the week he became quite unconscious, passed urine and fæces under him, and died.

Autopsy, thirty-six hours after death. The body was well nourished, rigor mortis persistent; the thumb of the right hand was clenched in the palm. The cranium was symmetrical, the calvaria thicker than normal. The dura-mater was congested, easily removed; it was not adherent to the cranium or cerebrum. The subarachnoid fluid was turbid and in excess; the vessels running over the surface of the brain were congested, and the pia-mater injected; there was no thickening or opacity of the membranes. A little fluid drained away on removing the brain, which weighed three pounds and half an ounce, from the cranial cavity. The convolutions were normal in size, with the exception of those in the parietal and temporo-sphenoidal regions. In the former position they were *slightly*, in the latter *very* coarse in character, *i.e.*, not highly developed. Island of Reil very evident. On applying gentle pressure with the fingers the brain was found to be firm in consistence, the parietal regions more resistant than normal, and the occipital convolutions firm and hard, those on the right side being a little harder than the left. On slicing through the brain a little excess of fluid was found in the ventricles. The white matter presented "puncta vasculosa" in excess, and was, so to say, "greyish" in character. In the region of the first temporo-sphenoidal convolution, and of the inferior parietal lobule on both sides, on a level with the middle part of the lateral ventricles, the white matter appeared fibrous. The same appearance was noticed in the white matter of the occipital convolutions on the same level.

Excellent microscopical sections of the affected parts of the brain were made for me by my friend Dr. Palmer, of the Lincoln County Asylum. On examining them with No. 7 Hartnack the chief changes noticed were: 1, great increase in the number of the vessels; 2, distension of many of these vessels; 3, extensive infiltration of the tissue with leucocytes, especially in the perivascular sheaths of the vessels.

These changes were seen especially in the grey matter of the right inferior parietal lobule and first temporo-sphenoidal convolution, more particularly where the angular gyrus joins the temporo-sphenoidal. Examination of this part showed great infiltration of the grey matter, and, to a less extent, of the white matter, with leucocytes. These bodies

Fig. 1.



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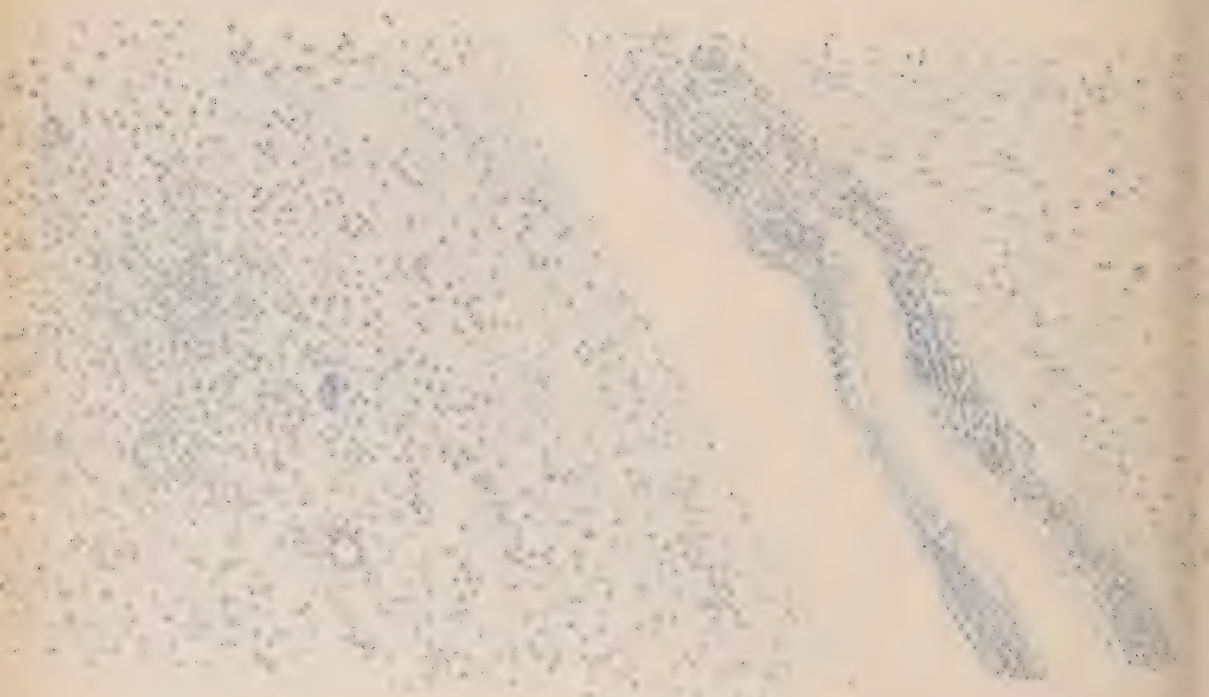

TO ILLUSTRATE DR. FLETCHER BEACH'S CASE OF IMBECILITY WITH CHOREOID MOVEMENTS.

FIG. 1.—Vessel containing blood corpuscules. The wider portion contains so-called "pressure lines" (stained pink) probably due to the blood pressure. The narrower end of the vessel is surrounded by a large number of leucocytes.

FIG. 2.—Large collection of leucocytes round a vessel which is nearly obscured. Below is a smaller collection round another vessel.

FIG. 3.—Accumulation of cells in perivascular sheath. To the left is an aggregation of cells forming a "miliary abscess."

were present in the perivascular sheaths of all the vessels, in some places forming a single layer, in others many layers, being often in such quantity as to compress the vessel they surrounded. Generally they were rounded, but, where subjected to pressure, they assumed an oval or angular appearance. In several places the vessels were much distended and their sheaths filled with leucocytes, while further on the walls were absolutely crammed with these bodies, exerting pressure on the vessel and reducing its lumen considerably. In some places the leucocytes had escaped into the surrounding tissue. Here and there they were collected into dense masses, forming so-called "miliary abscesses." Very often the leucocytes were in such numbers as to entirely obscure the vessel, so that its course and distribution could only be seen by the direction taken by them. Many of the vessels contained clot, and, in a few cases, mixed with it, were rounded bodies which stained with carmine, showing their recent character. In some of the vessels the blood-corpuscles had undergone a granular change, and in two sections the clot appeared dark in the centre, the surrounding portions shading off gradually. In one vessel the clot presented curved pressure-lines, described by Dr. Gowers as being due to exposure to pressure by the blood current. In some places there appeared to be an excess of fibrous tissue around the vessels. The white matter showed many leucocytes and an increase in the number of the vessels, but otherwise no change. The grey matter of the left inferior parietal lobule and first temporo-sphenoidal convolution, and that of the left occipital convolution, showed excess of leucocytes, but no great excess of vessels. A few of these presented perivascular sheaths filled with leucocytes. The nerve-cells of the third layer presented in many sections a clear space at the basal end, caused apparently by shrinking of the protoplasm, which stained readily, showing that there was no degeneration. Many of the cells had no processes, and others had only one at the apex. These appearances in the cells, I believe, are due to the mode of preparation, as they are not seen in frozen sections. In order to be certain as to the amount of change present I examined the sections of the brain of this patient side by side with others obtained from the brain of a man killed by an accident.

Some particulars of the foregoing case were given in the "British Medical Journal" a few years ago. I have now described the symptoms present during life, and the appearances found after death, including the microscopical appearances, with greater detail, and the drawings accompanying the paper are published for the first time. I formerly regarded the case as one of athetosis, but subsequent reflection has led me to look upon it as a post-hemiplegic disorder of movement, allied to those described by Dr. Gowers in his paper published in the "Medico-Chirurgical Trans-

actions in 1876," Vol. lix., page 271. The movements of the hand and foot in the cases described by Dr. Hammond, who first gave the name "athetosis" to the disease, were *slow* and continuous, did not cease during sleep, and were unaccompanied by paralysis. In the case which I have related the movements were *rather quick*, ceased during sleep, and did not present themselves until paresis appeared. I do not lay much stress upon the last two symptoms, but the movements were quite different from those described by Dr. Hammond, and many other muscles than those of the hand and foot were affected. Dr. Gowers states that the essential difference between athetosis and the mobile spasm seen in partially paralyzed limbs is that in the latter there is a fixed spasm superadded to the mobile spasm. There was fixed spasm of the fingers in this case, which resembles, in many particulars, Case 12 in the paper of Dr. Gowers before referred to, except that in my case the movements are less severe, and there was no fixed spasm of the arm and forearm, but only of the fingers of the hand.

There were some special characters peculiar to this case. Among these may be mentioned presence of considerable voluntary power, although the movements were interfered with by the spasm, the affection of the arm being greater than that of the leg, an increase in the movements when an attempt was made at voluntary action, the drawing backwards and upwards of the head when the tongue was put out, and cessation of the movements shortly before death, no doubt due to exhaustion of the nerve-centres from the violence of the epileptic convulsions which he at that time experienced. The symptoms were quite different from those present in chorea.

What is the pathology of this affection? "The symptoms," as Dr. Gowers says, "point clearly to damage to the grey matter of the brain, to local perverted nutrition of nerve-cells, in consequence of which they overact, either spontaneously or on the stimulus of a volitional impulse, which is, by their overaction, perverted or irregularly distributed." Now, in this case, great congestion of the grey matter of the brain was present, evidenced by the microscopical appearances. The vessels are seen distended with blood-corpuscles, and the perivascular sheaths crammed with leucocytes, which are present in such numbers as often to obscure the vessels and the nerve-cells as well. That these appearances are pathological I have no doubt, as the mode

of death was not asphyxial, and they were not observed in the brain of the man killed by an accident. It is therefore quite possible that the nerve-cells in this case have overacted from perverted nutrition, due to excessive supply of blood, and hence the spasms. Although I did not examine the ascending frontal and parietal convolutions, yet there is no reason to doubt that the changes described were present in them. Appearances similar to those I have mentioned were seen in the medulla from a case of hydrophobia, and were described by Dr. Gowers at the Pathological Society, and to a less degree in the cord from a case of tetanus, which Dr. Ross brought before the same society. Although it is quite open to an objector to say that these changes are secondary to irritation of the nerve-elements, I have an equal right to hold the opinion that the vascular changes are the primary lesion. The youth of the patient would no doubt cause the nerve-elements more readily to receive permanent damage.

On Catalepsy, with Cases. Treatment by High Temperature and Galvanism to Head. By Alex. Robertson, M.D., Physician to the Royal Infirmary and City Parochial Asylum, Glasgow.

Catalepsy is one of the most striking of the great group of functional disorders of the nervous system. In this country it is a rare disease, except in lunatic asylums, where, at least in a modified form, it is by no means uncommon. Among the recorded cases a considerable proportion occurred in women of a hysterical disposition. It has, however, been observed in many other conditions. Thus in some individuals it has been associated with gross organic lesions of the brain, such as tumours and softening; but these may be regarded as accidental coincidences, and not as essential to the disease. Malaria would seem to have been the agent in its production in a number of instances, this opinion being supported by the fact that the patients recovered under the use of quinine and other remedies with similar properties. A curious case is recorded by Vogt of an Alpine village near Würzburg, in which half of the population, both males and females, suffered from this disease. He states that the inhabitants had been much given to intermarriage, and that generally they are, or at least were—for his account was published in 1863—a small and deformed race. The seizures

were of short duration, not generally lasting longer than five minutes. They were preceded by a chill, which was soon followed by a strange sensation in the arms and legs. Then the sufferers became deadly pale, while their limbs got stiff, and continued in the position they were in when the attack commenced.

It is stated by Vogt that in these cases the intellect and senses were normal. In this respect they differ materially from general experience, as it is usual for the mental powers, as well as the various forms of sensation, to be in complete, or at least partial, abeyance.

Observers are generally agreed that the muscular rigidity is quite independent of the will. Thus Handfield Jones, in his work on "Functional Nervous Disorders," after reviewing the group of cases recorded by the eminent alienist physician, M. Lasègue, remarks, "In such cases it must be admitted there is a permanent tension or contraction of the muscles independent of the will, and unattended by fatigue, which, were it even felt, would show itself by relaxation." This is certainly the usual impression, but the following cases throw doubt on the soundness of this conclusion, so far as it applies to those occurring in association with mental disturbance. The variety of mental disorder which it accompanies is melancholia, and, so far as my experience goes, the form known as melancholy with stupor. Three or four years ago I showed a young woman to my class of students in the asylum who suffered from a resistive form of melancholy with a degree of stupor. When her arms were stretched out and put into any position, they remained there, until they slowly fell, seemingly after the muscles were exhausted. The lower extremities were not affected in the same way, nor other parts of her body. This plasticity of the arms was observed during some weeks, and then gradually passed away. She is still insane, and in the asylum. It will be observed how limited the disease was in this instance. Many cases of partial catalepsy, resembling this one, are on record; and in them, as well as in my patient, consciousness was not altogether in abeyance.

The patient to whose case I shall specially refer was first under the care of Dr. Wood Smith, in the Glasgow Royal Infirmary, who showed him to a meeting of the Medico-Chirurgical Society in 1883. Ultimately he came under my charge in the Town's Hospital. While in the infirmary Dr. Smith was good enough to allow me to examine the patient,

and afterwards sent me a full report of his medical history up to the time of his leaving that institution. Some other details were obtained from his relatives. From these sources I have drawn out an abstract of the case, which I shall submit before relating the after history. Besides the interest which attaches to the question of volition, there are some practical points in the treatment to which attention will be directed.

J. Kelly, age 23, labourer in a chemical work, was admitted into the Royal Infirmary on 11th January, 1883, in a state of unconsciousness, which had set in on the previous day. It was stated that up to this illness he had been a healthy man, and particularly that he had never previously suffered from disease of the nervous system. His family-history was pretty good, except that a maternal uncle had been insane. Though not a habitual drunkard, it had been his habit for years to get drunk occasionally. For some weeks before the occurrence of the seizure there had been a noteworthy change in his mental condition and habits, as in the evenings he had become a regular attendant of religious meetings, and at home had been singing hymns and reading the Bible—all which were very different from his previous mode of life. During the week just before his admission he had been taciturn, doing things mechanically, and his eyes had a strange expression. Still, he had been going to his work. On the morning of the 8th January, however, while at his employment, he suddenly began to stare vacantly at his fellow-workmen, and would not speak. He was sent home, and was able to walk thither alone. In the course of that forenoon he had become apparently unconscious, and his limbs were stiff, retaining any position in which they were placed. This seizure did not last more than ten minutes, the rigidity passed away, and he was able to walk home from a medical man's residence, where the attack occurred. On the 9th he had returned to the singing of hymns, and said that God was showing him his sins (I would direct special attention to this fact in relation to his mental condition when he emerged from the cataleptic state). Again, however, on the 10th his limbs became stiff, but at the same time plastic, and his eyes were fixed. This was his state on admission into the hospital. It was then also noted that the pupils were dilated, but sensitive to a bright light; he swallowed well; respirations were 24 per minute; axillary temperature was 98°·4. His limbs were found to retain any position in which they were placed. When his arms were fully extended and raised perpendicularly above his head they remained so for fully ten minutes; his lower extremities, and also his head, and neck, and trunk, could likewise be moulded into position in the same way; the muscles being in a state of plastic rigidity. In the course of the next few days repeated examinations

showed that there was general anæsthesia, for on pinching or pricking him anywhere, both on trunk and extremities, with needles and pins, there was no indication of sensation. Nor was there any sign of feeling on the passage of the full current from a 40-cell Leclanché battery. A deep thrust of a pin produced no response, and there was no oozing of blood at the point of insertion. The interrupted current produced vigorous contractions of the muscles of the extremities. Both superficial and deep reflexes were in abeyance. He was able to swallow well. Though in the state described, when supported on both sides, he was able to walk up and down the ward; and on the 15th, when ordered, he walked a few steps alone. Yet his rigidity soon returned. Thus, on the 14th, after a walk in the ward, he became stiff, and while so was placed with his heels resting on one chair and the back of his head on another, the chairs being apart from each other. He maintained this position about $1\frac{1}{2}$ minutes. On the 16th, and for four or five days afterwards, the rigidity of the limbs did not last above a minute at a time when they were put into position. Altogether, at this time, his symptons had abated considerably; he was even able to take his food himself, and attend to his bodily wants occasionally. From this time his temperature was normal, except between the 13th and 16th January, when it rose to about 100°F. Dr. F. Fergus examined the eyes with the ophthalmoscope, and he reported that there were no important morbid conditions; he particularly notes that there was no anæmia of the fundus. During his further stay in the infirmary his condition became less satisfactory, and he was discharged on the 16th February, after thirty-six days' residence. The principal medicines administered were, first, potassium bromide, and afterwards the tinctures of valerian and assafœtida. My examination of the patient was made on the third day after his admission into the infirmary. The note that I then took states that his arms retained the outstretched and unsupported position in which I placed them for twelve minutes, and then they slowly fell to the bed; the legs did not remain *in situ* so long as the arms. I pricked him with a needle at eight different points of his extremities, but there was no appearance or expression of feeling, and none of the points bled. When discharged from the infirmary he immediately came under my care in the Town's Hospital. For the first four days after his removal he obstinately refused food, and had to be fed by the stomach-pump. He kept his teeth firmly clenched, and I required to use the nasal tube. When mastered by this means he cried out bitterly. The waxy flexibility *(flexibilitas cerea)*, as the cataleptic condition has been called, continued. It was observed that the rigidity of the muscles was by no means great; they did not seem firmer when the limbs were extended than they would be had the extension been effected by voluntary action. His pulse was 70, and of fair volume. His skin felt warm and moist; the temperature was

about a degree above the normal. He was cleanly in his habits, using the chamber utensil voluntarily. He also now took his food himself. Sensibility of skin was often tested in various ways, but there was never the least indication of its presence, whatever the test. His lips had generally a dusky colour. There was no disease of heart, or lungs, or kidneys. The treatment up to the 28th April, besides careful attention to the improvement of his strength and condition and the regulation of his bowels, consisted in the application of two fly blisters to the shaven scalp. There was, however, no improvement in his condition, nor much apparent change for some weeks after admission. It was then determined to try the effect of the stimulus of heat to the head. Accordingly, on the 28th April, the water-cap * was applied to the head, and water at 104° was circulated through it for two hours. At the beginning of the application the pulse was 84 and the axillary temperature 99°; at its close the temperature was 101° and pulse 108. That afternoon and next morning he showed more mental activity. From that date till 11th May, a period of 14 days, this treatment was continued. The temperature of the water was higher than at first, ranging from 108° to 120° Fahr.; on the 10th and 11th May it was 120°. On each occasion I noted the axillary temperature and the pulse immediately before each application and at its close. On an average there was 1° F. of an increase on the removal of the apparatus, and the pulse was twelve beats higher. From the 11th to the 14th May the water was circulated at 116° or 118° for two hours each day, and was then gradually lowered to cold—about 50° F. The latter was continued for about an hour. On the 14th I recorded that "the expression of his countenance for some days has been much more intelligent than before this treatment was commenced. He follows with his eyes the movements of anyone beside him. When asked to sit up and take his meals he does so at once. On seeing the thermometer he withdrew his arm to admit it into the armpit, and brought the arm to his side when requested." His limbs still showed the same waxy flexibility as before, without distinct rigidity. The circulation of hot and cold water in the way described was continued daily till 1st June, the increase of axillary temperature being less than with the hot water alone. At that date the entry in the note-book is:

* This is one of a number of apparatus which were designed by the writer about seventeen years ago for the purpose of applying heat and cold at graduated temperatures to different parts of the body. They include, besides the water-cap, a spinal bag (which has been of great use in the treatment of various diseases of the spinal cord), a chest and abdominal bag, a uterine bag, and a throat bag. A description of them, particularly of the chest one, was published in a serial paper in the "British Medical Journal" for November and December, 1871, and in the "Glasgow Medical Journal" previously. I have added this note to prevent possible misapprehension, as there are now other apparatus, metallic as well as India-rubber, in use, constructed on the same principle, but all of them have been introduced since the period referred to.

"Mental condition much improved; now asks questions and answers them correctly; puts off and on his clothes himself; played a game at draughts with me fairly well." I tested the sensibility of the general surface, and it seemed greatly improved, though impressions were slow in transmission. On asking him if he felt me pinching him, answered "Yes." Even though so much improved generally he still maintained the attitudes in which his limbs were placed. On the 4th June I asked him why he kept up his hand in that way, namely, stretched out, and his forefinger pointing upwards. He replied, "It is the Lord." On being asked if he meant God, he said "Yes," but would say no more. I pricked his arm at six different points, three of which bled freely, showing that the circulation was much more active than at the early part of his illness. On the 13th June, there being no further change, the water-cap was discontinued, and the continuous current was ordered to be passed from neck to head, first on one side and then on the other; the positive pole was placed over the cervical sympathetic, and the negative was moved slowly along one side of the head. On the 4th July the positive pole was put into a basin of salt and water along with his feet, the negative being moved over both sides of his head alternately as before. From five to ten cells of a Leclanché's battery were in use, and the current was passed for five minutes on each side of the head daily. On 25th July his mind is noted to be much more active. I then subjected him to a careful examination, and have noted a long series of questions and answers. I shall quote the part relating to his visit to the meeting of the Medico-Chirurgical Society in the Faculty Hall. Question: Do you remember being taken to any place out of the infirmary? Answer: I was taken to a place like a hotel with my father. Question: Did they give you anything? Answer: He (meaning his father) took the tea and cake; they forced a little on me. Question: Did they do anything else to you? Answer: They took me into a large room with a big table, where there were a number of dressed gentlemen. They passed me round the room, and a pin was put into my hand, but I did not feel it much. I cannot say how that should be. They set me leaning back on a chair, and put my arms and my legs up. *I tried to keep up as well as I could.* Question: What happened after that? Answer: After I left the room where there were so many gentlemen they offered me brandy. I took some of the brandy, but it was forced on me. I was afraid they were going to do something to me.—From this time there was no further indication of catalepsy, sensation was fully restored, and his mind continued active. He was, however, found to entertain delusions about God speaking to him by audible voice, this delusion having been manifested at the outset of his illness. He was also occasionally troublesome, and threatened violence to the nurse. It was therefore deemed advisable to

transfer him to an asylum, and he was accordingly sent to Woodilee, under the charge of Dr. Blair, on 17th August, 1883.

Dr. Blair's letter contains the after-history. It is dated 2nd June, 1886, and is to the effect that Kelly was then in the asylum, and had been so on three previous occasions since he was sent there from the Town's hospital. Twice he was dismissed recovered, but on the third time only relieved. There had not been the least approach to the cataleptic state. He was, however, supposed to have had more than one epileptic fit. His inability to continue well when out of the asylum Dr. Blair ascribes to drinking-bouts.

In briefly reviewing this case I remark that sensation was much more deeply involved than the power of motion. The various forms of sensibility were, at least, very greatly impaired, if not entirely in abeyance, whereas there was no clear evidence of motor defect. The muscles responded perfectly to the faradic stimulus, and there was no paralysis. The cutaneous circulation was obviously very sluggish, and the question suggests itself—Was the circulation in internal organs, and particularly the brain, in a similar state? If so we have here at least one cause for serious disturbance of the cerebral functions. But the further question arises—Why should the circulatory system be in that condition? Was there any deeper cause in action? When this patient was shown to the Medico-Chirurgical Society, in the course of the after-discussion I expressed the opinion that, should he emerge from his then state, it would probably be found that he had been labouring under some overpowering delusion, and also that he was not altogether unconscious of what was passing around him. His statements, which I have quoted, show that this opinion was well founded. A profound delusion appears to have occupied his mind throughout his illness. It would almost seem that this morbid idea, or rather, that the pathological condition of the cerebral tissue, of which the idea was the expression, had so tyrannized over him as to absorb the nerve-force and exhaust the nerve-cells of the part of the brain which is associated with psychical action, as well as the cells of the highest sensory centres. The sympathetic system was also involved, if we may draw that inference from the languid circulation, and this would tend to maintain the prevailing inertia through the nervous system generally. With respect to treatment, it was sought to stimulate the brain, and thus rouse the patient from his

long protracted torpidity of mind and body. The high temperature applied to his head, ranging from 112° to 118° Fahr., seemed to effect this; at least there was no distinct indication of improvement till this measure was used. After a time it was thought that the stimulating effect would be more decided by alternating heat and cold, and the result was apparently a further progress. At a still later stage of the case these modes of treatment were laid aside, and stimulation of a different kind, namely, by galvanism, was employed; this, too, acted beneficially. It was certainly disappointing that complete recovery did not then occur. The remaining disorder was purely mental, which, as mentioned by Dr. Blair, was entirely removed in Woodilee Asylum. That gentleman is also of opinion that our patient might have continued well had it not been for his intemperate habits. If the impression on Dr. Blair's mind, that Kelly has now become epileptic, be correct, support is given to the view that catalepsy and epilepsy are allied in nature, but, on the other hand, it is possible that the latter—the epilepsy—may have been induced by his excesses in alcohol.

In the description I have given of the state of his limbs when extended during the cataleptic condition it was stated that the degree of firmness or rigidity of the muscles did not, in my opinion, exceed that which is present in the same positions maintained by voluntary effort in health; and if we may credit his statement when he had partially recovered, the attitudes in which his limbs were placed by myself and others were retained there by *volitional acts* till the muscles were exhausted. He said distinctly, "I tried to keep up as well as I could." My impression is the same respecting the girl to whose case I have referred. Her muscles were not more firmly contracted than was necessary to maintain the position of the limbs. She, also, probably acted under delusion.

As already mentioned, the records of published cases of catalepsy all state that there was muscular rigidity of the limbs, and in some this was undoubtedly a marked feature. The descriptions also leave the impression on the mind in reading them that these contractions were *involuntary*. Still there is much need of fresh observation with special reference to this point. It may be that the muscular contractions are really maintained by the will in an abnormal state. Assuming, however, that the recorded observations are correct, then there would seem to be an essential difference

between the muscular condition in my cases, as well as probably in the great majority of those that are associated with the same forms of mental disorder, and that which is present in catalepsy of other origin.

If it be contended that the absence of volition in any form is essential to the existence of true catalepsy, then it may be fairly questioned if cases occurring among the insane have any proper title to be so regarded—at least such cases as are here recorded—and the writer considers that in all probability other cases have not generally any better claim. Should it ultimately be determined that genuine catalepsy in this sense does exist, then a *cataleptoid* group should be recognized, in which the will is not altogether in abeyance, and most of the insane cataleptics would find their correct place in this category. It is, of course, clear that the will in this, the apparently completely or partially voluntary class of cases, is not really free, but is subjugated by the morbid thought. In its turn the unhealthy ideation is the result of the serious disturbance of cerebral function, which in the sphere of sensation is manifested by anæsthesia, and in vaso-motor action by the torpid circulation in the smaller blood-vessels.

A Case of Prolonged Sleep. By J. Keser, M.D., F.R.C.S., Surgeon to the French Hospital, London.

Cases of prolonged sleep and hystero-epilepsy being of comparatively rare occurrence in England, it may be worth while to record one which came under my care in March last.

The patient, Chauffat, aged 38, belongs to a family in which tubercular and nervous affections have been frequently observed. His grandfather had a nephew who committed suicide; his grandmother died of phthisis; the father, who was addicted to drink and had had epileptiform attacks when 49 years old, died of tubercular laryngitis eight years later. The mother died of phthisis in her forty-seventh year. She was a passionate woman, subject to violent headaches and to paroxysms of nervous excitement. Chauffat is the eldest of eight children. His only brother died of croup when three years old; one of his sisters died of phthisis at the age of 26; another had repeated attacks of sleep, which lasted from one to six days, and were accompanied by cataleptiform phenomena; she also died of phthisis in her twenty-fourth year. The third sister had a fever after a premature confinement; the fourth had a severe attack of typhoid fever, after

which one leg became shorter than the other; she limps a little, but there is no atrophy of the limb. The fifth sister has a situation as cook in Switzerland; her son has been rickety, but he is now in good health. The sixth (youngest) sister is anæmic, and of a weak constitution. It is not necessary to do more than note in the patient's family the coexistence of phthisical and nervous affections, which has been observed in so many other instances.

Chauffat was born at Gy (near Geneva), and, when twenty years old, he enlisted in the Foreign Legion of the French Army, where he remained for two years. During the Franco-German war he had an attack of pleurisy, and received a wound on the left frontal protuberance, which, however, does not seem to have been serious. Later on, a gun-shot wound of the left elbow necessitated the amputation of the arm in the upper third. Chauffat left the army and went to Switzerland, and then to Algiers, where he appears to have had a serious disappointment in love. In October, 1873, he had an attack of fever and delirium, which lasted six days. The temperature went up to 107°·5, and there were other serious symptoms, such as extreme restlessness and carphology. Two medical men diagnosed an acute meningitis, but after the sixth day there was a steady improvement, and two weeks later the patient had entirely recovered. Shortly after, however, he was seized, after a drive in an open carriage, with rigors and severe cephalalgia. He fell unconscious on the floor, and had a violent attack of convulsions, which was followed by coma and delirium. He recovered gradually, but in 1875, on his way to Algeria, he had another fit of a similar kind, which lasted only a few hours.

In Algeria he had small-pox, and, later on, an attack of ague, which obliged him to leave the country. He came back to Switzerland, and afterwards went to Germany as a commercial traveller. While at Balingen, in January, 1880, he went to bed one evening as usual, and remained fast asleep for forty hours. When he woke up he was paralyzed on the left side, and quite dumb. He went to Geneva, where he was treated in the hospital, and then left for Lyons, apparently in good health. During the summer of the year 1881 he often felt pains in the head, and on September sixth, without any previous warning, he fell unconscious on his bed, where he was found by his friends, who took him to the Hotel Dieu. He was treated there as a case of tumour of the brain, and woke up hemiplegic and quite dumb, as at Balingen. Several other attacks of a similar nature occurred at Valence and in Switzerland, and Chauffat then decided to go to Paris in order to consult Professor Charcot. He was admitted into the Salpêtrière in October, 1885, but left shortly after. He fell asleep one day, without any special cause, in an hotel, and remained unconscious for 130 hours, but when he woke up there was neither paralysis nor dumbness. During another attack of sleep he was robbed of a sum of money, and he then decided to come to England, thinking that he might earn some money by ex-

hibiting himself as a fasting man, as he had on one occasion lived without food for 16 days.

He arrived in London on March 23rd, and the next evening he went to a club with the intention of making some acquaintances with people who might have helped him to execute his plans; but things turned out otherwise than he expected; the strong English drinks upset him, and while he was muddled he was robbed of his money and watch. On March 25th he remained in bed the whole day without having anything to eat or drink. On the following day he became quite unconscious, and on March 27th I was called in to see him. A card was found in his pocket, on which the patient asked to be taken back to the Salpêtrière if found asleep. This, of course, helped to clear up the diagnosis, and I wrote to Professor Charcot, asking him to give me some details about Chauffat. I take this occasion to express to the highly-esteemed Professor of the Salpêtrière and to Dr. Babinski my best thanks for their valuable information. In their opinion, and in the opinion of those who have taken the trouble to examine Chauffat carefully, the diagnosis is that of hystero-epilepsy, with occasional attacks of prolonged sleep; but it must be admitted that, had nothing whatever been known of the patient's previous history, other diseases might have been thought of as possible. As a matter of fact, Chauffat has been repeatedly treated abroad for cerebral hæmorrhage, cerebral anæmia, acute meningitis, and tumour of the brain.

I found the patient a strong, healthy-looking man, lying on his bed in a small restaurant in Greek Street, Soho. He appeared to be sleeping soundly, and did not make any movement when called or touched gently; a tap with the finger on any part of the body was followed, after an interval of about half a second, by a sudden shaking of the whole body, which lasted for about two seconds. The colour of the face was natural, and the general appearance was that of ordinary sleep; the breathing was quiet, regular, of normal frequency and rhythm; pulse 84, soft; temperature 98°·5 at 5 p.m. (in the mouth). A careful examination of the chest and abdomen revealed nothing abnormal, except a considerable distension of the bladder, which had to be emptied by the catheter; it contained about two pints of dark-coloured urine. When the skin was pricked with a pin the same shaking of the whole body occurred as after a tap with the finger, but there was no expression of pain on the patient's face, and a mere trace of blood showed itself in the small wound. I tried to put some water into the mouth with a spoon, but it was not swallowed. I then opened the right eye with the finger and threw a ray of light into it by means of a concave mirror, in order to examine the pupil. The globe was turned upwards and inwards, but after two or three seconds the eye began to move, and the pupil became visible; it reacted to light as usual for about half a minute, and then remained dilated; the left eye opened spontaneously, and both remained open.

They soon began to follow the movements of the mirror, and as the patient seemed to be partly awake he was placed in the sitting posture, supported by cushions, and I made him swallow about an ounce of wine and water, which was on the table. Every movement of deglutition was followed by a general tremor of the body. I sent someone downstairs to fetch some milk, but before I had time to give it, the patient closed his eyes, and I was unable to rouse him again,

On March 28th I examined the patient again, and made him swallow some milk and beaf-tea. The patellar, cremasteric, and plantar reflexes were normal on both sides, and there was no ankle clonus. Slight friction of the skin, especially across the chest, produced a well-marked *tache cérébrale*, which persisted for a long time afterwards. When the eyes were closed there was complete flaccidity of the arm and legs, but after the patient had been partly roused by means of the mirror the limbs remained for an almost indefinite time in the position in which they were placed. The condition of the muscles was not always the same ; if, for example, the arm was placed very gently in the perpendicular position, it remained motionless, but there was no rigidity of the muscles, and a stroke with the hand did not cause it to fall down. If, on the contrary, the arm was firmly grasped by the hand and lifted up suddenly, the muscles became rigid and the rigidity could be increased by rubbing, but then a gentle stroke with the hand produced a complete relaxation of the muscles, and the arm fell down on the bed. The same result could be obtained by simply blowing on the arm or by passing the hand over the patient's eyes from above downwards.

On March 29th the patient made some spontaneous movements with the arm ; during the night he spoke of thieves, and repeated several times the number 13,198 ; some words were pronounced quite distinctly, generally, however, there was a good deal of stammering. The pulse, temperature, and respiration were normal, and the patient took some milk or beef-tea every two hours ; the urine had to be drawn off as on the first day.

On March 30th Chauffat was examined by several medical men, and amongst others by Mr. Brudenell Carter,* who found contraction of the vessels of the fundus. During the afternoon the patient was restless, and began to speak again in an incoherent and almost unintelligible manner ; he occasionally moved his arm, but he never answered or seemed to understand any question. When the arm was stretched and the fist clenched, the patient's face took an expression of anger ; it was also noticed that a movement of the limbs or face performed passively once or twice was continued automatically and with great rapidity for an almost indefinite time, when the eyes were open ; closure of the eyes was followed by a gradual cessation of the automatic movements. I tried, but without success, to induce the patient to perform various movements by suggestion. It should be

* See memorandum by Mr. Carter at the end of this case.—[Eds.]

stated that during the above rapid movements of particular muscles there were no signs of effort in the patient. His facial muscles remained as placid as before. In the evening, Dr. De Watteville ascertained that the electrical reactions of the muscles were normal; prolonged faradization of the facial nerve produced a persistent contraction in the corresponding muscles; faradization of the septum of the nose gave rise to signs of uneasiness, the patient moving his head away, but without opening his eyes. He then had a well-marked epileptiform seizure with violent tremor of the whole body, pleurosthotonus and clonic spasms, which were followed by rigidity of the extremities.

On March 31st, the patient had an enema, but it remained without effect; about 300 grammes of urine were drawn off with the catheter; liquid food was given every two hours.

The following day (April 1st), I succeeded for the first time in inducing the patient to pass water by suggestion; he was also able to sit up almost without help. On April 2nd he began to answer simple questions in writing, and to walk about the room when supported on both sides; it was noticed that the left leg was very weak, and that the patient was unable to stand alone; he was quite speechless, but could write without any difficulty. When asked if he was asleep, he wrote that he had not slept for several days, and that he was not hungry but very thirsty; when told to write something which was either absurd or untrue, he did so, but with very evident signs of displeasure; he signed his name in his usual hand. Having been asked to *write* Charcot's name, he did so, forming the letters as he did when writing any other word, but when he was told to *sign* "Charcot," he imitated Charcot's signature in a very striking manner. I then ordered him to write a letter to Charcot, and he at once set to work; he began by excusing himself for having left the Salpêtrière so suddenly, and went on to say that "this fatal sleep always played him tricks;" that he had gone to sleep on a bench, and had been robbed of all his money, &c.; he signed this letter—"Chauffat, Paris, le 13 Mars, 1887." It was ascertained later on that he had really left the Salpêtrière without permission, and that he had written a letter of apology to Professor Charcot, but that the letter had never been sent. On the following days, whenever he was told to write to Charcot, he began the same letter.

On April 3rd, in the evening, Chauffat could be made to open his eyes by passing the hand before the face from below upwards several times; a single movement in the reverse direction sent him to sleep again. Patient ate three oysters and drank some white wine.

On April 5th he recognized Charcot's photograph, which was shown to him by Dr. A. Garrod; he answered readily most questions by writing, but was unable to make a choice; when, for example, he was asked if he would like to have some claret, he answered *no;* when asked if he desired to drink some white wine, he wrote *yes;* but

whenever I asked him which wine he liked best, the answer was always—"I do not know."

On April 6th the patient was more easily roused than before, and made some spontaneous movements with the lips; on the following day it was noticed that the automatic movements were less easily induced, and less persistent.

On April 8th, when the landlord entered Chauffat's room in the morning, he found him apparently asleep, but when he tapped him on the shoulder and asked him if he was still sleeping, he at once opened his eyes, sat up in bed, and showed by signs that he wished to write. I arrived shortly after, and found the patient wide awake, but nearly paralyzed on the left side, and quite unable to speak. The right eye was slightly congested. In answer to my questions, Chauffat wrote that he had a headache and felt very drowsy; he had no appetite, but felt thirsty. He was soon after removed to the French Hospital, where he rapidly improved under the influence of galvanism and nux vomica; at the end of a week he was able to walk alone and without a stick, but the aphonia was still complete.

During his 13 days of sleep, Chauffat's temperature had always been normal, but the pulse and respiration had varied a good deal; the pulse was soft, regular, and the number of the beats oscillated in an irregular manner between 68 and 100; respiration 18 to 24.

The quantity of urine passed or drawn off daily varied between 50 grammes on the second day and 1,600 grammes on April 6th; the average was about a pint. The urine has been examined for me by Mr. Woodland, who has sent me two reports on which the following table is based :—

Date.	Reaction.	Spec. Gravity.	Urea %	Uric Acid %	Hippuric Acid %	Chlorides %	Phosphates %	Albumen.	Sugar.
April 1.	Very acid	1029	4·13	0·481	0·431	0·01	0·21	none	trace
April 3.	Acid	1026	1·26	0·3·1	0·216	In small proportion.		trace	trace
April 5.	Acid	1028	1·002	0·312	0·221			none	trace

During his sleep the patient had two motions, one on the 31st of March, and one on April 3rd; the first was abundant, of a brown colour; the second was small in quantity and of greyish colour.

The sensibility of the skin was frequently tested while the patient was asleep, and also afterwards. There was a partial loss of sensation on the left side of the body; on the leg, between the knee and ankle, the anæsthesia was almost complete. Careful examination revealed the existence of four patches where the sensibility was either normal or exaggerated; one of these patches was situated in front of the left external malleolus, and had an oval shape; the second occupied the front and back of the left knee; the third was found in the left inguinal region; and the fourth on the extremity of the stump. The shape of the three last patches was irregular, but always the same on repeated examinations.

Although both eyes are apparently normal, the patient sees better with the right than with the left, and the same difference is found in regard to his hearing. The taste is almost completely abolished on both sides of the tongue. There is a marked anæsthesia of the pharynx, which makes the examination of the larynx very easy. The vocal cords present their usual appearance, and move freely when the patient breathes; when he tries to speak, they remain quite flaccid and separated by an interval of 2 or 3 millimetres, so that the patient is unable to produce a sound. According to Professor Charcot, this dumbness is likely to last some time, and the patient will stammer when he begins to speak again.*

I have not much to say about the treatment of this case, as I considered that the best plan was to feed and wait. The retinal vessels being contracted, it was thought that nitrite of amyl might produce some favourable effect, but this expectation was not realized, although a rather large quantity was given to the patient to inhale. There was a well marked congestion of the face, but no sign of returning consciousness.

Editorial Note.

To the foregoing report by Dr. Keser, we append the memorandum by Mr. R. Brudenell Carter, referred to at p. 270.

"While Chauffat was in a state of profound unconsciousness, I twice examined his eyes with the ophthalmoscope, and once again when he had so far recovered as to be able to write replies to questions. In consequence of the difficulty of giving any definite direction to his eyes, I was unable, on the two first occasions, to obtain a satisfactory view of the optic discs, but I saw the general surface of the

* After this notice had been written, the patient recovered the use of his voice. On May 9th, during the application of the galvanic current to the sides of the neck, he was able to utter an inarticulate sound. The next evening he suddenly began to speak in a peculiar squeaky voice, but without stammering.

retinæ very well, and noted an entire absence of any morbid appearance, together with a state of the vessels which I should best describe negatively as the reverse of distension. On the third occasion I examined both discs minutely, and came to the conclusion that an apparent slight turbidity of the nerve tissue was physiological, and due to its being somewhat massed together towards the inner side of the scleral foramen.

"Dr. Tuke asks me to append to this note a mention of a case of catalepsy, which I saw more than forty years ago. The patient was a young woman, employed as a farm servant, who had a stormy interview with a man of her own class, by whom she was pregnant, and who refused to marry her. On returning home she was attacked by convulsions of great violence, which lasted for about two hours, and then passed into catalepsy, with well-marked *flexibilitas cerea*. She was left about midnight, and woke up the next morning as well as usual, except for fatigue and stiffness. She had a severe instrumental labour, but never showed any more tendency to convulsion or other nervous disorder."

We are indebted to an article by Dr. Edgar Bérillon in the April number of the "Revue de l'Hypnotisme" for the following references to cases of prolonged sleep, *à propos* of the report by himself of a case of lethargy in a woman.

Dr. Bérillon borrows them from a work by Dr. Semelaigne, Superintendent of the Maison de Santé of St. James, at Neuilly. His work is entitled "Du Sommeil pathologique chez les aliénés," Paris, 1885. See also "Annales médico-psychologiques," Janvier, 1885. He himself reports a case which he had observed from 1875 to 1883, in which there had been altogether, in the course of eight years, 1,698 days of pathological sleep. The last crisis of sleep had lasted 15 months, and during the whole of this time he was fed only by means of the œsophageal tube. After the death of this patient, on the 19th of June, 1883, an examination was made, and at the close of a report made to the Medico-Psychological Society of Paris, Dr. Semelaigne collected together 80 cases presenting similar phenomena. From these 80 instances Dr. Bérillon extracts only the principal:—

Dr. Burette observed in 1713, at la Charité, a carpenter who slept for six months. During this time he was fed with spoonfuls of broth and of wine introduced every day between the teeth.

In a case reported by Franck the sleep lasted 18 months. Nourishment was administered to the patient in the same manner. Legrand

du Saulle had under his observation at the Bicêtre, a sleeper whom he found on September 9th, 1868, during his round, in the attitude of a man plunged into a state of profound sleep. This patient remained in almost the same condition until his death, which took place in April, 1869. He was nourished by means of the tube.

In another case reported by the same physician, a man, eighty years of age, slept from April 3rd to October 1st, 1867.

From this pathological sleep he never awoke. As in the preceding case he was fed by the tube.

In 1868 Dr. Foville had under his observation a man at Charenton who remained in a condition of absolute immobility for about nine weeks.

In 1707, Homberg read at the Academy of Sciences a report of an extraordinary instance of lethargy. The man was called "the sleeper of Holland," and his sleep was prolonged for six months, without any interruption, during which he evinced no sign of voluntary movement, or of feeling. (Not reported in the work of M. Semelaigne.)

In the foregoing observations there are points of difference between them and that of Mdlle. B. (reported by M. Bérillon); but there is a second group of facts which more nearly resembles it, in the sense that they are manifestly dependent upon hysteria. Thus, Sandras cites the case of a young hysteric, who had several complete attacks of lethargy. These attacks only lasted a few days, but the description of her state during the lethargy recalls that of Mdlle. B. exactly. As with this latter case, liquid placed upon the back of the tongue was swallowed without effort. Louyer-Villermer has placed on record a similar case of hysterical lethargy which lasted about a week.

In the same group of hysterical lethargies, it is necessary to include the patient of Louvain, known under the name of *La Marmotte de Flandre*, who was seized every day, from the morning until the evening, with an attack of complete lethargy. We may add that similar cases of more or less limited duration have been observed by Briquet, Charcot, Delasiauve, &c. Quite recently, in the service of M. Jules Voisin, we have seen a patient, called Eudoxie R., remain during several months, at the end of a nervous crisis, in a state of complete immobility and insensibility. The report of this patient, who in many respects resembled cases of lethargy, will be found in the "Iconographie Photographique de la Salpêtrière," de MM. Bourneville et Regnard.

This patient has been described by M. Charcot in several masterly lectures, and she is one of the subjects which have aided him in reconstructing the complete natural history of these peculiar cases of prolonged sleep.

We have found also in the "Bibliothèque Nationale" some facts of the same description, old cases, but, nevertheless, very carefully studied. Among these, we may cite that of a young hysterical girl, published by M. De Beauchêne, physician to the King. This patient

for five years was attacked with lethargic sleep, for periods lasting from eight to ten days; and of which one lasted even seventeen days. The patient during this period had no excretions. She took food only when awake. Another case, not less conscientiously observed, is that published by M. Dionis, surgeon to the Dauphiness. Elizabeth Devigne, aged 25, living with her mother in the Faubourg-Saint-Germain, was attacked on May 26, 1709, with an extraordinary malady, which was looked upon as catalepsy. . . . The physicians who came to see the patient went away convinced that there was no imposture; but no one was able to formulate a plausible theory. . . . The Lieutenant-General of Police had her placed in one of the religious hospitals, where she was placed under the care of Drs. Ombert, Morian, and Geoffroy. They found that in the hospital, under their eyes, the patient had the same attacks of catalepsy. Ultimately, the patient greatly improved.—[Eds.]

OCCASIONAL NOTES OF THE QUARTER.

Lunacy Acts Amendment Bill.

The Medico-Psychological Association has not been idle in considering the clauses of this oft-introduced Bill, and in bringing its defects and actually mischievous enactments under the notice of the Lord Chancellor. The Parliamentary Committee has repeatedly met, and it has stated the grounds of objection in the form of a circular. It was thought only fair to the members of the Association, and likely to be productive of benefit to the Committee itself, to submit this statement to the quarterly meeting of the Association. As will be seen from the report of this meeting under "Notes and News," the result was a lively and practical debate on the Bill. Experienced men in and out of asylums agreed in regretting the troublesome interference with the prompt admission of private patients into institutions for the insane. A curious omission in the clause referring to urgency certificates was pointed out by the Chairman, in his appropriate opening remarks.

Strong protests were made against the worse than useless checks put upon the care and treatment of single patients. That they should be visited only once a year is, no doubt, a great defect; but we fail to understand why the Bill should rush from this extreme of neglect to that of so great an interference with the system that it would become practically unavailable, much to the detriment of the

patients, who will be driven by this Bill, should it become law, into out-of-the-way nooks and corners of England, or expatriated to Belgium or France, or no one knows where. Dr. Ringrose Atkins forcibly pointed out the absurdity and inconvenience of excluding medical men on committees of registered hospitals from signing the certificates of patients should they happen to be admitted into those institutions. Indeed, the more the Bill is looked at in the light of this and some other causes, the more it shows the want of practical acquaintance with lunacy among those who have been engaged in drawing up this elaborate Bill. One of our judges once made the pertinent and sarcastic remark that it might be supposed from the character of some of our Lunacy Acts that they had been drafted by lunatics themselves!

Dr. Murray Lindsay, than whom no one is better informed on the question of pensions, brought out the main points, upon which he has always insisted. The difficulty, however, remains as to the scale upon which pensions should be reckoned, it being felt by some that if the present rate of a maximum of two-thirds of the salary and emoluments could be depended upon as certain, it would be undesirable to propose any change beyond (1) the addition of seven years to the term of service, (2) the inclusion of the previous service of a superintendent in another county, should such be the fact, and (3) the right of appeal to the Home Secretary if there should be a disagreement between committees of asylums or Quarter Sessions on the one hand, and superintendents on the other, in regard to the amount of pension.

Much may be done by the influence brought to bear upon Members of Parliament by the members of this Association. We hope that now the definite points of objection to the Bill have been clearly put forward by the Association, no legitimate means will be omitted in exercising this influence in bringing about amendments in Committee in the House of Commons.

Some of the objections to the Bill are so well stated by Dr. Needham, in his recent Annual Report, that we cannot do better than add them to the foregoing remarks:—

> As the same, or a slightly altered, Bill will probably be again introduced, I venture to draw attention to two clauses especially, which appear to be in a high degree objectionable, seeing that they have reference to institutions such as this, which were established by voluntary effort for philanthropic purposes, the whole of whose resources

are devoted to the comfort and recovery of the patients, and which are managed by Committees of independent gentlemen, such as form the Committees of County Asylums, who derive no pecuniary or other benefit from their connection with them.

Clause 8, sub-section 3, provides that no person shall be received as a lunatic in a hospital under an order on the application of a member of the Managing Committee of the Hospital. This provision seems both unnecessary and unfair to those who, associated with these institutions solely for philanthropic purposes, devote much time and trouble to their management, and who, approving of their constitution, and having an intimate knowledge of their character and arrangements, would naturally be desirous of selecting them, in case of need, in preference to other classes of asylums in whose constitution they might not have so much confidence.*

Clause 53, in its present form, is considered to be peculiarly objectionable.

While admitting the propriety of some provision whereby the Commissioners in Lunacy can enforce compliance with their reasonable requirements, there is probably no precedent for such extensive powers, practically without appeal, being given by an Act of Parliament to any department over large public institutions which, for many years, have been fulfilling a great public requirement, and which, as the reports of the Commissioners in Lunacy bear witness, have been conducted with efficiency and success.

It must also be noticed that, in this clause especially, a responsibility, under severe penalties, is thrown upon the Superintendent of the Hospital, which he, as the paid servant of the Committee, could have no possible power of discharging except by their permission. The objectionable character of this clause would be greatly diminished if it were so varied as to give power to the Secretary of State to take independent action against the Hospital, in the event of the reasonable requirements of the Commissioners not being complied with, and upon their representation; right of appeal to Parliament, or to some practical body, being, at the same time, conferred upon the hospital authorities.

A Theistic Monomaniac's Suicide.

A book full of interest and of ghastly instruction might be compiled from newspaper cuttings of extraordinary suicides. Of these few would be more startling than one recently reported at Kemerton near Tewkesbury. The head gardener to a Mrs. Holland, named Adams, aged 40, was found burnt to a cinder in the root-house. The under-gardener had known him for two years, and having been informed that he was

* In our opinion the same objection applies to the restriction on signing a medical certificate.—[EDS].

missing one Monday morning, made search for him, and, in doing so, had his attention drawn to smoke issuing from the root-house in the garden. There, after extinguishing the fire with assistance, the remains of the deceased were found, although they could not be identified. A can used for petroleum, a flask with brandy in it, and a small benzoline lamp were also there. What remained of the body was lying face downwards on the fire of burning wood.

The root-house spoken of in his evidence is an excavation with a brick roof, used for keeping roots, &c., in winter time. In the floor was a square hole six feet by five feet, and about a foot deep. The hole is filled with charred wood and a few logs partly burned, all quite greasy with the melted flesh of the unfortunate man. The heat of the flames must have been very great, for the door-posts were half burnt away, as also was the ivy overhanging the doorway. Of the deceased nothing was left but blackened bones, chiefly the backbone and thighbones in one piece, and several small pieces of bone. Of the flesh nothing whatever remained, except a piece of the heart. Even the skull was unrecognizable.

A hole had been dug in the floor of the house, and the wood must have been carefully laid in it. This witness had seen him in his usual health on the previous Sunday, and he had never given any indication of his not being in his right mind.

The unfortunate man's mother, Mrs. Adams, stated that he got up on the Monday at 4 o'clock, and had said on the previous Saturday that if the weather continued the same he would have to get up early to go to the vinery. He always came back to breakfast about 8 o'clock. When he was missing, search was made for him at the mother's request, with the result already stated.

Then comes the explanation of the suicide in the form of letters placed in his writing-desk on the Monday morning, one being addressed to his mother and the other to Mr. Reuben Smith.

The latter is as follows (the former being identical with the exception that it was addressed to his mother as "recipient for the whole jury of women") :—

"My dear Sir,—I make you the recipient of this charge to the whole jury of men, and you will find a true verdict upon it according to the evidence set before you.

"God has commanded me to burn my body ; I have done so in the root-house in the kitchen garden as a protest against Christianity. To pronounce sentence upon it in the following terms :—

"That it is high treason against the majesty of God.

"A libel upon His works.

"And a degradation of the reason of man and woman.
"The Lord is the whole spiritual power of man.
"The Spirit the whole spiritual power of woman.
"And have no claim to equality with God.
"Absalom and Christ are the same persons.
"Make your prayers direct to God.
"God, who is judge of all, hath judged me.
"With the permission of God I shall return again in about three months, more or less, newly recreated.
"My wife as my helpmeet will accompany me.
"We shall be fully endowed with the prerogative of God's Commission.
"Our duties then will be to rearrange the machinery of Government, to rewrite the Bible, leaving out the transgressions of man and woman, chronology, history, deeds of prowess, and other objectionable matter, and honour the pure and valuable precepts only.
"Woman will be redeemed from the original curse passed upon her body, and will have a separate government to manage her own affairs.
"I have been content to address God as my master.
"You will do well to reduce yourselves to subjects, and to consider that you are the sons and daughters of man and woman only.

"Your loyal and faithful friend and servant,

"Samuel A. Adams."

The mother stated that she had never seen anything peculiar about her son's behaviour; he was the same as anyone else in manner or conversation. It turned out, however, from her evidence that Adams was confined 15 years ago in the Lancaster Asylum. He had lost his wife in May, 1886, and this made him melancholy for some time. He had no children. After his wife died his mother came to live with him. When she last saw him alive on the Sunday night about 10 o'clock, he seemed quite happy and jocular; better than she had seen him for a long time. This remark shows that the symptoms of mental disorder following his wife's death had in reality never quite departed.

The coroner pointed out to the jury that they must take into consideration the fact that Adams had been confined in a lunatic asylum. He thought the letters proved that he was of unsound mind. There was nothing to show that the fumes of the oil suffocated him; but the position of the body indicated that he had laid himself down upon the fire.

The jury immediately returned a verdict that the deceased committed suicide while in a state of unsound mind.

We have thought it well to place this case on record. A theist, he was a religious monomaniac. He had heard a voice commanding him to do the deadly act, and it is quite

consistent with the mother's evidence that he was happy and jocular. Granting the premises, his conduct was but natural. He was proud of being thus employed by God himself. He expected to return to earth in about three months, recreated, and his wife would accompany him as his helpmeet, both of them endowed with extraordinary powers. Had he committed a murder, and written no letters, the evidence of the under-gardener and of the mother would have left the impression on the minds of a jury that he was a responsible being, and the judge would have laid down the law, with characteristic emphasis, that unless the jury were satisfied that he did not know the nature and quality of the act which he had committed, they must find him guilty.

In regard to the letters themselves, it may be said that, while affording ample proof of insanity in Adams, in England, in the year of grace 1887, they would not have necessarily been so in all other persons, in every country and in every age. A Mahdi might arise to-morrow in the Soudan, who might write a letter to the same effect, and immolate himself for what, to him, would be a great cause, and the carrying out of a Divinely-appointed commission, and yet possess a brain entirely free from any pathological changes. On the other hand, a case like this of Adams is an illustration of what some religious fanatics may really have been in all ages and countries. They are yet far from having disappeared from the face of the earth.

The Houghton Tragedy.

The event described in the following paragraph in the daily papers, is decidedly unusual, and as such seems worthy of being placed on record. It has reference to the death of McCann, the murderer of a miner on New Year's Eve last.

The Houghton Tragedy.—The Death of McCann.—On Saturday morning, an inquest was held in the Chief Warder's office in Durham Gaol, before Mr. John Graham, coroner, on the body of John McCann (31), miner, who, as already stated, died in the prison infirmary on the previous day.—Chief Warder Proctor identified the body as that of John McCann, who was admitted to the gaol on the 15th January last, on the charge of the wilful murder of John Dixon, miner, at Houghton-le-Spring on New Year's Eve. He was tried before Mr. Justice Day on the 26th January,

was found guilty, and sentenced to death. Subsequently, he was reprieved, and the death sentence was commuted to one of penal servitude for life. McCann was a native of Lanarkshire. In regard to the circumstances of his death, the first symptoms of mania exhibited themselves about ten days previously. At first he was quiet, but more acute symptoms quickly developed themselves, and on the Saturday previous he was placed in the infirmary, where every attention was paid to him by Dr. Treadwell, the prison surgeon. He gradually got worse and refused food. On the Wednesday he was so violent that he broke a large square of glass, and he had to be put into a "straight" waistcoat, and liquid food was pumped into him. He never recovered, and died at a quarter past nine on Friday morning from acute mania.—Dr. Treadwell corroborated the chief warder's evidence and said the mania was of a religious kind. He made a post-mortem examination of his head that morning, but found nothing unusual, and that there were no indications that McCann had been an intemperate man.—Mr. Robertson (a juryman) said the evidence at the trial of McCann bore out that statement. —After some further conversation, the jury returned a verdict in accordance with the medical evidence.

PART II.—REVIEWS.

The Life and Work of the Seventh Earl of Shaftesbury, K.G. By Edwin Hodder. Three Vols. Cassell and Company, London, Paris, New York, and Melbourne. 1887.

It is a striking proof of the many-sidedness of Lord Shaftesbury's labours, that while the work he performed in relation to the insane presents itself to those interested in their care and treatment as the great work of his life, it is found to constitute but a fraction after all of the multitudinous services he rendered to humanity. One of his peers paid a tribute in the "Times" after his death to his memory, but omitted any reference to his action in regard to lunacy legislation. This circumstance we mention merely to emphasize the truth we have above stated, and which accords with the fact that a very large proportion of the contents of the biography before us is devoted to other paths of service in the interests of mankind than that which led him to pursue a course of beneficent action justly endearing his name

to those who have at heart the welfare of the disordered in mind.

It may be said at once that the task of writing Lord Shaftesbury's Memoir has fallen, happily, upon the right shoulders, for Mr. Hodder gives just so much as, and no more than, is requisite for the clear understanding of the diary and letters which he introduces into the biography. He is also discriminative in his appreciation of the Earl's character, and does not nauseate the reader, as so many biographers do, by a continual repetition of eulogistic epithets. Great credit is due to him for clearly stating (and to the members of the family for permitting it) the unhappy circumstances connected with the influence of his father and mother, as without such a statement Lord Shaftesbury's character would have been imperfectly understood. The wretched school-life which young Ashley endured formed also an important element in the formation of his character. Parental harshness and scholastic sufferings left a trace of sadness upon his features, the cause of which was not guessed by a large number of those with whom he came in contact in after life. *Haud ignarus mali, miseris succurrere disco* must have been a line often in his thoughts, and no doubt prompted many a kindly act to suffering children.

The third chapter opens with a short sketch of the condition of the insane in former times and of the Acts of Parliament passed on their behalf. The success of the York Retreat, and the cruel treatment pursued at the old Lunatic Hospital in that city, are stated to have been the circumstances which led to the well-known changes which took place in public opinion, and as a consequence in legislation. The Select Committee of the House of Commons, which took evidence in 1814 and 1815, followed, and a Bill passed the House of Commons which required the periodical inspection of asylums by magistrates, and the appointment of eight Lunacy Commissioners; but the House of Lords at that period contained within its walls only fourteen peers who cared for the humane treatment of the insane. When an Act did pass both Houses of Parliament, in 1819, entitled "For the Better Care of Pauper Lunatics," the clauses were only permissive. Lord Ashley entered first upon the movement with which his name is now so honourably associated, in the year 1828, when he seconded the motion of Mr. Gordon for leave to bring in "A Bill to Amend the Law for the Regulation of Lunatic Asylums." A quotation is made

from Hansard that "his lordship spoke in so low a tone that he was nearly inaudible in the gallery." In his diary he wrote:—

Feb. 20th, 1828. Last night I ventured to speak, and, God be praised, I did not utterly disgrace myself, though the exhibition was far from glorious; but the subject was upon lunatic asylums, a mere matter of plain business, and requiring simplicity alone, with common-sense. Gordon had requested me to second his motion; having sat on the Committee, and having felt unusual sympathy for those whom the Bill is intended to protect, I did not decline, more especially as I had heard that, from certain circumstances, my support in this affair would render some small service to the cause. And so, by God's blessing, my first effort has been for the advancement of human happiness. (Vol. i., p. 97.)

Lord Bathurst wrote (Feb. 20, 1828):—

Peel said that if your speech had been uttered with as loud a voice as that of Lord Morpeth, everybody would have said it was an excellent speech. It is now your own fault if you do not go on. I could not help writing this, as I know you to be mighty sensitive, and may, therefore, take it into your head that there had been a failure, which I can assure you is not the case.

The Bill passed July 15th, 1828. Power was transferred from the College of Physicians, which had only too clearly failed to do its duty, to fifteen Metropolitan Commissioners. Two medical certificates were required for private patients before admission into an asylum. Lord Ashley was one of the Commissioners, and in the following year he was appointed Chairman of the Board. As is well known, he occupied the post of Chairman of this Board, and that which succeeded it under a subsequent Act, for the rest of his life —fifty-six years; and during this time his attention to the duties of the office was exemplary in the extreme, for the multiplicity of his engagements in other departments never led him to neglect his first love.

As Lord Ashley was born in the year 1801 (at 24, Grosvenor Square), he was in his 27th year when he took the first step in the promotion of lunacy reform.

Under date October 3, 1838, Lord Shaftesbury writes:—

Gave a decision to-day, along with colleagues, in the Commission in Lunacy (upon a division of 6 to 4, the first division that has taken place since the institution of the body, now 10 years ago), that one R. P. should be set at liberty. It is an unpleasant and responsible office either to detain or discharge a patient; in the first case, you hazard the commission of cruelty to the prisoner;

in the second, to his friends or the public. We can lay down no fixed rules for decision; we must take our course according to doctors' prescriptions, *pro re natâ*. In the instance before us, R. P. had been seized only a few days when we proceeded to inquire into his alleged insanity and the grounds of his detention. A more heartless ruffian, one more low in mind and coarse in language, though a man of talent and education, never entered the walls of a prison or a mad-house. The opposite party, however, could not prove against him one single act of personal violence; his words, his manner, his feelings, were awfully wicked; but had never, as yet (although their charge extended over several years), broken out into action. In fact, a decision on our part that he was rightfully detained would have authorized the incarceration in a Bedlam of seven-tenths of the human race who have ever been excited to violence of speech and gesture. Three days' sitting—myself Chairman—of five hours each, and all "gratis!" (Vol. i., p. 234.)

The next reference to lunacy in these volumes occurs in Chapter XII. of Vol. ii. It was in 1842 that Lord Somerset brought in a Bill "To extend the Metropolitan System of Inspection to the Provinces, and to appoint Barristers as Inspecting Commissioners, who should devote themselves exclusively to the Service." This was supported by Lord Ashley.

Lord Shaftesbury observes, in reference to the Lunacy Bill of 1842:—

March 18th. Spoke again last night on the Lunacy Bill. I seemed myself to do it without force or point, and with difficulty; half left unsaid, and the other half said ill. This is humbling and despairing, because I plough not in hope. How can I look to success in the great measures I propose if I am so weak in the smaller? The House will despise schemes so brought forward. Am I working *in* the truth and *for* the truth? This doubt often arises now, and yet, what is my guide if I am not? (Vol. i., p. 411.)

The Act was added to the Statute Book July, 1842.

Under date November 9th, 1842, Lord Shaftesbury makes the following entry in his journal:—

Have been to London to transact business in Lunacy. This is a mighty subject, and one on which authority and power could be extensively and beneficially exercised. How often do I exclaim, for this and many other purposes:

> O, Thou, my thoughts inspire,
> Who touched Isaiah's hallowed lips with fire.

But God's strength is made perfect in man's weakness." (Vol. i., p. 439.)

The remarkable Report on the condition of asylums in England and Wales, presented to Parliament in 1844, formed the basis upon which to proceed to a thorough reform of both public and private institutions for the insane, vulgarly called "madhouses." The following entry in Lord Ashley's diary is of interest:—

July 2nd, 1844. Finished, at last, report of the Commission in Lunacy. Good thing over. Sat for many days in review. God prosper it. It contains much for the alleviation of physical and moral suffering. (Vol. ii., p. 61).

On the 23rd of this month Lord Ashley moved for an Address to the Crown, praying Her Majesty to take into her consideration this Report of the Metropolitan Commissioners in Lunacy. In his speech, after giving a graphic description of the abuses which require reform, he said:—

To correct these evils there was no remedy but the multiplication of county asylums; and if advice and example failed, they ought to appeal to the assistance of the law to compel the construction of an adequate number of asylums over the whole country. (Vol. ii., p. 64.)

We quote the following passage from Lord Ashley's diary:—

July 24, 1844. Last night motion on Lunacy. Obtained indulgent hearing. The speech did its work so far as to obtain a recognition from the Secretary of State that legislation was necessary, and should be taken up in my sense of it. Sheil made a neat allusion, by way of compliment, to my great-grandfather's work. He added, too: "The noble Lord's speaking is a *sursum corda* kind of eloquence." This is the most agreeable language of praise I have ever received; it is the very style I have aimed at.

July 25. My friend, the "Times," in character, as usual, charges me with weakness. How can I be otherwise, not having in the House even a bulrush to rest upon? "No politician! No statesman!" I never aspired to that character; if I did I should not be such a fool as to attack every interest and one half of mankind, and only on the behalf of classes whose united influences would not obtain for me 50 votes in the County of Dorset or the Borough of Manchester. "Rides but one hobby at a time!" Of course; a man who cannot afford to keep a groom, if he be rich enough to have two horses, must ride them alternately. I have no aid of any kind, no coadjutor, no secretary, no one to begin and leave me to finish, or finish what I begin; everything must be done by myself, or it will not be done at all. (Vol. ii., p. 67).

Under date November 18th, of the same year, Lord Ashley records in his journal his visit to the Peckham Asylum:—

Long affair—six hours. What a lesson! How small the interval—a hair's breadth—between reason and madness. A sight, too, to stir apprehension in one's own mind. I am visiting in authority to-day. I may be visited by authority to-morrow. God be praised that there are any visitations at all; time was when such care was unknown. What an awful condition, that of a lunatic! His words are generally disbelieved, and his most innocent peculiarities perverted; it is most natural it should be so: we know him to be insane; at least, we are told that he is so; and we place ourselves on our guard—that is, we give to every word, look, gesture, a value and meaning which oftentimes it cannot bear, and which it never would bear in ordinary life. Thus, we too readily get him in, and too sluggishly get him out; and yet what a destiny! (Vol. ii., p. 77).

The following passage from his diary must not be omitted:—

Nov. 9th, 1844. Sittings renewed in Lunacy. What a scene of horrors! If such be the condition of things under all our inspection, law, public opinion, and the whole apparatus of "philanthropy" (what a sad word!), what must it have been formerly, and what would it be again, in a state of pure principle of non-interference?

On the 21st of the same month Lord Ashley writes:—

Graham has asked me to undertake the Lunacy Bill, promising to treat it as a Government measure. Prodigious work! but cannot refuse to lighten the burden on a Minister's shoulders. Agreed, on condition of *full Government support* in every respect. Oh, that I might prosper and do something for those desolate and oppressed creatures!

We must now pass on to the year 1845, in the spring of which year he visits the Surrey County Asylum, in regard to which he makes the following entry in his journal:—

A noble establishment and admirably conducted. A sight to make a man, who cares a fig for his fellows, jump for joy, and give thanks to God. Surely we are on the advance to better things. Compare this with the state of lunatics *fifteen* years ago; and what a change! We see it all around, but do we go fast enough? Is not the cup being *filled* more rapidly by our iniquities than *emptied* by our obedience? Oh, that I might be permitted by God's grace to introduce and carry my measures for the benefit and protection of this helpless race! (Vol. ii., p. 108.)

May 7th. Cannot get in my Lunacy Bills. Graham is not ready. Session is slipping away. The labour and hopes for years will be lost. "All these things," said old Jacob, "are against me." God grant, for I commit all to Him, that I may be alike persuaded of the contrary! (*Ibid.*)

At last, on the 6th of June, Lord Ashley introduced those Lunacy Bills which have become so well known as the main code upon which those engaged in Lunacy have to depend; the first being "For the Regulation of Lunatic Asylums," and the second being entitled "For the Better Care and Treatment of Lunatics in England and Wales." Lord Ashley's speeches on this occasion possessed all the good qualities for which his addresses were distinguished—directness, lucidity, common sense, warm appeals to the human feeling of his audience, and a very effective choice of words. He sketched the leading principles of the Bills, including the appointment of a permanent Board of Commissioners, the obligation on the part of counties to provide asylums for insane paupers, and the protection of single patients. He did not fail to pay a tribute of praise to those who in Paris (Pinel) and in York (Tuke) had introduced a better system, and in England paved the way for reform and the interference of the Legislature in the interests of the insane.

In passing it may be observed that Lord Ashley entertained the idea, from which, strange to say, he never seemed to free himself, that the mentally deranged were "under the marked visitation of a wise though inscrutable Providence," a proposition which might seem calculated to paralyze any attempt to relieve them from a malady inflicted upon them for some special end. But Lord Ashley was not always logical, and happily he followed his benevolent feelings, which safely conducted him to the practical line of action which he so earnestly pursued. Had he lived in the seventeenth instead of the nineteenth century, he would probably have believed in witches, and have found himself in a painful dilemma between the impulses of his kindly nature and the stern requirements of his belief in the sin of witchcraft.

After Lord Ashley's Bills had passed, he makes the following entry in his diary :—

June 7th, 1845. I must enter an expression of humble, hearty, and unceasing thanks to Almighty God for my great success in the introduction of the Lunacy Bills yesterday evening. Sir J. Graham seconded the proposition in a very kind and fervid speech, and announced the full support of the Government.

June 30th. Never have I suffered more anxiety than on these Lunacy Bills. I dream every night, and pass in my visions every clause, and confuse the whole in one great mass. It is very trying —perpetual objections, perpetual correspondence, perpetual doubt, and yet there are good feelings exhibited. Nevertheless, at this

late period of the session, one obstinate, ill-disposed, and stupid man may impede our entire progress.

July 22nd. Have toiled through obstruction, insult, delay, desertion, to the third reading, and have been detained all this day by Mr. Duncombe on clause by clause of the Bill, as he has a *right* to do on this stage. What a time I have passed! Every hour of every day engaged in this Bill and its collateral troubles! Not a moment to myself for thought or comfort. Have had a violent attack, brought on by labour and anxiety.

July 30th. Both Bills passed Committee in the Lords, and they are now quite safe. Most humbly and heartily do I thank God for my success.

(To be continued.)

Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.C.P. J. and A. Churchill, 1886. Vol. I.

(*Second Notice.*)

In a first notice of this work we dealt with diseases of the nerves. We have thus to consider the remaining and larger part of the volume, which treats of diseases of the spinal cord.

The anatomy of the cord is described at some length, but care is taken to exclude details which are without obvious practical bearing; a number of excellent wood-cuts illustrate the chapter. On p. 116 the whole motor path, from the cortex of the brain to the muscles, is set forth in a diagram, according to which this same path is to be divided into an upper or "cerebro-spinal" segment, and a lower or "spino-muscular" segment; each segment consisting of a ganglion cell, a nerve fibre, and the terminal expansion of the fibre. One might add, and an end organ; the spinal ganglion cell playing this part to the upper segment, while the muscle-fibre represents it in the lower. We feel that the author says truly when he states that such a representation "conduces to clearer ideas of many phenomena of disease."

The functions of the spinal cord come next for consideration. On pp. 128-130 the more important movements, *i.e.*, grouped muscular actions, are set down in relation to their representation in the spinal cord. This is a piece of anatomy and physiology which complements the teaching in an earlier part of the work as to the representation of those same movements in the motor fibres of the anterior nerve roots. The general truth underlying these details is

given in the statement on p. 128, "That most movements and muscles are represented in vertical tracts, and the whole anterior grey matter at any one nerve segment contains cells that are concerned with different movements. An extensive lesion of small vertical extent may thus weaken many movements, but abolish none."

The paths of sensory conduction follow on p. 130, *et seq.*; alas, they are still painfully intricate.

On p. 142 is a very useful table "showing the approximate relation to the spinal nerves of the various motor, sensory, and reflex functions of the spinal cord." This table is of special value for purposes of reference.

The symptoms of disease of the spinal cord are contained in a very interesting chapter. In relation to this subject we find, on p. 144, the statement that the nutritional stability of the axis-cylinder becomes less, the greater the distance from the parent cell, and "that it is least in the terminal ramification of each segment." (The segments here referred to are the above-mentioned cerebro-spinal and spino-muscular.) So far so good, but we fear that the tempting suggestion which follows, viz., "that this may be the reason why curara acts chiefly on the intra-muscular nerves," is too good to be true. More likely, we think, is it that chemico-physical affinities will be needed to explain the strange selections of given tissues by drugs which pharmacology presents us with.

This chapter abounds in facts which are so put as to be most available for the student of clinical medicine, whilst, at the same time, the author endeavours, where possible, to make these facts intelligible, by suggesting a possible or probable explanation, *e.g.*, the more ready impairment of the conduction of tactile impressions, as compared with those of pain, is suggested as resulting from the less energy of the former. On the value of pain as a diagnostic symptom of spinal disease, the student is warned of the many abdominal and neuralgic affections which may counterfeit it; but—and this refers specially to the group of excentric pains—we are told that "in all cases persistent rheumatic pains in the limbs should suggest the possibility of spinal disease, and watch should be kept for such symptoms as loss of local power, or alterations in reflex action." On reflex action attention is drawn in a foot-note, p. 149, to the analogy between the effects of degeneration of the two segments of the motor tract; the over-action of the muscle reflex centres

resulting from disease of the cerebro-spinal segment being likened to the increased irritability of the muscular fibres which results from degeneration of the motor nerve-endings of the lower segment. On page 150 we find the statement that "the muscular state on which myotatic irritability depends . . . is probably identical with physiological *tone*." From this, by an easy mental process, we pass to the further statement that the increased irritability of the spinal-reflex centres, which marks itself by a tendency to tonic extensor spasm, "is probably an excessive and morbid degree of the normal tone." We quote the above few instances as examples of the endeavour, everywhere apparent, of the author to bring home to his readers the facts of pathology, to make them really his by explanation, by analogy, and by reference to the more familiar facts of physiology. We must repeat that throughout Dr. Gowers orders his teaching with a view to bedside application.

Pathological diagnosis forms a concluding section to this general and introductory portion of the work.

Space does not permit us to do more than mention the remainder of the work, though this forms the chief part. Individual criticism of the several chapters would be very instructive to the critic, but since choice had to be made it appeared to us more profitable to consider the ground-plan of the structure rather than the details.

Among the list of chapters, and grouped along with the idiopathic forms of atrophy and hypertrophy, we find that most curious disease described by Thomsen, and bearing his name. In considering the pathology of this disease, the author is loth to attribute the symptoms *solely* to abnormal condition of the muscular tissues—this being the more generally accepted theory, and he dwells on the intimate functional relationship which exists between motor cell and muscular fibre. Some rare cases of the arising of the disease in adult life, also the influence of emotion upon the muscular rigidity, speak in favour of a nervous element in the pathology.

We trust that the few points we have been able to accentuate in this short notice of a most admirable work may serve to induce others to study it. The old proverb, *Quot homines, tot sententiæ*, will, we think, here suffer loss, for however numerous the readers of Dr. Gowers' work should prove, we are convinced they will be of one mind as to its worth.

Observations on the Spinal Cord in the Insane. By R. S. Stewart, M.D., C.M. Edinburgh. 1886.

The author has made this the subject of his thesis for the M.D. of Glasgow University, and has investigated the condition of the spinal cord in twenty cases of insanity. Each case is fully recorded, and we have a detailed account of the microscopical appearances of the spinal cord, and in many cases also of the brain after death. The cases selected were: Five of general paralysis; six of dementia; four of melancholia; four of imbecility with epilepsy; and one of imbecility without epilepsy.

In the clinical histories the frequency and serious nature of the bedsores is to be regretted, but beyond that nothing very unusual or striking is recorded.

With the microscope Dr. Stewart found vascular changes in the central grey substance of the cord in sixteen cases, but the most constant changes found were atrophy and degeneration in the nerve cells; pigmentary changes being especially frequent. He failed, however, to find in any of the cases either hypertrophy, multiplication of nuclei, or vacuolation of the nerve-cells such as would meet the descriptions of Charcot, and in two cases only did he find a condition at all approaching sclerous atrophy.

In conclusion, the author ventures to state his belief that changes in the spinal nerve-cells are constant features in almost all, if not all, cases of insanity of some duration. With regard to spinal lesions in general paralysis, he adopts the views of Westphal and Schultze, that the degeneration of the lateral columns is, with few exceptions, a primary development; also that the atrophy, pigmentary, and fatty degenerations of the nerve-cells of the grey substance is a primary affection in the majority of cases, and he does not admit the explanation that they depend upon muscular inaction or confinement to bed, since in some of the cases there was a continual motor excitement and restlessness till death. This paper, although evidently the result of a great deal of labour and care, yet fails to teach us much or to advance the state of our present knowledge.

Influence of the Sympathetic on Disease. By Long Fox, M.D. Smith, Elder, and Co., 15, Waterloo Place, London. 1886.

This volume is an extension of the line of thought expressed by the author in the Bradshaw Lecture, delivered at the College of Physicians, in 1882, and, on account of the large number of observations and facts it contains, necessarily furnishes us with a wealth of material for further thought and study.

The first few chapters are devoted to Anatomy and Physiology alone, and although the descriptions are not by any means exhaustive, yet there is sufficient for reference in reading the later chapters. The author next discusses the General Pathology of the Sympathetic, then proceeding to the Special Pathology, he considers at length the effects of pressure upon the Cervical Sympathetic, and the probable relationships of Myosis, Mydriasis, Glaucoma, &c. To each of the following morbid conditions a separate chapter is devoted: Exophthalmic Goitre; Headache; Hemicrania; Insomnia; Epilepsy; Spinal Cord Lesions—Progressive Muscular Atrophy, Tabes Dorsalis, Sunstroke, Hemiplegia, Lesions of Nerves, General Paralysis; Ephidrosis, Angina Pectoris; Hepatic Neuralgia; Diabetes Mellitus; Visceral Neuroses; Neurasthenia; Pigmentation, Diabetes Insipidus, Nephralgia; Neuroses of the Extremities, Symmetrical Gangrene; Myxœdema and Scleroderma.

The author has not attributed to the Sympathetic System undue influence in the causation of these various conditions, but rather has endeavoured to attack the subject from all directions in an unbiassed manner, giving us as the result an interesting volume from which much can be learnt.

On Aphasia; being a Contribution to the subject of the Dissolution of Speech from Cerebral Disease. By James Ross, M.D., LL.D.Aberd., Fellow of the Royal College of Physicians of London, and Senior Assistant Physician to the Manchester Royal Infirmary. London: J. and A. Churchill, 11, New Burlington Street. 1887.

This *brochure* is for the most part a reprint of papers which recently appeared in the "Medical Chronicle." It does not pretend to be a systematic essay, or an exhaustive monograph. The most important part of the treatise con-

sists of a discussion of Dr. Broadbent's views, from which Dr. Ross, in some particulars, strongly dissents. He discovers, or thinks he discovers, a serious "tendency to break up the human mind into numerous faculties, with their corresponding cortical centres." We should not be doing justice to the author if we attempted to give an abstract of his theory of Aphasia in a short notice. We must, therefore, refer the reader to the book itself, which contains in a small compass the records of interesting and typical cases of Motor and Sensory Aphasia. A section is devoted to the Morbid Anatomy of Aphasia, in which the nature and the localization of the lesion are described, while another section is devoted to Morbid Physiology, in which Aphemia and Motor Agraphia are considered, as well as the Aphasia of Recollection, Psychical Blindness, Psychical Deafness, Paraphasia, Paragraphia, Paralexia. The remaining portion of the book comprises a statement of the theories of Aphasia, enunciated by Kussmaul, Charcot, and Lichtheim. Several diagrams help to make the writer's observations more readily understood. We commend this, the most recent contribution to the literature of Aphasia, to our readers, whether in or out of Asylums.

A Text Book of Pathological Anatomy and Pathogenesis. By Ernest Ziegler, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited by Donald MacAlister, M.A., M.D., M.R.C.P., Fellow and Medical Lecturer of St. John's College, and Physician to Addenbrooke's Hospital, Cambridge. Second edition. Three Vols. 1885-7. Macmillan and Co., London.

The concluding volume of Ziegler's "Pathological Anatomy," as translated and edited by Dr. Donald MacAlister, of Cambridge, has now appeared. We hope to review the entire work in the next number of the Journal; meanwhile we must say that welcome as these volumes are to us, they do not comprehend the whole of Ziegler's Text Book. The part not included treats of the morbid anatomy of the eye, the ear, the bone-joints, also the organs of sex. We trust Dr. MacAlister will take it as a compliment that we regret the omission of these subjects.

Our Temperaments: their Study and their Teaching. A popular outline. By Alexander Stewart, F.R.C.S. With illustrations. London: Crosby, Lockwood, and Co. 1887.

In forming an estimate of this book, it must be continually borne in mind that it only professes to be a popular outline. If, instead of this, it be criticised as a scientific treatise, the medical reader will be disappointed.

An ingenious attempt is made to group the forms of faces under such classes as the square, the tapering, the oval (long and broad), the semi-oval, the oblong, and the melancholic face. Interesting illustrations are given from Lodge's Historical Portraits, and no doubt these forms may be made to comprise the various outlines of the human face. Whether, however, they are associated with a distinct mental characteristic is a much more difficult question. That facial forms mean something, and that the temperaments, when rightly understood, are correlated with very different tendencies of mind, may be allowed, but we fear we are yet far from the sanguine conclusion of the author that all will become familiar with their temperaments and their associated mental qualities, and that they will not only find guidance in forecasting the action of those they may have to deal with, but make themselves and others happier by greater tolerance of the different ways of those who differ from them in temperament (p. 389). Notwithstanding this hesitation, we commend Mr. Stewart's work as one containing much interesting information on a subject in regard to which medical psychologists ought to be well informed. Whatever can be brought together bearing upon the relation between the features and the character is valuable.

The Healing Art; or, Chapters upon Medicine, Diseases, Remedies, and Physicians, Historical, Biographical, and Descriptive. Two Vols. London: Ward and Downey. 1887.

The anonymous author of this work has exercised not a little industry in its preparation, for it is a history of medicine from the time of Hippocrates to our own times. It will be found a very useful compilation, and medical men will do well to procure it for reference, even if their busy lives do not allow them to read it from cover to cover.

The information given respecting the apothecaries may be

taken as an illustration of the interesting matter which the work contains. In the 14th century they were incorporated with grocers. In 1543 the Act 34 & 35 Hen. VIII., c. 8, which was intended as a remedy for the ignorance and greed of London surgeons, tolerates and protects the irregular practitioners afterwards known as apothecaries. It sets forth that the aforesaid surgeons had "sued, troubled, and vexed divers honest persons, as well men as women, whom God had endued with the knowledge of the nature, kind, and operation of certain herbs, roots, and waters, and the using and ministering of them to such as had been pained with customable diseases, as women's breasts being sore, a pin and the web in the eye, uncomes of hands, burnings, scaldings, sore mouths, the stone, strangury, saucelim, and morphew, and such other like diseases; and yet the said persons have not taken anything for their pains or cunning, but have ministered the same to poor people only, for neighbourhood and God's sake, and of pity and charity," and therefore it ordains "that at all time from henceforth it shall be lawful to every person being the King's subject, having knowledge and experience of the nature of herbs, roots, and waters, or of the operation of the same by speculation or practice, within any part of the realm of England, or within any other the King's dominions, to practice, use and minister in and to any outward sore, uncome, wound, apostemation, outward swelling, or disease, any herb or herbs, ointments, baths, pultess, and emplaisters, according to their cunning, experience, and knowledge, in any of the diseases, sores and maladies beforesaid, and all other like to the same, or drinks for the stone, strangury, or agues, without suit, vexation, trouble, penalty, or loss of their goods" (p. 71.)

The apothecary did not, however, attain a high position socially. He was not more than a druggist. The regulations laid down by William Bulleyn* for his guidance are given by the author, and are of great interest. Among them are the following: The apothecary must first serve God, foresee the end, be cleanly, and pity the poor. His place of dwelling and shop must be cleanly, to please the senses withal. His garden must be at hand with plenty of herbs, seeds, and roots. He must read Dioscorides. He must have his mortars, stills, pots, filters, glasses, boxes, clean and sweet.

* Born in the Isle of Ely early in the sixteenth century, and belonged to the same family as Anne Boleyn. He died in 1576, and was buried in St. Giles', Cripplegate, London.

He must have two places in his shop—one most clean for the physic, and the baser place for the chirurgic stuff. He is neither to decrease or diminish the physician's prescription; he is neither to buy or sell rotten drugs; he must be able to open well a vein, for to help pleurisy. He is to meddle only in his vocation, and to remember that his office is only to be the physician's cook. Lastly, he is to remember his end, and the judgment of God (p. 72-3).

James I. granted a charter in 1608 by which "all and singular the Freemen of the Mystery of Grocers and Apothecaries of the City of London" were constituted a body corporate and politic, by the name of "Warden and Commonalty of the Mystery of Grocers of the City of London." Nine years afterwards another Royal Charter was issued, forming the apothecaries into a distinct company under the control of the College of Physicians. We need not follow the subsequent rise and prosperity of the Apothecaries' Company. If its days are now numbered, it has served a good purpose during its long career.

We have said enough to indicate the kind of information which can be gleaned from this work, the concluding chapter of which contains biographical notes of eminent contemporary practitioners, including Sir Henry Acland, Sir William Bowman, Sir George Burrows, Sir Andrew Clark, Sir Dominic John Corrigan, Mr. Erichsen, Sir William Gull, Sir William Jenner, Sir Joseph Lister, Sir James Paget, Sir Henry Thompson, Sir Spencer Wells, and others.

In conclusion, we may say that the author of these volumes has no occasion to conceal his name, as he has succeeded in producing a very useful and interesting work.

Gedenktage der Psychiatrie und ihrer Hülfsdisciplinen in allen Ländern. Von Dr. Heinrich Laehr. Berlin, 1886.

English alienists who have visited Germany are well acquainted with Dr. Laehr's useful work on German asylums, the first edition of which was published about thirty-five years ago. From the same author proceeds the small book whose title appears above. The compiler has with infinite pains ascertained the dates of the most, and, indeed, in some instances the least, important events in the history of institutions for the care and treatment of the insane in various countries of the world. It constitutes a sort of almanack

for the medical psychologist, arranged according to the months of the year. Thus, under January 1st, we find recorded the opening of St. Luke's Hospital in 1787, the opening of the Sieburg Asylum under Dr. Jacobi in 1825 (being the first asylum in Germany whose director was a physician), the opening of the Pennsylvania Hospital of the Insane in Philadelphia under Dr. Kirkbride in 1841, and the opening of the Lancaster County Asylum, Prestwich, in 1851, &c., &c.

Although we think it would have been more interesting to have arranged these occurrences under the year instead of the month, so as to have made the latter of secondary importance to the former, the reader will find a mass of useful information collected together in a small compass. An English alienist has no occasion to complain of the omission of references to the movements of the insane and important events connected with British asylums. It would be a pity if the commendable industry of Dr. Laehr should not be rewarded by the extensive use of his compendium. It has already reached its second edition.

Monomanie sans Délire: An Examination of the Irresistible Criminal Impulse Theory. By A. Wood Renton, M.A., LL.B., of Gray's Inn, and of the Oxford Circuit, Barrister-at-law. Edinburgh: T. and T. Clark. 1886.

To begin with the end rather than the beginning, we may state the conclusions at which the author thinks himself justified in arriving, and that really hang upon the vexed question of so-called moral insanity, which, judging from the title page, one might suppose Mr. Renton to confound with an irresistible criminal impulse. He maintains, then, that to prove the existence of moral insanity as an irresistible impulse to do some act known to be contrary to morality or law, cases must be adduced in which the following elements *combine*, viz., an unlawful impulse, protracted resistance, perfect intellectual soundness, and involuntary gratification (p. 76). Certain cases which have been published in England and on the Continent, as also in America, are subjected to rigorous analysis, and are disposed of with triumphant success in the opinion of the writer. That there have been "unskilful advocacy" and "ill-assorted evidence" brought to bear upon moral insanity must be admitted. As, however,

the doctrine of moral insanity is still held, in spite of the unskilfulness of its advocates, by men like Maudsley and Clouston, there would appear to be something fundamentally true to nature, or rather disease, in the contention that there are a considerable number of most important cases in which the emotions or feelings are so deranged as to render a person thus affected irresponsible for his acts, although it may be impossible to detect that definite lesion of the intellect which the legal mind considers so essential to the definition of insanity. Of this the author is unconvinced, and one might say that he "loses himself in countless masses of adjustments," and ends in the "sceptical destructive slough" of which Carlyle speaks. Granting all that may be fairly advanced against the illogical, non-lucid, and slip-shod writing that has too often marked the productions of the advocates of *Monomanie sans Délire*, we should suppose that the majority of thinking men (lawyers excepted) would think it more probable that the mental physicians referred to would be right in their judgment, based as that judgment is upon actual clinical experience, than even Mr. Renton. We say this with all respect, as with like respect, we think the latter has mistaken his vocation in entering upon the discussion of this profoundly interesting but very difficult problem. The real truth will remain, although many of the reports of cases of moral insanity may be made to look ridiculous and improbable by the hair-splitting ingenuity of gentlemen at the bar. However, we do not complain that the weak points in the evidence should be exposed. All we contend for is that the clever attacks of the lawyers should not be allowed to destroy the substantial truth which lies at the bottom of the doctrine of moral insanity, by whatever name it may be called and however much it may be abused, in common with every other truth in medicine and morals. When Mr. Renton next enters the lists in an attack upon a position which is supported by so considerable a number of practical and experienced men, we should recommend him to study with care the cases recorded, not only by a past generation, but in modern treatises on insanity, including the pages of this Journal, although probably nothing but the actual knowledge of patients would carry conviction to his mind. We hope to meet the author on a future occasion, treating of subjects within his own special range of experience. *Ne sutor*, &c.

Leçons sur les Maladies du Système Nerveux faites a la Salpêtrière. Par J. M. Charcot. Tome Trisième. Paris, 1887.

Les Démoniaques dans l'art. Par J. M. Charcot et Paul Richer. Avec 67 figures intercalées dans le Texte.

We regret that we cannot do more in this number of the Journal than bring under the notice of our readers the fresh contributions to medical science whose titles stand at the head of this notice—the latter of the two having the joint names of Charcot and Richer. They deserve an extended notice, and we rejoice that M. Charcot has found time to continue his former work "On the Diseases of the Nervous System," and to add others to his list of contributions. He has his calumniators, no doubt, both in France and England, but when the history of the progress of neurology comes to be written at a future day the Professor at the Salpêtrière will stand out in bold and dignified relief, while his petty foes and critics will be forgotten. In our next number we shall return to these admirable writings.

Handbook of Practical Botany for the Botanical Laboratory and Private Student. By E. Strasburger, author of "Zellbildung und Zelltheilund," etc., etc. Edited from the German by Professor Hillhouse, M.A., F.L.S. London: Swan Sonnenschein, Lowrey, and Co.

An Elementary Text Book of British Fungi, Illustrated. By William Delisle Hay, F.R.G.S., author of "Brighter Britain," etc., etc. London: Swan Sonnenschein, Lowrey, and Co.

What have botany or fungi to do with psychological medicine or mental science? some of our readers may be disposed to ask. In truth we often find it difficult to know where to draw the line, and we are conscious that we may expose ourselves to the charge of inconsistency in accepting some works for review and declining others. For example, we have before us a little book on the "Athanasian Creed," anonymous, but generally supposed to be written by a retired medical superintendent, esteemed for the work he performed in past days. Coming from such a source, it commands our respect and tempts us to give the author a friendly hand-shake. We hold, however, that while some may maintain

that theology has as much to do with mental science as botany, there are sufficient reasons to debar us from reviewing a distinctly theological work, while we bring under the notice of our readers a botanical treatise. We might, indeed, have cited the incidental references scattered throughout the book to hereditary transmission, and to the relation between organization and thought; but we should not find it easy to separate these from the body of the work without injustice to the author. We, therefore, adopt the position of *non possumus*, as regards works of this nature, and proceed to the notice of those at the head of this review.

Although, then, not directly connected with medical psychology, works of this description ought to find readers among those engaged in this department of medicine. They contain a large amount of information, systematically and carefully prepared. A special description is given in the first volume, at the head of this notice, of the methods of studying bacteria. Simple directions will be found for the practical examination of these organisms. Minute instructions are given for microscopical investigations, as also in regard to the best method of culture. In short, this work is an elaborate, detailed and practical treatise, and is conscientiously prepared. It is accompanied, moreover, by a number of illustrations.

The work on "The British Fungi"—not very correctly called a "Text Book"—which contains a large number of plates (not all original*), deserves a certain amount of, although a qualified, commendation, and in spite of its faults cannot fail to be useful to medical men. The writer says, and we can well believe him, that he has never had the privilege of meeting with anyone versed in mycology from whom he could derive instruction. It is really surprising that the subject of British poisonous fungi should have been so much overlooked. In the tenth chapter Mr. Hay gives as perfect a list as he is able of toxic fungi. His comments are often lively and original, in striking contrast to the orthodox dulness and dryness of modern botanical works, which remind one of the happy definition of pea soup, that it distends the stomach without improving the mind. Thus, of one species of Agaricus, the Destroying Angel, the writer's comment is as follows:—"Angelically beautiful and demoniacally poisonous, it reminds me of a bride in white satin and lace" (we hope the simile does not go on all fours). "A perfect specimen I once lit upon in the shade of a dark

* It should have been stated what plates are copied from other works.

shrubbery, illuminated by a straggling ray of sunshine through which a red admiral butterfly fluttered down upon it, afforded me an artistic feast." Again, of Agaricus Lacrymabundus of the crocodile, the comment runs—"It is bowed with the weight of its guilt." The esculent and economic uses of the fungi are strongly insisted upon, and an amazing amount of ignorance would be dispelled were this work widely circulated among the public. It would seem that "prejudiced Britons" are in a condition of much greater ignorance than the French and Germans. "The recognition of the common esculents is easy enough to learn, once the mind has grappled the idea of discrimination. On the Continent children are taught to recognize those kinds of fungi locally appreciated, and they will select such a species with which they have become familiar unhesitatingly from amid a thousand others. Surely English children are as quick as those of the Black Forest or Lorraine." The author adds: "Little as English people know about esculent fungi, that little is illumination compared with all they know on the subject of 'Fungus Poisons.' In that field there is almost total darkness." A study of Mr. Hay's work is certainly calculated to diminish some, at least, of this darkness, notwithstanding many blemishes which disfigure it, and it might be criticised at length did our space allow.

L'Encéphale. Structure et description iconographique du Cerveau, du Cervelet et du Bulbe. Par E. Gavoy, Médecin principal de l'armée. Avec Atlas de 59 planches en glyptographie. Préface de M. le Professeur Vulpian. Paris Libraire, J. B. Baillière et Fils, 19, Rue Hautefeuille. 1886.

This is an atlas of the human brain, giving a complete representation of the cerebrum in the three chief planes, viz., frontal (lateral-vertical), sagittal (antero-posterior and vertical), and horizontal. The sections are made only a short distance apart, and in this way a very complete series of pictures is obtained of the brain in the various planes. The plates are drawn by hand to the natural size, from the sections, and are reproduced by the glyptographic method. The drawings are most beautifully executed, and the minutest details are figured.

Accompanying the atlas is a full explanatory text describing the different sections.

It is stated in the text that the sections have been prepared by a method which brings out the various parts more clearly, but unfortunately the method employed is not described. Certainly the fibres are brought out much more sharply than they appear when a section is made in the fresh brain or after hardening in bichlorate of potash.

A similar atlas has been previously brought out by Prof. Dalton (America). There is this distinction, however, that the sections of the brain have been photographed in place of being drawn, so that while the fibres are not reproduced so vividly, the plates are necessarily more accurate so far as they go. There are some parts of the text with which we are not fully in accord, more especially as regards the omission of any reference to the direct pyramidal tract—the fibres of which go direct from the motor area of the cortex, through the internal capsule to the pons and medulla without joining the basal ganglia; and we would take exception to the description of the minute anatomy of the fibres of the cerebellum.

The atlas, at the same time, is a work which will be very valuable for reference in elucidating the complicated arrangement of the interior parts of the brain, and particularly the intricate regions about the basal ganglia. The author is to be congratulated on a production which must have entailed a vast amount of labour.

Professor Vulpian, since deceased, prefaces the work in terms of high commendation. B.

The Life of Percy Bysshe Shelley. By Edward Dowden, LL.D. Two Vols. Kegan Paul, Trench, and Co., London. 1887.

(Continued from p. 126.)

Our notice of this work left off at the point when Shelley was unable to find sufficiently impassioned terms to describe his admiration of Miss Hitchener.

A reconciliation now took place between Shelley and his own and his wife's father, one practical consequence being that the allowance for the young couple was made £400 per annum.

Shelley, who when at Oxford had conceived a great admiration for the author of "Political Justice," now fell completely under Godwin's influence. He wrote a letter to him in which he desired an interview with one whom he had been accus-

tomed to regard as "a luminary too dazzling for the darkness which surrounds him." In this letter he says:—

I am married to a woman whose views are similar to my own. To you, as the regulator and former of my mind, I must ever look with real respect and veneration.

Shelley now threw his enthusiasm into the Irish questions of the day, especially Catholic emancipation. Leaving Keswick, where he and his wife had resided since quitting York, they proceeded to Dublin. As his biographer says —

Of Irish parties and internal politics Shelley knew but little. He was not the first or last of his countrymen who fancied that by a promenade in Ireland he could restore order from the chaos (p. 241).

We need not discuss the pamphlets which Shelley issued in order to bring about the regeneration of Ireland, but he exhibited at this period considerable ability and unquestionable sincerity, although everyone would admit with Shelley's biographer that —

Practical men of action, like Scully and O'Connell, could have little in common with a boy-dreamer, who supposed that he had mastered Irish politics in a week, and whose chief thoughts and hopes were centred in a vaporous millennium of equality and freedom, resplendent and remote as a sunset palace in the western sky (p. 245).

Godwin remonstrated with the course his young disciple was pursuing in Ireland, and thus proceeds:—

He that would benefit mankind on a comprehensive scale, by changing the principles and elements of society, must learn the hard lesson, to put off self, and to contribute, by a quiet but incessant activity like a rill of water, to irrigate and fertilize the intellectual soil. Shelley, you are preparing a scene of blood! (p. 263.).

Shelley withdrew his condemned publication from circulation and left Dublin. He was blamed by Godwin for "running from one extreme to another." This, in truth, was precisely what a temperament like Shelley's was certain to do.

Now Shelley is a resident in Nantgwillt, in Wales. Here Harriet became very ill, and Shelley was troubled with some legal difficulties. Injurious reports were circulated in regard to Miss Hitchener and her admirer, who indignantly wrote to his uncle, Captain Pilfold, and to her father, Mr. Hitchener. Writing to the latter Shelley says: "Take care, sir; you may destroy her by disease, but her mind is free—*that* you cannot hurt. . . . When next I hear from you I hope that time will have liberalized your sentiments" (p. 276). This

was quite the Shelley style of writing to his elders. All that the kind Captain Pilfold was sure of was that his nephew was "very much attached" to Eliza Hitchener.

Next we find Shelley and Harriet residing in lodgings at Lynmouth, one room being assigned, in anticipation, to the angelic Miss Hitchener, who, after her arrival, was engrossed in helping Shelley in his writings, and in reading his Irish manuscripts. Dr. Dowden thinks that this period was the happiest in Shelley's early life. "His love for Harriet was ardent and unmarred by fleck or flaw. In his relations with Miss Hitchener he had not yet passed from enthusiasm to disillusion" (p. 283). It is interesting to note here that when in Dublin, Shelley had written: "I either am, or fancy myself, something of a poet." And everything now tended in his surroundings and in his domestic happiness to favour his marvellous poetical genius.

It may be mentioned here that Shelley's opinions in regard to marriage were confirmed by the reading of a work by Sir James Lawrence. It "convinced him, if any doubts yet remained, that marriage is essentially an evil" (p. 286). To him Shelley, having then been in the bonds of matrimony for a year, addressed a letter, in which he says: "Love seems inclined to stay in the prison." To Harriet he addressed birthday lines, which show that on August 1, 1812, he had no cause for regarding the alliance as uncongenial:—

> Ever as now, with love and virtue's glow,
> May thy unwithering soul not cease to burn,
> Still may thine heart with those pure thoughts o'erflow,
> Which force from mine such quick and warm return.

And in other lines he thus apostrophises the Harriet whom he then adored and called his "second-self":—

> O, thou most dear,
> 'Tis an assurance that this Earth is Heaven,
> And Heaven the flower of that untainted seed
> Which springeth here beneath such love as ours.
> Harriet! let death all mortal ties dissolve,
> But ours shall not be mortal! The cold hand
> Of Time may chill the love of earthly minds
> Half-frozen now. The frigid intercourse
> Of common souls lives but a summer's day;
> It dies where it arose, upon this earth.
> But ours! Oh! 'tis the stretch of fancy's hope
> To portray its continuance as now,
> Warm, tranquil, spirit-healing. . . .

Shelley then speaks of Harriet's "woman-sweetness," the fire which throbs in her "enthusiast heart," and of "the dear love that binds our souls in soft communion," and he is assured that they can never "dare to cut the unrelaxing nerve that knits our love to Virtue":—

> Can those eyes,
> Beaming with mildest radiance on my heart
> To purify its purity, e'er bend
> To soothe its vice or consecrate its fears?
> Never, thou second self!

The poet ends his beautiful lines to Harriet with —

> Virtue and Love! unbending Fortitude,
> Freedom, Devotedness, and Purity!
> That life my spirit consecrates to you* (p. 288).

Nor was this fondness for Harriet a mere poetical expression. Writing to Hogg subsequently (Feb. 7, 1813), he says: "When I come home to Harriet I am the happiest of the happy" (p. 320).

To Fanny Godwin (daughter of Mary Wollstonecraft and Imlay) Shelley writes of Harriet: "The ease and simplicity of her habits, the unassuming plainness of her address, the uncalculated connection of her thought and speech, have ever formed, in my eyes, her greatest charms; and none of these are compatible with fashionable life, or the attempted assumption of its vulgar and noisy *éclat*" (rather later date.)

Shelley's visit to London in October, 1812, with his wife, sister-in-law, and Miss Hitchener, was an important incident, inasmuch as he met Godwin in person for the first time. Everything, in Shelley's eyes, was admirable. Godwin was an infallible mentor and profound philosopher, while Mrs. Godwin was "chiefly distinguished by a sweet resoluteness and magnanimity of soul." Godwin's daughter, Mary Wollstonecraft, was now fifteen, and it is probable, although not certain that Shelley met her at that time.

Shelley's admiration for Elizabeth Hitchener now vanished, she who as "the chosen partner of Shelley's spirit in its higher strivings and aspirations" (Dowden) had naturally caused Harriet much unhappiness by coming between her and Shelley.†

* In the MS. book from which this is taken it is followed by the beautiful sonnet to Harriet, Aug. 1, 1812.

† Mrs. John Williams writes (Vol. i., p. 321) that Shelley's taking Miss Hitchener into his house brought to it "confusion and anarchy" in addition to the poverty.

Dr. Dowden speaks here with unusual directness: "Certainly Harriet was stung by expressions which implied that the girl-wife must take up a humbler position of service towards Percy than that held by the elect sister of his soul." What with Miss Hitchener's natural acceptance of the position accorded her, and the extravagant terms of admiration expressed for "the chosen partner of Shelley's spirit," poor Harriet may well have begun to doubt whether she was any longer her husband's "second-self."

When Shelley ceased to admire the Surrey schoolmistress he went from one extreme to the other, and "Portia" was now regarded with disgust. Shelley offered to make her some compensation for having induced her to give up her school and live in his family, but it is not clear that she accepted it. "The Brown Demon, as we call our late tormentor and schoolmistress, must receive her stipend. I pay it with a heavy heart and an unwilling hand; but it must be so. . . . What would Hell be were such a woman in Heaven!" (Shelley to Hogg, Dec. 3, 1812, p. 313). The terms in which this former idol is described in this letter form one of the innumerable examples of fickle change of opinion on Shelley's part in regard to his heroes and heroines.

A brief reference may here be made to an alleged attack made on Shelley during the night of February 26th, 1813, while residing at a small house (Tanyrallt) at Tremadoc, North Wales. Many supposed that this was a delusion of Shelley's brain, although the narration of the occurrence by Harriet at the time was very circumstantial. Peacock wrote, after making inquiries on the spot, that the evidence appeared conclusive that the whole series of operations took place from within, and not from without (p. 354). Again, Mr. Jno. Williams, a neighbour, who was sent for, and found Shelley sadly excited, believed that there was no attempt whatever at burglary, but that the whole affair was the product of Shelley's heated imagination. He said * that Shelley

> "Fancied he had seen a man's face on the drawing room window; he took his pistol and shot the glass to shivers, and then bounced out on the grass, and there he saw leaning against a tree the ghost, or, as he said, the devil; and to show Mr. Williams what he had seen, he took his pen and ink and sketched the figure on the screen, where it is at this moment, showing plainly that his mind was astray. . . .

* What follows in inverted commas is from a statement made by Mrs. John Williams long afterwards (1860), as to her husband's opinion of the Shelley ghost (see Vol. i., p. 354).

When I add that Mr. Shelley set fire to the wood to burn the apparition, you may suppose it was not all right with him."

Leeson, who was his supposed assailant, was a real man who had charged Shelley with sedition. In after-life Shelley appears to have dreaded being pursued by the same person, who, on his part, asserted that Shelley invented the story in order to escape from his creditors, which seems a very far-fetched and improbable explanation. It is certainly remarkable, and favours the theory of delusion (or invention) that Harriet used to be angry whenever Leeson was named. She said Shelley wanted to frighten her, and that for long she was frightened, but that Mr. Peacock had told her it was untrue (p. 355).

Soon after this period Shelley wrote to his father from London, proposing reconciliation. Shelley was not one to say to his father what he did not really feel, and it is, therefore, of some importance to record that he frankly acknowledges that the intercourse between himself and his father was forfeited by his *own* "follies;" (p. 365). He adds: "I hope the time is approaching when we shall consider each other as father and son with more confidence than ever, and that I shall be no longer a cause of disunion to the happiness of my family." We must admit, with Dr. Dowden, that Shelley had been "a trying, intractable son." Unfortunately, his father still required him to disavow his sentiments on religion, which, of course, Shelley could not do with truthfulness. That old Mr. Shelley meant well, and had just cause for bitter disappointment in the course his son had pursued, is not denied. But wrong as Shelley's former disobedience was, it would have been an act of hypocrisy to have consented to profess beliefs which he did not hold, as his father is said to have wished him to do.

Shelley at this period was a vegetarian. He rarely took beer, spirits never. Tea was his favourite beverage. At one time he took freely of laudanum. His dress was neglected, as became a philosopher and poet. His throat was generally bare. In the street he felt obliged to wear a hat, "but in fields or gardens his little round head," says Hogg, "had no other covering than his long, wild, ragged locks" (p. 372).

Shelley informed Cornelia Turner that he dreaded the visions that pursued him when alone at night. In 1813,

The strange delusion afflicted him that he was attacked by

elephantiasis; he had travelled in a mail coach with a fat old lady, whose legs, the reverse of slender, had horribly fascinated Shelley's gaze and imagination. She must be a victim of that cruel disease which changes the human skin into an elephant's hide; the disease must be contagious, and he himself could not now escape from its invasion. "One day, at Mr. Newton's house in Chester street, as he was sitting in an armchair," writes Madam Gatayes, "talking to my father and mother, he suddenly slipped down on the ground, twisting about like an eel. 'What is the matter?' cried my mother. In his impressive tone, Shelley answered, 'I have the elephantiasis'" (p. 373).

Shelley consulted a doctor, and in the course of a few weeks his hypochondriacal delusion vanished. He was by no means a stranger to mirth, and sometimes told a good story, "shrieking with paroxysms of the wildest laughter." Hogg, from whom we quote, represents him as carried away irresistibly by this laughter, which rose to a "fiendish peal" on the most inopportune occasions.

Shelley now becomes a father. Ianthe was born in the summer of 1813. Although, according to Hogg, the child did not appear to afford any gratification to Shelley, we are assured by Peacock that he was extremely fond of it; and this is confirmed by the sonnet he addressed to it, in which he expresses his love to it for its "own sweet sake," although still more for its mother's; for it is—

> Dearest when most thy tender traits express
> The image of thy mother's loveliness.

In reference to this period, Hogg records that Shelley

> Took strange caprices, unfounded frights and dislikes, vain apprehensions, and panic terrors, and, therefore, he absented himself from formal and sacred engagements. He was unconscious and oblivious of times, places, persons, and seasons; and, falling into some poetic vision, some day-dream, he quickly and completely forgot all that he had repeatedly and solemnly promised; or he ran away after some object of imaginary urgency and importance, which suddenly came into his head, setting off in vain pursuit of it, he knew not whither (p. 377).

It is pleasant to find that about this time a friendly meeting took place between Mr. Timothy Shelley and his son, who had not been in receipt of more than £200 a year, and was in great want of money. Indeed, his arrest for debt was only prevented by his father's interference, without the son being aware of it. His mother and sisters gave repeated proofs of their attachment to Shelley, and appear to have been friendly with Harriet.

Shelley was re-married in London, he being now of age. The author of "Political Justice" had modified his own views in regard to the legal form of marriage, and he accompanied Shelley to Doctors' Commons to obtain a license. Two days later, March 24, 1814, Shelley and Harriet were re-married in St. George's Church, Hanover Square.

(*To be continued.*)

PART III.—PSYCHOLOGICAL RETROSPECT.

Asylum Reports, 1886.

Very little is necessary in the form of introduction to our notice of the Reports. The same features appear year by year; some reports are too long, others far too short. The majority, however, indicate a determination on the part of medical superintendents to keep their buildings and arrangements up to the times, and, so far as can be judged by the criticism of the Lunacy Commissioners, most of them succeed.

It may have been noticed that during the past year or two the Commissioners have made special inquiries about the exercising of the patients beyond the airing courts. This official pressure, if it may be so called, appears to be doing good, though there is still sadly too much room for improvement.

The cost of maintenance of pauper lunatics continues to fall, and there seems to be a fierce competition as to which asylum is to occupy the place of most questionable distinction as being the most economically managed in the country. We hope we may be excused when we say that in our opinion this struggle is a most foolish one. There are so many improvements in asylum management retarded by the disinclination of the public to pay for them that the present is an exceptionally favourable time for their introduction. If with little exception the medical staff of our asylums requires to be increased, the same may be more strongly said regarding the number of nurses and attendants, and in all, the hours on duty urgently call for diminution. None of these really necessary improvements can be carried out without money. "Few attendants" means neglect and restraint.

Barnwood House, Gloucester.—This hospital continues to prosper abundantly, as indeed it richly deserves to do. Some of Dr. Needham's excellent observations will be found under "Occasional Notes of the Quarter."

Birmingham. Winson Green.—Relative to employment, Dr. Whitcombe remarks:—

A recent visit to the asylums at Berlin and Vienna impressed upon me the advantages possessed by them over the majority of our English asylums in

their excellent provision for a variety of employments. In the block for idiots at Berlin this was especially noticeable, resulting, I was informed, in the discharge of 80 per cent. of that class as being competent to earn their own living.* Whilst at Vienna a system prevails of giving a small monetary remuneration to patients for their work, the manufactured articles being sold and proving a financial success.

There is truth in Dr. Whitcombe's criticism, but there is very little chance of a real advance in asylum management in England so long as the foolish efforts to reduce the cost of maintenance continue. We repeat that the first step in the improvement of English asylums is to largely increase the staff of attendants.

Birmingham. Rubery Hill.—Judging from the extract from the Lunacy Commissioners' report, this asylum is in a most efficient condition, and we would suggest that in future the whole report, with that for Winson Green, should be published in full.

Bristol.—Extensive additions, at an estimated cost of £65,676, have been begun. These consist of four projecting blocks, and are arranged for the accommodation of 240 patients.

The following paragraph from Dr. Thompson's report may be interesting for more reasons than one :—

> Though this document is addressed to a Committee of "laymen," I hope it is read by some of the medical officers of other asylums. It will not therefore be out of place, perhaps, to say something of some of the means used for treating the patients medicinally. I should say at once, then, that chloral, bromide of potassium, and cannabis indica—those dreadful destroyers of nerve function—are not used in this asylum. But during the year a new weapon has been added to our armoury, which promises to be of great service in the treatment of acute, chronic, and recurrent mania. I refer to the hydrobromate of hyoscine. Given in doses of from $\frac{1}{200}$th to $\frac{1}{60}$th of a grain by the mouth or injected beneath the skin, the effect, especially on the latter class of cases, is simply marvellous. Where the tendency of such persons (a very common one) is to destroy their clothing and property generally, the new drug most peremptorily puts a stop to it. But the hyoscine should on no account be given to an epileptic, as that condition known as the *status epilepticus* is at once induced in a dangerous degree. I find that small doses of aconite and antimony, together or alone, are of great service in the treatment of the ordinary morose epileptic. The fits are reduced in number, and the temper and manners and intelligence are improved all round. The calabar-bean is still used in the early stages of general paralysis, and, I think, with beneficial effect; but our trouble is, that we do not get such cases early enough to expect benefit to follow upon any mode of treatment; and until medical men outside asylums are trained to recognize this disease in its earliest stage, our tables of causes of death will present a large proportion of the deaths in asylums as being due to this sad disease. Sometimes jaborandi takes the place of the calabar-bean, and with about the same result—a general improvement of the patient if given early enough.

To criticise the preceding statements would be to go over the whole field of therapeutics as applied to mental cases. If we may express

* Supposing this extraordinary statement to be a misprint, we communicated with Dr. Whitcombe, but find such is not the case. It is obvious that either the "idiots" are not what we call by that name, or an incorrect statement was inadvertently made to Dr. Whitcombe.—[Eds.]

an opinion, it would be that we scarcely agree with anything Dr. Thompson has said.

Berkshire, &c.—The Visitors pay a warm tribute to the worth and ability of the late medical superintendent, Dr. Gilland.

The alterations in the sanitary arrangements are now complete.

A considerable accumulation of patients has occurred during the year.

Although this report extends to 79 pages, it does not include the result of the annual inspection of the asylum by the Commissioners. The new superintendent, Mr. J. Harrington Douty, would do well to remedy this omission in future.

Broadmoor (1885).—This contains the last report by Dr. Orange, whose retirement we have already noticed with sincere regret. As is well known, he is succeeded by Dr. Nicolson, who will doubtless maintain the reputation of this great asylum.

The medical staff has been strengthened by the addition of another junior officer. There is nothing calling for special notice, except, perhaps, the heating of some of the blocks by hot water. Dr. Orange gives a detailed account of the arrangements connected therewith; they appear to be most satisfactory, and would doubtless repay inspection.

Cambridgeshire, &c.—At last the Commissioners have compelled the Visitors to consider the enlargement of the asylum. The cost is roughly estimated at £16,000.

Whilst the report by the Visitors is distressingly minute in detail, that by the Medical Superintendent is quite as minute in size. The former contains some information, however worthless; the latter, none at all.

The Visitors recommended a retiring allowance to an attendant of 17s. per week; the Quarter Sessions declined to confirm it; whilst these embodiments of wisdom wrangled over it, "the beggar died." £20 to the widow to defray the funeral expenses cannot atone for the previous cruel meanness of Quarter Sessions.

Carmarthen.—The new chapel makes satisfactory progress towards completion. Dr. Hearder states that this work has included the quarrying of more than 2,000 tons of stone, and its removal by boat to a landing place four miles from the quarry; all this has been done by the patients and the ordinary staff, with the assistance of one paid labourer. This is exceedingly creditable to all concerned.

The number of admissions has been lower than for any year since 1877. This would be a matter for sincere thankfulness if it could be regarded as a result of decrease in the frequency of attacks of insanity; but, unfortunately, we have no corroborative evidence to support such a theory. The number of chargeable lunatics does not diminish. In this district the proportion of lunatics in the asylum is still under 50 per cent. of the total number chargeable; while for the whole of England and Wales the proportion under treatment is above 67 per cent. The admissions to asylums throughout the country during the year are in the ratio of 5 to each 10,000 of the population; in this asylum the ratio was last year only 5 to each 22,000 of the population; in other

words, our admissions for the past year, if equal to the average of the rest of the country, would have been 140 instead of 65. This disparity between the ratio of admissions to this and to other asylums becomes even more strongly marked when we have ascertained the proportion of the chargeable insane to the general population in this and in other districts; for we find that in the whole of England and Wales there are 26 chargeable lunatics to each 10,000 of the population; while in the counties of Carmarthen, Cardigan, and Pembroke, the proportion is 33 to each 10,000.

We doubt whether this diminution in admissions of pauper patients is due, as Dr. Hearder supposes, to the fear entertained by medical men of legal proceedings following on the signing of lunacy certificates.

Cornwall.—It would appear that the new accommodation is being rapidly filled up by chronic cases from workhouses. The epileptic and more actively suicidal patients are now under continuous supervision at night.

Crichton Royal Institution.—The number of pauper patients has been kept down by the discharge of all who were fit to reside out of the asylum, and most of those discharged unrecovered were boarded out in private dwellings. This policy has been steadily pursued for the last few years, with the result that the number of pauper patients belonging to the district has fallen from 302 to 239.

Concerning general paralysis Dr. Rutherford says —

For some years I have observed what seems to be a change in the duration of this disease. Ten or fifteen years ago from two to three years was considered the limit of life in men after its symptoms were decidedly pronounced. At present there are several men, undoubted general paralytics, who have been ill upwards of four years, and are yet in good physical condition. The less rapid course of the disease may be due to improved methods of treatment and nursing, or perhaps to its having been brought on by slighter causes than in those we were accustomed to see long ago; if so, this would account for the increase in the numbers of such cases. Another feature in the nature of the admissions now, as compared with ten years ago, is the small number of cases of acute mania, and the large number of those of mental depression or melancholia.

It is satisfactory to learn that gentlemen in increasing numbers engage in garden work, which is limited to four hours per day.

Extensive structural alterations are still in progress.

No report by the trustees is given; neither is the entry made by the Commissioner at his semi-annual visit. These we cannot but think should be published. They refer to a public institution and are of general interest.

Cumberland and Westmoreland.—The official report on the condition of this asylum is most favourable.

Concerning the visiting of the patients by their friends, Dr. Campbell says :—

It is a distinct hardship when asylums are built in such remote districts that the patients are deprived of visits from their relatives. I am more and more convinced, as my experience extends, of the value of visits from relatives in many cases of insanity. To be left without the sight of a relative or friend, without a cheering word from home, in an asylum among strangers, is enough

to make a desponding patient more desponding; a patient tending to dementia more ready to lose interest in all mundane matters. I strongly advise frequent visits to such cases, as I believe they will benefit by them; and I also advise such friends as can afford it to send occasionally the special local paper which interested their relative; for even though our supply is a good one, patients prize getting a paper for themselves.

If all the patients' friends were discreet, no doubt they would be welcomed by the officers of an asylum much more heartily than has been the case hitherto. It cannot be denied that they occasionally work irretrievable mischief.

Denbigh.—It is to be regretted that the Visitors delay providing accommodation which is evidently required. They prefer to send patients to other asylums

Rather than recommend a large outlay in additional buildings in these depressed times, and with a possible change in the government and arrangement of asylums in prospect under a County Government Bill.

The Commissioners point out that the staff of attendants is numerically weak. Other defects, chiefly structural, and others due to overcrowding, are pointed out. As the rate of maintenance is at the dangerously low figure of 7s. per week, it would not be amiss to increase the cost by carrying out the suggestions made by the Commissioners.

Mr. Cox seems to be doing what he can to increase the useful employment of the patients, and has placed an attendant in charge of the newly instituted upholsterer's shop.

Derby.—Dr. Lindsay brings under the notice of his visitors some paragraphs from the Report of 1882, relating to the Capitation Grant and how it might be spent more wisely than at present. He has got hold of an excellent subject, and should not drop it.

Three of the admissions were found not insane, and were returned to the workhouses from which they had been sent.

The mortality is again high, and the deaths from phthisis are excessive. In 8 of the 15 deaths from that disease it probably existed on admission.

A photographic apparatus has been purchased, and is used by the assistant medical officer, who takes the photographs of the patients for insertion in the Case Book, so as to facilitate the better illustration of the cases. This ought to be done in all asylums.

Devon.—A sum of £4,000 has been granted to provide sleeping accommodation for 35 female patients, and for the erection of a dining-hall to seat 400.

An observation dormitory for epileptic and suicidal patients has at last been provided.

A marked falling-off in the number of admissions in the last two years, causes Dr. Saunders to remark that the fact is noteworthy, but not easily accounted for. Although in the present uncertain and transitional state of the Lunacy Laws, both magistrates and medical men are reluctant in some cases to make the necessary orders and certificates for

admission to the asylum, the movement of population in agricultural districts must be a more important factor, as the tendency is for a certain proportion of the rural population to remove to urban districts or to emigrate.

The absence of the Commissioners' report is to be regretted.

Dublin. Richmond District Lunatic Asylum.—The report of the medical superintendent of this asylum is, to our thinking, one of the most important events in the Irish lunacy world. When any asylum has been governed for many years by one man, however good, the chances are that when a change comes, many necessary improvements are needed. Men stand still much more than medical science does. What was good enough 30 years ago will not now be tolerated. In looking over the report we are struck with the amount of much-needed sanitary reform which Dr. Norman has to carry out, and unless he is ably supported by his committee, it will be a hard matter to get all things in order before the visit of the Medical Association to Dublin this year. The state of water, of the drains, and of the general health, as represented by dysentery and diarrhœa, is alarming, and if cholera happened to visit Ireland, it would be hard to say where the disaster might end. We believe Dr. Conolly Norman knows fully his responsibility, and will not shrink from his duty, which is to persist in pointing out the grave dangers to which his patients are exposed till they are removed. It is intolerable for a conscientious superintendent to think that patients suffering from mental disorder may come in for cure, but may be injured or killed by the evils of the establishment where they seek health.

Dundee.—We regret to find that this Royal Asylum continues to struggle against severe financial embarrassment, though the directors express a hope of speedy relief in this direction.

The following paragraph from Dr. Rorie's report holds out the hope that yet another asylum may be utilized for the teaching of psychological medicine :—

> The character of the institution is, however, affected in another way. The pauper patients allowed to remain in the asylum chiefly belong to the epileptic and paralytic class, and those whose physical condition requires special attention. When this is kept in view, and the large increase in the numbers admitted, it will be seen that the Institution is becoming year by year more and more a hospital for the curative treatment of the insane, and for the treatment of persons suffering from paralysis, epilepsy, and other allied nervous diseases, and year by year less a place for the detention of the insane for the safety of the public; and this purely medical aspect of the question is one that ought to be kept prominently in view, the more especially as the establishment of medical classes in connection with the University College seems to be meeting with greater and increasing approval on the part of the community generally. Indeed, the question how far the Institution even at present might not be, to a certain extent, a means of medical education, is worthy of consideration. Thus, by establishing one or more clinical clerkships, and throwing them open to advanced medical students from any of the Universities or Medical Schools as might be desirous of acquiring a practical acquaintance with the treatment of the insane, a satisfactory commencement would be

made in this direction at scarcely any cost to the Institution, or, at least, a cost which would be more than compensated for by the additional assistanc that would be in this manner rendered in the individual treatment of th patients and in pathological investigation and research. The opportunitie available in this direction have long appeared to me to be too little take advantage of, and it is with satisfaction that I can now report the accomplish ment of what has been a long cherished desire on my part—the establishment o a thorough and systematic pathological examination in all cases where per mission can be obtained. In connection with this department, the foundatio of a pathological museum has now been laid, which already is interesting, an in after years will, no doubt, prove of greater value.

Fife and Kinross.—This asylum has now been occupied twent years. Dr. Turnbull has prepared some statistics for this period, an we make the following extract from his remarks :—

It may be interesting to note the amount of pauper lunacy at the beginnin and the end of the period. On the first of January, 1866, a few months before th opening of the asylum, the number of registered pauper lunatics belonging t Fife was 251, and to Kinross 16. At 1st January, 1886, the correspondin figures were 452 and 23. Taking the general population of the district as repre sented at these two dates by the numbers given in the census for 1861 and 188 respectively, the population of Fife in 1866 was in round numbers 155,000, an of Kinross 8,000; while in 1886 the population is 172,000 and 6,000. In Fif the general population has increased during the 20 years by nearly 11 per cent. but the number of pauper lunatics has increased 80 per cent. In Kinross th general population has decreased by 25 per cent.; the number of pauper lunatic has increased 43 per cent. Taking the proportion of pauper lunatics per 100,00 of the general population, we find that in Fife the number was 162 in 186 and 263 in 1886, and that in Kinross the number was 200 in 1866 and 379 i 1886. The amount of pauper lunacy has thus increased in a much greate ratio than the general population. As has already been pointed out mor than once, this does not necessarily indicate that insanity occurs more fre quently now-a-days than it did 20 years ago. The influences which lead to a increase in the proportion of pauper lunacy, independently of any increase i the real amount of insanity, have been referred to in previous reports, and nee not now be mentioned again.

Turning to the disposal of the patients, it appears that at 1st January, 1866 of the total 267 pauper lunatics of Fife and Kinross, 208, or 76 per cent., wer in public establishments (that is, asylums or licensed wards of workhouses), an 64, or 24 per cent., were under private care. At 1st January, 1886, of a tota number of 475 pauper lunatics in the two counties, 365 (77 per cent.) were i public establishments, and 110 (23 per cent.) under private care. There is thu only a slight variation in the mode of disposal of the patients at the two dates For the whole of Scotland, the proportion at present of pauper lunatics place in public establishments is 78 per cent., and under private care 22 per cent.

All suicidal patients are now under continuous supervision at night This very necessary part of asylum work might with great advantage be introduced in other Scotch asylums.

Glamorgan.—The auxiliary asylum is nearly ready for occupation. At their visit, the Commissioners indicated several serious structural defects in this building.

Dr. Pringle again directs attention to the large proportion o melancholiacs in the cases admitted.

Gloucester.—Mr. Craddock's report is a record of much work accomplished. We can find room for the following paragraph only.

It is interesting from a legal point of view, and relates to a topic never before discussed, so far as we know.

The existence of overlapping Unions, *i.e.*, Unions extending into more than one county, was, during the year, the cause of considerable correspondence between your Superintendent, the Commissioners in Lunacy, and the Clerk of the Peace, and of discussion by your Committee. A patient was sent here from the Shipston-on-Stone workhouse, which is situated in Worcestershire. Previous to his admission into the workhouse, he had been resident in that portion of the Shipston-on-Stone Union which is situated in Gloucestershire. The question raised was whether a Justice of the Peace for Gloucestershire had jurisdiction to send a patient here whose settlement was in Gloucestershire, but who at the time the order was made was actually resident in Worcestershire. A case for opinion was submitted by your direction to the Clerk of the Peace, and this gentleman held that the order for the patient's admission was good, and that, under the Act 30 and 31 Vic., c. 106, s. 27, "A Gloucestershire magistrate acting judicially within the area of the Union would be acting within his jurisdiction by force of the Statute." This definite opinion has, it is hoped, set a much-disputed question at rest, and will form a useful precedent for guidance should such a case occur again.

Govan.—A limited outbreak of erysipelas occurred, ending fatally in one case. Mr. Watson, the medical officer, reports that "steps were taken to discover, if possible, and remedy any sanitary defects which might account for the disease. This, it is to be hoped, will prove successful; but inasmuch as the causes of erysipelas are not certainly known, it would be rash to predict its permanent disappearance." There is one chief cause of erysipelas which should not be overlooked, especially as it exists in this asylum. We refer to overcrowding. One of the Visiting Commissioners reports: "The difficulties attending the management of the asylum are much increased by the fact that the population is considerably in excess of that which it was designed to accommodate, leading to a disproportion between the day-room and the dormitory accommodation, and an insufficiency of hospital accommodation." Here is a sanitary defect, obvious and easily removed.

At last an epileptic has been suffocated in a Scotch asylum. And so an additional night-attendant has been engaged. It has frequently struck us as remarkable that the manner in which the night-attendants perform their duties in Scotch asylums is scarcely ever the subject of official observation. Except as relating to the number of wet beds, about which night-attendants may tell any number of lies, their work escapes criticism. So far as we know, it is quite exceptional to check them by tell-tale clocks. If so, this is not as it should be.

Glasgow District.—In reproducing the following paragraph from Dr. Clark's report, we must say that we do not quite agree with his views. It will surely be admitted that a wet and dirty case is not a suitable inmate of an overcrowded house. The patient cannot be attended to by a woman who has a husband and perhaps five or six children to work for. Neither is it desirable, nay, most unreasonable, that a whole household should be inconvenienced, and, as we have seen, made miserable, by a dirty, evil-smelling, foul-talking old man. Cer-

tainly such a case might be cared for in a workhouse, but if he does at last gravitate to an asylum, why should he be so unwelcome?

The admissions were of (an) unusually hapless character, the proportion of incurable and dying cases being above the average. Many patients came to us who in the hospital wards of English workhouses would find their appropriate place, shattered in body, and mentally helpless, because of their physical helplessness; but, if these cases are cases of lunacy, every old man or woman who has a stroke of paralysis is a lunatic, for no rigid line of distinction can be drawn between the one and the other. They are not raving lunatics; they are neither homicidal, suicidal, dangerous, nor destructive; they are no more offensive to decency than any other paralytic who, by his helplessness, requires the cleansing offices of a nurse from time to time. They may wander in their talk, but it is a quite inoffensive delirium, and they may be childish or have lost memory, but these are nothing strange in an hospital ward. It does not take long to exhaust the affection of their relatives; because from paralysis they are "wet and dirty," the hospital will not have them, and they are not good enough for the poorhouse; but "wet and dirty," though it never appears in the medical certificate, is the reason for their removal to an asylum. Nervous diseases are very much on the increase, and if they are to be confounded with lunacy in the ratio of their increase, the structural character of asylums must undergo extensive alteration, and their limits be considerably increased.

If the welfare of a patient be the chief consideration, we have no hesitation in saying that any senile or paralytic dement will be much better cared for and nursed under Dr. Clark's care than in any Scotch workhouse, or boarded out.

Glasgow Royal Asylum.—A youth labouring under acute mania developed signs of scarlet fever three days after admission. The disease did not spread, but the need of a detached hospital was demonstrated, and is under consideration.

Hants.—Nearly all the drains have been taken up and relaid; and the whole sanitary condition of the buildings, old and new, is receiving attention. This work is being carried out under the superintendence of Mr. Rogers Field, at a cost of about £3,000. The water supply is not beyond suspicion. The reports by chemical experts as to its character are certainly most surprisingly at variance.

Two blocks of cottages for attendants, in all 12 houses, have been provided.

Dr. Worthington's report is largely devoted to the consideration of the water supply, and the other questions connected with the origin of typhoid.

Although it may be necessary in an official report to mention such unimportant events as the birth of children, we cannot see why the mothers' names should be given in full. Surely this has been done in error, as it is self-evident that such announcements must be distressing to the patients and their relatives.

A useful report by the County Surveyor on the sanitary condition of the buildings, the disposal of the sewage, &c., is given.

Hereford.—Here also sanitary improvements have been in hand. A new main sewer has been laid, which has been disconnected from all

the branch drains, and from the ventilating pipes around the asylum buildings. The branch drains have in several parts been relaid and ventilated.

We reproduce the following paragraphs from Dr. Chapman's report :—

> The appeal made to the Unions at the beginning of the year to moderate the influx of "workhouse cases" seems to me to have been a complete failure; the admissions are certainly seven less than the average of the previous ten years, but the cases I miss from among them are not these "workhouse cases," but the more manageable of the recent and curable cases that ought certainly to have been sent to the asylum. Whether their absence is a curious coincidence, or whether such cases have been retained at home or in Unions, as an answer to our appeal, I do not know, but if they have been, then our appeal has not only been a failure, but a very unfortunate one.

Referring to the unfavourable nature of the cases under treatment, he says :—

> The number of persons confined to bed constantly increases; those who are only able to get up for a portion of the day increases in a greater ratio. Those in bed all day exceed 30 on most days. A census taken one morning lately showed 64 patients (out of 400) in bed at breakfast time, and 24 who had to be fed. The patients of wet and dirty habits are no less than 119, and those partially so 45, leaving only 237 out of 401 of clean and decent habits. Twenty years ago a score would have been a fair proportion of patients of dirty habits in this number.

Dr. Chapman gives a valuable table, showing the character of his cases since 1872. As usual, his report is of much interest.

Holloway Sanatorium.—This first report is not very encouraging to amateurs in asylum construction. We sympathise with Dr. Philipps in his work; it will be no easy task to arrange this magnificent but defective building for the special purpose for which it was built. This report makes it quite evident that so far as time has permitted, he has made great progress in all the branches of administrative and structural work. It is disappointing to see an advertisement in which the institution is described as for "patients of the *upper* classes only." If such is the case, and we are bound to believe the statement, we do not hesitate to say that Holloway's is a great Charity wasted, for Mr. Holloway's original intention or plan was to provide for private patients just above the pauper class—*none* over 21s. a week. *Now* the class he intended to benefit is expressly excluded. Endless structural alterations are or have been required, and a great charity is nullified. "But yet the pity of it, Iago!" What unspeakable good *might* have been done with that money on the lines of the first intention! We are almost tempted to say that the taste of the pill though silvered is scarcely disguised, and that there are not a few "dead flies which cause the ointment of the" worthy donor "to send forth a stinking savour." We do not refer to the imperfect drainage only.

We specially commend the arrangement mentioned in the following paragraph from Dr. Philipps's report :—

Encouraged by the great success which has been obtained by Mr. Bayley, the Medical Superintendent of St. Andrew's Hospital, Northampton, in getting the gentlemen patients to engage in manual labour, to the improvement of their physical and mental condition, an attempt has been made to introduce a similar system here. About 18 gentlemen have worked in the grounds, and about 12 have assisted in the lighter house-work. The advantage all round has been great; grumbling and quarrels among the gentlemen have been infrequent, while the general health has improved. On the ladies' side, such good results have not been obtained; but still, a great deal of needlework has been done, and some housework; and few of those who are mentally capable have been altogether idle.

Hull.—This new asylum appears to be rapidly getting into full working order. The cases admitted here appear to be most unfavourable. Dr. Merson reports that of 95 admissions, 22 were general paralytics, 16 were epileptics, imbeciles, or subjects of some form of brain disease, and many others were cases of long standing mental disease. Only 32 of the whole number were considered at all likely to recover. And yet we go on talking about the great things we could do, if we had separate asylums for *recent* cases!

The mortality continues high.

One cause of this excessive mortality is the great prevalence of general paralysis among the patients admitted here, and it may not be without interest to compare this asylum with others in respect to the occurrence of this disease. The Commissioners in Lunacy, in their yearly reports, have for some years past given tables showing the proportion of cases suffering from general paralysis to the entire number of admissions in all county and borough asylums. From these tables I find that for the last three years published, the proportion of cases of general paralysis to the entire admissions in county and borough asylums was 8·3 per cent. During the corresponding three years the proportion in this asylum was 16·7, or more than double, while during the year just closed it has been 23 per cent.

Isle of Man.—Dr. Richardson mentions in his report that a family, consisting of husband, wife, and daughter, was sent to the asylum on one day. As they were suffering from the milder forms of insanity an attempt was made to have the old married couple boarded out, so that they might be able to spend the remainder of their days together, free from that monastic discipline which seems to have become a necessary part of the arrangements of every asylum.

Ipswich.—One of the serious disadvantages of the boarding-out system is noticed by Dr. Chevallier in the following paragraph:—

For the first time, I believe, in the history of this asylum, a birth took place within its walls, the mother being a patient whose friends had removed her into private lodgings, and had not sufficiently watched over and protected her during her absence of several months.

(*To be continued.*)

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital, on May 17th. In the absence, at first, of the President, Dr. Savage, the chair was occupied by Dr. Rayner. There were also present: —Drs. Ringrose Atkins, S. H. Agar, R. Baker, D. Bower, P. E. Campbell, C. Clapham, E. East, W. M. Harmer, C. K. Hitchcock, H. G. Hill, Murray Lindsay, A. MacLean, G. Mickley, A. Newington, H. Hayes Newington, J. H. Paul, Evan Powell, Walter Pearce, G. H. Savage, H. Sutherland, D. Hack Tuke, A. R. Urquhart, S. W. D. Williams, T. Outterson Wood, H. F. Winslow, F. J. Wright, &c.

The following gentleman was elected a member of the Association, viz. :—

Alfred Miller, M.B., and B.Ch. (Dub.), Senior Assistant Medical Officer, Hatton Asylum, Warwick.

Dr. BOWER said that he wished to enlist the interest of the members of the Association in the case of a young man, aged 22, who for the past four or five years had been subject to epilepsy, but was at present engaged with an accountant, with whom he had been nearly four years. The young man's father had once been proprietor of a private asylum, and might, perhaps, some years ago, have been a member of the Medico-Psychological Association. The father, having another son afflicted with the same disease, and being himself in weak health, was anxious to get the young man into an asylum or hospital to assist the steward, and do desk-work and book-keeping, giving his services for his board and the care he might occasionally need. Dr. Bower added that he should be pleased to receive any communication on behalf of the person referred to.

The CHAIRMAN said that, in bringing before the meeting a memorandum containing the observations and suggestions of the Parliamentary Committee of the Association on the Lunacy Acts Amendment Bill, he thought it right to refer to some observations made by the Lord Chancellor in introducing the Bill into the House of Lords. Certain of these observations were very remarkable and striking, as throwing a considerable amount of light upon the way in which the question was viewed by the Lord Chancellor. The quotations were taken from Hansard. The first of his lordship's observations to which he wished to draw attention was that in which it was stated that "Every person *accused* of Lunacy should have the right to be brought before a Judicial Tribunal." Now, inasmuch as upon such an important occasion his lordship would probably weigh well his words, this could only mean that he regarded insanity as a crime; hence the provision found afterwards in the Bill. Further on were the words, "The examination which medical men were *supposed* (he used the word deliberately) to make before signing certificates." That, if it meant anything at all, implied a deliberate insinuation against medical men in regard to the manner in which they discharged their duties. If it did not mean that definitely, it meant a vague slur cast on the profession such as a barrister might use in special pleading, and was entirely unworthy of the position occupied by the Lord Chancellor. Another statement was, "He could not understand why a magistrate should not be competent to decide the question of insanity with as judicial a mind as a medical man." Here, again, the original idea was followed out, that insanity was a question of criminality, and not one of disease or disorder. If the reasoning were logical, the Lord Chancellor would not, after such an assertion, make it necessary for medical men to sign certificates. In that view of the case anyone might do so. If the legal mind was as capable of deciding the question of lunacy as the medical mind, one was certainly astonished that so many lunatics were received into asylums after being tried

by magistrates and judges and sentenced as criminals, whereas it was clear that at the time they were judged they were insane.

A Memorandum* of the Parliamentary Committee was then read, the CHAIRMAN remarking that it was proposed to bring the views of the Association before as many members of the House of Commons as possible; and that as about fifty of the members of the Lower House were members of Asylum Committees, it was to be hoped that the superintendents of the asylums to which they were attached as committee-men would use their best interests in attaining this object.

Dr. RINGROSE ATKINS said that in Ireland one of the methods by which lunatics were sent to asylums—viz., that under the provisions of the Dangerous Lunatics Act, 30 and 31 Vict., c. 119—was in spirit somewhat similar to what was about to be introduced into England. The effect of the Act mentioned was to cause lunatics to be regarded as criminals, and in Ireland its abuse was very great; and it was to be regretted if the wrong idea should be perpetuated by the proposed English Bill. Under the Dangerous Lunatics (Ireland) Act, patients might be taken to petty sessions and subjected to indignity, being removed thence to asylums by the Royal Irish Constabulary, after committal by magistrates. The asylum-superintendent could not discharge them until they had been certified as having actually recovered. His own experience was that people, from ignorance and other causes, were very prone to get their friends put into asylums under that form of procedure, sometimes inducing them to break glass or assault persons in order to bring them within the Act. It seemed wrong and cruel to have a person afflicted with disease made the subject of magisterial inquiry. It was quite right, of course, to have safeguards; but it was not right that a patient should be placed in an asylum only when it had been proved by magisterial inquiry that it should be done. It appeared by the Bill that the lunatic was to be informed that he was to be made the subject of inquiry. This would, probably, do much harm. Patients should certainly not be irritated by being told this. The Lord Chancellor's expression, "*accused*," should never have been used. It threw a slur upon insanity. One of the most unjust clauses in the Bill was section 28. He thought it should be pressed upon Parliament that it was a great injustice that medical men should be unable to receive patients (with a few exceptions). All other classes of persons would still be able to do so. The mode of treatment in question might be the best kind in early cases. It did not matter to Irish practitioners, as the Bill would not apply to Ireland; but to them it seemed as though there was a kind of fear in England that every man was trying to get his neighbour into an asylum. The clause in the Bill which prohibited medical men who happened, by virtue of social position, to be connected with a Board of Governors of a hospital, from signing a medical certificate for a patient admitted there, was absurd. A medical man was as trustworthy a man as any other in the world, and he ought to have a perfect right to certify, unfettered by this restriction.

The CHAIRMAN referred to one remarkable omission which appeared to have escaped notice. In the memorandum on the Bill it was stated that "In urgent cases (Section four) a patient may be confined upon an order by a relative, accompanied by one medical certificate; but in that case *a petition for an order must be presented to a county-court judge, stipendiary magistrate, or justice within seven days.*" There was no provision in the Act itself whereby this proceeding would necessarily follow. He also mentioned that the Parliamentary Committee of the Association had met some eight or nine times, and had made several communications to the Lord Chancellor while the Bill was passing through the House of Lords.

Dr. OUTTERSON WOOD pointed out that, in dealing with cases of urgency, there would be required three medical certificates, and, in addition, a fee to the Petty Sessional Clerk, which would weigh heavily in poorer cases.

* This Memorandum ("Observations," &c.) will be found at the end of the Journal.—[EDS.]

Dr. URQUHART said that the matter of Clerk's fee had been one of great grievance in Scotland. In one county the charges payable amounted to 5s. for a private patient, and 2s. 6d. for a pauper patient, but in another place it was double that amount, and elsewhere higher still. The Bill did not fix any scale of fee, and he thought it important that in the case of parochial patients or of the poor private patients some limit should be put on these charges. He would like to know whether the observations and suggestions of the Parliamentary Committee were put forward to-day for the approval of the meeting.

The CHAIRMAN replied that they were put forward only for discussion. The memorandum was only a proof so far as they had got. The Committee would be glad to consider any further suggestions made by members.

Dr. URQUHART said that two years ago he had moved "That the Commissioners or Inspectors of Lunacy in England, Scotland, and Ireland, shall have powers of removal of patients on trial, or for the benefit of their health, throughout the three countries. That the English Commissioners may grant writings under their seal to this effect, that shall be valid for Scotland and Ireland, and similarly with the Scotch and Irish Lunacy Boards." He noticed that there was no mention whatever of this in the present memorandum.

The CHAIRMAN said that he remembered that it was urged upon the Lord Chancellor in 1885, and without success.

Dr. URQUHART said it was very important, if the Commissioners were to have power to recapture patients escaping over the border, that they should also have power to grant leave of absence for the corresponding distance. He should like to see this added to the memorandum.

Dr. MURRAY LINDSAY said he thought they were greatly indebted to the Parliamentary Committee for the trouble they had taken in regard to the Bill. With respect to the magisterial authority, he had a very strong opinion, and he quite concurred in the remarks of the Committee thereon. One of the main objects of all lunacy legislation should be to render the early treatment of insanity as easy as possible. It seemed to him that some of the proposals in the Lunacy Bill would have a tendency in an opposite direction. He noticed, moreover, that it was proposed to abolish the order of a clergyman and relieving officer, restricting it to that of a magistrate. Theoretically, and for the sake of uniformity, this may be right enough, but considering the matter from a practical point of view, in some districts of the county of Derby, at all events, its operation would be attended with great hardship, not only hindering proceedings and delaying the removal of the lunatic to the asylum, but causing the relieving officers much inconvenience and the guardians additional expense. So far as his own experience went, he could not say that he had seen any disadvantage in orders being signed by a clergyman and relieving officer. Theoretically, it might be well to have magisterial authority in all cases, and to make no exception, but he would repeat that he had not found disadvantage in the other method. In connection with this matter, there is another practical difficulty deserving consideration, for some magistrates even now are reluctant to sign lunacy orders, occasionally refusing, and under the new Lunacy Bill, when passed, this difficulty will probably be increased. One relieving officer had told him that he had been to three magistrates, at some distance apart, before he succeeded in getting the order signed, one magistrate having positively declined to sign any lunacy orders at all. Another relieving officer had said that he might have to drive twelve miles to get the necessary signature, and his guardians would grumble at the expense. He would much rather see the Bill start on the assumption of embodying the Scotch plan. Why not adopt the Scotch plan? The real essence of the Scotch plan had been ignored. Why not make the magistrate's action merely ministerial as in Scotland? The whole thing worked well in Scotland, the sheriff signed the order without seeing the patient, and this plan seemed to satisfy both the public and the lunatic. He was strongly of opinion that the action of the Justice should be simply ministerial. With regard to idiots, he had received a communication from Dr. Ireland, one of the best authorities on

idiocy, suggesting that a clause should be inserted in the Bill making it prohibitory to send idiotic and imbecile children to asylums for adults. Under the Idiots Act of 1886, the guardians have the power to send pauper idiots as imbeciles to special institutions, and are entitled to receive the benefit of the Capitation Grant of 4s. Although, with Dr. Ireland, they might like to see it made compulsory, it was very doubtful whether they could succeed in getting such a clause introduced into the Bill under existing circumstances. As regards superannuation, it was apparent that this question stood on a very unsatisfactory basis, and something ought certainly to be done to render their position more stable. Referring to the recommendation of the Committee with regard to *continuous service*, that service in different counties should reckon towards pension, he suggested that it would be well to make sure that this provision should apply to boroughs as well as counties. He was glad to see that the Committee were endeavouring to secure the privilege of *added service*, a privilege which existed in the civil service, and to bring about the addition of seven years, after a certain period, to the service of medical superintendents. He also considered it to be a most useful and very necessary recommendation, the suggested *power of appeal to the Home Secretary* in the case of refusal or reduction of pension. The necessity for this had recently been illustrated by several cases. One was that of the Superintendent of the Dorset County Asylum, who was recommended by the Committee of Visitors for a pension of £600 per annum after thirty-two years' service. At Quarter Sessions this amount was reduced to £450 per annum, being a reduction of 25 per cent.! In this case the Committee of Visitors, who knew well the value of their medical officer's services, had decided to award him the maximum amount, viz., two-thirds, to which they considered he was justly entitled. At the Cambridgeshire Asylum there had been a very hard case. An attendant there became affected with general paralysis, and was removed to Northampton County Asylum, where the surplus Cambridgeshire lunatics are temporarily taken care of. The Committee of Visitors recommended that he should be granted a pension of 17s. per week, being the maximum two-thirds. He was forty-three years of age, and had served a few weeks short of fifteen years. There was opposition to this proposal at the Quarter Sessions; a correspondence took place between the Clerk to the Visitors and the Clerk of the Peace, but in the meantime the poor man died. His body was brought from Northampton for burial at his own place in Cambridgeshire, and the Committee of Visitors made a grant of £20 to his widow. It is worthy of note that another officer at the same asylum, suffering from the same form of mental malady seven years previously, was granted a pension by the Quarter Sessions for seven years' service, just half the length of service of the poor man referred to. The third case he should mention was a very striking case. It was that of the Superintendent of the Lincoln County Asylum, who was recommended for a pension of £600 per annum, being nearly two-thirds. His pension has to pass the trying ordeal of three Quarter Sessions, of Lindsey, Kesteven, and Holland, and three Town Councils, of Lincoln, Stamford, and Grantham, the latter Corporation having dissented from the proposal to grant the pension. Several Lincolnshire Boards of Guardians are protesting against the proposed pension, and clamouring for a reduction of the amount. He has served thirty-nine years, and is seventy years of age. In regard to superannuation, everything was indefinite, there being no certainty or fixed system. He (Dr. Lindsay) had, unfortunately perhaps, had as much experience in recommending pensions as any Superintendent in the same length of time, having had to make seventeen recommendations for pensions during a period of fifteen years. There had, in addition, been three granted before his time. But of all these, in his opinion, the maximum, two-thirds, had been granted in one case only, and that was in the case of the chaplain, a non-resident officer, who was vicar of a neighbouring parish three or four miles distant, and visited the asylum about twice a week.

The CHAIRMAN referred to a plan which had been passed in one of the

counties of granting pensions for limited periods, and also to a case in which superannuation had been granted for ten years' service.

Dr. MURRAY LINDSAY remarked that this showed all the greater necessity for something definite. There was power, which was frequently exercised, under the Lunacy Acts to pension after short service on account of ill-health, as was done at one county asylum where the officer, who was known to be affected with general paralysis, was granted a pension after seven years' service, "for twelve years, should he live so long." It is unnecessary to add that he did not live so long, but died in a year or two afterwards. At two other county asylums pensions of one-sixth and under one-third of the total value of office were granted to two attendants for nine and thirteen years' service. But so long as the superannuation system is merely permissive, and each county can have its own plan within the Acts, the anomalies, already too numerous, will not only continue, but in all probability increase. In addition to these pensions, at least thirty-six pensions for short periods of service, varying from 7 to 14 years, have been granted to officers and attendants in 15 county and 2 borough asylums. This should suffice to settle the question of power to grant short service pensions. It is the practical application or exercise of this power that is variable, uncertain, and anomalous, as in the case of the poor man at Cambridge Asylum already referred to.

Dr. URQUHART said that he hoped that the question of superannuation would be urged strongly. In Scotland there had been some clamour about it lately. The Act was drawn out providing for pensions, but, by an accident of the draftsman, the words "district or parochial asylums" had been omitted, so that those asylums stood in an anomalous position. In 1877, or thereabouts, a deputation waited upon the Lord Advocate, which was very cordially received, and an absolute promise was made that on the very first possible occasion a clause should be inserted securing pensions to officers and servants of district and parochial asylums of Scotland. No opportunity occurred till the other day, when the Government found it necessary to bring in a Bill granting powers to the Board of Lunacy in Scotland to sub-divide districts. They thought it would then be a good time to reorganize their forces to accomplish what they wanted, and they accordingly met together in Edinburgh and drew up a memorial, showing that whilst superannuation powers existed in regard to similar institutions in England, there was nothing of the sort in Scotland. In their investigation of the subject, they found that within the last few years—for it was, of course, only within the last few years that the effects of long service would have come into operation—there had been a great many cases of evasion of the law on the part of the magistrates governing the asylums. In one case a matron had been continued as matron whilst there was no longer residence in the asylum. At another asylum, a medical superintendent who had fallen into ill-health, and had served a long time, was made consulting physician, with a salary of £600 per annum. However satisfactory these arrangements may have been to the persons who were the recipients of such misguided charity, they were not satisfactory to those who were placed in the position of having to resign their appointments without getting anything. Their memorial upon the subject had been duly sent in, but, unfortunately, the Marquis of Lothian did not see his way to inserting a clause in the Bill. He, therefore, thought that the Association should take some very active steps in the matter of pensions, and at the same time not forget Scotland.

Dr. OUTTERSON WOOD, quoting Sub-section 4 of Clause 28, said that he thought that the Commissioners should be required to visit single patients in unlicensed houses at least twice in every year, or that in any case some provision should be made for other visitation. There were several paragraphs providing for recapture in case of escape from England into Scotland or Ireland, or *vice versâ*, but there was nothing to cover escape to the Isle of Man, which island, from some northern portions of the United Kingdom, was very easy of access.

Dr. S. W. D. WILLIAMS said that he could not endorse the words of the

memorandum, that "the statutory question 'whether any near relative has been afflicted with insanity' is looked upon as unnecessarily inquisitorial, and cannot be defended on the ground of scientific interest." He thought the question was of very great scientific interest.

Dr. HACK TUKE agreed with Dr. Williams, and said that he had strongly upheld in the Committee the attempt made by the Government to obtain this information in the statement, and was disappointed to find that the general feeling of the Committee was against it. He did not see what the Association had to do with the penalties the friends of the patient might incur by not giving correct information.

Mr HAYES NEWINGTON said that as he was responsible for the objection to that information being specified on the statement he would like to explain the grounds of the objection. Perhaps the words of the memorandum were too strong. Of course they were all scientifically interested in having information of this sort, but the fact was that it was a tremendous farce for anyone to have to answer that query as a statutory inquiry to start with, considering that any malfeasance would be a statutory crime and punishable. It was a question whether the patient's friends would not be sufficiently frightened by the intervention of the magistrate without having such an inquiry as this to meet. The question of its scientific interest was brought up in the Committee, and was answered in this way: That the returns already supplied to the Lunacy Commissioners, at their request, sufficiently answered the inquiry. He had given it as his experience (and he believed most of the Committee agreed with him) that if they were to deal with an answer to such a question in an admission paper they would be dealing with a mass of lies. A person who would be absolutely truthful on any other subject would, without a blush, tell a lie upon the subject of insanity in his family. They had therefore considered it important, in the interests of science, that the matter should not be answered straight off, but at the end of the year, when they would be better able to judge and give a well-formed opinion in their returns to the Commissioners.

Dr. S. W. D. WILLIAMS said that his exception to the Committee's objection was taken on the score of the words used—that it could not "be defended on the ground of scientific interest." Perhaps the sentence might be improved.

Dr. SAVAGE said he thought it would be best merely to say that the statutory question referred to was "unnecessarily inquisitorial." He had felt in the Committee its immense importance, but it would be inquisitorial if the friends had to state this in the first instance on the statutory document, in the same way as it would be inquisitorial if they were required to make a statement as to intemperance or syphilis.

The CHAIRMAN, referring to Dr. Murray Lindsay's remarks respecting pensions, said that it should be borne in mind that where the emoluments of resident officers were taken into consideration in fixing superannuation allowance, the value put upon such emoluments was generally considerably below what the cost would be to officers living outside.

In the course of further discussion on the subject of pensions it was suggested that, in view of pensions being apportioned among different counties, some uniform rate of superannuation would be desirable. Dr. WILLIAMS pointed out that all the arguments were in favour of making the pensions chargeable to some central fund, a proposal which Dr. SAVAGE reminded the meeting was brought forward some years ago by Dr. Lockhart Robertson. Dr. RAYNER advocated the principle of "deferred pay."

Dr. HACK TUKE said he thought that members of the Association might do a good deal through Members of Parliament. He was surprised that more had not been said in medical papers on the subject of the proposed check upon patients being received into the houses of medical men. He believed that the late Lord Chancellor, in introducing this clause, entertained the idea that none but medical men took patients, and unless Members of Parliament were properly informed in regard to the whole subject, it was to be feared that the only

result of their pointing out the distinction which had been drawn between medical men and other classes of persons, would be that no one at all would be permitted to take patients without the restrictions indicated.

Dr. AGAR said that with a view to carrying out Dr. Hack Tuke's desire that members of the Association should use their efforts with members of the House of Commons, he would suggest that a copy of the Memorandum of the Parliamentary Committee should be posted to each member of the Association.

Dr. OUTTERSON WOOD supported this proposal, which was agreed to; Dr. TUKE intimating that copies of the Memorandum would be furnished quite distinct from the Journal.

Dr. AGAR then said that he had heard that afternoon of the difficulty which existed in regard to patients in England going to Scotland or Ireland. This seemed very hard, for, supposing the case of a patient coming originally from Ireland or Scotland, and becoming sufficiently recovered to go home on leave, he did not see how the medical superintendent would have the right to send him.

Dr. R. BAKER said that it was evident that great difficulty was felt in regard to patients travelling. It was to be hoped that any extension of power which might be given in this direction to the Commissioners in Lunacy, would also be conferred upon the committees of persons in hospitals to whom the sanction of the Lunacy Commissioners did not apply, and who, being generally of the wealthier class, were more likely to travel than other classes of patients.

Dr. OUTTERSON WOOD said it was to be noted that the recapture of patients in Ireland or Scotland was to be carried out under the seal of the Commissioners in Lunacy. This was a very important step for the Commissioners to initiate—to allow anybody to go into a country where the law was entirely different, and administered in a different way. It would be a very difficult thing to make any arrangement about, but if power was to be granted under the Bill as to recapture in this way, he did not see why similar power should not be given to enable patients to be sent to a neighbouring country for their benefit. On a recent occasion, he had arranged for Dr. Savage to take one of his patients for a time, and the Lunacy Commissioners in London strongly objected to it. In Scotland there was no difficulty at all in this respect, although, of course, it was illegal at the present moment. In regard to removing patients from one country to another at the instance of their friends, he cited an instance in which the curator bonis, or committee, of the estate of a lady under the charge of the Court of Session in Scotland wished to take the patient from England into Scotland, and yet it was possible for her friends to spirit her away, and he did not think her whereabouts had been yet ascertained. To convey a patient from England into Scotland, it was necessary to proceed under the English law till the border was passed, and then to proceed by the Scotch law—the whole business being most complicated. At the present time, a Chancery patient could not be recaptured in Scotland. On the border being crossed, the patient was legally free. The case was similar with Scotch patients going to England.

Dr. BAKER said he thought it very desirable that the clause should be extended in the way indicated by Dr. Wood. It would be a great pity to have it limited.

Mr. EVAN POWELL suggested that a clause should be introduced into the Bill inflicting a penalty on friends of patients for conniving at escape from an asylum. He was in the habit of allowing patients to visit their friends a good deal, especially when the cases became convalescent, or when they were chronic cases. On a recent occasion, a mother asked to be allowed to have her daughter out for a day. This was granted, and on the next morning he received a bundle of clothing, with a polite note from the mother, stating that the daughter had been sent to Birmingham for change of air, and that the mother did not think it necessary for her to come back to the asylum. If any asylum-official had thus acted there would have been liability to penalty, and he threw out for the consideration of the Parliamentary Committee the suggestion whether persons other than asylum-officials should not be also thus liable. Many present would

remember the case of Elliot at the Barming Heath Asylum. He would also like to know whether the term "county asylum" would include "borough asylum."

The CHAIRMAN said that it would be well for this latter point to be made quite clear. It was to be sincerely hoped that every member of the Association would endeavour to press upon individual Members of Parliament the recommendations now made, so that when the Bill came forward for consideration in the House of Commons there might be an adequate number of supporters of their views in that House.

SUGGESTIONS FOR ASYLUM PENSIONS.

Dr. R. H. W. Wickham, Medical Superintendent of the Borough Asylum, Newcastle-on-Tyne, has forwarded us the following for publication.—[EDS.]

1.—Pensions should be obligatory.

2.—Asylum officers to be retired at 60, and at such less age as they may desire, or as may seem to the Committee of Visitors necessary, always provided that, except in the case of infirmity directly caused by the service, no officer should be eligible for a pension who is not both 40 years of age and who has not served for ten years in the asylum.

3.—The pension at 60 years of age and after 20 years of service, both inclusive, to be two-thirds of salary and all allowances.

4.—One-fortieth of the two-thirds to be deducted for each year below the age of 60.

5.—One-sixtieth of the two-thirds to be deducted for each year below the 20 years period of service.

6.—The pension to be chargeable, as at present, on the county or borough rates. To charge it on the Treasury Grant would be practically charging it to maintenance, and would introduce a new element into the discussion.

Examples.

1.—Superintendent: Salary, &c., £1,100. Aged 45. Service 18 years.

	£	s.	d.		
Two-thirds of £1,100...	733	6	8	60 years—45 years = 15 or $\frac{15}{40}$ age.	
Deduct.....	299	8	10	20 years—18 years = 2 or $\frac{2}{60}$ service.	
				$\frac{15}{40}$ of £733 6s 8d =	£275 0 0
				$\frac{2}{60}$ of £733 6s 8d =	24 8 10
Pension due	£433	17	10	Total deduction ...	£299 8 10

2.—Nurse: Salary, &c., £69. Age 51. Service 13 years.

	£	s.	d.		
Two-thirds of £69	46	0	0	60 years—51 years = 9 years or $\frac{9}{40}$ age.	
Deduct.....	15	14	4	20 years—13 years = 7 years or $\frac{7}{60}$ service.	
				$\frac{9}{40}$ of £46 =	£10 7 0
				$\frac{7}{60}$ of £46 =	5 7 4
Pension due.....	£30	5	8	Total deduction ...	£15 14 4

SCOTTISH MEETING.

A Special Meeting of the Medico-Psychological Association was held in the Edinburgh Hotel, Edinburgh, on the 1st April, 1887.

Dr. Clouston was called to the chair, the other members present being Dr. Aitken (Inverness), Dr. Blair (Lenzie), Dr. R. W. K. Cameron (Midlothian), Dr. C. M. Campbell (Murthly), Dr. Keay (Mavisbank), Dr. Watson (Govan), and Dr. Urquhart, Secretary.

The SECRETARY stated that he had called the meeting in consequence of the general agreement amongst the Scottish members that a Pension Clause should be inserted in the Bill dealing with lunacy districts in Scotland, shortly to be introduced by Government. He then read letters from the members of the Association who had made suggestions in reference to this matter; and, after discussion, the meeting adjourned to the Chambers of the General Board of Lunacy, where Dr. Clouston briefly indicated the views of the Association. Dr. Arthur Mitchell, C.B., on behalf of the Commissioners, assured the Association of the sympathy of the Board, and stated that the Board had already recommended the introduction of such a clause.

Dr. CLOUSTON having thanked the Board for their courtesy, and having expressed, on behalf of the meeting, their satisfaction with the action of the Board, the members of the Association returned to the Edinburgh Hotel and drafted the following memorial:—

"UNTO THE MOST NOBLE THE MARQUIS OF LOTHIAN, K.T., HER MAJESTY'S SECRETARY OF STATE FOR SCOTLAND.

"*The Memorial of the Chief Medical Officers of the Scottish Royal, District, and Parochial Asylums for the Insane, as representing all the Officials of the Institutions under their care,*

"HUMBLY SHOWETH,

"I. That provision has been made by the Legislature for granting Superannuation Allowances to the Officers and Servants of the County and Borough Asylums in England and of the District Asylums in Ireland.

"II. That by the Act 29° and 30° Vict. Cap. 51, Sect. XXV., the Directors of the Chartered Asylums in Scotland were also empowered to grant similar Superannuation Allowances.

"III. That there is no such provision for the same classes of Officials in the District and Parochial Asylums of Scotland, however long or meritorious their services may have been, or however much they may be incapacitated by injury, accident, or otherwise.

"IV. That this is a manifest injustice to Scotland and to such Scottish Officials. It is directly calculated to impair the efficient working of these Asylums, and has been found to draw away their staff to more favoured Institutions.

"V. That the cure and welfare of the Insane being, as in your Lordship's opinion, the main point at issue, it is necessary to attract efficient and energetic Officials in the prime of life to a service which is in many ways repellent and arduous; and it is equally necessary that due facilities should be given for their retirement from active service when their full power of work has become exhausted.

"VI. That those principles have been found in practice so necessary for the efficiency of Asylums, and the injustice of the present want of statutory provisions for carrying them out so glaring, that, in many of these Institutions, District and Parochial Boards have hitherto, without objection on the part of the ratepayers, continued the emoluments of those Officers on retirement after long periods of service, or in consequence of ill health.

"VII.—That the promised introduction by her Majesty's Government of a Bill relating to Lunacy Districts in Scotland seems to afford a favourable op-

portunity for the rectifying of this injustice to Scottish District and Parochial Asylum Officers and Servants, as compared with the Officers and Servants of English and Irish Asylums, and of Scottish Royal Asylums.

"Your Memorialists therefore humbly pray your Lordship to introduce into the promised Bill such a clause as will remedy the omission of which they complain."

The Secretary was instructed to have the Memorial printed and signed by the chief medical officers of the Scottish Asylums. The following signatures were appended in due course :—

THOMAS AITKEN, M.D.,
Medical Superintendent, Inverness District Asylum.
R. BLAIR, M.D.,
Medical Superintendent, Barony Parochial Asylum.
JOHN CAMERON, M.D.,
Medical Superintendent, Argyll and Bute District Asylum.
R. W. D. CAMERON, M.D.,
Medical Superintendent, Midlothian and Peebles District Asylum.
C. M. CAMPBELL, M.D.,
Medical Superintendent, Perth District Asylum.
A. CAMPBELL CLARK, M.B.,
Medical Superintendent, Glasgow District Asylum.
T. S. CLOUSTON, M.D.,
Physician-Superintendent, Royal Edinburgh Asylum.
D. FRASER, M.D.,
Medical Officer, Riccartsbar Parochial Asylum, Paisley.
THOMAS GRAHAM, M.D.,
Medical Superintendent, Abbey Parochial Asylum, Paisley.
S. GRIERSON, M.R.C.S.,
Consulting Physician, Roxburgh District Asylum.
J. C. HOWDEN, M.D.,
Physician-Superintendent, Montrose Royal Asylum.
ROBERT JAMIESON, M.D.,
Consulting Physician, Aberdeen Royal Asylum.
J. CARLYLE JOHNSTONE, M.B.,
Medical Superintendent, Roxburgh, Berwick, and Selkirk District Asylum.
W. C. M'INTOSH, M.D.,
Consulting Physician, Perth District Asylum.
J. MACLAREN, F.R.C.S.,
Medical Superintendent, Stirling District Asylum.
A. J. MANSON, M.D.,
Physician to the Banff District Asylum.
W. REID, M.D.,
Physician-Superintendent, Aberdeen Royal Asylum.
ALEXANDER ROBERTSON, M.D.,
Physician to the City of Glasgow Parochial Asylum.
JAMES RORIE, M.D.,
Physician-Superintendent, Dundee Royal Asylum.
JAMES RUTHERFORD, M.D.,
Physician-Superintendent, Crichton Royal Institution, Dumfries.
J. B. RONALDSON, M.D.,
Medical Officer, Haddington District Asylum.
JAMES ROSS, M.D.,
Medical Officer, Elgin District Asylum.
CHARLES HOLLAND SKAE, M.D.,
Medical Superintendent, Ayr District Asylum.
A. R. TURNBULL, M.B.,
Medical Superintendent, Fife and Kinross District Asylum.

A. R. URQUHART, M.D.,
Physician-Superintendent, James Murray's Royal Asylum, Perth.
JAMES WALLACE, M.D.,
Physician to the Greenock Parochial Asylum.
W. R. WATSON, L.R.C.S., L.R.C.P.,
Medical Superintendent, Govan Parochial Asylum.
DAVID YELLOWLEES, M.D.,
Physician-Superintendent, Glasgow Royal Asylum.

The memorial was sent to the Marquis of Lothian, and copies to the Lord Advocate and the Solicitor-General.

The following is the reply of the Marquis of Lothian :—

"Dover House, Whitehall, S.W.,
"3rd May, 1887.

"DEAR SIR,—I am desired by Lord Lothian to acknowledge receipt of the Memorial of the Chief Medical Officers of the Scottish Royal, Parochial, and District Asylums for the Insane on the subject of Superannuation Allowances.

"His Lordship, while feeling that there is probably much justice in the demand for Superannuation Allowances put forward by the Officers of Scottish Asylums, cannot hold out any hope of the subject being dealt with in the Bill dealing with Lunacy Districts now before Parliament.

"I am,
"Yours faithfully,
"JOHN BLACKBURN.

"A. R. Urquhart, Esq., M.D."

It was thereafter agreed, in addition to what might be done by private efforts, that Drs. Clouston, Aitken, and Watson should be empowered to act on behalf of the memorialists as might seem expedient to them.

MRS. LOWE'S APPEAL TO THE HOUSE OF LORDS.

The case of Lowe (the appellant) * and Fox (the respondent) is one of too much importance in its legal aspect to be allowed to pass without placing on record the grounds on which final judgment was given by the Lord Chancellor, and Lords Watson, FitzGerald, Herschell, and Macnaughten.

The Lord Chancellor (Halsbury), after complimenting Mrs. Lowe on the great ability and propriety with which she had argued her appeal, and stating her to be in full possession of her faculties—thus exercising that power of diagnosis in insanity which the present Lord Chancellor believes to be as satisfactorily performed by a legal as by a medical man—proceeded to give it as his opinion that it was impossible to deal with the order upon a patient received into an asylum without taking all its parts and its contents together, and judging of them as a whole. He held that Mrs. Lowe had dissociated the various parts of which it was composed, and dissected it as if one such part had no relation to or dependence upon another. Much turned upon the answer to the question "Whether the first attack?" The answer was "For the last 20 years has been subject to what is termed hysteria." The Lord Chancellor admitted that, taken by itself, the question had "reference to that which alone the keeper of the house has to consider, namely, the state of her mind." But an answer, "Yes" or "No," would be inadequate and misleading. Hence the above reply merely gave the important information that she had suffered from hysteria for 20 years, but by no means alleged that she had been insane during this period. Again, in reply to the question, "Age on first attack?" the answer was given "30." The

* We are indebted to the shorthand notes of Messrs. Cherer, Bennett, and Davis, 38, Lincoln's Inn Fields, for the summary of this appeal to the House of Lords, which took place January 31st, 1887.

Lord Chancellor admitted that, taken alone, the natural conclusion from it would be that it meant the first attack of insanity. On the principle, however, of interpreting one question and answer by others, no one could doubt that the age on first attack, namely 30, had reference to the attack of hysteria from which she had been suffering 20 years.

It is not necessary to give the observations of the Lord Chancellor on the other answers to the statutory questions, further than to quote the passage upon which he says: "It seems to me that no one with a knowledge of the facts, as we are now possessed of them, could have answered those questions with a more apparently scrupulous regard to giving the whole state of the facts."

On the point whether an alteration alleged to have been made in the order deprived it of any validity, the Lord Chancellor admitted that, if a material part of it were altered, so that the document no longer spoke the language which it did speak when it was originally received, the document was vitiated. But in all the cases which Mrs. Lowe quoted it might be clearly perceived that materiality was an essential condition to make the instrument void. In the statement upon which Mrs. Lowe was received into Burlington House, there were only the words "for hysteria" added to the sentence "during this period of 20 years has been constantly under treatment."

Lastly, on the question—whether Mr. Lowe's written direction, that Mrs. Lowe should be discharged—complied with the conditions of the Lunacy Acts, the Lord Chancellor observed: "That point appears to me to be beyond all doubt." The letter in question was so worded that it left a certain discretion to the person receiving it. Then "the question is," said the Lord Chancellor, "whether the person who acted in pursuance of that discretion, and fulfilled strictly the authority which he got, namely, to exercise a discretion to retain the lady for the period of a fortnight, disobeyed an order within the language of the statute. My lords, it seems to me that it is impossible to maintain for one moment that he did, and I am, therefore, of opinion, and so move your lordships, that the judgment of the Court of Appeal should be affirmed, and that this appeal should be dismissed with costs."

The other law lords concurred in the views expressed by the Lord Chancellor.

We congratulate the Drs. Fox on the result of Mrs. Lowe's appeal.

PHARMACEUTIC AND THERAPEUTIC MEMORANDA.*

We would draw attention to the many admirable preparations which Messrs. Burroughs and Welcome, Snow Hill, London, have introduced. Few things are more surprising than the change which has taken place during the last few years in the art of preparing medicines in a way which makes them palatable and even tempting to the most fastidious taste. There are the neat and dainty tabloids used in hypodermic injection, and there are the beautifully prepared pills which offer so striking a contrast to the repulsive boluses of former days. Again, there are the convenient cases of selected drugs which the practitioner can carry about with him. We have been more especially struck with the carefully contrived case of antidotes to poisons. This has been for a long time past a desideratum, and we can confidently recommend it to practitioners and physicians, but especially to those engaged in the department of mental medicine, for whom the possession of such a selection of remedies at hand in emergencies cannot fail to be a great help. The case contains not only bottles of remedies required for prompt exhibition, but tabloids for hypodermic injections. There is also a stomach tube which can be used as a syphon for emptying the stomach of its contents. A gag should be provided. The price of this case is moderate (£3), and ought to be procured by asylum men and by physicians specially engaged in the treatment of the insane.

* We purpose giving under this head, from time to time, short memoranda of important drugs, &c.—[Eds.]

THE EAMES MEMORIAL FUND.

Dr. Courtenay begs to acknowledge the receipt of the following sums to the Eames Memorial Fund :—

	£	s.	d.	
Drs. Charles and Bonville Fox	5	5	0	
Dr. W. Orange, C.B.	5	5	0	
Medico-Psychological Association	10	0	0	(omitted.)

The following is a letter from Mrs. Eames :—

2, Dyke Parade, Cork.

DEAR DR. COURTENAY,—Will you kindly convey to the members of the Psychological Association my sincere thanks for their very liberal contribution of £245 19s. 6d. to the memory of my dear husband, and believe me

Your greatly obliged,

HELEN EAMES.

March 14th, 1887.

SYDNEY UNIVERSITY.

PSYCHOLOGICAL MEDICINE has been made a compulsory subject at the University of Sydney at the Examinations for the degrees of M.B. and M.D. Attendance at Lectures and Hospital Practice is insisted on, and a Lecturer on Psychological Medicine has been appointed, Dr. Manning being the first occupant of the chair. This is an excellent beginning.

Correspondence.

A VISIT TO ASYLUMS IN PARIS.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—The following notes of a visit to the two chief and typical asylums of France, both of them situated in Paris, may be interesting to some. I thankfully acknowledge the kindness and courtesy of my friend, Dr Larroque, one of the *internes* at Charenton, both during my visit and also since. The Asylum of Ste. Anne, for acute cases, is at the southern boundary of Paris, near Gentilly; that at Charenton is north of the Seine, outside the fortifications, and close to the park of Vincennes. Charenton, for the less acute cases, is the National Asylum of France; it is destined by the State to be the model establishment for the insane throughout the country; it is erected upon a raised plateau, and is sheltered from the north by the woods of Vincennes. The situation commands a most extensive and beautiful landscape along the Seine Valley, and from a sanitary point of view, it leaves nothing to be desired.

Charenton dates from a very remote period; it has several times been pulled down and rebuilt. Previous to 1830 it belonged to and was governed by the brotherhood of St. Jean de Dieu, and ranked, I believe, as a monastery; the treatment of mental disease being undertaken by the monks themselves. In 1830, the time of the great Revolution, when Louis Phillippe became King, and civic improvements were resumed at a vast outlay, it became the property of the State, was reconstructed with pure white limestone (resembling our Portland stone), and has remained so up to the present time. It has a strikingly clean

and bright appearance. It was here that the great Esquirol, Calmeil, and other great teachers practised; among the *internes* are also the names of Bayle, Trousseau, Legrand du Saulle, &c. There is a most complete medical library, including, as his own gift, all the valuable books of Esquirol himself. The building is surrounded by extensive gardens and woods, affording work for the male patients, recreation and diversion for the females. Corresponding to the divisions or sections on either side are well-planned airing courts, made pleasant with fountains and flower beds. Within the asylum everything is the picture of cleanliness; the beautifully waxed parquet floor, against which some of us cry out, does not appear to increase the casualties; whilst the dainty dimity canopy over the beds adds much to the brightness of the dormitories for the quieter patients. The beds are for the most part arranged in single rooms--although accommodation for servants and nurses adjoining the patient's own room is also provided— comfortably furnished and well-arranged suites of apartments, to admit of this, being supplied at higher rates of payments. Drawing-rooms arranged with chaste bric-à-brac are a marked feature on the women's side; readings and entertainments in these rooms help to pass the time pleasantly during the winter evenings. Carefully-planned, commodious workrooms, linen rooms, and wardrobes also exist where the industrious females find employment. Light is plentiful in this asylum, and ventilation is good. The atmosphere is kept at an even temperature during the winter months by means of heated coils passing through the building. I was greatly struck with the complete methods of hydro-therapeutics in vogue; Turkish, Roman, and medicated baths, packs, douches, &c., being fitted on each side. I have not seen the equal in any English asylum. Ought this so to be?

The lay management of the asylum is entrusted to a director or governor, who is responsible to the Ministre de l'Interieur (or Home Secretary), by whom the appointment is made. The director resides in the establishment, and in the present instance is an old private secretary of the late Gambetta; he is relieved in the management by a numerous staff, to whom the work is mostly delegated. His post is by no means onerous, the selection being possibly more a reward for past political services than adaptation for the post; still, he is highly respected and esteemed by the medical staff. There is, in addition, a Committee of Management, consisting of honorary members, selected by the Ministre de l'Interieur from members of the Courts of Justice, the State Councils, the Court of Repeal, and other judicial Courts in Paris. This Committee appoint one of their number every year to act as provisional administrator of property belonging to those who for the time being are deprived from managing their own affairs.

The medical staff consists of two resident physicians, supported by two assistant medical officers or *internes*, the latter being selected after a competitive examination, and holding the post for three years; there is also a consulting surgeon of high repute, who assists and performs operations, and who is non-resident. A dispenser is also attached to the asylum.

Dr. Christian and Dr. Ritti are respectively responsible for the male and female department; both are well known in Paris for work in the specialty. A morning visit is made by the medical officers together, each for their respective departments, the *internes* making an additional evening visit at the hour of dinner. A resident chaplain conducts daily services according to the rites of the Romish Church; all the patients are encouraged to attend, the selection being generally made upon the authority of the medical officers, who are empowered to act with responsibility and unrestrained freedom in all that concerns the welfare of the patients. The salary is not so high as that paid to English superintendents, but they have more freedom, as a rule, being allowed to hold honorary appointments in addition to consultations.

The number of the attendants and servants amounts approximately to 190,

varying according to the requirements of private patients, who may each have two or more according to payment. The establishment is divided into sections or wards; at the head of each section is a charge attendant, who has the supervision of the others, each charge being responsible for his section. Among the women, religious sisters fulfil the duties of charge or head attendant; they are devoted, refined, and fairly educated, and appear to give every satisfaction. The office corresponding to our matron's is filled by two ladies of the Augustine Sisterhood; the more responsible being called the Sister Superior; together they have the general supervision of the female department under the doctors, whose confidence they seemed to me fully to possess; their close interest and sympathy with the afflicted greatly impressed me. There are eight sections on the male side, including the infirmary; the female side comprised twelve sections, including an infirmary.

Admission into Charenton is obtained in two ways: either by the order of the Prefect of Police, with or without a medical certificate, or through a petition signed by the nearest relative, together with a proof of the identity of the person making application, as well as of the patient himself; both these certificates to be accompanied by the ordinary medical certificate giving reasons for admission, and bearing a date of less than fifteen days. The medical man signing the certificate must be unconnected with the asylum, and not in any way related to or interested in the patient to be admitted. Extensive libraries, containing the daily papers, serials, and other journals are a feature on both sides of the establishment. With regard to the patients, the number at Charenton is about 600; a little more than half being females, the women preponderating, as in most asylums. They are, unfortunately, classified, primarily, according to payments, and into three divisions, varying from £50 to £200 per annum (although 20 beds are secured for free cases); the higher rates include separate apartments, board, wages, and attention of private servants. The diet, although abundant, good, and daintily served to all, is more varied and *recherché* for those providing increased payments; wine in all cases takes the place of our beer; it was light and refreshing, and appeared very suitable for the women. The patients, for the most part, are derived from the middle and artisan classes, being kept by the contribution of their friends or guardians, although artists, actors and actresses, military and naval officers, are in many cases supported by State subsidies. The age varies according to the average scale of those in English asylums. Many patients at Charenton, certainly the greater number, suffer from chronic forms of mental disease. The women, as is their wont, were more noisy, clamorous, and turbulent; some were in restraint, strong camisoles being used, and the patients strapped in chairs, arranged in a row, exhausting themselves into a state of quietude, in this situation, by screams and shouts. I did not see this method adopted on the male side, or elsewhere, and was assured that it was an uncommon practice, and very rarely used. Considering the number of attendants and nurses at disposal, the necessity for such treatment should be exceptional. There were very few in bed of either sex, those unable to get up being generally paralyzed, or otherwise feeble. Food was artificially administered through the mouth in a large number of cases; light red wine and peptonized preparations being added to the usual fluid nourishment in each case, artificial feeding being an essentially gentle, and particularly facile operation in the hands of Dr. Larroque, one of the *internes*. I met several British patients in the asylum; all were anxious to return, one Irishman being full of ardent promises for the benefit of his native land as a return for his liberty; he was reproached with being a dangerous patient, but respectful and plausible complacency was all that I saw. Alas, how the race may be misjudged even nearer home! Although kind and gentle treatment was so marked here, I could not leave my incarcerated countryman without a pang of remorse.

The asylum of Ste. Anne, for the accommodation of about 600 cases, is a very different institution compared with its predecessor. It is less impressive from without, and there is less dignity, ease, and luxury within. No paying patients are received here; it is free for all, being supported by the Department of the Seine, entirely depending for its income upon State aid. It is more a hospital for the cure than a receptacle for the care of the insane. I have reason to believe that the asylum is the outcome of an important Commission held in Paris in 1864 to inquire into the state of the great hospitals for the insane in that city. M. Lelut was closely examined before that Commission, and certain propositions having been fully discussed, they were adopted by the construction of Ste. Anne. The most important of these provided that there should be erected a central asylum, situated in Paris, for the reception of all forms of insanity—more especially acute and recent cases; that this accommodation should be combined with clinical instruction; that there should be a special block instituted (as annexe to the central asylum) for the *admission* of patients, and in which the admissions might be carefully examined, and their distribution afterwards determined; also that there should be erected special asylums for the care and treatment of epileptics and idiots. Clinical instruction is well carried out here under professors from the Paris Faculty of Medicine. I had the privilege of attending the clinic of Professor Ball, who is almost as well known in England as in Paris, having about equal claims upon the two countries, being English by birth and French by adoption; he was spoken of in Paris as a great French physician and orator. I can quite believe it. Among other physicians who teach here are Drs. Magnan, Dagonet, and Bouchereau, all well known for their works in psychology and nervous diseases. The appointments of the physicians and *internes* are made in a precisely similar manner to those at Charenton. Dr. Magnan, whose clinic I also had the honour and privilege to attend, resides in the asylum, and every morning was occupied in a special section (resembling very much our out-patient hospital department), examining reputed lunatics, who are sent here from a central bureau, or by orders from the Préfecture of the Seine, with or without a medical certificate. After examination they are kept under observation for a time, being discharged if not insane, or if the certificates be faulty, without being committed to the registers of the asylum, and officially admitted. When the diagnosis and prognosis are made, they are detained until recovery, if acute; or drafted into special asylums outside the capital for the reception of the more chronic class, such as Vaucluse, Ville Vraz, and Burge. The patients are all recruited from the poorer classes, and being all acute, possess by far the greatest interest for the scientific student. The staff is large; the wards are small, affording greater individualization, a point greatly emphasized in Clouston's plan of a model asylum for acute cases; the wards are certainly not cheerful, being lighted from cramped airing courts. The contrast with Charenton was very marked, but I saw no camisoles, and no personal restraint; the padded rooms were in use for such patients as generally occupy them in English asylums, I mean those where prejudice does not run high. For the most part the occupants were exhausted from mania, melancholia, and general paralysis. Many noisy ones were exercising in the airing courts, which were small, depressing, and very confining. There were many in bed, with various bodily disorders of a serious nature. I saw several children of the imbecile class in one part of the building, arranged as a nursery; an attempt to entertain and educate them was in vogue, after the manner of our asylum at Earlswood, although I admit with a staff much less keen and imposing. Among the insane generally it is easy to discover how largely racial peculiarities enter into the mental constitution; it was interesting to find, even here, the graceful politeness which is inborn, the glimmer of native chivalry, and that sensitive emotional nature, which, in the outside world, either bubbles over in unrestrained expressions of feeling, or, moderated, throws the Gaul so soon and

so completely into *rapport* with others. I trust, however, that I have not wearied my readers with uninteresting details of a visit which afforded me most keen enjoyment, and which helped to seal the bond of friendship. It is one thing to see, another to describe.*

Yours truly,
ROBERT JONES, M.D.

Perth, 6th June, 1887.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

GENTLEMEN,—With reference to Dr. Campbell Clark's letter in the April number of the Journal (p. 167), I beg to state that the substance of his reply was given with perfect correctness in the number for January (p. 624). I now enclose the shorthand writer's verbatim report. At page 100 it runs :—

"As to its affecting the power of the superintendent, he thought that Dr. Maclean had answered that very well. He would supplement that by saying that it would be a good thing if superintendents in that respect were a little more hampered. He thought there was a good deal of arbitrariness on the part of superintendents in dealing with attendants, and it would make superintendents less hasty in sending attendants away, and lead them to do to others as they would wish others to do to them. If that were followed out they would be better treated."

Of course Dr. Campbell Clark has every right to correct what he said on the spur of the moment, but he has no right to impugn the accuracy of the reporter and myself.

It would be interesting to know what Superintendents are still included in Dr. Campbell Clark's condemnation, and what their views are regarding the evictions referred to.

I am, yours truly,
A. R. URQUHART, M.D.
Hon. Secretary for Scotland.

Obituary.

WILLIAM CHAPMAN BEGLEY, M.D., F.R.C.P.

With deep regret we have to record the death of Dr. W. C. Begley, which took place at his residence, 26, St. Peter Square, Hammersmith, on Easter Monday, 11th April. He was in his 85th year, and had been in failing health for some time. His remains were interred in Highgate Cemetery on 18th April, after a very impressive ceremony at the church in St. Peter Square, which he used to attend. He took his B.A. degree in 1826, M.A. in 1840, and M.D. in 1851, all at Trinity College, Dublin. He obtained the diploma of M.R.C.S.Eng. in 1830, and in 1872 he was elected a Fellow of the Royal College of Physicians of London, the Membership of which College he obtained in 1859.

He was engaged in private practice at Glossup, in Derbyshire, and subsequently, in 1838, he was appointed house surgeon to the male department of Hanwell Asylum, which post he held, under the direction of the successive resident physicians, Sir William Ellis, Dr. Millingen, and Dr. Conolly, for 14

* We should be very glad if other travellers in search of the asylumesque would forward us similar letters, even if not so well written as Dr. Jones's excellent contribution.—[EDS.].

years, up to 1852, when he was promoted to the office of medical superintendent of the male department on the resignation of Dr. Conolly. His service, therefore, as medical officer at Hanwell Asylum extended over the lengthened period of 34 years.

Dr. Begley had a well-stored, cultured mind, he was a good classic, very fond of Greek, a man of noble character, sterling, upright, warm-hearted, full of charity and benevolence, ever ready to assist the needy or those who required his aid, dispensing his charity in a quiet, unostentatious way, hating display, never letting the left hand know what the right hand doeth. He was modest, unassuming, and of a retiring disposition, slow to make friends, but when once his friendship was gained, he proved himself a true friend in every sense of the word. The true nobleness of his character and his generous disposition were known to comparatively few men. The writer had the great privilege of his intimate friendship for many years, during which he learned to appreciate his worth and to entertain for him a feeling of the most profound respect. He became a Governor of Bethlem Royal Hospital for the opportunity it afforded of enabling him to do good, for he was never weary in well-doing.

During his lengthened service at Hanwell he worked hard for the good of the poor afflicted creatures placed under his care, showing a manly spirit of sturdy independence in making suggestions and asserting his opinions, even to the risk of occasionally incurring the opposition or displeasure of the Committee. Indeed, it is very questionable whether any medical officer at Hanwell has ever done more for the benefit of the patients and the staff than Dr. Begley. Such was his spirit that if he thought he was right he acted accordingly, and feared no one.

Of all the men connected with the treatment of the insane, Dr. Begley appeared to have the highest appreciation of the labours of Sir William Ellis, who did so much to promote their occupation, and whose labours were duly acknowledged and favourably commented on by Dr. Conolly in his Hanwell reports.

Dr. Begley assisted Dr. Conolly in his lectures delivered at Hanwell, and did much to maintain and increase the reputation of that well-known institution.

In the Report of Hanwell Asylum for 1872, the Committee refer to Dr. Begley's "desire to retire from the appointment of medical superintendent of the male department, which he had filled with so much credit and advantage to the patients for more than 34 years; and they recorded their appreciation of his professional merits and unremitting devotion to his duties and the interests of the asylum in a resolution, and by awarding him the highest retiring annuity which it was in their power to recommend."

In respect of pensions, the Hanwell Committee are deserving of all praise, and show an example worthy of being followed, for they have always been considerate, just, and liberal towards their staff in the matter of superannuation.

The following is copy of resolution referred to above :—

Resolution of Committee of Visitors upon Dr. Begley's Retirement.

At a Meeting of the Committee of Visitors, duly appointed for the purposes of the Middlesex Pauper Lunatic Asylum, held at Hanwell on the 4th day of April, 1872 :

Resolved unanimously—"That this Committee receive with great regret the resignation of Dr. Begley, and desire to express their high opinion of the manner in which he has performed the arduous duties as Medical Superintendent during the long period of 34 years, of his unvaried kindness to the patients, and the deep interest which he has evinced in the welfare of the Asylum; and that this be communicated to Dr. Begley, together with the assurance that the Committee will not fail to give their cordial support to his claim for a good service pension."

Dr. Begley leaves behind him a widow to mourn his loss, a lady who shared

his kindly, charitable, benevolent spirit, and who was truly his helpmate through life.

On his memorial card these very appropriate words appear, "Blessed is the man that provideth for the sick and needy; the Lord shall deliver him in the time of trouble."

"Now the labourer's task is o'er."

J. M. L.

DR. JEWELL, OF CHICAGO.

Those who had the pleasure of Dr. Jewell's acquaintance could not fail to recognize his originality of character, his ability, enthusiasm for work, fearless pursuit of truth, and the charm of his character. We deplore his loss, and append the following appreciative notice of him in Dr. Sach's "Journal of Nervous and Mental Diseases:"—

"We are pained to announce the death of Dr. James Stewart Jewell, of Chicago, on April 18th, after a lingering and complicated illness. During the past year or more, numerous evidences of Dr. Jewell's poor health reached his New York friends and acquaintances, but none expected so early an end to a bright career. Dr. Jewell was born September 8th, 1837, at Galena, Ill. He took his degree at the Chicago Medical College in 1860, and two years later began his practice in Chicago, in which he continued until the time of his death. From 1864 to 1869, he held a position as professor of anatomy in his college, and since 1872 has filled the chair of Nervous and Mental Diseases. In 1874, Dr. Jewell founded this Journal, and, in the face of many discouraging conditions, continued it until a few years ago. Through the efforts of its founder, the 'Journal' soon obtained an enviable reputation among journals on neurology. Looking back upon past numbers, we find that Dr. Jewell performed his editorial duties in the most painstaking fashion. Innumerable reviews, signed and unsigned, were written by him, and many excellent original articles appeared in the 'Journal' from his pen. Dr. Jewell had the satisfaction of seeing his 'Journal' a pronounced success, and although it had passed out of his hands, he retained a lively interest in its welfare up to his dying day. In 1886, Dr. Jewell founded another journal, the 'Neurological Review.' The plan and design of the new journal were both good, but the editor's health was not equal to the task he undertook, and that journal had to be abandoned after three numbers had appeared.

"Dr. Jewell rendered many valuable services to American neurology, and helped to place this special department upon an equal footing with other great specialities. He was one of the early members and organizers of the American Neurological Association. In practice Dr. Jewell was eminently successful, and deservedly popular among patients and physicians.

"Dr. Jewell possessed great enthusiasm for his special subject, and was at all times well abreast of the latest advances in the science. Free from feelings of personal envy, he was ever happy to prove to others his recognition of the good work they were doing. We mourn the loss of an earnest student, a generous friend, and an honest critic."—"Journal of Nervous and Mental Diseases," New York, May, 1887.

DR. KIRKMAN.

At the ripe old age of 93, the former medical superintendent of the Suffolk County Asylum at Melton died at Brighton, April 3, 1887. For the long period of forty-five years he held this post, and was much esteemed by all who knew him. He retired eleven years ago on a pension of £600 per annum. He was a warm advocate of the non-restraint system.

He occupied the Presidential chair of the Association in 1862, and in the course of his address observed :—

"I am old enough to remember the origin of this Association, existing at first only in a small volunteer band, urged on by the energetic labours of Dr. Hitch. I can revert in pleasing recollection to its more organized arrangements, and its augmented numbers from our meeting at Oxford (with the liberal encouragement of Mr. Ley) ; and in marking its progressive growth, from the days of its peripatetic youth, widening its area before it deepened its roots into 'a local habitation and a name,' I cannot but congratulate every officer and every member on the influence that the Association now exerts, and the rank that it holds among the nations."

At one period Dr. Kirkman was President of the East Anglican Branch of the British Medical Association.

Another generation of mental physicians is growing up who do not remember Dr. Kirkman. By those who are passing away, and were acquainted with him, he will be remembered with esteem, and the honest practical work he performed in asylum-life will be duly appreciated.

Appointments.

Anderson, W. A., M.B., C.M.Ed., appointed Assist. Med. Officer to Kent County Lunatic Asylum, *vice* W. F. Menzies, M.B., C.M.Ed., resigned.

Christie, J. W. S., M.D., appointed Med. Superintendent to the Stafford County Asylum.

Shaw, Harold, B.A., M.B., M.C.Cantab., appointed Assist. Med. Officer to the Gloucester County Asylum.

Taylor, Alfred Everley, L.R.C.P. & S.Edin., L.S.A.Lond., appointed Sen. Res. Med. Officer to the County Asylum, Stafford.

Turner, A., M.B., C.M.Edin., appointed Assist. Med. Officer to the Dorset County Asylum.

Williams, Lionel, M.R.C.S., L.S.A., appointed Assist. House Surgeon to the York County Asylum.

White, Ernest H., M.B.Lond., M.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., A.K.C., appointed Res. Med. Supt. of the City of London Asylum.

Wreford, John, M.R.C.S., L.R.C.P., appointed Res. Clinical Assist. to the Birmingham Borough Asylum.

Several Original Articles and Reviews have been crowded out this Quarter.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

HONOURS EXAMINATION (GASKELL PRIZE), July, 1887.

The Examination will be held at Bethlem Royal Hospital on the 29th and 30th July, 1887.

Candidates must have passed an examination for the Certificate in Psychological Medicine in the United Kingdom, must have attained the age of twenty-three, and must have been qualified medical officers in one or more asylums for at least two years. Candidates will be examined in—1. Healthy and Morbid Histology of the Brain and Spinal Cord. 2. Clinical Cases with Commentaries. 3. Psychology, including the Senses, Intellect, Emotions, and Volition. 4. Written Examination, including questions on the Diagnosis, Prognosis, Pathology, and Treatment of Mental Diseases, and their Medico-legal Relations.

Candidates intending to present themselves for examination are requested to give Fourteen Days' Notice to Dr. H. RAYNER, Hanwell, W.

A Pass Examination for the Certificate of Efficiency in Psychological Medicine will be held at Bethlem Hospital, London, on the 25th and 26th July, and in Edinburgh on the 16th and 17th July.

H. RAYNER,
Hon. Sec.
Hanwell, W.

25th May, 1887.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

ANNUAL MEETING, 1887.

The Annual Meeting will be held at the Medical Society's Rooms, Chandos Street, W., on Wednesday, July 27, 1887, under the Presidency of Frederick Needham, M.D.

Council Meet at 10.30 a.m
General Meeting at 11.
Afternoon Meeting at 2 p.m.

The Agenda will be forwarded to Members of the Association by the Hon. Secretary, Dr. Rayner, Hanwell.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

CONDITIONS AND REGULATIONS RESPECTING THE EXAMINATION FOR THE CERTIFICATE IN PSYCHOLOGICAL MEDICINE.

I. Candidates must be at least 21 years of age.

II. They must produce a Certificate of having resided in an asylum (affording sufficient opportunity for the study of mental disorders) as Clinical Clerk or Assistant Medical Officer for at least three months, or of having attended a course of Lectures on Insanity and the practice of an asylum (where there is clinical teaching) for a like period, or they shall give such proofs of experience in Lunacy as shall in the opinion of the President be sufficient.

III. They must be Registered under the Medical Act (1858) before the Certificate is actually bestowed.

IV. The Examination to be held twice a year, at such times as shall be most convenient, in London, Scotland, and Ireland.

V. The Examination to be written and oral, including the actual examination of insane patients.

VI. The fee for the Examination to be fixed at £3 3s., to be paid to the Treasurer, for any expenditure incurred, including the Examiners' Fees.

VII. Candidates failing in the Examination, to be allowed to present themselves again at the next and subsequent Examinations on payment of a fee of £1 1s.

VIII. The Certificate awarded to the successful candidates to be entitled "Certificate in Psychological Medicine of the Medico-Psychological Association of Great Britain and Ireland."

IX. Candidates intending to present themselves for Examination to give Fourteen Days' Notice in writing to either the General Secretary of the Association, the Secretary for Scotland, or the Secretary for Ireland, according as they desire to be examined in London, Edinburgh, or Dublin.

X. The Examiners shall be two in number for England and Wales, for Scotland, and for Ireland.

XI. They shall be appointed annually by the Council of the Association from Members of the Association. They shall not hold office for more than two years in succession.

XII. Form of Certificate to which the Seal of the Association is to be affixed:

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

Examination for the Certificate in Psychological Medicine.

This is to certify that Mr. ..... has satisfied the Examiners as to his knowledge of the subjects of the Examination.

Dated

N.B.—Candidates intending to present themselves for Examination are requested to give notice thereof Fourteen Days prior to Examination—

In England, to Dr. RAYNER, Hanwell.
In Scotland, to Dr. URQUHART, Murray's Asylum, Perth.
In Ireland, to Dr. COURTENAY, Limerick.

THE JOURNAL OF MENTAL SCIENCE.

[*Published by Authority of the Medico-Psychological Association*]

No. 143. NEW SERIES, No. 107. OCTOBER, 1887. VOL. XXXIII.

PART 1.—ORIGINAL ARTICLES.

Presidential Address, delivered at the Annual Meeting of the Medico-Psychological Association, held at the London Medical Society's Rooms, Chandos Street, W., July 27, 1887. By FREDERICK NEEDHAM, M.D., Medical Superintendent of Barnwood House, Hospital for the Insane, Gloucester.

GENTLEMEN,—In occupying the position to which you have done me the honour to elect me, I beg to thank you sincerely for having conferred that honour upon me, and to assure you that it has my warmest appreciation.

A position which has been held by men like my predecessors, whose names are among the most distinguished in our department of medical science, is one which may be occupied by anyone with pride and satisfaction. But I cannot fail to be conscious that in conferring this office upon me you have sought, through me, to pay a mark of high respect to registered hospitals, and especially to those members of our specialty who are practising in the provinces.

In giving an address, which is the first duty of the President, those who have preceded me have discharged that official duty with a variety as to subject which has followed the course of their special studies, or been the result of the selection of circumstances. The high character of these addresses, and the wide extent of ground which has been covered by them, render the task increasingly difficult with each recurrence of the occasion which calls for them. It is almost impossible to say what is new. It is most difficult to repeat in varied language that which has frequently been better said by more able persons. One's only hope is in reliance upon the forbearance and kindly feeling of an audience which is not unduly expectant or harshly critical, and in this hope I appear before you to-day, while I endeavour to tread

in the footsteps of some of my predecessors, to the extent of passing in brief review those events of the year which have been connected with our specialty, and cannot, therefore, be entirely devoid of interest to any of us.

Since our last annual meeting we have had to deplore the thinning of our ranks by the death of several of our honorary and ordinary members.

Of the former we have, in Dr. Nairne, lost a friend whom we older superintendents especially, regarded, and had reason to regard, with much respect and affection, as having, during his long term of office, discharged his duties as a Commissioner in Lunacy not only with great efficiency, but with the utmost consideration for those who were subject to his official supervision. A lecturer on medicine and physician to a large Metropolitan hospital, he did not commence his career as a Commissioner with the advantages which result from extensive practical experience in the management of asylums and the special treatment of the insane. But his kindliness of heart, refined feeling, good common-sense, and educated tact soon made him one of the most efficient and deservedly-popular Commissioners. This he continued to be during the long term of his official service of nearly 30 years.

Another honorary member of our Association, whose name was a power across the Atlantic, has also joined the majority since our last annual meeting. I refer to Dr. John Gray, the distinguished superintendent of the New York State Hospital for the Insane.

A man of strong intelligence, of distinct individuality, of vigorous, active mind, and very definite opinions, not always in accordance with those which are usually received or considered orthodox, he could not fail to be a power, or to leave a gap when his place knew him no more. His death appeared to be the ultimate result of an injury inflicted upon him by a patient, and adds one to the line of those who have so died within recent time.

From among our ordinary members death has taken three distinguished asylum superintendents—Dr. Lalor, Dr. Gilland, and Dr. Kirkman.

In Dr. Lalor the profession, in Ireland especially, has lost a valuable member, whose services at the Dublin asylum had shed a lustre upon Irish lunacy administration which will last far beyond his time. He was at once an originator and an enthusiast, an accomplished physician and an able administrator, a genial, high-spirited gentleman, whose

qualities of heart and brain gained the confidence and secured the affection of all with whom he was brought into official relation, and although his work has been taken up by an able successor, and he had previously resigned active work, his loss is one which will be severely felt wherever his influence had impressed itself.

Dr. Gilland died in what should have been the prime of life, worn out by incessant work overacting on a sensitive and anxious organization. His death points a moral which those who are engaged in the arduous and responsible duties of our specialty cannot too earnestly take to heart, that a man's best work is sustained only by adequate relaxation, and that to neglect the latter is as certainly to stop the production of the former at its source.

Dr. Kirkman's death has removed an ancient landmark of our department of medicine. He had attained to almost a patriarchal age, and had retired from the active practice of his profession for some years. But he retained his appointment as superintendent of the Suffolk asylum until he was 82 years of age. He was well known as one of the earliest adopters of the non-restraint system, and he held the office of President of this Association so far back as when it was known as the Association of Medical Officers of Asylums and Hospitals for the Insane.

In reviewing the events of the year one of them stands out in strong relief, as promising to impress it with a distinctive, if not an altogether pleasing, character.

I refer, of course, to the progress of the new Lunacy Bill, which has passed through all its stages in the House of Lords, and made some way in the House of Commons.

As this Bill, for what is euphemistically called the *amendment* of the Lunacy Acts, if passed, as it probably will be, will effect very important changes in the relation of the medical profession generally to the public, and in that of ourselves to the patients under our care, I may, perhaps, be excused if I venture, somewhat at length, to review its chief provisions, and offer such criticisms as have occurred to me.

This Bill, the progeny of a long series of generative efforts, appears to have excited a singularly small amount of interest among more than a very limited section of the public and in the profession whose interests will be chiefly affected by it. The reason is not far to seek. The general public knows but little of the legal relations of lunacy, and cares less. Its practical incidence has to be met when it occurs; but

this necessity having passed away it prefers to bury the whole subject out of sight, and let the future take care of itself. As to the medical profession, its rank and file would probably have been willing to accept a much more generally objectionable measure in order to secure the protection which is supposed to be conferred by clauses of the Bill, against the malicious persecution from which so many of them have been made to suffer.

But for this feeling, many of the leading provisions of the Bill would, in all probability, have been subjected to keen criticism and determined opposition; for it is a Bill manufactured by lawyers, who do not seem to have recognized or remembered that the condition to which it relates is a condition of actual physical disease, and neither an accident nor a crime, and that those who should be helped and not hindered in their treatment of it are not banditti attacking a helpless foe, but physicians anxious only to pursue their legitimate calling in peace, and under that protection which every citizen of the State has a right to claim from it.

Those who made the Bill have filled it with curious anomalies, but this one idea seems to have been constantly kept in view—that in the diagnosis of morbid states of mind the non-medical class has, in its ignorance, a better claim to public confidence than those who have devoted the trained intelligence of their lives to the discrimination of such diseased conditions.

That an indignity of this kind can be offered to the medical profession is no doubt due to the fact that there is among us no effective power of combination.

We have no legitimate trades-union, no common cohesion which would make us conceal or sink our differences while we present a bold and an unbroken front to the enemy.

What would be the course of the legal profession if grave questions of law were to be submitted to the members of other professions for their elucidation and settlement? Here is a fact with a difference. The recent Bill for the amendment of the law relating to the transfer of land, because it affected the interests of the legal profession, was handed over to the Incorporated Law Society for criticism and suggestions. I have not heard that the Lunacy Bill has been submitted to any body representing the medical profession for a similar purpose.

The basis of this Bill has been stated to be principally the recommendations of the Select Committee of 1877, but

in many essential particulars it travels far beyond, and in others it departs widely from them. The principle of the Scotch procedure has been said to have been adopted with somewhat fuller elaboration of detail, but in the machinery which regulates that procedure are initial conditions which cannot be reproduced in any English Lunacy Bill. The Scotch Sheriffs and Sheriff substitutes, who are skilled lawyers of standing at the Bar, have no analogues in the English magistrates, who become so, not necessarily because of their legal knowledge or judicial minds, but because they are respectable citizens, with decided political sympathies, or, in many cases, good business capacity.

The primary and fundamental principle of the Bill is that in future no private patient shall be deprived of his liberty, either for his own benefit or the good of society, by an order under the hand of a friend or relative and the certificates of two medical men, but that in every county and borough there shall be made a selection of justices, to whom petitions, supported by medical evidence, shall be presented. They are to consider the medical evidence of lunacy, and, if they think fit, personally examine the patient. They are also empowered to take evidence upon oath, and summon persons to give it. They may use the services of the Clerk to their Petty Sessional Division, and the petitioner is to pay his fees.

Patients *may* be confined under an urgency order made by a relative, or even friend, accompanied by one medical certificate, but this order will only remain in force for seven days, before the expiration of which the petition to the judge or magistrate, accompanied by the two medical certificates previously referred to, must have been presented if the patient is to remain in confinement; but the medical certificate given with the urgency order must not be under the hand of either of the medical men who give those which accompany the petition.

The objections to these provisions are, I think, obvious.

Upon the magistrate is conferred the power, not of satisfying himself as to the *bona fides* and respectability of the medical certificants, and that the necessary legal requirements have been complied with, as in Scotland, but to decide as to the sufficiency of the medical facts adduced as evidence of insanity. This duty has, up to this time, been in the skilled and experienced hands of the Commissioners in Lunacy. By the new Bill the magistrate will decide questions of medical fact which, under ordinary circumstances, he will be unable

to understand or assess at their legitimate value; while upon the Commissioners, whose wide experience especially qualifies them to estimate such facts at their proper value, will devolve the duty of seeing that the necessary legal forms have been complied with, a matter as to which the most ignorant of magistrates would have required no lengthened education.

Moreover, the clerk's fee, and that of the third certificant will, in numbers of instances, make a very material addition to the charges which, under ordinary circumstances with persons of small means, are already sufficiently difficult to meet.

But if these objections are well-founded, what must be thought of the publicity and exposure which will be implied in the personal visit of the magistrates, of whom the "fools," if there are any, "will rush in where the angels would fear to tread."

Who is to pay the fees and recompense for the inconvenience and sacrifice of time of the busy practitioners whom they may summon from the four corners of the kingdom to give evidence as to the questions of medical fact which they are unable to comprehend?

It may be urged that these are powers which will not be exercised; but who can answer for this, for "Are they not in the bond?"

Personally, I have no doubt that all our effort should be directed to the modification and alteration of these provisions as a distinct invasion of our rights as a scientific profession, and as inflicting an injury upon the public, who have hitherto, in the main, trusted us.

It may be that this public insists upon the magisterial intervention in the interests of what, by a misnomer, is called the liberty of the subject; but, at any rate, such intervention ought surely to be ministerial only. Physicians alone should still be suffered to do physicians' work, and disease be diagnosed and treated by the only persons who can have, even presumably, the requisite knowledge for doing it with any degree of efficiency.

I am aware that, although the general interest which has been aroused by this Bill has been singularly small, determined and persevering efforts have been, and will be, made to increase its stringency, and still further give it the character of a Prisons' Bill. A body of persons, calling themselves the "National Association for the Defence of Personal

Rights," have addressed to Parliament a memorial, setting forth at length the absolute right of every supposed lunatic to trial by jury, with the utmost possible publicity; that privation of liberty should alone be consequent upon the commission of some act or neglect, which in a sane state would be regarded as a legal offence; and that safety and not treatment should be the test of all imprisonment.

Under the pressure, perhaps, of opinions such as these, an endeavour was made in recent revisions of the Bill to make the magisterial intervention more real and personal, and, as a compromise, it was agreed in the House of Lords that, where the patient had not been seen by a magistrate prior to reception, he should be informed that he had a right to be so seen by some magistrate other than the one upon whose order his commitment had been made.

It is true that a safeguard has been introduced side by side with this provision that the superintendent of the asylum, or the medical attendant of the single patient, might certify that the exercise of the right would be prejudicial, and further proceedings then be stopped at this stage.

If medical men choose to take this responsibility generally, no harm will result, but the position will be invidious, and it is curiously suggestive when contrasted with that in which the Bill places them in some of its other clauses.

The protection given to medical men and others in the discharge of their duties under the Bill will, I greatly fear, in practice be found to be somewhat illusory, for there is no finality in the clauses. Good faith and reasonable care are incapable of mathematical definition, and even in courts of law and among judges there might be differences of opinion as to which arguments would require to be heard upon these points in cases even in which no *mala fides* was intended, and as reasonable care was exercised as was possible under the circumstances.

It would, undoubtedly, have been more satisfactory, as it would only have been reasonable, to have had some provision whereby security for costs was to be given before even the initiatory proceedings of an action could be entered on. An attempt was made to obtain this concession, but without success, although it would be difficult to oppose it upon any valid ground.

Unless the clauses, as at present drafted, have the effect which is hoped for from them, or some efficient alternative is

adopted, the public will shortly have to deplore one unfortunate result of the Bill. It is not probable that the best or average members of the medical profession will be content to continue the discharge of public functions, for which they receive neither honour nor due emolument, unless they are at least protected against vexatious litigation, which, even in the unlikely event of not costing them money, involves them in worry and loss of time. The men best qualified, therefore, would sooner or later cease to certify.

There are in the Bill numerous provisions as to visitation, reports, and other matters, many of which have been shown by experience to be neither necessary nor desirable. Those clauses which provide for reports at fixed intervals, failing which the authority for detention will cease, will involve a serious addition to the duties of the superintendents of the larger asylums, unless they are made formally and in a wholesale manner, when they will be useless.

But there is one clause of which I have been hitherto unable to see either the need or any justification.

It is to the effect that no person who is not temporarily insane only, or suffering from senile insanity, or desirous of voluntarily submitting to care and treatment, may be received into the house of a medical man as a single patient, except upon a special order by the Lord Chancellor, or a Judge of the Supreme Court; in other words, unless he be a Chancery patient. I must confess my entire inability to understand the reason for this enactment. It would have been intelligible if it had provided that no patient should be received into houses other than those of medical men, but in its present form it seems to widen and extend the basis of the system by which any person of limited means and education may farm a lunatic.

Its chief incidence will be upon medical men in general practice, and upon the public which desires to avoid sending its insane relatives to asylums; but it will also deprive us of an excellent method of treatment in certain cases, and it is another indignity to the medical profession.

The clauses which relate to the letters of patients, although based to some extent upon the recommendations of the Select Committee of 1877, are likely, if passed, to be productive of considerable confusion and inconvenience.

None of *us* require to be reminded of the letter-writing mania which affects so many of our patients, and the proposed new regulations cannot fail to intensify and aggravate

the propensity far beyond its present limits. For not only is every letter written by private patients to be forwarded to the Lord Chancellor, the Judges, Secretaries of State, Masters, Visitors in Lunacy, Commissioners, Committees, and individual members thereof, relatives and friends, but in every asylum, hospital, and licensed house are to be exhibited at all times printed notices, conspicuously setting forth the rights of private patients both to have their letters so forwarded, and to demand personal private interviews with Commissioners and visitors on the occasion of any visit. There can, I think, be no doubt in the mind of anyone who has had practical experience in an asylum of the unwisdom of such provisions in the interests of the patients themselves. The alternative is obvious. You cannot make men honest by Act of Parliament. You certainly cannot make them more honest by constantly suspecting them and telling them that you do so. Therefore use every precaution to guard against the confinement of patients who are not insane; have them regularly and carefully inspected; provide that asylums are founded upon a proper basis; and that their management is entrusted only to persons who are believed to be efficient, trustworthy, and honourable: but do not publicly degrade the officers of those asylums in the eyes of their patients, who by the very nature of their disease are suspicious, by practically publishing that they are the victims of an adverse combination which would, if it dared, deprive them of all their civil rights.

Why, these notices will act, in numerous cases, where rest and quiet are needed as the first elements of cure, as constant provocatives, disturbing all the nice and pleasant relations which ought to, and at present so frequently do, exist between the patients and those who have charge of them.

By what arrangement can the Commissioners possibly deal fairly with the shower of letters which will daily descend upon their office? My patients annually write more than 9,000 letters, of which three-fourths are forwarded, and the remainder detained, giving an average to each patient of close upon 59 a year. Multiply these by the total number of private patients under care, and the absurdity of the new departure becomes at once apparent.

It is pleasant to turn from this part of the Bill to those sections of it which have reference to the care of patients' property, and the treatment of the licensed houses. The

latter have met with fair and liberal treatment in the revised editions of the Bill, such as they could scarcely have dared to hope for in its earlier stages. The prophet who came to curse remained almost altogether to bless, and I cannot say that, in my judgment, substantial justice has not been done. The licensed houses had done much for the treatment of certain classes of the insane. They had met a great public need. Most of them had been well and liberally conducted. Some of them were exceptionally good, even when compared with the best class of asylums anywhere. They were as free from legitimate suspicion as others, and I have no doubt that their retention will be a distinct advantage to the community. With such competition as will be introduced the worst will die out, and the best will still remain to compete with each other and with the best of the hospitals, to the mutual advantage of them all. I am naturally a strong believer in the hospital system, and should like to see its wide extension, but I hold that for a certain class of patients the high-class private asylums, the proprietors of which study the whims and unnecessary requirements of the friends of patients, offer advantages which no hospital has any right to be able to afford.

It is, I think, greatly to be regretted that the resources of the hospitals have not been more generously assisted by the public, but that they have had to rely chiefly upon the surplus income derived from the more ample payments of the rich for the means to render assistance to the less affluent among their patients. This is so even in the most recent addition to their number, and it is greatly to be deplored.

The hospitals have, I think, received more than their due recognition and less than justice entitled them to in the new Bill. The clauses relating to them seem to have been framed with the object of bringing them under, perhaps, more strict legal control than almost any other class of institution. And yet they are said to have been almost uniformly well-conducted, and their extension formed one of the strongest recommendations of the Select Committee of 1877.

Great, and, I think, very just, exception has been taken to the clauses which place in the hands of the Commissioners in Lunacy the power of summary closure of hospitals. It is a power which could scarcely be practically exercised when the character and position of these institutions are considered, and the discretion and good judgment of the present Board of Commissioners might very safely be trusted with

even such exceptional powers. But one cannot foresee what the remote future may bring forth, and I can conceive it to be not impossible that, at some time or other, the retention of this clause in its present form might enable a great act of injustice to be done. If this clause is requisite at all, it should, I think, be modified to this extent at least, that the power of closure should be transferred to the Secretary of State, to be exercised by him upon the representation of the Commissioners, but only after careful separate inquiry by himself.

The unfortunate Superintendent should no longer be made the scapegoat upon whose back are loaded all the sins contemplated in these clauses and in the Bill generally, for he is only the servant of his committee, to do, or suffer to be done, that which they decree.

Excellent provisions in the Bill secure the right to retake escaped patients in any of the three divisions of the kingdom. They remove what has long been an absurd anomaly, and, it is to be hoped, are the beginning of many similar changes, which will sweep away complications and absurdities which have long deformed the Statute book. But it is greatly to be regretted that the main principles of the Bill will entirely destroy any prospect of certificates granted in Scotland or Ireland being available in England, and *vice-versâ*—a matter which is in the highest degree desirable.

The greatly extended scope of the new Lunacy Bill will, I should think, necessitate some considerable addition to the inspectorial and clerical staff of the Commissioners' Office. To meet this, the Bill provides for an amalgamation of the Masters in Lunacy and their staff, with the Visitors in Lunacy and their staff, and the Commissioners in Lunacy and theirs. Whether this arrangement would work satisfactorily remains to be seen, but it is certainly a new departure for a proportion of the cost of such amalgamation to be charged to the fund derived from a percentage of the incomes of Chancery patients, whose contributions have hitherto been devoted to defray the expenses of their exclusive visitation and the management of their estates.

Such are the most important features of a Bill which promises to become law within a reasonable period, and which will certainly, for good or ill, effect important changes in the legal relations of insane persons and their custodians.

In the modification of this Bill and its improvement by

the removal of many ill-considered and objectionable clauses, the Parliamentary Committee of this Association has done excellent service, and it is to be hoped that their influence with regard to it is not yet exhausted.

There is still one more measure looming in the not very far distant future which also promises to materially affect the position of county asylums, their officials, and their inmates. I refer to the Bill which is promised by the present Government for local government in counties. Everything, I think, points to a somewhat drastic Act, which will materially modify the position of county asylums, unless they can, by any means, be excluded from its operation.

It is clearly of the first importance that their external government should be conducted by intelligent and educated persons, that good salaries should be continued in order to secure and retain the services of the best men as superintendents, and that while due economy should prevail, so as to lighten as far as possible the burden upon the rates, economy should not be the only, or the chief, consideration. I consider that the present competition in public asylums for a reduction of the rates to the lowest possible point is simply disastrous from the point of view of the cure and comfort of the patients, and the future of the asylums and their officials.

The comparatively limited experiences of our own country, and the more extended experience of other countries, does not give one an unqualified belief in the wisdom or the public spirit of Democracies. Evidences exist, even under our present system of limited county government, of the absence in too many instances of these qualities in those who are responsible for the administration of our public local charitable institutions, and I do not think that County Boards, with their constitution what I fear it will be, are likely to introduce an improved or a more liberal system.

This is, I think, obvious from facts which are within our knowledge and recent experience.

The committees of county asylums at present consist generally of gentlemen of position, who have both a large personal interest in securing an economical administration of county finance, and an enlarged appreciation of what constitutes true economy. They know that present parsimony may imply a large future expenditure, and that what may be called the fringe of expenditure is especially valuable. They are told and believe that the decoration and furniture of rooms, and the provision of suitable amusements, have a

distinct moral influence in the cure of insanity. But they are not absolutely essential, like so much beef or so much bread and milk, and is it to be expected from what is seen and known of the typical guardian, the guardian not of the poor but of the rates, that he will be willing to continue an expenditure in respect of them when he is unable accurately to weigh or measure the advantages to his pocket which are to accrue from them?

So, also, with reference to the salaries and pensions of the superior officers. The present committees, with some unfortunate exceptions, to which I shall have occasion further to allude, know that ability and efficiency are qualities having a distinct money value, and that they are deserving of recognition, even from a selfish standpoint, at the hands of those who use and profit by them.

Will this be the case with those who, adopting trade union principles, place everyone on a common platform of so much work so much remuneration, without regard to the nature of the work or the ability of the worker? It is well known that the estimation in which brain services rendered by officials to the guardian class are held by them is expressed in the formula: "We can get plenty of men to do the work for less money." Apply this to the office of medical superintendent, and you have the disgust and discouragement of the individual, and the ultimate narrowing of the area from which a selection may be made.

The wear and tear of asylum work is undoubtedly great, and it needs the inducement of a liberal salary and pension to secure the devotion of the best men to the service.

Will County Boards be likely to recognize these claims, and continue these inducements? The answer to this question is, I think, involved in the reply to the following:—Will County Boards consist chiefly of such men as administer the present county government, or will the guardian and farmer class predominate?

Personally I have no doubt upon the subject, or that the policy of these Boards will be the guardian policy, intensified by the existence, if they still continue, of the hard times and the consequent pressure of every small expenditure.

The Superintendent of the Gloucester Asylum broke down from ill-health in 1883, after nineteen years of service. His salary and allowances were calculated at £1,100 a year, and a pension of £550 was proposed. All the guardian instinct of the county was immediately aroused, meetings were held,

and opinions were expressed which, in combination, afforded a very full and fair statement of the prevalent views upon the subject. Here are some of them: "A direct stand must be made against these extravagancies. I never could understand why officers of public bodies (in many cases already overpaid) are entitled to, or should be led to expect, pensions." "Does anyone suppose that under a representative County Board this grant would have been made? I answer emphatically, No." "I, for one, entirely disagree with the superannuation principle. The opinion of the ratepayers is that there should be no pensions whatever." All this was in 1883. In 1887 similar proceedings have occurred.

The Dorset Asylum Committee, who had been well and faithfully served by their superintendent for the long period of thirty-two years, recommended that, on his retirement, he should receive a pension of £600 a year, or two-thirds of his salary and allowances. An agitation was immediately started by Boards of Guardians throughout the county, with the disappointing, but perhaps not unexpected, result that Quarter Sessions rejected the committee's proposal by a majority of three to one, the statements being made that "no man had a right to any pension whatever," that "an officer was not to receive a large pension because he had done his duty," and that "the ratepayers were opposed to giving pensions at all."

Again, at the Norfolk Asylum, a pension of the same amount was proposed for the superintendent, after twenty-five years' service, by the committee, who alone could estimate the value of his services, and although the pension was ultimately secured, it was only after the most degrading discussions and agitation had prevailed throughout the county.

Very much the same course was followed with reference to a pension of £400 to the Superintendent of the Berks Asylum, after seventeen years' service and his retirement from ill-health, the result of overwork, and the same process is being repeated at the Lincolnshire Asylum, after an honourable service by the superintendent of thirty-nine years.

It is at least gratifying to know that in Hampshire the Justices have given their late superintendent a pension of £800 a year, and that at the City of London Asylum a pension of the same amount has been granted to Dr. Jepson. But the facts quoted, and the consideration of the relation

of county asylums to County Boards, suggest the great desirability of energetic and combined action being directed to the procuring of such amendments in the new Lunacy Bill as shall secure to the principal officers of asylums the right to reasonable pensions in respect of services rendered, not only in any particular county or borough asylum, but in any number of asylums in that county or elsewhere—the basis of such claim being that the salaries are never so large, even under the most liberal committees, as to enable men, during the period in which they can efficiently discharge their arduous and responsible duties, to save sufficient wherewithal to provide an adequate fund for their own superannuation, and that the holding of an appointment does not, as does general practice, secure a vested interest which can be turned into money upon the cessation of active work.

From the first introduction into either House of Parliament of a Local Government Bill every force which can be brought to bear should be focussed in opposition to the clauses which will provide, if the claims already loudly made are conceded, for the handing over of the county asylums to the tender mercies of the County Boards.

Unless this can be done, and done successfully, I fear that evil times are in store for those institutions, for there is ample evidence to show, especially from the experience of the Colonies, that wherever the representative, that is the democratic, principle is newly in operation, those public officials whose work is chiefly subjective and mental have but little sympathy to hope for from the rude intelligence which can only estimate the money-value of physical labour and the capacity to raise foot-pounds.

An important Act has been added to the Statute Book during the past year in the "Idiots Act of 1886."

It provides for the registration of hospitals, institutions, and licensed houses, and for the subsequent reception into them of idiots and imbeciles upon an order under the hand of the parent or guardian and the certificate of one medical man.

The Act is very short, consisting of only 16 sections, but it effects a very important and useful change in the legal status of the persons to whom it refers, and will, no doubt, greatly facilitate the proper care and treatment of the imbecile class, which is so great a desideratum.

I have thus endeavoured, but at greater length than I had

intended, to bring to your notice the various proposals which have been, or are now, under discussion with reference to the legal relations of the insane.

They indicate that, although the public concern in any particular Bill or form of proposal may be small, there is a growing interest generally in the questions which are connected with the subject of insanity. If no other evidence of this existed it might be found in the rapid increase, within recent years, of literature having as its foundation the phenomena of insanity in some form or other. "Called Back" was only one of a long series of novels which would come under this category.

That this general interest has been shared in an exaggerated degree by a section of the public, whose restless activity and energy alone give it strength, which is impatient of authority in any form, and rides to death the hobby of respect for the liberty, that is the license, of the subject, is a misfortune which every well-wisher of the lunatic has greatly to regret.

But all this points one moral, to which it behoves us to give practical expression. Upon us devolves the treatment of the disease insanity, and the working of the laws within which its treatment must be regulated.

We should, therefore, agree upon definite principles, avoid schisms or what look like them, be strong in combination, and combine strenuously to compel attention to our representations. We should lose no opportunity of educating the public, giving them whenever and wherever we can true views of the nature of insanity, especially as regards its material and pathological character, and leading them, therefore, to the necessary conclusion that the diagnosis and treatment of mental diseases must follow the same course as those of ordinary disease, and be entrusted only to skilled physicians who have devoted their labour and their lives to the work.

At present we have nothing approaching to our legitimate influence. Anyone may cast a stone at us and think that he does God service. The public generally, who are ignorant, are told by those who have no excuse for being so that a disease which has puzzled wise men in all ages, and involves the most complicated organism in our bodies, can be recognized in all its subtle and delicate shades by any person of ordinary observation and intelligence. This appears to arise only from a form of agnosticism, which, in order to prove

that there is nothing which it does not understand, pronounces that which it fails to comprehend as having nothing in it which may not be understood of all the people.

Among the causes to which this want of influence is attributable is undoubtedly the unfortunate readiness with which medical opinions as to insanity in legal cases are to be obtained in direct antagonism to each other.

A common gibe, and I have heard it from the lips of a judge in open court, is that for every six men who are prepared to testify to one view of a case, six others are to be obtained who will say exactly the reverse. This is, of course, not confined to the profession of medicine, but it still has a disastrous effect on the public estimate of our knowledge and consistency.

The non-professional public is unable to distinguish between evidence which is specially skilled and that which is the result of ordinary medical knowledge and experience. It naturally places both on the same level, and, finding them divergent, attaches no value to either.

Here combination and a reasonable amount of self-sacrifice would, in the end, secure for the whole profession a position to which it has never yet attained, and sooner or later we might hope to see members of each specialty in it consulted by the courts as assessors, instead of being brow-beaten by opposing counsel and depreciated by the bench and juries. All this may seem to be theoretical and visionary, but it is at least worth trying for, if only from the standpoint of self-interest, and it has been found practicable in other countries which are not ordinarily more practical than ourselves.

The longer the Lunacy Bill is in passing, the fuller the opportunity for the study of insanity by the public, for there is, I think, little doubt that, in consequence of the difficulty of obtaining certificates, numbers of patients are at large or in confinement with relatives who would otherwise be under care in asylums. Whereas in 1875 the proportion of patients admitted into asylums and into single care was one in every 1,932 of the population, in 1885 it had fallen to one in every 2,059. This has probably not been altogether due to the cause referred to, but its influence has undoubtedly been considerable.

The year of Jubilee, which has just been celebrated, closes a period which in nothing has been more remarkable than in the changes which have occurred in the treatment of the insane. Most of them have been recorded at length by a

predecessor in this chair, whom I may fitly term the historian of our specialty. I need scarcely say that I refer to Dr. Hack Tuke, of whose ability and industry I dare not say in his presence all that I feel. He has traced, in his "History of the Insane in the British Isles," the progress of the asylum system and the improvements in the treatment of the insane in a manner, and with a fulness, which I could not hope even to approach, and the picture is quite an astonishing one.

It is less than the 50 years celebrated by the Jubilee since Dr. Conolly went to Hanwell, and commenced there the non-restraint reform which has been followed, in a greater or less degree, by every civilized country in the world.

Forty-two years ago a Lunacy Bill, introducing the present system of asylum constitution and inspection, was passed by the Legislature, practically under the influence and personal guidance of Lord Shaftesbury, to whom both our patients and ourselves owe a deep debt of gratitude, which no lapse of time ought ever to be able to efface, and from that time there has been an uninterrupted course of improvement in the management of asylums and the care of their inmates.

In 1837 the amount of restraint and seclusion throughout the country, although greatly diminished, was still very excessive. In 1857 it had, to a large extent, ceased in the best asylums, while in 1876, omitting one asylum of 1,000 patients in which it had been used 67 times, it had so far been discontinued as a method of treatment that only one patient in every 575 had been brought under its influence.

It may have been an accidental circumstance, but I regret to say that in 1886 this proportion had risen again to one in every 420. It would be most unfortunate if this could be taken as an indication of any general revulsion in favour of this method of treatment. The temptation to use it in other than surgical cases is, no doubt, considerable, from motives of economy and other similar reasons; but I venture to think that, though allowable as a means of treatment, its use still requires to be closely watched as peculiarly liable to abuse, and as, therefore, needing to be defended in every instance in which it is employed.

I wish it had been possible to point to a largely increased percentage of recoveries and a diminished death-rate as a result, and it would have been a most desirable one, of the great changes to which reference has been made. There is no evidence that it is so, although statistics are wanting

from which any very reliable inference could be drawn. But it is, on the other hand, probable that general paralysis, and the more severe and fatal lesions of nervous structure, have increased of late years with the greater complexity of our social system, and the more continuous and prevalent over-taxing of the energies of the nerve centres.

The means at our disposal for the treatment of the symptoms of insanity have recently been materially increased. While deprecating what has been called chemical restraint, there can be no doubt in my mind that it is a distinct advantage to have alternative remedies for the control of excitement, and to procure that rest for the brain which restores energy to its cells, and is the first element in the re-establishment of its functional activity; and these we have in paraldehyde with the bromides, hydrobromic acid, hyoscyamine, and the salts of hyoscine, and other drugs of this class. Perhaps, however, the greatest gain has resulted from our realization of the material character of disorders of the mind and their treatment, not so much by specific remedies as by pursuing the principles of general medicine. It is a sign of good omen for our specialty that we have all come to rely upon these, and upon hygienic effort in the shape of fresh air, exercise, and what Dr. Clouston has termed the gospel of fatness. Personally, I have great doubt as to the wisdom of the abolition of beer as an ordinary article of diet in asylums; but there are, no doubt, many excellent reasons to be adduced in favour of the practice.

The moral treatment of insanity has continued to make steady advances, and none of us can have failed to realize how great an influence is exercised upon the insane condition by agencies which are not medical in any but the widest sense. We know that all things in an asylum must work together to a common end if the administration is to be successful; that the ideal asylum of the present day, for private patients at least, is one in which there is a single controlling power, holding the threads of every department drawn to a common focus; where there can be no divergent aims or antagonistic elements; where there are diverse buildings, often at a distance from each other, in which patients in varied mental states can be suited with the conditions of life which are most conducive to their happiness or recovery; where training of the best kind is given to the attendants, as well by lectures and other instruction as

by association with educated and refined lady and gentlemen companions, whose leaven of gentleness and intelligence leavens the whole lump; where the rooms present not so much the institutional character as the appearance of the ordinary apartments of gentlepeople, and the furniture and decoration combine to produce what has been fitly called "the harmony of a varied perfection;" where the amusements are frequent and the multiple employments carried out with completeness and success, and where each patient is carefully individualized and made the object of moral influences which are constantly exercising their power over him, if insensibly to himself; where, in fact, Dr. Clouston's definitions of a hospital and a home are realized in the fullest and most comprehensive sense.

On all hands there are, I think, evidences of distinct advance. Increased attention is being paid to the structural adaptation of buildings to the nature of the requirements which they are to fulfil, and the defects of previous designs form the stepping stones which assist and chronicle progress. The standard of all is higher, and there is a healthy rivalry which forbids to stand still and be content.

An earnest endeavour is being made everywhere to keep in view the primary object of all asylums, that they should be hospitals for the treatment of mental diseases, and not prisons only for the safe keeping of those who are dangerous to society. We are all combining to break down the middle wall of partition which has for so long, to some extent at least, divided the practice of medicine from that of medical psychology.

The abolition of walled airing courts and locked doors, and the extension of parole, even where they have been replaced by substitutes, have shown us that patients generally may be more trusted, and have greater liberty than we used to think wise or safe.

Outside our institutions, in the general affairs of the Association and of our specialty, important advances have been made.

The new examination at the London University in mental physiology in relation to mental disorders, marks the beginning of a new era. This will, no doubt, ultimately develop into an examination in psychological medicine generally, and so proceed *pari passu* with the examination in the same subject of this Association.

My friend Dr. Manning, the Inspector-General of the

Insane for the Colony of New South Wales, whom we are so glad to see among us at this meeting, has succeeded in inducing the Senate of the University of Sydney to include psychological medicine in the compulsory subjects for their examination for the degree of M.D.

It has been, I think, a step of great importance that our own Association has been the pioneer of this movement in this country by instituting the pass and honours examinations for certificates of efficiency in psychological medicine.

This has already been taken advantage of to a considerable extent; and, by a fortunate combination of circumstances, a sum of £1,000 has recently been vested in the Association in memory of the late Mr. Gaskell, and its interest devoted to an annual prize of the value of £30, to be awarded to the most successful candidate in the honours examination among those who shall attain to a certain definite standard.

It is to be hoped that the future of these examinations will be a successful one, and that the certificates and prizes of the Association will be so regarded as to make them the objects of a keen competition.

It is, of course, greatly to be desired that the subject should be made compulsory at the examining boards which admit to the profession; but meanwhile our own initiative cannot fail to lead to valuable practical results.

The great increase of post-mortem examinations of late years has assisted our diagnosis in a marked degree, and the extension and refinement of microscopical investigation have added largely to our differential knowledge, both of the minute anatomical structure of the central nervous masses, and of the changes which are undergone by them under the influence of diseased processes.

The recent researches of inquirers like Meynert, Ferrier, Hughlings Jackson, Gowers, Mickle, Horsley, and others, both at home and abroad, would lead us to hope that, not to-day, nor, perhaps, to-morrow, but still within a time which shall be measurable, the evolutionary process may transform the art which we love into the science of which we shall have reason to be proud.

Outdoor Work as a Remedial Agent in Insanity. By Lloyd Francis, M.A., M.D. Oxon., Senr. Assist. Med. Officer, St. Andrew's Hospital, Northampton.

I propose to consider this subject exclusively in its relation to the insane of the better class. The pauper asylums throughout the country have long been admirably organized in this particular. Every such institution has attached to it a farm, gardens, a multiplicity of workshops, and the appliances for the pursuit of various trades—frequently those special to the locality, as weaving sheds in the West Riding Asylums. In one or another department, all the labourers and artisans, who comprise the majority of the inmates, can find congenial occupation. Manual labour, thus systematically provided for those able and willing to engage in it, is coincidently the source of immense benefit to the mental and physical health of the patients, and of considerable profit to the institution; the pauper lunatic, by one and the same effort, works out his own salvation and helps to pay for his care and treatment; the recovery rate is raised, the rate per head diminished. There is obviously danger of regarding the financial and not the remedial as the paramount consideration; but no instance of such an abuse of therapeutics has ever been brought forward. To the county patient hand-work is neither a novelty nor a hardship: even though his mental obliquity or confusion be such that he fails utterly to comprehend or appreciate the motives of those who urge him to employ himself; yet he is glad to exchange the monotony of ward, airing court, or aimless country walk, for the bustle and activity of farm or shop, with the prospect, may be, of working at his own craft or even acquiring a fresh one.

Turning now to private asylums and public hospitals for the better classes, we find conditions materially different. In the first place, economical considerations can be entirely disregarded. There are no poor law guardians or heavily burdened ratepayers to be reckoned with; the question, freed from financial complications, is narrowed down into one of treatment pure and simple. It is from the latter standpoint that unfavourable criticism has sometimes been bestowed upon the management of such institutions. The lazy, listless, humdrum life of the private patient has been contrasted with the busy, active, and varied one of his pauper

fellow sufferer. A writer, whilst lauding the county asylum as a "hive of industry," stigmatizes the private asylums and lunatic hospitals as "castles of indolence;" and it is asked why a system, the benefits of which in the one case are so striking and unquestioned, should not be applied, even to a limited extent and in a modified form, in the other.

A plausible retort would be that the cases are in no sense parallel; the great majority of private patients have been brain, not hand-workers; gentlemen, professional men, and such like have not been trained to manual labour; they would not work, and could not if they would; it is extremely difficult to arouse interest even in sports and amusements; it would be impossible to elicit even toleration of outdoor drudgery.

As the result of experience of this, the largest lunatic hospital in England, I will proceed to show that neither the criticism nor the rejoinder is of universal application—that every lunatic hospital is not a castle of indolence, nor every private patient of necessity a drone. In this institution the proportion of male patients usefully employed or rationally occupied is, I venture to think, at least equal to the average of county asylums, a fact which I will endeavour later to illustrate by figures. The facilities for arriving at this result are possibly in some degree exceptional. Not to mention the land (about 64 acres, laid out in gardens and ornamental grounds) in which the hospital stands, we are fortunate in the possession of an annexe, to which is attached a farm of 500 acres, part arable, part pasture; the whole making provision for manual labour, practically unlimited in amount, and sufficiently varied in character to suit the different mental conditions and capabilities of the workers. Outdoor labour is looked upon as a therapeutic means of the highest possible value, and each year adds fresh evidence of its efficiency; it is put to trial in one stage or another of every case, where physical disease or extreme exhaustion do not contraindicate. The means of persuasion are necessarily more limited than in a county asylum; the bait of small extra luxuries and privileges—ale, tobacco, and the like—so tempting to the pauper, cannot lure the private patient, whose diet is ample and varied, and whose material comforts no amount of industry can increase. There remains, then, only argument, moral suasion; and hence oftentimes much difficulty in

overcoming the irrational scruples, more especially of lads and young men. The idea of digging, road making, or wheeling a barrow is, even in the guise of medical treatment, at the outset rather shocking to the schoolboy, the undergraduate, the lawyer, or parson. He resents the proposal as an outrage to his dignity; declares that he was sent here for rest and remedies, not to do labourer's work, that such toil is all very well for poor people, but not for gentlemen—that, in short, he will have none of it. His repugnance, however, generally yields in time to reiterated advice and the example of others; and, once vanquished, seldom revives.

The result, in the immense majority of cases—I might say in all—is beneficial. Over and over again do we note instances of rapid and complete recovery following steady application to outdoor work, when other means have signally failed and the prognosis has become decidedly bad, and, coincidently with the mental improvement, the establishment of physical robustness and vigour such as the patient has often not previously possessed. Such patients have the fresh ruddy complexion, fat cheeks, and happy contented aspect, which one observes in convalescents from typhoid fever.

In the treatment of chronic insanity, too, outdoor employment, though of necessity rarely curative, is yet of unquestionable value. A chronic lunatic of the worst type—turbulent, noisy, destructive, a masturbator, treacherous, violent, faulty in habits, an inveterate nuisance—shows marked improvement after a few months of steady work. Sleeplessness, which drugs have failed to influence, yields to healthy fatigue; he no longer makes a scarecrow of himself by tearing his clothes; his opportunities for self-abuse are much curtailed; and he relieves his angry feelings by vicious digs into the earth or kicks at his barrow in place of murderous attacks upon fellow-patients or attendants. Finally, his appetite is more keen, his food better assimilated, and his general health improves. Now and then such a patient even attains a state of fairly permanent partial recovery—a placid, contented, feeble-minded condition, it is true, but still enviable in comparison with his former miserable existence.

It may be asked whether outdoor amusements, athletic exercises, would not more agreeably serve the same end. The answer must be in the negative. For one patient who is

capable of taking part in outdoor games, at least 20 can be put to manual work. An acute maniac or a dement can be made nothing of on the cricket field or tennis lawn, though he may dig or break stones with energy and purpose. Moreover, field sports and athletics are apt to be indulged in spasmodically—a few hours of violent exercise and excitement, followed by a long interval of rest and indolence. Obviously, too, such pastimes as hunting, running with beagles, coursing, &c., which involve mixing with the world outside, presuppose a degree of natural manner and decorous behaviour such as only a small minority of asylum inmates are capable of. The working patient, on the other hand, is ensured seven or eight hours daily in the open air, with continuous employment, not severe enough to over fatigue, and free from tendencies to unhealthy excitement. The groundwork of recovery is found by experience to be best laid in steady plodding within the hospital boundaries; later, when convalescence is fairly established, play may safely vary the monotony of work or even be substituted for it, though frequently such a patient, recognizing as he improves what a good friend work has been to him, goes on quite contentedly, making no complaint—not averse to recreation, but by no means enthusiastic.

Most important amongst the remedial properties of outdoor work is its favourable influence upon the physical health; the disordered brain is benefited directly and indirectly through improved general nutrition. Indeed gain in weight, improved colour, and other indications of physical amendment, are always the first observed hopeful symptoms; signs of mental improvement follow more or less rapidly.

Adverting next to the risks incidental to the above plan of treatment, no serious casualty has so far occurred. We occasionally hear of attacks of noisy excitement and threats, but not actual violence, and with a sufficient staff of trustworthy attendants, specially trained to this outdoor duty—the whole scheme, moreover, under strict medical supervision—the chances of a catastrophe are minimized. Each patient, too, undergoes a species of preliminary training in simple employments on the grounds and gardens—where, under close surveillance, his capacities and temper can be gauged—prior to engaging, with fuller liberty, in more dangerous farming operations.

The system which I have endeavoured to describe is, I believe, carried out on a more extended scale in this hospital

than in any other of the same type—with a completeness, indeed, which frequently elicits expressions of interest and astonishment from visitors, both lay and medical, and has more than once been favourably commented on and held up for imitation by the Lunacy Commissioners.

Putting on one side its proved remedial value in the treatment of recent insanity, its effect in raising the standard of physical health, in combating excitement, turbulence, and disorder, and lessening the discomforts and annoyances of an asylum patient's life, would fully compensate for the trouble and expense of carrying it out. Nothing illustrates this fact more clearly than the contrast between the behaviour of working patients on a week-day and Sunday—a contrast highly unfavourable to the day of rest. Missing the accustomed round of work, incapable of intellectual occupation of any kind, they become restless, noisy, mischievous, destructive, quarrelsome, turning the ward into a bear-garden, and sorely trying the patience and temper of the attendants. Still more marked is the difference between male and female wards of the same class—the inmates of the latter being noisier, more excitable, and difficult to manage, to a degree far greater than can be accounted for by mere difference of sex. At meals, for instance, the male dining halls are generally a marvel of order and quietude, the female often quite the reverse.

I will conclude by quoting the statistics of an ordinary working day, and append a few illustrative cases.

Nov. 23rd, 1886.

Total number of male patients	... 160
Employed on farm, grounds, and gardens	... 56
,, in indoor work, carpentry, printing, &c.	18
Hunting, riding, tricycling, &c.	... 14

This yields a total of 74 engaged in manual labour—in all, 88 male patients healthily occupied. Of the remaining 72, 40 are incapacitated by age, infirmity, or physical disease. This leaves 32 unaccounted for, of whom about one-half confine their attention to books, drawing, billiards, cards, &c. The final residue, 16 only, comprises those who baffle all efforts to improve them—are either hopelessly indolent, or else so demented or intractable that nothing can be done with them.

Case I.—(Hypochondriacal melancholia. Recovery.) G. A. W., admitted June 1st, 1886, aged 19 ; single ; fishmonger. His illness,

of a year's duration, was attributed to the shock of a domestic bereavement, self-abuse, to which he had been addicted from the age of 16, being added as a predisposing cause. After undergoing twelve months' medical treatment at his home without benefit he was at length sent here.

He was stated in the certificates to be greatly depressed; to exhibit confusion of ideas and defective memory and intelligence; to take no interest in his surroundings, and to be unable to occupy himself in any rational way; to be very indecent in behaviour, and to entertain delusions that his food was poisoned, himself ruined, &c.

On admission he presented, physically, a wretched spectacle. Though his height was 5ft. 6½in. he weighed but 7st. 7lb.

He was a long-limbed, lank, slender lad, pale and miserably thin. with pinched face and cold extremities.

His mental was on a par with his bodily condition. He was profoundly unhappy, moaning, crying, declaring that nothing could be done for him, and begging to be sent home. He talked in a childish, irrelevant way, and gave a very vague account of his past life. He seemed especially concerned about his indulgence in self-abuse, protesting at the same time that he had not practised it for two months. He believed his "inside" to be in an unnatural state, saying that it was full of "trash"—cakes, biscuits, and the like—that his bowels were completely blocked, that nothing would ever pass through, that it was "of no use."

During the first three weeks he gave much trouble. He was most obstinate about food—the stomach tube being frequently necessary—all the while declaring that the "trash" in his inside would not allow him to swallow anything more, and begging for aperients (which he did not need). He went crying about the ward, and would not employ himself in any way. Once he made his escape, but was brought back. He lost weight (7st. 6lb.).

He was then sent to work out of doors at gardening. There was immediate improvement, but for six or seven weeks it was slight, and more physical than mental. He took food more readily, gained weight and colour, and was less constant in complaints about his "inside" and demands for purgatives. He worked fairly, but in a listless way, and looked very miserable. On account of his fondness for exposing his person he needed constant watching out of doors. Later, however, his progress was much more rapid and satisfactory. He began to take interest in his employment, worked harder and more to the purpose. The keener appetite produced by increased muscular effort did much to dissipate his hypochondriacal ideas. He ate heartily, and as a consequence improved amazingly in bodily condition (weight 9st. 7lb.). He recovered his natural spirits, ceased worrying about the state of his interior, became patient and contented, and took a natural interest in his surroundings.

Though he has been for more than a month to all intents and pur-

poses well, and will be formally discharged in a few days, he betrays no impatience, but exhibits untiring industry in and a strange fondness for the gardening work, to which he owes so much. He is free from all trace of morbid idea or emotion, and is cheerful, vivacious, and quick-witted beyond the average. Physically, he looks the picture of rude health.

Case II.—(Mania. Recovery.) P. J. L., admitted Nov. 18th, 1884, aged 21 ; single; clerk ; first attack. Mental symptoms first appeared about a year previously ; and for nine months he had been treated in another asylum, from which he was transferred here. The assigned cause was " strumous disease of the testicle." The family history was not favourable, his father having died of phthisis. The initial phase of his disorder was one of melancholia. He was very depressed, said he felt that he was lost ; had morbid fears of having injured various persons ; entertained delusions—*e.g.*, that a potato which he touched with a spoon was turned into blood ; and had an unnatural dread of coming into contact with females, even his own sisters, declaring that they took away his strength by merely looking at him.

On admission he was maniacal rather than melancholic. He was restless and unsettled, untidy in dress, pert, conceited, and unfriendly. His answers to questions were entirely irrational, and he was constantly punning in an absurd way—*e.g.*, " May I ask how died, for this waistcoat has been dyed ? " He frequently talked to himself. Physically, he was tall, slender, fairly well nourished, dark complexioned, with small, regular features. Both testicles were enlarged, indurated, not painful or tender to touch ; no signs of pulmonary disease.

He was forthwith sent to work in the grounds, but would do nothing. He resorted to all manner of shifts and excuses, would simulate bodily illness, and even wilfully pass his evacuations in his trousers in order to be brought indoors. In short, he was so intractable that the attempt to keep him employed was perforce abandoned.

For four months he led a life of idleness, growing worse rather than better. He was restless, mischievous, destructive, at times violent. He exposed himself indecently, and lost weight and colour through excessive masturbation. Sometimes he would read aloud, apparently with the sole object of annoying others. He obstinately refused to entertain the idea of outdoor work, and was saucy and flippant in response to well-intentioned counsel. Occasionally, for a day or portion of a day, there were gleams of improvement—he would be more natural, reasonable, and decorous, only, however, to relapse into his former condition.

Five months from admission he was (for pecuniary reasons) made a second class patient, and transferred to a ward where his indoor life and surroundings were not nearly so refined and luxurious as before,

and inducements to outdoor employment would presumably be much stronger. He felt his altered position keenly ; but for a time remained deaf to all advice, and in the same unsatisfactory mental state.

At the end of six weeks, however, during one of his lucid intervals, he was prevailed upon to resume his work out of doors, with excellent results. His recovery was rapid and uninterrupted by a single relapse. His general condition, too, improved greatly ; he gained weight very considerably, and looked bronzed and healthy. On September 12th, 1885, he was discharged.

Case III.—(Acute Mania. Secondary Dementia. Recovery.) This case possesses rather a special interest, on account of the patient's previous intellectual successes, and his subsequent brilliant career. C.W., admitted March 2nd, 1882, aged 20; single ; undergraduate. Second attack (first at the age of 15) of nine days' duration. Supposed cause, low physical condition through overwork, prolonged suspense as to its result. He was a scholar of his college, and just prior to his attack had succeeded in winning the first place in the annual college examination. On admission he showed maniacal symptoms ; he was restless and noisy, laughing and talking to himself in an irrational, punning way ; applied fantastic names to people around him ; and was sleepless and destructive to bedding at night.

He went steadily from bad to worse for several months, and seemed to be passing into a condition of hopeless dementia ; was silent, obstinate, faulty in habits, drivelling, fatuous in aspect, indifferent to his surroundings.

In July he was sent to work on the farm, wheeling a barrow being the only employment for which his then mental condition fitted him. For four or five months he continued at this occupation, with benefit to his bodily health, but no material improvement in mind.

At length he showed signs of amendment ; the first indication being a request for a change of employment. Subsequent improvement, though steady and continuous, was slow, and it was not until August 31st, 1883, that he was finally discharged.

After a short period spent in travel he returned to the University, renewed his studies, and not only obtained his degree, but won the second place in the Classical Honours List.

The fact that nearly five months had elapsed from the date of admission before this patient was put to outdoor work, aptly illustrates another practical difficulty, not previously noticed—objections emanating from the friends of patients. To the proposal, made soon after his arrival, that this youth should employ himself, his parents offered decided opposition ; his mother being particularly emphatic in her refusal, expressing herself as greatly scandalized at the fancied affront to the family dignity. It was only when the case had assumed a most unfavourable aspect, and the

patient's discharge had been presented as the alternative, that they yielded a grudging assent. It is but fair, however, to add that later they made full acknowledgment of their error, and were profuse in their expressions of gratitude.

Such an incident is not at all an exceptional one. On this, as on other questions affecting a patient's welfare, friends and relatives are frequently more unreasonable, shortsighted, and trying, than the insane individual himself. The wisest course, then, and the one adopted here, is to declare and insist that any patient who is not allowed to accept treatment—be it in the shape of sedatives, tonics, or manual work—must be removed from the hospital. Such a display of firmness generally has the desired effect.

Ætiology, Pathology, and Treatment of Puerperal Insanity. By A. Campbell Clark, M.D. Edin., Medical Superintendent Glasgow District Asylum, Bothwell.

(Continued from p. 189.)

The value of an examination of the urinary constituents in the present investigation depends on (1) the promptness with which it is made, and whenever possible it should date from the first warning of mental attack; (2) on qualitative and quantitative analysis; (3) on microscopic examination; (4) on fluid and solid measures.

The first condition is rarely obtained, and is possible only in private practice, but exceedingly improbable unless the subject is to the physician in attendance one of special interest. It has been attended to in my practice immediately on the admissions of the patients, provided they were sufficiently recent. Some were, though comparatively recent, transferred from other asylums, while others had been treated at home for two or three weeks prior to admission. These have not been allowed to obscure the calculation. The difficulty, however, did not end here, for some were so perverse, or wet and dirty in their habits, as to render complete or prolonged investigation impossible. Latterly I have got over the difficulty by getting the nurses to draw off the urine by catheter, a proceeding which is possible even in the most troublesome cases by administering hypodermic injections of hyoscyamine. The latter course, however, I did not need to resort to.

It is unnecessry to explain the methods of examination further than to state —

(1) That the urine was collected and placed in a graduated vessel by a trained nurse; so far as possible it was kept separate from fæces; when admixture occurred a supplementary estimate was made.

(2) The night urine was calculated from 8 p.m. to 6 a.m., and the day urine for the remaining 14 hours. As far as possible—and this was the rule rather than the exception—the day urine was examined after 8 p.m., and the night urine between 10 a.m. and 12 noon.

(3) The tests used *for albumen* were (*a*) heat, (*b*) nitric acid, (*c*) picric acid; *for sugar*, (*a*) liq. potassæ and heat, (*b*) Fehling's method, (*c*) picric acid and liquor potassæ; and *for bile pigments* Gmelin's test.

(4) The volumetric estimation of phosphoric acid was arrived at by means of standard solutions of acetate of soda and uranium respectively (v. Thudichum).

(5) For urea and chloride of sodium I adopted Liebig's methods.

The number of cases subject to examination was 17, and the results are summed up as follows :—

First.—The earlier the urine was examined, the more certainly was it found to be scanty and of high specific gravity.

Second.—The lowest fluid measure per day was ... 2 oz.
„ „ „ „ „ night was 3 „
The lowest measure for 24 hours was ... 6 „
The average total for 24 hours, not extending beyond first three days and nights of residence, was ... ... 16·6 „
Average health total ... ... 40 to 60 „

Third.—The lowest solid measure, calculated by Christison's formula, was per day ... ... 2· 6 grammes.
Ditto ditto per night ... ... 6·08 „
The lowest for 24 hours was ... 8· 3 „
And the average for 24 hours, not extending beyond first three days and nights ... 30·62 „
Average in health ... 40 to 60 „

Fourth.—These figures are all the more remarkable in view of the following facts :—(*a*) That on admission the urine drawn off was in some cases the accumulation of more

than 12 hours; (*b*) the continuous excitement and sleeplessness of several patients; (*c*) frequent dryness of skin and frequent constipation of bowels. The deficient ingesta of the first few days of residence, and notably of the days preceding admission, will help but very insufficiently to counterbalance the discounting causes which have just been described.

Fifth.—Taking a range of observation wider than is comprised in my tables, albumen was present in 9 out of 23; the precipitate was usually slight; in one it continued in day urine long after its disappearance from night urine; in another it continued day and night for 16 days, and faintly reappeared during convalescence.

Sixth.—Sugar was not present, though Dr. Savage has found it in some cases. I have tested for it carefully, and, having failed to find it, conclude that in Dr. Savage's experience it was the result of choloroform inhalation or chloral treatment. Dr. Johnson's test for sugar in some cases produced a result which I at first attributed to the previous exhibition of chloral, but the same result was obtained with other samples of healthy urine, and I was not surprised to find that boiling liquor potassæ and picric acid effected a similar coloration, only less intense. On looking up the discussion on the subject between Drs. Pavy and Johnson in the "Lancet," Vol. II., 1882, I find Dr. Pavy disputes the validity of the test on the same grounds. I have not yet found saccharine urine in the other cases when the remaining mentioned tests were employed, and I may remark that the Fehling's solution was perfectly fresh.

Seventh.—Bile is a rare appearance, though I have looked for it in cases where a jaundiced appearance or clay-coloured stools would suggest its presence. It was not present in more than three instances, and these were cases of septicæmia.

Eighth.—Chlorides were found scarcely traceable, being so low as ·36 grammes in 24 hours; for 14 hours of day urine the minimum was ·09 grammes, and for 10 hours of night urine ·24 grammes. The daily average in health is 16·5 grammes according to Vogel. The following facts must here be taken into account:—(1) The diet deficient in quantity and saline quality; (2) the appetite impaired; (3) the low state of health and nutrition; (4) although the mental excitement was considerable, the degree of muscular excitement was not increased in proportion—indeed, the patient was often kept

in a recumbent position fairly well; (5) the sum total of pyrexia could scarcely be regarded as high, and a rise of temperature was in Case I. of the second series examined accompanied by an increase of chlorides; (6) a movement of the bowels was rarely or insufficiently obtained within the first forty-eight hours of residence, though fæces might be formed abundantly; (7) the arrest of mucus secretion implies another diminution of chlorides, for chloride of sodium is an important constituent in mucus, and a stimulant of its secretion; (8) again the chlorides were the last of the urinary constituents to return to their normal quantity.

The following conclusions then become obvious:—

(*a*) That a deficiency of chlorides may be partially, but insufficiently, accounted for by (*a*) the anorexia and atonic dyspepsia; (*b*) saline deficiency in the food administered; (*c*) sluggish digestion, owing to artificial, instead of natural, alimentation. I have found, in a series of investigations, that feeding by stomach pump (even with food to some extent predigested) does not stimulate digestion or absorption well, and that a third of the quantity so administered, if voluntarily taken by the patient, stimulates the secretions better, and promotes more vigorous digestion; (*d*) the pyrexia, which must in these cases be regarded as only of moderate import; (*e*) moisture of skin. The hysterical case had the minimum of chlorides.

(*b*) That these causes can only be taken *pro tanto*, because (*a*) of excessive mental and bodily activity, the former especially, when sleeplessness is taken into account, being a considerable factor; (*b*) pyrexia was, in the case where it was highest, attended by an increase in the chlorides; (*c*) the great discrepancy between the normal output and the shadowy quantity recorded in the tables; (*d*) deficiency of other excreta as well. As bearing on the question of excreta, it must be recorded that as a general rule respiration was shallow, yet frequently, and that in the earlier days and nights of residence, the skin was dry. It is exceedingly probable that in some way yet to be ascertained chlorides accumulate in the system, and have some pathological significance in this disease, which we know not. The loss to urine and mucus secretions have three possible explanations: (*a*) chlorine starvation; (*b*) chlorine infiltration of tissues; (*c*) chlorinæmia.

Ninth.—Phosphoric acid was also decreased, being so low as ·2 grammes in 24 hours, the minima being ·07 for day

urine, and ·25 grammes for night urine. The average for 24 hours of health is 3·5 grammes. The amount of ingesta is not so material a calculation here. The diminution varies in degree; in the hysterical case it is least evident, and is restored to the normal state when weeks later the chlorides are low. The hyperpyrexia already noticed was not attended with any increase, nor can the variations be explained by the degree of mental excitement, for they are all much *below par*. The quality rather than the quantity of mental excitement is more likely to account for changes in the excretion of phosphoric acid.

Tenth.—The urea total descended to 3·68 grammes in 24 hours, the lowest daily quantity was 1·32 grammes, and the lowest nightly quantity 2·26 grammes; the average quantity in health being from 30 to 40 grammes in 24 hours. Diminution can only be regarded as a striking feature in one case, although in some degree visible in all. It is soon recovered from, and in Case III. I was surprised by its excessive quantity. This patient was overfed with custards, and she showed, by the state of tongue and stomach, that digestion was weak; she lost weight rapidly for a time; and yet she excreted urea in inordinate amount for her size and weight, unless we regard it as the sum total for all the excretory channels and as a result of her mental and motor excitement. A reference to the history of each case shows that any increase was in proportion to the degree of sleeplessness and mania in the cases. It must, moreover, be regarded as remarkable, in view of the almost complete absence of the chlorides, which, according to Barral, increase the elimination of urea, and other nitrogenous excreta.

Eleventh.—The deposits on standing were heavier in the earlier days of the disease. This would be expected on cooling, owing to the deficiency of water. They were of different kinds: (*a*) phosphates; (*b*) urates; (*c*) mucus. Microscopic appearances were of no importance.

Twelfth.—The early appearance of bacteria in the urine of the scarlatina patient suggests for future study an investigation of fermentative and putrefactive changes.

I now pass on to the pathological complications.

The time is not yet ripe for classifying the complications of puerperal insanity. They have been too much overlooked on account of the mental disease itself; and they have been mentioned by writers in vague and general terms merely to indicate their gravity and seriously to influence their

prognosis. According to Batty Tuke and others, they affect the prognosis of puerperal insanity very seriously. This I regard as a mistake. My experience leads me to view pathological complications as something tangible, and within the reach of the surgeon or physician, and something that gives palpable indications for treatment. That a strange fatality does follow the appearance of some complications goes without saying; but something of this is due to our error in not recognizing them soon enough and often enough. We frequently err in neglecting to ascertain their existence, and too often in our examination lose sight of the pelvic and genital regions altogether. In no class of cases is gynæcological investigation of more importance than in the study of puerperal insanity.

As already indicated, blood poisoning is an important complication of puerperal insanity. Without an actual examination of the blood, and an experimental investigation, it is not possible to demonstrate the milder forms of septicæmia; and though their seats of origin and areas of secondary deposit may be strongly inferred in some cases, it is difficult to assume the *onus probandi* in not a few cases where the conclusions are not altogether free from a charge of speculation. Under ætiology I have already referred to this subject, and need not again go into detail, merely contenting myself with a statement of some doubts and difficulties that meet the observer from time to time.

(*a*) His first difficulty is to make sure of a local and primary seat of infection, and this is not always easy with insane patients. For one thing, the evidence of pain or its absence must not be implicitly relied on, and the bowels should be thoroughly evacuated before an attempt is made to settle the question. Even then the restlessness of the patient will disturb and distract attention, and as the septic lesion is often slight enough to elude the tactile sense it may be missed altogether.

(*b*) Sudden rises of temperature, whether preceded by a chill or not, will often perplex the physician. They may be septicæmic, phthisical, zymotic, neurotic, or simple inflammatory, and they may refer purely to intestinal causes. Zymotic disease will soon settle the question, so far as it is concerned, and so will phthisis, unless it is a true tubercular, but the differential diagnosis of the others is not so easy, and in one case of periodic pyrexia I had difficulty in deciding between hepato-intestinal disorder and scepticæmia.

Next in importance to septicæmia and its congeners is phthisis pulmonalis. Batty Tuke records three cases of death from phthisis out of 73 patients labouring under puerperal insanity, and Dr. Boyd gives two out of 63. My number is three out of 40. Bronchitis, pneumonia, and heart disease have, so far as these statistics go, been less frequent, but they are recorded. I have found no record of mammary abscess in the experience of others, but it was a complication of two cases of melancholia under my care. The abnormal conditions of the *primæ viæ* have been already referred to.

Rarely was a recent case admitted that did not exhibit uterine or allied symptoms of abnormal character, the most frequent being pain on pressure in the hypogastrium, and scanty, extremely offensive, lochia. Precision of examination was not always possible, but if accuracy of diagnosis was not assured, the certainty of some form of uterine or allied disease was frequently established. Three post-mortem cases showed pelvic inflammation, and a dirty sloughy placenta site in the typhoid case. One case, which recovered, had pelvic cellulitis; another, retention of clots in uterus, with high fever and deeply seated pain in right iliac region; while a third complained only of tenderness on pressure over the uterus. These are fair illustrations of many other cases which might be quoted, and suffice to show the importance of attending to the condition of the uterus and pelvic cavity.

Anæmia is a complication which in varying degree is as frequent as the insanity itself. It is a subject which in this connection opens up a prospect of profitable study; and a series of clinical estimates of hæmoglobin and hæmacytes, by means of the hæmoglobinometer and hæmacytometer, would be of great value.

The subject is new to me, and I have only data of two cases, in which the percentages were as follows:—Hæmacytes, 68·7 and 76·4; hæmoglobin, 60 and 65; the cases being respectively one of insanity following post-partum hæmorrhage, and one where a series of depressing circumstances predisposed to insanity. With Dr. McPhail's valuable records for guidance and comparison a specially interesting and utilitarian field is here open for research. The scope of it must not, however, be limited by mere considerations of percentage, quality, and composition; the foreign elements are of still more account, and especially their toxic significance. The state of the blood furnishes a very

complex problem, and until we bring into view its whole pathology, distinguishing the varieties of blood disorder to which the puerperal subject is liable, and the different indications furnished by each, the disease will be regarded empirically, and its treatment will be founded on a narrow incompetent pathology.

The Treatment of Puerperal Insanity will be considered in a subsequent article.

(*To be concluded in the next number.*)

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*Our Laws and Our Staff.** By Dr. Oscar Woods, Medical Superintendent, District Asylum, Killarney.

As the British Medical Association does not often visit Ireland, I think the present not an unsuitable time to lay before this Section a few facts which I think of special bearing on the management of Irish asylums, and largely affecting the interests of their inmates. My object, however, is as much to elicit the opinions of others as to impart information. When the Psychological Association met in Dublin in 1875 an interesting paper was read by Dr. Stewart on the "Obstacles to the Advancement in Ireland of Psychological Medicine," and laid principal stress on the fact that 18 out of 22 Irish asylums had no assistant medical officer. Suffice it now to say that they have since been appointed to five other asylums, but that there are still 13 asylums without a second medical officer.

I now, however, wish to draw your attention to two subjects: 1st. Our Laws; 2nd. Our Staffs.

The Inspectors and several of the Irish superintendents have frequently drawn attention to the admission forms in use, but as their defect is great, we are *bound not to let the subject rest;* when *life is endangered,* surely it is time to press for a remedy. As, probably, many of you have not seen the forms in use, I have one of each here. Form E, as approved by Privy Council, is for general use, but as it causes unnecessary delay, and needless trouble and expense to the friends, it is seldom used. Application has to be made for it at the asylum, and, when filled, again returned before the patient can be transmitted. As a consequence, in 1885, 862 patients were admitted as "ordinary cases," while 1,846 were committed by justices as "criminal lunatics."

* Read at the Psychology Section of the British Medical Association, August, 1887.

The objections to the committal of a patient on the warrant of two magistrates as a *criminal* are manifest and manifold, and have frequently been drawn attention to by the Inspectors in forcible language; they, therefore, need not here be referred to at length. Nervous patients are handed over to the care of the police, and, in many instances, their recovery retarded. The patient is made a criminal through no fault of his own; as the police know nothing of the history of the patient, little information can be gained. The Lunacy Inquiry Commission reported in 1879 that 13 superintendents condemned it and only one approved of it. An onus is thrown on the superintendent as regards the legality of these committals which is scarcely fair, and a superintendent not long since was put to considerable cost in defending himself in an action at law for detaining a patient on a slightly informal warrant, although he took all the required steps to have it corrected. An eminent judge has quite recently stated that there is an important difference between the English and Irish Acts; "that in the former if all the documents were regular, and if there was a reasonable and probable cause for believing the man to be insane, that amounted to a defence to an action for imprisoning him; but that under the Irish Act it would *not* be a good defence, unless it was also proved that the man was actually insane." It will, I presume, scarcely be questioned but that this law should be amended.

With regard to both these forms, there is a general vagueness as to dates, the length of time a committal will hold good for, and Form E does not require the medical man to have seen the patient within any specified time. But, perhaps, the chief defect in the law is, that no one is made responsible for inquiry as to the *state of a supposed lunatic* unless an overt act has been committed, an information sworn, and the police put in charge of the case. As a consequence, I have known patients to be kept at home for many months, an annoyance to their friends, a danger to themselves and all around them, their prospect of recovery interfered with, not unfrequently suicide, and, sometimes, murder committed. Within the last few days a man committed suicide whose friends had endeavoured to get him into an asylum, and who had been for some time insane and under supervision, but the magistrates refused to commit him, as he was charged with no indictable offence. Not long since a murder was committed by a man who was manifestly insane for several days, but neither family, doctor, nor priest took any step, although appealed to, believing he could not be sent to an

asylum until he was charged with some overt act, although he was seen sharpening a knife, as he said, to kill his wife. The offence was soon committed, and he is now deprived of his liberty for life.

But, probably, the last case that occurred is fresh in the minds of all, where a man in the County Down ran wildly through the country and in the course of an hour murdered four people. "Two attempts had been made to commit him as a dangerous lunatic, but no one could be found to swear he was such, and through a legal technicality he was allowed to go loose." On the other hand, it is never difficult to commit as dangerous, feeble old women and harmless idiots from the Workhouses, many of the other inmates being only too ready to swear an information in order to relieve themselves of some slight responsibility.

As proof that this Act was never intended for general use, we have only to read the circulars issued from the Chief Secretary to the magistrates from time to time, and to know that it was drawn up on the lines of the Act of 1837 (1 and 2 Vict., c. 14), which regulates the committal of English criminals. In 1885 there was but one committal in England on this Act, while in Ireland, on the Act drawn on the same lines, 1,846 were committed. A comparison of statistics for the two countries is, therefore, incomprehensible. Now, had the Irish Act of 1867 (30 and 31 Vict., c. 118) been drawn up on the lines of the English Act of 1853 instead of that of 1837, much good might have resulted.

Why, then, you will ask, does not the Legislature pass a short Bill to remedy this state of things? In 1879 the late Lord O'Hagan introduced into the House of Lords a Bill "To extend to Ireland some provisions of English and Scotch law as to the care of Lunatics." This was withdrawn to await the report of the Lunacy Inquiry Commission. Mr. Litton introduced a similar Bill into the House of Commons in 1881, and a third Bill was introduced by the then Lord President in 1883, "To make better provision for the care of the Lunatic Poor in Ireland;" but all these Bills were of too extended and sweeping a nature, admitted of too much debate, and had consequently to be withdrawn. Still, I believe if a strong representation was made by this Association, pointing out the advantages of a change, a short Bill might be passed unopposed.

But the mode of committal not only injures the patient and exposes the superintendent to unfair risks, but it deals more directly with our Statistical Returns than one might at first

imagine. As no official is made responsible for the absolute correctness of the admission forms, the information given in them is usually most meagre, sometimes altogether left out, and often incorrect; and as friends rarely accompany a patient to an asylum, it is, as a rule, impossible to obtain further history. The causation table, among others, might be of much greater value than it is. In 33 per cent. of the cases the cause is returned as "Unknown," and this percentage would be increased but that two asylums, Carlow and Ennis, have only failed to get information in three cases. I have taken a large number of English Asylum Reports, and I find that in only 14 per cent. of the cases has no cause been assigned; and this would be considerably lower but that Birmingham Asylum returned the cause as "Unknown" in 48 per cent. of admissions. Referring further to this table, I find the different causes are returned in 1886 as follows:—

	Percentages.			
	Moral.	Physical.	Hereditary.	Not known.
English Asylums...	25	75	27	14
Irish Asylums.....	21	41	20	34

If we had a fuller history I am sure the hereditary predisposition would be much higher for Ireland, as consanguineous marriages are more common. Of the patients admitted to the Killarney Asylum in 1886, whose history I was able to obtain, I found in 46 per cent. a hereditary taint.

I hope before long to see a similar set of Statistical Tables adopted by English, Scotch, and Irish Asylums. Although the Medico-Psychological Association Tables have not been adopted in their entirety by the Irish superintendents, much general information regarding staff expenditure, &c., is given by them, which is excluded from many of the English reports. The Consanguinity Table, which is of much interest, is also published only in Irish Reports. Mortality Table No. VIII should, however, in Irish reports, be given more fully, as it is not easy to understand in a condensed form why the mortality, when there is little general paralysis, should range from 3·7 to 16 per cent.

And now with regard to our Staff. This subject, of course, has a direct bearing on the recovery of our patients, and their happiness while in the asylum. 30 and 31 Vic., c. 118, sect. 2, deals with it as follows: "The said Governors shall appoint all servants necessary for such asylum." For my own part I cannot easily imagine anything more detrimental to the

interests of an asylum and the well-being of the patients than this division of responsibility, as, of course, if a superintendent has not a trustworthy and competent staff he cannot well be wholly responsible for the management of his asylum. Kirkbride, on "Hospitals for the Insane," refers to this subject as follows: "The superintendent should especially have that kind of tact and judgment which will enable him to fulfil efficiently one of the most important functions of his office, that of selecting individuals for every department, fully qualified to discharge their appropriate duties, and who will be held by him to a strict accountability in their proper performance." "The power of appointment and discharge should be clearly and unconditionally with the physician in charge. A single interference with his power could hardly fail to lead to acts of insubordination and a disregard of the proper authority, and to prove to a greater or less extent destructive of all good discipline and the thoroughly efficient working of any institution."

I believe in many asylums in England the head-attendant and matron are, in the first instance, asked to select candidates for the approval of the superintendent. Why in Ireland should the superintendent be altogether relieved of the responsibility in this important matter? I believe that some of my colleagues will say it is better not to have the appointments. It is hard to get good and trustworthy men and women, and it is better to leave the onus on the Governors. Possibly for a time we might have difficulties, but I with confidence assert that no asylum can be managed as it should for the best interests of the ratepayers, and for the happiness and recovery of the patients, when the superintendent has not the absolute appointment and control of all the attendants.

In many asylums the superintendent, no doubt, has a voice in the election, but no superintendent will make a selection from a limited number of inferior candidates drawn only from the immediate neighbourhood, and, owing to previous canvassing, possibly not always have his choice approved of. The secret of the good working of an asylum is a happy and contented staff of long service, proud of the institution, and doing their work for duty's sake. To secure this, Privy Council rules must throw the responsibility of selection on the superintendent, and if they think right give a vetoing power to the Board. Who would think it advisable to interfere with a medical man in regard to the drugs he might order? Why then interfere in what is of as much

importance, viz., the moral treatment? It is quite as necessary in the majority of cases as medicine; therefore, unless you have this essential element in the treatment of your patients justice cannot be done them.

I trust the day will soon come when ladies will enter the wards of asylums, male and female, as they now do the hospitals, and assist the medical staff in reasoning with and comforting the melancholy, calming the excited, and training the imbecile. I am certain that when such is the case the percentage of recoveries will be largely increased, and that many patients that now drift into dementia, and are left a burden on the rates for life, will be cured, and possibly not unfrequently, as the breadwinner of a household, save others also from becoming chargeable on the rates. I would wish to see added to the staff of every asylum at least two ladies, to be appointed by the superintendent, and be altogether under his control, whose sole duty would be the moral treatment of the inmates. To look at it in a monetary point, suppose their cost would be £160 a year, might we not look to at least that saving in the rates? I feel strongly that if the nursing staff of our hospitals for the insane were very considerably increased in numbers and in intelligence, we should reap advantages untold in many ways, and not have so often, as at present, to resort to bricks and mortar. How can one nurse for every twelve or fifteen patients be made accountable for their cleanliness, neatness, and order, the care of their clothing, the sanitary condition of the dormitories, closets, &c., and at the same time undertake the proper moral control of her patients? I contend that even with the best will and the desire to perform her duties for conscience' sake, she never has the time and seldom the intelligence. At present our staffs are selected from the same rank in life as our patients. How much more control would they have over them if they were selected from a rank in life better educated, with feelings more refined, hearts more sympathetic? The public would then indeed look on our asylums as hospitals for the cure of disease, and not, as I fear they now too often consider them, houses for the detention of the dangerous.

*On the Use of Galvanism in the Treatment of Certain Forms of Insanity.** By Joseph Wiglesworth, M.D.Lond., Rainhill Asylum.

The question of the value of electricity in the treatment of insanity is one concerning which much difference of opinion appears to prevail, although there seems to be a more or less general idea that it is, or ought to be, of some service. We every now and then read of cases which have progressed to recovery under the application of this agent, but, as far as one can judge from published records, very little has hitherto been done in this country to study the question at all thoroughly or systematically.

Germany, as usual, is ahead of us in this respect, and the readers of the "Journal of Mental Science" will have seen occasional abstracts of laborious work done in this direction without perhaps feeling that their ideas on the subject have become much more luminous.

Fourteen years ago Dr. Newth † reported a series of fifteen cases in which galvanization of the head was tried, in several of which much benefit appeared to result; and, more recently,‡ the same author has again advocated this form of treatment. Dr. Robertson § has also recorded a case of insanity of seven years' standing which recovered under the use of galvanism.

We have lately|| been indebted to Dr. de Watteville for some much needed instruction as to the best method of applying the current, and I am personally under obligations to this author for kindly furnishing me with information on this point.

There seems to be the more need for a thorough examination of the question, as of late years the improvement in medical batteries, and the introduction of apparatus for measuring the strength of the current, have, for the first time, rendered it possible to approach the subject in something like a scientific manner.

It was with the view of testing the value of electricity in the light of these more recent advances that the few observations I have the honour of laying before you were undertaken, and I can only regret that they are not nearly so numerous as I could have wished.

* Paper read at the Psychology Section of the British Medical Association, August, 1887.

† "Journal of Mental Science," April, 1873. ‡ *Ibid.*, Oct., 1884.

§ *Ibid.*, April, 1884. || *Ibid.*, January, 1885.

I am very hopeful, however, that the addition of facts by other speakers will enable us to see our way more clearly than before.

Previous to proceeding, however, to the actual narration of cases, it is necessary to make some general remarks as to the form of electricity and kind of apparatus employed. For much useful information on the subject I am indebted to Dr. de Watteville's admirable little work on "Medical Electricity."

My experience in the matter has been confined to the use of the continuous current or galvanism. The battery selected was one of fifty Leclanché cells, which gave fairly satisfactory results. It was fitted with a dial collector for bringing the cells gradually into action, two being added at a time. I may call attention here to the fact that one essential point in the selection of a battery is that the current should be capable of very gradual increase, so as to avoid all sudden changes. For this purpose it is advisable, if possible, that it should be fitted with an apparatus for throwing the cells into action one by one. A contrivance for reversing the poles of the battery without moving the electrodes is also advisable. But one of the most important points in a battery is that it should be provided with an apparatus for measuring accurately the strength of the currents used.

Dr. de Watteville especially insists upon this, and my own experience has convinced me of the necessity of it. Without it no results can be of scientific value. If anyone is doubtful on this point, a little practice with a battery fitted with an absolute galvanometer will suffice to convince him. To begin with, if a battery is much used, the cells most in action tend pretty rapidly to diminish in strength, and consequently the same number of cells will give a different reading week by week. But more important than this is the fact that the resistance to the passage of the current presented by the skin, always considerable, varies very much in different persons, and consequently for two given patients, although the same number of cells be used, the actual strength of the current passing is by no means the same.

Then, again, the resistance of the skin is always greatest when the application is first commenced, and as this tissue becomes permeated with moisture it diminishes considerably, so that to produce a constant strength of current more cells have to be used in the first instance than may become necessary in a time which is of very variable duration. Furthermore, from a failure of some of the connections, or exhaustion of the

battery, no current whatever may be passing, and yet the operator, in ignorance of this, may be calmly noting down the number of cells employed and the effects on the patient; for when a person is in a state of stupor it goes without saying that he cannot describe to us his sensations.

This is not an imaginary occurrence, for it has happened to me more than once that I have only been made aware of the fact that no current was passing by the needle of the galvanometer remaining stationary. The ordinary galvanometer, or galvanoscope, will indeed indicate whether any current is passing or not; but, as Dr. de Watteville points out, the angle of deflection in it is not proportional to the current, and therefore for scientific purposes its readings are of no value.

What we require is an absolute galvanometer graduated in milliampères, and with this we can measure accurately the exact strength of the current used in every instance, and note it down for future reference. The battery I employed was fitted with such an instrument, and the current strength used being in every case recorded in milliampères, the data collected are hence capable of comparison with those of other observers. The electrodes used in my experiments were the flexible plate ones, recommended by Dr. de Watteville. Medium sized ones, $3\frac{1}{2}$ in. $\times$ $2\frac{1}{2}$ in., were in the first instance employed, and the method adopted at the commencement was to apply the cathode or negative pole to the forehead, and the anode or positive pole to the nape of the neck. Subsequently, whilst retaining the anode in the same position and not altering the size of it, I had a large plate constructed, $6\frac{1}{2}$ in. $\times$ $5\frac{1}{2}$ in., for use as the cathode, adapted to cover accurately the whole of the vertex of the head. One practical point to remember here is that these flexible plates require to be well covered, as eschars are very liable to form under the point of application, especially at the edge of the plate, when strong currents are employed. This has, of course, to be guarded against all the more carefully when the sensations of the patient operated upon are dulled, as is so frequently the case with the insane. It is not sufficient, with strong currents, to cover the plates with a single layer of wash-leather, for I have several times seen eschars form under these circumstances; a double layer of this material has, however, always appeared to afford sufficient protection to the skin.

I shall not waste time in theorizing as to the way in which galvanism acts on the nervous system, nor on the reasons which are supposed to furnish indications for the use of either pole, as authorities appear to differ considerably on the subject,

and it seems doubtful how far we are treading on safe ground. There appears to be no doubt, however, that the galvanic current is capable of producing both powerful stimulating and sedative effects, according to the manner and duration of its application, and that it has also great influence on nutrition, though whether this is exerted directly, or through the medium of the blood vessels, does not seem certain.

I will now give an account, as brief as possible, of eleven cases of insanity in which treatment by galvanism in this manner was given a fair trial. I only include in this series cases in which more than ten separate applications were made, for in two or three instances attempts at galvanization had to be abandoned, owing to the resistance or intolerance of the patients when the number of sittings had not reached half-a-dozen, from which consequently it would not be safe to draw any conclusions.

All the patients were females.

Case I.—E. D., married, æt. 23. *Mental condition*: Acute dementia. Patient had a blank expression, was perfectly taciturn, and sat usually with her head bent forward, taking no notice of anything; she resisted everything that was done for her; had to be washed, dressed, and fed, and was dirty in her habits. The cause of the insanity was parturition, and its duration six weeks previous to admission. Treatment by galvanization was not commenced until the patient had been four months in the asylum, so that the case had then lasted nearly six months without the slightest sign of improvement. Flexible plate electrodes of medium size, $3\frac{1}{2} \times 2\frac{1}{2}$ in., were employed, the cathode being placed on the forehead, and the anode on the nape of the neck, and, with a few exceptions, these were the positions maintained throughout the treatment. A start was made with a current strength of three milliampères, applied for six minutes, and this was gradually increased to 25 milliampères for ten minutes, as much as 30 being used on one occasion. The average current strength employed may be put at 15 milliampères, and the time of application ten minutes. Usually there was a daily sitting, but sometimes a rest was given of one or more days, so that 60 applications, which was the total number used, were spread over a period of three months. At first the current did not produce much effect, but as the strength was increased patient resisted a good deal, and there was a good deal of flushing of the face. No mental change was, however, noted until after 27 applications, when patient was observed to be a little brighter. She would occasionally do a little needlework, and at times answer "Yes" to questions, in a whisper. She kept, however, dirty in her habits. A day or two after this she was for one afternoon quite lively, talking and singing. But little change occurred for another three

weeks, when patient was described as decidedly brighter, and occupied with cleaning windows. The improvement thus effected was maintained, though it progressed in a very gradual manner, and three months after the galvanization was stopped patient was bright and industrious, answered questions readily and rationally, and her memory appeared good. No relapse occurred, and she continued to progress favourably until her discharge.

In this case, I think, a cure may fairly be claimed for the treatment, for, though the case was one which usually terminates in recovery, and the age of the patient was distinctly in her favour, it must be remembered that the case had lasted for nearly six months without sign of improvement before galvanization was commenced, and this certainly appeared to me to have a distinct influence in arousing the brain from its lethargy.

Case II.—C. L., æt. 15, single. First attack. Melancholic stupor of mild type. Treatment by galvanization commenced eleven weeks after the onset of the attack. The flexible plates were applied, as in the first case, to the forehead and the nape of the neck, the cathode being on the forehead. A current of $3\frac{1}{2}$ milliampères, applied for five minutes, was used to begin with, and the strength was gradually increased to 20; the average may be put at 12 milliampères for ten minutes. In all 22 applications were made, which were spread over a period of six weeks. For the first three weeks no change occurred, but after this patient gradually became somewhat restless and talkative; she developed, in fact, a mild maniacal attack, from which she convalesced in about two months after the discontinuance of the galvanization.

In this case the treatment appeared to be of some benefit, and seemed to have an effect in changing the type of the symptoms from melancholia to mild mania. Eighteen months after her discharge, however, she was readmitted in a condition similar to that which she presented in the first attack. No special treatment was resorted to. Her case ran through very similar phases, and she is now again convalescing.

Case III.—E. P., æt. 30, widow. Simple melancholia, without delusions. Patient was very fretful and depressed, wandering up and down the ward, moaning and groaning, and could not be got to employ herself in any way. The case had lasted two years previous to admission, and galvanization was commenced two months subsequently, no change having at that time taken place in the patient's symptoms. A large flexible plate (anode), $6\frac{1}{2}$ in. by $3\frac{1}{4}$ in., was applied to the nape of the neck, the medium-sized one (cathode) being placed on the forehead. Treatment was commenced with five milliampères, applied for ten minutes, this strength being gradually

increased to 14, which was the highest that could be employed, as patient was throughout very intolerant of the applications. The average current strength was seven milliampères, continued for ten minutes each time. Sixteen sittings only were resorted to, and these were spread over a period of 23 days. Great and rapid improvement resulted. When the galvanization was stopped patient was noted to be much more cheerful and active, and to be working fairly well. In three weeks more she was convalescent, and she was discharged the following month recovered. This patient was seen a few months ago, nearly two years after her discharge, and she had continued well up to that time.

In this case there can, I think, be no question of the great value of the treatment. I do not, of course, assert that recovery would not have taken place without it, but when we consider that the case had lasted upwards of two years before treatment was commenced, and that the patient was practically well six weeks after the galvanization was started, this conclusion seems to be justified. I think, however, that in this case the benefit derived was as much psychical as physical; the patient disliked the applications immensely, and these appeared to act in a reflex manner by giving the patient the stimulus she required to make an effort to rouse herself from her lethargy.

Case IV.—M. A. G., æt. 44, married. Melancholia of six weeks' duration. The same sized electrodes were used as in the last case, the larger one being placed between the scapulæ and the other on the forehead. The current strength employed varied from 4 to 20 milliampères, 25 being used on one occasion, but this caused faintness. The average may be put at 17 milliampères for ten minutes each day. Twenty-six applications were used during a period of 27 days, and the treatment was then discontinued on account of a small eschar forming on the forehead. At first slight benefit appeared to result, but this proved only temporary, and no permanent improvement ensued. The patient is still an inmate of the asylum, and the progress of the case has raised a suspicion of general paralysis.

Case V.—E. K., æt. 28, married. First attack. Melancholia agitans, the result of lactation. Duration, previous to admission, three weeks; treatment by galvanization commenced two months subsequently. Five milliampères were employed to begin with, gradually increased to 20, the average being 14 for ten minutes. Twenty-six applications were used in the course of one month, and the treatment was then discontinued, as it seemed to be doing more harm than good. Six months after this the patient began to improve, and she was discharged recovered five months subsequently, but after this length of time the recovery could not be in any way attributed to the galvanization.

Case VI.—H. C., married, æt. 25. Second attack. Melancholia due to lactation of three months' duration previous to admission; treatment by galvanization commenced four months afterwards. In this case the plates were at first attached to the forehead and nape of neck as before, but the applications were afterwards varied by placing the larger electrode between the scapulæ, and the medium-sized one beneath each ear alternately. The highest current strength employed was 15 milliampères, but the average was only seven for eight minutes. The patient, indeed, manifested such great intolerance of the treatment that this had to be discontinued after 19 applications. No improvement whatever resulted, and the patient is still an inmate of the asylum.

Case VII.—M. C., æt. 29, married. Melancholia of two weeks' duration previous to admission; treatment by galvanization commenced five months afterwards. The large plate—anode—was placed on the nape of the neck, and the medium-sized one—cathode—on forehead. Four milliampères were used to begin with, and this number was increased to 20, 25 being used on a few occasions, the average current strength being 15 milliampères for ten minutes. Thirty-one applications were resorted to, spread over a period of five weeks. Patient throughout manifested great intolerance of the treatment, and, as it appeared, if anything, to aggravate the mental distress and hyperæsthesia, it was discontinued. No improvement has since resulted, and the case has become chronic.

Case VIII.—M. A. D., æt. 33, married. Melancholia, verging on stupor of one week's duration on admission; galvanization commenced two months subsequently. The plates were at first applied as on previous occasions, but after a few applications the medium-sized one on the forehead was discontinued, and a very large plate, $6\frac{1}{2} \times 5\frac{1}{2}$ inches, adapted to cover the vertex of the head, was applied to this region, and used as the cathode. Commencing with eight milliampères the current strength was gradually increased to 20, and on one occasion to 25, the average being 15 milliampères for ten minutes. The total number of applications was 35, spread over a period of two months. After a month's treatment an improvement set in, which was continued with a slight intermission; two months after the galvanization was stopped the patient was convalescent, and she was discharged the following month. In this case the galvanization appeared to have a distinctly beneficial effect, and the recovery may, I think, fairly be attributed to it.

Case IX.—M. J., æt. 30, single. Melancholic stupor, of six months' duration previous to admission, three months after which treatment by galvanization was commenced. The largest flexible plate was applied, as in the last case, over the vertex of the head, the smaller one being placed as usual on the nape of the neck or between the scapulæ. A strength of five milliampères was used to begin with, and this was increased to 15; the average being only nine

milliampères for ten minutes. Patient showed great intolerance of the applications, and these had to be discontinued after 17 sittings on account of a small eschar forming, so that the treatment scarcely had a fair trial. No improvement whatever resulted, and patient is still an inmate of the asylum.

Case X.—M. L., æt. 27, married. Melancholic stupor of eight weeks' duration previous to admission; treatment by galvanization commenced one month subsequently. The medium-sized flexible plate (cathode), applied to the forehead, was used for the first 30 applications, but after this the largest plate, covering the whole of the vertex of the head, was employed for the cathode, the scalp having been first shaven; the anode was placed in the usual position on the nape of the neck. The treatment in this case was spread over a period of nearly six months, 81 separate applications being made. A current strength of five milliampères was used to begin with, and this was increased to 35, and on one or two occasions to 40, the average being 22 milliampères. The usual time of application was ten minutes, but the sitting was continued on several occasions to fifteen minutes, the average being about 12. In addition to the uniform steady application of the current, "voltaic alternatives" were used on 32 occasions, that is, the poles of the battery were rapidly reversed several times in succession; by this means very powerful shocks can be transmitted through the head.

In this case the treatment was persevered in for a longer time, and the current strength employed was greater than in any previous case. The result was that the patient's condition was sensibly ameliorated; instead of being obstinately taciturn, and sitting still, taking no notice of anything, she was got to occupy herself a little in the way of carrying things from ward to ward, and she would at times answer simple questions; she also washed and dressed herself. The treatment was discontinued on account of a serious falling off in the strength of the battery, which rendered it for some time practically useless, and it was not again resumed. The patient retained the ground she had gained under the use of the galvanization, but her condition remained quite stationary for a few months afterwards; since then she has brightened up gradually, but still (18 months since treatment was stopped) remains an inmate of the asylum, and is not, I fear, likely to leave it. There seems to be no doubt that the galvanization had a beneficial influence in this case, and I cannot help thinking that had I been able to continue the treatment longer, and more particularly to keep on increasing the strength of the current, a cure might have resulted.

Case XI.—B. N., æt. 20, single. First attack. Melancholic

stupor of mild type, of five weeks' duration. The largest electrode was fixed on the vertex of the head, and the medium-sized one on the nape of the neck. The current strength employed ranged from 6 to 28 milliampères, the average being 18 for ten minutes. Forty applications were made in all, and these were spread over a period of seven weeks. When the galvanization was discontinued it did not appear to have effected any change in patient's condition; shortly afterwards, however, an improvement set in, in a couple of months she had brightened up wonderfully, and two months later she was discharged recovered.

It is possible that the treatment may have had an influence in producing this result, but one cannot feel at all certain of it.

If we sum up now the results of the foregoing cases we shall find five (Nos. 4, 5, 6, 7, and 9) in which no benefit whatever resulted from the use of the battery, though it is fair to remark that three of these showed a great deal of intolerance of the current, and hence this was not persevered in very long. Two cases (Nos. 2 and 10) improved under the galvanization, whilst in one other (No. 11) the benefit derived seemed more doubtful. In the remaining three cases (Nos. 1, 3, and 8) a cure resulted.

Three cures out of 11 cases can certainly not be considered a very startling result, especially when one bears in mind the fallacy that must always underlie an affirmative issue. If no improvement ensues in a case we can, at least, be certain that the treatment has done no good; but if recovery takes place we cannot be equally sure that such recovery is due to the agency employed. This fallacy is, of course, all the more difficult to guard against when a small number of cases is under consideration. In truth, the series of cases above given is not, I think, of much value statistically, and this, not simply on account of the smallness of the numbers, but also because the cases were not altogether unselected. Several of the cases were picked out, indeed, because they were either of some severity or had lasted a considerable time, in order that the efficacy of the treatment might be submitted to a thorough test. They possess, therefore, more of a qualitative than a quantitative value. To give my own opinion in the matter, I must say that I have been a little disappointed at not getting better results; at the same time, in some of the cases, the treatment appeared to be of real value.

The class of cases in which galvanism was tried has been indicated above; cases of mental depression, stupor, and torpor appeared to offer the best field for its use, and to these my

observations have been mainly restricted. In cases of mental excitement, even if the treatment were likely to be of benefit, there are considerable practical difficulties in the way of its application, and in the only case of mania in which I attempted it, these were found to be insuperable. But in the case of melancholia with excitement above described (No. 5), the treatment appeared to do harm rather than good. If I may judge from the cases submitted to treatment, the more the case departed from simple depression in the direction of stupor and torpor, the more good did the treatment seem to do. Case No. 3 is, indeed, a notable example to the contrary, for here the good effects seemed to be much more psychical than physical, and this suggests that in appropriate cases treatment directed in this way might be turned to good account. It would, however, be necessary to take great care in the selection of cases, as in some of the patients with melancholia the galvanism appeared rather to aggravate the mental hyperæsthesia—at least at the time of application. When the treatment does good psychically, as in the above-mentioned case, it probably does so by supplying a sort of reflex mental stimulus to exertion. But what we have to rely upon most is the physical effect of the current, and though it is difficult at present to say exactly how it acts, it probably produces a powerful stimulating effect on the nervous centres, and at the same time improves the nutrition of the parts, either by a direct trophic influence or through the agency of the blood vessels.

But though we conclude that galvanism is capable of producing good effects in certain cases of mental disorder, we must not overlook the reverse side of the question, namely, whether it may not also at times be potent for harm. Certain it is that it is an agency which requires careful employment. I have seen faintness, retching, actual vomiting, and a peculiar form of hysteroid convulsions result from too strong or too prolonged currents, though never any permanent bad effects. So that I think the applications should be conducted by the medical man in charge, and not be entrusted to an attendant, except in case of necessity, and after previous education in the subject.

Briefly now to sum up the conclusions which present themselves from the foregoing considerations, I should say—(1) That whilst the use of galvanism to the head is a proceeding which is certainly *not* going to revolutionize the treatment of insanity, this agent is nevertheless one that is capable of doing much good in certain selected cases, and that by its judicious

employment we may every now and then cure cases which would otherwise drift into hopeless chronicity. (2) The class of cases which offers the best field for the employment of this agent is that which includes examples of mental stupor and torpor—cases which are grouped under the specific designations of *Melancholia attonita* and so-called *Acute dementia*.

CLINICAL NOTES AND CASES.

Cases of Masturbation (*Masturbatic Insanity*). By E. C. Spitzka, M.D., of New York.

(Continued from p. 254.)

The following case presents us with an interesting picture of alcoholic delirium, engrafted on a masturbatic neurosis. When the former was recovered from, certain features of insanity, due to masturbation, prevailed.

VII.—*Strumous diathesis, repeated over-exposure to the sun, masturbation, masturbatic character-change, alcoholic excesses, alcoholic delirium, katatonic insanity, complete recovery.*

Frank ——, aged 23, no ancestral mental taint. Both parents are, however, weakly persons, the mother particularly, who presents a strumous appearance. His elder brother is a somewhat talkative, but intelligent and sound man. As a child the patient was always healthy, and in his adolescence nothing peculiar was noticed in him. There was, at the time of my examination, and had been for some time before, a swelling of the lymphatic glands on the right side of his neck, which subsequently enlarged, and yielded to iodine applications and surgical measures. His sister, at the age of three years, had the same condition, which yielded to the former means. In his ninth year the patient, while bathing in a hot sun, was taken with a fit of so-called "malaria." This name has been so often applied to any obscure condition that I suppose it a safe assumption to consider it to have been a partial insolation. In his eleventh year he had an attack of sunstroke, since which he has never been able to go out in the sun without bringing on a severe headache, and, if sufficiently prolonged, a decided *malaise*.

Masturbation was begun in his fifteenth year, and it was carried to extremes. During the last few years he has alternately indulged *in coitu* to excess, masturbation, and occasionally intemperance. Six years ago he was very much worried by business troubles. It appears that his uncle objected to his being in the employ of the firm

which he and the patient's father were members of. The uncle in question finally succeeded in driving him off, and then defrauded his partner. The discouragement of this first business association had a bad effect on the patient, and the next situation he obtained, which was a very good one, did not satisfy him. He secured a position in a Customs Office, with light work and good pay. After having been six months in this place he was noticed to act strangely; he would laugh, joke, and be boisterously jovial, so that he had to be reproved. These spells of elation frequently recurred, and alternated with fits of depression, in which he would allow his work to accumulate, and sit motionless, staring at his desk. He was removed from his position, and taken into partnership by his brother. In this new relation it was found that whatever work was laid out for him, or belonged to the business routine, he could perform well, but in all matters in which he was left to judge for himself, including his private affairs, he had less judgment and self-reliance. All this time he worried about the old grievance against his "Uriah Heap" uncle. His brother was compelled to leave the city for a week, and during that time the landlady noticed him to be very despondent, crying and moping, and not having spontaneity enough to venture in the street without his brother. Matters went on in this way for a year, when the brother went to Europe, and, before leaving, laid out the patient's routine work for the period of his absence. But the steamer on which he returned was six weeks in making the passage. The delay greatly excited the patient. He was seen nervously twirling his moustache, and broke down in health. His brother returning found the business affairs in good order, and resolved to give F. a vacation. He accordingly sent him to join his parents in Europe. He manifested much irresolution as to leaving at all, had a disagreeable passage over, and, on recovering from sea-sickness, indulged in bacchanalian excesses, which were continued after landing. His mother observed that he would sit before a letter for hours, as if mustering resolution to write it, and then leave it uncompleted. He overdrew on his letters of credit, and ran through a large sum of money in London. It was ascertained that he indulged in the wildest sexual orgies. His comrades in these excesses commented on the fact that the patient was not drawn to the opposite sex when in good health and spirits, but when he felt most dejected and "blue." All this time, as before in New York, he expressed a great horror of contracting venereal disease or becoming ruptured. To these morbid fears was finally added a dread of kidney disease, and on one occasion, while in a railway car, he urinated out of the car window while the train was in motion, because he had "a pain in the kidneys," and wanted to see whether he could pass water freely.

Finding that he grew worse instead of better, and was, to use an expressive phrase of his comrade, "saturating himself with whisky," he was started back to New York, much against his wish. He ceased

drinking abruptly on joining the steamer, and had nightmares the first few nights. On the third day out he saw the sea-serpent in endless coils following the vessel, in company with "funny little men." He began to notice that the other passengers would purposely lay newspapers containing references to the Dublin scandal — which occurred about this time—on the table near him, and look at him in a peculiar way, and (according to the ship surgeon's account) imagined he was suspected to be a refugee from Dublin Castle.

As the steamer discharged its passengers, an appraiser, who was a mutual friend, said to the brother, "Frank looks very funny; he can't pack his own things or make a declaration unless you will help him." His brother took him on board his private yacht, recently built. The patient boarded it as if it was nothing new to him; met an old friend whom he had not seen for years, and greeted him as if he had been in daily communication with him. He had a ring in the shape of a serpent, coiled as the Egyptian symbol of eternity, and gave it to one of his acquaintances, saying "Take it away, I do not want these snakes around." At this moment the captain of the yacht was examining the ring, when the patient, with glaring eyes, snatched it from him and cried out for champagne. Meanwhile the yacht arrived at its destination, and the patient took off his shoes and declined to leave it. He could not be induced to go on shore until the others threatened to leave him alone on board. On arriving at a hotel he seized a water flask, ground it fiercely on the table, saying "Give me a glass of water; for God's sake give me a glass of water!" He stared at the waiter, asking "What does he stand there for?" Meanwhile the elder brother went out under the pretext of getting a cigar, but in reality to make some arrangements about the patient's surveillance. On his return he found that he had eloped. A younger brother, who was left behind, said that he mumbled something about being put in a room previously occupied by a hotel guest who was syphilitic. It seems that the landlady, who had been informed of the nature of his trouble, had followed him on his disappearance from the dining-room. The patient went to the room assigned him, and, lighting his pipe, said "I am lighting my pipe here, and he is lighting his cigar there, and I ought to be with him." The landlady attempted to calm him down and keep him in the room, but he levelled his cane at her as if to fire off a gun, and, dodging past her, darted out and reached the street. His subsequent movements were traced. He had gone into a restaurant and left it as if under some sudden terror, leaving his cane, hat, and overcoat behind him. When his brother found him he said that the devil was after him, that he would have to go to a certain hotel and drink ice-water till midnight, when the devil would leave him alone. He went, as he intimated, and stayed out his time, when he received a bath and a hypnotic, not having slept for ten nights previous. On dressing he declined to put on dark clothes, as he was afraid of the "black pox." While dressing

he had an idea that a race was going on, and repeatedly counted "one, two, three." Then he asserted that he would wait till three, as Christ was about to pass, and take three pills. He was removed to the yacht the following day, and by the fourth appeared calm and more rational. But when sitting in the office after his return he would be often found holding the newspaper upside down. He spoke vaguely of a "Wall Street scheme," and appeared to have some idea that his head was "not sound." On the fifth day he indulged in alcoholic excesses, and was exposed to the sun's heat. That evening he laid out his clothing in a peculiar way, and a number of matches in a special position. He would repeatedly cry out "Is everything all right as I left it?" for the first four hours of that night. He left for Saratoga, and gave his companions a great deal of trouble, picking up rolls and throwing them at other guests at a railroad restaurant, declining to eat, and afterwards ravenously swallowing everything within reach. He also developed a habit of picking up his hat and bag and throwing them away, as if the victim of uncontrollable impulses. He was successfully turned from his path and taken back to this city. Here, while in the bar-room of one of our largest hotels, he would repeatedly slide down from his chair, keeping his heels on the floor. The party were compelled to leave the place in consequence. In a public square he took off his coat and hat, and proceeded to remove his shoes. His brother knew of no other device for getting him out of the crowd which this procedure collected than to hail a cab and suggest a trip to Coney Island. The patient saying "That is a good idea," forthwith knocked an old gentleman's umbrella out of his hand. As soon as the cab came he went in at one side and out of the other, exclaiming "This is not the boat." But he was easily got in again, and the cab was kept driving round and round till the detectives summoned arrived. In the cab the muscular disturbance became very great. He touched the top with his feet, and braced himself up stiff in that position. When he got out he reentered the hotel. His hat fell off, and one of the detectives standing by handed it to him, on which the patient threw it back into his face.

While on the way to a private asylum he would twist his hat, push off and on the "snake" ring before mentioned, and look at his watch or play with some pennies in a childish manner. He was transferred to a carriage, and while it was summoned he lay down in the street, again collecting a crowd. He refused to get up, and muscular movements occurred, which were almost convulsive in character. These continued in the carriage, so that he reached the asylum with scarcely a shred of clothing on his person. On arrival he was very restless, and turned three or four summersaults * in the reception-room; then he took his trousers off. He was received on August 1st, and I examined him on November 3rd of the same year. The most remarkable features were the peculiar movements he indulged

* He is an athlete and an excellent gymnast.

in; he would contract his brows, and at the same time purse up his mouth as old-fashioned ladies are in the habit of doing when reproving children before company. Simultaneously he would move his hands from his forehead to his chin, make a pass, and resume the motion. His facial contortions at times resembled those of typical katatonia. While I examined him with a stethoscope he said, "Yes, understand it all—liver-disease, lung-disease, Bright's disease, cancer, dropsy, death, and so on." He seized an ornament on my watch-chain, representing in negative relief a Roman warrior's bust, and said "Latin Principia." To every question he began a rational answer, but the movements would be resumed before he completed it, and he would talk at random, grinning and grimacing as related. His pupils were dilated. He said, "My memory is covered by a veil." On December 15 he was entirely rational and responsive. His pupils were contracted more than at the last visit. Occasionally he repeated his rhythmical movements in a faint way. He correctly reproduced the history of his case as given by his brother; forgot what he noticed on my watch-chain, but remembers that he seized it. On being shown it, remembers what he said, and that the head of the Roman suggested the school-boy reminiscence: "Latin Principia." He admits having masturbated excessively from his fifteenth to his twenty-first year, and adds that he had attacks of alcoholic delirium on more than one occasion at the appraiser's office. On this occasion his automatic movements could be checked by calling his attention to them. To some extent this had been possible at my first visit, when due firmness was employed.

The patient made an absolute recovery, and has continued in perfect mental and physical health since his discharge, a period of two years, and in spite of mental and emotional strain.

One of the most important modifying factors of masturbatic, as of other forms of insanity, is heredity. Masturbaitc insanity proves no exception to a generalization which I have not seen expressed elsewhere, but to which there are very few exceptions, that *heredity is a favourable element as regards the immediate prognosis in the emotional vesanias, and an unfavourable element in the primary delusional and moral forms.* An illustration of its favourable influence under the former alternative is the following case:—

VIII.—*Heredity direct, two attacks of melancholia, precipitated by self-abuse and overstrain or anxiety, peculiar motor symptom in the second attack, recovery.*

A physician, examined at a large private asylum at the request of his relatives. I had known the patient before; his mincing gait and peculiar manner had often been the subject of remark. He had once before been in an asylum for the same trouble, the exciting cause

being supposed to be an approaching medical examination ; but I am informed by two American physicians, who studied at the same University then, that it was a notorious fact that he masturbated *coram publico.* His father had been an eccentric person, easily depressed, and had attempted suicide. Several other relatives were unsound, one cousin being in an asylum abroad.

About five years ago he came to this country and engaged successfully in medical practice. The exciting cause of the present malady grew out of a mortifying professional error. He had been treating a sister-in-law of his cousin, being consulted by the father of the patient, himself a physician. Both agreed in regarding the disorder treated as a rheumatic affection of the ankle-joint. Dr. ——, however, expressed a suspicion that the disease might be deeper, but continued treating the foot with palliative measures under the influence of the older physician. The swelling and pain increased, sinuses opened, and a surgeon was called in, who instantly took steps to perform the necessary operation for tarsal necrosis. Evidently something said, or supposed to have been said, by this surgeon rankled in the minds of the family, and one female relative, an elderly virago, stopped Dr. —— in the street as he was leaving his office and saluted him with most uncomplimentary epithets, reproached him for his lack of skill, and threatened to spread the news thereof among all his friends and patrons, and to drive him out of his profession and out of the city. Her tongue attracted a great crowd of people, and the timid victim stood before her hemmed in on every side, held up to the scorn of the street arab, and compelled to submit to the deluge of her wrath without reply. This *rencontre* greatly depressed him. The surgeon above mentioned delayed notifying him, according to the custom, of the time and place of operation, and Dr. P. —— thought himself slighted, underrated, and contemned by his colleagues. At and previous to this time he had indulged in his bad habits, and he now became depressed. Always pale, his complexion now was ghastly, and he lost flesh rapidly. Under other advice he was sent to one of the numerous private asylums of a neighbouring State, which would doubtless perish in the contest for existence if a proper lunacy supervision existed. He was thence transferred to the institution where I examined him. I found him very much changed in appearance, so that I should certainly not have recognized him. He was reticent, at first absolutely mute, but on being appealed to with kindness and firmness, he answered questions in monosyllables. He correctly gave my name, and the last occasion we had met on. He expressed in a vague unsystematized way a fear of attacks on his soul's welfare as well as of bodily injury. He also asserted that on his arrival here the attendants wanted to strangle him, holding their hands over his mouth and putting pillows around his head. He has never failed to recognize persons or the nature of the places in which he was and is confined. Whenever his morbid ideas are followed up, he becomes

apparently humiliated, and his face assumes an expression of mean suspicion, looking downward. He has a peculiar habit—since being in this institution—of standing on tiptoe. He would maintain this uncomfortable position so persistently that the question arose as to his possibly developing a spastic affection, but no objective signs of spinal disease can be found. He has repeatedly masturbated while in the asylum, and done so quite publicly, holding a newspaper, as if reading it, for concealment of the act. As he improved, he could be occasionally induced to settle down on the full sole of his foot in standing and walking, and ultimately did so voluntarily. I observed that the hair had grown considerably all over the convexity of his scalp, which previously had been entirely bald. He was, according to the latest information, recovering in his native land, to which he had been taken after his discharge from the asylum.

(*To be continued.*)

A Case of Epilepsy. By W. J. Dodds, M.D., D.Sc., Montrose Royal Asylum.

Harry S., a boy of 15, a baker by trade, was admitted into the Birmingham Asylum under the care of Dr. Whitcombe, on May 24, 1883. He was unconscious, and during the quarter of an hour he was in the reception-room he had four epileptic fits.

History.—Six years ago, when a boy of nine, he had a fall, and is said to have hung with his head downwards for a minute or two. There was no mark of injury on his head. Two or three weeks afterwards he was observed to go off in a sort of "swoon" occasionally, but it was not until six months after the accident that he took his first fit. His right side was convulsed. He now began to take fits, right-sided fits for the most part, at infrequent intervals, sometimes having as many as four or five a day, but never having any series of fits till Christmas, 1882. The series began on a Tuesday, and he was in fits, more or less, till the following Friday. When this attack passed off he was found to have lost the use of his right arm and of speech; but he regained both within a week, speech first, then the use of the right arm. Since Christmas he had had single fits, but not many, and his parents thought he was growing out of them. He was able to go to work, and was not paralyzed or disabled in any way. He was always a sharp lad. About a month before admission he had begun to take fits more frequently, and their number had steadily increased. During the last fortnight his speech had been affected. Since May 20th, that is four days before admission to the asylum, he had scarcely been out of fits; and his right arm had appeared paralyzed since that time. During this attack, and in all his previous ones, the fits had been mostly on the right side, but some-

times his body was convulsed. On his father's side his grandfather and two uncles had been insane. Such, then, was the history.

Condition on admission.—The patient when brought to the asylum was in the *status epilepticus.* The convulsions were mainly, but not altogether, on the right side, and they followed one another with great rapidity. They began in the right face, the muscles of the angle of the mouth on the right side and the right orbicularis palpebrarum being chiefly affected; the head and both eyes were drawn to the right, and the pupils became widely dilated. Soon the right arm became convulsed; then both legs, but the right much more so than the left, and lastly the muscles of the left shoulder and neck twitched slightly. A long breath was taken, and the fit suddenly ceased. The eyes turned to the left and the pupils became contracted.

As the bowels were not acting properly an enema was administered, which brought away soft, yellow fæcal matter. At two o'clock in the afternoon he had 40 grains of potassium bromide by mouth.

3.30 p.m.—He has had 51 fits; temperature, 101·4; pulse, 120, full, soft; no cardiac bruit, though there is a slight impurity of the first sound in the aortic area. Respirations normal. Patient is sweating profusely. The conjunctival reflex is retained on the left side, but almost absent on the right. There is paralysis of the right arm and apparently of the right leg; he has not been noticed to move either except in a fit. The left arm and leg he frequently moves. In the intervals of the fits there is no puffing of the cheek or evident paralysis of the face. The patient seems quite unconscious, but on shouting to him and asking him to put his tongue out he does so. His tongue is thickly coated white.

6.20 p.m.—The number of fits has risen to 92; they are the same in character as the one described. Since the last note he has had an attack of excitement, but it soon passed off. Immediately after a fit he is often observed to open his eyes and turn to the left. Harsh breathing is detected at the base of the right lung, with distant rattling sounds on expiration. Ordered 60 grains of potassium bromide in two doses.

11.20 p.m.—He is still taking fit after fit. When spoken to he sometimes moans and mutters something. He has been taking small quantities of milk occasionally. 30 grains of potassium bromide, and of chloral hydrate, ordered every three hours.

May 25, 9.30 a.m.—He has had 364 fits. They are still of the same character. The temperature has now risen to 103·1 on the left side, 103·2 on the right side. The sweating ceased at 3 a.m.; the pulse is 148, the respirations 44 per minute.

11 a.m.—Ten drops of nitrite of amyl inhaled; a fit followed a few minutes after.

1 p.m.—The temperature has risen to 103·8. The left conjunctiva not so sensitive as it was. Once during an interval slight diverging

strabismus of right eye was noticed. The pupils are contracted in the intervals, and still dilate rapidly when fits come on. Ten drops of amyl nitrite again given ; and four grains of calomel on tongue.

3.30 p.m.—Nitrite of amyl, gtt. x, given for the third time. The blush was very distinct on the chest, but a fit occurred a few minutes afterwards.

The fits continued steadily till 5.30 p.m., when they ceased ; that is, a little less than 30 hours after admission. During this time there had been 472 fits. The last fit was stated to be an unusually severe one ; he got discoloured in the face and frothed at the mouth.

6.30 p.m.—Is lying comatose ; temperature 104·2, pulse 140, respirations 58 per minute.

11 p.m.—Temperature still rising, it is now 105° ; respirations 52, pulse 144. He has had four slight fits since the last note, making a grand total of 476. The face is drawn to the left, and he has become very restless. He moves both legs.

May 26, 9.30 a.m.—Was very restless during night. The temperature has fallen to 102·8, but the respirations are 48 ; the pulse very rapid and weak, and scarcely to be counted. The right leg is freely moved, the right arm a little. He can speak, saying "Yes, yes, sir;" but is only semi-conscious, answering different questions in just the same way.

May 27.—The temperature has dropped to 99°, respirations to 26, pulse 120. He is becoming more conscious and regaining power over right leg, arm, and face. He cannot whistle. He takes food well.

May 28.—Speech is still muttering and indistinct; he is confused, scarcely seeming to comprehend what is said to him, and not always answering simple questions.

May 30.—Speech still ataxic. An eruption of acne on both sides of face near nose, and a few spots on forehead.

June 1.—Lips tremulous ; he slurs words, scarcely getting them out. Drags right leg in walking. Ordered potassium bromide, gr. x., three times a day.

June 3.—Now walks with only a trace of weakness in right leg. Ataxia in speech disappearing. Is slow at reading; is some time before he can spell out a simple word.

June 15.—Very irritable and quarrelsome, threatening other patients, and sometimes striking them ; makes use of bad language.

July 11.—Still some impairment of speech. Complains of being unable to do anything with the right hand ; it shakes when he uses it ; he finds it difficult to write with it.

July 15.—Home on trial. To take potassium bromide, gr. xx., twice a day.

July 30.—Has had no fits since he went home, and is looking well. There is still some impairment of speech, a slight stutter occasionally with a slurring of the words, and a difficulty in saying what he wants to say. He complains, too, of weakness, and a feeling of deadness and

numbness at times in his right arm, and he is rather clumsy with it, letting things fall oftener than he used to do. The leg is quite normal.

August 10, 1883.—Discharged recovered.

He had no fits for about twelve months, but they came on again, and caused his discharge from the Navy, which he had in the meantime entered.

On May 20, 1885, he was again admitted to the Birmingham Asylum.

The medical certificate stated that he had been violent, thought his relations were against him, had shouted murder, struck his father and mother, and seemed to be unconscious of what he was doing.

On admission he was calmer, and answered questions rationally, but his memory was impaired, and he told a long and incredible story about being assailed by his father and brother, and stated that his mother had attempted to stab him.

While in the asylum he was excitable, quarrelsome, pugnacious, striking and kicking freely at times. The excitement and irritability seem to have been greatest after his fits.

A remarkable change had come over the character of the fits. They were no longer mainly unilateral, but were ordinary general epileptic fits. The attacks were sometimes very strong. The number of the fits varied greatly. In June, 1885, there were 94, in July 4, August 3 ; in the following March 4, in April 22.

In May he was well enough mentally to be sent home on trial, and in June, 1886, he was discharged recovered.

The patient's father informs me (March, 1887) that his son still takes fits, sometimes two a week. They are not so severe as they were. At times the whole body is convulsed, at other times the convulsions are on the right side. He knows when the fits are coming on, for half a minute before very peculiar thoughts come over his mind.

Remarks.—The outstanding feature in this case is the large number of fits the patient had. In 30 hours he had 472 fits, or one every four minutes, and when we remember that for four days previously he had scarcely been out of fits we can form an idea of the vast number he must have had during the attack. The case, as far as my reading goes, beats the record. The boy seemed to have a perfect genius for fits.

Another feature in the case is the fact that the fits were unilateral. They were not absolutely unilateral, for there were often convulsive movements in the left leg and slight twitching of the left shoulder and neck. But the convulsions were by far the most marked on the right side, and the left face and arm were not convulsed.

A third point of interest is the post-epileptic paralysis.

During the *status epilepticus* the arm and leg were apparently paralyzed, and after the patient became conscious there was a degree of ataxic aphasia and paresis of the arm and face, and, in a slight measure, of the leg. The leg soon recovered, but it is interesting to note that as long as two months after the attack, there was still impairment of speech and deadness and numbness of the right arm. This is an unusually long period for symptoms of post-epileptic paralysis to last.

The pathology of the case is far from clear, but the symptoms point to an irritative lesion, a fine, not a coarse, lesion, affecting the cortical motor centres for the face and arm on the left side. The mere fact (says Gowers in his "Epilepsy," p. 236) of local commencement and deliberate march (of a fit) does not alone constitute evidence that there is organic disease, since fits begin thus in idiopathic epilepsy not at all rarely.

An important question arises. Was this a case of epileptiform convulsions, or, as it is variously termed, Jacksonian or organic or cortical epilepsy; or was it a case of idiopathic, primary, functional epilepsy? My own view is that it partakes of the characters of both; in its early stages it resembled a case of epileptiform convulsions, in its later a case of idiopathic epilepsy; the one stage passed into the other. The case seems to me to show that the distinction between epileptiform convulsions and true epilepsy is not a very deep one.

Two theories are held as to the pathology of idiopathic epilepsy. By the one school it is considered essentially an affection of the medulla oblongata or pons; by the other school, with H. Jackson at its head, it is considered an affection of the cerebral cortex. Our case may, I think, be fairly adduced in support of the latter view that epilepsy is, like epileptiform convulsions, due to a discharging lesion of the cortex cerebri. It may be compared with a case recently reported by Dr. Noël-Paton ("Brain," vol. viii.) which presented the two distinct classes of fits, Jacksonian epilepsy and ordinary epilepsy, now one, now the other, after fracture of the parietal bone.

I must, in conclusion, express my thanks to Dr. Whitcombe for his permission to publish the case and for his kindness in supplying me with the notes of its later progress.

OCCASIONAL NOTES OF THE QUARTER.

Lunacy Acts Amendment Bill.

And so once more this unlucky Bill has been arrested in its development into a fully organized Act. It is very wearisome to be obliged every year to consider proposed changes in the Lunacy Laws and to have to insist upon the necessity of not interfering with the prompt treatment and care of the insane by vexatious preliminary proceedings and complicated forms. Above all is it a thankless office to attempt to convince the highest legal functionary of the land that a medical man may be better qualified than a lawyer to diagnose the nature of the mental disorder under which a person labours. So long as a Lord Chancellor having charge of a Lunacy Bill deliberately asserts from the Woolsack that the lawyer is as competent as the physician to determine whether a man has or has not disease of the brain, so long will any legislation which he initiates or supports be liable to proceed on fundamentally false lines, and so long will it be simply impossible to urge with any prospect of success the profound objection entertained by the Parliamentary Committee of the Medico-Psychological Association to allowing magistrates the opportunity of revising and reversing the certified opinion of a medical man, or entrusting them with the function of a personal examination of the alleged lunatic with a view to determine his mental condition.

It would, however, be unfair not to acknowledge the courtesy with which the Solicitor-General listened to the representations made by a deputation which waited upon him for the purpose of stating the objections entertained by the Medico-Psychological Association to a number of clauses in the Bill. Sir Edward Clarke wished the interview to be of a somewhat private character. He entered into the suggestions made in the most friendly spirit, and frankly admitted the force of some of the objections which were pressed upon his attention. There can be no doubt important amendments would have been introduced by the Government in the House of Commons, and that if Mr. Clarke has charge of a similar Bill next Session, important modifications will be introduced, although the fundamental principle—the personal intervention of the magistrate—will no doubt be regarded as essential to the Bill.

Irish Lunacy Law.

The Psychology Section of the British Medical Association will not have met in Dublin in vain if the protest which it made against the Lunacy Law in Ireland leads to an alteration in some existing enactments. If in England we are in danger of suffering from over-cooking in legislation, it is very clear that the provisions hitherto placed upon the table of the Legislature relative to the insane in Ireland have been underdone. The result is an indigestible mess, which causes serious disorder in the practical working of the legal formalities required in the admission of patients into asylums and in the management of these institutions. We commend to our readers the paper on this subject, read by Dr. Oscar Woods at the above Section.

The following resolution was unanimously adopted at the meeting of the Section, Aug. 5, 1887:—

"The Psychology Section of the British Medical Association, having had under consideration during their meeting in Dublin (Aug., 1887) the Irish Lunacy Laws and their practical working, and having strongly felt their grave defects when compared with those of England and Scotland, conclude to bring the subject under the consideration of the Council of the Association in the hope that they will take such steps as seem desirable to bring under the attention of the Government the urgent need of better regulations, and, if necessary, of further legislation with regard to the matter.

"The chief defects are the following:—

"1. The modes of admission of patients into asylums, which often involve injustice and injury to the patient, and great danger to the public.

"2. The defective powers possessed by the medical superintendent for the proper and efficient management of the asylum, *e.g.*, his having no power to engage or to dismiss the attendants, on whose loyal discharge of duty the welfare of the patients so greatly depends.

"3. The want in the majority of cases of assistant medical officers, so that the medical superintendent is unable to give the necessary time to his strictly medical duties, and large asylums, containing some hundreds of lunatics, may be left entirely without resident medical supervision when the superintendent is absent."

Examinations and Prizes in Psychological Medicine.

The movement initiated by the Council of the Association two years ago continues to make steady and satisfactory progress. The opportunity afforded for examination, and the conditions attaching to it, are now generally known, and men see the advantages which obviously attach to the possession of a certificate of efficiency in psychological medicine. Its value in applying for asylum appointments, and, indeed, in general practice, is being more and more appreciated. We have no doubt that in course of time the possession of the title of M.P.C. will be one among the qualifications required by the committees of asylums in the selection of medical officers.*

The institution of the Gaskell Exhibition of £30, to be awarded annually as an Honours prize in psychological medicine, has already induced competitors to come forward for examination, and the prize was awarded, for the first time, in July last, to Dr. J. D. Mortimer. As holding the efficiency certificate or diploma is one of the conditions of this prize, a fresh inducement is offered to qualify for the pass examination.

The Assistant Medical Officers' Prize of £10 10s. and a medal led this year to a spirited competition, the successful competitor being Dr. Wiglesworth, of the Lancashire County Asylum, Rainhill. The essays sent in were remarkable for the careful clinical work which they exhibited, and their excellence was such that the adjudicators found some difficulty in determining which bore the palm of merit.

We record these facts as proofs of increased activity in the cultivation of a knowledge, at once theoretic and practical, of medical psychology. We are not among those who attach excessive importance to examinations and the winning of prizes. They may be so conducted as to fail to secure what is of primary utility, and may lead to superficial cramming. It has, however, been the object of the examiners to make these examinations of a thoroughly practical character; and it is to be hoped that such will always be the case. We have reason to know that this is the earnest wish of those immediately concerned in placing the Gaskell fund at the disposal of the Association. We think it a duty to put this desire on record in order that it may help to ensure its being constantly borne in mind by future examiners.

* The next pass examination will take place on the 22nd and 22rd December, 1887.

PART II.—REVIEWS.

The Life of Percy Bysshe Shelley. By Edward Dowden, LL.D. Two Vols. Kegan Paul, Trench, and Co. London, 1887.

(*Continued from p.* 310.)

It is an abrupt transition from the record of Shelley's remarriage to that of his parting from his wife. Let us consider the causes which led him to adopt this extraordinary course. As Dr. Dowden puts it, Harriet awoke from the grand theories of liberty, equality, fraternity, and human perfectibility, and "was able to perceive her husband's infirmities, and he could perceive hers" (p. 404). No doubt Harriet, being human, was not perfect, but we fail to discover what these infirmities were. It would seem that, having to attend to the practical duties of motherhood, she had less time for the study and reading aloud of which she had been so fond. We are told that she could not be Shelley's companion in his absorption in Laplace, Homer, or Tacitus, the dialogues of Plato, or the poetry of Tasso, Ariosto, and Petrarch in the original. On the other hand, to certain ladies (Mrs. Newton, Mrs. Boinville, and Cornelia Turner) with whom he had begun to spend much of his time, Shelley felt more powerful attractions than to the young mother and her infant child. As the biographer justly remarks, in reference to his new acquaintances, Shelley's "delight in their society might naturally have been a cause of uneasiness or heartache to Harriet" (p. 405). Naturally, also, the poor heart ached till it was at last broken. There is an absurd mention of the introduction of a wet nurse into the house, as calculated to upset Shelley's romantic notion of married life. Then there was the eldest sister, Eliza Westbrook, living in the house, to whom Shelley, after finding her very useful, had begun to take extreme dislike. It seems impossible to decide how far Shelley was justified in his revulsion of feeling towards Harriet's sister.

> His violent antipathy was probably not less unreasonable than his former excess of deference and blind compliance and concessions towards a person whose counsels and direction could never have been prudent, safe, or judicious (Hogg, "Life," Vol. ii., p. 517).

Dr. Dowden thinks it useless to attempt to decide on the nature of other causes which divided Shelley and his wife in

the early months of 1814, but surely there was cause enough for marital dissension in Shelley's own conduct. Shelley says that they were "disunited by incurable dissension," and in the lines about to be quoted he actually owns that he was worthy of her hate. Harriet was certainly alienated by his vagaries and absence from home, and we cannot pretend to feel surprised. Shelley in May addressed beautiful lines to her as "only virtuous, gentle, kind, amid a world of hate," and he asks her to pity if she can no longer love.

> Harriett! if all who long to live
> In the warm sunshine of thine eye,
> That price beyond all pain must give
> Beneath thy scorn to die—
> Then hear thy chosen own too late
> His heart most worthy of thy hate.*

What Harriet replied to these lines is not known. Indeed we are here, as always, at a disadvantage in judging her fairly from having to trust almost entirely to Shelley's own version of their parting. Letters the former wrote to him, which would doubtless tell a piteous tale, Shelley appears to have destroyed. Thornton Hunt says that Harriet left Shelley. But, if so, Shelley had already practically left Harriet by his frequent visits to the ladies of whom he had become so much enamoured. It is not surprising, therefore, to find Harriet at Bath early in July, while Shelley was in London.

In the dedication to "The Revolt of Islam" † he refers both to his cousin Harriet Grove and to Harriet Westbrook:—

> One whom I found was dear, but false to me:
> The other's heart was like a heart of stone.

And yet, as we have just seen, the last-mentioned's eye possessed such warm sunshine that all longed to live in it! As there is really no evidence whatever of a stony heart, and as in the same stanza Shelley says that he never knew one who was

* *In her own hand writing*, in poems Shelley prepared for printing.

† The original poem, "Laon and Cythna," re-named and modified in consequence of the protests of his own publisher and friends, ought not to be overlooked as an indication of extraordinary moral perversion. Dr. Clouston has spoken of Shelley as a man "whose abilities were far above the average, but whose moral qualities and volitional powers were twisted and perverted" ("Journal of Mental Science," April, 1887, p. 163). Mr. T. Hall Caine writes—"The man who could regard as a vulgar prejudice the sacred instinct that holds a brother and sister at once together and apart . . . . the man who did not shrink from asking the wife he had abandoned to share the society of the woman who had supplanted her, was a man who could have no moral nature to endure a collapse."—"The Academy," December 4, 1886.

not false to him, or had not hearts as hard as stone and as cold as ice, we are inclined to think that Shelley here, as in so many other instances, swung back from one extreme to the other—from a passionate admiration of the object of his love for the time being to a reactionary dislike, which, however natural, was altogether unreasonable. As his biographer cannot help saying, "Yet Harriet Shelley's heart was, indeed, no heart of stone, but a frail heart of woman, capable of love, of grief, and of despair" (p. 416). Strong, indeed, must the case be which forces such words of sympathy and chivalrous feeling from Dr. Dowden.

During this summer (June) Shelley, in one of his visits to Godwin, became hopelessly attracted to Mary Wollstonecraft, then in her seventeenth year. Mention is made of Shelley's calling at Godwin's shop in Skinner Street, on June 8th, 1814, with Hogg, just before leaving London for ten days. "A thrilling voice called 'Shelley!' A thrilling voice answered 'Mary!'" It is obvious from the familiar terms employed that they were already well acquainted, although the actual proof of their meeting more than once or twice is not forthcoming. But is it not probable that they had met more frequently than is actually recorded? Dr. Dowden supposes that it may have been at this very date that Harriet went to live at Bath, and that Shelley accompanied her during his ten days' absence from London. Before the end of June he was writing passionate lines to one whose sweet accents fell upon his heart like dew on half dead flowers, whose lips met his, and whose dark eyes threw their soft persuasion on his brain. Yet at this very time he was writing to Harriet as his wife, and when a letter had not reached her for four days (which to her was "an age") she became extremely anxious about him. It is difficult to reconcile this with continued coldness on his wife's part. She wrote anxiously (July 7th) to Hookham, enclosing a letter to Shelley, and asking him to tell her by return what had become of her husband —

As I always fancy something dreadful has happened if I do not hear from him. If you tell me that he is well I shall not come to London; but if I do not hear from you or him I shall certainly come, as I cannot endure this dreadful state of suspense. You are his friend, and you can feel for me (p. 423.)

The epistle is characterized by Shelley's biographer as "this pathetic letter," and we see no excuse for the heartless conjecture, for which there is not a particle of evidence, that Harriet would gladly have retraced her steps. There is no proof, that

we can discover, that she had taken any but involuntary steps in the way of leaving Shelley. It was he who had left her. He appears now to have entertained the idea (not unlikely to arise in the mind of one who was himself unfaithful) that Harriet had formed an attachment to a gentleman of the name of Ryan, the friend of both in 1813, and he subsequently made this an excuse for inducing Mary Godwin to elope with him. In truth, Shelley's excuses for doing whatever he wished to do were quite on a par with those of Henry VIII. But this idea was either a delusion on Shelley's part or a cruel invention. "We may feel the most absolute assurance," Dr. Dowden admits, "that in the summer of 1813 Harriet loved her husband, and loved him alone" (p. 424). Shelley's animus carried him so far as to make him assert that the child next born was not his, but afterwards acknowledged his error. It may be stated here, by way of parenthesis, that Mrs. Shelley (Mary) wrote on one occasion to Leigh Hunt that Harriet and Shelley did not part by mutual consent. Harriet declared that the refusal to return to their former relations was not on her part, and that she never ceased to love him devotedly. An unprejudiced authority, Peacock, writes :—

> I feel it due to the memory of Harriet to state my most decided conviction that her conduct as a wife was as pure, as true, as absolutely faultless as that of any who for such conduct are held most in honour.

Thornton Hunt also wrote that there was not a trace of evidence or a whisper of scandal against her before the separation. And, again, Shelley's friend Trelawny says :—

> I was assured by the evidence of the few friends who knew both Shelley and his wife—Hookham, who kept the great library in Bond Street, Jefferson Hogg, Peacock, and one of the Godwins—that Harriet was perfectly innocent of all offence (p. 429).

Justly, therefore, does Dr. Dowden assert: "*No one who was not a rash partisan would assert that Harriet was not innocent*" (p. 429).*

* Mr. J. A. Symonds (a warm admirer of Shelley) argues conclusively "that it was not until 1817 that the suspicion of Harriet's guilt before the separation arose. This suspicion, however, did not harden into certainty, nor was it found capable of verification ; else why did not Shelley use the fact as he proposed in order to strengthen his case against the Westbrooks?" It is a most striking circumstance, and Mr. Symonds justly lays great stress upon it, that between June, 1814, and May, 1815, there is no intimation whatever in any journals or letters of Mary, Miss Clairmont, or Shelley himself, nor yet in the conduct of the Godwin family, that any of them supposed that Harriet had wronged her husband at the early period at which it was afterwards alleged that she had. Then there is the fact of Shelley actually inviting his wife to join Mary and him-

In Mrs. Godwin's letter to Lady Mountcashell, August 20th, 1814, occurs the following, corrected by Dr. Dowden:—

In May [March 30] Mary came home from Scotland, and then began all our troubles. He paid her the most devoted attentions, and my husband spoke to him on the subject. Mr. S— declared that it was only his manner with all women. Shortly after, Harriet Shelley came up from Bracknell suddenly, and saw me and my husband alone. She was very much agitated, and wept, poor dear young lady, a great deal, because Mr. Shelley had told her yesterday at Bracknell that he was desperately in love with Mary Godwin. She implored us to forbid him our house, and prevent him seeing Mary. . . . We sympathised with her, and she went away contented, feeling, as she said, quite sure that, not seeing Mary, he would forget her. We then spoke to Mary on the subject, and she behaved as well as possible; approved our renouncing his acquaintance, and wrote a few lines to pray her (Harriet) not to be unhappy, as she would not see Mr. S— again. [Shelley's visits to Skinner Street ceased on July 7th. Harriet did not call at Godwin's until after she had come at Shelley's request to London from Bath on the 14th, as shown by Godwin's diary.† She and Shelley called on the 15th.] . . . A week of tranquillity followed. Then one day, when Godwin was out, Shelley suddenly entered the shop and went upstairs. I perceived him from the counting-house, and hastened after him, and overtook him at the schoolroom door. I entreated him not to enter. He looked extremely wild. He pushed me aside with extreme violence, and, entering, walked straight to Mary. "They wish to separate us, my beloved; but death shall unite us," and offered her a bottle of laudanum. "By this you can escape from tyranny; and this," taking a small pistol from his pocket, "shall re-unite me to you." Poor Mary turned as pale as a ghost. . . . I hastened to my husband's study. He hastened upstairs. . . . With the tears streaming down her cheeks, she entreated Shelley to calm himself, and to go home. She told us afterwards she believed she said to him, "I won't take this laudanum; but if you will be only reasonable and calm, I will promise to be ever faithful to you!" This seemed to calm him, and he left the house, leaving the phial of laudanum on the table (Appendix, page 544).

self during their Continental honeymoon. Mr. Symonds points out with great force that Mrs. Shelley (Mary) in her novel "Lodore," which is allowed to be her version of Shelley's relations to his first wife, describes her gradual alienation from her husband without breathing the slightest suspicion of her misbehaviour. Mr. Symonds puts the whole case in a nutshell when he says:—"An irresistible passion for another woman had suddenly sprung up in his heart. Upon these grounds, after undergoing terrible contention of the soul, he forced on the separation, to which his first wife unwillingly submitted." ("Fortnightly Review," April, 1887.)

† It does not follow that because a man keeps a diary he enters everything that happens. Harriet may well have called on the Godwins previously.

In Mrs. Godwin's letter to Lady Mountcashell, dated August 20th, 1814, she writes:—

> Shelley used to visit us frequently with his wife—a beautiful and charming young lady of about 19. We grew very intimate; they came when they liked, and made themselves quite at home, and we all loved them extremely. . . . Mrs. Shelley remained greatly at home (Bracknell), but Mr. Shelley was busy with lawyers about borrowing money, and ran up and down to and from town, and took a lodging in Hatton Gardens in order to be near us (Appendix B, p. 542).

According to Mrs. Godwin, Shelley paid immense attention to her daughter Frances. She, therefore, sent her from home to be out of his way. Mary was at that time at Dundee.

Lady Mountcashell, in a letter to Mrs. Godwin in November of 1814, writes:—

> The impression you gave me of Mary makes me think her conduct perfectly natural. She only acted like a person who cares for nothing but herself (Appendix, p. 546).

We now see Godwin "hoist with his own petard," although his views on marriage had for some time undergone a change. Never, surely, did man suffer more than he from an avenging Nemesis. It was, as already recorded, on July 7 that Hookham had received Harriet's "pathetic letter." It is supposed that he saw what was likely to happen, and enlightened Godwin. The latter spoke seriously to his daughter, and from that time Shelley did not dine at Godwin's house. In this same month of July, Mary Wollstonecraft Godwin wrote in a copy of "Queen Mab," given to her by the author—she speaks of the love they have promised to each other— "I am thine, exclusively thine. . . . I have pledged myself to thee, and sacred is the gift" (p. 430). On the 14th, wishing to make a proposal of separation, Shelley met Harriet, who, at his request, had come to London. His proposition proved so great a surprise, and caused so terrible a shock, that it brought on a severe illness, "alarming to one who looked forward to the birth of a baby in December" (p. 431). There seems nothing improbable in Jerdan's statement that Harriet, in an agony of distress, exclaimed, "Good God, Percy! what am I to do?" Nor is it unlikely that Shelley replied, "Do? do? Do what other women do"—what he meant being that other wives, under like circumstances, had managed to survive, and Harriet might do the same.

Harriet, however, strove as much as possible to transfer the

blame from Shelley's shoulders to those of Mary Godwin. Dr. Dowden, after stating, on Peacock's authority, that no separation by mutual consent had ever taken place, says that "there is some reason for supposing that Harriet, even after Shelley's elopement to France with Mary Godwin, was not without expectation that her husband would tire of the stranger who had displaced her in his affections, and would return to herself. It was when the certainty gradually forced itself upon her at a later date that all was over between her and Shelley—that he was indeed Mary's and not her own—it was then, in solitude and the dull constraint of her father's house, that unhappy Harriet's anguish grew to a height, and that she became willing to try to forget it in excitement and change" (p. 432).

Shelley, in these days of distraction between duty and passion, sought relief, as we have seen, in laudanum. When, at Shelley's urgent request, Peacock came to see him in London, he found him in the condition thus described by his friend:—

> Nothing that I ever read in tale or history could present a more striking image of a sudden, violent, irresistible passion than that under which I found him labouring. . . . Between his old feelings towards Harriet, from whom he was not then separated, and his new passion for Mary, he showed in his looks, in his gestures, in his speech, the state of a mind "suffering like a little kingdom the nature of an insurrection." His eyes were bloodshot, his hair and dress disordered. He caught up a bottle of laudanum, and said, "I never part from this."

Quoting from Peacock's translation, he said he was always repeating to himself the lines of Sophocles which represent man's happiest lot as annihilation. He did not deny Peacock's statement that he had been very fond of Harriet, and spoke of her nobleness, although she did not feel poetry and understand philosophy, essential, according to his present views, in the partner of his life (p. 433). Had the law permitted, Shelley would, according to his own account three years afterwards, have been legally married to Mary Godwin. But as the law would not lend its sanction to bigamy, the lovers escaped, on July 28th, 1814, to France. Mary's elopement was effected in the early morning, without disturbing Godwin's quiet slumber. Her step-sister, Jane Clairmont, who accompanied her, thought nothing more was intended than an early-morning stroll, but said that she was induced by Shelley and Mary to go with them, being skilled in the French tongue.

Mrs. Godwin pursued the fugitives to Calais, but did not succeed in inducing even Jane to return home. That he had not any reason to suppose Harriet to be unfaithful to him is

very evident from a letter he penned to her from Troyes, August 13th, 1814, commencing with "My dearest Harriet," and ending with "With love to my sweet little Ianthe, ever most affectionately yours, S." Strangely obtuse to Harriet's outraged feelings and inevitable indignation, he urges her to join them in Switzerland, and he tells her that from none can she expect such consideration for her feelings and interests as himself, for all others "have beloved friends of their own, to whom their affection and attention is confined." It is difficult to suppose that such a statement could have appeared to Harriet otherwise than ironical. Even if Harriet's condition would have rendered it prudent to cross the Channel and travel to Switzerland, her self-respect prevented her joining her husband and her rival. One day Shelley asked Mary why she suddenly looked so sad. Her answer has been preserved: "I was thinking of my father, and wondering what he was now feeling." Shelley then said, "Do you mean that as a reproach to me?" and she answered, "Oh, no! Don't let us think more about it" (p. 453). What the father felt we know from a letter which he wrote to Shelley in the spring of 1816:

As long as understanding and sentiment shall exist in this frame, I shall never cease from my disapprobation of that act of yours, which I regard as the great calamity of my life (p. 551).

Whatever Godwin's "anguish" may have been, or Harriet's sense of desertion, or Mary's occasional remorse, Shelley himself, if we may accept Jane Clairmont's testimony, was in the greatest delight, and able to exclaim, in view of the Alps —

How great is my rapture! I, a fiery man, with my heart full of youth and with my beloved by my side—I behold those lordly, immeasurable Alps. They look like a second world gleaming on one; they look like dreams more than realities, they are so pure and heavenly white (p. 453).

And all this optimism in one who was living beyond his means, and whose rapturous honeymoon on the Continent plunged him still further into debt. It was on September 13th, 1814, that the joyful, but impecunious, travellers returned to London, Shelley having, with some difficulty, induced the captain of the vessel to trust them for the passage-money. Godwin absolutely refused to have any communications whatever with Shelley, except through his solicitor; on which circumstance Mary disappointingly exclaims in her journal, "Oh, philosophy!" This action of Godwin's was simultaneous with a laudable attempt on Shelley's part to obtain pecuniary

help for the man he had once regarded as an idol, and who was now so closely connected with him through his alliance with his daughter. Perhaps, however, Harriet and the child wanted the money quite as much, to say nothing of his own creditors. But these notions are too commonplace for genius.*

(*To be continued.*)

The Life and Work of the Seventh Earl of Shaftesbury, K.G. By Edwin Hodder. Three Vols. Cassell and Company. London, Paris, New York, and Melbourne. 1887.

(*Concluded from p. 289.*)

To resume Lord Shaftesbury's Diary, we extract the following interesting reference to Cowper :—

August 20th. Have been reading "Life of Cowper." What a wonderful story! He was, when he attempted his life, thoroughly mad; he was never so at any other time. Yet his symptoms were such as would have been sufficient for any "mad doctor" to shut him up, and far too serious to permit any Commissioner to let him out, and, doubtless, both would be justifiable. The experiment proved that Cowper might safely be trusted; but an experiment it was, the responsibility of which not one man in three generations would consent, or ought, to incur. We should, however, take warning by his example, and not let people be in such a hurry to set down all delusions (especially religious delusions) as involving danger either

* A biographer of Shelley, certainly not wanting in appreciation and praise of Shelley, thus expresses himself :—"If a reunion of heart with Harriet was possible before, it now became impossible. Shelley fell helplessly in love with Mary; quitted Harriet; offered his heart-homage to Mary, &c., &c. . . . . Poor Harriet, who had behaved well to Shelley according to her lights and opportunities, was much to be pitied, and as yet in no way pointedly to be blamed." "Harriet was a frank, kind, nice girl, and in all ways worthy of any ordinary man's love" ("Shelley's Poetical Works," pp. 15, 17, edited by Rossetti). But more than that, we have ample proof from Shelley's own statement that she was worthy of an extraordinary man's love also. Her fickle husband had addressed lines to Harriet in 1813, in the dedication to "Queen Mab," which speak for themselves.

Beneath whose looks did my surviving soul
Riper in trouble and virtuous daring grow?
* * * *
Harriet! on thine; thou wert my purer mind;
Thou wert the inspiration of my song.
* * * *
Then press into thy breast this pledge of love;
And know, tho' time may change and years may roll,
Each floweret gathered in my heart
It consecrates to thine.

to a man's self or to the public. There are, I suspect, not a few persons confined whom it would be just as perplexing, and yet just as safe, to release as the poet Cowper.

Mention is made of the attention paid by Lord Ashley in 1847 to the case of a lady who had been shut up in a lunatic asylum whom the Commissioners regarded as perfectly sane, and who was, in consequence, set at liberty. This lady was, it is stated, a victim of a cruel conspiracy. Again, a lady who was satisfied that a friend of hers had, under the same circumstances, been carried away to an asylum fifty miles from London, called on the Earl and told him her suspicions :—

It was evening when she arrived in Grosvenor Square, and dinner was on the table, but within a quarter of an hour Lord Shaftesbury was on his way to the railway station to go down to the asylum and investigate the matter for himself. He did so, and on the following day the young lady was released, it having been authoritatively ascertained that she was not in a state to render it necessary for her to be an inmate of an asylum. (Vol. ii., p. 230.)

Lord Ashley's promptness and alacrity in the visitation of asylums at other than the period of official inspection are shown in the following entry :—

May 15th, 1849. Made a night visitation to Hoxton Lunatic Asylum, having suspicions of misconduct ; found, I rejoice to say, things far better than we expected ; our system, therefore, of inspection may be considered successful, and our terrors salutary. Ventilation of apartments very bad.

In the year 1851, Christmas Day, very shortly before he became the Earl of Shaftesbury, he made the following review of what he had been able to effect :—

Seventeen years of labour and anxiety obtained the Lunacy Bill of 1845, and five years of increased labour since that time have carried it into operation. It has effected, I know, prodigious relief, has forced the construction of many public asylums, and greatly multiplied inspection and care. Much, alas ! remains to be done, and much will remain ; and that much will, in the estimation of the public, who know little, and inquire less, overwhelm the good, the mighty good, that has been the fruit.

The next record of Lord Shaftesbury's labours in lunacy legislation has reference to the proper provision for criminal lunatics. He had in 1852 brought the subject under the notice of the House of Lords, and had urged the necessity of the establishment of a State Asylum, in which they could be separated from the insane who had not been convicted of

crime. His attempt at that time fell to the ground in consequence of the want of support he received from Lord Derby; and it was not till eight years afterwards (1860) that an Act was passed making special provision for this class, the result of which was the establishment of the Broadmoor State Asylum for Criminal Lunatics.

Reference is made to the attempt to establish, in 1861, a benevolent asylum for the insane for the middle classes. As is well known, the enthusiastic meeting held in the Freemasons' Hall, with Lord Shaftesbury in the chair, ended in nothing but the subscription of £760, which, doubtless, was afterwards returned to the donors. It so happened, however, that the notorious vendor of pills and ointments, Mr. Holloway, was present at the meeting, and was so impressed with the statement of the need for such an institution as that advocated by Lord Shaftesbury that within a few weeks of the meeting he had an interview with the Earl, and expressed his willingness to expend a very large sum of money upon a building for the above purpose. It appears that Lord Shaftesbury advised him to divide his munificent gift in more than one object, the result being that Mr. Holloway eventually expended £300,000 upon the Holloway Sanatorium, Virginia Water, and £450,000 upon the Ladies' College at Egham. We have heard Lord Shaftesbury express his deep regret that the donor did not amply endow the Institution for the Insane for the Middle Classes; and with the information supplied in this biography, showing the influence exerted by the Earl, we are surprised that he did not bring about that which he regarded as so great a desideratum. The result is that, with all its advantages, this institution only partially meets the object which the benevolent gentlemen who met at the Freemasons' Tavern, 19 April, 1861, had in view.

In 1862 the "Act to amend the Law relating to Lunatics" which Lord Shaftesbury brought forward was passed. Among other clauses it was provided that there should be an increased visitation, a greater protection of single patients, and increased safeguards against the improper confinement of alleged lunatics. In his speech Lord Shaftesbury related that on one occasion he was sitting on the Commission as Chairman when the insanity of a lady was being discussed. His view was opposed to that of his colleagues. A medical man, who was present to give evidence in support of her lunacy, came up to Lord Shaftesbury and said, "Are you aware, my lord, that she subscribes to the Society for the Conversion of the Jews?"

"Indeed!" replied his lordship; "and are you aware that *I* am *President* of that Society?"

We next come to Mr. Dillwyn's motion for the "Select Committee to inquire into the operation of the Lunacy Law so far as regards the security afforded by it against violation of personal liberty." This was on the 12th February, 1877, and it was duly appointed. We must quote the entries made by Lord Shaftesbury in his diary in reference to it.

February 13th, 1877. Mr. Dillwyn has obtained a Committee of Inquiry into the operation of the Lunacy Laws. As in 1859, and so now, I shall be summoned as Chairman to give evidence.

March 11 . . . My hour of trial is near; cannot, I should think, be delayed beyond the coming week. Half-a-century, all but one year, has been devoted to this cause of the lunatics; and through the wonderful mercy and power of God, their state now, as compared with their state *then*, would baffle, if description were attempted, any voice and any pen that were ever employed in spoken or written eloquence. *Non nobis Domine.*

It is clear that Lord Shaftesbury was very nervous as to giving his evidence, and not a little anxiety was certainly depicted on his countenance as he paced the corridor in attendance for his examination; but those who heard him can bear witness to his nerve, instead of his nervousness, and to the proof which he gave of his thorough familiarity with the subject. It is observed by his biographer "that the worn look of Sir John Millais' portrait of him, painted about this time, sufficiently attests the state of his nerves," and the newspaper which he had once ironically called "my friend," made the observation: "These lines in the face of the Philanthropist would be painful were they not pathetic."

Lord Shaftesbury made the following entry under date July 22 :—

Sunday . . . Appeared again on Tuesday, 17th, before the Committee. . . . Beyond the circle of my own Commissioners and the lunatics that I visit, not a soul, in great or small life, not even my associates in my works of philanthropy, as the expression is, have any notion of the years of toil and care that, under God, I have bestowed on this melancholy and awful question.

Two events are fresh in the memory of our readers, namely, the motion made in the House of Lords by Lord Milltown for an inquiry into the administration of the Lunacy Laws, and the subsequent introduction of Lord Selborne's Lunacy Amendment Bills in 1885. Mr. Hodder observes—"Very pathetic are the outpourings of his heart as he contemplates the possibility

of the labour, the toils, the anxiety, the prayers of more than fifty years, being in one moment brought to naught, and cries 'Cast me not off in the time of old age,' &c. He felt that God had manifestly blessed the efforts of this Commission; and it was a grievous disappointment to him when Lord Milltown's motion was carried." (Vol. iii., p. 504.)

Mr. Hodder states no more than the truth when he says: "From the moment when, in the midst of great bodily and mental suffering, Lord Shaftesbury was summoned to London to consider it, it was the source of almost constant anxiety. It involved a long correspondence with the Lord Chancellor." His disapproval of the Bill was, as we know, followed by his resignation of his office as Chairman of the Board.

The following entry in his Journal has reference to his feelings at this juncture:—

> May 5th, 1885. My conclusions were—I could not go down to the Lords and sit through the passing of such a measure, and be thus a party to its enactment. I could not, while holding an office under the Chancellor, oppose him by speech and division. He offered me permission to do so, but he knew, as well as I did, the indecency of such a course.

In vain Lord Shaftesbury remonstrated with the Lord Chancellor, whose disregard of his advice "greatly embittered his last days." When the progress of the Bill was arrested, in consequence of political events, Lord Shaftesbury was prevailed upon to resume his office, to the great satisfaction of his colleagues in Whitehall Place.

Having now availed ourselves of all the references contained in these volumes to Lord Shaftesbury's work in Lunacy Reform, and not only reform, but the prevention of what he regarded, and what the Medico-Psychological Association regarded, as mischievously meddlesome legislation, we have only to express our admiration of his career in humane endeavours to mitigate human suffering in all directions, although it does not fall within our province to go beyond the services rendered to the insane. On the occasion of his death we paid a tribute to his memory, and were we to expatiate further here upon his "record" we could do little more than repeat the observations we made in that article. It is to be hoped that some other nobleman will arise to supply his place, gifted with the same unselfish love of his fellows, the same perseverance in perfecting and sustaining the work upon which he entered, and the same judgment in limiting the extent of legislative interference to the action called for in the interests of the insane

themselves as regards prompt treatment and the avoidance of unnecessary publicity.

For those who profess to reverence the memory of the Earl of Shaftesbury, the volumes before us, so full of entries revealing his inmost feelings, and so ably edited by Mr. Hodder, ought to possess the greatest interest, and we trust that the extracts which we have made will induce our readers to procure the work for themselves. We have been astonished to find how few among our friends, well acquainted as they are with the near relation in which Lord Shaftesbury stood to their daily occupation, and many, more or less, knowing him personally, have sufficient enthusiasm to induce them to read, still less to buy, this good man's biography.

Magnétisme et Hypnotisme; exposé des phénomènes observés pendant le sommeil nerveux provoqué. Par Dr. A. Cullerre. Avec 28 figures. Paris: Librairie, J. B. Baillière et fils, 19, Rue Hautefeuille. 1887.

M. Cullerre is known as a writer of works upon mental disorders: general paralysis; melancholia and stupor; alcoholism in relation to ideas of persecution; tuberculosis and heart diseases in the insane; cerebral localization, &c. The author, as would be expected, treats the whole question from the Braid standpoint. He gives a very complete and readable history of the fortunes of artificial somnambulism, the discovery from time to time of strange and unexpected phenomena, the misinterpretations of these facts, the ignorance on both sides, namely, the ignorance of the scientific explanation on the one hand and the ignorant denial of the facts on the other. Of the two forms of ignorance the last is the most inexcusable. It has not died out yet. Progress is impossible in the presence of this refusal to acknowledge facts. The morbid dread of being imposed upon is a mania with a certain class of scientific exquisites.

But Dr. Cullerre's book is not merely a history. He discusses many of the questions which arise out of the phenomena witnessed in our own day in France, and offers judicious comments. An important section has reference to the dangers of hypnotism, which, like chloroform, may be perverted to vile ends.

Our space will not allow of more than a brief notice of this book, which we commend to our readers as interesting, well arranged, and free from prejudice. It forms a volume of the "Bibliothèque Scientifique Contemporaire."

The Health of Nations: A Review of the Works of Edwin Chadwick, with a Biographical Dissertation. By Benjamin Ward Richardson. Two vols. London: Longmans, Green, and Co. 1887.

Dr. Richardson is to be congratulated on having completed this laborious undertaking. The name of Edwin Chadwick has been for so long a household word that it is difficult to credit that he is still living, and to believe in the identity of the author of so many articles, extending over the greater part of the century.

To Mr. Chadwick the medical psychologist must be grateful, because whatever tends to improve the health of a nation is calculated to diminish the risks to the development of mental diseases. Under the head of "The Physiological Limits of Mental Labour" (Chap. IV.) and "The Psychological Limits of Mental Labour" (Chap. V.), Mr. Chadwick's insistance upon correct principles is lucidly set forth, and the reader will peruse with interest a letter from him to Professor Owen, and another from Owen to Chadwick, upon the latter, the psychological aspect of the subject. They deserve wide circulation even now, and no doubt had a salutary effect at the time they appeared in disseminating wholesome views on the limits of mental labour, though it is lamentable to think how many have turned a deaf ear to these notes of warning.

It would carry us too far to attempt to analyse the contents of these valuable volumes, which will remain not only a permanent monument to the wisdom and practical sagacity of Mr. Chadwick, but also to the industry, skill, and loving labour of his friend, the editor and biographer. The work will always be valuable for reference, and every medical man whose ken extends upon the narrow horizon of his own selfish interests would do wisely to possess himself of these volumes. No library ought to be without them.

Before Trial: What should be done by Client, Solicitor, and Counsel, from a Barrister's point of view; together with a Treatise on the Defence of Insanity. By Richard Harris, Barrister-at-Law. London: Waterlow Bros. and Layton, 24, Birchin Lane. 1886.

This little book, coming from a lawyer, is refreshing. It is singularly free from prejudice. It will help to break down the barrier between lawyers and doctors. The manner in which the author tears to pieces the *dicta* of the judges in regard to criminal responsibility is charming. "Let me ask," says Mr. Harris, "with all reverence due to departed greatness, Can anyone examine them for a moment and not perceive that they are for the most part wrong? . . . The closer you examine the distinctions between sanity and insanity, the more clearly it will appear that while Justice and Common Sense were for acquitting the lunatic, Authority and Precedent were for hanging him." Again, "I have always felt that the medical profession is too little regarded in this question of insanity. Medical men are the very best, nay, they are almost the only persons capable of pronouncing a trustworthy opinion on the subject. They are too often ignored, as if they always came to get a prisoner acquitted, and as if they had a motive for so doing. They pronounce their opinion on facts, and unquestionably it is by facts that the condition of a man's mind must be ascertained; whereas the judges, for the most part, seem to regard the question as one of *law;* as will be shown by the answers I am about to examine. What was said in such and such a case must be said in this; the man who has been in his grave for fifty years must serve the case of to-day. In fact, precedent, for the most part, may be described in the words of the old song:

> "It was my father's custom,
> And so it shall be mine."

On the well-known legal test for insanity, our author irreverently observes: "The question whether the accused knew it was wrong has, I venture to say, no more to do with the issue than an inquiry as to whether the man at the time he committed the murder could stand on one leg." Mr. Harris says, in conclusion, "that the defence of insanity has been rather a trap than a means of escape. Happily, the *tendency* of modern practice is becoming more and more in accordance with enlightened reason; at least, my experience leads me so to believe. Judges

do not like to abandon what almost looks like their prerogative of life and death to the medical profession; but I feel sure that a time will come when the question of sanity or insanity will no longer be left to the misleading definitions of legal ingenuity, but will be decided by the unerring test of scientific experience."

We purposely abstain from further quotations, because we wish our readers to obtain for themselves this little book, which can be had for a trifle, and is worth a great deal more than many learned folios which have been written on the subject; the reason being that it is the outcome of unprejudiced common sense, and a determination to be guided by medical facts.

The Defence of Insanity in Criminal Cases; being an Essay by Lancelot Fielding Everest, M.A., LL.D., Barrister-at-Law. London: Stevens and Sons, 119, Chancery Lane. 1887.

This is a sensibly-written essay, which like that reviewed above shows that there are lawyers who rise above the parrot-cry of the defence of the legal tests of criminal responsibility against the attacks of mental physicians. On the contrary, Mr. Everest avers that "no test at all is better than the imperfect and unsatisfactory test laid down in the answers in McNaghten's case," and he asks why should the law remain in such an unsatisfactory condition when a remedy might be afforded by legislation? With Pandulph he might say:—

> Therefore, since law itself is perfect wrong,
> How can the law forbid my tongue to curse?

He would have only a general principle laid down, namely, that no man can be held responsible for an act if at the time he does it he is labouring under insanity. Each case would then be determined by the jury according to the evidence given by medical men and others as to whether the alleged lunatic is insane and ought to be acquitted on that account. There is certainly much to be said in favour of this simplification of the plea of insanity in criminal cases. At one bold sweep it gets rid of the complex tests which the ingenuity of the puzzled judicial mind has evolved with such great elaboration and with such little success. The author does not pretend to provide any test whatever; and he practically leaves the jury to be guided by the opinion of the medical witness as to the re-

sponsibility of the prisoner, although the author does not exactly say so.

Mr. Everest will, we hope, take every opportunity of instilling his views, both destructive and (with some exceptions) constructive, into the minds of the judges. He proposes that —

> The suggestion of insanity should come from some independent source—say, from some medical authority appointed by Government —and let the question of insanity be tried in some such way as follows :—Let a skilled physician, appointed by Government, go the rounds of the gaols periodically before Quarter Sessions and Assizes, and send those cases in which there is a suspicion of insanity before a special tribunal for the purpose of trying the question of insanity, and that only.

The judge ought, the author considers, to have studied lunacy. We fear, however, that this is not practicable. He is to judge of the admissibility of evidence without being bound by the ordinary rules of evidence of Courts of Law.

Anatomy of the Brain and Spinal Cord. By J. Ryland Whitaker. Edinburgh, 1887.

The author has no doubt used his experience as a demonstrator to arrive at such well-chosen words to convey his descriptions of the brain and spinal cord. Admirable in clearness, and including everything of real importance, this little book will be found to be a useful manual, not only to the student, but to those who keep up or revive their knowledge of the anatomy of the nervous centres. The verbal descriptions are concise and well expressed, and the illustrations show special skill. There are twenty plates which portray in a striking manner the most important structures in the brain and spinal cord, as well as the vessels and enveloping membranes. Some of the most instructive are of the diagrammatic kind, in which good use has been made of contrast in colours in bringing out the most essential characters. It is curious to observe how much Mr. Whitaker manages to describe in a short space; with the help of his diagrams, he gives a wonderfully clear description of the fissures and convolutions of the brain in ten pages.

It would be too much to say that Mr. Whitaker has made easy the anatomy of the brain and spinal cord, but it appears to us that he has made it easier than any other manual we have read.

A Text Book of Pathological Anatomy and Pathogenesis. By Ernest Ziegler, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited by Donald MacAlister, M.A., M.D., M.R.C.P., Fellow and Medical Lecturer of St. John's College, and Physician to Addenbrooke's Hospital, Cambridge. Second edition. Three Vols. 1885-7. Macmillan and Co., London.

The present work appears in three volumes; the first deals with general pathology, the second and third with special pathology. A fourth volume, which will include a department of special pathology,* is *sub judice* for the present. Its omission is, perhaps, a wise one, for the pathology of this particular department is abundantly represented in special treatises. As it stands, the work is a complete treatise, and embodies a very large mass of information, for there is no waste of words, the style being terse, without, however, too much compression. Professor MacAlister has wisely retained the plan, in the original work, of setting forth the more essential teachings in larger type—the less essential, illustrative, or reference portions, in smaller type. The subject matter is broken up into a number of well-defined chapters. To the order in which these are arranged in the general part of the work one might perhaps object that the plan adopted is not a very apparent one, and might be improved on. We find, for instance, a chapter on malformations taking precedence, whereas it would seem more fitting that complex deviations from the normal should succeed simpler deviations. But this may or may not be so, and in any case the question is of minor import.

The chapter on tumours is preceded by one on the "infective granulomata," which of course takes in tubercle, syphilis, leprosy, etc. The term "infective granuloma" is a happy one, for it sets forth, as Ziegler insists, two important facts, viz., clinically, the infectious nature of these formations, and anatomically, the structure which characterizes them. We may note as an omission in this chapter, that lupus is spoken of as without a known exciting cause, whereas the cause is generally held to be the bacillus of tubercle, lupus being now described as a form of skin tuberculosis. Again, in the case of glanders, the bacillary nature of the poison is omitted.

* On the Eye, Ear, Bones, Muscles, and Genital Organs.

On the etiology of tumours there is a good chapter. In it Cohuheim's hypothesis in particular is fully considered.

A very important feature in the general part of Ziegler's work, is a lengthy chapter on parasites. This subject is very ably dealt with and abundantly figured. We find ourselves here, of course, on somewhat unstable ground, and there is evidence of this in the English version before us, for in several places we note deviation from the text of the third edition of the German work. Perhaps Prof. MacAlister has wisely put the drag on a little, and not allowed himself to be carried away by the too numerous winds of doctrine which prevail in this region. The value of a certain amount of *vis inertiæ* is at times undoubted.

From the special part of the work we shall pick out the nervous system for consideration. The topography of the brain scarcely calls for notice, though we may observe that the inclusion of the anterior occipital furrow and the inferior occiptal furrow amongst the "most important sulci" is surely not usual. The physiology of the cortex cerebri is very briefly referred to.

In the anatomy of the spinal cord we could wish that the rational nomenclature advocated by Dr. Gowers were adopted, and that in place of the columns of "Goll," or even of the "funiculus gracilis," the name "posterior median column" were substituted. In like manner the term "postero-external column" is far more easily remembered than "column of Burdach," and, moreover, it describes itself as to locality. In the further description of these two columns, the fact of the former consisting of very long commissural fibres, the latter of short commissural fibres, might well have been insisted on since it helps the understanding in relation to the ascending degenerations.

Under the heading of meningeal hydrocephalus, we find the statement that occasionally the accumulation of fluid is not preceded by cerebral atrophy. The effusion is thus described as a primary event, which may cause more or less compression of the brain and dilatation of the skull. Is this pathology really established?

If space permitted we would refer to some other points of interest in relation, *e.g.*, to the causation of microcephalus, to the question of hypertrophy of the brain, to the prevailing doctrine as to the so-called "pachymeningitis of the dura mater," the discussion of which is, we think, somewhat unsatisfactory. In the section on tumours affecting the

central nervous system, we should like to have seen the question of the frequency of metastasis from primary foci in the nervous system touched on.

But it will be said, and the criticism will be just, it is demanding too much from a text-book that all moot points shall be solved. It is, and in defence we can only plead that, having been taught so much, we naturally turned to the same source for more. It would be instructive to ourselves if we could examine other portions of the special pathology volumes; but we are unable to do so, and must end a very cursory review.

Of considerable importance in Ziegler's work are the numerous references to the literature of the subject; this has been greatly increased in value in the present edition by fuller notice of English and French memoirs. This is a very important addition. The work, as now completed, we heartily welcome, and as heartily recommend. It will prove invaluable as a text-book and as a book of reference, and certainly is not replaceable by Cornil and Ramier's text-book of pathological histology, which also figures in our English dress. Were Birch Hirschfeld's work on pathology translated, there would be a serious rival in the lists. As it is, and thanks to Professor MacAlister, Ziegler "holds the field."

The Curability of Insanity and the Individualized Treatment of the Insane. By John S. Butler, M.D. G. P. Putnam's Sons, New York and London, 1887.

This little book, from the pen of the former Superintendent of the well-known Retreat for the Insane at Hartford, Conn., will receive a friendly welcome from all who know the venerable physician, who here gives the results of his life-long experience and reflections.

We note with interest Dr. Butler's approval of the recent attempts to separate the chronic from the acute and curable insane. He records that at the meeting of the "Association of Medical Superintendents of Institutions for the Insane," held in Pittsburg, in 1865, he stated to the Association that "the admission into the Hartford Retreat of a large number of incurable State patients had greatly embarrassed the remedial treatment of the recent and hopefully curable." Hence he suggested some kind of distinct provision for

chronic lunatics to be adopted by the State. The proposition led to an excited debate, and all but unanimous disapproval. The meeting in 1866 reaffirmed the views which had been always held by the Association, and Dr. Butler's views were shelved. We can understand the interest he takes in the "segregation" movement and the compliment he pays to Dr. Dewey, of the Kankakee Asylum. The testimony borne by so honoured and experienced an asylum man to the advantages arising from variety in the arrangement of buildings, and the wisdom of separating the demented and imbecile from recent and acute cases, is very striking, and shows a mind open to receive new impressions and experiments, which is the exception rather than the rule in those who have reached advanced life.

Elements of Physiological Psychology: A Treatise on the Activities and Nature of the Mind from the Physical and Experimental Point of View. By George T. Ladd, Professor of Philosophy in Yale University, U.S.A. London: Longmans, Green, and Co. 1887.

We are obliged to defer a notice of the above work to a future number, but in the meantime we commend it to our readers as a valuable addition to the literature of psychology studied by scientific and physiological methods. Professor Ladd has spared no pains to make the treatise comprehensive and suited to form a text-book for special students in this department.

Three Lectures on the Anatomy of Movement: A Treatise on the Action of Nerve Centres and Modes of Growth. By Francis Warner, M.D., F.R.C.S., F.R.C.P. London: Kegan Paul, Trench, and Co., 1, Paternoster Square. 1887.

These lectures were delivered by Dr. Warner at the Royal College of Surgeons of England, and may be studied with profit by psychologists. The author is ingenious and industrious, and has succeeded in illustrating the truth that the motor action of the brain is an integral portion of our being, subject to the same laws and conditions, and that "the forces which, acting upon the brain, stimulate motor

action, are those which stimulate growth in other parts and other tissues." Dr. Warner endeavours to show that this motor action may be described by a reference to the parts moving, and the attributes of the movement, its time and quantity. Growth, on the other hand, involves a reference to "the parts growing, the time, quantity, and kind of growth." The resultant of the two (motor action and growth) is frequently due to "the time and quantity of the component individual acts." Further physical forces may control the attributes. The author hopes that, by pursuing the inquiry on these lines, our knowledge of motor actions may be extended, and the origin of at least some modes of mental expression may be elucidated. We do not find that these lectures admit readily of analysis or quotation. Nor can many very definite results be given as the outcome of Dr. Warner's researches. Still, they deserve every encouragement, and we hope he will continue to pursue them with unabated ardour. We have before us also a syllabus of a course of six lectures on "The Children: How to study them," by the same lecturer, delivered at the request of the Fröebel Society. They appear well calculated to stimulate observation, and to make the child a subject of study to a much greater extent than is usual. They are in the direction of thought so largely cultivated by the late Professor Laycock.

Nervous Diseases and their Diagnosis: A Treatise upon the Phenomena produced by Diseases of the Nervous System, with especial reference to the recognition of their Causes. By H. C. Wood, M.D., LL.D. Philadelphia: J. B. Lippincott Company. 1887.

This is a valuable work which can hardly fail to obtain a large circulation in this country as well as in the United States. The author speaks from a large and varied experience, the matter is very clearly arranged, and the style lucid and attractive. It will increase the reputation of this physician.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *Scandinavian Retrospect.*

Swedish Gymnastics: Educational and Medical.

By Ellen F. White, Certificated by the Royal Gymnastic Central Institute at Stockholm.*

I. *Educational.*

Having had my attention drawn by special circumstances to the Swedish gymnastics in England, I was induced to seek admittance to the Royal Central Institute at Stockholm in order to become thoroughly acquainted with the system, and as this system is beginning to attract much attention now in England, it may be of interest to have a short account of the Institution and of the course of instruction pursued in it.

The building occupies a triangle where two streets meet. A large gateway opens into a triangular court beyond, where various schools are drilled in fine weather. Two sides, looking on to the streets, are occupied by professors' dwellings and large lecture-rooms and dressing-rooms; on the third side are the two large gymnasiums, one of which is called the fencing hall.

The object of the course is to send out teachers, thoroughly trained, to teach, both practically and theoretically. The course is carried on in two great divisions, one for men and the other for women, and in these two the methods of instruction employed are quite distinct from each other. Of the former nearly all are young lieutenants who learn fencing, with military and pedagogical gymnastics, anatomy, and physiology. Their course lasts two years, one half of the students changing each year.

I shall speak almost exclusively of the women's course. None are admitted over thirty years of age or under twenty, except under special circumstances. The native students are limited to twenty in number, the class being formed only every second year. The foreigners are but three or four, Norway, Denmark, and Finland each having usually a representative there. All must bring a certificate of health and of freedom from deformity, signed by a doctor. The course of study lasts two years, and is tolerably severe, embracing several subjects. The system consists of two main branches, the medical and (as they are called in Sweden) the "Frisk" or health gymnastics, for all in health, of whatever age or sex. Anatomy, physiology, and

* Miss White is the first English lady who has passed this examination.

The Medical aspect of the Swedish Gymnastics will be treated of in the next number. The bearing of the subject upon the treatment of the insane is obvious.—[Eds.]

lessons in health are needed for both branches. The other subjects are theoretical gymnastics, pathology, and the mechanics of the body. There is a large staff of teachers, mostly gentlemen, many of them officers in the army.

The day's work begins at 8 a.m. with a practical lesson in medical gymnastics, under the superintendence of a lady teacher. A "table" of a certain number of movements is gone through by the students, so that all may in turn both give and take the movements.

Stays and heels are of course strictly forbidden, and the students are expected to wear a special gymnastic costume, consisting of a loose tunic reaching to the knees, with a belt and knickerbockers of the same length to match. A constant change of comrade is insisted on to accustom the student to patients of different size and powers. This lesson lasts an hour, and as the students become a little more expert they help in turn, two of them together, for a month at a time, with the patients. From 9 o'clock till 11 is free time, and is used mostly for reading and breakfast. From 11 till 3 class follows class as closely as possible.

Pathology is taken up the second year, when the students have become somewhat acquainted with the movements, and have gone through the anatomy and physiology courses. It is not only stiff joints, spinal complaints, and muscular contractions from burns and other causes which are treated, but diseases of all kinds. Consumption, indigestion, and even spasmodic asthma and affections of the heart may be greatly relieved, if not permanently cured. A Swedish author, writing on gymnastics and medicine, says that gymnastics are the only radical method for strengthening the digestive organs. Anatomy and physiology are both taken the first year, each having three hours per week devoted to lectures. The anatomy is taken by a doctor, and most of the time spent on this subject is passed in the dissecting room. The students are not expected to do the dissecting themselves, yet they may do it if they please. Lessons in health are also taken in the first year.

Sanitary science is not so far advanced in Sweden as in England, and the benefits of open windows and daily baths are far from being universally admitted even amongst the students, which renders these lessons doubly necessary. The part which brings most life into the course is the practical gymnastics. The students have an hour's "health" gymnastics every day, at which all must attend in their costumes. The lightness and ease of this dress seem to have a corresponding effect on the spirits of the students, who are brighter and more lively then than at any other hour of the day. The work done here is truly systematic, the movements following each other in a prescribed order. Progressive tables of movements having been drawn up by those well versed in the subject, so that no new movement can be taken without due preparation, the students are led on step by step from simple easy movements to those more complicated and difficult

without the least danger of over-exertion. Thus, a balancing movement is introduced by resting the hands lightly on a support, and a back-bending movement is taken, at first with the hands on the hips, the exercise being increased in difficulty later on by stretching the arms upwards or outwards.

Apparatus is largely used from the beginning, many movements being performed with its aid which, without it, would be too difficult for the beginner. For instance, to rise from a recumbent to a sitting position is impossible for many without help; but if the toes are put under a bar, or if another person press on the insteps, the difficulty vanishes in most cases.

One of the most important principles laid down is that the aim of gymnastics is not to strengthen the arms and legs to jump higher or to run faster than others, but to develop the whole body, especially the organs of respiration, circulation, digestion, &c., in due proportion to one another, and to the muscular system of the body, so that the former may not be worn out by their efforts to supply the extravagant demands made upon them by over-developed muscles.

There is a school of instruction in connection with the Institute where the students learn to drill the children under strict supervision. The children are divided into so-called "squares," each square consisting of eight or ten children. Each student has a square committed to her care, and six or seven squares are drilled at one time. The children form in a long line, and at the word "March" from the teacher each student takes her square to the appointed place and puts them through the table of movements which she has prepared for them. To the uninitiated looker-on the scene is at first confusing, but it is soon perceived how everything goes in regular order, how the apparatus is used in turn, and how well the squares keep to their own place without interfering with one another. It would be doubtless easier to have the whole room at one's command; but one learns watchfulness, concentration, and readiness of resource which it would be impossible to learn under easier circumstances. The teacher is present the whole time, taking notes of mistakes to be commented upon afterwards, and ready to help in any difficulty which may arise.

The success of a class depends entirely on the teacher. If she be dull and uninterested, the children will become either sleepy or unruly. She must make the children feel that she is watching each one, and that nothing escapes her eye. She must be bright and lively, and show that she enjoys the lessons as much as they. The children's costume need not be such a difficulty as it is commonly made in England in girls' schools. The children in a Swedish school, at any rate the younger ones, often have their costumes of the same materials as their dress, so that the skirt is worn over the gymnastic dress, and slipped off for the lesson without time being wasted in changing. Younger children are easier to teach than older. They like to move about, but they must be kept occupied the whole time. There must be no spare moments when they can begin to talk or play.

Let them rest and play, but let it be lawful rest. When once the word "Attention" is said all must be on the alert. Older girls often think it too much trouble, and are too fond of their stays and high heels, so that whilst needing the exercise more than the little ones they are more often excused attendance, and when they do come they bring to the lesson a passive indifference which is more trying to the teacher than the superabundant spirits of their juniors.

No protective apparatus, such as mats, pillows, &c., is used. If a new movement is taken, and the children after two or three days still fail to grasp the idea of it, this is a proof that it has been taken too soon, and it must be discarded until simpler exercises have prepared the way for it. It is this care which renders the use of mattrasses, &c., unnecessary. To take an example. The first lesson in jumping is (1st) to rise on the toes; (2nd) to bend the knees, keeping the body straight and well balanced; (3rd) to straighten the knees; and (4th) to lower the heels. When this can be done both slowly and quickly without any loss of balance, the child springs off the ground at 3, coming down with feet, knees, and body in good position. The next step is to jump forwards and sideways. Then to take one, two, or three steps before jumping. By the time these movements have been gone through sufficiently, the children are prepared to begin jumping down from a low elevation, and to do other more difficult exercises, without the least danger of tumbling forwards or backwards, or of injuring the back by coming down on their heels. The teacher must, of course, be constantly on the watch to give help at any moment if needed. Other exercises are all graduated in a similar way, and the children know very well that if they have to go back to an old movement it is because they have not been fully attentive.

Protective apparatus is, however, occasionally used by the young lieutenants under the trapeze. The feats then performed belong rather to acrobatic than to gymnastic exercises. But in the schools all movements done for show are carefully avoided, so that on a review day the children who learn gymnastics take part in a table of exercises which can be followed by all alike. This, of course, excludes those feats of skill in which a few may excel to the neglect of the many, but it ensures that all the children have their full share of attention.

Such children as may have any special delicacy or deformity ought not to be subjected to the same movements as the others. Still, they need not be altogether withdrawn from the school gymnastics. In my own division there was a child with a rupture. Such movements as climbing a rope, or hanging from a bar, running, jumping, and others she was not allowed to take. Before beginning with new pupils, the teacher should always take means to discover if there are any children with a special tendency requiring individual attention, so that, if possible, they may be relegated to a class by themselves.

Our gymnasium is most beautifully fitted up, the apparatus taking

up no floor space when not in actual use. The great charm of it is its exceeding simplicity. The chief qualities required in the apparatus are—(1) that it can be used by persons of both sexes and of all ages; (2) that a great variety of movements can be executed on it; (3) that a considerable number can use it simultaneously; (4) that it takes up but little room when not in use; (5) that its working is so simple that children of 10 or 12 years of age can, if necessary, both set it up and put it away; (6) that it shall be inexpensive, and capable of being made by an ordinary carpenter. This may seem a formidable list of requirements, but it is one not impossible or, indeed, difficult to meet. A light horizontal bar, which can be raised or lowered at will from the floor to a height of seven or eight feet, and which with its upright support may be sunk into the floor when done with, is a most easily-managed piece of apparatus, admirably suited to its purpose. At the Institute, the original bar put up by Ling is still in existence. It runs the whole width of the gymnasium, a length of about 30 feet. Its ends fit into grooves in the walls, and it is raised and lowered by stout ropes running over pulleys. It is heavier and, perhaps, more clumsy, but it is just as useful as the lighter bar described above. It can be used by a larger number owing to its greater length and strength. But its weight and size place it beyond the power of children to raise and lower it. There is no part of the body which cannot be exercised on the horizontal bar. Another almost equally useful arrangement is the "rib stool," or climbing wall. This I have seen in England, in the Cheltenham gymnasium; but there were only two divisions there, whilst here two or three walls are lined with them, so that from 20 to 40 children can be at work together. The rib stool consists of upright posts fixed to the wall, three feet apart, in which are inserted horizontal bars about five inches from each other from the floor to a height of eight or nine feet. This can be used in as many ways as the horizontal bar.

Now and then, perhaps once in three or four weeks, the children are allowed, as a great treat and reward for good conduct, to play games instead of having a lesson, and if the teacher does not join she must at least watch the games to see that all goes rightly.

The exercises for the day are taken in a regular order, beginning with the gentler movements, passing on to the more violent, and concluding with movements calculated to quiet both the quickened pulse and the respiration. The table of exercises begins with (1) a short march and a few quick, decided movements as an introduction; (2) an exercise which brings the circulation into more active play, such an exercise being always followed by a simple leg and foot exercise, which draws the blood away from the heart again; (3) a hanging exercise, which is suited to the powers of the class and acts especially in widening the chest; (4) a balancing movement, with or without support, according to the proficiency of the pupil or the difficulty of the movement; (5) an exercise for the shoulders and

back; (6) a general trunk movement, acting directly or indirectly on the circulation of the internal organs, and thus promoting their healthy action; (7) an alternate trunk movement, such as turning or bending from side to side; (8) jumping, to which some prominence is given, especially for the boys, as bringing every muscle into play, as also developing quickness, decision, fearlessness, correctness of eye, and also a power of gauging accurately what they can or cannot safely attempt. An infinite variety of exercises is included under the common name of jumping, from the first jump on the spot to springing on to a galloping horse's back. Then the lesson concludes with a few quieting leg and respiratory movements, and a march if the children are to return to their desks at once. This is the usual order followed, but it is subject to many modifications according to the time, space, and skill at the teacher's command.

The question of drilling boys and girls together must inevitably come prominently forward if, as in Sweden, the number of schools common to both sexes should increase. At present it has not been tried much, save in the preparatory schools, where no difficulty has been found in drilling the children together up to the age of 12 or 13. As they grow older their powers seem to diverge more and more. The boys gain quickness and greater power for more difficult and stronger exercises; whilst the girls develop a sense of form, so that they are able to execute slower movements without losing time or form. The power of girls in gymnastics depends, however, very much upon their bringing up. Were they allowed as much freedom and activity as their brothers, and assisted by a rational dress in which they might have the full use of their lungs and limbs, bloodlessness, headaches, and backaches would become far less frequent than at present amongst school girls.

I think it is not well to mix boys and girls above the age of 13 in the gymnasium. But it has not been tried sufficiently at present to draw any very definite conclusions. It does not seem to have been a success in our own school of instruction at Stockholm. In this school there were boys and girls from the age of eight to that of 16; and the head-master would not allow them to be separated even for this one lesson. For the junior classes it worked well; but the senior classes were difficult to manage, the girls keeping back the boys, and the boys not being able to appreciate the more accurate and refined work of the girls. The highest class of all consisted entirely, however, of boys of 15 and 16 years of age, and this class was admirably managed by one of our number, who had sufficient power of command to keep them well under her control.

The length of the daily lesson should be from 30 to 40 minutes. If the teacher is not up to her work and makes the class as dull and spiritless as herself, the shorter the lesson the better. A daily lesson should be the rule, even if it does not last more than 20 minutes, rather than a long and exhausting lesson twice a week. In Sweden

seven or eight years is the age fixed by law for children to begin gymnastics. From 30 to 50 children are in ordinary cases enough for a class, but if the children are of fairly equal strength 80 to 90 may be exercised together with advantage, provided space and apparatus will allow. But in places where there are large numbers to be drilled, 100 at a time in some cases, it is exceedingly difficult to give individual supervision, and the age of 9 or 10 is then quite early enough to begin with. On the other hand, medical gymnastics, and gymnastics given individually under the teacher's hand, may begin with the earliest years of childhood.

The boys' drill in the senior classes prepares the way for military drill, into which it imperceptibly merges. Ling defines educational gymnastics as "putting the body under the control of its owner;" military gymnastics as "putting another's body under one's own control." Even in the military branch the harmonious development of the body holds a prominent place, no position being tolerated which hinders a full and free respiration. The art of swimming is also included in the system. It is taught on dry land and with great success. Out of 60 children taught by this method in one of the National Schools 40 could swim at once on getting into the water. This method is fully described in a little book called "Home Gymnastics," published by Isbister and Co., but space forbids me to go into further details.

The whole subject is too wide to be more than touched upon in a paper like this; but there is one point to which I should like to draw attention. It is this—that, whilst deprecating the gratuitous feeding of the children of the poor, I should hesitate to give any which come to our schools in a half-clad and half-starved condition a gymnasium-lesson without their first being fed. Otherwise the lesson can only be to them a pure loss of strength and warmth which they can ill-afford to spare.

(*To be continued.*)

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2. *French Retrospect.*

By D. Hack Tuke, F.R.C.P.

We resume the analysis of the work on Hypnotism, by M. Beaunis, which we noticed in the April number of the Journal (p. 147).*

Hallucinations of hearing appear to be very clearly defined. Subjects are easily made to hear words very distinctly. They resemble the "voices" which the insane hear, commanding them to do things. Nothing is easier than to suggest visceral sensations, hunger or thirst, or the sensation of burning or shivering with cold. Motor hallucinations are most striking in their character, for certain movements may be suggested to the hypnotized while they remain absolutely im-

* A second edition of this work has now been issued.

movable, as dancing, &c., just as happens in our dreams. Then there is the question of the length of time hallucinations may persist after the subject has been aroused from induced sleep. When a time is assigned by the operator the hallucination generally lasts as long, but of course there should be a limit to such an experiment lest some danger arise. When the duration has not been fixed, the time the hallucination lasts may be minutes, hours, or days without any assignable reason. It is noteworthy that it does not disappear in a moment, but gradually fades away.

Next as to what are called negative hallucinations. By suggestion a person or object may be invisible to the subject. How shall we account for this remarkable fact, known to us for many years, but apparently regarded as novel by those who have at last woke up to the importance and interest of these phenomena? It would probably be no exaggeration to say that they have been quite familiar for at least 40 years to those who have turned their attention to the subject. M. Beaunis has no difficulty in explaining negative hallucinations in reference to simple sensations. "When I say to a subject 'You do not see red any longer,' one may suppose that a number of retinal elements (or correlative cerebral elements) have been paralyzed, just as when I say 'You cannot perform a certain movement,' I paralyze a certain group of muscles." It is more difficult to explain how one can make a person who is present be neither heard, nor seen, nor felt, however explicable the production of the phantom of an absent person may be. We are accustomed to the effect of a dominant idea if sufficiently intense in producing a visual sensation, but the reverse experiment cannot be explained in the same way, for it is altogether negative. Furthermore, a person may be made to disappear partially, *e.g.*, is seen, but not heard, or seen and heard, but not felt on contact.

Such marvels are authentic facts, and excellent illustrations are given in M. Beaunis's book. One unpleasant result of not seeing a person who is actually present may be a personal remark which would fall under the category of "things better left unsaid," as in the instance of Miss A. E., who said of M. X., "He looks like a fool."

We pass on to the spontaneity observed in somnambulism, the subject proceeding to the performance of an act with (as has been well said) the fatality of a stone which falls to the ground, and not from reflection. The subject hypnotized is ordered to do a certain thing at a certain hour ten days afterwards. At that very time the act is executed which has been suggested, A. all the time believing himself to be a free agent. In certain cases, however, when the act suggested is very singular or is criminal, the attention of the subject is aroused, and he is himself astonished at this idea. It is accepted by his intellect and implanted there like an obsession. He then feels that his will is overborne, and he is conscious that all resistance is impossible. We see here the analogue of the lunatic who, dominated by

a delusion or an irresistible impulse, kills, steals, or burns with complete irresponsibility. Again, all spontaneity is not abolished in every instance. For example, M. Beaunis asks A. E., during the hypnotic sleep, "Do you wish to dream?" and she replies, "I do not care." "What do you wish to dream?" "What you wish." "Would you like a good breakfast?" The reply is "No." Several kinds of dreams are enumerated and proposed. To all the reply is in the negative. Again, "Do you wish to walk?" "Yes." "Where?" "In Madame X.'s garden." "You are there; are you content?" "Yes." "What are you doing there?" "I am walking on the terrace." Here we see the subject able to make a choice between different proposals. However, M. Beaunis is disposed to admit in theory the irresponsibility of somnambulists, while M. Pitres (*Des Suggestions Hypnotiques*) takes the opposite view in consequence of their resistance, in some instances, to a suggestive impulse. Pitres is, notwithstanding, forced in the end to admit that a doctor will be justified in regarding a somnambulist accused of crime as irresponsible.

Instances of attempts to resist a suggestion to do something disagreeable, are given by the author, and are very curious. He on one occasion suggested to A. E. that she could no longer pronounce any vowel except *o*, and that whenever she found a different vowel in a word she should substitute for it the vowel *o*. She was then aroused from sleep, but, as M. Beaunis had forgotten to suggest to her to speak, she remained absolutely silent for nearly half an hour, until she was free from the suggestion. Had he suggested that she must speak she could not have maintained the silence she desired. The refusal to reply to questions during the induced sleep is sometimes obstinate and prolonged, but an energetic affirmation and a deepening of the sleep secure the wish of the hypnotiser. Somnambulists have been known to reveal the secrets of their lives, as indeed has happened with persons merely talking in their ordinary sleep.

One chapter is devoted to the mental condition present during the hypnotic sleep. M. Beaunis is inclined to think that there is an absolute repose of thought so long as no suggestions are made. If the subject is asked what he is thinking about, he almost always replies "Nothing." And this accords with the motionless body, the expression of his face, and, indeed, a tranquil calm which it rarely presents in ordinary sleep. There are neither dreams nor thoughts, for the subjects, who so well remember when re-hypnotized what passed in the previous sleep, can never recall anything unless suggestions have been made to them. Incidentally, it may be mentioned that the sleep which is without suggestions—a complete blank—is more useful in therapeutics. The judgment seems to be good, and the subjects reason in general very correctly and logically. Liébeault has been much struck with the power of deduction. Hence M. Pitres would seem to be wrong in regarding the hypnotized as an unconscious machine, incapable of reasoning or judging.

M. Beaunis, while not prepared to deny certain astonishing facts vouched for by *savants* of good faith, asserts that he has never seen anything like mental divination, or second sight, and the power of predicting, except that a somnambule labouring under a disease, especially of a nervous character, may announce the day and the hour when an attack may occur, and predict the date of his recovery; but this may be attributed to mere auto-suggestion. The question is raised, Do somnambules tell lies during their sleep? Pitres says they do, and that knowingly and voluntarily. Beaunis has not come across a flagrant instance of lying, only a refusal to answer a question. He has even found that when he thought a subject made a mistake in certain details, he himself was wrong and the subject right. It remains true that in hypnotism the moral being is fully laid bare, not only in its acts, but in its thoughts and most secret feelings! Everything is exposed with the most complete *naïveté*—vices, faults, irregularities, virtues, and passions. "What a study for a philosopher," exclaims M. Beaunis, "to see the naked soul of a Lacenaire. And who knows whether in this examination he may not meet with some pure sentiment, a diamond lost in the dirt, some memory of childhood, which, aroused by suggestion, may become the *point de départ* of the moral reformation of the criminal, and his return to virtue?" We are afraid that the practical English mind will hardly be able to follow M. Beaunis's hopeful expectation.

The last chapter takes up the difficult question of the relation between the hypnotizer and the hypnotized. According to the author, the somnambule is usually unable to hear what is addressed to him by a third person, if he is *en rapport* with the person who has sent him to sleep. This relationship does not obtain only in regard to hearing, but to all the senses. If the hypnotizer takes the hand of the subject after taking every possible means to prevent him knowing who does so, the latter immediately recognizes whose hand it is, and he obeys the gestures and movements which the hypnotizer, without saying a word, impresses upon the limbs of the hypnotized. For example, if he raises the arm of the subject, it remains extended, whilst if a third person does this it falls inert. If the arm is cataleptic, this condition ceases the moment the hypnotizer takes it, without speaking, in order to make it execute a movement, whilst a third person who makes the attempt meets with considerable resistance. Again, if passes are made at a little distance from the subject, he recognises whether they are made by the hypnotizer or by a stranger. M. Beaunis says he cannot tell whether this is due to excess of tactile sensibility. If the subject is asked how he knows who it is who has made the passes, he can give no other explanation than "I feel it." Further, when *rapport* is established, the hypnotizer may take the hand of one of his assistants, and place it in that of the subject, and say "I put you *en rapport* with this person, obey him as you would me." The result is that the subject is precisely as much in relation with the latter as with the

operator. In what does this singular phenomenon consist? Noizet, Bertram, and Liébeault attribute it to the subject thinking of the hypnotiser on going to sleep. Just as, in fact, happens when a mother, sleeping by the cradle of her child, does not cease to have an ear open for it; and, while quite insensible to much louder sounds, hears the least cry from the infant. So thought Dr. Carpenter, whom M. Beaunis classes among "modern hypnotizers." The subject is possessed with the idea that a particular person is destined to exert a particular influence over him. M. Beaunis, while adopting the same view, has met with certain facts which seem inexplicable on this theory, and appear to point to a real relationship between hypnotizer and hypnotized.

In his "conclusions" the author states his belief that "concentrating attention" fails to explain all the phenomena of hypnotism. In seeking for a further explanation, he says, "How can you explain by this means the fact that the subject will see a person when awake, who has been impressed upon his mind when asleep, a week before, if this suggestion has been made?" Here the suggested idea remains in his mind all that time without his being conscious of it, but it comes to the surface at the very hour fixed upon. M. Beaunis cannot find here any proof that the mind was concentrated upon this one idea. Again, physiological phenomena, such as palpitation, redness of the skin, vesication, &c., are inexplicable, it is alleged, upon the principle of volition or suggestion alone; there must be also a modification of the cerebral innervation, a receptivity very different from that of the normal state. But what *is* this cerebral state? To reply is confessedly very difficult. If the method by which the condition of sleep-waking is induced is analyzed, it will be found that one condition is essential to its production. It is necessary at first to strongly arrest the attention in order to make a suggestion. The course of thought is arrested suddenly; in other words, there is cerebral shock. This is the *sine quâ non* of success, and the cerebral change is produced which is necessary for suggestions in hypnotism, although we cannot tell the essence of this change. The same result may be produced gradually in the hypnotic sleep, or suddenly, as in the somnambulistic waking just described.

In the Appendix a case of chorea, cured by hypnotism, is reported. The number of cases in which relief of symptoms has followed the employment of this process in various affections is now very considerable. Mr. Braid, had he been alive, would have said "I told you so."

The "Archives de Neurologie," edited by M. Charcot, a review of whose recent work (Vol. iii. of the "Leçons sur les Maladies du Systeme Nerveux") will appear in our next number, contain many interesting articles, which our space unfortunately obliges us to pass over at present. The same remark applies to the "Annales Medico-Psychologiques," and to "L'Encéphale," edited by MM. Ball and Luys.

3. *German Retrospect.*

Changes in Visual Power in Nervous Diseases.

Dr. L. Finkelstein has made some investigations in the clinique of Professor Mierzejewski with a view to ascertain what are the changes in visual power amongst those affected by disease of the nervous system. His results were communicated to the Psychiatric Association of St. Petersburg ("Neurologisches Centralblatt," No. 1, 1886). He has especially investigated the power of sight in patients suffering from epilepsy, hysteria, neurasthenia, and chronic alcoholism. With the help of the perimeter he has found, along with the initial symptoms of an approaching epileptic attack, such as giddiness, headache, palpitation, that there is a narrowing of the field of vision in the retina of both eyes. Sometimes this takes the form of hemiopia, sometimes of concentric diminution. This narrowness of the field of vision is greatest after the attack, and the capacity for colours is unequal in different areas of the retina: thus the area in which green light is seen is the smallest; it is larger for red and larger still for blue. Dyschromatopsia is frequent; green is often seen indistinctly, or confounded with other colours. In like manner the visual power for colours returns at successive times, green coming last. Scatoma often occurs, and passes away in the same manner. The same appearances are noticed in hysteria, especially after hysterical attacks. In neurasthenia the visual area for white light is unaltered, while that for coloured light is contracted. In ordinary drunkenness there is no sensible diminution of the field of vision; but it is constantly found in chronic alcoholism and delirium tremens. In these cases hemiopia is the most common form of visual defect. It is generally in both eyes, not in one, as Magnan states. In some women, apparently healthy, there was observed periodical contraction of the retinal visual area, especially during menstruation.

A New Symptom in Hemiplegia.

Dr. H. Oppenheim, in the "Neurologisches Centralblatt" (No. 23, 1885), has called attention to a peculiar symptom which he has observed in four patients in the Nervenklinik of the Charité Hospital at Berlin. In a woman suffering from right hemiplegia with aphasia, the feeling of sensation and pain on the paralyzed side was but feebly diminished, and the power of vision did not appear to be affected. On holding out two keys, one to each eye, the image next the left eye was found to be at once realized, while on the right the key had to be brought nearer or moved up and down ere it was noticed.

While the prick of a needle was felt if applied to the right hand, if two pricks were made, one on the right hand and another on the left, one impression, that on the left, was realized. The same abnormality was found in the leg. In another case of aphasia with

right-sided hemiplegia the same symptoms were observed. On the affected side a prick was felt in the right hand ; but in pricking the right and left hand at once the prick was only realized on the left. The same phenomenon was observed both in sight and hearing. The experiment was repeated on two male patients, one suffering from epileptiform seizures on the left side, the other from right-sided hemiplegia and aphasia. Dr. Oppenheim tried the same experiment in a great number of cases in nervous disease, but without finding a similar result. He believes that no such result is ever met with in healthy people.

Porencephaly.

Professor D. Lambl, of Warsaw, has published a case (" Archiv.," xv. Band, 1 Heft) in which this defect, instead of being accompanied with idiocy, went along with an unusual amount of sharpness. Catherine, natural daughter of Marianne Kwiecen, used to go about the district of Nowo Alexandrowsk. Under the guidance of her mother, she gained great reputation as a clairvoyante, interpreter of dreams, and healer, and many of the richer people in the country went to consult " the little witch." Her grotesque appearance was of service in keeping up such pretensions. Small and weak, somewhat paralyzed on the right side, the body leaning to the left, squinting, and with an unsteady gaze, she was ready of retort, cunning, and quick of wit, and knew how to assume a tone of confidence which had its effect upon the country people. Her materia medica was of a striking character, such as to rub the limbs with dogs' or cats' fat, or to take soup made from rats' flesh. Her prescription for phthisis was peculiar, a bath in decoction of rye-straw, and when the patient had left the tub a cat was to be thrown in. If the cat were drowned the patient would recover, otherwise not. As most cats are active enough to leap out of a tub, this may be thought a roundabout way of conveying an unfavourable prognosis. In 1872 the little witch was brought by the police to the Hospital at Lublin, where she was examined by Dr. Schmidt. She was then twelve years of age. He found her very intelligent, with an excellent memory, although she had never been at school. She wandered through the wards, showing great curiosity about the patients, and asked questions from the apothecary about the medicines which they got. The right side was found feebler than the left, and the muscles more weakly developed. She had divergent strabismus with nystagmus ; the sight in the left eye was weak. Her appetite was good ; the sleep troubled with wild dreams. Examined about her pretensions as a healer and soothsayer, the creature showed considerable tact and cunning in evading searching questions. She said that three years before, when she was looking after some calves in a meadow, she had a vision of a beautiful lady, who soon began to vanish, save the head and hat, and who cried out, " Be quiet, Catherine ; you will no more have to look after

calves, but will go about towns and villages curing the sick." After she had been two months in the hospital, Catherine confessed that she had been coached by her mother and two other persons, who taught her the names of some diseases and popular remedies, and instructed her how to play her part as a healer and soothsayer. In consequence of this she was sent to the Hospital at Lublin, in which she died two years after of anasarca.

On examining the brain, there was found to be porencephaly of the left hemisphere, that is, a funnel-shaped depression from the upper surface of the cortex, communicating with the lateral ventricle, which was enlarged, and full of serum. The left hemisphere weighed 406·710 grammes, the right 440·054 grammes, the left hemispheres being lighter by 33 grammes. The convolutions of the left side were flattened, the grey matter pale and œdematus, and on microscopical examination the nerve-tissue around the pons was found to be altered and degenerated in structure. Dr. Lambl thinks that the strabismus and the nystagmus were the results of intracranial pressure, and that the paralysis of the right side was the result of the cerebral atrophy. He discusses the question of why, instead of being imbecile, Catherine was possessed of such unusual intelligence, without mentioning, what seems to be the rational explanation, that there was no proof that the left side of the brain was diseased ; and, indeed, no exact proof that the greater proportion of the right hemisphere was functionally incapable.

Dr. Lambl discusses at considerable length the causes and pathology of porencephaly, and mentions several cases where, when only one hemisphere was affected, the intelligence was preserved. His paper is illustrated with some lithographic plates.

For other cases of porencephaly, the reader may see our Retrospect in this Journal for April, 1882, p. 124, and April, 1883, p. 122.

Another Case of Porencephaly.

This is recorded by Dr. R. Otto ("Archiv.," xvi. Band, 1 Heft) in a child who died at the age of three-and-a-half years. He had never spoken nor walked, and the mental manifestations seemed to amount to little more than a slight attention to sounds and an occasional effort to push away what hurt him. The sensibility appeared to be normal. The muscles were, during waking moments, stiff; during sleep they were relaxed. The porus or opening on the right side of the cortex was somewhat further back than usual, being in the region of the parietal lobe. There were two openings on the left side. Dr. Otto connects the failure in speech with a deficiency in the third frontal, but there was no chance of a child of so little intellect being able to speak. He cites the case of Ross, but does not seem to be acquainted with the one described by Mierzejewski, reported in the Russian Retrospect of the "Journal of Mental Science," 1882. There is mention of a similar case in the "British Medical Journal," 11th March, 1882, in which the motor deficiency of the limbs was

supposed to be dependent upon failure of the development of the motor area of the cortex.

Reflex Epilepsy.

Professor Eulemburg gives in the "Centralblatt für Nervenheilkunde" (No. 1, 1886) a good case of reflex epilepsy, which began with a growth on the big toe of the right foot. The first nervous symptom was cramp, which caused painful flexion of the foot. The abnormal spasms then spread upwards, so that there was convulsive bending of the knee-joint, and at last an epileptic attack with loss of consciousness, which was repeated two months after. The growth was touched with escharotics, and later on the nail was taken away, on which there was found an exostosis of the phalanx of the great toe, which was removed. Three weeks after, however, the cramps returned, and about four months after there was a new epileptic attack. This was followed by other fits, which in the end became very frequent, sometimes implicating the right side only, and sometimes accompanied by unconsciousness; at other times not. Stretching of the sciatic nerve was tried, which caused an abscess. Other means were used—local and general subcutaneous injections of atropine, hydriodide of hyoscyamine, curare, bromic ether spray, galvanic baths, bromide of potassium—all without effect. After six months' treatment the man left the hospital rather worse than when he came.

Murder under Epileptic Insanity.

An instructive case of crime committed under the influence of insanity is recorded in the "Centralblatt für Nervenheilkunde" (1 November, 1885), quoted from a paper by Dr. F. Gierl ("Friedrichs Blatt für Gericht. Med.," Jan. und Febr., 1885).

On the 20th of February, 1881, a servant in a brewery was found murdered in his bed. The right side of the skull was completely shattered, and on the face and breast there were twenty-three cuts and stabs. The trunk of the deceased was open, and it looked as if its contents had been searched. Suspicion at once fell upon J. R., a day labourer, who had first entered the man's bedroom. He seemed quite aghast at being arrested, and could give no explanation of marks of blood on his clothes and boots. The next day some money was found, wrapped in a handkerchief, in the court-yard near J. R.'s dwelling, so poorly concealed that a corner of the cloth was sticking out of the ground. At first J. R. denied the crime, but, under a sustained examination, on the 22nd he confessed that he had killed the man with a cudgel. At that time he apparently denied stabbing him, which, however, he admitted next day. The day after this, however, he retracted his previous confession, saying that previously he had been quite deranged. He admitted having had a scuffle with the man. During all these examinations his manner was very apathetic. Witnesses appeared, who represented him to be an industrious, honest, and peaceable man. His wife testified that he had sometimes suffered

from fits of insanity, and was actually passing through one of them when he committed the deed. Before these attacks he remained for days silent and apathetic, and then he would begin to rage and bite the panels of the bed with his teeth. On one occasion he threw the lighted petroleum lamp into the bed where his sick child was. Another time he seized an older boy who did not immediately obey some command, and threw him across the whole room into the bed, regardless of the danger of hurting him. He had talked of suicide. These attacks had come on several times, but she had tried to conceal them, and could produce no witnesses to support her statements. A fellow-labourer, however, said that he had observed that J. R. was sometimes quite deranged and very dangerous when provoked, on which account he had kept a knife by him to defend himself if attacked. The accused was sent for six weeks to the asylum at Kaufbeuren, where he was kept under observation. He was a powerful man, quiet, and very apathetic in manner, and never spoke save when he was addressed. He was easily led to say anything suggested. There was a scar below the left axilla between the eighth and ninth rib, which, however, did not seem to be sensitive to handling. The stage of excitement seemed to commence with a burning feeling proceeding from the scar, and then there were pains in the breast and giddiness. The scar was the result of a stab in the left side which he had received above three years before. After it had healed up the wound had again been opened by an injur When the attacks of derangement came on he had thoughts of icide and hallucinations of the devil. He professed to have a very imperfect recollection of killing the man, but said that he thought he had done it to defend himself after an apparition of the devil. He said that he took the man's money because he thought he had no more use for it after he was dead. He retained no remembrance of the attacks of fury in his own house after they had passed away. Two physicians experienced in insanity certified that he suffered from attacks of epileptic or epileptiform insanity, and that he committed the action when there was suspension of will-power. In spite of this he was found guilty by a jury and condemned to death, which was commuted into imprisonment for life. He went through the trial with apparent indifference.

On Aphasia and its Relation to Apprehension.

Dr. Grashey ("Archiv.," xvi. Band, 3 Heft) has given an article of thirty-four pages on this interesting subject. He gives a careful study of a patient whom he showed to the Würzburg Medical Society. This man had a fracture of the base of the skull, which resulted in aphasia as well as injury to the function of several of the cranial nerves on the right side. During a careful and prolonged study of this case Dr. Grashey considered the relation of the images of objects to the images of sound, of sound images to spoken words, of words to symbols and writing, and so on.

Dr. Grashey holds that there is a variety of aphasia which is dependent neither upon the loss of function of the nerve-centres nor injury to the conducting power of the nerve tracts, but simply upon a diminution of the duration of the impressions of the senses causing a loss of the powers of apprehension and association. Aphasia following diminished duration of the sensory impressions is, to all appearance, not rare. It is to be sought for amongst patients who suffer from concussion of the brain or from fevers. Dr Grashey has found a number of cases in which all impressions are forgotten immediately after being apprehended. He cites one instance from Lichtheim of a man whose head was injured by a fall from a waggon, and could not recall the names of objects. When one said the words to him or wrote them he could repeat the words without any difficulty. The power of writing was also much injured.

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4. *English Retrospect.*

Asylum Reports, 1886.

(Continued from p. 326.)

Aberdeen.—What might have been a very destructive fire broke out in the roof of an upper storey. Fortunately it was almost immediately discovered, and did little damage beyond consuming the roof it originated in. Various suggestions have been made by one of the Commissioners, by which the dangers of fire would be much diminished, and no doubt the Managers will do all that is in their power, now that they have seen what may happen, to protect the patients and buildings.

A private patient, who had for several years been allowed to walk beyond the asylum-grounds, accompanied by an attendant, suddenly threw himself over a bridge. This is another illustration of what chronic, and so-called harmless, lunatics will do.

Although 35 patients died during the year in only 15 cases was the cause of death verified by examination. This must be considered a small proportion.

Bedford, Hertford, and Huntingdon.—The Commissioners remark:—

> There has not been any resort to seclusion or restraint. When it is found necessary to dissociate a patient from the rest in a ward an attendant is always placed in separate charge of the case.

In acute delirious mania, in the fury of epilepsy and general paralysis, we should have expected that complete isolation would have been preferred.

The importance of extended exercise beyond the airing courts is also pointed out.

Cheshire. Macclesfield.—Among various works in progress or suggested is the heating of the dormitories with hot water.

The Committee still adopt the practice of asking the patients when they come up to be discharged (the Medical Superintendent not being present) whether they have any complaints to make of their treatment in the Asylum. The result has been satisfactory.

This is an arrangement which should be adopted in every asylum. In some large asylums the patients are discharged without ever seeing the Visitors; and though means are adopted for obtaining expressions of opinion as to the nature of the treatment experienced, these cannot be considered quite satisfactory.

The following suggestion by the Commissioners may be usefully adopted by those as yet unacquainted with it:—

We also visited the Chapel, where we observed a box placed for contributions towards aiding discharged patients. In respect to this subject, on reading the Chaplain's report we notice he advocates a yearly grant by the Committee towards the "Samaritan Fund" to aid in supporting the patients on discharge until they are able to obtain work. We are fully alive to the great advantages accruing to patients from such pecuniary assistance, and the practice in the Metropolitan Licensed Houses receiving paupers is to send them out on trial for a certain period, giving them a weekly allowance during that period, thus enabling them to live without unduly taxing their strength, and helping them in a short time to earn their own living. This system, it appears to us, might well be tried here.

Dorset.—After a service of 32 years Mr. Symes retires in favour of Dr. Macdonald. We cannot help expressing surprise at the manner in which he was treated as to pension. No doubt the Pensions Committee, consisting of such practical men as Dr. Murray Lindsay and Dr. Williams, will give due consideration to the circumstances of this case, although we are aware that it is said that, while it is not agreeable to have a pension cut down from £600 to £450, the latter sum is not to be despised in these days of retrenchment and general discontent.

Improved means for testing the punctuality of the night attendants have been provided. The apparatus is electrical and cost £103.

We commend Mr. Symes' method of treating *little* offences by attendants and nurses. He says:—

The duties of attendants on the insane are irksome and very heavy to bear, and it needs considerable forbearance on their part to submit to the many indignities frequently heaped upon them; it is this knowledge which makes me desirous of commending them to your kind consideration and favour, and, feeling as I do, I have always endeavoured to put the most favourable construction on any little error or misconduct. The outside world knows little or nothing of life amongst the insane; did they, I feel certain their remarks would be sometimes more modest and leavened with more real Christian truth and charity.

Edinburgh Royal Asylum.—It is exceedingly satisfactory to find that the Governors have been successful in the suit raised by them against the City and St. Cuthbert's parishes for the recovery of the

boards of pauper patients at the rate which they considered they were entitled to.

Intimation of a legacy of £5,000, with residue, has been received. The money is to be held in trust for the benefit and relief of insane persons, who, from their rank in society, or education and habits, cannot properly be associated with paupers, but whose means are insufficient for defraying the expense of their comfortable maintenance in the asylum conformably to their station and habits, though their mental condition be such as to render it desirable that they should be placed in such an institution. Careful provision is made by the testatrix for the application of the whole annual income for the benefit of insane persons of the class referred to, in no case more than £40 being allowed for any one patient, and the fund not being allowed to operate in any manner so as to lessen the burden upon parishes or other public bodies legally liable for the support of paupers and others in the asylum.

As usual, Dr. Clouston's report contains much that is worthy of reproduction, but space forbids.

Kent. Chartham Downs.—A hospital, to contain 20 beds and the necessary rooms for attendants, &c., is in course of erection, at a cost of £2,500.

A patient committed suicide by jumping down the well in the engine-house. He had been nine years in the asylum and had never exhibited any suicidal tendency. Dr. Spencer attributes the act to uncontrollable impulse.

Kent. Barming Heath.—The following paragraphs from Dr. Davies's report will be read with interest:—

> It is the diminution of discharges which explains this increase, and I am of opinion that the general depression in trade and industry of all kinds, which has been so severe lately, has directly conduced to this result, and this in two ways:—Firstly, by lowering the vital power of those affected; and, secondly, by curtailing the means of the patients' friends, thereby rendering it impossible for them to do anything towards promoting recovery, by removing the patients early, and completing their cure at home. I have great faith in this early removal from an asylum. Let the wards be ever so cheerful, they lack the nameless comforts of home, and relapse but too frequently ensues if removal be unduly delayed.
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> Again I have the pleasure of reporting the total absence of seclusion and mechanical restraint. The greater freedom allowed to, and the more varied forms of occupation we now provide for the patients, are mainly the cause of this most desirable result. This subject of occupation of patients under skilled attendants in various trades has already received considerable attention from you. I cannot express too strongly the very high opinion I have of its advantages to my patients, apart altogether from its economic aspect, though this latter is by no means inconsiderable.
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> Work, particularly skilled work, is more essential for the successful treatment of the diseases of the mind than all the drugs I know anything about. This work, however, must be under the direction of trained attendants, and also under the immediate supervision of the medical staff. I have proved over and over again that it is worse than useless to send a semi-convalescent patient to work with an ordinary artisan. I trust the day is not far distant

when the full resources of the asylum will be developed for the benefit of its afflicted inmates by the extension, to its utmost limit, of this system, which we have found to be so very advantageous, and absolutely free from any drawback.

Killarney.—Dr. Woods notes that one death was due to general paralysis of the insane, the second that has occurred in the asylum during the past eleven years, and it is worthy of remark that the man was not a resident in the county, but had served for many years in the R.I.C., and was stationed in a part of the country where lately he had hard and trying duties to perform.

The enlargement of the asylum is under consideration.

Lancashire. Lancaster.—We are pleased to learn that Dr. Cassidy's salary has been raised to £1,000 per annum. Various structural alterations, including the drainage works, have been completed, and others of much importance are contemplated.

Dr. Cassidy has recently introduced, the Commissioners report, the practice of associating the sexes at meals on opposite sides of the same table. This has caused no confusion or disturbance, indeed the patients have taken little notice of their neighbours opposite. The airing courts are little, if at all, used ; and the women get their proper share of exercise on the boundary walk.

In connection with the amusements, an experiment has been tried to make them self-supporting by admitting the public and charging for admission. The Christmas pantomimes left a handsome profit.

The following paragraphs are from Dr. Cassidy's report. His opinions may be compared with Dr. Davies's on the same subject—early discharge of convalescent cases :—

A curious instance occurred in a young man, readmitted after a considerable interval of absence from the asylum, whose symptoms, those of suicidal melancholia, were similar on both occasions, but where the same treatment, self-applied, succeeded the first time but failed on a second trial. When here on the first occasion he precipitated himself head foremost on a stone pavement, causing a nasty bruise and wound of the scalp, which was followed by diffuse cellulitis and suppuration, in the course of which he recovered completely, and was ultimately discharged. After his second admission he was closely watched, but found, in spite of this, an opportunity for repeating his former tactics, and threw himself head foremost as before. The same results short of recovery followed, and his scalp being now healed, he remains as he was, melancholic and obviously watchful for some further opportunity to injure himself. [Might not the next experiment succeed?]

With respect to readmissions within the year, I am afraid in some instances premature discharge must be accountable for the relapse. Though holding the conviction that premature discharge is more likely to be harmful than the detention, and even the prolonged detention of convalescent patients, I find it often very difficult to resist the importunity of the patient and of patients' friends, in which very often the latter have no measure. It is a common experience to find, when this importunity has been resisted, the patient in the end is grateful, and ready to acknowledge his previous non-fitness and his now better preparedness for discharge.

It seems hard to condemn a convalescent who is practically sane, but whose nervous system has not yet recovered its tone or his mental powers their full fitness for the ordinary calls of life, to spend a further portion of his days in

the society of the actively insane, and for such an one discharge from this intercourse would be the best solution, could we be sure that his home and surroundings would be such as to promote the full restoration of his powers. Herein lies the difficulty, and in the sometimes astonishing inconsiderateness of relatives, the bad conduct of husbands, wives, or parents, or the overwhelming pressure of domestic or business cares, exists the cause of many an early relapse. Therefore, the ideal asylum, in addition to a separate and detached block for the newly-admitted acute cases, which it is generally admitted is an urgent want in most asylums, should contain a building apart from the asylum proper for convalescents, where a longer probationary period prior to discharge should be passed, with such liberty, privileges, and surroundings as would mitigate the hardness of detention, and gradually accustom the recently-recovered lunatic to the responsibilities of freedom.

Lancashire. Prestwich.—Dr. Ley points out that of the admissions, about 30 per cent. came directly from their own homes, and 60 per cent. from workhouses. This method of passing patients through workhouses to asylums is worthy of emphatic condemnation.

Suicidal tendencies exist in 40 per cent. of the cases in residence. This is a most unusual proportion, and Dr. Ley reports that this distressing complication has greatly increased during the last three years.

Lancashire. Rainhill.—Dr. Rogers reports :—

> In an unusually large number of cases, especially among the women, there has been observed a very marked derangement of the bodily functions, especially of the circulation, among those recently admitted. This disturbance of the circulation, accompanied with a very high temperature and great exhaustion, has closely resembled continued fever, though without its special characteristics, and the subjects of it have required very careful nursing, but most of those who have been so affected have either already recovered or are on the way to recovery.

Lancashire. Whittingham.—The following extract from Dr. Wallis's report shows that he is working in the right direction :—

> This mention of nurses and attendants allows me to refer to their training. Much of the successful treatment of the insane depends upon the care and attention they should receive from those in immediate charge of them; indeed, it may frequently be said of a particularly critical case that the life of the patient absolutely depends upon the painstaking and faithful carrying out of minute details of nursing. The asylum attendant receives, as a rule, no systematic training, but depends upon his native sharpness, love of his work, and energy for picking up from his charge attendant such atoms and scraps of information as he may be favoured with from time to time. Beyond this he is left to the perusal of his rule-book, his own powers of observation, and an occasional word from the chief attendant. Some superintendents of asylums, especially in Scotland, have endeavoured to systematize the training of their attendants; and a manual has been edited and issued which has received the approval of many of the members of the Psychological Association. Without going quite so far as the manual, I feel that something in this direction ought to be done; and, with that object in view, I have in hand some instruction classes, which I propose, at first, at any rate, to confine to the charge attendants, by means of which I hope to be able to give them a broader view of their duties, and some more precise instructions as to nursing, than they have hitherto enjoyed.

In their report the Commissioners state that, although the Irish Roman Catholics are a large proportion of the inmates, Dr. Wallis

overcomes the objections usually made by the friends of such patients to post-mortem examinations by refusing a certificate of the cause of death unless verified by autopsy. Now we should like to know the legal aspect of this question. Is it lawful for a doctor to refuse a certificate of death although he knows the cause? We believe not, though we are not aware that the question has been authoritatively settled. Whether it be morally right to bring such pressure to bear upon the relatives, is a question to be settled by each man according to his conscience.

Leicester (Borough).—The whole of the drainage is in process of being overhauled.

About 30 only of each sex are confined entirely to the airing courts. Various structural improvements have been effected; the most important being the erection of a block of workshops.

Leicester and Rutland.—So far as we can gather from the report, for the subject is not even mentioned, the proposal to erect a new asylum is abandoned in the meantime. It is quite evident, judging from the Commissioners' report, that the present building has many structural defects, and much is required to bring it up to modern requirements, if, indeed, this be possible.

Lincoln.—No progress has been made in providing necessary accommodation for pauper lunatics in this county. A separate asylum for the southern division has been talked of, but nothing has been done.

London.—The Commissioners point out that no fewer than 315 out of 425 patients are entirely confined to the airing courts for exercise. If the number of nurses and attendants is too small to permit of more extended exercise, it is obvious that the number should be increased. In reply to this Dr. Jepson remarks :—

> This implied hardship is scarcely a justifiable stricture, having in view the exceptional size of the grounds, which afford ample scope for exercise to those who are able or willing to take it. The country walks are enjoyed by the men, and all who can be trusted are invited to join them, but among the women they are regarded with considerable disfavour, and various subterfuges are resorted to to obtain exemption from the indulgence. A very great number of both sexes are too old and too feeble to walk at all for any length of time, or for any distance.

It will be found that, by a little persuasion and firmness, the women will walk and obtain much benefit therefrom. The infirm should be sent out in separate parties. Experience has abundantly proved that female patients are much improved in their general condition by being excluded from airing courts and being compelled to walk out in the country. The advantages to the discipline of the nurses are obvious. The results of actual experience are the best replies to the difficulties urged against this practice.

Middlesex. Hanwell.—The laundry is now quite inadequate. The contemplated additions and alterations will cost £8,491. To accommodate the increasing number of female epileptics, plans have been prepared for the erection of an *annexe* to the infirmary ward for sick

and feeble epileptics. The building will contain 20 beds, with five single rooms, and the cost, including furniture, is estimated at about £2,899.

Middlesex. Banstead.—The occurrence of the outbreak of fire late at night in the bedroom of a male attendant afforded a practical opportunity of testing the usefulness of the electrical alarm bells. The fire brigade thus summoned mustered very promptly, although, happily, their services were not required, as the fire had been previously put out.

A sitting-room has been provided for the male attendants, and fitted up with a billiard table, presented by the chairman. This act of benevolence might be imitated in other asylums, for such are singularly rare.

Monmouth, Brecon, and Radnor.—The addition of sixty acres to the estate has been sanctioned, but not completed.

It is satisfactory to learn that only 10 men and 30 women of those physically able to take more extended walks are confined wholly to the airing courts.

Dr. Glendinning reports that only one death from phthisis occurred during the year, and only one patient in the asylum is suffering from that disease. This is a most satisfactory condition, for there is no doubt, as he remarks, that this disease is chiefly due to impure air, defective hygiene, and imperfect nutrition.

Montrose.—The long-standing controversy with the District Board has been brought to a close; but the Managers have received notice from the Board that it will seek to reduce the rate of board, £28 12s., to the old rate of £24 10s. The Managers have resolved to adhere to the higher rate, and we sincerely hope that they will succeed in any litigation that may arise thereon.

The following paragraph is from Dr. Howden's report :—

It has been alleged that in English mining and manufacturing districts the number of admissions into asylums is fewer during periods of commercial depression than in more prosperous times, and an endeavour has been made to explain the supposed fact that, wages being low, working people spend less on drink, and as a consequence fewer persons go insane from intemperance. It would certainly be a considerable compensation for national misfortune if the fact and the theory were alike true. I question, however, if either will be corroborated by careful investigation. The theory was ventilated ten years ago, at the commencement of a long period of depression. The depression still exists, and in a more aggravated form, but I do not think the lunacy statistics of the last ten years show a decrease of insanity as compared with the previous decade. However it may be in England, the temperance theory is not applicable to the districts from which the inmates of this asylum are derived. Intemperance, as a direct cause, has always been a low factor in the production of insanity with us, as compared with urban districts, though, curiously enough, the number of cases of *mania a potu* (5) is larger this year than usual.

Mullingar.—In his new appointment it is evident that Mr. Finegan is not lacking in energy. In order to keep down the ever-increasing number of patients in the asylum, he very properly makes an in-

variable practice of encouraging the surrender of inoffensive and incurable cases to the care of their lawful guardians. He has also recently instituted the keeping of medical case-books, "in which are fully and accurately recorded information from every possible source bearing upon the medical history of the case, together with statements of the mental condition on admission, and the result of treatment administered." When one reads this sentence one is compelled to ask, Is it possible that no case-books existed before in this asylum, and are any other Irish asylums still without them?

Murray's Royal Asylum.—This institution continues to prosper under Dr. Urquhart's efficient management. The following paragraghs occur in his report:—

A wholesome competition among Royal Asylums in Scotland has, without doubt, stimulated officials and benefited patients. That increase of personal liberty, which is to be found in all the best hospitals for the insane in the United Kingdom, is surely gaining the confidence of the public, and will as surely result in a true appreciation of the highest aims of the medical care and treatment of lunacy—"the cure of the curable." It is of little moment whether this be ticketed the "Open-door system." The main point is that on both sides of the Tweed there is a *system* of granting liberty on parole, of sending patients out on leaves of varying duration, of minimizing irksome and degrading restraints, of encouraging intercourse with the outer world, and of approximating asylum-life to the domestic ideal in so far as possible. This is not the fashion of a day, but has been built up in studied evolution since Conolly and his compeers began their labours; and we have to acknowledge and found upon the experience of the men who showed how asylums could be conducted without mechanical restraint.

The occupations have been continued on the same lines as in former years, with manifest advantage to the patients. It is of the greatest importance that those labouring under excitement or sinking into dementia should, so far as consistent with prudence, be led to occupy themselves in useful work. It is an advantage that has been widely recognized in pauper asylums, and it is now being tried with benefit in hospitals of this class. I have felt that, however important the amusement of the patients is, it is only subsidiary and complementary to their occupation; and, therefore, since my appointment here every effort has been made, from day to day, to induce patients to employ themselves in some useful manner. The quiet and absence of turbulence, remarked by the Commissioners from time to time, is in no small measure due to this. The daily reports of the charge-attendants name the patients who are unemployed, and state the reasons. Half are at work in one way or another. It has been said that farm and garden labour is not the best work for the town-bred insane patient. I am strongly of opinion, after an experience of seven years in this asylum, that it is one of the most valuable aids to recovery. It has been my fortune to have the unanimous approval of my patients' friends in this matter with one exception—an exception that proves the rule. A young gentleman, suffering from chronic mania, was found wheeling a barrow by his father, who pronounced his occupation degrading, and in consequence removed him to another asylum; but within a few months the father wrote requesting me to receive his son again, without stipulating for his exemption from the labours that had proved so salutary to him.

(To be continued.)

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The forty-sixth annual meeting of the Medico-Psychological Association of Great Britain and Ireland was held on Wednesday, 27th July, 1887, in the rooms of the London Medical Society, Chandos Street, Cavendish Square, Dr. F. Needham presiding. Among the members present were Drs. J. Bayley, G. F. Blandford, R. Baker, D. Bower, D. M. Cassidy, M. Cooke, T. S. Clouston, Pritchard Davies, J. T. Hingston, H. Hicks, O. Jepson, T. Lyle, H. R. Ley, W. J. Mickle, H. C. MacBryan, H. Maudsley, G. Mickley, T. W. McDowall, H. Hayes Newington, S. R. Philipps, J. H. Paul, A. Patton, J. Rutherford, H. Rayner, T. L. Rogers, G. H. Savage, E. Swain, H. Sutherland, J. B. Spence, A. H. Stocker, D. Hack Tuke, C. M. Tuke, F. W. Thurnam, A. R. Urquhart, W. Wood, T. O. Wood, E. B. Whitcombe, F. J. Wright, &c. Among the visitors were Dr. F. Norton Manning, Sydney, N.S.W., Mr. Clark Bell, New York, and Dr. Hall, Northampton, Mass.

In the unavoidable absence, at the earlier stage of the proceedings, of Dr. Savage, the outgoing President, Dr. RAYNER opened the business of the meeting, and expressed his regret that Dr. Savage was not present to say a few preliminary words about the work of the Association during the past year, which had been an unusually eventful one. Among others, one very satisfactory feature of the past year's work had been the development of the system of examination for the Certificate of Efficiency in Psychological Medicine, which had been attended with very satisfactory results, twenty-four gentlemen now holding the certificate of competency. Then the Gaskell Prize had been offered and won. Another circumstance which might be referred to was the unveiling of the Guislain Statue at Ghent. The Belgian Society of Psychological Medicine sent a circular to the various Psychological Societies of Europe and America requesting them to send delegates to be present at the inauguration of the Statue of Guislain at Ghent in the early part of the present month. The Council of this Association deputed Dr. Hack Tuke to attend, and that gentleman accordingly represented the Association at the inauguration. As the important subject of lunacy-legislation would be referred to in the President's Address, in the afternoon, Dr. Rayner said that he should not enter upon it, but simply ask Dr. Needham to take the chair.

The PRESIDENT having taken the chair amid applause, said that he should reserve any observations he might have to make for the afternoon meeting, and that the formal business of the meeting would now be proceeded with according to the agenda.

Dr. HACK TUKE said that in reference to the inauguration of the Statue of Guislain, to which Dr. Rayner had referred, he would simply report that he had attended as requested, and that the ceremony had passed off in the most satisfactory manner.

The GENERAL SECRETARY submitted the minutes of the last annual meeting, which were printed in Vol. xxxii., No. 139, of this Journal. (October, 1886.)

The minutes, having been taken as read, were confirmed.

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.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Treasurer's Annual Balance Sheet, 1886-87.

RECEIPTS.	£	s.	d.
To Balance—Cash in Hand	110	15	8
To Subscriptions received	279	15	0
To Subscriptions, Secretary for Ireland	27	6	0
To Examination Fee (Ireland)	3	3	0
To Subscriptions, Secretary for Scotland	45	3	0
To Examination Fees (Scotland)	15	15	0
To Sale of Journal	145	4	0
To Interest on £306 3 per cent. Consols	8	17	10
To Dividend on £1,000 Gaskell Memorial Fund ...	9	4	10
To Fees received from Examination for the Certificate in Psychological Medicine (England)...	25	4	0
	£670	8	4

EXPENDITURE.	£	s.	d.
By Annual, Special, and Quarterly Meetings ...	17	18	0
By Expenses of Reporting at various Meetings ...	12	11	0
By Editorial Expenses	12	12	0
Printing, publishing, engraving, advertising expenses, and postage of Journal ...	449	17	0
By Sundry Expenses, Printing, &c.	5	16	6
By Treasurer	6	6	0
By Secretary for Ireland	0	12	9
By Secretary for Scotland	11	16	9
By General Secretary	4	10	9
By Donation to the Eames Fund	10	10	0
By Messrs. Wyon for Engraving Plate for Certificate of the Med.-Psych.-Association ...	31	13	0
By Examiners' Fees	19	19	0
By Prize—Dr. Wiglesworth	10	10	0
By Balance in Treasurer's hands	75	15	7
	£670	8	4

Examined and found correct,

H. HAYES NEWINGTON,
J. TREGELLES HINGSTON, } Auditors.

July 27th, 1887.

J. H. PAUL,
TREASURER.

On the motion of Dr. MURRAY LINDSAY, seconded by Dr. URQUHART, the balance-sheet was adopted, and a vote of thanks was conveyed to Dr. Paul, which was suitably responded to by him.

Dr. WILLIAM WOOD proposed a vote of thanks to the Editors of the Journal, saying that he felt sure he should have the concurrence of everyone present in acknowledging the able manner in which the Journal was conducted, the value of the work commending itself not only to members of the Association, but to the profession generally.

Dr. URQUHART seconded the motion, which was carried, the PRESIDENT remarking that the Journal itself was the best testimony to the arduous and excellent character of the work bestowed upon it.

Dr. HACK TUKE thanked the Association on behalf of Dr. Savage and himself for the vote of thanks.

Dr. CLOUSTON proposed a vote of thanks to the Secretaries, saying that without their Secretaries they could do nothing, and that everyone would agree that the secretarial work was carried on very satisfactorily.

Dr. OUTTERSON WOOD seconded the motion, which was carried.

Dr. RAYNER, General Secretary, suitably responded, saying that as regarded himself he only regretted that he could not do the work better. It had always given him great pleasure to serve the Association. He hoped that next year a more efficient General Secretary might be appointed to relieve him. He was sorry to have to read a letter from Dr. Courtenay, the Secretary for Ireland, tendering his resignation.

Dr. PATTON, of Farnham House, Finglas, Dublin, proposed that Dr. Courtenay be requested to continue for another year.

Dr. OUTTERSON WOOD seconded the motion as to Dr. Courtenay, and it was resolved that a letter be addressed to him expressing the unanimous wish of the Association that he would continue in office for another year.

Mr. HAYES NEWINGTON said that he hoped that Dr. Rayner would long continue to be their Secretary—at all events, until the Lunacy Bill should be passed. It was absolutely necessary that at this critical stage of the legislation, someone should work the machine who knew how to work it. The Association had for the last three years been devoting much attention to the Parliamentary work, and it would be very hard if any of their labour were lost by a change in their officers.

Dr. WM. WOOD supported this, saying it would be a great loss to the Association if they were deprived of Dr. Rayner's services.

The PRESIDENT said that he endorsed every word which had been said as regards Dr. Rayner, and he hoped the appeal which had been made to him not to resign next year would be successful.

Dr. RAYNER said that he would do the best he could to comply with the wish of the Association.

The next business to be dealt with being the appointment of Officers and Council for the ensuing year, the PRESIDENT explained the mode of voting, and nominated Dr. Outterson Wood and Dr. Cooke as scrutineers. The lists having been duly collected, the scrutineers retired to examine them, subsequently reporting that the nominations of the Council had been unanimously supported, whereupon the following gentlemen were declared by the President to be elected as

OFFICERS AND OTHER MEMBERS OF COUNCIL OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

YEAR 1887-8.

PRESIDENT-ELECT	T. S. CLOUSTON, M.D., F.R.C.P.
TREASURER	JOHN H. PAUL, M.D.
EDITORS OF JOURNAL...	D. HACK TUKE, M.D. G. H. SAVAGE, M.D.

Auditors	J. T. Hingston, M.D. D. Yellowlees, M.D.
Honorary Secretaries	E. M. Courtenay, M.B. For Ireland. A. R. Urquhart, M.D. For Scotland. H. Rayner, M.D. General Secretary.

MEMBERS OF COUNCIL.

Fletcher Beach, M.D. | Hayes Newington, M.R.C.P.
F. H. Craddock, B.A. | F. Schofield, M.D.
S. W. D. Williams, M.D.

The next business being the question of the time and place of the next annual meeting, Dr. Urquhart said that at the annual meeting last year he had the honour of giving a notice of motion on this point. It had been found that the meetings had been getting smaller of late years, and to-day there was a very poor show of members for a Society numbering nearly four hundred. He thought it would be very much better if, instead of being brought together there in the height of summer, the Association would decide to meet, say in the month of May. It was, perhaps, begging the question to say that the Association should meet in London, because they were perfectly aware that it was originally intended that the Association should be peripatetic; but of late years the meetings had been held, and very rightly so, generally in London. They had travelled to Glasgow and to Cork, but the general tendency was to meet in London, and if the annual meeting were held in London it should be convened earlier in the year, when they would probably be favoured with the presence of many physicians who usually went out of town at the present period. In July, moreover, there was a difficulty as to the rooms, the College of Physicians not being available on account of the examinations. In support of the meeting being held about the present time a reason had been adduced that it was very convenient for members of the Association to take along with this annual meeting that of the British Medical Association, but he thought that the time had come when they ought to make some kind of stand against that. Last year the meeting was held in London about this time, and afterwards many of the members went to Brighton, where there was a most excellent meeting of the British Medical Association, the psychological discussions being promoted by their own members. Now he thought it would be very much better if they could get their members to keep for the annual meetings of this Association the papers which thus went away from the Association to the British Medical Association, and it would also be well if the time of the annual meetings could be extended. Theirs was a Society to guard the interests of men who were interested in asylums; but not only that, he presumed it was a scientific society for scientific discussion. The latter feature had been somewhat overlooked at the annual meetings, especially of late years. It had been the custom to have some kind of discussion on the President's address. That was a proceeding which he did not quite approve of. He thought that the address should not be discussed. They also laboured under this disadvantage, that the papers read at the British Medical Association meeting were not utilized in the "British Medical Journal," nor were they handed over to the editors of the "Journal of Mental Science." In effect it had been found hard to summarize them in their own Journal. Last year there had been one of the most interesting discussions at Brighton which it had been his fortune to listen to, in regard to the medical spirit in asylums, and that was perfectly burked, for the notice that appeared of it was inadequate to do it justice. There had been another objection proposed to the annual meeting being held earlier in the year, and that was as to the closing of the accounts, but that had been disposed of on consultation with the Treasurer, Dr. Paul, who said it could be done earlier with equal facility. In conclusion he said that perhaps it might suit the

convenience of many of those present to meet in July or August, but he thought there were many in the country who would prefer an earlier meeting, and he should be very glad to have the opinion of the Association at large on that point. He would, therefore, move, "That the annual meeting be held in the month of May, and that the proceedings shall not be limited to a single day, but be continued for the reading and discussion of such papers as may be offered."

Dr. RAYNER said that, in regard to the difficulty of arranging for papers with a one-day meeting, for some years past it had been found that their formal morning business generally extended up to the luncheon hour or a little over, while in the afternoon the President's address and the discussion following it lasted until it was time to adjourn for their evening reunion. On several occasions they had had papers down for reading, but there had been no time to read them, and in some instances considerable offence had been given to members who had papers down to be read, and who had come to town specially for the purpose. He hoped that if Dr. Urquhart's proposal as to the change of the time of the year for the meeting were adopted, that the Association would also agree to extension of the time of meeting. He quite agreed with Dr. Urquhart that a meeting in May might attract a great number of men who might not be able to come otherwise, and, moreover, the Association would not be competing with the British Medical Association. He believed that many members would have been present to-day if they were not next week going to Dublin. The Association had suffered from this in years past, and would continue to suffer from it unless an alteration were made.

The PRESIDENT pointed out that the order of the agenda had been a little departed from in the discussion, it being necessary, in the first place, to fix the place of the next Annual Meeting.

Dr. HACK TUKE thereupon moved—"That the next Annual Meeting be held in Edinburgh." As Dr. Clouston was to be their President next year, this would obviously be the most suitable arrangement.

Dr. MURRAY LINDSAY seconded the motion.

Mr. SWAIN said that if they should meet at Edinburgh next year, would it not be well to fix the same time as that of the visit of the British Medical Association at Glasgow?

Dr. URQUHART said that he saw there was a difficulty in dealing that day with the matter which he had brought forward. Last year he had given a notice of motion, but as the President-elect was willing that the annual meeting next year should take place in Edinburgh, he felt a certain hesitation in proposing that the next annual meeting should be held earlier. Still, he thought if there was one thing clearly understood in years past it was that the Medico-Psychological Association was not to be an appendix to the British Medical Association. He was himself a member of the latter Association, and was deeply interested in its success, but he thought, nevertheless, that they must make a stand on that point.

Mr. HAYES NEWINGTON said that he had great sympathy with Dr. Urquhart's views in many respects; but what he proposed would be an enormous change. As, he believed, was pointed out last year, there was practically no necessity at all for Dr. Urquhart's motion. The rule was as follows:—"An annual meeting of the Association shall be held at such time as shall, in the judgment of the Council, be most convenient, such meeting to be called both by advertisement in the medical papers and by circular to each member, giving at least four weeks' notice." It seemed to him that, unless they were going to alter the rule, the right way would be for the members to make representations to the Council. The rule at present left the matter entirely in the hands of the Council, and he did not think that sufficient cause had been shown to take it out of the hands of the Council. It was entirely in the Council's power next year to make what arrangements they liked, and he

would suggest that Dr. Urquhart, and those members of the Association who agreed with him, should write their views to the Council, and state their reasons for those views, and the Council would then take the communications into their consideration. As to the two-day meeting, the rule would meet that. This would, he took it, come within the powers of the Council. He thought that if the Council were pursued by representations made to them they would adjourn the meetings. Instead, therefore, of carrying such a very strong motion as was proposed by Dr. Urquhart, the way would be for members to send communications to the Council on the subject. It struck him that the reason they were suffering in regard to attendance at their annual meetings was the very fact that they only met for one day. He did not see any reason to suppose that the British Medical Association should really interfere with their annual meetings. Of course the psychological members of the British Medical Association went to the meetings of that Association for psychological work, and no doubt very little psychological work was done at the annual meeting of the Medico-Psychological Association. The best way would be for the Council to try what was proposed as an experiment: next year to have a two-days' meeting; if necessary, try it later on; and then, perhaps, if it were found successful, change the rule. He should therefore move, as an amendment, "That, having regard to the powers at present in the hands of the Council to make such arrangements as would include the objects of the motion now before the meeting, it is inexpedient to tie the hands of the Council by a radical alteration of the rules."

Dr. CLOUSTON said that Mr. Hayes Newington's suggestion would meet with his approval. Next year, as the Association was going to Scotland, perhaps the Council might fix the next day to the meeting at Glasgow; but as the British Medical Association met on Tuesday, that would practically limit their meeting to Monday, so that a second day's meeting might be inexpedient. In 1889 let them try a two-days' meeting, and if at next year's meeting a recommendation to that effect could be given, and also as to meeting in May, the Association would probably be satisfied as to the expediency of adopting that course as a rule. Possibly next year it might be considered desirable that most of the psychological papers for the annual meeting should be taken as transferred to the British Medical Association.

Dr. RAYNER said, if so, could the Medico-Psychological Association have a proprietary right in those papers? Might they take their own reporter on to Glasgow?

Mr. SWAIN: Are the papers read before the British Medical Association the property of the British Medical Association?

The PRESIDENT: Yes.

Dr. HACK TUKE: It is only through Mr. Hart's courtesy that we have them. They are clearly the property of the British Medical Association.

Dr. RAYNER asked whether some compromise could not be made. If they were to forego a day of their meeting, might they not fairly expect to be allowed to take reports of the papers read at the British Medical Association?

Mr. COOKE said that it was a great convenience to members of the British Medical Association to be able to attend the several branches of its annual meeting. Let the Medico-Psychological Association next year be content with one good annual meeting, and then the members would be free to attend the various surgical, obstetrical, and medical sections of the British Medical Association. At subsequent annual meetings they might have two days' sittings.

The PRESIDENT suggested that it might be best to send a circular round to the members.

Dr. URQUHART said it was with that in view that he had moved his resolution. At the last meeting they were told precisely what they had heard that day, that the Council should take the matter into their consideration. He thought it best that the Association at large should give the Council

their decision in the matter. He should be very sorry to press the motion against the general feeling; but he believed it would be a good thing for the Council to get the opinion of the meeting to-day. He had given his reasons, and he had adduced similar reasons last year. He did not see what was to be gained by writing to the Council and giving those reasons again. He, therefore, thought they should now come to some general understanding as to what should be done in future. There was no doubt that the annual meetings would be usually held in London. Next year would be exceptional.

Mr. HAYES NEWINGTON said he thought the reason why the Council had not moved in the matter was because there had been no sufficient expression of opinion from members of the Association. Dr. Urquhart had said that he believed there were other members who felt like himself, but there might be others who did not feel so about it. His motion presupposed a radical alteration in the rules of the Association. He (Mr. Newington) still ventured to suggest that such a resolution as Dr. Urquhart's was not called for, and that ample power already existed for them to do what they liked. He should, therefore, move as an amendment that Dr. Urquhart's motion be not accepted.

Dr. T. W. MCDOWALL said that if some of the members of the Association did not express their feelings it was not because they had no feeling in the matter. They did feel that the comparatively small attendance at the annual meeting was largely due to the fact that their meeting clashed with that of the British Medical Association. Persons situated like himself could not go to London and then on to Dublin. He thought a good beginning would be to have their annual meetings in May.

Mr. SWAIN asked whether an alteration of a rule did not require previous notice to be given.

Dr. URQUHART referred to the minutes of the proceedings at the last annual meeting, and said that a year's notice had been given. It was, moreover, on the agenda to-day. If they could now get the sense of the meeting as to when future annual meetings should be held, that would serve their purpose perfectly well.

Dr. MURRAY LINDSAY said that he thought it very desirable to obtain the sense of the present meeting. He had strong sympathy with Dr. Urquhart, and thought, moreover, that they were not acting very respectfully towards the editors of their Journal. They were making their editors play second fiddle to the editors of the "British Medical Journal."

Dr. PRITCHARD DAVIES said that he should very strongly support the motion of Dr. Urquhart. The British Medical Association had for many years past ignored the claims of psychology. It was in evidence that they did not publish proper accounts of papers read, and that they did not hand over the papers read. No amount of courtesy could get away from the fact that the service was not rendered. If the papers referred to were read here by members of this Association, clearly they would be published. Therefore, all they were now asked to do was to afford members of this Association proper facilities for the reading and discussion of their papers. It seemed to him that hitherto they had been proceeding in a wrong way. There was a motion on the agenda that the title of the Association should be changed so as to make it the Medico-Psychological Association of Great Britain and Ireland. This should imply enlarged scope and renewed energy, and he thought, therefore, that the present occasion was very opportune for Dr. Urquhart's proposal to be considered. He did not see that there was anything diametrically opposite between Dr. Urquhart's motion and the rules of the Association. It was surely competent for the meeting to consider what was advised, and if the present meeting expressed an opinion to the Council, the Council would probably act upon the feeling of the meeting. Accordingly, he had very great pleasure in supporting Dr. Urquhart's motion that the annual meetings should be extended. He hoped that the members would then be made to understand

that papers were required from them, and he believed it would be found they would duly respond.

Dr. CLOUSTON said he felt inclined to move—"That a circular be sent to each member of the Association asking his opinion as to the time at which the annual meeting shall be held."

Dr. WOOD seconded this.

Mr. WHITCOMBE said that he was of opinion that the Association should read its own papers, and that proper time should be given to the members for the preparation of those papers. It seemed to be taken for granted that the annual meeting in 1889 was to be held in London. Was that so?

The PRESIDENT said that he did not think it was competent to the present meeting to consider the question of the 1889 meeting. He then put to the meeting Dr. Clouston's amendment, "That a circular be sent to each member of the Association asking his opinion as to the time at which the annual meeting shall be held," when there appeared—In favour, 15; against, 0.

The amendment was thereupon declared to be carried unanimously.

Mr. Hayes Newington's amendment was then put to the meeting, and declared to be lost.

Dr. Urquhart's original motion was then put, the words "as a general rule" being understood to be added to it, when there appeared—In favour, 18; against, 2.

The motion being thus carried,

Mr. HAYES NEWINGTON asked whether it would now be necessary to send a circular round to ascertain the opinion of members.

Dr. PRITCHARD DAVIES urged that, the amendment moved by Dr. Clouston having been carried, the original motion should not have been put to the meeting.

Dr. CLOUSTON suggested that it should be put again.

Dr. SPENCE said he was prepared to move "That the opinion of this meeting to the effect that an experiment of holding the annual meeting during the month of May, 1889, and extending its duration, should be placed before the Council of the Association at their next meeting."

Mr. HAYES NEWINGTON suggested that, as a way out of the difficulty, the Association should adopt the amendment he had moved, which he had purposely framed to avoid that difficulty. The Council were appointed to look after these matters.

Dr. URQUHART said that, if he rightly understood it to be the sense of the meeting to-day that they wished the meeting to be held in the month of May, then he was willing to withdraw his motion.

Dr. PRITCHARD DAVIES submitted that there was only one thing now to be done. The amendment had been put and carried, and the substantive motion could not be carried. The only thing was to put the amendment a second time. Although he warmly sympathised with Dr. Urquhart, he accepted the mistake, and felt sure that the Council, having heard the views of the meeting, would adopt the feeling so strongly shown.

Dr. URQUHART said he was quite willing to withdraw his motion if it was understood that it was the sense of the meeting that the annual gathering of the Association should be about the month of May.

Dr. CLOUSTON asked whether Dr. Urquhart would limit his motion to 1889. Then the circular might still be sent out.

The PRESIDENT said that he should now put again Dr. Clouston's amendment. He wished them distinctly to understand that in voting for that amendment they were voting for a circular being sent round, and if they did not vote for that they would be voting for Dr. Urquhart's motion, "That the annual meeting be held in the month of May," &c.

The result of the voting showed—For Dr. Clouston's amendment, 16; against, 9.

The amendment was then put as a substantive motion, and declared carried,

Dr. SPENCE then moved—"That the opinion of this meeting to the effect that an experiment be made of holding the annual meeting during the month of May, 1889, and extending its duration, be placed before the Council of the Association at their next meeting."

Dr. LYLE seconded the motion, which was put to the meeting and declared carried.

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.:—Mr. J. Harrington Douty, Medical Superintendent of the Berks County Asylum; Dr. W. Armstrong, Ararat Asylum, Victoria; and Dr. Thos. Brushfield, jun., Assistant-Medical Officer, Chartham Asylum, Kent.

The GENERAL SECRETARY read a letter in Latin from Dr. J. N. Ramaer, Haarlem, Inspector of Asylums, thanking the Association for the honorary membership conferred upon him at the last annual meeting of the Association.

Shortly after last year's meeting, letters of acknowledgment and thanks had been received from M. Roussel and Dr. Godding on becoming Honorary Members, and from M. Jules Morel and M. Parant on becoming Corresponding Members.

Dr. HACK TUKE, in proposing the election of three distinguished honorary members, said that the gentlemen whose names he was about to propose should, perhaps, have been put forward long ago; but by the rules the appointment of honorary members was limited to three every year, although they were not limited as to the total number. The names which had up to the present time been proposed had been, it would be admitted, those of very good men. Some of them had been removed by death, and vacancies, therefore, occurred. He felt that care was required not to confer honorary membership upon anyone too hastily. If this were done, it would cease to be an honour. Good reasons must be adduced for conferring the honour in each case, and the names proposed have to be in the hands of members, according to the rules, for one month before the annual meeting. With regard to the gentlemen now proposed for election, he felt sure that they all met the conditions laid down in Chapter 7 of the Rules of the Association. They were all "distinguished members of the medical profession, who had rendered signal service to the cause of humanity in relation to the treatment of the insane." He, therefore, claimed for each of these gentlemen that they met this requirement. Dr. Chapin, whom he had met in Philadelphia, was the Superintendent of the Pennsylvania Hospital for the Insane. He had previously organized and superintended the Willard Asylum in the State of New York, which was carried out on what was called the plan of *segregation* (as opposed to mere *aggregation*) of the insane—a course which at one time met with considerable opposition in America. On the death of Dr. Kirkbride he had been elected as the best man to succeed him, and he had now been several years in office in the asylum in Philadelphia. As to Dr. Lentz, he was the respected Medical Superintendent of the Asylum at Tournai, Belgium, which some of the members had visited two years ago. That asylum was the newest and largest in Belgium, and those who had seen Dr. Lentz there, had formed a very high opinion of his administrative ability. Dr. Lentz was the author of several works; one in particular, on "Alcoholism," was a standard work on the subject. Dr. Heinrich Schüle, of the Illenau Asylum, Baden, where he had visited him, was an able man, and took a very high position among German alienists. He was the author of the "Klinische Psychiatrie" in Ziemssen's Handbuch, and had written some years previously a Manual of Mental Diseases. His name ought, in his opinion, to be added to their list of honorary members. He could say much more in relation to these three gentlemen, but he trusted he had said enough to obtain for their election the approval of the Association.

Dr. RUTHERFORD cordially seconded the motion.

Dr. CLOUSTON said that he rose not from any feeling of opposition to the motion. They were all very much indebted to their learned *confrère*, Dr. Hack Tuke, for the way in which he had gone into the important matter of selecting honorary and corresponding members, but he wished to suggest this, that they ought to be very careful in regard to the absolute numbers of the honorary and corresponding members whom they elected. It was a fact, as appeared in their last Journal, that the Association consisted of 392 ordinary members and 63 honorary and corresponding members. That implied that a copy of the Journal was posted to each of these members; and, looking at this aspect of the case, it meant that they expended at least £33 a year on their honorary and corresponding members. He would only say that it was a matter which they ought to rather draw their hand in as regards the future; and perhaps most of the members would agree with him that, in an Association of this size, fifty of that class of members ought to be the largest standing number. He felt sure that Dr. Tuke would not misunderstand these remarks. He only wished to draw attention to the point.

Dr. HACK TUKE said he felt that Dr. Clouston's remarks were well-timed. As regards the actual expense, however, he did not think it was quite so high as Dr. Clouston had put it at. Corresponding members were not entitled to a copy of the Journal.

Dr. PRITCHARD DAVIES said that, knowing two out of the three gentlemen proposed for election as honorary members, he should like to speak very strongly indeed in favour of Dr. Tuke's motion. It had been his honour, in visiting the United States, to make the acquaintance of Dr. Chapin before he was appointed to the Pennsylvania Hospital. He had visited him at his great place at Seneca Lake (Willard), and was much impressed with the great grasp which he exhibited on all points. One matter which had not been mentioned was that he was connected also with a beautiful place at Poughkeepsie, which was in telephonic communication with the asylum at Seneca. As regards Dr. Lentz, he could assure them that they were all much impressed with the man and his asylum when he and others visited that gentleman in Belgium. The work on "Alcoholism" was by no means the only work which had emanated from Dr. Lentz. He felt sure that if they were to adopt Dr. Clouston's suggestion to the letter, and limit their honorary members to fifty, or even to thirty, the names of the three gentlemen now proposed for election would most rightly be included in the number.

The names having been taken *en masse*, the gentlemen referred to were declared to be duly elected.

Dr. HACK TUKE, in accordance with a notice given on the agenda, drew attention to the present title of the Association, which did not state what country it represented. He had several times thought that this was an important omission, and in no other country did it occur; but it came to a definite point recently in connection with the "Gaskell Prize Trust." The solicitor who drew up that trust said that for such a purpose the law required that there should be more than appeared in the existing title as given in the Rules of the Association; he could not put into the document simply "The Medico-Psychological Association" as a sufficient description. Thereupon Dr. Paul and himself agreed that "Of Great Britain and Ireland" should be added. The solicitor advised that the rules should be altered in accordance with this fuller title. Accordingly, they wished to get the alteration made at this meeting. He might add that the proposed title was already adopted by the Association in the certificate of efficiency in psychological medicine. He, therefore, moved "That the words 'Of Great Britain and Ireland' be added to the present title of the Association ('The Medico-Psychological Association')."

Dr. RUTHERFORD seconded the motion.

Dr. ROGERS moved the previous question, saying it was a bad sign when an old firm altered its name. He thought that the grounds for the alteration brought forward were very feeble indeed, and he did not see why they should

alter the title of the Association after so many years on the mere suggestion of a solicitor.

Dr. HACK TUKE replied that he did not put the solicitor's opinion as the sole reason. He had for some time thought the change should be made. He must say, moreover, that the words proposed to be added were now inserted in the trust; and unless the title of the Association was altered as suggested, it would not agree with that engrossed in the trust-deed, which might prove very inconvenient.

Dr. SAVAGE said that the question of addition did not involve alteration. A firm might add a name to its number without prejudicing itself. To add the words "Of Great Britain and Ireland" would merely be an addition and not an alteration. He decidedly supported Dr. Tuke's proposition.

Dr. MURRAY LINDSAY said he thought that strong reasons had been adduced for adding the words proposed.

Dr. Rogers' amendment not being seconded, the motion was put and carried *nem. con.*

The GENERAL SECRETARY (Dr. Rayner) stated, in regard to the work of the Committees of the Association during the past year, that the report of the Parliamentary Committee had been already circulated. He might say that that Committee had met upon seven occasions, with lengthy sittings, and had had one interview with the Attorney-General on the Lunacy Bill question. No doubt that Bill would come on next session, and it would, therefore, be necessary for the Parliamentary Committee to be reappointed. He would also suggest that as medical superintendents of asylums had of late been much vexed by the question of pensions, that a separate Committee should be appointed to thoroughly investigate and thresh out that subject.

The names of the members of the Parliamentary Committee, as printed at page 35 of the October, 1886, number of the Journal, having been read,

It was resolved, on the motion of Dr. HACK TUKE, seconded by Dr. HINGSTON, that Dr. T. W. McDowall's name be added to the Parliamentary Committee.

It was further resolved, on the motion of Dr. OUTTERSON WOOD, and seconded, that, with the addition of Dr. T. W. McDowall, the members appearing in last year's list of the Parliamentary Committee be now reappointed.

Mr. HAYES NEWINGTON, referring to Dr. Rayner's suggestion as to a Pensions Committee, said that he thought it would be extremely desirable that that branch of the work of the Parliamentary Committee should be put into the hands of a separate Committee, because the subject was a most important one, and involved a great deal of consideration. There would also be more time for other important matters to be settled by the Parliamentary Committee if the pensions question were put into the hands of a special Committee.

Dr. RAYNER said he should like all three countries to be represented.

Dr. MURRAY LINDSAY said the matter resolved itself now practically into two things: either the restoring to Committees of Visitors of the power they formerly had up to 1862 of granting pensions, or of obtaining the present optional scheme. He thought they must be prepared to make some sacrifice, either by adopting the Civil Service scale or some other scale. There was a very strong feeling at the meeting in London the other day as to the restoring to Committees of Visitors the power they formerly held, and it was only by the casting vote of the chairman that the clause was carried in favour of this power being restored to Committees of Visitors. At that meeting it was suggested that the same confidence did not now exist as formerly existed in regard to those bodies, and that there was now a strong element of "guardianism." They were all aware of the last instance—the case of Dr. Palmer, of Lincoln. There had been a great hubbub, and Boards of Guardians had protested. Dr. Palmer's pension had to go before six Quarter Sessions,

and it was referred back again, with the probability that he would have to accept a reduction of twenty-five per cent.

It was then resolved that Dr. Murray Lindsay and Dr. Williams be appointed a Pensions' Committee, with power to add to their number.

Dr. Savage, the outgoing President, being now present,

Dr. MURRAY LINDSAY proposed a vote of thanks to Dr. Savage, saying that his presidency had reflected honour upon the Association. For Dr. Savage's exertions in the matter of the Lunacy Bill alone the Association was greatly indebted to him, and he felt sure that a hearty recognition would be accorded to him.

Dr. ROGERS seconded the motion, which was carried with acclamation.

Dr. SAVAGE said that first of all he felt he must apologize for his absence that morning. He simply could not help it. It happened to be his Committee day, and as he was just leaving for his holiday and going to America he felt that he must be present at the Committee meeting. He thanked the Association most sincerely for the vote of thanks, which was more than he deserved, inasmuch as he looked upon the honour of serving the Association as its President as an honour of which anyone had a right to be proud, especially when everything had gone on as smoothly as it had done during the past year. Of course, one came into office thinking that the year would be a very long year, and that there would be opportunities of doing something new and fresh; but perhaps it was just as well that things had gone on quietly. The meetings had been large; questions of practical account had been considered —pensions, diets, strong clothes, crib beds, and so forth; in fact, the last year had been marked by the practicalness of the discussions. Everything had gone on so smoothly that he felt that the year had passed almost without his knowing it. He resigned the chair with regret that his year of office was over, and that after all there was so little to be shown for it. He had hoped that, it being Jubilee year, there might have been a Lunacy Bill; but Sisyphus had still to roll that stone up, and he hoped his successor would have the luck to see it rolled right up to the top. Whether it would roll down on the other side remained to be seen. (Laughter.) He was glad to know that he resigned the presidency in favour of one who would add lustre to the chair in as complete and successful a manner as was possible. (Applause.)

AFTERNOON MEETING.

The PRESIDENT reported that the Association prize and medal had been awarded to Dr. Wiglesworth for his essay on Pachymeningitis. The adjudicators were very pleased with this paper, and also with the other papers, which were two in number.

The PRESIDENT read his Address, which will be found at p. 343 of this Journal.

Dr. MAUDSLEY moved a vote of thanks to the President for his Address, saying that all present would agree that there was no need for the President to have claimed indulgence, for the Address was admirable throughout, and was characterized by the principal characteristics of his mind, namely, thorough sincerity and keen practical sense. As regarded Dr. Needham's criticisms on the newly-proposed Lunacy Bill, he (Dr. Maudsley) felt a particular sympathy with them, as he could not help thinking now that their Parliamentary Committee might have taken, perhaps, a stronger post than they had ventured to do in reference to the local and general public opinion which was prevailing. They had spent a great deal of labour and time in criticizing the details of that Bill, and in protecting it as far as possible; but he should almost have preferred, if it were practicable, that they should have refused to take any responsibility on it whatever in any way. If they had said, "This Bill proceeds entirely upon the incarceration

point of view, and not from the medical point of view, we will have nothing to do with it," it seemed to him that it might have been possible to bring into some sort of harmony the legal and medical views, especially if they had said, "We grant you anything you like in the way of stringency of legislation or form in chronic cases, or cases which have been ill a certain time; but we ask you not to make the treatment of recent and acute cases impossible, as you are doing now." In fact, why should there not be some arrangement whereby some simple forms might suit for fresh cases, and then, after a period of six months or so, bring in all those restrictions? If the Bill were to pass in its present form, early treatment of insanity in its present sense would be practically abolished. Instead of cases of insanity being sent to asylums in the early period of the disease, they would be relegated to attics and other places; and, in fact, put out of the way for so long a time that the cases would really become hopeless. He was quite sure that would be the case, because he believed that during the last two years there had been more cruelty and more neglect than during twenty years past. During the last two years he had seen restraint practised which he had never in his life seen before, simply on account of the impossibility under the present system of getting the patients under care. That was what the late Lord Shaftesbury felt—it was the real reason of his resignation—and that was what would happen again if that Bill were to pass in its present form. Before it was again brought in he would suggest that the Parliamentary Committee of the Association might take into consideration the question as to whether they should not propose some modified treatment for the first six months or so of early and recent cases; and then, after that period, if the patient did not get well, bring into action all the legal stringent rules they liked.

Dr. W. Wood rose to second the vote of thanks, saying that he did so with perfect pleasure, because Dr. Needham's paper set forth what was in his mind a very important omission on the part of the Parliamentary Committee. He thought they ought all to have looked at the question from a much broader field than they had done. They had done too much with the details, and too little with the principles. It seemed to him that the medical profession was expected to discharge a very arduous and important duty, and yet it was distrusted. Throughout all the Bill it was taken for granted that the doctor would, if he could, do something which he ought not to do, and thus, instead of causing trust in the patient's mind, distrust was created. He was not sorry the Bill had failed to pass, because he hoped there might still be time to get the lawyers to look at it from the medical point of view. It was at present a "lawyer's Bill." He hoped the time given to its consideration would not be lost if they could succeed in this. It was fortunate that they were so well represented in the presidential chair, and he was very glad that Dr. Needham had taken the view which he did of the matter.

Dr. Clouston said, that in rising to add a word or two to the remarks which had been made so vigorously by Dr. Maudsley and Dr. Wood, he would agree with them most strongly as to the admirable character of the address to which they had listened. If there was anything which would justify him in adding a few words to what had already been said, it would be this: that in Scotland they had had for many years actual experience of the practice and working of a system differing somewhat from the English one, but under which they had had the opportunity of treating patients at first without an order from anybody, and he would simply, in strengthening Dr. Maudsley's statement, say that that medical provision by which the family had the power to get a patient treated for six months without any distinct legal order, had been the means of doing good, both to the friends of the patients and to the patients themselves, and also of extending a knowledge of insanity to the medical profession generally. Of course the Association was comparatively a small body, and if there was anything which would supplement the force of the remarks which had been already made, it would be the

enlistment of the sympathy of their professional brethren and of the great medical press in the view taken of the matter by the Association. Could they not hope to eradicate the prejudice which had shown itself to prevail even in the medical journals, and which had done so much harm? If they could see the time when the "unity," to which reference had been made, should exist, and they could see themselves supported by the medical journals and the medical profession generally, he thought they would then be able to convince the Government much better. They knew that the "British Medical Journal" had helped them, and helped vigorously. Without at all saying that their system in Scotland had been better than that in England, he would say that in Scotland, wherever the element of the civil magistrate had been called in—where it had been in action—it at all events did not seem to have done any harm. He did not think they need fear it.

A MEMBER: But the magistrate does not see the patient.

Dr. CLOUSTON said that was what he was coming to. Could they not impress upon the Legislature that the medical aspect must be taken? The Scotch system did not in any way imply an inspection of the patient by the sheriff. This should be accentuated in the Bill now under discussion. The Bill began by saying that it was founded largely upon the Scotch system, but it departed from the essential spirit of the Scotch system by adopting that wretched idea of the magistrate seeing the patient. This was not sufficiently known. The English Bill was a bad legal accentuation and a perversion of the Scotch system. It was not like the Scotch system, and that fact could not be too widely known. In regard to a remark made in the first part of the address, he could not help adverting to an extraordinary paragraph which he had seen in a social paper lately, where it was laid down that lunacy was a most objectionable thing, and all men and women should do everything they could for its eradication, and that, therefore, as public opinion was everything, every lunatic's name should be published as widely as possible, and that it ought to be published in the newsapers so that no one should marry into that family, and the lunatic should thus, for the good of society, be branded as a lunatic for all time. Those were the errors which were promulgated. Any man with a spark of philanthropy in his heart would detest such a mode of thought. With reference to the remark made as to the clauses affecting the registered hospitals of England, for his part he was simply amazed that such clauses should find their way into any Lunacy Bill. That such a body as the Commissioners in Lunacy should have those arbitrary and extravagant powers in regard to hospitals, which it was proposed to give them, was what he could not fancy anyone would agree to, seeing that those hospitals were started by great public charitable contributions, and were managed by committees consisting of persons chosen on account of high position and responsibility. He hoped they would all try to put pressure on the various members of Parliament whom they knew to modify those clauses relating to the great registered hospitals.

The motion was then put to the meeting by Dr. Rayner, and carried with applause.

The PRESIDENT, after thanking the Association for the vote of thanks, said that they had one or two distinguished visitors from whom they would be glad to have any remarks.

Mr. CLARK BELL said it gave him very great pleasure to record his appreciation of the excellent address, the earlier part of which he had been unfortunately precluded from hearing. Candidly, he might say that he believed if they had in England a Medico-Legal Society, analogous to that over which he had the honour of presiding at New York, many of the questions which he gathered had arisen, and which, as far as he was able to judge, he believed they looked at correctly, would be better understood by the legal gentlemen with whom they frequently had to work in the matter of insanity. The Medico-Legal Society at New York met for the purpose of discussing such

points as these, just in the same way as the meeting to-day, and the reflex of their deliberations went to the Legislature and the general public through the medium of the press. The difficulty in the present case, if he correctly understood the criticisms which had been made, and which were summed up in the expression he had heard made use of as to the Bill being a "lawyer's Bill," doubtless arose from the feeling in regard to what was popularly called the "liberty of the subject." That feeling existed in other parts of the world besides Great Britain. In America it was said that no person should be deprived of his liberty except by due process of law, and his incarceration in an asylum might possibly be construed into an invasion of the constitutional rights of a man. Dr. Maudsley had urged that a period of six months might be allowed before the limitations, called "stringent," which had been referred to, should come in. The laws of almost all the American States provide that before a person could be put into an asylum there must be a judge's order, which, however, was more "ministerial" than judicial, and did not override the medical certificates, but in emergency cases in the State of New York a patient could be placed in an asylum for five days, at the end of which time, if a judge's order had not been obtained, the patient would have to be discharged. In England the law relating to lunacy was in many respects so much better than that in the United States that he had been striving to bring the law of his own country up to the standard of that work which culminated the labours of the late Earl of Shaftesbury in England, especially as to Commissions in Lunacy and supervision of establishments. He felt that in England much had been done in the way of useful and careful lunacy legislation, and he was not sure that in doing more than enough it might not end in doing badly. He advised them to let "well enough" alone. There had been agitation in regard to this matter in other countries besides England. In France and Italy the question had forced itself upon public attention. In the different States of America they had for years been endeavouring to change their statutes where they were greatly more in fault than those existing in England. About four years back one of the States attempted a modification of their lunacy statutes, proceeding in a manner very similar to that in which the English lunacy statutes had been enacted, namely, by means of a governmental proceeding analogous to a Parliamentary inquiry. The governor of that State appointed of his own motion seven or eight gentlemen chosen from both legal and medical professions—one or two ex-governors of the State, some members of legislative bodies, and some alienists of acknowledged position—and asked them to consider the whole subject of the Lunacy Law of Pennsylvania. They did so. A Bill was brought in on their report to Governor Hogg, who made it the subject of a message to the Legislature, and recommending its passage. It was a most extraordinary thing that almost all the medical superintendents of Pennsylvania opposed that Bill. The Bill, however, which was drawn up in many respects upon the theory of the English law, passed. It seemed to lift the law of Pennsylvania up to the platform of English law. For instance, hitherto there had been no such thing in Pennsylvania as a Lunacy Commission. The medical superintendent of an asylum was a perfect autocrat, had absolute authority, and could not be got at in any way except by the Local Board appointing him. One man would have one idea as to the best way of treating an insane person and one another, and there were, of course, abuses and public scandals. The new law to which he referred had a clause in it giving full freedom as to the correspondence of patients. As to trial by jury, it existed in the State of Illinois, except in regard to the estates of patients. He highly disapproved of it on principle, and yet in its practical use there was very little harm in it, and the people of Illinois refused to change it. It would certainly prevent improper incarceration. That was the legal and lay side of the question. Things had in America got to such a state that something had to be done. Some unfortunate circumstances had lately happened exhibiting the need for further

legal provisions, and there was more trouble coming on. What with accidents and convictions of attendants before juries for cruelty and brutality to patients, the public impression had got to be that things were not as they ought to be in many institutions. Still he thought things all right, and the public mind not wisely inflamed. He did not believe that the intervention of the magistrate would be found to do a very great deal of harm, if any at all. The great thing was to educate the public mind as to insanity being not a crime, but a disease requiring prompt and efficient treatment in the same way as other diseases, and that the patient should accordingly be placed under circumstances favourable to his cure. As regards the question of mechanical restraint and seclusion, there had lately been a marked change in America. He remembered that at an asylum in Philadelphia not very long ago he had heard of a woman being sent up in chains from an almshouse to the Norristown Asylum. In many asylums mechanical restraint was now abolished entirely, and one after another medical superintendents of insane hospitals were coming to dispense with it. Dr. Gray, of Utica, had maintained and defended restraint, but his successor had come out entirely in favour of non-restraint. Mr. Clark Bell concluded by saying that it gave him the greatest possible pleasure to see the faces of so many gentlemen of whom he had heard and known. He had stayed so long in London on purpose to meet them. He had never seen so many "mad doctors" in one box before. (Laughter and applause).

Dr. MANNING, of New South Wales, said that he had had a very peculiar pleasure in listening to the President's address. He had known Dr. Needham for more than twenty-five years as an intimate friend, long before he (Dr. Manning) had ever been in an asylum ward, and then Dr. Needham was the honoured superintendent of an asylum. It was, therefore, very gratifying to him to see Dr. Needham now occupying the chair of the Association. With respect to the particular question of the law of insanity he had only to report that the law in New South Wales was founded very closely indeed upon the English law. They had the intervention of the magistrate, but the magistrate's interference only went as far as certifying to the correctness of the signature—to, as he might say, the *bona fides* of the person signing the request, and the correctness of the legal documents. He had no standing whatever as to the certificates; he was bound to pass those. The magistrate was only asked to give them some certified guarantee that the person signing the request was a person of some respectability and standing. It had been found that that satisfied the scruples of the public. He should be very sorry indeed to see any alteration in the direction of the new English Lunacy Bill, and quite agreed with one of the speakers that it would be very much better to let the English law alone. He was quite sure that a great deal of harm would be done by the passing of the Bill as it was framed at present, and he thought it very advisable that the Parliamentary Committee should take some steps in the direction indicated by Dr. Maudsley. The statutes of New South Wales were founded closely upon the English model. They were about eight years old, and during the period they had been in existence there had been no trouble in their working.

Dr. URQUHART said that some years ago there was a proposal made as to the introduction of reception houses as half-way places between lunatics' homes and asylums. As Dr. Manning had had great experience in regard to that particular point, they would be very glad to hear something about the reception house at Sydney.

Dr. MANNING said that the establishment of the reception-house was more or less an accident, but it had worked most satisfactorily, and now about 600 patients passed through it annually. It contained about twenty-four beds, twelve or fourteen for men and the remainder for women. There were two classes of admissions. The first class consisted of those who were brought before the magistrates and were remanded by them so that medical

men should have an opportunity of examining and certifying. On being taken up by the police the cases were taken before the magistrate and seen by him in his private room. The medical man would sometimes be unable to certify, and would advise that they should be seen again. These cases would accordingly be sent to the reception hospital. At the end of a week or ten days these cases would again be seen, and then, if necessary, sent on to an asylum. About three hundred cases were of that sort. Of course a very large proportion of them did not reach asylums at all. The other class of admissions to the reception hospital were those "upon certificate." These cases were admitted upon one certificate, and it was necessary that another certificate should be signed before they could be sent on to an asylum. Many of those cases were discharged, and never reached the asylum at all. The medical officer of an asylum had the power to certify that the cases might be benefited by remaining in the reception hospital, otherwise they must be discharged in the course of a fortnight. Thus by the use of this reception-house a very large number of cases were spared going to the asylum at all. Out of the 600 admissions not more than 300 passed to the asylums. Many of those were cases of delirium tremens, and many of temporary aberration which recovered in a week or ten days. The only institution of the same kind with which he was acquainted was one in Paris, but there, he believed, the cases could only be admitted upon certificate. It was found that some of those cases which were brought up and remanded were very much injured by being taken to the police cells, and the reception-house was established to meet that particular class of case. The number of people who recovered in the reception-house very materially lessened the proportion of recoveries in asylums. All the same, it had done a very good work, and certainly the treatment there, and the care bestowed, was much better than was likely to be afforded to that class of cases in the poor-houses, where he understood such cases were sent in the first instance in England.

Dr. Hack Tuke said that upon the point of magisterial intervention the difficulty arose, that under the existing law the magistrate was already called in in pauper cases, and, therefore, it was not easy to argue against this course being taken in private ones. It should, however, be remembered that all along the Parliamentary Committee had entered a protest against the calling in of the magistrate, and especially against his seeing the patient. The Parliamentary Committee, moreover, had gone on to say that whether that proposal passed or not, there were certain clauses in the Bill which this Association wished to have modified. He believed it would have been a mistake for the Association to have looked silently on and not to have done anything in the matter. Possibly the opposition which they had raised had helped to prevent the Bill passing so soon as it might have done, and prolonged the discussion till another session. It must also be borne in mind that unfortunately both political parties had felt equally strongly about the intervention of the magistrate, and thus no party feeling could be aroused. These difficulties ought to be borne in mind in considering the action, or what might be thought the want of action, on the part of the Parliamentary Committee. As regards the trial by jury described as existing at Illinois, he might say that he was present at one of these trials in Chicago, and although he did not see anything particularly objectionable, he inferred from what he heard from those well able to judge in that State, that there were very strong reasons against the publicity which was occasioned in consequence of cases being taken before juries, and certainly he heard that cases were kept back from the fear of being involved in legal proceedings. He would only add that he had been extremely interested and pleased by the admirable address which had been delivered by the President.

The proceedings then terminated, the members of the Association and visitors subsequently dining together at Greenwich.

BRITISH MEDICAL ASSOCIATION.—DUBLIN MEETING, AUGUST, 1887.

(Psychology Section.)

President: J. R. Gasquet, M.B., Brighton. Vice-Presidents: Frederick Needham, M.D., Gloucester; Oscar T. Woods, M.D., Killarney. Secretaries: Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

The interest in the meetings of this section was well sustained. The discussion on the papers read will appear in the "British Medical Journal." Some, if not all, of the papers themselves will be published in this Journal. That by Dr. Oscar Woods will be found among the Original Articles of the present number. The outcome of this article promises to be of practical importance.

The President, Dr. Gasquet, gave, as might have been expected, an able and thoughtful discourse, whose only fault was its brevity. We append it.

The following was the order in which the papers were read:—

Wednesday, August 3.

President's Address.

"Folie à Deux," D. Hack Tuke, M.D.

"On the Use of Galvanism in the Treatment of Certain Forms of Insanity," Joseph Wiglesworth, M.D. (see Original Articles).

"Nervous Disorders following the Use of Anæsthetics," Dr. George H. Savage.

Thursday, August 4.

"Case of M. R., a Medico-Legal Study," Prof. Kinkead.

"Expectancy as an Element in the Exaggeration of Railway Injuries, Real or Imaginary," H. C. Tweedy, M.D.

"Our Laws and our Staff," Oscar Woods, M.D. (see Original Articles).

"How ought Society to deal with Habitual Criminals?" Isaac Ashe, M.D.

Friday, August 5.

Resolution passed asking the Council to memorialize the Government in regard to the defects in the Irish Lunacy Law.

"Are Airing Courts, Locked Rooms, and Restraint necessary in Asylum Practice?" John Keay, M.B.

"On Private Treatment *versus* Asylum Treatment," D. Yellowlees, M.D.

Vote of thanks to President and Secretaries.

The President's Address.

Gentlemen,—I will not waste the time allotted to me—which, happily for you, is short—by dwelling upon my own unfitness for the post which I have the honour to fill to-day. You will do me the justice to believe that I never realized my own shortcomings so fully as I do now, when I am called to preside over men of greater knowledge and experience that myself. I therefore put aside at once all personal considerations, and rely, solely but confidently, upon your kindness to make the work of our Section a success, in spite of all my deficiencies.

But I approach the subject of my address with greater diffidence, being aware that many will think it needs more apology than my position here. I know there is hardly a matter connected with insanity which you have not had larger opportunities of studying, and, I fear, used those opportunities more

profitably than I. On these it would be almost an impertinence that I should dwell; but there is one subject which, as it seems to me, we all alike neglect, and to which I may without presumption direct your attention, as well as my own. I propose to ask whether the abundance and importance of the bodily conditions that come before us do not unduly distract our minds from the mental and moral phenomena of insanity? Whether we do not look too much upon the physical side of the object of our study, and neglect its psychical aspect? Let no one be alarmed. I have not the slightest wish to disturb our tacit agreement that questions of philosophy should be set aside by us, and that our business is to study the concrete manifestations of mind. Nay, I am quite prepared, with a physician who was also a great philosopher (Lotze, *Logic*, chap. v.), "by one general formula of ready worship, to purchase a dispensation from any further glorification" of the principle that insanity is due to disease of the bodily organism, and must be studied as such. No doubt there has been much need in the past of the frequent repetition of this fundamental truth; still "any moral sermon becomes intolerable if it goes on for ever." Nor does there seem to be much present risk of its being forgotten; while there is, on the contrary, the danger of a reaction if we dwell too unduly upon the bodily side of our duty. The zigzag progress of human thought may at the next turn of the path bring the psychical aspect into undue prominence.

A few examples will show what I mean, and, perhaps, enable us to ascertain better how far my fears are justified. Let us take the causation of insanity. It is impossible to exaggerate the importance of heredity in all biological study; it is the first law of motion applied to the organic world, and must, therefore, be the starting point of all our inquiries. But has not our daily increasing recognition of the universal extent of heredity somewhat lessened our attention to all those factors of insanity which used to be called (and still figure in the text-books as) "moral causes"—education, precept, example, and all the manifold ways in which one human mind can influence another? Of course they all have a common physical basis in that tendency to imitation which is inherent in the nervous system as the highest form of reflex action, yet the connecting link between mind and mind is none the less purely psychical. I have not forgotten that we are about to have the pleasure of hearing a paper on a striking instance of what I refer to—*folie à deux*—by one of our most accomplished members; but what fields remain unexplored! Who has sought to unravel the tangled skein of family histories, and tried to estimate the share which the early example and training of neurotic parents have in strengthening the evil tendencies which they have already transmitted to their children? Happily we seldom now have the opportunity of studying the effect of imitation on the largest scale in those epidemics of insanity which have been so notable in the history of the world; but their records are still acceptable to our study, and appear to justify abundantly my contention.

I need only just mention the influence of the various passions, even in their most refined developments. Jealousy, remorse, anxiety, grief, act, indeed, only by and through the nervous system, but in their nature and origin are mental rather than cerebral.

If we pass from the causation of insanity to its symptoms, we shall, I believe, find their psychological aspects equally deserving of more careful investigation than they receive at present. Thus many of the phenomena of insanity, if tested by psychology, turn out to be quite different from what they at first sight appear. For instance, I suppose we are all apt to class as disorders or loss of memory states which would be more accurately defined as disordered recollection or attention, which no doubt have very different physical correlates from loss of memory proper. It may even be suggested that the slowness with which psychiatry progresses may be largely due to our imperfect psychological analysis, which connects symptoms really dissimilar, and separates others which are only different in appearance.

Turning to symptoms as we find them, we may say roughly and generally that the bodily condition supplies the general direction which the insanity takes, while the details by which each individual seeks to account for his altered feelings are derived from his past mental experience. This is, of course, most plainly seen in cases of recent melancholia. The religious belief to a great extent supplies the data on which delusions are constructed, so that we find many delusions of this kind are "endemic" among the members of various religious bodies.

The way in which the systematic delusions of chronic insanity are gradually built up, if more difficult to study, appears to be more curious and remarkable. For instance, we have all seen patients who start with delusions of persecution, and gradually go on to construct the belief that they must be personages of exceptional rank or importance to be the victims of such persistent conspiracy and hatred. Or again; it is very interesting to watch the growth of delusions in educated lunatics, by their continual attempts to meet real or fancied objections, so that the very reasoning that is employed to disabuse their minds leads to their increased confusion.

A question of greater delicacy and difficulty has sometimes been approached, but still, I believe, awaits adequate investigation. It needs a very subtle analysis to discover whether all the mental faculties are alike liable to perversion, or whether any laws of thought or processes of mind remain standing amid the general ruin, and are always normal as long as they are manifested at all.

So, too, no one will say that the several groups of symptoms which we include under the term "moral insanity" have been sufficiently studied. Many problems still await solution by the application of psychological analysis, though it has been carried much further in this than in other directions, owing to the pressure of medico-legal requirements.

After all, the ultimate test of all our medical knowledge is its practical value. Fortunately for you, this excludes from my consideration the services we might render psychology, were we trained psychologists. But it leads me to ask all the more urgently—Is the psychological side of our speciality unduly neglected in treatment? As a proof that it is, I need hardly go further than the very term "moral treatment," which has been used so vaguely as to become almost ridiculous, and fallen into disrepute. It is, indeed, true that the mental and moral influence of one mind upon another is hardly ever more wonderfully displayed than in the management and cure of the insane. To rouse the apathetic, to cheer the melancholy, to control the excited, to bring the self-centred lunatic face to face with the realities of life—these are noble powers indeed, which are being constantly exercised in asylums. But the tact which can do all this is personal and incommunicable, born of long practice, of frequent success, and still more frequent failure; it is the skill of an artist bringing forth harmony and order from the instrument on which it plays. What a gain it would be if the principles on which one skilled in dealing with the insane proceeds, instead of being intangible, because unconscious, could take shape and definiteness under scientific treatment, and the beginner start in some measure armed with the experience of past generations. That the thing is not impossible is shown by the success in a parallel profession of Mr. Sully's excellent "Teacher's Manual of Psychology." It is from this point of view that such experiments as Dr. Savage, in particular, has recorded are of great interest where lunatics are reasoned out of their delusions, and cured, so to speak, by psychology. We may naturally expect that by the continuance of such attempts upon some fixed method we should gradually arrive at fixed principles of treatment.

A profound conviction of the practical importance of my subject could alone have induced me to occupy your time to-day with what must, at first sight, look like mere fault-finding and criticism. A heavy responsibility lay upon me

to use the moments in which I was privileged to address you to the best of my power. I felt I could not do better with them than to enforce the old sentence, which might well be the motto of our profession: "Ars artium regimen animarum," "The art of arts is the government of souls."

INAUGURATION OF THE STATUE OF GUISLAIN.

Early in the second week of July an interesting ceremony took place at Ghent. Although the distinguished Belgian alienist performed his great work some fifty years after the reformers in England and France performed theirs, his labours are equally creditable to his heart and understanding. He found the customary abuses in the management of the insane; he determined that his country should be at least abreast of the age in which he lived; he demonstrated to his countrymen the possibility of a more excellent way, and insisted upon the duty of the authorities in providing proper accommodation and humane treatment for the insane. To say that the results fell far short, as regards the whole kingdom, of what Guislain desired, is only to say that reforms initiated by far-seeing men are not adopted beyond the immediate circle of their influence for a long period, often not during their lifetime. But the seed has been sown, some of it doubtless scattered on stony ground, some of it among thorns and briars which choke it, but, as in the case of Belgium, enough has fallen on good ground to ensure the success of Guislain's humane efforts to arouse popular sentiment and to overcome official apathy and neglect. The reformer's work must not be measured by contemporaneous results; these are prolonged far beyond his lifetime. Of this common truth the inauguration of Guislain's statue is the best illustration possible. The man it commemorates showed what could be done for the insane in the asylum he superintended, and which bears his name. He also urged their claims in the municipal and national conscience, but whatever he effected or failed to effect while he lived is powerfully influenced by the ceremony of July, 1887. In honouring Guislain as a public benefactor the people of Belgium admit the necessity and righteousness of the principles of action for which he contended. The sufficient provision for and proper treatment of the insane and idiotic are not secured at any period once for all. They must be sustained by continual appeals to official authority and benevolent action made by an authority springing from the combination of philanthropy and science, for the former single-handed goes too far, and the latter does not go far enough.

Returning to the Guislain ceremony, we have to record that a striking bronze statue of the citizen of Ghent and the alienist of Belgium was unveiled on the 10th of July in the Place de Beguinage of that place. On the pedestal was inscribed: Joseph Guislain, 1797-1860. M. Hambresin was the sculptor, and was congratulated on his success. The cost of the statue was £1,000. From the covered platform erected in the Place, speeches appropriate to the occasion were delivered by the President, M. Lentz, Inspector of Asylums, delegate of the Minister of Justice, Director-General of the Bureau of Justice, President of the Committee of Organization, by his brother, Dr. Lentz, the Superintendent of the Tournai Asylum (who was made an honorary member of our Association at the recent annual meeting), by M. Lefebvre, M. Boddaert, President of the Academy of Medicine, and others. M. Lentz, the chairman, was supported by the Governor of the Province (Flandre Occidentale), M. de Kerchove, and by the Mayor of Ghent, M. H. Lippens, who also delivered an address. Various countries were represented at the ceremony by physicians deputed to attend; Holland by Dr. Ramaer, Inspector of Dutch asylums; Denmark by Dr. Steenberg; Russia by Dr. Dektereff; Britain by Dr. Hack Tuke. A telegram received

Yours Cordially

"The American Standard."

from Laehr, Berlin, stated that unavoidable circumstances prevented his attendance. Apologies and congratulations were also received from Prof. Mierzejewski (St. Petersburg), Prof. Kowalewsky (Kharkoff), Prof. Tibaldi (Padua), Prof. Wille (Switzerland), Dr. Semal (Mons), Dr. Van der Lith (Utrecht), Dr. Christian (Charenton), Dr. Brosius (Bendorf), Clark Bell (New York), etc.

Prior to the ceremony most of those who took part in it assembled at the Hospice Guislain, and were received by the present superintendent, M. Morel, who recently succeeded the lamented M. Ingels. M. Morel introduced the members of the deputation to the Commissaire d'Arrondissement and the President des Hospices, gave a rapid review of the past history of the insane in Belgium, and then escorted the visitors over the asylum, the condition of which reflects great credit upon the successors of Guislain, no less than Guislain himself.

In the evening a banquet, given in honour of the occasion at the Hôtel de la Poste, brought the proceedings to a close. Speeches were delivered by M. Lentz, M. Héger, Professor in the University of Brussels, and President of the Belgian Société de Médecine Mentale, M. de Kerchove, Dr. Poirier, Dean of the Faculty of Medicine of the University of Ghent, Dr. Vermeulen, Physician-in-Chief of the Asylums of Ghent, Dr. Ramaer, Dr. Steenberg, and a tribute again paid to the services rendered by Guislain to the cause of the humane treatment of the insane in Belgium.

We cannot conclude this notice of the ceremony and the whole proceedings without an acknowledgment of the admirable manner in which the business of the day was carried out, the success of which was in great measure due to the active thoughtfulness of M. Morel.

[Since the foregoing was written, the Bulletin of the Society of Mental Medicine of Belgium contains a full description of the proceedings, including reports of the discourses of MM. Morel, Lentz, Lefebvre, Boddaert, Lentz, Lippens, Tuke, Hegér, de Kirchove, Poirier, Vermeulen, Ramaer, Steenberg, etc.]

Obituary.

DOROTHEA L. DIX.

No name in connection with reforms in the condition of the insane in the United States is worthy of more honour and veneration than that of Dorothea Dix. Early in the field, never disheartened by the difficulties which beset her path, firm as a rock, yet a lady in all she did, this resolute woman succeeded in not only exposing the once revolting condition and shameful neglect of the insane, but in inducing the State Legislatures to erect suitable receptacles for them. More than this, she encouraged efficient medical men to come forward to superintend these institutions, and exercised her influence in obtaining their appointment. Furthermore, she watched over the hospitals for the insane after their establishment, and promoted their successful working by all the means within her power. She frequently visited them, and was always a welcome guest. What Mrs. Fry was to prisons, Miss Dix was to asylums. The homage paid to the former by Sydney Smith may be fittingly applied to the latter, and, indeed, the reference is doubly appropriate because Miss Dix visited the prisoner in his cell as well as the neglected lunatic in the outhouse and garret. "There is a spectacle which this town (London) now exhibits, that I will venture to call the most solemn, the most Christian, the most affecting which any human being ever witnessed. To see that holy woman in the midst of wretched prisoners—to see them calling earnestly upon God, soothed by her voice, animated by her look, clinging to the hem of her garment, and worshipping her as the only human being who has ever loved

them, or taught them, or spoken to them of God—this is the sight which breaks down the pageantry of the world, which tells us that the short hour of life is passing away . . . that it is time to go, like this blessed woman, among the guilty, the broken-hearted, and the sick, and to labour in the deepest and darkest wretchedness of life." Well do we remember Miss Dix telling us that as she was travelling one night along a lonely road she was attacked by a highway robber, who demanded her purse. She spoke to him, and when he heard her voice his whole demeanour changed. He expressed his contrition for his conduct, and said he remembered her visits to the prison where he had once been confined. On another occasion, after staying for a week at an inn, she asked for her bill, but the landlord refused to take a cent, stating that he had received kindness and good counsel from her when he had the misfortune to be in a prison which she visited. Unlike the thief just mentioned, he had endeavoured to lead a better life.

Those who would adequately estimate the courage displayed by Miss Dix in penetrating into the dens in which the insane and idiots were once concealed, must read her narrative of cases and her Memorials to the American Government some forty years ago. Her Report shocked the feelings of the community and aroused sympathy on behalf of the suffering insane for whom she pleaded. State hospitals were built, and she had the satisfaction of witnessing a great reform carried out, although even her powerful influence was unable to induce the authorities to do all that she wanted them to do, the State provision being often very inadequate for the needs of the insane, and numbers being allowed to remain in inferior almshouses. But if the condition of the insane in the United States at the time of her death were compared with that in which she found it, some five-and-forty years ago, the contrast would be at once startling and gratifying. To Miss Dix the change is mainly due. She laboured first, and others happily entered into her labours. The superintendents of asylums paid her the greatest respect; she was always welcome to their houses as a guest, and the American Association of Medical Superintendents of Hospitals for the Insane welcomed her on one occasion in terms of the most flattering description, and passed a special resolution in her honour. And the writer has observed in at least one asylum-chapel in the States the portrait of this saintly woman on the wall where in a Roman Catholic Church the Virgin Mary would have been placed. Miss Dix's philanthropic labours were not confined to the States. She was interested in the asylums in Canada, and at one period was painfully impressed with their bad condition. Again, everyone who knows the history of the reform in lunacy in Scotland knows that her visit to that country in 1855, her exposure of the dreadful state of things she discovered, and her vigorous onslaught on the authorities who supported them, led to a complete revolution in the care and treatment of pauper lunatics. Those who heard from her own lips the stirring incidents of that raid upon Scotland after her return to England, and her interview with the Home Secretary only a few hours before the Provost of Edinburgh arrived in hot haste on the scene in order to anticipate and nullify the good woman's appeal—but just too late—are not likely ever to forget her graphic story. Her clear statement of facts, her dignified presence, her obvious sincerity, and her dogged perseverance triumphed. She could afford to smile at the epithet bestowed mockingly upon her, "The American Invader," a soubriquet which she adopts in the autograph we have appended (from a letter) to the portrait facing the title page.

Miss Dix's health was feeble, but her indomitable energy overcame all obstacles.

During the Secession War, Miss Dix's activity was diverted into another channel. She saw her duty then lay in tending the sick and dying, and it is needless to say she was an angel of mercy in the hospitals where the wounded were nursed. Her eventful life when written, as we believe it will be, should be an interesting one. Her pen was never weary, so that out of her

voluminous correspondence there ought to be material for much valuable personal experience and opinion. The only drawback is the not easily read handwriting, written on thin paper and frequently crossed. Of letters received by the writer during thirty years, the last was dictated on the 17th April, 1886, in which she expresses herself thus:—

"I have for many weeks been wishing to write, and, with the expression of affectionate remembrance and regards, I must now say illness only has interposed. I have of late been very ill. This morning Dr. Ward brought me a message from Mr. Rathbone (M.P.) which again reminded me of, and took me to, the more immediate remembrance of my English friends. May I not ask that you soon write and inform me of hospital affairs in England?"

Although Miss Dix's health had become much impaired for some years, she retained her interest in the great work of her life. She resided in rooms set apart for her use in the upper storey of the State Asylum for New Jersey at Trenton, of which Dr. Ward is the medical superintendent.* Dr. and Mrs. Ward did all in their power to render her declining years as comfortable as possible, and for their kind care of one who had spent her life in caring for others, the friends of Miss Dix in England, as well as in America, ought to feel very grateful.

During the period Miss Dix spent in her rooms without once leaving them, her death has many times appeared to be imminent; but there had, it appears, been a slow decline in her bodily powers, whose failure seemed to be sudden at last. She became unconscious about twelve hours before her death, and continued so to the end. Dr. Ward attributed her death to heart disease.

Miss Dix died on the 17th July, 1887. We are not able to state her length of days, but they must have extended considerably beyond 80. She was not exempt from the feminine disinclination to disclose her age, and many have been the innocent attempts to induce her to betray the secret, but all in vain. On one occasion the question was abruptly put to her, but she evaded it with characteristic tact. The occurrence took place one day as she went round an asylum. It happened to be the birthday of one of the female patients. Addressing the well-known visitor she announced her own age, and immediately added (perhaps previously prompted by the superintendent) "And what age are *you*, madam?" The inquisitive bystanders thought that there was no escape. On the contrary, Miss Dix promptly replied, "*About* a hundred!" and passed on, leaving her interrogator and others thoroughly discomfited.

We are glad to be able to accompany this obituary notice with an admirable likeness of Miss Dix. With great difficulty we induced her to allow herself to be daguerreotyped during her visit to York in the year 1885. Even when taken, it nearly suffered destruction at her hands.

Her remains were laid in the Mount Auburn Cemetery, near Boston (Mass.), on the 21st, having been conveyed from Trenton, a distance of 300 miles.

Among those who attended her funeral was Dr. Charles H. Nichols, of the Bloomingdale Asylum, N.Y. We cannot better close our imperfect notice of this devoted woman, whose memory will be cherished by all who have at heart the amelioration of the condition of the insane, than by the following tribute to her honourable career by one who knew her so well and can so justly estimate the benefits she has conferred upon humanity. Dr. Nichols, in commenting on the decease of Miss Dix, writes to us:—

"Thus has died and been laid to rest in the most quiet, unostentatious way, the most useful and distinguished woman that America has yet produced."

* To prevent what has already led to a misconception, it may be as well to state that Miss Dix did not seek this asylum on account of mental failure. It had repeatedly been her home in former years, when Dr. Buttolph was superintendent.

CERTIFICATE OF EFFICIENCY IN PSYCHOLOGICAL MEDICINE.

PASS EXAMINATION.

The following candidates for this certificate passed the examination held at Bethlem Hospital, July 23-24, 1887 :—

English, Edgar, M.R.C.S.Eng., L.S.A.Lond., Dip.P.H.R.C.P.Lond., Stoke Newington.

Mortimer, Jno. Desmond Ernest, M.R.C.S.Eng., L.S.A.Lond., Ass. Med. Off. Portsmouth Borough Asylum.

Nairn, Robert, M.R.C.S.Eng., L.R.C.P. Lond., Bethlem Hospital, London.

Simpson, Samuel, M.B., B.Ch.Dublin University, Bethlem Hospital, London.

Slater, William Arnison, M.R.C.S.Eng., Fisberton House, Salisbury.

Thompson, Geo. Matthew, M.D., M.Ch.Q.U.I., Bellaghy, Castledawson, Co. Derry, Ireland.

The following are the written questions asked at the Pass Examination:—

Examiners:

D. Hack Tuke, M.D.
Geo. H. Savage, M.D.

(It is not necessary to answer more than Four of these Questions.)

I.—Give the symptoms, bodily and mental, of General Paralysis of the Insane, distinguishing between the several stages through which it may run. Note the different mental forms which may characterize the invasion of the Disorder.

II.—With what other diseases may Acute Delirious Mania be confounded? Give the differential Diagnosis.

III.—What forms of mental disorder may be classed under "Alcoholic Insanity"?

IV.—Enumerate the bodily and mental symptoms of Mental Stupor with Melancholia. In what does it differ from Mental Stupor without Melancholia ("Primary Dementia")?

V.—Give the treatment (General and Medical) of a case of Puerperal Mania.

VI.—In what form and dose would you prescribe Hyoscyamine, Hyoscine Hydro-bromate, Urethane, Paraldehyde, and Hypnone?

Questions asked at the Honours Examination:—

(*Same examiners.*)

I.—Trace the relationships of Alcohol and Syphilis to General Paralysis of the Insane.

II.—How would you subdivide cases of Insanity depending upon morbid sense impressions?

III.—Explain the relationship of Heredity to various forms of Insanity.

PSYCHOLOGY.

I.—Enumerate the most important classifications of Healthy Mental Phenomena, indicating the one you prefer, with your reasons.

II.—Give the psychological bearings of Word-Deafness and Word-Blindness. Illustrate by a diagram.

III.—What is meant by the influence of the Mind upon the Body, and the Body upon the Mind? Illustrate the *modus operandi* by an example of each.

IV.—How would you define Volition? State the main differences in the mode of regarding the Will by psychologists.

V.—Distinguish between Emotion and Desire.

VI.—Describe what happens when subjective sensations are experienced. Are the terminal sense-organs involved?

IRISH EXAMINATION.—JULY, 1887.

The following candidate passed the examination for the Certificate of Efficiency in Psychological Medicine, the examiners being

RINGROSE ATKINS, M.A., M.D.
CONOLLY NORMAN, F.R.C.S.I.

Moore, Edward Erskine, M.D., Assistant Medical Officer District Asylum Downpatrick.

The following written questions were asked:—

I.—What is Insanity? State shortly the modern views as to its nature.

II.—Contrast the classification of Esquirol with that of Skae. Say which you consider to be the most generally useful, and give your reasons.

III.—You are brought to two "chronic" so called "harmless lunatics," in a workhouse ward, presenting generally the same mental symptoms. Describe the special conditions which would lead you to infer that one was labouring under congenital mental defect, and the other suffering from acquired mental disease.

IV.—What is "Othæmatoma?" Describe its mode of onset, its nature, course, probable pathology, and the significance it possesses in any case of insanity with which it is associated.

V.—Describe briefly the morbid changes observed in the brains of the chronic insane:—

(*a*) In the Blood Vessels.
(*b*) In the Nerve Cells.
(*c*) In the Neuroglia and Nerve Tubules.

VI.—Describe the various methods of artificial feeding now employed, and state in detail how you would conduct the treatment of a case of obstinate refusal of food in an insane person.

VII.—Describe a case of acute delirious mania; its symptoms and course; its prognosis and sequelæ.

VIII.—Distinguish between the conditions which have been described as acute primary dementia and melancholia with stupor.

IX.—Describe the proceedings requisite to place a lunatic in an asylum in Ireland under the provisions of the Act 30 and 31 Vic., c. 118. What are the various conditions under which such patient can be discharged?

X.—What is the prognostic significance of hallucinations of hearing, and with what other symptoms are they commonly associated?

XI.—Briefly detail the physical diseases and affections most frequently found to stand in an antecedent relation to Insanity.

XII.—What circumstances in the personal history and condition of a patient would lead you to recommend treatment in an asylum?

SCOTCH EXAMINATION.—JULY, 1887.

Examiners:

JAMES RUTHERFORD, M.D.
T. S. CLOUSTON, M.D.

The following candidates passed the examination for the Certificate of Efficiency in Psychological Medicine held in Edinburgh on July 15 and 16, 1887:—

Black, Victor, M.B., C.M.Edin., Royal Edinburgh Asylum.
Cowper, John, Merchiston Aven, Edinburgh.
Steel, John, M.B., C.M.Edin., Royal Edinburgh Asylum.
Wood, David James, Hope Park Square, Edinburgh.

The following were the questions asked at the Written Examination:—

I.—Describe the *chief and essential* features of a case of Melancholia; and mention the principles of Treatment you would adopt.

II.—Mention the forms of insanity in which Motor Symptoms necessarily exist, stating shortly the kind of Motor Symptoms to be expected in each, and the theory of such Association of Mental and Motor Symptoms in each.

III.—Give the chief symptoms of a case of Adolescent Insanity; describe the treatment of this form of Mental Disease; and mention the grounds on which you would conclude that complete recovery had taken place.

IV.—State briefly the general method you would adopt in examining a Patient supposed to be Insane; how would you distinguish Meningitis from Acute Mania? Under what circumstances would you recommend home in preference to Asylum treatment? Correct the accompanying faulty Certificate.

V.—Name the various forms of Alcoholic Insanity. Describe the condition commonly known as *Chronic Alcoholism*. Give the Prognosis and Treatment.

VI.—What Mental and Physical symptoms, other than the expressed desire of the Patient, would lead you to adopt precautions against Suicide?

MEDICO-PSYCHOLOGICAL ASSOCIATION.

Certificate of Efficiency.

The next examination for the Certificate of Efficiency in Psychological Medicine will take place on the 22nd and 23rd December, 1887, at Bethlem Hospital.

MORNING EXAMINATION:
11 to 1.
AFTERNOON EXAMINATION:
2 to 4.

For further particulars apply to

HENRY RAYNER, M.D.,
Hanwell, W.

September, 1887.

For information respecting the corresponding Examination in Scotland apply to Dr. Urquhart, Murray Royal Asylum, Perth, N.B.; and in Ireland to Dr. M. Courtenay, District Asylum, Limerick.

SIR ARTHUR MITCHELL, K.C.B.

The honour bestowed upon Dr. Arthur Mitchell will, we are sure, give universal satisfaction. The Medico-Psychological Association is proud to number him among its members, and this Journal, as its organ, congratulates him upon the well-merited distinction conferred upon him by Her Majesty. As a Commissioner in Lunacy, Sir Arthur Mitchell has left his mark deeply impressed upon the Scotch Lunacy system, with which his name is indelibly associated. Moreover, as an archæologist and as a writer on primitive man, our distinguished *confrère* is well known outside the circle of Psychological Medicine. May he long live to continue his good work and to enjoy his honours!

Appointments.

White, Ernest, M.B.Lond., M.R.C.P.Lond., A.K.C., appointed Resident Medical Superintendent, City of London Asylum.

Lys, H. G., M.R.C.S., appointed Resident Clinical Assistant to St. Luke's Hospital.

Brushfield, T., M.B., M.R.C.S., appointed Second Assistant Medical Officer to Kent County Lunatic Asylum, Chatham Downs.

King, Thomas Radford, M.D.Ed., appointed Medical Superintendent of the Porirua and Wellington Lunatic Asylums, New Zealand.

Levinge, E. G., M.B., L.R.C.S.I., Medical Superintendent to the Christchurch Lunatic Asylum, New Zealand.

THE JOURNAL OF MENTAL SCIENCE.

[*Published by Authority of the Medico-Psychological Association*]

No. 144. NEW SERIES, No. 108. JANUARY, 1888. VOL. XXXIII.

PART 1.—ORIGINAL ARTICLES.

The Distribution of Lead in the Brains of two Lead Factory Operatives dying suddenly. By A. WYNTER BLYTH, M.R.C.S.

Five cases of fatal lead poisoning occurred between 1884-6 among the *employés* of a certain white lead factory in the East of London. The cases presented the following common characters. They were all adult women, aged from 18 to 33. They had all worked at the factory for short periods from three to twelve months. They all exhibited mild symptoms of plumbism, such as a blue line round the gums and more or less ill-defined indisposition; paralyses were absent. They were all in their usual state of health within a few days or hours preceding death. Death was unexpected—mostly sudden. In four cases it was preceded by epileptic fits and coma, but in the fifth case no convulsions were noted, although they may have occurred during the night.

Lastly, in four cases, in which there was an autopsy, the vital organs were reported healthy or nearly so.

In the fourth and fifth cases portions of the liver, kidney, and brain * were submitted to me for analysis, and the results obtained afford a clue to the action of lead upon the nervous system.

FOURTH CASE.—I received in December, 1885, 402 grms. of liver; the whole of the right kidney, weighing 81 grms., and 401 grms. of the brain tissue.

The liver was incinerated, the ash treated with dilute nitric acid, filtered, the portion of the ash insoluble in acid fused with sodic carbonate to convert any possible lead sulphate, and the fusion was lixiviated with water, the insoluble portion being treated as before with dilute nitric acid and

* By Dr. F. M. Corner, Medical Officer of Health for Poplar, under whose observation the patients were, and who was kind enough to furnish me with details of the symptoms of the patients so far as could be ascertained.

filtered; the two acid filtrates were then diluted and saturated with hydric sulphide, the precipitate collected, converted into lead sulphate, gently ignited and weighed. The amount obtained was 24·256 mgrms. of lead sulphate.

The kidney, treated similarly, yielded 5·416 mgrms. lead sulphate.

The 401 grms. of brain, which comprised the entire cerebellum and a considerable portion of the cerebrum, was dehydrated with alcohol, then divided up as finely as possible and exhausted with successive quantities of boiling alcohol, then with ether, and lastly with chloroform; these three different extracts were united, the solvents driven off, and the residue ignited, and any lead dissolved out of the ash in the usual way precipitated as sulphide and weighed as sulphate.

The alcohol in which the brain had been soaked was also treated similarly. Lastly, the insoluble or albuminoid residue was incinerated and dealt with on the same lines.

The results were as follows:—

	Mgrms.	
Soluble in cold alcohol (aqueous extract) ...	1·108	Pb SO_4
Portion soluble in alcoholic and ethereal solvents ...	25·473	„
Albuminoid residue	7·759	„
Total	34·340	„

The brain was unfortunately not weighed by those who made the autopsy, but, presuming the weight to have been 1,235 grms., which is the average for women of the age of the deceased, the quantities would then be as follows:—

	Mgrms.	
Aqueous extract	3·41	Pb SO_4
Portion soluble in alcohol and ether...	78·47	„
Insoluble or albuminoid residue ...	23·89	„
Total	105 77	„

The albuminoid residue is mainly composed of albumen differing in no essential feature from albumen found in the blood and tissues generally. On the other hand, the portion of the brain soluble in alcoholic and ethereal solvents contains the peculiar nitrogenous and phosphorised principles which there is every reason to believe take part in thought and volition. Hence this preliminary research rendered it probable that 74 per cent. of the total lead in the

brain was in chemical combination with one or several of the complicated nitrogenised and phosphorised brain fats.

Fifth Case.—I had an opportunity of following out this clue in the chemical investigation of the fifth case of sudden death among the *employés* at the lead factory. The death occurred in December, 1886, and the substances transmitted to me for analysis were the whole of one kidney, weighing 78·9 grms., 299·16 grms. of the liver, and 617 grms. of the brain.

I may at once say that the liver and kidney were perfectly healthy; the 299 grms. of liver yielded 24 mgrms. of lead sulphate, and the kidney 78·9 mgrms.

The brain which reached me comprised the whole of the cerebellum, the pons, and medulla, but not the whole of the cerebrum.

The cerebral tissues were placed in strong alcohol for three weeks. When they were thus somewhat dehydrated the cerebellum was separated with the attached medulla and treated separately from the hemispheres.

The extraction by solvents was the same in principle as that already detailed, with this difference, that first alcohol was used, and then ether, but no chloroform.

The various alcoholic extracts were filtered hot, and then exposed to cold, by which means most of the white matter separated out. This white matter, after filtration from the mother liquor, was well washed with ether to free it from the kephalins, and this ether extract was added to the ether extract of the brain tissues. From the ether extract impure kephalin was precipitated by absolute alcohol, and the kephalins filtered off, the result of these various operations being the following solutions and substances:—

1.—Alcohol, in which the whole brain had been soaked for some weeks, containing much water and substances extracted with the water. This may be called "the watery extract."

2.—White matter (*a*) from cerebrum; (*b*) from cerebellum.

3.—Kephalin (*a*) from cerebrum; (*b*) from cerebellum.

4.—Ether extract, kephalin free; (*a*) from cerebrum; (*b*) from cerebellum.

5.—Substances soluble in cold alcohol (*a*) from cerebrum; (*b*) from cerebellum.

6.—The albuminoid residue (*a*) from cerebrum; (*b*) from cerebellum.

From these various solutions and solids the ash was

obtained, and any lead present extracted and weighed as lead sulphate.

The general results are as follows:—

	Cerebrum 460·8 grms. Lead Sulphate. Mgrms.	Cerebellum 156·2 grms. Lead Sulphate. Mgrms.
White matter freed from kephalin by ether	0·0	5·0
Kephalin	1·5	6 0
Ether extract, kephalin free	0·0	0·0
Substances soluble in cold alcohol	0·0	0·0
Albuminoid residue...	40·0	6·0
	41·5	17·0

The aqueous extract contained 1·5 mgrms. of lead sulphate. Dividing this in proper proportion between cerebrum and cerebellum it will bring the weight of the lead sulphate to 42·6 mgrms. in the cerebrum and 17·4 mgrms. in the cerebellum.

Presuming the whole of the cerebrum was contaminated with lead in the same proportion to that actually found, and that the cerebrum weighed 1,097 grms., then the weight in the whole cerebrum of lead sulphate would be 99·7 mgrms., which, added to the 17·4 mgrms. of lead sulphate in the cerebellum, pons, and medulla, makes a possible total of 117·1 mgrms.

It may be significant that the cerebellum contains more lead relatively than the cerebrum, the cerebellum yielding 1·07 per 10,000 parts, the cerebrum ·92.

Thudichum has described a lead salt of kephalin C_{42} H_{75} Pb_2 NPO_{13} easily soluble in ether, insoluble in alcohol; probably the lead found in the impure kephalin was this or an analogous compound. Small as the amount of lead-kephalin found is, yet, if considered in its relation to the whole kephalin, it is not so small. Thudichum's analysis of the brain gives the percentage of kephalin as 5·4, and calculated on this basis a brain weighing 1,235 grms. would yield 19·3 mgrms. of lead-kephalin, *i.e.*, nearly 25 per cent. (·238) of the total kephalin would be transformed into lead salt. So important a modification as the replacement of hydrogen in its molecule by lead must profoundly modify if not annihilate whatever functions kephalin may possess.

The pathology of lead intoxication has always been most obscure; no theory of any value has been suggested which sufficiently accounts for its persistence, its cumulative

effects, and Protean characters. A great part of the mystery is capable of explanation if it is at once allowed that the very minute fractions of lead which may be carried dissolved in the blood so far overcome the vital resistance of grey matter bioplasm, as to decompose a portion, forming a definite substitution compound. Presuming, for instance, lead-kephalin to be formed in the living cell, it is improbable that a cell thus lead-saturated would be capable of high function, but rather that, so far as conduction, inhibition, or volition, the cell is in effect dead. Nor will any function it possesses be restored until the lead-kephalin is slowly eliminated or the extra work taken up by healthy cells. The change being not one of structure, but of composition, will evade all ordinary kinds of pathological research, and the essential difference between this kind of toxic action and that which is produced by the irritant effects of a large single dose of sugar of lead is that in the latter case the effects are produced for the most part on mucous surfaces outside, as it were, the organism, while here the effects are within.

According to these views Plumbism, whether expressed by colic, paralysis, epilepsy, or insanity, is analogous to some very refined method of vivisection by which an operator is able to destroy not nerve centres, but thousands of the ultimate parts of nerve centres. Hence the pursuit of this investigation will open up a method of studying the use of groups of cells and of the brain principles.*

Ætiology, Pathology, and Treatment of Puerperal Insanity. By A. Campbell Clark, M.D. Edin., Medical Superintendent, Glasgow District Asylum, Bothwell.

(Continued from p. 379.)

The Treatment of Puerperal Insanity may now be considered.

Considerable diversity of treatment has hitherto obtained, especially with regard to sedatives. No systematic experiments are recorded, and no very conclusive data have been published. The following quotations from some of the best authorities, placed side by side, will summarise our present knowledge of the subject.

* Should any of the readers of this paper meet with a fatal case of lead encephalopathy, the author would be very pleased to undertake the chemical part of the investigation.

First.—Diet and Stimulants.—Dr. Clouston, true to his practice in other cases, believes in heavy egg custards—three eggs in each pint of milk, and sometimes cream in addition—beef tea, port, sherry, brandy. "Give much food and give it often." Dr. Leishman, of Glasgow, is more afraid of overburdening the digestive organs. He regulates the diet carefully and increases it cautiously.

Second.—Open-air Exercise.—Dr. Clouston lays great stress on this.

Third.—Anti-pyretics.—The same physician gives as much as 40 grains of sulphate of quinine in eight hours, and believes in it.

Fourth.—Uterine Treatment.—(*a*) Clouston :—Vaginal injections of carbolic lotion. Poultices. (*b*) Bucknill and Tuke :—Vaginal injections of condy. Emetics of ipecacuanha.

Fifth.—Treatment of *Constipation* and *Indigestion.*—Bucknill and Tuke :—Calomel, black draught, aloes, scammony, castor oil, enemata.

Sixth.—Anæmia. Iron.—(Bucknill and Tuke.)

Seventh.—Dry Skin and Scanty Urine.—Saline diaphoretics. (Bucknill and Tuke.)

Eighth.—Sedatives.—(*a*) Clouston seems to use them rarely and gives chloral. (*b*) Dr. Batty Tuke gives morphia in melancholia in large doses, and says that "sedatives in large doses are contraindicated in mania." (*c*) Dr. Blandford gives chloral in mania. (*d*) Bucknill and Tuke believe in morphia for mania, and put less faith in chloral and bromide of potassium. (*e*) Leishman says that chloral favours sleep. Opium makes matters worse.

An ætiology so intricate and a pathology so widespread as the foregoing facts reveal must needs furnish indications for treatment of unusual variety and extent. It is not always easy to ascertain the indications most urgent, because there is a danger of ignoring some symptoms, undervaluing others, and overestimating what is secondary and conditional to what is obscure and ill-defined. The mental symptoms too often engross attention to the exclusion of causes which may operate to produce them; and mistaken notions of pathology have ere this led to heroic measures with disastrous results.

It is clear from the facts elicited that no simple and specific lines of treatment can be laid down, for there is an endless variety of feature presented by the disease. It is, however, desirable to classify in this connection according as one or

more of the following morbid states gives a pronounced character to the disease. These are:

(1) Digestive, Hepatic, and Intestinal Disorders.
(2) Inflammatory, Septicæmic, and Anæmic conditions.
(3) Hysteria.
(4) Mania, with intensity of symptoms and sleeplessness.
(5) Melancholia „ „ „ „

That these blend together with or without other abnormal states in one and the same patient is clearly understood, but they are now separately identified as being the conditions most frequently and urgently calling for specific attention.

It is beyond the province of the present paper, and it would indeed be rather presumptive to enter into a dissertation on every-day therapeutics. The treatment of disorders and diseases of the first and second classes will be pursued by every practitioner on lines which he has made good by study and experience. Without therefore, dictating a course of treatment under these heads, I will give an epitome of my own practice and results.

I. *Digestive, Hepatic, and Intestinal Disorders.*—One patient was fed, owing to refusal of food, by the stomach pump, with rare intermissions of voluntary alimentation for eight weeks. The tongue and root of mouth were coated with creamy fur, the lips were cyanotic and crusted, the saliva white and inspissated often frothy, the pharynx relaxed, stomach irritable, fæces dry, dark or greenish, and slimy. Septicæmia with diaphragmatic and pleuritic deposits, and boils often complicated these states.

She was fed liberally with custards (two eggs in each), beef tea, milk, and whisky. Calomel 1 grain *bis die;* and Acid Nit. Mur. Dil. with Tr. Nucis Vomicæ *ter die* were administered, the calomel powders being intermitted at end of three days, to be repeated as occasion suggested. Castor oil was prescribed from time to time with good effect. Codliver oil was given, and for a month she was under mild bromide of potassium treatment. *Result.*—After three weeks, during which occurred two moderate pyrexial crises, she still refused food, the tongue and mouth cleared up a little, and then got heavily furred again, the appetite returned for a day only once, and she was getting so weak as to threaten collapse during feeding. Codliver oil was stopped, then custards, then bromide, and last of all artificial feeding, but neither of these changes of treatment seemed to encourage a healthier state. The stomach was now evacuated from time to time to

ascertain the progress of digestion, and after 3½ hours custards were withdrawn little altered in bulk or character from the hour of injection.

Her weight was now taken, 6st. 2lbs., the stomach was washed out with 1-500 carbolic lotion, and a diet-scale arranged, to be pumped (after predigestion with Benger's liquid pepsine) at intervals of four hours, four times a day. The diet was thus prepared: —8 *a.m.* ¾ pint milk with 1 egg as a custard; 12 *noon* ¾ pint beef tea with finely grated potato in suspension; 4 *p.m.* custard as at 8 a.m.; 8 *p.m.* milk gruel ¾ pint. Two ounces whisky were given in 24 hours. No medicines given. She lost 5lbs. in the first week. Bismuth was now prescribed, and a combination of the bromides of potassium and ammonium. Up to this time food regurgitated in an undigested state on introduction of tube, hence the bismuth treatment. At end of second week had lost 4lbs.; seemed on the whole better under bis-bromide combination, but at end of third week this was given up, as lips and tongue were becoming dry, and a copious rash had appeared. The pyrexial crises were less marked during these three weeks.

At end of third week the weight was stationary. The tribromide combination of potassium, sodium, and ammonia was tried, and suffered a like fate as its predecessors. At end of fourth week weight was still stationary. She complained of diaphragmatic pain to left side, and had a short troublesome cough at end of fifth week, with the highest temperature yet reached (over 103° for two days and three nights). Eructations and regurgitation of food had not been troublesome for some days, but secretions very scanty, and tongue and lips were dry, so that bromides were stopped.

At end of seventh week weight 5st. 6lbs., having lost 1lb. in three weeks, during which beef peptonoids were used, and later, with apparently more gratifying effect, Carnrick's peptonized codliver oil and milk. I judged at this time that although the "turn of the scale" had not been reached, she was stronger, less limp in our hands, and less cyanotic during the artificial feeding. It ought to be stated that the method of alimentation was by means of the soft oral tube, that four nurses were at hand, each trained to a particular duty, and that from the first handling of the patient to the last the operation took—as I have frequently calculated—not more than 40 seconds. Therefore exhausting struggles were averted.

From this period onwards she slowly recovered, she began

to take her food herself, but in very small quantities compared with what had been injected into the stomach hitherto —sufficient, however, to turn the scale. Soon she was able —the weather being propitious—to go out into the open air, and in two months had risen from 5st. 6lbs. to 6st. 9lbs. She was of phthisical habit, had not menstruated three months after recovery, and her doctor then wrote me that she was under treatment at home, "with rusty sputum and dulness over left lung."

This, of course, was an extreme case; the patient was limp, almost pulseless, extremely atonic, and absolutely anorexic. With such a case again, I would at first try nutrient and stimulant enemata, and give the upper digestive tract as little work as possible. At the outset I found that calomel or blue pill, followed by castor oil or a saline cathartic, according to the specific indications, was a valuable resource in the great majority of cases. Where the hue of the skin changed from clear to saffron, or a deeper tinge, and these changes came and went, I found minute doses of calomel, $\frac{1}{8}$ grain once or twice a day, combined with Acid Nit. Mur. Dil. and Tr. Nucis Vomicæ *aa* ♏ v. thrice a day before meals, most useful. This indication, however, was usually observed in slow cases, and the restoration to health was gradual. One case with alcoholic history was treated in the manner just described (but with larger doses of calomel). For a few days at a time the tongue would clear up, the digestive functions assert themselves, and mental calm and coherence become restored. Relapse as surely followed, and now she is a hopeless "chronic" with a hearty digestion and a voracious appetite. Many examples of puerperal insanity become chronic or die for want of alcoholic stimulant. These are so-called "typhoid cases," and in them the use of stimulants undoubtedly saves life and often reason. It must be administered, however, with discrimination, for there comes a stage beyond which it simply feeds the flame of excitement and hastens the end. The following preliminary considerations should be kept always in view in prescribing the treatment of puerperal insanity. (1) That there is a defective bile secretion or defective bile elimination in very many cases. (2) That the other digestive secretions are deficient in quantity, and that the mucus secretion is often very scanty and altered in quality. (3) That involuntary muscular tone is lost, and (4) that reflex excitability is impaired. What will restore or normalize the secretions, recharge the reflex centres, and

restore the muscular tone? To answer this we require deeper penetration and further experiment.

II. *Inflammatory Septicæmic and Anæmic Conditions.*—The effect on the pelvic and mental conditions of pelvic poultices was in many cases remarkably gratifying. This treatment was indicated where there were signs of pain; iodine being more frequently reserved for the deeper metastatic deposits. Of vaginal injections my favourite is carbolic lotion, and I pin my faith to it because the patients liked it best. In their more lucid intervals they said it soothed them, and in their hyperæsthetic state this was no small boon. To soothe is to reduce excitement and produce sleep, and uterine medication may have a more direct and salutary influence on the mental condition than has been suspected. Direct uterine injection will probably be found more serviceable than mere vaginal irrigation where there is fever and local distress with signs or threatenings of septicæmia. Superficial evidence of septicæmia was found in abscesses, boils, scalp deposits often resembling wens, and a copious pustular acne. It is unnecessary to linger over their appropriate treatment.

Constitutional means may be employed in two directions: (*a*) to increase nutritive processes, (*b*) to arrest fermentation. The first of these has already been discussed, and in addition to its more immediate purpose of bringing up nutrition to its normal standard, it exercises a double purpose in septicæmia by also increasing physiological resistance to fermentative change. The latter is a world-wide subject in itself, and can only be referred to here as having recognition in the treatment of suitable cases. Albeit, in the present state of our knowledge, not of the most exact and definite character, mention might be made of many remedies employed for the purposes just indicated; but they were attended with no aggregate results of surpassing excellence, and must be held in reserve.

Further, if it be admitted that septicæmia has in this instance a wider meaning than that of a mere germ disease, if it be accepted that puerperal septicæmia may arise also from the diffusion through the primæ viæ into the blood of putrid gases, or from retained and decomposing excreta within the blood-vessels, from the absorption of puerperal disintegrations, or from the retention and accumulation of the elements of secretions, then the question is one not only of germicide, but also of depurative treatment. That septic absorption may, secondarily, carry in its train the absorption

of lesser impurities, and by secondary deposits induce local and constitutional changes enough to account for a heterogeneous septicæmia such as I have described, is possibly or approximately true; but local absorption does not always take place, and secondary deposits more rarely still. Septicæmia has many grades, and often tapers into the finest and least nocuous attenuations; yet we still have evidences of grave blood impurity arising manifestly from the sources above indicated, these being primary, and independent of septic absorption. We, therefore, must consider three kinds of treatment: (1) germicide; (2) depurative; (3) secretory stimulant. Here again, are indications for careful research. The treatment of anæmia, in so far as it may be regarded as specific, was confined in recent and extreme cases to either enemata of defibrinated blood (*vide* article in "Lancet" already referred to) or Blaud's Pill. The treatment of the more chronic forms was chiefly by means of arsenic and iron. Defibrinated blood is undoubtedly of value, especially where the anæmic state has been induced suddenly and intensely. Why it should be so I cannot say; and whether it can be as strongly recommended in what may be called sub-acute anæmia remains to be seen. We certainly have not given it the full and exhaustive trial it deserves.

III. *Hysteria.*—This variety gives a distinctive character to some cases, and, having a special interest from the point of view of treatment, it is desirable to place on record my results. In one patient a quick recovery followed purgative treatment; in another this had no proximate effect, and a definite and satisfactory result followed the exhibition of bromide of potassium, 45 grains every four hours. Copious diuresis soon followed, and in three weeks the patient was convalescent. I had hoped to find in bromide treatment something specific for the hysteric group; but the cases are often too asthenic, and my one good result was exceptional. Certain hysterical cases will probably benefit in this way, but there must be no flaccidity or inertia; rather, there must be acute excitement, distinct nervous tension, and response to reflex stimuli.

IV. *Mania.*—A moment's consideration of the somatic relations of puerperal insanity will suffice to show that there is no cutting of the gordian-knot by means of neurotic remedies, unless in exceptional cases where the disease has been anticipated. The whole mass of evidence before us leads to the conclusion that treatment must be of a com-

posite character, that, in short, it is a case of having many strings to our bow. To many of the various neurotic remedies advocated I have given a fair trial; in no case with exceptional results, as the following experience testifies :— (*a*) (Case I.) Morphia administered in $\frac{1}{2}$-grain suppositories every 8 hours thrice daily for 18 days, with gastro-intestinal correctives; it reduced the muscular excitement, moderated the mental *furore,* did not arrest the cutaneous secretion nor diminish appetite, and at first seemed to induce a return to mental stability and coherence. Soon the mental habit acquired a new phase : previously it was eccentric, impulsive, explosive, irrelevant, invertebrate; now it resolved itself into a definite character. Frankness, good nature, and playfulness gave place to sullen obstinacy and dogged antipathies; suspicions and delusions of persecution, hitherto fleeting and superficial, became more deeply rooted and intensified.

The last entry in the case-book regarding this patient after a long interval is as follows :—"She still manifests strong antipathies to all the nurses, the matron, and the doctor, and has not a good word to say of anyone. She is a sour, cross-grained woman, and yet the shadow of a smile betrays that she is—even at her worst—not so severe as she would have us believe. The morphia treatment does not seem to have been successful. It has prolonged and altered the morbid habit, rendering her less facile and amenable, easily put out, discontented, never satisfied, and decidedly cranky; otherwise she is coherent, knows what she is about, has no definite delusions, and will probably do well at home." Three weeks later she was discharged, considerably subdued, and has now remained out for two years.

In another case the suppositories were given every eight hours at first, after two days every six hours. Here, also, the same appearance of returning reason quickly occurred, as soon to disappear, for the dregs of mental disease remained. The same gastro-intestinal correctives were used as in the preceding case. The appetite remained good, and she gained in strength; often she had angry explosions, was unusually threatening, and said silly, childish things. She evinced a strong animus to nurses, and on all and every occasion took the part of the patients against the nurses, believing that the latter invariably abused them. Morally she was utterly depraved in her ideas; her conceptions of right and wrong were of the lowest character. By-and-bye she seemed, after a close study of some weeks, to be free from delusions,

when suddenly one day she expressed outrageous ideas as to being married, and her child (an illegitimate) being fathered by a third party. Later on menstruation appeared, ushered by premonitory epistaxis, and after a long interval she gradually recovered. I have since discarded morphia, for the recoveries were not so complete as they might probably have been otherwise, and convalescence was much more tedious than in our usual experience. At the same time I use morphia to relieve peripheral irritations, and thus subdue excitement and produce sleep. It is given in form of suppository, and not pushed to anything like the extent above indicated.

The effects of chloral have been noticed where this treatment was pursued prior to the patients coming under our care. It has usually suspended morbid action temporarily, and even induced a saner perception of surroundings, delusions of identity of persons and place having vanished for a time, and a pause being marked in the course of the excitement—an ominous pause, indeed, for the mental reaction is greater than before. In combination with bromide of potassium, 25 grains of the latter to 20 of the former, I have used it as an hypnotic to ward off exhaustion from prolonged mental excitement and insomnia, and its effect—a good one in itself—has been, after two or three exhibitions, to restore the periodicity of sleep. As to any specific action on the mental state, I fear this combination has none; but it is a safer hypnotic and sedative than either of the others. My experience of bromide, bis-bromide, and the tri-bromide combinations has been confined to one case already described, and simple potass. bromid. to the case of acute hysterical mania which I have mentioned. It is unnecessary to repeat what has already been said of them.

V. *Melancholia.*—Morphia was given in one case of melancholia—the Liq. Morph. Mur. 10 minims four times a day for three weeks. The appetite, which had not been good before, got worse; she refused food, and the mental symptoms became intensified. The skin was all along dry and the bowels costive. At the commencement of morphia treatment a pill was prescribed as follows :—

℞ Ext. Nucis Vom.
„ Belladon., *aa* gr. $\frac{1}{8}$.
Ferri Sulph., gr. $\frac{1}{4}$.
Pil. Col. cum. Hyoscy., gr i.
Pill mas. q. s.
Sig. One or more daily as directed.

As with mania, so with melancholia, there is no certain course of neurotic treatment. We want a brain stimulant, alterative or sedative as the case may be, and we think these virtues are to be found in drugs which act directly and promptly on the brain. The teaching of pathology and clinical research contraindicates such a belief. The brain nutrition is below par, and neurotic drugs are not brain nutrients; till nutrition is restored to the normal standard there cannot be normal function, and a course of neurotic treatment is decidedly mischievous. Moreover, the blood is often impure as well as impoverished; and, therefore, where indicated, depurative treatment must be early attended to. The neurotic remedies that can exercise any good purpose are those that can subserve a trophic function, either directly cerebral or visceral. Nux vomicæ will probably suggest itself in this connection.

In conclusion, let me observe that I prescribe (1) *the open air*, with a degree of exercise suited to the strength of the patient, when the weather is agreeable or the walks sheltered, where there is no serious complication, and the patient will not lie in bed; (2) *a private room with a nurse to herself* when she keeps in bed, is weak and exhausted, and suffers from pyrexia, septicæmia, or active inflammatory disease; (3) above all things, *the utmost quiet and isolation*, for the nervous system is high strung, the senses are most acute and intolerant of the slightest disturbance. Every scrap of conversation is suggestive to an excited puerperal patient, every strange sight or sound has a personal meaning; and the less suggestiveness there is the better. This is the sedative treatment *par excellence*. The state of the bowels and digestion are of the very first importance; but in their treatment no uniform plan can be laid down, for in these respects each case is very much a law unto itself. Several useful indications have been already stated which will serve as guides for different classes.

The subject is yet far from exhausted. I am deeply sensible of the wide range of undiscovered truth which it contains, but hope this article will be suggestive of lines for future research in this interesting labour-field.

The Neuropathic Diathesis, or the Diathesis of the Degenerate.
By G. T. Revington, M.A., M.D., County Asylum, Prestwich, Lancashire.

When we examine the purpose and the progress of the animal world from the scientific standpoint, we find that "life is a cycle, beginning in an ovum, and coming round to an ovum again," and the history of the human race, the failures and triumphs of nations, the loves and hates, the baseness and nobility of individuals, appear to be "the mere by-play of ovum bearing organisms." Whatever other purpose is served by our existence, we are certainly placed here to reproduce our kind, and to furnish human figures to play their part in the next scene of the perpetual panorama of life. Moreover, we make man in our own image, after our likeness, and endow him with the characteristics we have inherited from our ancestors, and with those which we have created, for good or evil, in our own life. One of the oldest of books teaches us that the sins of the fathers will be visited upon the children to the third and fourth generations, and we might go further and say that physiological sins will penalize the race for many generations, and even lead to its utter extinction, unless counteracted by the strong antidotes of physiological morality, perfect hygienic conditions, and judicious intermarriage with untainted breeds.

This great law of Heredity seems to me to be the corollary of the general law, that "the life of the individual organism is the recapitulation of its ancestral history." As in the hourly changes of early intrauterine life we reproduce some characteristics of our Piscine, Batrachian, or Avian ancestors, so in the more protracted stages of later intrauterine life, and of independent existence, we reproduce the physical and mental features of our human progenitors. And the features of the parents produce more effect than those of the grandparents, and so on in lessening degree, till the influence of the primordial parent is lost in the accumulation of the influences of more recent ancestors. And as we endeavour to advance to our higher developments —

> Move upward, working out the beast,
> And let the ape and tiger die,

we find that it is the more recent influences of the race which are most difficult to eradicate. "In the far-reaching

influences which go to every life," says Robert Collyer, "and away backward as certainly as forward, children are sometimes born with appetites fatally strong in their nature. As they grow up the appetite grows with them, and speedily becomes a master, the master a tyrant, and by the time he arrives at manhood the man is a slave. I heard a man say that for eight-and-twenty years the soul within him had to stand like an unsleeping sentinel, guarding his appetite for strong drink. To be a man under such a disadvantage, not to mention a saint, is as fine a piece of grace as can well be seen. There is no doctrine that demands a larger vision than this of the depravity of human nature. Old Dr. Mason used to say 'that as much grace as would make John a saint would barely keep Peter from knocking a man down.'" Moreover, if the heredity of coarse physical characteristics, the Bourbon lip, the Napoleonic nose, or supernumerary digits be so marked, how terribly potent must be the influence of ancestral taints upon the delicate and intricate organization of the human brain, the acme of the evolution of the vertebrate nervous system. Jonathan Hutchinson has formulated the principle of heredity in the general diatheses. He says, "I tried to show that rheumatism is a modification of the catarrhal diathesis, mainly nervous in its origin, in which the stress of the reflex disturbance falls upon the tissues of the joints. I traced a close parallel between gout and leprosy, alleging that both are food diatheses, being distinctly and definitely caused by certain peculiar articles of diet. Respecting both, we had to remark upon the facts that having been acquired by food, they became capable of transmission from parent to child, and that gout at any rate was prone to receive important modifications in such inheritance." He then proceeds to prove the reality of temperaments, and to discuss the importance of recognizing their existence, and he proposes that parents should keep a life-history of each child; in other words, he suggests that we should each carry a log-book, which should be produced for the inspection of the medical adviser under whose care we place ourselves in the stress of physiological storms. None know better than alienists what a boon such information would be when called upon to give a prognosis in a difficult case. Mr. Hutchinson would place the bilious and melancholic temperaments together as the "hepatic diathesis," and he denies that the latter is commoner in persons of dark complexion. Contrasting, however, in-

dividuals of dark and fair complexions, he points out that the former bear mercurial treatment well, and require larger doses, that they do not bear direct tonics well, that the need of purgatives is greater in them, and that they are often not helped by sea air. This would seem to show that the inheritance of a dark complexion connotes the inheritance of a group of more or less definite characteristics. He further states that "the hæmorrhagic diathesis, so strongly hereditary when once produced, unknown in the lower animals, and frequently coincident in the individual with gout, has its origin in the peculiarities of vascular structure which are developed by gout, and which have become modified and specialized by transmission through many generations. With regard to the occurrence of xanthelasma as a family and almost as a congenital disease, he points out that in such cases the affection is most probably inherited from some ancestor who had acquired the ordinary hepatic form of adults. In these two cases the disease is generally inherited without the bodily condition which originally produced it, and if we follow the argument to its legitimate conclusion, we must believe that the numberless idiosyncrasies as to drugs or foods, the liability to take the contagion of the specific fevers, or to suffer from erysipelas on the smallest provocation, are all examples of diatheses, developed, intensified, and specialized, diatheses brought to a point, in which all trace of the original causation has been lost. Mr. Hutchinson also speaks of malaria and bronchocele as climatic diatheses, capable both of being acquired and inherited. For the explanation of many of the above facts we must appeal to the nervous system, as it alone seems capable of satisfying all the demands of our ignorance. We see the accuracy of the development of hereditary influence upon the nervous system, in the appearance in generation after generation of a peculiar gesture of the hand, a special attitude in sleep, or of characteristic writing. And just as these objective signs, which may correspond to a subjective, intangible mental bias, are inherited, so fundamental modes of mental activity must be born with us —

> Grow with our growth, and strengthen with our strength.

We all feel the tyranny of our organization, we sometimes like what our education would teach us to abhor, and we cannot admire what we know to be admirable, and we can thus realize the mental organization of the neurotic, we

understand that they will inevitably develop in certain grooves. And though we may affect much by judicious education, we had surely best begin earlier, and prevent what we cannot cure. There are thousands who rush annually to obey the great instinct of reproduction, and who are certain to produce neurotic offspring. *Hinc illæ lachrymæ.* Hence an enormous lunacy population and a host of mentally-unstable individuals, authors of half the crimes and follies which disgrace our race. It is, indeed, time that the physician from the physiological standpoint, not the lawyer from the monetary, should be the arbiter of marriage.

The study of the neurotic individual who never transgresses the boundary line of certifiable insanity has been much neglected, and yet much may be learnt here. I may venture to give a short history of a case, such as anyone may meet, if he does not lay aside his psychological habits the moment he passes the asylum gate. A. B.; a remote history of insanity in the family, an immediate history also, a paternal aunt is insane, and a brother suffers from petit mal; father and mother of normal mental equilibrium. A. B. is of slight build, with delicate irregular features, brilliant eyes, and a sharp, restless manner, and with an extraordinary aptitude for unusual acquirements. We note his instability, he varies —

> Is everything by starts, and nothing long.

While refined to a romantic degree about women, he is morally lax in his actions. He is hypersensitive, is not muscular, and does not put on flesh. These remarks apply, *mutatis mutandis,* to his two sisters. To such as these, Dr. Clouston would preach "the gospel of fresh air and fatness," and would say with Cæsar —

> Let me have men about me that are fat,
> Sleek-headed men, and such as sleep o' nights.

But it would be more scientific to prevent their existence by putting a veto on the union of the neurotic.

I need not delay to further consider the general laws of heredity, but will pass to my special subject.

There are many functional and organic diseases of the nervous system which appear to be the result of an ancestral taint, and which interchange in the life-history of the individual or of the race, and we may roughly divide the various affections thus related into the following groups:—

Group 1.—Forms of neurotic manifestations, the heredity of which is well-marked, but which are not apt to develop unless the individual liabilities are incurred.

The irritable and excitable temperaments.

The liability to shock from slight causes.

The liability to outbursts of extreme passion.

The liability to be easily affected by drink or by injury to the head.

Eccentricity.

Group 2.—Forms of neurotic manifestation, the heredity of which is well-marked, and which are apter to develop in the life-history of individual or of race into the severer neuroses of the succeeding groups.

Neuralgia and migraine.

Headaches, "nerve-storm" headaches, the sensory epilepsy of Hughlings Jackson.

The various conditions comprised under the term "neurasthenia."

Spasmodic asthma.

Group 3.—Development of inherited and acquired neuroses, manifesting themselves at the later periods of life, being of moderate strength, and not necessarily ending in mental death.

Various vesaniæ of adults.

Group 4.—Development of inherited, and more especially of acquired neuroses, which attain great strength, and result in complete mental extinction in the individual, and in the inheritance by the offspring of a strong neurotic tendency.

General paralysis.

Group 5.—Inherited neuroses, mild as regards the form, severe as regards the time of their manifestation, and very apt to develop in the life of the individual to more definite forms.

Chorea.

Hysteria.

Various forms of epilepsy of milder variety.

Group 6.—Forms in which a strong neurotic inheritance manifests itself early in the life of the individual, and often ends in permanent mental perversion or mental death.

Various vesaniæ of adolescents.

Epilepsy of adolescents.

Moral insanity.

Criminality.

Primäre Verrucktheit.

Group 7.—(*a*) Strong inheritance manifesting itself in infancy.

Infantile convulsions.

Infantile epilepsy.

Hydrocephalus.

(*b*) Extreme development of neurotic inheritance, mental death from birth, or rather the entire absence of any intellectual life.

Idiocy.

One further step is possible, when the law of the limited dissimilarity or similarity of parents is broken there is no offspring, as in many cases in the following pages.

Group 8.—Anomalous forms, as yet but indifferently associated with the neurotic group which is the subject of this paper.

Locomotor ataxy.

Diabetes.

This classification is merely an enumeration of the forms in which the neuropathic diathesis manifests itself, and the grouping is provisional. No doubt other diatheses co-operate or antagonize the neurotic, but I shall not venture upon such theoretical grounds. I must ask the reader to remember that in the following pages, I shall not discuss this classification nor confine myself to the order of the groups. I shall merely enumerate and illustrate the laws which seem to have governed the alternations and manifestations of the various neuroses of the 258 men with well-ascertained heredity, admitted here between January, 1885, and September, 1886, together with a much larger series of cases of neurotic manifestation in the families of the 258 patients. I hope, however, that each group will be found to be illustrated under one or more laws. In the cases in which neurotic inheritance is denied, I can only plead the ignorance of the lower classes with regard to their ancestors, and our imperfect knowledge of the general laws of heredity. Neurotic manifestations occur in a large number of individuals, in whom no neurotic inheritance can be proved, just as each individual develops characteristics which we cannot account for by heredity. I can only express my belief that as our knowledge increases, so will the number of inexplicable developments diminish, as has been the case in all departments of science. All the so-called freaks of nature are examples of general laws. Moreover, the influence of acquired neuroses is very extensive. As

Dr. O. W. Holmes quaintly says, "Each of us is only the footing up of a double column of figures that goes back to the first pair. Every unit tells, some of them are plus, and some minus. If the columns do not add up right, it is commonly because we cannot make out all the figures."

I may now briefly give the headings of the fifteen sections which follow:—

Section 1.—An individual may start a neurosis in his own life.

2.—An individual may start a neurosis in the life-history of his family.

3.—The neurosis may increase in strength from generation to generation.

4.—The neurosis may diminish in strength from generation to generation.

5.—The neurosis may skip a generation—Latency.

6.—Postponement of the neurotic tendency under favourable circumstances; its appearance as premature senility.

7.—The forms of neurotic manifestation may alternate in the life of the individual.

8.—The forms of neurotic manifestation may alternate in the life-history of the family.

9.—The form of the neurotic manifestation may be determined by the superior influence of one or other parent—Prepotency.

10.—Transmission of identical tendencies—a form of prepotency.

11.—The inheritance of a slight neurotic tendency connotes a ready breakdown but rapid recovery.

12.—The inheritance of a strong neurotic tendency connotes—

A. Perpetual instability.

B. Early and complete breakdown.

13.—Influence of inherited and acquired neuroses in epilepsy.

14.—Influence of inherited and especially of acquired neuroses in general paralysis.

15.—Summary of ideas suggested by investigation, but not substantiated. Conclusion.

Section 1.—An individual may start a neurosis in his own life. The alcoholic man may, under slight causation, injury to the head, or shock, or worry, develop a sharp attack of insanity, or may completely break down as a general paralytic. This is a law which I would venture to insist upon. The man

who indulges to excess in alcohol, puts himself in the position of a man who has inherited a slight neurotic tendency, which manifests itself as a temperament, or as one of the liabilities of the neurotic which I have placed together in Class 1. The Nemesis of natural law in the one case visits the sins of the parents upon the offspring, and in the other visits the sins of the individual upon himself in the first instance. And the man who has thus created a neurosis in his own lifetime, is in a worse plight than the man who has inherited one, for the former will develop under a slighter stimulus than the latter. I am very anxious to avoid repetition, and it is very difficult to attain my object, as most of the cases illustrate several laws. The acquirement of neuroses will be most abundantly exemplified as we proceed, and I may refer the reader to the cases related in Sections 2, 3, and 14, and for statistics to Sections 3, 11, 14.

The Rev. J. Horsley, in his recent "Jottings from Jail," lays great stress on the relation between drink and criminality.

Section 2.—The individual may start a neurosis in the life-history of the family. The children of alcoholic parents who have not incurred their liabilities may be imbecile or epileptic, or may break down at any of the physiological crises of life; or a mere predisposition to alcohol may be transmitted, which, if not overcome, may, later in the life of the individual or of the race, manifest itself in the form of a definite neurosis.

Case 5.—Melancholia. W. E., single, age 24, first attack; admitted July, 1886. Has been a heavy drinker, especially during the two weeks preceding his attack. March, 1887, is slightly improved. Family history: Father and mother drank heavily. This case illustrates the inheritance of a predisposition to drink, a liability to be easily affected by drink, and the early development of a definite neurosis. Recovery is exceptionally slow.

Case 7.—Acute mania. W. D., single, age 31, duration a year; admitted July, 1886, heavy drinker. Family history: Father drank, uncle insane. Here the alcoholic and neurotic diatheses combine, and an incurable attack results. With regard to the details of this and other cases, I must ask the reader to take it for granted that when not given, they are either unascertainable or have no bearing on my subject.

Case 28.—Melancholia. J. B., married, two children, age 57, first attack, duration a year. Has indulged freely in alcohol, is prematurely senile both in body and mind. Attack induced by

shock received on witnessing the sudden bursting of a canal. Family history: Father and uncle drank hard. Brother phthisis. Here we have an inherited predisposition to drink, the indulgence of the tendency, a premature senility as the result, culminating in an attack of insanity, which develops when the liability to be easily affected by shock is put to the test.

Case 30.—Acute mania. J. C., age 37, first attack; admitted March 30th, 1886, recovered May 21st. Very alcoholic, as was his father, who also became insane.

Case 31.—Active melancholia. P. T., age 51, single, first attack, has always been of a melancholy turn of mind, and has drunk freely. Is an incurable case. Father drank. Here is a remarkable sequence, father alcoholic, son predisposed to alcohol, melancholic temperament, active melancholia.

Case 68.—General paralysis. A. S., age 39, first attack, heavy drinker, noted for his irritable and excitable temperament. Father drank hard.

Case 74.—Acute mania. G. S., age 42, first attack. Has indulged freely in alcohol, and had an attack of delirium tremens when 36. At 39 epilepsy developed, at 40 he received a severe injury to the head, which laid him up for six months. Five weeks before admission he had a second attack of delirium tremens. Admitted May, 1885, recovered September. Readmitted December, 1885, after a bout of drinking, recovered February, 1886. Family history: Father drank hard. A remarkable sequence is here seen, and the development of a predisposition to a definite neurosis is well illustrated. He indulged his predisposition, and incurred his liability to be easily affected by drink or by injury to the head. He breaks down first with delirium tremens, then in three years epilepsy develops, in another three years suffers from an attack of delirium tremens passing into mania, and in four months after his recovery from this, he develops, after a bout of drinking, a second attack of mania without a preliminary attack of delirium tremens.

Case 84.—Acute delirious mania. J. A., age 25, first attack, duration five days, died on eleventh day of illness. The attack developed on cessation of erysipelas of foot. Has been a steady man. Family history: A. A., his mother, age 45, admitted September, 1884, with climacteric melancholia of an active type, recovered November, 1886. Father drank, a brother drank. The influence of the father is prepotent in one son, and of the mother in another. The son breaks down at a physiological crisis, just as the mother had done.

Case 101.—Acute general paralysis. J. S., age 33, first attack, duration one month, admitted April, 1885, died July. Heavy drinker; parents drank.

Case 104.—General paralysis. W. B., age 36, first attack, duration two years, died a week after admission. Drank hard.

Family history: Father drank hard, and died of general paralysis at W— Asylum.

Case 109.—General paralysis. J. B., age 47, first attack, duration six months, has been a drunkard all his life, as was his father before him.

Case 112.—General paralysis. W. H., age 32; first attack, duration a fortnight; admitted December, 1885. March, 1887: The case now presents a good example of almost complete remission. Family history: Father, a drunkard, became epileptic; brother, J. H., nervous temperament, brain fever at 20, became insane when 27, and is now in a state of terminal dementia at L— asylum.

Section 3.—The neurosis may increase in strength from generation to generation, if it is not counterbalanced by physiological morality and the judicious antidote which marriage into a healthy stock affords. Neuralgia or megraine in the parent, under circumstances favourable for the development of a neurosis, may be represented in the offspring by epilepsy or insanity, and the neurosis will generally manifest itself at an earlier age in the second generation. The general law of development teaches us that characteristic features tend to be reproduced in the offspring, at the period corresponding to that in which they appeared in the parent, and the instances which Darwin quotes are too well known to require repetition. But my investigation has taught me conclusively, that the neurosis manifests itself at an earlier age in the second generation, and many instances will be quoted as we proceed. Moreover, while the general law is undoubtedly true of certain special features, the whole history of the development of the animal world shows conclusively that accidental improvements in the parents are emphasized in the offspring, both by more distinctive form and by earlier appearance, else surely evolution were at an end and perissodactyls would be born with the full number of toes. And what is true of development is true also of degeneration. Mr. Hutchinson has proved that psoriasis, which is never congenital, is very hereditary, is prone to skip a generation, but rarely occurs in more than one member of a family, may culminate in ichthyosis, which is very hereditary, occurs in several members of a family, and at a very early age. Let us see what statistics teach us upon this point. Of the 723 males admitted between January 1st, 1885, and September 10th, 1886, reliable family histories

were obtained in 471, and evidence of the existence of a family neurosis in 54·7 per cent. of these (for details see Section 14). I tabulated the average age on first attack in all cases, exclusive of general paralytics, with the following results:—

With a family history of both insanity and drink ...	28·
With a family history of insanity	32·37
With a family history of drink	35·48
Said definitely to have no family neurosis	38·7

Case 12.—Melancholia. J. L., age 36; first attack; always eccentric; very alcoholic. Father and mother were hard drinkers. Here we have a neurosis started by alcohol, manifesting itself at an early period as eccentricity and culminating in insanity.

Case 66.—Senile dementia. I. M., age 72; first attack, duration three months; married, seven children, one daughter imbecile. Family history: All the family have been hard drinkers, including the patient, his parents, and his children. Here we have a culmination—first generation, drink; second, drink and senile dementia; third, imbecility in one member of the family and alcoholism in the others. If it were possible to trace the family history further, doubtless we should find other developments.

Case 83.—Mania. J. W., age 32, married, no children; first attack. Personal history: Alcoholic for years, severe injury to head when seventeen, epilepsy when twenty-five, which persists; said to have become suddenly insane twenty-four hours before admission. Family history: Maternal uncle insane, cousin phthisis. The neurosis was here not a strong inheritance, and displayed itself as a liability to be easily affected by drink or by injury to the head. These individual liabilities being incurred, the neurosis is strengthened during the life of the patient, and we have epilepsy at twenty-five, and incurable insanity at thirty-two, and a non-reproductive existence, the extinction of a bad stock.

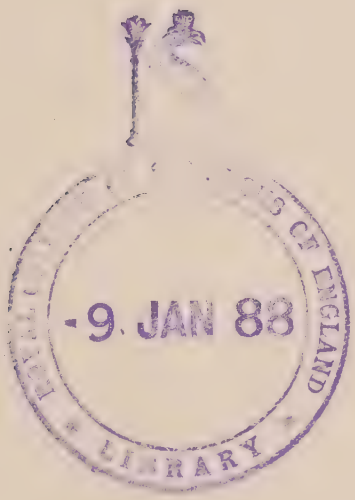
Case 87.—Dementia. H. B., age 67; duration of attack, six years. Epilepsy developed at fifty-seven. Daughter became insane at an early age.

Case 89.—Acute mania. J. B., age 17; first attack; admitted March, 1885; recovered July. Family history: Grandfather alcoholic; father had five attacks of insanity, the first occurring when he was 19, and he died during the last, aged 46, from phthisis.

Section 4.—The diathesis may decrease from parent to child, and die out if the tendencies are repressed, the general hygienic conditions are good, and the breed is strengthened by crossing with healthy stock. It is not necessary to men-

tion examples of this. We know, chiefly by the negative evidence that the cases do not come under our notice, that the majority of the offspring of neurotic stock do not become epileptic or insane. It were indeed a bad look-out for the race if the tendency to develop did not generally over-ride the tendency to degenerate. That we do not meet with a larger number of cases is accounted for by the facts, that family histories are forgotten or concealed, that the females marry and thus they or their offspring may be admitted under different names, that the neurotic members of a family are those most likely to die young or leave their native place. Moreover diatheses may oppose diatheses (see below), and favourable crossing with healthy breeds prove antidotal. Finally we know that any peculiarity, such as the hæmorrhagic diathesis or the appearance of supernumerary digits, may be most irregular in its appearance. It has been suggested that even the numberless sporadic cases of tuberculosis are instances of a diathesis with occasional manifestations, just as there is, according to Mr. Hutchinson, a "cancerous diathesis," and "it is clear that a state of health may be transmitted which gives proclivity to the disease without actual conveyance of the cell germs." With regard to the development of the neurotic diathesis, the nemesis of natural law may sometimes be satisfied with its development in single instances. And we must suppose that each embryo, in the power of its tendency to develop, and in its receptivity to malign influences, differs from every other. Finally there is the law of "individual variation," which, as Dr. Maudsley says, is particularly strong in the human species, "because it affords infinite scope for modifications, neutralizations, and variations of qualities."

(To be continued.)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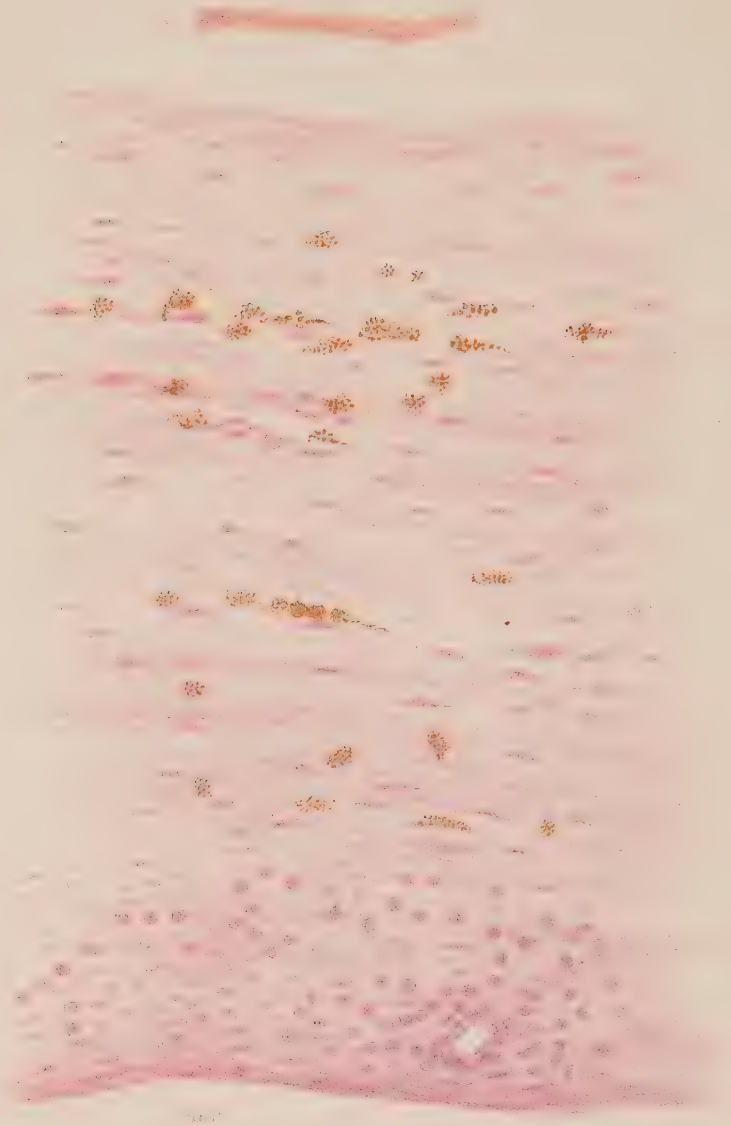

Case N° 19.

1. *Membrane — natural size*
2. *Portion of the same — magnified.*
   - *a. Imperfectly formed fibrous tissue.*
   - *b. Hæmatoidin granules.*
   - *c. Leucocytes.*

M.B. del.

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Case N°. 27.

A. *Membrane — natural size.*
B. *Portion of the same — magnified.*
a. *Imperfectly formed fibrous tissue.*
b. *Red blood globules.*
c. *Hæmatoidin granules.*

On Hæmorrhages and False Membranes within the Cerebral Subdural Space, occurring in the Insane (including the so-called Pachymeningitis.)* By Joseph Wiglesworth, M.D.Lond., County Asylum, Rainhill, Lancashire. With Plate.

The title of this paper implies the assumption that the current doctrine with reference to the condition known as *pachymeningitis* is not the true one; obviously the use of this term signifies that the pathological process underlying the morbid changes met with is one of inflammation, and that without the operation of this agency they would not occur. Now, without denying the possible occurrence of a condition to which the name of cerebral pachymeningitis might with appropriateness be applied, my endeavour will be to bring forward arguments and proofs to show that the condition which usually passes under that term is not the result of inflammation at all, but that all the phenomena met with may be explained as the simple result of effusion of blood into the subdural space (arachnoid cavity).

This view is not a new one; it was advocated before Virchow described the morbid changes in terms of inflammation, and it is to the authority of that great name that we are indebted for the predominance of the inflammatory theory. Having myself been indoctrinated in this latter view, it was only after the repeated observation of cases in which the signs of inflammation were conspicuous by their absence, whilst those of hæmorrhage were abundantly manifest, that the conclusion was forced upon me that this view was not a tenable one.

It may be well to illustrate by a few quotations the teachings of the books in this matter.

Thus, in Bristowe's well-known work on "The Theory and Practice of Medicine,"† we read —

> A peculiar chronic form of inflammation of the dura mater of the brain or cord is now usually termed *pachymeningitis*. . . . In the head it commences for the most part in the area of distribution of the middle meningeal artery, with the formation over a greater or less extent of surface of a delicate adherent film, which consists partly of embryonic corpuscles, but mainly of large irregular thin-walled capillaries. Other similar films become developed in slow

* Essay to which the £10 10s. Prize and Medal of the Association were awarded.

† P. 952, 1st Ed., 1876.

succession, one upon the other, over the diseased area, until the adventitious formation attains considerable thickness; the deeper seated laminæ meanwhile becoming denser, more fibrous, and less vascular. Owing to the large size and extreme delicacy of the newly-formed blood-vessels, rupture with extravasation of blood is of frequent occurrence. For the most part the hæmorrhages are minute and numerous, and result in the precipitation of crystalline and other forms of blood pigment; not unfrequently, however, they are abundant, and form large accumulations between the laminæ, giving, it may be to the whole, the aspect of a mere clot.

That this quotation accurately represents the teaching of the German School may be seen by a reference to Ziegler's "Pathological Anatomy,"* where a description, in all respects similar to the above, is given of the affection under the name *Chronic Internal Pachymeningitis.*

Gowers,† whilst describing the affection under the name of *Hæmatoma of the Cerebral Meninges,* nevertheless defines it as

Inflammation of the inner surface of the dura mater, attended with the formation of a membranous vascular tissue into which hæmorrhage takes place.

Turning to more special works we find Dr. Savage‡ describing *pachymeningitis* as occurring in general paralysis —

Occasionally one meets with false membranes occupying the whole or half of the vertex immediately under the dura mater. This false membrane is due to pachymeningitis, and may vary in thickness and consistency.

Dr. Mickle describing this same condition in his exhaustive work,§ seems to leave it an open question "whether this organized formation is primarily of hæmorrhagic or of inflammatory origin."

On the other hand, I am glad to find myself in accord with no less an authority than Dr. Clouston, who writes ‖ —

In a number of cases [of general paralysis] we find under the dura mater and attached to it, lying between it and the arachnoid, a new substance of a morbid and peculiar kind, commonly called a false membrane. . . . In some cases it looks like a clot, in others like an extra layer of dura mater, but it can always be easily scraped away. When it is removed from the dura mater, that membrane is not congested or inflamed looking. It always contains new blood-vessels, and nearly always blood corpuscles or blood-colouring matter. . . . This is the so-called *pachymeningitis*

* Part II., article 664—English translation, 1886.
† Quain's "Dictionary of Medicine," p. 953.
‡ "Insanity and Allied Neuroses," p. 345.
§ "General Paralysis of the Insane," 2nd Ed., p. 279.
‖ "Clinical Lectures on Mental Diseases," p. 373.

hæmorrhagica interna of the Germans, a ridiculous and misleading name, for it is not the result of inflammation at all.

Having regard to the diversity of opinion expressed in the above quotations, it will be conceded that the question is one requiring further investigation.

My experience in this matter is based upon a series of 400 unselected post-mortem examinations of persons dying with various forms of insanity. Of these 400 cases 195 were males and 205 females. Out of the 195 male cases 80 were examples of general paralysis, a percentage of 41·02; whilst in the 205 female cases there were 39 general paralytics, a percentage of 19·02. The percentage of general paralytics on the whole series of 400 cases was 29·75.

Now, out of this series of 400 cases, in no less than 42—10·5 per cent.—the cerebral subdural space contained either blood or membrane or both combined. I group these two conditions together because, in practice, it seems impossible to separate them, and, as I shall endeavour to show, the one appears to be but a later stage of the other. I may add that no cases of death from severe injury to the head, such as fracture of the skull, are included in this series, and hence the possible agency of traumatism has been as far as possible excluded.

I have appended a table, giving details of the 42 cases in which blood and membrane, singly or combined, were present in the cerebral subdural space.

The age of the youngest patient given in this table is 32, that of the oldest 85; the average being 51·07. Now, as the average age of the asylum population is about 43·33,* these figures indicate that the conditions noted are most frequently met with in insane persons of advancing years.

Turning now to the form of mental disorder, we find that the cases in the table are divisible as follows:—

General paralysis	22
Melancholia (acute)	3
,, (chronic)	2
Mental stupor ,, ...	1
Epilepsy (with mania)	1
Chronic mania	4
Chronic mania with dementia	2
Dementia (secondary)	4
,, (senile)	3
	42

* This was the figure in the year 1885.

Two facts are apparent from this analysis—first, that *hæmatoma of the cerebral meninges** is more common in general paralysis than in all other forms of insanity put together; secondly, that it occurs in the immense majority of instances in cases in which the mental disease has been of some standing; for in only three of the cases given in the table was the insanity of less than three months' duration, and these three cases were all examples of melancholia. Of the 42 cases of hæmatoma given in the table 23 were males and 19 females; this gives us a percentage of 11·79 on the total number of male cases examined, and one of 9·26 on the whole series of females.

These figures indicate that hæmatoma is more common in males than in females. This result is due to the excess of male general paralytics over female; for if we exclude general paralysis altogether we find that the percentage of cases of hæmatoma on the total number of males remaining (115) is 6·08; whilst the percentage on the total number of female *non*-general paralytics (166) is 7·83, a balance on the side of the female. If, on the other hand, we take cases of general paralysis only, we find that out of 80 males there were 16 cases of hæmatoma—a percentage of 20·00; whilst out of 39 females 6 cases occurred—a percentage of 15·38; so that it would appear from this that male general paralytics are more liable to the affection than female.

The condition of the subdural space in the 42 cases given in the table may be briefly summed up as follows:—In one case mention is made of fluid blood only; in seven others fluid blood was combined with recent clot; in all the rest there was more or less of a membrane present; but in no less than 15 of these the membrane, which was attached more or less loosely to the inner surface of the dura mater, had all the appearance of coagulated blood, and was described as such in the notes. In the remaining cases, the membrane, whilst still frequently exhibiting by its colour more or less of a hæmorrhagic element, was described in such terms as a whitish or pinkish thin gelatinous lamina, a thick fibrinous laminated membrane, etc.

The actual conditions met with in each case are given in detail in the table.

* It is necessary, for the sake of brevity, to make use of a term which will stand for the conditions of the subdural space described in the table, but impossible to obtain one which does not connote a pathological theory, the proof or disproof of which has yet to follow.

Now, in seeking to discover the pathological process which is at the root of the above phenomena it is, I think, a very suggestive fact to note that in no less than seven of the cases—one-sixth of the whole—fluid blood, or this combined with recent blood clot, was found in the subdural space, without the presence of any trace of membrane on the inner surface of the dura mater. The advocates of the pachymeningitic view assert that the blood which is so frequently met with, and of which they are compelled to give an account, is extravasated through the rupture of delicate, thin-walled vessels ramifying in a membrane which has previously formed on the inner surface of the dura mater. But if, as the above cases prove, blood may be found in considerable quantity without the presence of any trace of such a membrane, why is it necessary to call in the aid of a membrane to account for it in any case? It may, of course, be argued that these cases of fluid or clotted blood only should not be included in the same category as those in which a distinct membrane is present; but to this it may be replied that the two conditions occur in just the same class of cases, and there is such a very gradual transition from one to the other that the conclusion is strongly suggested that the membrane is formed from the blood, and not the blood from the membrane.

This opinion is reinforced by the structure of the membrane itself, whether this have the hæmorrhagic or the fibrinous form; for in the former case it has all the appearance, both to the naked eye and to the microscope, of a recent thrombus, and in the latter it closely resembles in its intimate structure the laminated fibrinous clots met with in veins when coagulation in them is of old date. And just as in the case of a recent thrombus, the clot is at first but very loosely attached to the wall of the vessel, but becomes more firmly united with it as time goes one, though still for some time capable of being readily separated; so is it in the case of the membranes under consideration, which though becoming more firmly adherent to the inner surface of the dura mater as their age increases, are nevertheless almost always capable of being easily peeled off from this.

The microscopical appearances of the membrane will vary with its age. Thus in Case No. 27 the membrane was composed of more or less structureless looking bands of imperfectly formed fibrous tissue, between which were contained considerable collections of red blood globules, the relative

proportions of these two elements varying in different parts; whilst in Case No. 19 the fibrous tissue was more fully developed, with oval nuclei, and red blood globules were not met with in the portion examined, but there were numerous leucocytes scattered about. In both cases delicate capillary vessels were observed in the membrane, and plentiful collections of hæmatoidin granules. The membrane, in fact, resembles in structure an organizing or organized thrombus.

If the structure of the membrane itself gives no support to a supposed inflammatory origin, what is to be said as to the condition of the dura mater from which it is presumed to be derived? One would expect at least to find evidence of inflammation here. But, to the naked eye at any rate, such evidence is not apparent. The dura mater is, as a rule, either not thickened at all or only very slightly so, and the membrane, which is almost always loosely adherent to its inner surface, can be stripped off with ease, leaving this inner surface smooth and shining in the great majority of cases. It is true that to microscopic examination the dura mater may present appearances indicative of slight inflammatory change. Thus in Case No. 19 there was a tendency to accumulation of leucocytes in the inner layers of the dura mater, and the nuclei of the fibrous bundles were abnormally distinct. But such changes may fairly be considered to be secondary to the irritation of the adjacent clot, and to be in all respects comparable to the processes which go on in the wall of a vein when coagulation has occurred within it. A thrombus in a vein sets up irritation in the wall of this vessel, with effusion of leucocytes; and it is through the agency of these migratory cells that the clot becomes adherent to the vessel, and subsequently undergoes organization. Now, the inner surface of the dura mater might be compared to the inner wall of a vein within which coagulation has occurred; and I would submit that the fibrinous membranes found beneath the dura mater are merely clots which have become converted into imperfect fibrous tissue—organized, in fact—by means of leucocytes which have migrated from the dura mater in response to the irritation set up by these clots. It is fair to assume that if these membranes were the product of a primary inflammation of the dura mater it would not be necessary to have recourse to the microscope for the demonstration of this process.

An additional argument in favour of the hæmorrhagic origin of these subdural membranes is furnished by the fact that the membrane is sometimes presented to us in its most typical form in subjects who have at some period or other of their insanity exhibited symptoms of considerable cerebral hæmorrhage. This was so in Case No. 27, in which a thick fibrinous laminated membrane was found after death coating the whole of the inner surface of the dura mater. This patient just nine months before her death fell off her chair one morning in a fit; two hours after this she presented all the symptoms of a copious hæmorrhage. She was profoundly comatose, and lay on her back breathing stertorously; all the limbs were absolutely paralyzed and completely flaccid, and the plantar reflexes were totally abolished; the *temperature was lowered, being reduced to* 95·5°. The patient remained comatose with lowered temperature for some hours, but the coma and paralysis gradually passed off, and by the following day she had recovered her usual maniacal condition, the temperature at the same time rising to the normal. It is necessary to insist here on the lowered temperature as a diagnostic sign of cerebral hæmorrhage, as in the apoplectiform seizures of general paralysis the temperature always rises rapidly if the attack is one of any severity. The inference is, that in the attack thus briefly described the patient had a very free hæmorrhage into the subdural space, which gradually became organized, and constituted the fibrinous membrane found at the autopsy. I may add that no signs of hæmorrhage, either recent or remote, were discovered in the interior of the brain of this patient.

Further evidence of an important kind is furnished by Cases Nos. 20 and 36 in the table.

In both these cases there was an ante-mortem thrombus of some standing blocking up the longitudinal sinus throughout the whole, or a great portion, of its length. It is clear that in these cases there must have been great distension of the venous system which has its terminus in the longitudinal sinus, and consequent great liability to rupture of venous radicles or capillaries. That such rupture had actually taken place is proved by the fact that in both these cases a number of small hæmorrhages from the size of a pin's head to that of a hemp-seed had occurred into the cerebral cortex. The inference seems irresistible that the gelatinous red lamina met with in each of these cases was produced in a similar manner. Yet these cases were examples—No. 20

in particular being quite a typical one—of the so-called *pachymeningitis interna hæmorrhagica,* in an early stage. If, then, an appearance exactly resembling this latter condition can be produced by hæmorrhage simply (and I submit that these two cases prove that this may be so), why is it necessary to call in the aid of inflammation as a factor in the production of similar phenomena in other cases?

A further point which seems worth noting is that the affection is by no means always bilateral, although it is so in the majority of cases. In a little under half the cases given in the table the bilateral character was well marked, whilst in the remainder the affection was either unilateral or mainly so; it was wholly unilateral in 15 cases of the series—rather more than one-third of the whole. Without attaching too much importance to this point, one would nevertheless expect to find an inflammatory affection more constantly bilateral.

Briefly, then, to sum up the argument so far as this has proceeded. We noted that blood was frequently found in the subdural space without trace of membrane, and the inference that the membrane was formed from the blood was supported by its occurrence in the same class of cases as that in which simple hæmorrhage occurred, and by the gradual transition to be observed from one to the other. The structure of the membrane itself resembled that of clot in its different stages, and it was sometimes met with in its most typical form in subjects who had presented during life all the signs of cerebral hæmorrhage. That a gelatinous red lamina adherent to the inner surface of the dura mater might be produced by hæmorrhage was shown by its association with hæmorrhages into the cortex in cases of thrombosis of the cerebral sinuses. Furthermore all signs of inflammation were absent from the dura mater (at least to naked eye examination), and the affection was more often entirely unilateral than might have been expected did it have an inflammatory origin.

But if the different forms of membrane met with in the subdural space are to be looked on simply as the result of hæmorrhage, slight or severe, which has taken place into this region, how are we to account for the frequent occurrence of this process in cases of insanity? The answer to this question is to be found in two of the physical conditions which, singly or combined, occur in most cases of insanity, viz., wasting of the hemispheres, and general or localized

congestion of the meninges. The brain being in a closed box the atrophy of the convolutions which we so commonly meet with in insanity must be compensated for by the effusion of fluid. Usually the fluid thus effused to supply the lost brain substance is serum, and its occurrence under these conditions is usually well understood. But it does not seem to be recognized that blood may be a compensatory fluid as well as the serum which is derived from it; nevertheless there does not seem any valid reason for doubting that this may be so under certain conditions.

The atrophy of the convolutions must tend to remove a good deal of support from the exterior of the meningeal vessels, and thus create a tendency to congestion and rupture, which is usually prevented from occurring on account of the lost support being supplied by the effused serum. But it is easy to suppose that under certain conditions, such as very great or very rapid wasting, especially if accompanied with weakness of the walls of the vessels from degeneration, the required support might not be afforded efficiently, and hence that rupture of vessels with escape of their contents might occur. It is not, however, necessary to assume that actual rupture of the vessel-wall takes place in all cases, although doubtless this is so when the hæmorrhage is at all extensive, but minor degrees of effusion may be produced by escape of the vessel contents through the walls by diapedesis when the internal pressure is high. Effusion of blood in one or other of these ways is, I submit, what actually occurs. It is obvious that if general or localized congestion of the meninges co-exists with loss of external support from atrophy of the gyri the tendency to rupture will be much enhanced.

Evidence in favour of this view is afforded by a study of the conditions under which these hæmatomata beneath the dura mater are found. The so-called *pachymeningitis* (the phenomena presented by which I have above endeavoured to prove to be the result of hæmorrhage alone) is more frequently found in general paralysis than in any other form of insanity. This is the usually accepted opinion, and it is one which is fully borne out by the cases given in the table, for out of these 42 cases no less than 22 were examples of general paralysis. Now it is just in this disease that the conditions above indicated, viz., great and rapid wasting and general or localized congestions of the meninges, occur with the greatest frequency and intensity.

There is no need to lay stress on the large amount of brain wasting which is the invariable concomitant of general paralysis when the case has been of any duration; the frequent congestion of the meninges, more especially of the pia mater, is a fact equally capable of proof. When death has occurred in this disease after a series of epileptiform or apoplectiform attacks it is common enough to find considerable diffused congestion of the pia mater. But I have frequently also seen under these circumstances localized irregular-shaped patches of extreme congestion, which do not necessarily occur over the motor region. In such cases the pia mater over a variable area may be so intensely congested as actually to resemble an ecchymosis, without, however, any blood having escaped on the free surface. It is manifest, nevertheless, that the conditions here must be highly favourable to actual rupture, and I doubt not that this frequently occurs.

Such localized congestions are not, however, confined to general paralysis, as is shown by Case No. 42 in the table—a typical example—but they are by far most frequent in this disease.

It is not intended to be implied by the above allusion to epileptiform attacks that these latter are caused by effusion of blood beneath the dura mater. Though this may be so in a few cases it is certainly not so in the majority, for daily observation shows us that epileptiform attacks may frequently occur without any hæmorrhage having taken place. The more correct interpretation would seem to be that the epileptiform attacks are produced, in many cases at least, by the meningeal congestions, and that rupture of a vessel from one of these ecchymotic-looking patches is a complication that may, or may not, occur. The localized congestions may themselves be the result of loss of support from rapid wasting.

It seems worthy of note that phthisis is put down as the cause, or a part cause, of death, in a number of the cases given in the table, as in these cases the wasting produced by the cerebral disease would tend to be distinctly reinforced by the pulmonary affection.

Further evidence in the same direction is furnished by the age at which these hæmatomata are usually met with, for, as was previously shown, the affection is distinctly one of advancing years. This is the case even in insanity, where the mental affection usually tends to produce a premature

senility, and it is probably still more marked in sane people, for in them, when non-traumatic subdural hæmorrhage takes place, as it sometimes does, it is met with almost exclusively in old age. We recall here the fact that a certain amount of brain-wasting may almost be looked upon as a normal accompaniment of old age, and if to this we add the very frequent association of senility with degenerated vessels we have another powerful factor introduced.

Indeed, I think it may be said that wasting is most liable to occur in those whose vessels are most diseased, and hence these two factors, both tending to produce a rupture on the surface of the brain, are often combined.

A further highly significant point remains to be noted. When the hæmatoma is entirely unilateral the hemisphere of the side on which this has occurred seems to be generally the lighter of the two. This was so in the great majority of the unilateral cases given in the table, where each hemisphere had been separately weighed after being denuded of its membranes.

Further observations on this head would be desirable since hemispheres vary normally in weight, but the fact that in almost every case in which this point was noted the conditions above-mentioned existed could hardly have been a matter of accident. In some cases the difference in the weight of the hemispheres was decided, amounting to as much as 20 grammes. It is obvious that if loss of support from atrophy of convolutions is a factor in the production of hæmorrhage, such hæmorrhage is most likely to occur on the side on which the loss of support has been the greatest.

We have yet to inquire into the clinical significance of hæmatoma of the cerebral meninges, and to trace out, as far as possible, the symptoms it occasions. It must at once be admitted that in the majority of cases no symptoms capable of recognition are produced. Occurring for the most part in demented patients, often towards the close of life, and in the majority of cases to an inconsiderable extent, this is only, perhaps, what might have been anticipated. Occasionally in a chronic dement the development of unusual mental torpor, gradually deepening into coma, may give the needed clue, and at times, as in the case of general paralysis before quoted (No. 27), signs of copious hæmorrhage have been noted during life. But these are exceptional instances, and it is not uncommon, especially in general paralysis, to find a thick, fibrinous lamina covering the whole extent of the dura

mater, the presence of which has not even been suspected during life. The explanation of this, probably, is that the hæmorrhage which has taken place has simply filled up the vacuum that would otherwise have been occasioned by the wasting of the brain substance, and has done neither more nor less.

Incidentally one might here remark that this very absence of symptoms points to the compensatory nature of the affection, for inflammatory products are no respecters of space, and the encroachment of these on the surface of the brain could hardly fail to produce symptoms of irritation and pressure, even in a demented patient.

But there are other cases, chiefly of acute insanity, in which the hæmorrhage seems to do more than merely fill up a vacuum, and appears to introduce a complication which may actually be the cause, or a part cause, of the death of the patient.

In illustration of this I will very briefly relate three cases of recent melancholia which have been under my observation. They are numbered 5, 8, and 11 in the table.

No. 5.—Alice S., æt. 50, was admitted suffering from her second attack of insanity, which was then of two weeks' duration. She had an expression of alarm, frequently screamed, and at other times made a sort of moaning noise. She was very taciturn, and could with difficulty be got to give her name. These symptoms increased. She lay in bed, making a sort of moaning noise at times, and took no notice of any questions put. She often moved her hands about restlessly. The urine was retained, necessitating the use of the catheter. The temperature was normal up to the day before death, when it rose to 100°·4. She gradually passed into a semi-comatose condition, and died seventeen days after admission.

As regards the autopsy, besides the details given in the table, it is sufficient to state that both lungs were very congested and œdematous, and there was some patchy consolidation along the posterior borders of each.

No. 8.—Harriet B., æt. 48, was admitted suffering from her first attack of melancholia, of two weeks' duration. It was stated in the order of admission that the only answer she could make to questions was that she was ruined. She was admitted in a very weak state. She lay on her back in bed taking no notice of her surroundings; could not be got to give any replies to questions, but muttered to herself at times; arms and legs were kept very rigid when attempts were made to move them; temperature varied

from 99·°4 to 102°. She had a little diarrhœa, and gradually sank and died five days after admission.

There was nothing noted at the autopsy which would account for death beyond the hæmorrhage into the subdural space.

No. 11.—Elizabeth W., æt. 52. This was her first attack of melancholia, which was said to be of six days' duration. When admitted she was very fretful and depressed, and cried a good deal. A few days after this she resisted taking her food, and constantly made a sort of groaning noise. Three weeks after admission she lay in bed, scarcely speaking at all, and could with difficulty be got to answer the most simple questions, but she made almost constantly a low moaning sound. The physical and constitutional signs of pulmonary gangrene now set in, and patient died thirty days after admission. The temperature during the last week was only once below 102°, and reached to 103°·4.

In reviewing these three cases several points suggest themselves for consideration. What was the cause of the hæmorrhage beneath the dura mater? At what period of the case did it occur? How far did it influence the symptoms, and what connection had it with the death of the patients? To these questions it is difficult, in fact impossible, to return satisfactory replies. I would, however, suggest the following as a probable interpretation:—The cases commenced as ordinary attacks of melancholia. Without discussing the pathology of this condition, it will, I think, be conceded that even in recent cases there is some amount of wasting of the convolutions. Such wasting would tend to remove support from the vessels of the pia mater and render them liable to rupture, as previously noted. It is no argument against this view to say that such rupture does not occur in the majority of cases, for the conditions may not have been exactly similar. In the cases under consideration degeneration of vessel walls may, considering the ages of the patients, have been an additional factor. Rupture of a vessel having once occurred, the amount of blood effused would depend upon various circumstances; it is manifest that effusion of blood is less under control, so to speak, than effusion of serum, and it might tend, in certain cases, not only to fill up any vacuum occasioned by loss of brain substance, but to spread further; the more recent the case and the less the amount of wasting, the more likelihood would there seem to be of this taking place. But, under these circumstances, effusion of blood would be very liable to set up active irritation. That such irritation existed in the cases detailed may, I think, be legitimately inferred from some of the symptoms. Thus the constant or

frequent utterance of a low moaning noise was a prominent symptom in at least two of the cases; and restless movements of the hands, or rigidity of limbs, was likewise noted. But, in connection with the symptomatology, it will be well to give a short account of another case, which was not included in the above, because not a recent case of insanity, but which, nevertheless, is worthy of note. It is case No. 42 in the Table.

Mary Ann W., æt. 33 at death, had been an inmate of the asylum for eight years. Her mental condition was peculiar. She suffered from mental stupor of an unusual type, and would remain for weeks or months huddled up in a corner with her head strongly bent on the thorax; she exhibited at times a tendency to catalepsy, and was only partially amenable to external suggestion. After a long but uncertain period of this lethargy she would brighten up and be for a time fairly rational, but in the course of a few days she would relapse into her former state, which was well-nigh habitual to her. The patient, whilst apparently in her usual health, was seized one night with a sharp attack of diarrhœa, being freely purged three or four times; this ceased and was not renewed, but on the afternoon of the following day her pulse (whilst lying in bed) was 140, and her temperature 102°·8. Physical examination of chest, negative. Mental condition was an aggravation of her usual state of semi-stupor. Her pulse and temperature continued raised for the next few days, and there was considerable difficulty in administering food. She then passed into a very restless condition, continually tossing about in bed, throwing her arms about, and constantly moaning; when moved she resisted and screamed loudly as if in pain. She gradually got weaker, and died ten days after the transient attack of diarrhœa, which appeared to usher in the illness. At the autopsy, besides the subdural hæmorrhage, there was found considerable congestion of the lower lobes of both lungs, but nothing else worthy of note.

In this case, as in some of the others, there were continual restless movements of the arms, occasional screams, and the frequent utterance of a low moaning sound. The restless movements and the moanings appear to have been the most constant symptoms noted. Turning to the immediate cause of death, it will not have escaped notice that in three out of the four cases more or less disease of the lungs of recent date was present; in connection with which matter we may recall the well-known association of pulmonary affections with cerebral diseases.

One further point remains for consideration. I stated towards the commencement of this paper that cases of severe


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Table showing the condition of the subdural space, as to blood and membrane, in 42 cases of Insanity.

No.	Sex.	Age at Death.	Form of Mental Disorder.	Cause of Death.	Condition of Subdural Space.
1	M.	40	Chronic Mania, with Dementia.	? Arachnoid Hæmorrhage.	Inner surface of dura mater coated with a layer of coagulated blood; this extends all over right side, but on left side there is only a small patch at posterior part. Blood chiefly black and clotted and adherent to inner surface of dura mater, from which it can be peeled off. Towards anterior part a small patch decolorized, and more firmly adherent. No loose clot, although all parts were not equally adherent. Several ounces of blood-stained fluid in cavity of arachnoid (subdural space).
2	M.	54	Chronic Mania, with Dementia.	Phthisis.	Between dura mater and arachnoid a thick, organized, fibrinous layer, covering nearly the whole of vertex from frontal to occipital region, and dipping down into fossæ.
3	M.	50	Dementia, with General Paralysis.	General Paralysis.	Some arachnoid hæmorrhage of recent date over posterior portion.
4	M.	64	General Paralysis.	General Paralysis.	A thin, recent clot adherent to inner surface of dura mater in right parietal and occipital regions, dipping down towards base of skull; clot broken in many places, the largest portion being about two inches long and half inch broad; this occurs also on each side of longitudinal sinus for about two inches.
5	F.	50	Melancholia (acute).	? Arachnoid hæmorrhage. Lobular-pneumonia.	Three or four ounces of blood-stained serum in cavity. Spread over inner surface of dura mater, and slightly adherent to this, is a thin lamina of reddish-black blood-clot, which can with care be stripped off in a continuous layer, leaving the inner surface of the dura mater smooth; lamina thickest posteriorly, but extends in an attenuated form as far as frontal lobes; it dips down into occipital fossæ, and is pretty equally distributed on each side. The arachnoid covering the occipital lobes is also coated with a thin, adherent, black blood-clot, which cannot be detached as a distinct lamina.
6	M.	49	Dementia, with General Paralysis.	General Paralysis.	A thin layer of reddish-black coagulated blood forming a thin membrane, adherent to inner surface of dura mater, over convex surface of right frontal, and anterior part of right parietal lobe; a similar, irregularly-shaped thin lamina in each middle and occipital fossa. Small patch, about size of shilling, over convex surface on left side.
7	M.	63	Chronic Mania.	Phthisis.	A thin lamina of recent blood-clot spread over inner surface of dura mater, at convex surface of right hemisphere.
8	F.	48	Melancholia (acute).	? Arachnoid hæmorrhage. ? Diarrhœa.	An ounce or two of bloody serum in cavity. A little black clot in right middle and occipital fossæ, and a little thin fluid blood smeared over right occipital lobe.
9	F.	50	Dementia, with General Paralysis.	General Paralysis.	A coherent membrane spread over entire inner surface of dura mater both at vault and base, extending even over the orbital plates. It varies in thickness from about 2 mm. over the vault to ½ mm., in the middle fossæ, where it is thinnest. Though everywhere closely adherent to inner surface of dura mater, the whole forming apparently one laminated membrane, it can be readily stripped off, leaving the inner surface of the dura mater smooth. It is mostly pale red in colour, and apparently consists of organized blood-clot.
10	M.	54	Mania, with General Paralysis.	Phlegmonous erysipelas of forearm. General Paralysis.	On inner surface of dura mater in middle and occipital fossæ some thick coagulated blood.
11	F.	52	Melancholia (acute).	Gangrene of Lungs.	Slightly adherent to inner surface of dura mater in right parietal region, and to a greater extent in right middle and occipital fossæ, is a soft thin layer of reddish-black blood-clot, without cohesion. This is also spread over surface of hemispheres in posterior parietal, occipital, and temporo-sphenoidal regions. Pia mater deeply injected over right angular gyrus and posterior part of superior parietal lobule.
12	M.	58	Mania, with General Paralysis.	General Paralysis.	Four or five ounces of blood-stained fluid in cavity. Spread over greater part of inner surface of dura mater, and more or less adherent to this a thin layer of blood-clot.
13	F.	81	Senile Dementia.	Senile Decay.	A distinct lamina of some thickness adherent to inner surface of dura mater, from which, however, it can be easily detached on right side; traces of a lamina on left side. Right hem. = 400 grammes, left hem. = 410 grammes.
14	F.	34	Dementia, with General Paralysis.	General Paralysis.	Five or six ounces of fluid in space. Spread over whole of inner surface of dura mater, on the convexity, a thin, whitish-pink, gelatinous, more or less coherent lamina.
15	F.	53	Dementia, with General Paralysis.	Tuberculosis of Lungs. General Paralysis.	Seven ounces of fluid in subdural space. A thick, gelatinous, rather firm membrane spread all over inner surface of dura mater, but easily detached from this; it is at least one-eighth of an inch thick over anterior part of hemispheres, but diminishes slightly posteriorly, though it is still of some thickness in occipital regions. It spreads down to base where it exists as a thin film only in middle fossa, but as a thin coherent lamina in anterior fossa, and in upper part of posterior. Over convexity of hemispheres the membrane is distinctly adherent to the arachnoid, but the adhesion is soft and easily broken down with the finger.
16	F.	51	Dementia (secondary).	Phthisis.	Spread over inner surface of dura mater on left side only, a thin lamina of recent blood-clot. Right hem. = 517 grammes, left hem. = 502·5 grammes.
17	M.	39	General Paralysis.	General Paralysis.	On right side about eight ounces of dark coloured fluid blood; a thin lamina of adherent clot spread over under surface of dura mater, and a little, non-coherent, clotted blood pretty uniformly spread over surface of arachnoid; this extends down to base. Left side quite free.
18	M.	58	Dementia, with General Paralysis.	General Paralysis.	A very thin lamina of blood-clot spread over inner surface of dura mater in left posterior fossa. Right hem. = 600 grammes, left hem. = 580 grammes.
19	F.	57	Dementia, with General Paralysis.	General Paralysis.	Twelve ounces of slightly turbid serum in space. Spread over whole of inner surface of dura mater, both at convexity and in fossæ, a thick coherent lamina; it is thickest at anterior part of right side, where it is fully a line thick; it is thinnest and least coherent over middle of left side of vertex. Over right angular gyrus a thin recent blood-clot about size of a threepenny piece.
20	F.	57	Chronic Mania, with Dementia.	Thrombosis of Cerebral Sinuses. Broncho-pneumonia. Parotitis.	On inner surface of dura mater a very thin, gelatinous, red lamina, which can be stripped off without tearing; this is most marked on left side, and here stretches down into basal fossæ; on right side it is present to a less extent, and only over vertex. *Longitudinal sinus, and part of lateral sinuses, occupied with organized fibrinous thrombi, which are friable in places. Punctiform hæmorrhages in left cerebral cortex.*
21	M.	50	Dementia, with General Paralysis.	Pneumonia. General Paralysis.	A very thin delicate lamina spread over greater part of inner surface of dura mater, only in places, however, forming a coherent membrane, which in anterior frontal region is adherent to arachnoid.
22	M.	36	Mania, with Epilepsy.	Epilepsy.	Effusion of a thin layer of semi-fluid blood all over left hemisphere.
23	F.	47	Melancholia (chronic).	Phthisis.	Scattered sparsely over inner surface of dura mater, extending in some places down to base, is a thin, non-coherent, gelatinous lamina, dotted over in places with punctiform hæmorrhages.
24	M.	50	Mania, with General Paralysis.	General Paralysis.	On inner surface of dura mater a thin clot of recent formation, chiefly in parietal regions.
25	M.	40	Dementia, with General Paralysis.	General Paralysis.	Attached to inner surface of dura mater in many places is a thin coherent lamina of blood-clot; also similar laminæ of condensed pus.
26	M.	54	Melancholia.	Pneumonia.	A considerable amount of black clotted blood spread chiefly over posterior lobes, and extending down into fossæ at base; anterior part of brain almost free.
27	F.	44	General Paralysis.	General Paralysis.	A thick, fibrinous, laminated membrane spread over whole of inner surface of dura mater, thickest at vertex, but extending down to base and lining all the fossæ.
28	M.	63	Dementia.	?	On left side a thin, gelatinous, coherent lamina, spread over inner surface of dura mater, extending down to middle and posterior fossæ in the form of a hæmorrhagic film.
29	M.	43	General Paralysis.	Phthisis. General Paralysis.	A recent black blood-clot attached loosely to inner surface of dura mater on right side.
30	M.	52	General Paralysis.	General Paralysis.	Adherent to inner surface of dura mater, but separable from it, is a yellowish-red membrane, some lines in thickness in frontal and occipital regions, but thinner in parietal, extending into all fossæ. No recent blood-clot.
31	M.	43	General Paralysis.	Phthisis. General Paralysis.	A thin lamina of semi-fluid blood lines the inner surface of the dura mater on both sides, but is most marked on left; extends down to base.
32	F.	33	Dementia, with General Paralysis.	General Paralysis. Pneumonia.	A little recent red blood clot spread over inner surface of dura mater in right middle fossa, and slight traces of the same in left.
33	M.	48	General Paralysis.	General Paralysis.	Adherent to inner surface of dura mater, but separable from it, is a thick, organized layer of false membrane, pinkish-brown in colour, thickest over vertex, thinnest in fossæ.
34	F.	38	Dementia (secondary).	Phthisis.	A very thin film of coagulated blood spread over inner surface of dura mater on convexity of left side. Right hem. = 560 grammes, left hem. = 552 grammes.
35	F.	58	Dementia.	Miliary tuberculosis of Lungs. Cirrhosis of Kidneys.	Nine and a half ounces of fluid in subdural space. Attached to inner surface of dura mater on left side is a thin reddish film, which can be easily torn off; this is patchy over the convexity, and in one spot there is a small recent clot; it is more continuous in the middle and posterior fossæ, and from the rust-coloured appearance of portions would appear to have existed for some time.
36	M.	32	Mania (chronic).	Phthisis.	Spread over outer surface of arachnoid in frontal and parietal regions on right side is a thin, gelatinous film; this forms a distinct clot in anterior frontal regions; posteriorly there is a similar reddish film attached to inner surface of dura mater in occipital fossa on right side only. *Old adherent thrombus in longitudinal sinus. Punctiform hæmorrhages on surface of gyri.*
37	M.	42	Mania, with General Paralysis.	General Paralysis. Cellulitis of Neck.	A thin, gelatinous, reddish lamina, spread over inner surface of dura mater on left side, stretching down into base. Right hem. = 535 grammes, left hem. = 525 grammes.
38	M.	46	General Paralysis.	? Meningeal hæmorrhage. General Paralysis.	Six ounces of dark fluid blood in middle fossæ.
39	F.	85	Senile Dementia.	Bronchitis. Senile Decay.	Several ounces of blood-stained fluid in space. A thin film of coagulated blood spread over inner surface of dura mater on right side; this reaches down to the base, occupying all three fossæ on this side. Right hem. = 496 grammes, left hem. = 501 grammes.
40	F.	68	Chronic Mania.	Cancer of Gall-bladder and Liver.	A thin, gelatinous, yellowish film, adherent to inner surface of dura mater, most marked over convexity of left side, but present to a less degree on right.
41	F.	78	Senile Dementia, with Epilepsy.	Senile Decay. Pneumonia.	A very thin hæmorrhagic film spread irregularly over inner surface of dura mater on right side. Right hem. = 510 grammes, left hem. = 519 grammes.
42	F.	33	Mental Stupor (chronic).	? Arachnoid hæmorrhage. Pulmonary congestion.	On right side the inner surface of the dura mater is blood-stained posteriorly, and there are traces of a thin film adherent to it in places; on surface of arachnoid over convex surface of right occipital lobe is a loose layer of blackish blood-clot; there is a little also adherent to inner surface of dura mater in this region and in right occipital fossa; a small quantity of clot is also loose in the subdural space. There is a patch of intense—almost ecchymotic—congestion, occupying the pia mater over the right angular gyrus, over an irregular area, about the size of a florin; this is unaffected by washing with water, and on stripping it the cortex underneath appears unaffected. Right hem. = 462 grammes, left hem. = 480 grammes.

head-injury, such as those associated with fracture of the skull, had been excluded altogether. It has not, however, been feasible to exclude entirely the possible agency of a minor degree of traumatism. Case No. 8 (above described) presented, when admitted, a good deal of ecchymosis of the face, chiefly on the left side; and Case No. 26 sustained a considerable ecchymosis around the right eye, and died a week afterwards of pneumonia. Did the injury in these two cases cause the hæmorrhage into the subdural space? In neither case did it appear sufficient to have done so in a healthy person; but, given the conditions previously commented on, as predisposing to hæmorrhage, it is clear that we have in traumatism, even though of a slight nature, an additional agency, which might be sufficient to turn the balance in favour of a hæmorrhagic effusion, which might not otherwise have occurred.

Conclusions.—It will be convenient here briefly to sum up the main conclusions which the foregoing considerations appear to justify:—

(1) The morbid conditions described under the term *pachymeningitis interna hæmorrhagica* are not the result of inflammation at all, but are solely due to the effusion of blood beneath the dura-mater; the hæmatomata thus formed becoming organized and eventually converted into fibrinous membranes.

(2) Such effusions of blood are especially liable to occur in the insane by reason of the loss of support sustained by the meningeal vessels, on account of the convolutional atrophy which is so marked a concomitant of insanity; assisted as this condition so frequently is by transitory or more permanent congestions.

(3) It is because these conditions are most perfectly fulfilled in general paralysis that hæmatomata are more often met with in this disease than in any other form of insanity.

(4) Whilst subdural hæmorrhage occurs by far the most frequently in chronic cases of insanity, it is also met with in a small minority of acute cases, chiefly, if not solely, when the symptoms have been of a melancholic character; and in these cases the hæmorrhage may introduce a complication which may actually be the cause of the death of the patient.

(5) Whilst in the great majority of cases traumatism may be confidently excluded, there seems reason for believing that, under favourable predisposing conditions, a slight injury may start a hæmorrhage which may prove fatal.

CLINICAL NOTES AND CASES.

Folie du Doute. By P. J. Kowalewsky, Professor of Psychiatry and Neurology at the University of Kharcov.

(Concluded from p. 218.)

I shall now allow myself to mention a case in my own practice.

Mrs. Sch., aged 27, wife of a physician. Her father is a healthy, vigorous man. Her mother a sickly woman. Her cousin (related to the two families, the father and uncle of the patient having married two sisters) has attacks of epilepsy. The brothers and sisters of the patient are in good health. The patient was nervous from her childhood. She was married five years ago. Soon after her marriage her husband went to the war, and this made a strong impression on the young lady. During her pregnancy a mole showed itself, followed by violent hæmorrhages. All these causes—hæmorrhages, pains, and mental commotion—highly affected the health of the patient. She became anæmic, suspicious, and anxious about the state of her health. She began to entertain fears that the genitals, but no other part of her body, would take cold, and in consequence of these fears she wrapped, even in summer, the lower part of the abdomen, legs, and sexual parts in flannels. On one occasion, whilst making an injection, the midwife accidentally broke the glass bottle which contained the liquid. This brought on a dreadful fit of terror, the patient fearing that the broken pieces would enter the genitals. She had a throttling sensation in the throat, her arms and legs trembled, and she burst into tears. This acute attack did not last long, but the doubts remained, and from this moment she suffered dreadful torments. She feared that the pieces of glass would fall on her dress, petticoat, or shift, and from thence enter the genitals, and in order to avoid this misfortune, she used to examine, hundreds of times a day, her dress and underclothing, and as soon as this examination was finished doubts again arose in her mind whether pieces of glass had, after all, not remained concealed in her dress. She allowed nobody to make her bed, examining herself minutely every part of it, and frequently when already in bed she used to jump out suddenly and again recommence examining and shaking out the bed clothes. The linen was always washed under her own personal supervision and dried in her own room, as if left out of doors someone might throw glass on it. But even in her own room the linen used to dry either in her presence or with the doors locked. She could not look at objects made of glass, and therefore glasses, lamps, &c., were banished from her house. The

window panes were her great tyrants as she could not do otherwise than put up with them. She could exist as long as nothing was broken in the house, but when she heard the sound of glass breaking in the house she shrieked, groaned, and was in a state of terror. It is a noteworthy fact that she could eat and drink quietly without fearing that the pieces of glass would enter into her mouth, but she was always terrified at the thought that they could come into contact with the sexual organs. She dreaded going into the street, full of fear of coming on pieces of glass. When, unfortunately, she saw a piece of glass, she made a wide circuit round it, but this did not save her from the necessity of examining and shaking out her dress, &c. When the patient looked out of her window into the yard, and someone broke a glass or anything else in an adjoining yard, she had for days long no peace of mind. She was terrified when she had to take medicine out of a glass bottle. She kept examining it to see that it was not cracked, and if a crack did exist it caused her endless terror. Another misfortune soon added itself to the first. The patient began to be afraid of needles. She fancied that the end of the needle would break, fall on her dress, and thence enter the sexual organs. In consequence, before making use of the needle, she used to examine it frequently, and, after having ascertained that the needle was whole, she nevertheless examined her dress and underclothing. In the summer of 1881 she went to Tatta, but this journey, instead of quieting her, made her only worse. Added to all this, the patient was anæmic and heard noises in her ears. Antiflexio uteri et catarrhus colli uteri.

We pointed out that neurasthenia could engender many neuroses and psychoses. These neuroses and psychoses may appear alone or in various forms in combination with each other, and we have many clinical cases of such a combination. Under the denomination Onomatomania, Prof. Charcot and Dr. Magnan* have given an excellent description of pathophobia and uncontrollable obsessions combined. Régis† described emotional delirium with anxietas præcordialis combined. A. Takovlew‡ described a case of pathophobia accompanied by "impulsive" acts. Roussell§ showed the connection between epilepsy and uncontrollable obsessions. Gnauck,‖ Sovetow,¶ Platonow,** and others demonstrated the combination of delusion of persecution with epilepsy.

* Prof. Charcot and Magnan, "Archive de Neurologie," No. 29.
† Régis, "L'Encéphale," 1885, No. 6.
‡ A. A. Takovlew, "Arch. Psychiatrie," Vol. vii., 2.
§ Roussell, "The British Medical Journal," 1879.
‖ Gnauck, "Arch. f. Psychiatrie," B. xii., No. 2.
¶ Sovetow, "Arch. f. Psychiatrie," Vol. i., 2.
** Platonow, "Arch. f. Psychiatrie," Vol. xii., No. 1.

Wille mentions a case where hereditary ideas changed into "Grübelsucht. Folie du doute," &c. We could quote a great many instances of similar combinations.

We can state that a degenerative psychosis can also appear as a combination of different varieties of delusion. Thus, we can meet delusion of persecution combined with hypochondria, delusion of doubt with hypochondria, or with delirium of persecution. We shall here describe a case where folly of doubt was combined with delusion of persecution.

Countess A. K., twenty-six years old, granddaughter of General K., one of the heroes of 1812. Her father was a very cruel and impetuous man; her father's brother had epileptic fits. The patient's mother is also eccentric. During her lifetime she was suspicious and distrustful. She had lost her husband fifteen years ago, and since his death she had been constantly wandering from place to place—Petersburg, Nice, Biarritz, Moscow, Kharkow, Kiew, &c. The servants could not stay in the house. She at first liked and caressed them, but they soon were out of favour. She at first suspected and soon after dismissed them. When living in her own house, where she always had three doorkeepers and a great many servants, the old countess used every day, before going to bed, to examine herself the whole house, after which mother and daughter locked themselves up in their rooms. The old countess frequently got up in the middle of the night and went all over the rooms, fearing that someone was hidden in the house. The distrust of the old countess showed itself specially in conversation on serious subjects. At every new idea that was started she used invariably to put the question—"What does it mean?" and at any news she heard—"Why should it be so?"

The patient had six brothers, of whom one died of general paralysis of the insane. Another, a very nervous man, died in a state of lunacy. A third involved himself in speculations by which he ruined himself and his family. Two others are so stout that, when driving in a carriage, they have to sit opposite each other. The brothers are, notwithstanding, clever, intelligent, and practical men. The patient always lived with her mother, and after the death of her father seldom with the other members of her family. Speaking of her brothers, she used to say—"We are very fond of each other, but when we are together we always quarrel." From her early childhood she was nervous and impressionable. Educated by a nervous and suspicious mother, she naturally took after her. In childhood her affections underwent sudden changes. The patient writes in her autobiography—"At times she became pensive, serious thoughts arose in her mind, her heart beat violently, her eyes filled with tears, and their expression ceased to be that of a child, and became melancholy. This state did not, however, last long, and used to end suddenly by some childish frolic

and by an unrestrainable fit of laughter." During her childhood the patient suffered from many complaints, especially those of the digestive organs. Until her sixteenth year she was a thin, pale, sickly-looking and nervous young girl, but from that time she rapidly recovered, and developed herself. She had twice hit her head, once on the sinciput and another time on the occiput. Menstruæ showed themselves in her sixteenth year, and continued regularly without any morbid phenomena except some irritation. The patient was well brought up, and notwithstanding the frivolous, aristocratical life which she led, she found time for serious reading. From some of her writings, which I had occasion to see, it is evident that she interested herself in particular in the relation of man to God, as well as to nature, and in all its surroundings. The problem of existence troubled her. She did not follow religious rites, but her mind was absorbed in religious thoughts, and she endeavoured to study the thoughts of others. She suffered very much morally, and sought for consolation and peace either in God or in nature. By her own writings or by the extracts which she made from books, it can be seen that she suffered mentally, was dissatisfied, and was seeking for peace of mind. She began the history of her life as follows :—"The life of man is an enigma, the possibility of happiness is given to everyone, but fatality often ruins the career of man, and that which could have been will never recur again. There are natures that can love with all their heart, for whom love is as necessary as air and light, and for whom life without love is reduced to a state of vegetation."

This melancholy, despairing state of the mind in search of consolation is to be traced throughout all the writings of the patient. She was not of an even temper. She sometimes felt affection for a friend and confided to her her innermost thoughts and secrets, and then suddenly, without any or for the most futile cause, she broke off all relations with her and considered her henceforth as her enemy and as a dangerous person. These ruptures grieved her intensely, and rendered her suspicious and disenchanted of people. The same used to occur with servants, whom she at first treated as friends and afterwards as enemies, spies, &c. It is a noteworthy fact that the mother as well as the daughter, if they quarrelled with anybody, each transferred at once her affections to some other person. When, for instance, they quarrelled with one of the brothers, they used to transfer at once their attentions and affection to another brother, a servant, &c. The brothers were quite aware of this, and knew that the same fate awaited the beloved of the moment.

From her earliest years the patient admired the beauties of nature and art. Travelling in Italy, Tyrol, France, &c., she used to take long walks contemplating the views. Whilst at Munich she often went to the gallery of paintings, spending there many hours. All this contributed to make her pensive,

and seek for solitude. She liked to bury herself in her own thoughts.

Suffering from a chronic inflammation of the digestive organs, the patient frequently complained of feeling ill and languid. Her relations say that she became hypochondriac. Being of a loving and warm disposition, she fell in love four years ago with a young man who reciprocated her love; but the suspicious character of mother and daughter caused a rupture. It seemed to both women that the bridegroom did not love his bride sufficiently; that he wished to marry only for the sake of her money; that he had a mistress, &c. All this was pure invention, but the young man was rejected. The mental sorrows of the patient were somewhat soothed by constant travelling, but she became still more suspicious and distrustful, and at the same time superstitious. She fancied that she was "clairvoyante." The following circumstance was what brought this on. She saw as a vision a gentleman acquaintance riding on horseback; that the horse reared and threw him off, and that he hurt his forehead. The fall from the horse and the sight of the gentleman's face covered with blood caused a great fright to the patient, who shrieked. Her mother succeeded in quieting her, but the day and hour when the patient had this vision were noted, and soon after they learned from the sister of the gentleman in question that he had had a fall from his horse precisely on the same day and at the same hour. From this time the patient became convinced that she was "clairvoyante." She believed in fortune-tellings, chiromancy, &c., and was in despair when her forecastings were unfavourable.

In the meantime revolutionary movements had commenced in Russia, and amongst its victims were several of the patient's friends and relations. She became still more suspicious and exceedingly irritable. This was a year and a half before she became completely insane, and she got worse and worse every day. The patient suspected that the floor had been made double for some evil purposes by enemies, and that the servants put poison in her mother's bed. She feared to lie on the sofa, as she said that there was something wrong. She was particularly suspicious of her sister-in-law, who was a very amiable young lady, who did everything she could to please her. The sister-in-law accompanied the patient and her mother to Kiew, where they frequented very much society. The sister-in-law invited young men to her house, and endeavoured to find amongst them a husband for the patient, and in this she succeeded. A young gentleman made to the patient a proposal of marriage, and he was accepted by her. But very soon suspicions arose. Her sister-in-law was young and beautiful, and the young men used to pay their court to her. The patient fancied that she wanted to prevent the marriage, and angry words passed between her and her sister-in-law. The mother and daughter fancied that their relations were in the

plot. The bridegroom was rejected, and the patient grew much worse.

At this time the patient began to write a novel under the title "Lost Happiness," wherein she describes herself; but, unfortunately, in consequence of her illness, the novel stops where the heroine's childhood is described.

During the last years appeared the symptoms of the delusion of doubt. The patient used to rise several times to lock a door, and after having repeatedly ascertained that the door was locked, she nevertheless again had doubts of its being locked, and again rose. She could neither eat nor drink without fancying that the food was either of bad quality or was poisoned. She frequently had doubts of her having paid the tradesmen's bills, and used to go over and over to inquire. The patient was very fond of reading, and was in the habit of making marginal notes in the books which she read. She began to fancy that persons touched her books, which annoyed her, and caused her to wash her hands. Soon after she got into the habit of washing her hands on touching any object. When she took up anything she examined it for some time with disgust, and then either kept it in her hand with a feeling of restraint or threw it away in disgust. Whilst eating or taking anything in her hand she would always ask what it meant, or what it would lead to afterwards. As these symptoms only showed themselves at intervals they were not considered as pathological symptoms, and were attributed to extravagance and to her being spoilt. At the same time, the patient considered herself to be very ill, and drank a great deal of milk, and tried to get better, although she had an excellent constitution and was fairly stout. She complained of oppression on the chest and of retchings.

After having rejected her bridegroom in Kiew, the patient and her mother seem to have lost their presence of mind, and did not know what to do. They took several decisions without, however, carrying any of them out. They decided to go to Moscow, to the Crimea, to Nice, Petersburg, and came to Kharcow. Having a beautiful house in St. Petersburg, they hired rich apartments in Kiew, which they left to go into an hotel, and finally they set off travelling.

All these decisions were communicated to the brothers, who were requested to forward the ladies' effects to various places, and it thus happened that umbrellas were sent to Tatta, shoes to Moscow, a fur cloak to Petersburg, money to Nice, whilst the patient and her mother finally went to Kharcow. During the journey frow Kiew to Kharcow the illness developed itself into an acute shape. When they entered the railway carriage the patient grew suddenly alarmed, and called out, "No, no! we shall not be well here. It is a bad carriage." They changed carriages, on which the patient exclaimed again, "We should have remained in

the first carriage, which was good. This is a bad one." The patient was agitated during all the time that the journey lasted. "There is a noise in the carriage. They meant to do something to us." She begged her mother at every station not to proceed any further as they were running to their perdition. During the journey she refused to take any nourishment, as everything was poisoned; so was the air, and every object surrounding her. She must not touch anything, nor must anybody touch her. There was something peculiar about the train which was specially destined to torture them.

They arrived at Kharcow. On their way from the station the mother related that the patient complained of everybody they met turning their heads away and looking angrily at them. On entering the room of a well-known hotel the patient complained that it was bad, and that there was a peculiar smell in it, and that it was poisoned, and that she must go into another room. In the same hotel lodged Count K., the patient's uncle, who offered to give up his own room, but she found that this room was also bad. Some misfortune or other must happen to them. She feared that she was going to die, and asked to see a doctor. Finally, I was called in.

On my examining the patient, I found the young woman to be tall, well-formed, fair, of a good constitution, and 29 years old. She did not remain quiet for an instant, walked about the room, and talked in a loud and agitated voice. She spoke abruptly, and repeated one and the same phrase, for instance: "What will become of us? what will become of us? what will become of us? What do you want, doctor? what do you want, doctor? Mother, do not leave me! mother, do not leave me!" &c. Sometimes these sentences were pronounced in a singing tone, sometimes they sounded like shrieks.

From the general aspect of the patient it was evident that she was in a very excited state of mind, proceeding partly from ideas of persecution and partly from an unaccountable torturing feeling of anguish. The patient was convinced that she, her mother, and her two brothers were threatened with some dreadful misfortune; they were first to be all tortured and then murdered. She ran every instant to her mother, looked into her eyes, kissed her hands, asked for her blessing as if they were going to be parted and she was ready to die. Everybody was plotting against them, everybody was a wretch and a persecutor. The carriages driving and the men moving about, even a dog crossing the street, implied something mysterious connected with her fate. Every movement, every look of bystanders had a peculiar meaning which the patient commented on, and which brought on an attack of fear. Since several days the

patient had not drunk anything, and she was tormented by thirst.

She took up with avidity a tumbler of water, held it in her hand for half-an-hour, but dared not drink, thereby aggravating the tortures of thirst. "The water is poisoned." The patient's tongue and lips are parched; a drop of water tastes bad to the patient, which confirms her in her idea that the water is poisoned. She eats nothing herself, and gives nothing to her mother to eat. She has not slept for several nights, and is constantly waking up her mother, as she is afraid that if they go to sleep they will never wake up again. The mother could not leave her for an instant. The functions of the intestinal canal had ceased since several days; she had retchings and nauseas. The urine passed seldom, and only in small quantities. It was of a high specific gravity and acid. The organs of senses were in a state of hyperæsthesia. The patient could hear a whisper at a great distance, and paid great attention when anything was whispered, and at the same time she did not seem to hear what was said in a loud voice close to her. The slightest contact with any object, such as a hair or a feather, excited the patient. Suspiciousness and distrustfulness on the part of the patient reached their extreme limits. The train of ideas was in a disordered state—abrupt, and void of any system. The patient frequently looked at herself in the glass, and always found some changes in her hair, eyes, &c. She examined her hands, and found them also changed. She sometimes remembered certain events in her life and attributed to them a special meaning. She used to throw herself on her mother's things and on her own, hold them tight in her hands, as if she feared that somebody would take them away from her or that they were sacred objects. The pulse was feeble, 112 pulsations a minute; no fever. Menstruation appeared four days later than its usual time.

She grew still more agitated during the night. The following day she was troubled with the same fears, despair, and unaccountable ideas of persecution, the same dread of death, and of some dreadful event; the same doubts and fear of dirt and of touching anything, the indescribable state of anguish, which drove the patient into despair and made her burst into tears. The phenomena were the same, but had become more acute. During one of these paroxysms the patient put half her body out of the window, and screamed, "Help! There are women in the room No. 4 being murdered." At the same time she broke the lower panes, and it was with difficulty that she was removed from the window.

The next day the excitement of the patient had somewhat calmed down, but the delusion of doubt showed itself in a very marked and clear manner. All that she undertook to do she left undone twenty times, to begin over again twenty times. "Bring

me some milk," she said; "I shall take it in bed." The milk is brought to her. "No, put it on the table." She walks up to the table. "Ah! why have I come here? I ought to have taken the milk in bed." She goes to the bed. "No, I must have the milk on the table," and so on. She takes a bath, puts in her right leg. "No, I must put in my left leg." She puts in her left leg. "No, I must put in my right leg," and so on twenty or thirty times over and over again. I went out driving with her in a carriage; she sat on the right and I on the left. "No," she said, "I shall sit on the right." We changed places. "No," she said; "why should you sit to the right and I to the left?" We again changed places, and so it went on. With all this, the patient suffered, trembled, cried, and is seized with fear that she did so and not so. It was only in my presence that those who surrounded her inspired her with a certain amount of confidence; it was only from me that she accepted any food. I fell ill, and for five consecutive days she refused to take any food; and it was only when my assistant threatened to feed her by force that she consented to eat, but until I recovered it was only from my assistant that she accepted any food. The delusion of doubt, which at times showed itself very clearly, gradually disappeared altogether, and was succeeded by a state of simple want of self-confidence, and a dread of every object and apparition. When she was calm she recognized the absurdity of her fears, but a moment after the same fears reappeared.

This state lasted nearly three months. Under the influence of a calming treatment appeared "*intervalum lucidum*." After a year I met her at Reichenhalle, and found her in the same state, but in which the "*folie du doute*" showed itself under a more acute form.

I allow myself from all that precedes to draw the following conclusions:—

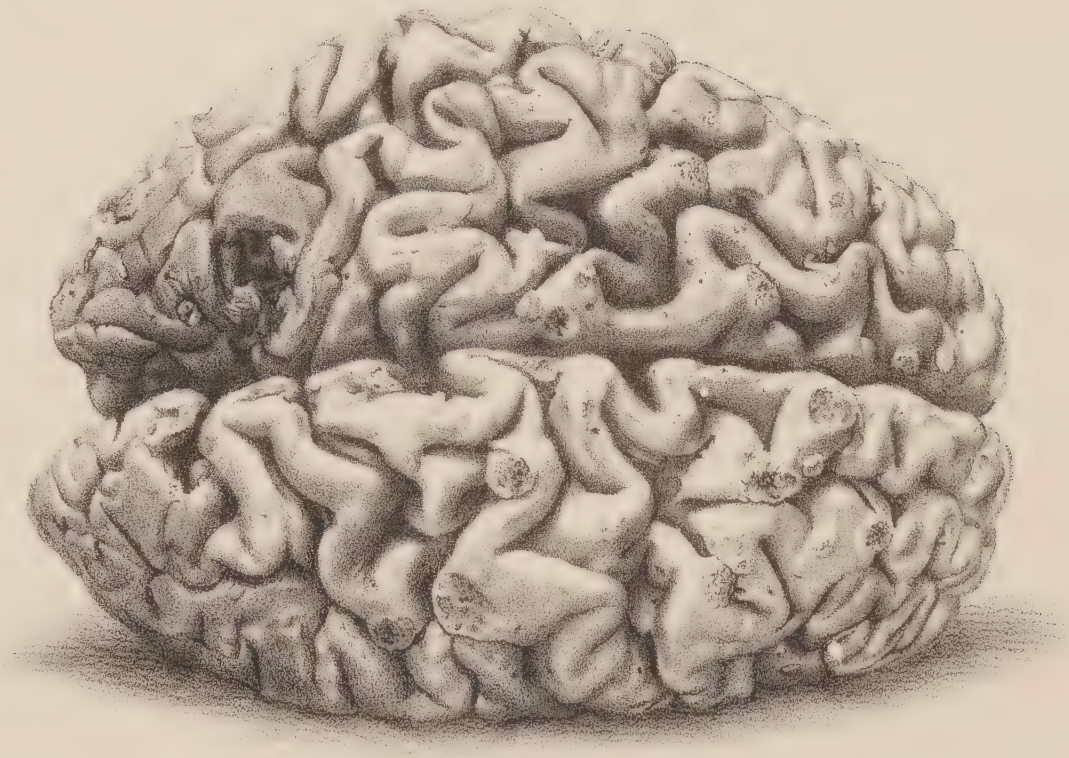
1. That neurasthenia engenders neurosis in various forms and degenerative psychosis.

2. That in many cases the disease is limited to neurasthenia, but that in some, neurasthenia enters into a second stage, *i.e.*, elementary mental disorders.

3. That these elementary disorders either have a happy issue or enter the third stage—organized neurosis and psychosis.

4. That in exceptional cases, neurasthenia can engender pathophobia, which, in connection with uncontrollable obsessions, can degenerate into "*folie du doute*."

5. The delusion of doubt may appear in its pure form or in connection with other forms of degenerative psychosis, hypochondriacal delusions, &c.



Multiple Sarcoma of Brain.
Reported by Dr Bullen.

West, Newman & Co. lith.

Case of Multiple Sarcomata of the Cerebrum.

By F. St. John Bullen, M.R.C.S., L.S.A., Pathologist and Assistant-Medical Officer, West Riding Asylum. (With Plate.)

W. K., æt. 52, admitted into West Riding Asylum, Feb. 12th, 1887, died March 14th, 1887.

I am indebted to his medical attendant for the following details :—

History.—Patient's general health has shown signs of failing for some time. In October, 1886, he was treated for catarrhal pneumonia ; in the course of a fortnight complete infraclavicular dulness on the right side was noticed, with absence of breath sounds. An exploratory puncture gave a negative result. In November, pain, cramp, and numbness in the right arm, the former shooting up the neck, were superadded to the preceding, and these symptoms were held to justify the diagnosis of tumour. In January, symptoms of mental derangement were observed, he became drowsy, depressed, irritable, wandered about aimlessly, and developed delusions. He suffered from frontal and occipital headache and neuralgia, with occasional attacks of giddiness.

He had been a very intemperate beer-drinker.

Family History.—Phthisis and cancer said to have existed in his family. No insanity.

Mental state on admission.—Patient was very drowsy and apathetic, and required much rousing before he could be made to answer questions. He did not recognize his surroundings, nor did he manifest any desire to do so. He was unable to give his age, the date, his home, address, or to render any account of his illness. He was aware of his failure of memory, and said that he did not sleep well. There was no evidence of hallucinations.

Physical condition.—Obese and flabby, head large, fairly well-shaped, face rather cyanosed, bloated, with enlarged capillaries, pupils equal, reactions sluggish but present, patellar reflexes very exaggerated, the superficial reflexes present.

Thoracic examination.—Breathing laboured, at intervals paroxysmal attacks of coughing, which left him much cyanosed and twitching about the face. The cough accompanied by mucous râles, but no expectoration.

Distinct dulness existed over front and upper part of chest, to the right of the sternum, shading off gradually about its middle. Breath sounds harsh, expiration everywhere prolonged, vocal resonance somewhat diminished, heart sounds feeble, otherwise normal, extensive engorgement of the veins of the neck and front of chest, urine normal.

Progress of case.—During the next week there was but little change beyond slight aggravation of the foregoing symptoms. It

was suspected that there was a greatly thickened pleura and enlargement of the bronchial glands.

A week later the dulness had extended towards the back of the thorax, and ægophony was observed below and in front. Dry râles and rhonchi were present.

In the course of the following fortnight patient grew worse. Over the right front of the chest the skin was very œdematous, The dulness was absolute over the whole right side. Heart-sounds scarcely audible. He was restless, and slept but little. Cyanosis increased; he grew rapidly feeble and passed into a semi-unconscious state, twitched about the face, and died asphyxiated.

Throughout his temperature was normal, and he was able to sleep on either side. On two occasions an exploratory puncture was made, but only about a drachm of slightly turbid fluid was withdrawn.

Post-mortem, the following was observed:—Considerable œdema of right upper extremity, and of head and neck. Adherent to the upper part of the pericardium was a mass of tumour, about two inches in diameter, through the centre of which one of the pulmonary veins passed.

The heart showed no morbid change, save much dilatation of the tricuspid orifice. A large cyst existed at the lower part of the right pleural sac, holding about twenty-four ounces of purulent fluid, solidified pus, and gelatinous material. The pleura was greatly thickened, and there were strong adhesions between it and the lung.

At the upper and inner part of the right lung, and extending up by the side of the trachea to rather above the level of the first rib, was a morbid growth, lobulated, soft, and in the larger masses diffluent at the centre. Portions were deeply pigmented.

The tumour on section presented an almost creamy-white appearance, with a slight pinkish tinge. Portions having similar characters, but firmer, extended into the interior of the lung about the root. The lung was everywhere dark, and showed some fibrosis and a portion of consolidation, the result of catarrhal pneumonia; it was compressed so as to be almost devoid of air. Left lung slightly congested and œdematous; early cirrhosis of liver; other viscera normal.

The skull-cap was rather thin, but dense; the dura mater slightly morbidly adherent. The sinuses contained a little black clot; the veins were somewhat distended. Inner meninges showed thickening, toughening, and opacity, and an excess of serous fluid was held in their meshes—most abundant over the convolutions immediately bounding the longitudinal fissure. No disease of vessels. The brain was of good size and consistence, and its gyri of fair complexity and arrangement. Scattered over the surface of the hemispheres were many small fungoid growths, varying in size from a pin's head to a large pea. They were placed alike on

the summits of the convolutions and in the sulci between, the smaller generally occupying the latter position, the larger the former. These were the more numerous. They were raised from one to three lines above the level of the gyrus; their margins were bevelled, their summits flat, except in the sulci, where they were rounded. The surface of the majority was abraded by the removal of the membranes, and here their margins were often everted and lipped. Their number appeared about equal on the two sides of the brain. They were most numerous over the frontal areæ.

Where the brain matter had been unavoidably lacerated in removing the membranes, owing to the intimacy of their adhesion to the summits of the tumours, an irregular excavation of the following characters was left: It was limited to the gyrus destroyed, not implicating the convolutions in its vicinity. The margins, floor, and walls of it were alike ill-defined, pulpy, and flocculent. From the latter numerous fibrinous shreds hung. A general rusty tint, significant of minute hæmorrhages into the brain-substance, was present. The surface of each tumour where the covering of cortical matter had been removed was soft, fluffy, and streaked, often radiately, by delicate vessels, so numerous as to contribute a general red, rusty tint to the whole. On section of a convolution the growth appeared to have commenced in and to have involved chiefly the medullary matter; the grey cortex, somewhat thinned, was spread out over it.

Microscopic examination.—The thoracic tumour appeared to consist exclusively of small, round cells, occasionally somewhat irregular, packed together without obvious stroma, and containing one or more nuclei. Numerous vessels traversed the mass; they were but channels, their walls being composed of cells similar to those constituting the bulk of the tumour; in only a few cases did connective tissue aid in their formation.

The cerebral tumour was composed of small, round, nucleated cells, imbedded in the meshes of a fine, web-like reticulum, the fibres of which appeared to penetrate between the individual cells. A few of the latter scattered through the section were of greater size, triangular shaped, with large nucleus, and having processes continued into the reticulate stroma. In parts, the structure more closely resembled that of the thoracic growth, the cell elements being massed together and the reticulum not obvious. Many of the vessels presented signs of rupture and extravasation of their contents.

This case is of interest as exemplifying the possibility of tumours affecting the cortex without any symptoms obviously denoting them.

The mental symptoms which the patient exhibited were easily explicable as due to the intense venous congestion

produced by the thoracic tumour, as well as to his previous intemperate habits.

I have extracted from the pathological records of the asylum four other cases of cerebral tumour worthy of grouping with the preceding. In none of these did any symptoms exist apart from the mental disorder, which itself was not indicative of the growth of a tumour. Briefly abstracted, they were the following :—

Case I.—A tumour, the size of a hen's egg, involving the orbital lobule of the frontal lobe.

Case II.—Two rounded growths (sarcomatous), one and a half and one and a quarter inches in diameter respectively, occupying the white matter of the temporo-sphenoidal and frontal lobes of the left hemisphere, the smaller ones the frontal region of the right.

Case III.—A tumour, about the size of a pigeon's egg, in the centrum ovale of each hemisphere, immediately overlying the roof of the lateral ventricle, of the nature of angioma.

Case IV.—A growth involving the outer division of the lenticular nucleus of the left side, the external capsule, claustrum, medullary, and grey matter of the Island of Reil.

Case of M. R.—A Medico-Legal Study. By Richard J. Kinkead, M.D., Lecturer on Medical Jurisprudence, Queen's College, Galway.*

The following case would prove interesting merely as a medico-legal record ; but, decided as it was on the mental condition of the prisoner, as it raised the question of insanity and crime—as fine distinctions were drawn as to the legal difference between drunkenness and disease of the mind produced by drink, and, again, between voluntary, or involuntary, or accidental, drunkenness, and the criminal responsibility connected therewith—I venture to submit it to the Psychological Section.

M. R. was committed to Her Majesty's Prison, Galway, on the 23rd April, and tried before Chief Baron Palles and a common jury on the 20th July, 1887, for the wilful murder of M. D.

Evidence for the Crown was given by the mother, sister-in-law, and brother of the deceased, the servant man, the sister-in-law's father, a neighbour, Dr. Dalton, who had attended him during life,

* Read in the Psychology Section of the British Medical Association, at the Dublin Meeting, August, 1887.

and Dr. Nally, who assisted Dr. Dalton to examine the body after death.

Professors Pye and Kinkead were examined by the defence.

The witnesses produced by the Crown showed, that D. had been suffering from typhus fever; that the prisoner was engaged as nurse on the 15th April, and from that day till the night of Friday, the 22nd, or early in the morning of the 23rd, she had been nursing him night and day; that the doctor last saw him on the Wednesday (20th April) before his death; that he was then very weak, apparently sinking, and the doctor told the relatives that he did not expect him to recover.

That about half-past nine or ten o'clock on the night of the 22nd, the sister-in-law gave a glass of whisky each to her husband and the servant man; took half a glass herself, gave half a glass to the nurse, and left the bottle, still containing five glasses, on the dresser in the kitchen.

That the family then went to bed, leaving the mother and nurse in charge of the dying man. The mother, worn out by previous watching, went into her daughter-in-law's room about ten o'clock and fell asleep (this room was separated from that of deceased by the kitchen or living-room, which occupied the entire centre part of the house). How long she slept she did not know, but "somewhere about an hour before dawn" she was awakened by *the nurse's* screams. On going to the door of the room she saw her son's dead body on the floor of the kitchen surrounded by fire; his clothes, two shirts, and a pair of drawers, were all consumed, save portions on the legs and arms; the nurse screaming and dancing about, having a brush in one hand, a pair of tongs in the other. The mother swore that not only did the nurse throw fire at her to keep her out of the kitchen, but threw a "pot lid full of coals" on the deceased; witness then fainted, or, as she described it, "became weak;" on coming to herself she succeeded in getting in.

She described the nurse as at times supporting herself by the walls, at others dragging her legs after her, as being very excited. Could not say whether she was drunk or mad.

The daughter-in-law was also awakened by the nurse's screams. Saw her "hopping on the floor;" corroborated the mother's testimony, except that she did not see any fire thrown.

The other witnesses confirmed the account as to position of body, &c., but the servant added that the prisoner asked him for a drink, and said "She'd soon have the devil burnt, and M. D. back again." While the father-in-law deposed that the head and chest were "dark scorched," and the hair burnt off, that he asked the prisoner "What have you done?" or "Why did you do it?" and that she replied, "I done that—I burnt him. That's the divil I burnt, instead of Michael." In his opinion she was either drunk or crazy.

The medical evidence was to the effect that the body was burnt

from head to foot; the burns on the head and chest black and charred; on the neck and under arms red; those on the back not so marked, mere scorches; some of the burns were red. Some had a red line round them, and there were blisters. That some were inflicted before and some after death, and that death was caused by burning.

None of the organs of the body had been examined. In fact no post-mortem examination, in the ordinary acceptation of the term, had beem made; conclusion as to cause of death was come to from extent of burns; the red line and blisters were evidence of their being inflicted during life. Burns inflicted immediately before, could be distinguished from those made immediately after death. The contents of blisters had not been examined. No marks of violence were found on unburnt portions of body.

For the defence medical evidence was given to the effect that burns made, roughly speaking, within fifteen minutes before, could not be distinguished from those produced within fifteen minutes after death; that the contents of post-mortem burn blisters were watery, while a life one was rich in albumen; that the charring of flesh might take place during life, yet it indicated that the tissues acted on had been first killed by the burn and then charred.

The presumption of the prosecution was that the prisoner had dragged deceased from his bed and burnt him.

But the entire absence of motive—the man was dying, and the prisoner was a stranger to him, never having met him until engaged to nurse him—together with the horrible mode of killing, also raised the presumption that she was insane or drunk.

In support of the latter, although there was no direct evidence of her having taken more than the half glass of whisky, yet it was proved that the bottle containing five glasses was put on the dresser, that it was afterwards found empty, that the mother had taken none, and that there was no other person who could have consumed it with the exception of the deceased.

I was directed to examine the prisoner and report as to her sanity.

I first saw her about 12 o'clock on the 24th April; although the exact time of the transaction could not be accurately fixed, as the burning might have taken place any time between 11 p.m. on the 22nd and about two hours before dawn on the morning of the 23rd, yet the time of my examination was within thirty to thirty-six hours of the occurrence.

She was very nervous and jerky; her pulse 120; temperature 103; tongue foul. She complained of headache, pains in the bones, shivering, and looked very ill. As she had been nursing a case of typhus, I thought it probable she might have contracted the contagion, and isolated her, but as the symptoms passed off in a couple of days I attributed them to drink, excitement, and the exhaustion of eight days and nights' continuous nursing.

Having given evidence to this effect, and that she was perfectly sane both on the 24th of April and 20th of July, I was asked by the Judge was it possible for a person suffering from delirium tremens to get well in thirty-six or forty-eight hours.

I replied No; but that I had frequently seen prisoners, committed in what I might call the first stage, some of whom suffered from delusions, get over it in the time specified.

Explaining that though drunkenness was no defence to a criminal charge, while disease of the mind produced by it was, the Judge asked were there not conditions of degradation of the blood in which drink would cause not so much drunkenness but a disease of the mind? Supposing, for instance, a week's watching both day and night of a fever patient, would not that be likely to produce such depravation of the blood that stimulant would take an unexpected effect and cause disease of the mind?

I said that much depended on the neurotic constitution and bodily condition, but given a nervous person, exhausted by such a watch, if she received a severe shock or great fright, that of itself, and quite independent of the question of stimulants, might produce insanity, either temporary or permanent. Also, depending on the person's temperament, there were bodily conditions which would cause stimulant, taken in less quantities than would at other times do so, to produce such intoxication as would prevent the person knowing the nature and quality of his acts.

The case, as put to the jury both by the defence and the Judge, was —

(1) Did the nurse take the man out of his bed and burn him to death?

(2) If so, was he alive when she did it? If he was, then she was guilty, but if not, then the burning of the dead body was not a criminal offence.

The Chief Baron said, that, to establish the charge, the Crown must prove conclusively that the man was alive when burnt; if there was a reasonable doubt the prisoner should get the benefit, and he expressed his opinion that it had not been proved that the man was alive.

If the jury came to the conclusion that he was alive, then they should consider—

(3) Was she drunk? or

(4) Was she insane?

Having explained at length the law with regard to crimes committed by the insane, the Judge directed the jury that, drunkenness being a voluntary act, the law rightly held persons responsible for acts done in a condition voluntarily produced, although when in that condition they did not know the nature and quality of their acts, and expressed his emphatic dissent from Mr. Justice Day's ruling in Reg. *v.* Baines. But that if a person, from any cause, say, long watching, want of sleep, or depravation of blood, was reduced

to such a condition that a smaller quantity of stimulant would make him drunk than would produce such a state if he were in health, then neither law nor common sense could hold him responsible for his acts, inasmuch as they were not voluntary but produced by disease. It appeared from the evidence that the nurse was under the delusion that her patient had been turned into a devil, that the proper course was to burn the devil, and thus bring back the patient; was that delusion the result of drunkenness or disease of the mind?

The jury found the prisoner guilty of manslaughter, but insane at the time of committing it, and she was ordered to be confined in a lunatic asylum during the Lord Lieutenant's pleasure.

To account for the horrible actions done, and the words spoken by the prisoner, it was suggested that a popular superstition gave rise to the drunken or insane delusion; but no such superstition was proved, nor am I aware that any exists to the effect that a dying man is changed into a devil, that the latter can be purgated by fire, and the former thereby restored; nor would it be consistent with the logical cunning of a lunatic to endeavour to drive out a spirit by the very element in which he is supposed to live and move habitually.

No doubt there is a prevalent superstition as to changelings, but I believe such transformations are confined to children, and the power of working them strictly limited to "the good people" or fairies.

The real solution, as it appears to me, was not put forward at all.

It is not unusual that, to a person dying of fever, there should come a sudden accession of strength—the last flicker of the flitting flame—sufficient to enable him to leave his bed and walk.

I believe this happened in this case; that he did get up; got as far as the kitchen, and fell into the fire; it is more probable than not that he fell into it dead—the exertion exhausting the last remnant of vital force.

The nurse and mother being asleep, there is no evidence as to how long the body lay there, but from the charred condition of the head and chest, and the almost total consumption of the clothes, it must have lain a considerable time.

When the nurse awoke she saw her patient lying in the fire and rushed to pull him out; in doing so, the fire being a turf one, "on the hearth," a considerable quantity of the coals must have been dragged out along with the body—hence the statement as to the fire surrounding it.

It is not surprising that an ignorant woman, suddenly aroused from sleep, her nervous system excited from eight

days and nights of watching, startled at the sight, and probably drunk, on turning over the body and seeing a black face, head, and chest, instead of her patient's features, should imagine that what she saw was the devil, and arrive at the idea that she could call back the patient by continuing to heap coals of fire on the devil's head.

Nor is this view inconsistent with her words, for even supposing that she knew what she was saying, which is doubtful, they would imply no more than a consciousness that the catastrophe was caused by her negligence, and that she was doing her best to remedy the mischief. That not a single witness testified to the house being filled with smoke, is, however, inconsistent with the theory propounded that she burnt deceased in the middle of the kitchen floor.

Medically, it makes no difference as to the fact of a man's being temporarily insane, whether the poison producing the insanity has been consumed, or generated within his body. Legally the difference is very decided, for the one may be hung for murder, and the other may not; although Mr. Justice Day said in Reg. *v.* Baines—"I have ruled that if a man were in such a state of intoxication that he did not know the nature of his act, or that his act was wrongful, his act would be excusable." Yet there is no doubt but that the majority of the judges would concur with the Chief Baron that a man was criminally responsible for his acts when drunk. But the distinction drawn by the Chief Baron between voluntary and involuntary drunkenness has not been always acted on, moreover it opens up a very wide field.

If criminal consequences do not attach when intoxication is involuntary in the sense of being unexpected, it follows when involuntary in its true sense—that is, when the will cannot control the craving arising from habitual excess; when from some inherited neurotic constitution, or acquired nervous defect, or exhaustion, the will-power is weakened and a systemic demand for stimulant springs up—that drunkenness becomes a valid plea. Hence there is imported into such investigations questions as to those neurotic and physical conditions, either inherited or acquired, which predispose to, and often compel, excessive drinking.

The problem is thus rendered even more complicated than a Chinese puzzle, and involves a number of unknown quantities, so that it may be unsolvable, or its solution mere guesswork; and thus justice, instead of acting on fixed and rational principles, becomes fallacious and uncertain.

This must be so as long as the law (1) fails to recognize all insanity as disease, and that the acts springing from disease can't be controlled, nor the disease cured by punishment; (2) while it fails to recognize that mental alienation from alcoholic poisoning is a true insanity; and (3) while it fails to recognize the production of this insanity as an offence, and only connotes crime to the acts resulting therefrom.

Can the question be solved, save in very exceptional cases, as to how much was due to insanity, *i.e.*, perverted nervous action caused by functional or organic derangement arising from within, and how much was due to drink, *i.e.*, perverted nervous action produced by alcohol?

Again, when does drunkenness cease to be simply drunkenness and become a disease of the mind?

Mr. Justice Manisty in Reg. *v.* McGowan, ruled "that a state of disease brought on by a person's own act—*e.g.*, delirium tremens, caused by excessive drinking—was no excuse for committing a crime unless the disease so produced was permanent." Chief Baron Palles distinctly charged that while drunkenness was no defence, disease produced by drunkenness was.

Whether the craving for excessive stimulation be the result of inherited defects or acquired nervous disabilities, or created by habit, once established it is a disease, and my experience leads me to conclude that not one in a hundred can control the craving. Drinking with such persons is therefore involuntary, and I concur that it is not common sense, whatever may be the law, to punish such persons for acts committed in a condition which they can't help getting into, and which, moreover, the law does nothing to prevent; but it does seem inconsistent that, while those who, by their own acts, have established a diseased condition, should escape punishment, the man who has only taken one or two steps on the downward road should be punished, not for having entered on the incline, but for acts which he could neither control, nor know the nature and quality of.

It would be intolerable that men should be permitted to get drunk and commit criminal acts with impunity, but it is just as intolerable to permit them to get drunk with impunity and then try them for their lives, aye, and hang them too, for acts done in the insane condition which the law allows them to produce, and which the Legislature declines to prevent or remedy.

Hysteria in Men. By Francis W. Clark, Assistant Medical Officer to the Croydon Infirmary.

The subject of hysteria is one which must always demand attention from the practical physician, owing to the infinite variety of the phases under which the disease may present itself, the aptitude with which it simulates other diseases of a purely organic nature, and, lastly, the frequent association of organic lesions with symptoms of a purely psychical origin.

The evident loss of self-control, or "will-power," as it has been termed, which lies at the root of all the symptoms of this strange disease, appears, perhaps, in stronger contrast when occurring in men, from the fact that more or less deficiency in this respect is looked upon as one of the special characteristics of the weaker sex.

Many have been the theories mooted with the object of throwing some light upon the pathology of hysteria, and I will, with your permission, venture to mention one or two of the more feasible of these hypotheses.

It will be obvious that the numerous aspects under which the disease may present itself point clearly to a central rather than to a peripheral origin, and hence it is that the various theories centre round some abnormal condition of the cerebral hemispheres. The two theories most in vogue at the present day may best be described as the vascular and the molecular theories. According to the former, the symptoms of the disease, hysteria, depend for the most part upon an altered blood-supply to the ganglionic centres of the cerebral cortex. This theory gains considerable support from the fact that fasting, anæmia, and all sources of prolonged physical and mental exhaustion are potent causes of certain forms of hysteria, mostly of a convulsive type, and moreover that stimulants and a generous dietary will, in such cases, frequently modify or prevent an impending attack.

The other theory, which I have named the molecular theory, and which claims, perhaps, more adherents than the foregoing, is to the effect that certain molecular changes occur in the cortex of the cerebral hemispheres, disturbing for the time being the due relation between central and peripheral nerve-strands. This theory has been aptly illustrated by Dr. Russell Reynolds, who compared the relation existing between a healthy and a hysterical brain to that existing between a magnetized and a de-magnetized iron

bar. We all know that a physical shock will so disturb the molecular composition of a magnetized iron bar as to deprive it of its magnetism, and in a similar manner may we not imagine that such a shock may suffice, in certain constitutions, to so alter the molecular composition of the cerebral cortex as to deprive the subject, for a time, of his power of self-control? There is, however, this great difference between the de-magnetized iron-bar and the hysterical brain, that the former, being inert, can never spontaneously regain its magnetism, whereas the latter, being a living, growing body, may, in time, regain its wonted stability.

With reference to the treatment of this disease, I have found that the removal of the patient from the influence of all injudicious sympathy, coupled with a plain but ample dietary, and, where the patient has faith in drugs, some simple placebo, will lead to a marked improvement in the symptoms, if not to a complete cure.

The three cases which I wish to detail to you have come under my care at the Croydon Infirmary during the past eighteen months, and are all well-marked examples of the disease.

Case I.—The first case is that of J. C., a potman, aged 27, a tall and well-developed man, who came under my care first in June of last year (1886), with a history that, some few years previously he had been bitten by a dog. No after consequences occurred at the time, but for about twelve months previous to the time at which he came under my care he had been suffering from frequent fits of an epileptiform nature, during which he foamed at the mouth and barked like a dog, occasionally passing his urine under him. These fits varied in duration from a quarter of an hour to an hour, and during the fit there was marked opisthotonos, and the patient was very violent, though he rarely did himself any injury, and never bit his tongue during a fit. If any remarks were passed by onlookers during a fit the patient invariably remembered what had been said, and moreover it was found that when suggestions as to any heroic form of treatment (such as a cold douche) were made in his presence he came round far more rapidly than would otherwise have been the case. The patient was a man of most violent temper, and it was observed that he always had a fit when anything occurred to displease him, or which threatened to interfere with his personal comfort.

In the intervals between these fits he complained of absolute loss of power in all four limbs, with some occasional and slight anæsthesia, but there was no wasting of any of the muscles, the reflexes were normal, and the sphincters unaffected. This apparent paraplegia had lasted for several months.

In common with many hysterical patients he was unable to control his laughter when amused, and he would frequently continue laughing for an hour or more over some trivial occurrence which had pleased him.

His intellect was, however, clear, and he took great pleasure in reading aloud to other patients, doing so with considerable fluency.

Before coming under my care he had been treated with large doses of bromide of potassium, and setons had been applied behind his ears, but the fits and the paraplegia still remained.

He was, therefore, placed under the care of a male attendant, and was given a plain but ample dietary, and it was found that he gradually convalesced, and at the end of some six months he was able to walk easily with crutches. He is now, I may add, earning his own living by working upon a railway-line, although he still, I hear, makes some use of his crutches, though more apparently from habit than from necessity. I might mention that I have, on more than one occasion, found the greatest difficulty in inducing patients convalescent from hysterical paraplegia to discard their crutches when they no longer required them.

One incident, which is extremely characteristic of the disease, occurred during the time that this patient was paraplegic, namely, that he was one day intensely annoyed with the nurse for refusing to turn over for him the newspaper which he was reading. After roundly abusing the nurse, and having completely lost his temper, he turned over the paper for himself, this being the first time that he had moved his arms voluntarily for some months. After this incident the paralysis of the upper limbs rapidly disappeared, but the paralysis of the legs remained for some time afterwards.

I would suggest that in this case, which is the most severe one that I have ever met with, the fear of hydrophobia excited by the bite of the dog had so unsettled the patient's mind that he, for a time, completely lost the power of self-control, and having in his mind the idea that "fits" and paralysis were the ordinary symptoms of hydrophobia, he accordingly gave way to the "fits" and firmly believed himself to be paralyzed.

Case II.—The second case is that of G. M., aged 38, a short, healthy-looking man, who is subject to periodical attacks of paralysis of the lower extremities, lasting for from a few days to two or three weeks. The patient has suffered from these attacks for the past nine years, and during each attack he is gloomy and morose, scarcely speaking to anyone, and will refuse food for days. At other times he is of an exceptionally merry disposition, will read and talk with fluency, and can walk or run with ease. Accompanying the paraplegia, the patient suffers from enormous tympanitic distension of the abdomen, the belly-wall being frequently as prominent as in a pregnant woman at full term. I can only compare this condition of the abdomen to that occurring occasionally in women, under the name of spurious pregnancy,

and its cause I believe to be in both cases an hysterical paralysis of the muscular walls of the intestine, and abdominal parietes.

This patient has a marked lateral curvature of the spine, with the convexity towards the left side, and this, he states, he has had as long as he can remember. There is, however, no tenderness of the spine, the muscles of the lower limbs are not wasted, and the reflexes are normal.

This patient has also much improved under similar treatment, the attacks having become less frequent and of much shorter duration during the past twelve months.

In this case, as in the following one, we find associated symptoms of an undoubtedly hysterical origin, with true organic disease, and it is, of course, in such cases that the greatest care is requisite in separating the symptoms due to the organic lesions from those which are of a purely psychical origin.

Case III.—The third case is that of J. W., aged 63, a spare and neurotic-looking man, who has suffered from paralysis of the lower extremities, with tingling sensations and other symptoms of a subjective nature, for the past four years.

The reflexes are normal, and there is no anæsthesia, no wasting of the muscles, and no affection of the sphincters, nor was there any tendency to the formation of bed-sores after the patient had been bed-ridden for some years. In this case also, strange to relate, there is a slight lateral curvature of the spine, and the patient is, moreover, a confirmed masturbator.

All the subjective symptoms were, for some months, completely cured by small doses of very dilute Aq. Rosæ, the patient remarking, however, on several occasions that the medicine was rather too strong, and sometimes got into his head. This patient has certainly improved to the extent that he now gets up every day, whereas formerly he was bed-ridden, but the paralysis of the lower extremities has not yet disappeared, and I must confess that, while admitting hysteria to be responsible for the majority of the symptoms, I am yet inclined to consider this patient an inveterate malingerer, who, so long as his friends will support him, has no desire to regain the power to walk.

OCCASIONAL NOTES OF THE QUARTER.

"Not more than Seven Clear Days."

There is, we are informed, a wide-spread doubt among medical men accustomed to sign lunacy certificates, and also among the superintendents of asylums, as to the meaning of the formula "not more than seven clear days." The importance of a correct interpretation is obvious, seeing that unnecessary delay and expense in obtaining fresh certificates may be incurred in some instances if the period does not lapse so soon as some suppose, and seeing, moreover, that an asylum superintendent may subject himself to serious legal consequences if he admits a patient within a period which he believes to be seven clear days from the date of the medical examination, but finds when the point is contested that the judges do not support him in his reading of the phrase. When the Lunacy Act Amendment Bill was first introduced, the Parliamentary Committee of the Association requested, among other things, that this term should be defined, but the Lord Chancellor did not comply with the request.

The well-known clause in which the law is laid down is found in 16 and 17 Vict., c. 96, s. 4, and 16 and 17 Vict., c. 97, s. 74—

"No person, not a pauper, shall be received into any asylum . . . without the medical certificate . . . of two persons . . . each of whom shall separately from the other have personally examined the person to whom it relates, not more than seven clear days previously to the reception of such person into such asylum. . . . And every person who receives any person, not a pauper, into any asylum, save under the provisions herein contained, shall be guilty of a misdemeanour."

Suppose, for example, a medical man examines a patient on February 1, how long is his certificate valid? On what day subsequently would a superintendent be guilty of a misdemeanour if he admitted him into his asylum? Some reply that the certificate is valid until February 8, and no longer; others until February 9. If the former be correct, it is obvious that a superintendent who admits the patient on the 9th, subjects himself to the risk of a penalty and great annoyance.

The Lunacy Commissioners, it is well known, hold that

"*seven* clear days" cover a period of *nine* days. Thus they would accept as legal the admission of a patient into an asylum on the 9th of February whose examination bore date February 1st. It must be remembered, however, that although the presumption is that they are perfectly right, they are merely the interpreters, not the makers, of the law, and that a judge might decide otherwise and so rule that a medical superintendent against whom a patient had brought an action had acted illegally. We are assured by counsel that the result of such an action would be extremely doubtful—depending on the particular judge who gave judgment—and that to adduce the sanction of the Lunacy Commissioners would not avail the unfortunate asylum superintendent. As on referring to the late Mr. Archbold's "Lunacy Acts" we failed to find any commentary elucidating the point at issue, we addressed ourselves to his editors, Messrs. Glen, barristers, and received from Mr. Alexander Glen the following:—

"The meaning of 'so many days at least' was considered in the case 'Reg. *v.* Shropshire JJ.,' noted at p. 258 of our edition of 'Archbold's Lunacy Acts.' The meaning is the same as that of 'so many clear days' or 'not less than so many days' before or after an event; that is, there must be the specified number of complete days after the day of the first event and before the day of the second event. Now, the expressions used in the Lunacy Acts 'within so many clear days,' '*not more than so many clear days,*' 'not beyond the period of so many clear days,' must be construed on the same principle, and, in these cases, there must not be the specified number of complete days between the days on which the two events happen. Thus the 9th February is 'not less than seven clear days after' the 1st February, and therefore it is *not* 'within seven clear days after' the 1st February."

The Commissioners in Lunacy leave no room to doubt in their official documents that in their opinion the meaning of the words of the Act above quoted, "not more than seven clear days," is precisely the same as "within seven clear days." Thus in their "Instructions" in regard to "single patients" issued in 1877, and still in force, they state "a certificate becomes invalid and useless if the reception does not take place, or if the order is not signed, *within seven clear days* from the day of the medical examination on which the certificate is grounded." Again, under "Directions to

Medical Men," the instruction is repeated in the words:—"The patient must be examined within seven clear days prior to admission."

The same words occur in the circular entitled "Lunacy-Medical Certificates Instructions," signed by the Secretary, Mr. Perceval.

In justification of the statement that "not more than seven clear days" is equivalent to "within seven clear days," it may be noted that Mr. Danby P. Fry, at p. 69 of his "Lunacy Acts" (last edition), inverts the statement contained in the Act, and holds that it is right to say that the examination must be "within" seven days of admission.* If, however, it be right to substitute the expression "within" for "not more than," it does not appear to be safe to admit a patient on the 9th February who was examined on the 1st. Observe, that after the day of admission we have the 2nd, 3rd, 4th, 5th, 6th, 7th, and 8th days of February—"seven clear days"—within which the patient must be admitted. This would seem a common sense, and, we believe, legal view to take of "*within* seven clear days," but, then, there is no judicial sanction for the assumption that "within" is equivalent to "not more than."

The judgment of Coleridge, J., in 1842 (not in a lunacy case, but one in which a similar question was raised, namely, in "Liffen *v.* Pitcher"),† favours the contention that there would not be "more than seven clear days" between the examination on the 1st and the admission on the 9th, and, if so, the Act would have been complied with.‡ But the judge did not commit himself to the opinion that "not more than" is correctly paraphrased by "within," but only laid it down that "clear" days are distinguished from "ordinary" days by the exclusion of the first and last day.

If, then, we need not follow the Commissioners in regarding "not more than" as synonymous with "*within*" seven days, and if the terminal days—the days of examination and admission—are to be excluded, it may be argued that if a patient be examined on the first of the month and be admitted on the

* To avoid burdening the main argument with a minor point, we relegate to a note the fact that Mr. Fry thinks the word "clear" is scarcely necessary here, the days so referred to being natural or ordinary days. The word is wanted in a negative or exclusive proposition, but not in an affirmative or inclusive one.

† *Vide* "Dowling's Reports on Points of Practice," Vol. i., N.S., p. 767.

‡ In connection with this question, "Rex *v.* Justices of Herefordshire," 3 B. and Ald. 581, should also be referred to. We have already noted "Reg. *v.* Justices of Shropshire," 8 Ad. and El. 173.

ninth, such examination was made, as the Act directs, "not more than seven clear days previously."

The difficulty of arriving at an indisputably clear conclusion on this important point is confirmed by an observation of Lord Mansfield: "Probably no question has more exercised the minds of judges in former times than the question as to the proper mode of computing time." Unfortunately we labour under this exercise of mind at the present day.

It need hardly be added that the broad and not the narrow interpretation is the one we should desire to be correct, as the time is often inconveniently short between the examination and admission. All we wish is to have the law unmistakably clear, lest by pursuing the broad way some unhappy asylum physician find that in his own experience it but too surely leads to destruction.

Provision for Indigent Idiots and Imbeciles.

All who are acquainted with the demands made upon the Public Charities by families which have the misfortune to have an idiot child, know how utterly inadequate is the provision made for this class in England. In the first place, there is a great mass of pauper idiocy. Undoubtedly, counties and boroughs are obliged by law to admit cases of idiocy and imbecility into workhouses and asylums in the same way as lunatics. It is not, however, necessary to prove that it is highly undesirable to mix this class with the insane in county asylums, or to retain them in workhouse infirmaries. It would be possible, indeed, to erect separate buildings exclusively for idiots on the grounds of the asylum, and this course may be adopted if no distinct provision for the training and care of idiots be provided, as was proposed a few years ago by the Charity Organization Society. We will, however, assume that such provision will be made for pauper idiots as shall meet the objection of mixing them with the insane, and that they shall receive the special kind of education which they require. There still remains a not inconsiderable number of idiots who belong to a class socially above a very poor and strictly pauper class. In many instances a small weekly payment could be made, and, indeed, nothing would be more painful to the parents of such a child than to have to seek relief and ask for the

admission of their child into a pauper asylum through the relieving officer. For persons in this social grade, the charitable Institutions, Earlswood, the Royal Albert Asylum, Star Cross, &c., provide, but only to a very small extent, and everyone knows the extreme difficulty of obtaining votes by canvassing in order to procure admission. In short, the supply falls ridiculously short of the demand.

We are brought, therefore, to the conclusion that increased efforts must be made to provide for the idiot children of non-pauper parents who can contribute a small sum towards their maintenance and training. In some instances, no doubt, it would be difficult to pay anything, although it would not be fitting that the child should be treated as a pauper. For the corresponding class of the insane, much larger provision, although still inadequate, has been made.

Will the benevolent public come forward to increase the number of institutions like Earlswood, and free from the objectionable system of canvassing? It is time that an effort was made in this direction. It must not be done by making exaggerated statements as to the educability of idiots, or by making sensational appeals founded on promises of substituting able-bodied and able-minded workers for those who cumber the ground, but by taking the position that idiots must be removed from the families of the poor in the interests of themselves and their families, that they can be improved up to a certain point, can be rendered cleanly in their habits, and in some instances even able to earn a modest livelihood.

An effort has been recently made to obtain funds for the above-mentioned object under the City of London Parochial Charities Act, 1883. Section 14 appears to warrant the application for a grant of the surplus funds so far as the inhabitants of London are concerned, for it refers to "the promoting the education of the poorer inhabitants of the Metropolis;" and after enumerating various other objects, including convalescent hospitals, the section proceeds to state: "And generally to the improving, by the above or by any other means which to the Commissioners may seem good, the physical, social, and moral condition of the poorer inhabitants of the Metropolis;" that is to say an area inclusive of the whole Metropolitan police district, viz., fifteen miles out. A formal application to the Charity Commissioners for England and Wales under the above Act was

made in October, and subsequently a deputation waited upon Mr. Anstie, at their office, in order to urge the claims of idiots upon the above-mentioned surplus funds. Sir Edmund Currie, who introduced the deputation, made a lucid statement of the reasons which induced those who attended to make the application. The application was courteously and carefully considered. Mr. Anstie, however, expressed the opinion that the application would be more likely to succeed if funds were already obtained for the erection of an institution designed for the object in view. Without committing himself or his colleagues, he pointed out that the application might possibly be acceded to if they were asked to aid rather than initiate such a movement. We hope that this suggestion may prove the starting point of a resolute attempt to make increased provision for idiots and imbeciles of the indigent but non-pauper class of the Metropolitan district.

In this connection we should like to see schools established for intermediate cases of mental feebleness.

At the Congress of German Teachers held at Gotha in 1887, a most interesting address on such auxiliary schools was delivered by Herr Kielhorn, of whose own at Brunswick, we can speak very highly from a visit paid thereto in 1886.

In Germany, schools of this kind have been established in several of the more important towns, viz., at Dresden, Leipsic, Gera, Halberstadt, Cologne, Brunswick, and others. Into these schools those children are drafted who have shown themselves quite unable to follow the instruction given in class at the national schools. This incapacity, evidenced during a period of at least two years, is suggested by Herr Keilhorn as a test or as a definition of weakmindedness. Having entered the auxiliary schools, they there receive instruction adapted to their powers of reception by teachers who have gained experience in the methods required to call out the faculties of these children. All the children being, so to speak, at the same level, it is possible to instruct them in class. At the same time, however, the demands of each child upon the teacher are much greater than in ordinary schools, and this very arduous form of teaching will scarcely permit of a class of more than twenty children for each instructor.

Herr Kielhorn advocates his cause with great force and earnestness, and certainly carries conviction with him. There can be no doubt of the value of these schools, for there can be no doubt that children of the class we are considering cannot be taught together with the relatively keener witted

children who congregate in our public schools. The extra care and patience which the former would require could not possibly be given by the master, and if given would only prove so much energy withdrawn from those nobler spirits, who, by-the-bye, would so much rather be fly-catching or preparing uncomfortable seats for confiding comrades than marching with Cyrus, or camping with Cæsar, or following Ulysses in his devious wanderings.

The author of the paper dwelt on the many points which mark the weakminded child, and on the many dangers which await him if let out into the world unprepared. He also points to the risks society itself runs from the uninstructed feebleminded, who add so largely to the criminal classes. On this point he refers to the words of Dr. Kind—"Which costs more (in hard cash), to instruct the idiot or to neglect him?" And he truly says that this holds equally for the weakminded, *i.e.*, short of idiocy. The special treatment of the bodily defects of the weakminded is insisted on by Herr Kielhorn, and the importance of patient instruction in skilled manual work, in order that, being unable to train their intellects above a certain level, their quick fingers may make up for their slow and deficient mental processes.

We trust these observations may serve to awaken interest in a movement which we shall soon, it is to be hoped, ourselves enter upon. It is a movement that must come.

PART II.—REVIEWS.

The forty-first Report of the Commissioners in Lunacy. 31*st March,* 1887.

The total number of persons returned to the office of the Commissioners in Lunacy as of unsound mind on the 1st January, 1887, was 80,891, showing an increase on the previous year of 735. These were exclusive of 249 lunatics, so found by inquisition, living in the immediate charge of their committees, and 69 male insane prisoners detained in convict prisons.

Their distribution was as tabulated on p. 554.

While private patients have increased by 15 and paupers by 780 during the year, a diminution in the number of criminal patients has brought the nett increase in patients of all classes to 735; the average annual increase of the last ten

Summary of Insane Patients, 1st January, 1887.

Where Maintained on 1st January, 1887.	Private.			Pauper.			Criminal.			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
In County and Borough Asylums ...	368	425	793	21,587	26,357	47,944	84	21	105	22,039	26,803	48,842
In Registered Hospitals	1,608	1,489	3,097	103	60	163	—	—	—	1,711	1,549	3,260
In Licensed Houses:—												
Metropolitan	861	787	1,648	287	507	794	—	—	—	1,148	1,294	2,442
Provincial	691	847	1,538	152	200	352	5	—	5	848	1,047	1,895
In Naval and Military Hospitals, and Royal India Asylum	259	20	279	—	—	—	—	—	—	259	20	279
In Criminal Lunatic Asylum (Broadmoor)	—	—	—	—	—	—	392	139	531	392	139	531
In Workhouses:—												
Ordinary Workhouses	—	—	—	5,217	6,765	11,982	—	—	—	5,217	6,765	11,982
Metropolitan District Asylums ...	—	—	—	2,501	2,898	5,399	—	—	—	2,501	2,898	5,399
Private Single Patients	186	266	452	—	—	—	—	—	—	186	266	452
Out-door Paupers	—	—	—	2,308	3,501	5,809	—	—	—	2,308	3,501	5,809
Total	3,973	3,834	7,807	32,155	40,288	72,443	481	160	641	36,609	44,282	80,891

years having been 1,591. This, under any circumstances, would have been a remarkable decrease, but it assumes additional importance as following upon a similar decline in the figures of 1885, showing a drop in the two years of ·34 per 10,000 of the entire population.

As the Commissioners remark, the returns of two years do not in themselves afford a sufficient basis upon which to form an opinion as to the causes of this apparently favourable record, and the decline may indeed prove, by further experience, to be rather temporary than permanent.

It is, however, at least curious that this sudden and very considerable drop should have been coincident with a distinctly marked and widely-spread disinclination on the part of medical men to certify to the insanity of both private and pauper patients.

If the two sets of facts have a direct relation to each other, as they certainly seem to have, it must be obvious that numerous cases of insanity are probably occurring which are not brought under official supervision. And if this is so, where do they go? How are they disposed of? Either, under normal circumstances, many patients are sent to asylums who do not need to be placed under care, or there must be a large amount of clandestine lunacy, which is not receiving the treatment it requires, and will lead to an accumulation of chronic cases whose chance of successful treatment will have passed away. This is a point which it behoves the Commissioners and the public carefully to consider.

The ratio of admissions to population, which in 1876 was 5·27 per 10,000, had sunk in 1886 to 4·87. The percentage of total lunatics to population had increased in the same period from 26·98 to 28·64 per 10,000, or from 1 in every 370 to 1 in every 349. The increase, which had been a gradually progressive one previously, has been arrested for the last three years, as is shown in the following table:—

Year.	Total lunatics to total population.
1878	1 in every 365
1879	,, ,, 363
1880	,, ,, 361
1881	,, ,, 356
1882	,, ,, 352
1883	,, ,, 348
1884	,, ,, 345
1885	,, ,, 345
1886	,, ,, 347
1887	,, ,, 349

Is this arrested increase to be attributed to the cause already referred to, or has it also some close relationship to the pressure of hard times and the cutting off of the drink supply? The problem is not uninteresting, either in its psychological or its social aspect.

The recovery and death rates of the year under review appear not to have varied greatly from those of previous years. The death rate generally and the recovery rate for females have somewhat exceeded the ten years average.

The following table gives the percentages of recoveries and deaths in the different classes of asylums and in private care, after transfers and admissions into idiot asylums have been excluded:—

	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	35·01	46·53	40·91	12·61	8·62	10·42
Registered Hospitals	37·54	55·02	47·59	8·60	5·16	6·70
Metropolitan Licensed Houses	35·07	43·46	39·14	15·50	10·48	12·76
Provincial Licensed Houses ...	31·41	44·66	38·95	8·33	6·73	7·39
Private Single Patients ...	5·00	17·30	11·95	5·14	4·79	4·93

The average proportion of stated recoveries to admissions in the various classes of asylums and in single care was 41·16 per cent.; that of deaths to the average numbers resident 10·03 per cent.

Of these deaths 19 were from suicide; 17 in County and Borough Asylums; one in a registered hospital; and one in a Metropolitan licensed house.

The causes of death in 72·2 per cent. of the total number were verified by post-mortem examinations. This is a distinct advance upon the records of previous years, and is quoted with approval by the Commissioners.

In seven cases of deaths in County Asylums this result was apparently due to suffocation during epileptic fits.

The Commissioners express a general approbation of the condition and the care and treatment of the patients in all classes of asylums under their supervision, and their entries on the occasions of their periodical visits fully bear out this general commendation.

It is greatly to be hoped that this fact will not be overlooked when any new scheme for county government is under consideration, lest by any radical change in their management a disastrous blow be struck at a system which evidently works well, and to the benefit both of the patients and of those who have to provide the means for their care and maintenance.

The average weekly cost of maintenance of patients in County and Borough Asylums is again diminished, as the following comparative statement will show :—

	1886.		1885.	
	s.	d.	s.	d.
In County Asylums	8	$7\frac{1}{2}$	8	$10\frac{1}{4}$
In Borough Asylums ...	9	$7\frac{1}{2}$	9	$11\frac{7}{8}$
In both taken together ...	8	$9\frac{1}{2}$	9	$0\frac{5}{8}$

The Commissioners devote considerable space in their report to observations upon the employment, exercise, and amusement of the insane, which may very fitly be quoted at length in this place.

In the treatment of the insane great importance should be attached to the subject of their useful employment. Our aim constantly is to encourage the efforts of superintendents to devise suitable occupations, and to induce their patients to engage in them, and with the view of ascertaining as nearly as we can the extent to which such efforts have been successful, we have instituted a comparison of the results attained in the years 1877 and 1886 respectively.

It is our practice at our visitation of County and Borough Asylums to inquire, and note in our entries, the number of patients of each sex who are at such times usefully employed, with the nature of their employment, and from the notes thus made we are able to arrive, very approximately, at the proportions which the employed in the above-mentioned years bore to the total numbers of patients in all the asylums.

We find then that in 1877 the numbers usefully employed at the time of our visits to all the County and Borough Asylums bore to the total number of patients the proportion of 56·65 per cent.; while in the year 1886 the proportion was 61·87 per cent. There has thus in 10 years been an increase of 5·22 per cent.

This advance is, we consider, a very satisfactory feature in the present management of the asylums; but we cannot rest satisfied with it, believing that considerable further progress is both practicable and desirable.

We are led to this conclusion by observing the great difference which now exists in the proportions of the employed in different asylums. To a certain extent this difference may be traced to the differing amount of labour which each superintendent considers sufficient to warrant him in classifying a patient as a worker.

This consideration, however, would scarcely afford a complete explanation of the differences observed. In some asylums we find the proportion as low as 45 or 46 per cent., while in others it reaches 76 or 78 per cent.; and though circumstances vary, there is not, in our opinion, so much difference in them as would reasonably account for the variance, or constitute a valid excuse for the very low proportions which we have mentioned.

To devise suitable work, and effective inducements to engage in it, requires much thought, trouble, and ingenuity, as well as favourable circumstances of locality and surroundings; but, believing, as we do, that superintendents generally are fully alive to the importance of the subject, we look with confidence for a progressive and substantial increase in the proportions of the usefully employed of asylum patients.

Not much less important than employment is regular, sufficient, and varied exercise for insane patients. In this matter, too, we are glad to be able to report improvement. It is now the rule much more than formerly to arrange for giving extended walks, rather than confine patients wholly to the airing courts, where they saunter about in a listless manner or crouch in corners; but there is still ample scope for further progress.

A third branch of treatment is the amusement of the insane. Here also we find progress. In all, or almost all institutions visited by us, there are, beside the provision of games, musical instruments, and books and newspapers in the wards, frequent meetings of the patients who are capable of enjoying them, to witness musical or theatrical entertainments, or to dance; while in the summer, outdoor games and amusements are organized and encouraged.

The three subjects we have thus touched upon, are, each in its place and degree, very valuable agents in promoting the cure of such patients as are curable, or the comfort and amelioration of those whose recovery is improbable, and who unhappily form the vast majority of asylum inmates. They are consequently, in our opinion, subjects worthy of the most careful attention of all who are charged with the care of the insane.

The Commissioners conclude an able, practical, and useful report by the following summary of the changes which have

occurred in the constitution of the Board since the date of the last annual report:—

Pursuant to the powers of the Act 8 and 9 Vict. c. 100, Mr. Thomas Salt, M.P., one of the unpaid Commissioners, was, on 21st December, 1886, elected as permanent Chairman of this Commission, in the room of the late Lord Shaftesbury.

Mr. Francis Barlow, for many years one of the Masters in Lunacy, and the last of the Commissioners named in the Act 8 and 9 Vict. c. 100, resigned his appointment (which was unsalaried) in April last. Being much occupied by the duties of the mastership, Mr. Barlow had never been able to devote much time to the affairs of this Commission.

On 1st May, 1886, the Lord Chancellor Herschell was pleased to appoint Viscount Emlyn to be a Commissioner in the room of Mr. Barlow.

We have to record, with sincere regret, the death on 5th November, 1886, of our colleague, Dr. Robert Nairne.

His services to the public, as a paid Commissioner in Lunacy, extended over 27 years, his appointment dating from 1856. In 1883 he resigned his office, but was immediately made an honorary Commissioner, in which capacity he continued to afford us the advantage of his long experience.

Twenty-ninth Annual Report of the General Board of Commissioners in Lunacy for Scotland. Edinburgh, 1887.

The report of the Commissioners in Lunacy for Scotland for 1886 is an unusually favourable one. It commends highly the treatment of, and the accommodation provided for, all classes of the insane, whether in asylums or in private dwellings. It shows also that the whole increase of the number of pauper lunatics maintained in asylums and other establishments, during the year, is only 18.

During the year, the whole number of registered lunatics increased from 10,895 to 11,025, thus giving an increase of 130, of whom 30 were private and 100 were pauper patients.

The number of individuals in the Lunatic Department of the General Prison, and in the Training Schools for Imbeciles diminished from 62 and 230 respectively, to 56 and 228.

In the manner of distribution of the insane the following changes have occurred during the year:—

In Royal and District asylums there has been an increase of 31 private patients and a decrease of two pauper patients. In private asylums there has been a decrease of 11 private patients. In parochial asylums there has been a decrease of

one pauper patient. In private dwellings there has been an increase of 10 private and 82 pauper patients.

The total increase of private patients in asylums has been 17, and the increase of registered pauper lunatics in asylums and other establishments has been 18. This increase of 18 in the number of pauper patients is less than those of the years 1885 and 1886, which were 96 and 74 respectively, and also below the average annual increase for the five years 1880-84, which was 140.

From the table showing the number of admissions into establishments each year, after deducting transfers, it is found (1)—that the number of private patients admitted during last year was 443, being four less than during the preceding year, and seven less than the average for the quinquenniad 1880-1884; and (2)—that the number of pauper patients admitted was 1,997, being 63 less than the number during the preceding year, which was the same as the average for the quinquenniad 1880-84.

During the year 49 voluntary patients were admitted into asylums, and the number resident on 1st January, 1887, was 44. Referring to these admissions, the Commissioners say:—"We have for some years been able to state that nothing has occurred to indicate any difficulty or disadvantage traceable to the presence of this class of patients in asylums; and we continue to be of opinion that it is a useful provision of the law which permits persons who desire to place themselves under care in an asylum to do so in a way which is not attended with troublesome or disagreeable forms, but which nevertheless affords sufficient guarantee against abuse."

There were 177 private, and 961 pauper patients discharged recovered during the year. The following table shows the recoveries per cent. of admissions:—

Classes of Establishments.	Recoveries per cent. of Admissions.		
	1880 to 1884.	1885.	1886.
In Royal and District Asylums	41	37	42
„ Private Asylums	38	50	26
„ Parochial Asylums	42	41	44
„ Lunatic Wards of Poorhouses	6	7	6

Of private patients 131, and of pauper patients 458 were discharged unrecovered.

The deaths in establishments during the year numbered 99 private, and 576 pauper patients. The following table shows the death-rate for private and pauper patients in establishments per cent. of the average number resident in the years 1885 and 1886, and the corresponding average death rates for the quinquenniad 1880-84 :—

Classes of Patients.	Death-rates in all Classes of Establishments per cent. of the Number Resident.		
	1880-84.	1885.	1886.
Private Patients	7·0	8·0	6·7
Pauper Patients	8·1	8·1	7·9

With respect to the discharge of patients on statutory probation, the Commissioners again urge its more extended adoption. In the following paragraph the statistics of its use during the past year are given :—"At 1st January, 1886, 58 patients were absent from asylums on probation. Of these 26 have been finally discharged as recovered, two were sent back, and 30 remain under the care of friends. In the course of 1886, 101 patients were discharged on probation. Of these 27 have been finally discharged as recovered, nine remain under the care of friends, 11 have been returned to asylums, one died, and 53 are still on probation."

From this it appears that of the 58 patients absent from asylums on the 1st January, 1886, 30 remained under the care of their friends, but whether as discharged relieved, or unimproved, or as still on probation, is not stated. Surely, to extend a period of probation over more than twelve months is unfair to both the patient and the authorities of the asylum who are responsible for him.

The whole number of changes among attendants during 1886 is 429, which is 52 less than the number for the previous year, and 51 less than the average for the last ten years.

During the year 228 patients escaped, of whom 22 were not brought back during the currency of the Sheriff's order,

or the certificate of emergency on the authority of which they had been detained. Two of these last were removed from the registers as recovered, 12 as relieved, and four as not improved. Three were found drowned, and one died from exposure.

Of accidents occurring in asylums 115 were reported, of which 15 ended fatally. In six of these cases the death was suicidal.

On the present condition of the various establishments for the insane the Commissioners report very favourably, and, as in previous reports, they note with approval the discharge from asylums of patients who have ceased to benefit by their detention there, thus providing accommodation for more urgent cases without the increase of costly asylum buildings.

While there is ample asylum accommodation for private patients belonging to the more opulent classes of the community in Scotland, there is at present very inadequate provision for those whose circumstances permit of a rate of board being paid for them equal to the rates charged for pauper patients, but not so much above them as to obtain accommodation in the best class of private asylums. Referring to this, the Commissioners say :—"In our last Report (p. xlvi.) we gave a statement showing for 1st January, 1886, that 1,053 patients were maintained out of private means at rates under 21s. a week. Of these 912 were maintained as private patients, 774 in Royal Asylums, and 138 in District Asylums. The rest, 141, were in the position of paupers, 22 being in Royal Asylums, 108 in District Asylums, and 11 in Parochial Asylums. In providing for the 774 patients, the Royal Asylums were, as we have said, performing to that extent a most charitable and most useful work. The position of the 138 patients who were inmates of District Asylums cannot, however, be regarded as satisfactory, for they are liable to be discharged whenever the accommodation which they occupy is required for paupers, and there are obvious objections to the placing of persons maintained out of private means in institutions specially intended for the accommodation of paupers. It may, however, be held that the placing of private patients in District Asylums is so far suitable that it does not involve classing the patients as actual paupers; but it admits of no doubt that it is a great hardship, if not an injustice, to oblige the 141 persons who are not admitted as private

patients, but sent into asylums at the instance of inspectors of poor, to be registered and treated as actual paupers when their maintenance is entirely defrayed from private sources. It is important to keep in view, in regard to this class of cases, which actually come upon the poor law records, that the present position of the matter must in many instances lead to the actual pauperizing of persons who might under other circumstances be saved from it. Efforts are frequently made by relatives and friends to keep a patient from becoming a burden on the rates if they can thereby save him from the stigma of pauperism. If, however, the patient is forced into the position of pauperism notwithstanding that these relatives or friends defray all the cost of his maintenance, there is an obvious inducement to them to avail themselves of the benefits of the position as they have to submit to the degradation. We have given full recognition to the degree to which the managers and directors of Royal Asylums have endeavoured to meet the wants of this class of private patients with scanty resources. But we think that they will not have done all that ought to be done, nor all that can be done, if public attention is intelligently directed to the matter, until all patients for whom rates of board of not more than £25 a year can be paid are provided for in these institutions as private patients."

The average daily cost of maintenance of pauper patients in the various classes of establishments has been 1s. $3\frac{3}{4}$d., which is the same as that for the previous two years.

With regard to the condition of patients residing in private dwellings, in addition to the reports of the Deputy-Commissioners, Dr. Sibbald reports on the condition of these patients in the county of Midlothian. The number of patients visited in that county was 179, of whom 53 were private and 126 pauper patients; and, except in a few cases where improvements were suggested and at once carried into effect, all were found suitably provided for.

Speaking of this mode of providing for patients, Dr. Sibbald says:—"And here it may be well to allude to a misapprehension which seems sometimes to exist. It appears sometimes to be supposed that the providing for pauper lunatics in private dwellings in Scotland is a result of recent administration. A glance at the table on page 107 will show that this is a mistake. The fact is, that the number of persons provided for in this way does not bear so large a proportion to the population of the country now as

it did when the present lunacy system came into operation. The number has, indeed, increased from 1,877 in the year 1859 to 2,140 in 1887; but this is more than 300 short of what would have been accounted for by the increased population of the country."

If, however, instead of contrasting the figures for 1859 and 1887, as suggested by Dr. Sibbald, the figures for 1878 and 1887 be contrasted, it will be seen that since 1878 there has been a very rapid increase in the number of pauper lunatics in private dwellings. In 1878 they numbered 1,385, in 1887 they numbered 2,140. Again, from 1859 to 1876 there was a regular annual decrease, the decrease for the period being 492. There are thus two periods, the first from 1859 to 1876, during which patients were removed from private dwellings to asylums; the second from 1876 to 1887, during which patients were removed from asylums to private dwellings. These figures, while they show that the system of boarding pauper lunatics in private dwellings was not introduced by the Board, appear to point to an alteration in the policy of administration of the Board, dating from about the year 1876.

The following paragraph from Dr. Sibbald's report is interesting, containing as it does his view of the policy of the Board with regard to the system. He says :—"The position of the pauper lunatics in private dwellings has, however, been altered in important respects by the administration of the Board. During the earlier years the efforts of the Board were directed mainly to the sending to asylums of patients who were unsuitable for treatment in private dwellings, and to the amelioration of the condition of those who, though suitable for such treatment, were inadequately provided for. In pursuance of this course, the number of pauper lunatics in private dwellings was considerably diminished. But it was prevented from diminishing so much as it would otherwise have done by the fact that a large number of persons previously unreported, who were suitable for care in private dwellings, were during the same period brought under the supervision of the Board. It was recognized by the Board, from an early period of their administration, that the providing for a certain number of pauper lunatics in private dwellings was one of the elements of a proper system of lunacy administration. The Board have not, it will be seen, introduced a new mode of providing for pauper lunatics. They have only endeavoured to

place under proper regulation a mode of provision which has always existed in Scotland, and which, indeed, has always existed in every country. The difference between the system which they have been enabled to establish and that of other countries consists in the fact that the patients so provided for are under the supervision of a central authority, which requires to be satisfied that they are suitable for such treatment, and that they will receive it in a satisfactory manner; while, in most other countries, those who are so provided for may be said to be merely left outside of the general lunacy administration."

Dr. Fraser has this year adopted a new form of report. He deals with his district as if it were a large asylum. From the statistics he furnishes, it appears that during the year the number of pauper patients in his district has increased from 996 to 1,091, and that the number located there for the first time in 1886 was 225. In Ayrshire alone 60 new cases have been boarded in private dwellings. In Forfarshire there have been 27 new cases, in Lanarkshire 23, and in Stirlingshire 28.

The number of discharges of all kinds from the district was 151, of which 26 were recoveries, 11 were removals from the poor roll, 50 were removals to establishments, and 64 were deaths. Of the 64 deaths, eight resulted from cerebral and spinal affections, 31 from thoracic affections, 11 from abdominal affections, 13 from other natural causes, and one from accidental burning, caused by the patient's clothes becoming ignited while standing near the fire. Six other accidents of a trifling nature are recorded as having occurred among the whole population of 1,177 insane in the district. In one case an imbecile girl became pregnant, but inquiry showed that she must have been in that condition when she came under the jurisdiction of the Board.

Dr. Fraser is to be congratulated on the altered form of his report. Its arrangement renders it easy to refer to, and the additions in the shape of a table of the causes of death, and statistics relating to accidents make it much more valuable and complete. By freely publishing such details the Board do much towards establishing confidence in the system which they have adopted for providing for so many comparatively helpless beings.

Dr. Lawson, in his report, deals with each county separately, but furnishes a table showing the admissions and discharges for the whole of his district. The admissions

number 171, the discharges 134, giving an increase for the district of 37. Of the patients discharged, 60 died, 14 recovered, 52 were removed to asylums, and eight were removed from the roll. In Fifeshire only has there been any considerable increase in the number of patients in private dwellings, and these were sent from Dundee, the City of Edinburgh, and St. Cuthberts. In 1884 there were visited in Fifeshire 156 pauper lunatics in private dwellings; in 1886, 265 were visited.

Speaking of the large number of these patients collected together in and around the parish of Kenoway, Dr. Lawson takes occasion to point out that in no way do they render themselves obnoxious to the general public. He reports that he has made special inquiry into the matter in the village itself, and that the result of frequent conversations with some residents there on the matter has been to confirm him in this opinion. He says:—"It would be quite possible for anyone to walk through the village, from end to end and top to bottom, without knowing that there was a single pauper lunatic boarded in it. At the present time there are about sixty such. When I am making my inspection I occasionally meet one, whom I know to be a patient, walking slowly along, but not looking or behaving in such a way as to attract notice. Some will be found to be working steadily and quietly in the fields, the gardens, or the byres. Others will be seen helping their guardians at housework, and the aged or infirm will be found quietly sitting or lying indoors."

It is to be regretted that Dr. Lawson does not furnish statistics relating to accidents, escapes, or causes of death.

Although the number of insane in private dwellings has again considerably increased, it appears from the report that the system continues to work most satisfactorily. The patients themselves are described as being much happier, their guardians are benefited by keeping them, the erection of costly asylum buildings is avoided, and at the same time the patients are more cheaply maintained. Such being the case, it is to be hoped and confidently expected that the system will soon be much more fully adopted throughout the whole of Scotland.

Thirty-Sixth Report of the Inspectors of Irish Lunatic Asylums. Dublin, 1887.

The Report of the Inspectors of Irish Asylums differs but little from that of the preceding year, either in volume or matter.

The total number of the insane under Government supervision, and their location, as compared with the return given in the thirty-fifth report is as follows:—

	On 31st December, 1885.			On 31st December, 1886.		
	Males.	Females.	Total.	Males.	Females.	Total.
In District Asylums ...	5402	4470	9872	5493	4584	10077
„ Private „ ...	243	389	632	233	369	602
„ Gaols...	—	—	—	1	—	1
„ Palmerstown House	3	6	9	3	6	9
„ Criminal Asylums ...	144	29	173	139	33	172
„ Poorhouses	1500	2233	3733	1532	2309	3841
Total	7292	7127	14419	7401	7301	14702

These returns show an increase on the year of 283, and, according to the Inspectors, from the decreasing population of the country, there is evidence that the ratio of the insane to the sane in Ireland becomes larger from year to year.

The increase for the year 1885 amounted to 143, that for 1884 to 188, and that for 1883 to 266. Taking the population of Ireland to be five millions, the ratio would be one insane person to 340 of the general population. Looking back to the Blue Book for Ireland for 1885, we find the ratio given by the Inspectors to be one individual more or less mentally affected in every 350 of the population.

The Inspectors point out that the inmates of public and private asylums are regarded as belonging to the lunatic class proper, that is, to individuals who at one period of their existence were possessed of intellectual faculties, and

even now have clear reasoning powers. In poorhouses, on the other hand, a very large proportion of the insane is constituted of idiots and demented persons. Independent of these, there exists an unknown amount of congenital idiocy in the lower strata of society. This classification certainly possesses the beauty of simplicity, and if it could be accurately adhered to would save endless trouble. But in Irish asylums are there no dements, imbeciles or epileptics? In poorhouses are there no cases of mania and melancholia? Does all congenital idiocy belong to the lower strata of society? Is it not found amongst the children of the well-to-do farmers and shopkeepers? The number of the latter class are considered to be few, for two reasons (1st), from the small number of idiot children, 85 under 12 years of age, now in workhouses; (2nd), from the evidence given by local authorities that idiocy has much decreased. During the present year the Inspectors will apply to the Local Government Board for further information on the subject.

As regards the mental condition of the 10,077 patients, the probably curable are estimated as 2,228, and the incurable as 7,779, each class needing equal professional care and domestic supervision, as those who are innocuous and tranquil when properly attended to become dangerous and unmanageable when neglected.

Such being the case, the Inspectors point out that it should not be a matter of surprise that for its own protection and that of the public this innocent community should be deprived of its freedom, and that owing to improved treatment their longevity should be increased, and, therefore, that additional accommodation should be required for them. Twelve years ago the accommodation in Irish asylums was 7,000 beds, it has since been increased by 2,600, and still there is a marked deficiency. During the past year the admissions to the 22 district asylums have been 2,746—1,531 males and 1,215 females. Of these 2,140 were cases of first attack, and 606 relapses.

Amongst the admissions were a few cases of soldiers becoming insane whilst on active service. The question of the erection of a separate institution for the military stationed in Ireland having been submitted to the Inspectors, they recommended, in lieu thereof, that on a soldier being duly certified to be a lunatic he should be transferred, under certain conditions and rules approved by the Lord Lieutenant, to the asylum of the district in which he happened to

be quartered for a period of three months, his maintenance to be defrayed by the War Office at 1s. 6d. per day. If he recovered during that time he should be sent back to his regiment, or at the end of three months be removed to the place to which he was chargeable on enlistment, the expenses of his transfer being repayable to the asylum.

As regards the different forms of admission to public asylums, 1,831 cases were sent through magistrates' warrants under the provision of the 30th and 31st Vic., c. 118, as dangerous lunatics; 698 were received by the asylum physician as urgent; whilst 83 were authorized at the meetings of governors. The Inspectors express strong disapprobation of the Dangerous Lunatic Act, as they consider that its effect is to mar the utility of public asylums, for four reasons: 1st. No reliable information is supplied for the guidance of the asylum physician further than the offence committed, or the assumption of an intention to commit a crime. The Inspectors, however, do not state why the history of the case should not be obtained, if so desired, in the ordinary way. 2nd. Strangers are occasionally made chargeable to districts with which they had no previous connection. Persons committed under the Dangerous Lunatic Act are made chargeable to the district in which the alleged offence was committed. 3rd. Under this Act, lunatics, male and female, young and old, are conveyed long distances under police escort. This objection is certainly a most proper one. It is deplorable to think that the statute, almost universally used in Ireland, should be so opposed to all ideas of civilization as to convert the insane into criminals, and cause them to be looked on as such. 4th. The statute leads to magisterial oversights, causing constant illegal committals, necessitating the constant return of warrants to the justices for correction. It is, however, to be feared that under the most perfect form of order of committal, magisterial errors will occur.

To obviate the unsatisfactory arrangements under this Act, the Inspectors propose to amend it so as to impose on the relieving officer the duty of reporting in all cases of insanity, so that the lunatic may be visited by a medical man and then taken charge of in the poorhouse until remitted in due form to the asylum of the district. No suggestion is, however, made as to the form of order on which the transfer should take place, or who should be responsible for the removal. That every insane person should first have to pass

through the union before obtaining admission to an asylum appears rather a retrograde idea with regard to the early treatment of insanity. A few years ago an attempt was made by Mr. E. Litton to extend to Ireland certain sections of Act 16 and 17 Vic., c. 97, in so far as they related to the care and protection of pauper lunatics. This would have been, indeed, a boon, as it would have simplified the difficulties at present existing of obtaining admission to public asylums in Ireland.

The mortality was higher in Irish public asylums during 1886 than during the preceding year, without any epidemic to account for it, as the sanitary condition of the twenty-three district asylums is considered by the Inspectors to be satisfactory, that is to say if the small number of deaths the result of bad sanitary arrangements be taken as a proof of the excellency of the condition of the ventilation and drainage. Only seven cases of typhus fever and twenty-six of dysentery occurred in these establishments. The argument that because epidemics do not occur that, therefore, the sanitary arrangements must be good, has been used so often to oppose every improvement in sanitation that it cannot be received as an unquestionable argument of the condition of Irish asylums. However, the Blue Book goes on to state that the drainage of the Carlow and Maryborough Asylums had to be thoroughly remodelled, whilst the unsatisfactory condition of the drainage of the Richmond Asylum, which the Inspectors state was reported on a few years back by the late resident physician, Dr. Lalor, has again been brought under public notice, and has been referred to Sir C. Cameron for advice, and it is hoped will, in due course, be remodelled. Further on the Inspectors state that serious apprehension existed as to the water supply in other asylums, particularly Armagh, Killarney, Down, and Carlow. At Mullingar the scarcity of water is so great as to prevent the required additions to the building from being carried out. Under these circumstances, we may be allowed to consider the sanitary condition of public asylums in Ireland as not as yet perfect.

As to the predisposing causes of insanity (table 15) amongst the admissions, 517 were said to arise from moral causes and 788 from physical influences; 561 cases were referable to hereditary tendency, and 880 are set down as unknown. 1,641 patients were discharged from public asylums. Of these 1,172 were recovered, 380 improved, and 89 removed,

not improved. 894 deaths occurred, all except eight being from natural causes; three were from accident, and five from suicide. Of these no details are given, except that inquests were held, resulting in each case in a verdict exculpating the officials from blame.

Pulmonary disease is stated to have been the cause of death in 294 cases, cerebral affection in 244, debility and old age in 169, disease of the heart in 37, abdominal derangements, including 26 cases of dysentery, in 83; the remaining deaths are stated to have been due to "*febrile, scrofulous, and cutaneous maladies of no marked description.*"

We cannot congratulate the superintendents of Irish public asylums on the scientific accuracy displayed in the return of the causes of death; nor can we understand how febrile, scrofulous, and cutaneous maladies could be of no marked description and still prove fatal. No mention is made of the number of post-mortems held in these establishments, nor do the Inspectors express any opinion of the importance of these examinations in order to obtain some more accurate record of the causes of the mortality occurring amongst the inmates.

Taking the percentage of recoveries on the admissions, as usually adopted in Parliamentary Reports, forty-three per cent. would be the average in Irish asylums. The Inspectors, however, consider that this is a flattering but rather fallacious theory, insomuch as the recoveries do not all belong to the annual admissions. The more intelligible calculation as to the utility of public asylums on the score of recoveries should be based on a daily annual average, which should give a percentage of $8\frac{3}{4}$.

Taking annual expenditure for the two years 1885 and 1886, the cost per head for the first year amounted to £21 19s. 5d. on a daily average of 9,684, and in the second to £20 19s. 8d. calculated on 9,999, the average number for the latter year.

From inquiry, the insane in workhouses are supposed to cost something less than four shillings per week; if so, their total maintenance amounted to £40,000 a year. This, added to the cost of district asylums, £216,802 5s. 5d., with cost of criminal lunatics at Dundrum, £6,327, cost of Government patients at Palmerstown House, £280, would represent in round numbers £259,323 as the sum obtained last year from all sources for supporting the insane poor in Ireland.

In the 33rd Report (1884) the outlay incurred in the erection of Irish asylums was given in detail; since then many improvements have been carried out by the Commissioners of Control. At present the balance due by Ireland, on account of public asylums, to the Treasury, amounts to £219,582 17s. 4d., to be repaid by the four provinces as follows :—By Ulster, £88,185 15s. 8d.; by Connaught, £26,883 17s. 4d.; by Leinster, £42,840 9s. 4d.; by Munster, £61,672 15s. The exact sum chargeable on the 25th of last March to the various counties and boroughs belonging to each province is given in appendix G of the Blue Book for this year.

The management of District Asylums, as heretofore, meets with the full approbation of the Inspectors thanks to the liberal control of Local Boards, the judicious management of medical superintendents, and the efficiency of officials and attendants attached to them. Against the latter few charges of a serious nature have been made during the year, but the services of the most efficient have been frequently lost in consequence of insufficient wages. Under the Statute 19 and 20 Vic., c. 34, any increase of wages has formally to be applied for to the Lord Lieutenant, and much delay thereby results. The Inspectors suggest that a maximum and minimum scale should be recognized, within which a discretionary power might be exercised by the Local Boards.

The domestic arrangements, also, of these institutions meet with the commendation of the Inspectors; their inmates are well clad and well fed, animal food being supplied in the great majority six times a week at dinner. (Table 28, giving the dietary of the district asylums, shows that in six out of the twenty-two asylums meat is given six times a week, the average amount of animal food being 22 oz. per week, exclusive of bone.) In most asylums there are large refectories, serving also as recreation halls. The dormitories are lofty and well ventilated, well kept, and supplied with excellent bedding. Means of amusement are on the increase, excursions to the country and to the seaside frequently take place, tending, if not to the recovery, at least to the quietude of the patients, doing away with restraint or confinement under any form. As regards domestic furniture as compared with England, the Irish institutions are, perhaps, not so showy; but if the original habits of life of the occupants be taken into comparison the difference between the two would, perhaps, not be so great. As a rule Irish lunatic

institutions present interiorly a cheerful, and, in fact, a decorated appearance, while exteriorly the grounds are neatly maintained.

Nothing could be more gratifying than these laudatory remarks, showing that at least the Inspectors are completely satisfied with the whole working of the institutions under their charge. In addition, they wind up their remarks on public asylums with the remarkable sentence: "In our department of the public service, however, there exists no more gratifying characteristics than the utter absence of unkindly or sectarian feelings, as is evidenced by the unanimity of all parties in fostering a cordial relationship, and the tranquillizing influence of religious observances." This statement is also a subject for sincere congratulation, although it is not quite plain who they are who exercise this unsectarian spirit and foster cordial relationship and the tranquillizing influences of religious observances. No one would have supposed for a moment that any other feelings would have actuated the Inspectors themselves in their official dealings.

During the past year the following changes have occurred amongst the medical officers of Irish public asylums. Owing to the death of Dr. Eames, the popular Medical Superintendent of Cork, Dr. Dwyer was moved from Mullingar and appointed his successor; Dr. Finnegan, Medical Superintendent of Castlebar, was moved to Mullingar; and Dr. O'Neil, for seven years Assistant Medical Officer at the Richmond Asylum, was appointed to Castlebar. On the death of Dr. Lalor, of the Richmond Asylum, whose name is associated with the establishment of schools for the insane, Mr. Conolly Norman, of the Monaghan Asylum, was selected to succeed him; and the vacancy thus made was filled up by the appointment of Dr. Taylor, who had been for nearly eight years Assistant Physician at the Dundrum Criminal Asylum. On the resignation of Dr. McKinstry, of Armagh, Dr. Graham, Assistant Medical Officer at Belfast Asylum, got the appointment.

On January 1st, 1886, the Dundrum Criminal Asylum contained 144 men and 29 females. The admissions were 19 men and six women; 22 were discharged—eight recovered and 14 improved—four died, leaving at the beginning of the year 139 males and 33 females under treatment. No escape or accident of any sort occurred, but three dangerous assaults were made, one of a very aggravated character, on the

resident physician, whose life was imperilled, though, providentially, he escaped unhurt. The Inspectors point out the difficulties and dangers of dealing with many of the inmates, some of whom are malingerers, others on the border-land between sanity and insanity, who give much trouble by exciting others to insubordination. Last summer a cabal was got up by these to waylay and murder two of the attendants. Latterly four strong cells with prison-like appearance have been constructed for these dangerous cases, the knowledge of which fact is said to have a useful effect.

Connected with the subject of criminal lunatics, the Inspectors call attention to the fact that when a prisoner is acquitted on the ground of insanity the antecedents of the case are not further inquired into at the time, no testimony is brought forward to elucidate the occurrence, the prisoner is confined at pleasure, and may be detained indefinitely for want of information to guide the Executive. The Inspectors advise, when the plea of insanity is put forward, that the act itself should be investigated before the jury. It is, however, difficult to understand why the Government should not always be able to obtain the records of the crime, or what object would be gained by continuing a trial where insanity was proved, unless it is proposed that the Judge should fix the length of time during which the lunatic was to be kept in confinement.

Little change is stated to have taken place in the condition of the insane in workhouses; the number of lunatics under care continues almost the same from year to year. In the great majority of cases the forms of mental derangement found in these institutions are considered by the Inspectors not to require asylum treatment however much their condition might be benefited by a more liberal attention to personal comforts. They, however, become violent, and are transferred to asylums. This the Inspectors object to, as they take up room which should be reserved for acute cases; hence asylums become overcrowded and the public rates are increased. This does not present itself so forcibly, as the support of asylums and poorhouses is derived from different sources. The Government rate in aid is also applicable to the one and not to the other. "That lunatics, properly speaking, should stand in a different category from the imbecile, idiotic, and demented in poorhouses is now fully recognized, and justly so." This may be perfectly true, but it is difficult to understand why the lunatic in a

workhouse should be denied the care and treatment of an asylum if he requires it; nor is it evident why the State should make a distinction between one form of lunacy and another.

The Inspectors, however, advocate the provision of accommodation in one or more of the unions in each district for idiots, confirmed imbeciles, and the utterly demented, who would thus be supported out of the rates.

Since 1884 they have been advising this plan to the Guardians of the Dublin Unions, to erect a plain pile of buildings as a receptacle for their insane inmates, who at present enjoy very imperfect and painfully restricted accommodation.

No change has taken place in the number of private asylums, licensed under 5 and 6 Vic., cap. 123, during the past year, but the number of patients located in them has fallen off. In 1885 the number was 632, whilst at the end of 1886 it was only 602. We may here remark that this decrease in the number of patients in private asylums in Ireland has been going on from year to year. Thus at the end of 1882 the number was 650, whilst at the end of 1883 the number was only 636.

Only one case of suicide is reported in these institutions during the year. This was the case of a lady, who had been long supposed to have been free from any suicidal tendency, and afforded an example of the impulsive and uncertain action of a person mentally affected.

The Inspectors consider that the power vested in them of allowing patients out on trial for definite periods has proved beneficial, though a few cases required to be brought back.

With reference to the domestic management of private licensed houses, they complain that in some there is much room for improvement, so as to raise them at least to a level with the best organized for the insane poor. The depressed condition of the country, and the irregular system of payment, they consider some excuse for these deficiencies, particularly as no provision has been made for the reception of lunatics of humble circumstances, except in district asylums, which are already filled by the insane poor.

With the general sanitary condition and the professional care bestowed on the inmates the Inspectors have little cause of complaint; and while they advert to some private asylums as inferior, they state that others are con-

ducted in a highly creditable manner, and afford every means of comfort to their inmates.

The appendices are stated to supply information connected with the department under various headings, a few tables of a solely professional nature being omitted by desire of the Government, otherwise they would have been introduced. The Inspectors are, however, to be congratulated on the introduction of Table No. 15, giving the causes of mental disease of those admitted to district asylums during the year; and it is to be hoped that, in spite of the opposition of a Government, who take so little interest in the progress of psychological medicine as to place obstacles in the way of further research, that in time the Irish Blue Book will equal those of the other parts of the United Kingdom in the compilation of statistics, and that we may obtain that great desideratum so long looked for—a compilation of tables giving similar statistics on insanity in the three divisions of the United Kingdom. On this point we shall continue "to peg away" until the desired end is attained.

Leçons sur les Maladies du Système Nerveux faites à la Salpêtrière, par J. M. Charcot.

(*First Notice.*)

We are pleased to welcome another instalment of Professor Charcot's lectures. His previous works have been made familiar to the profession by the translations undertaken through the agency of the New Sydenham Society. The present work is in no way inferior to those which preceded it, and, indeed, in some respects it has a fascination and a charm of its own. We trust that the New Sydenham Society will once more bring the great French master's labours before the profession in an English dress, although we cannot but feel that however competent the translator may be, it will be impossible to reproduce the peculiarly eloquent and picturesque style for which the author is so justly famous.

The work before us deals with a variety of subjects; but the greater bulk is devoted to the subject of hysteria, and incidentally to that of hypnotism and the effects of suggestion.

The investigations which Professor Charcot has been carrying on for years into these matters are familiar to all.

The present volumes, therefore, will be of special interest, as giving a more detailed account of his labours in this direction than has hitherto been presented in book-form. The work before us possesses that remarkable suggestiveness for which all the author's contributions are so renowned. No one now alive has done more than M. Charcot to foster the spirit of research into the obscure problems of the nervous system. Several of the younger workers at La Salpêtrière have given their aid in compiling these lectures, and their assistance is suitably acknowledged on the title-page, and on many occasions in the text. The names of these *collaborateurs* are Féré, Babinski, Bernard, Guinon, Marie, and Gilles de la Tourette.

In this review we propose to give briefly an outline of the contents of each lecture, though it must be confessed that an abridged account such as this will convey but an imperfect idea of the author's views.

The first lecture is introductory, and in part historical. The author alludes to his past efforts to make the Hospital of La Salpêtrière a regularly organized institution for the teaching of nervous diseases. His struggles have at last succeeded, and the French Government and the Municipal Council of Paris have removed all obstacles. The out-patient department has been entirely re-modelled, and in the Hospital itself there are now a museum and laboratories for various purposes; and, indeed, everything has been done to make La Salpêtrière an institution perfectly adapted for treatment, for clinical teaching, and for original research. The author proceeds briefly to point out that specialism in medicine has become absolutely necessary, and that we must accept it because we cannot avoid it. The field of research in nervous diseases is so vast that little or no apology is required for its specialization. The chapter ends with some general remarks on the methods of investigation to be adopted, on the difficulties to be encountered, and with some practical observations on the simulation of disease, especially with reference to the cataleptic state.

The second lecture treats of the muscular wasting which sometimes supervenes in joint-affections, especially when dependent on traumatic causes. The paralysis is most obvious in the extensor muscles, and is accompanied by atrophy. The muscles affected show simple diminution of excitability to both the constant and the induced current; in other words, there is a quantitative change in the reactions,

not qualitative, as seen in muscular atrophy dependent on degeneration of the nerves or motor cells. It is curious that there is no necessary relation between the intensity of the joint affection and the degree of paralysis and muscular atrophy. The articular lesion is often slight, and it has to be remembered that the muscular affection may persist long after the primary cause has disappeared. The author discusses the various theories which have been put forward in explanation, but he rejects them all. According to him, the most probable hypothesis is that there ensues a dynamic spinal lesion. The spinal motor cells become inert by reflex influence, but they undergo no degenerative change such as occurs in acute poliomyelitis. The prognosis in these cases is favourable, and it would appear that statical electricity has a marked influence in hastening the cure.

In the third lecture the author discusses the influence of traumatism in the production of contractures. He points out that rigidity of an extremity sometimes occurs suddenly after an injury, often of slight degree, and that the contracture thus determined may be the first manifestation of the hysterical diathesis. One of the most characteristic features of hysterical contracture is its sudden onset, thus differing from the late rigidity observed in destructive lesions of the pyramidal tract.

In the fourth lecture the author treats of muscular atrophy consecutive to chronic articular rheumatism. He observes that in these cases, as in those articular affections arising from injury, the extensor muscles are mainly involved. The muscles become weak and atrophied, and present quantitative changes in their electrical reactions. In some cases the tendon reflexes become exaggerated, and ankle-clonus may be present. He remarks that occasionally this condition is so striking that even competent observers have been led to look upon the spinal condition as the primary factor, the arthropathy being secondary. But an attentive study of the evolution of the phenomena will show that the contrary is really the case. In some articular affections of rheumatic nature, the most striking condition is not muscular atrophy, but spasmodic contracture. Here, again, the extensors mainly suffer. The state of spasm is involuntary, and in all probability of reflex nature, as Hilton has pointed out.

In the fifth lecture the discussion of reflex amyotrophies and contracture is continued. In certain instances spasmodic contracture of articular origin is not limited to the

muscles around the affected joint, but becomes more or less generalized, so that an entire extremity may become affected. The subjects in whom this occurs are usually hysterical.

The deformities of chronic articular rheumatism are originally dependent on spasmodic muscular contracture of reflex nature. The hands are usually pronated and slightly flexed, and there is a general deviation towards the ulnar side. According to the position of the phalanges, the deformities may be classed under two heads: (*a*) the type of extension, resembling the hand in athetosis; (*b*) the type of flexion, similar to the attitude of the digits in paralysis agitans.

The remainder of the fifth lecture is devoted to certain symptoms which are occasionally but rarely observed in the early stages of general paralysis of the insane. The author has seen three or four cases in which ophthalmic megrim, having the usual characters, has supervened in the initial stage of general paralysis, and has appeared to have some relation with the onset of the disease.

The sixth, seventh, and eighth lectures are devoted almost entirely to the consideration of certain phases of hysteria. In the first place attention is drawn to functional visual disorders. When hemianæsthesia is present there is usually some defect of vision on the same side. Often a very marked contraction of the visual field is present, and this contraction exists on both sides when there is general anæsthesia. Accompanying this condition there is, as a rule, diminution in the visual acuity. The author dwells particularly on the diminution or even absolute loss of colour perception occurring in hysteria (dyschromatopsia and achromatopsia). Under normal conditions the visual field is more extensive for blue than for yellow, and for yellow than red; then follow green and violet, the latter being perceived by the most central parts of the retina only. In hysterical amblyopia there is general contraction of the colour-field, violet disappearing first, then green and red. Yellow and blue alone often remain, but sometimes these are lost, and then there is complete loss of colour-perception, all objects appearing grey.

To the law just enunciated there is an exception, very frequent both in males and females. The contraction of the circles representing the colour-fields is not always concentric. The circle for red is frequently greater than that for blue, and this peculiarity is, in the author's opinion,

characteristic of hysteria. A case in which this peculiar feature existed has lately come under our own observation, and the subsequent history of the patient (a man) fully corroborated the hysterical nature of the affection.

The author calls attention to the so-called hysterogenic zones, and he points out that they are often found at certain definite spots on the surface of the trunk and head. On the limbs these zones are said not to exist, but in a footnote allusion is made to some recent researches by Pitres and Gaube, which indicate that hyperæsthetic areas may be present on the extremities, and that they differ in no respect from those found on the body and head.

As regards the frequency of hysteria in the male, an observation by Briquet is quoted, which gives the proportion as one male to twenty females. Although this is probably an exaggerated proportion, it indicates that male hysteria is far from being so rare as is usually supposed. In boys, hysteria is most common about the age of twelve or thirteen, and in adult males, according to the observations of Klein (a pupil of Ollivier), about the age of twenty-four. This practically coincides with the statement of Russell Reynolds that in adult males hysteria is most frequent between the ages of twenty and thirty. Taking hysteria, occurring both in males and females, hereditary influence is present in about thirty per cent.; but it must be borne in mind that the hereditary taint may exist in the progenitors not solely as hysteria. It is well known that epilepsy, insanity, and other affections of the nervous system in the ancestors may come out in the offspring in the form of hysteria.

Professor Charcot illustrates by clinical cases the well-known fact that contractures of a hysterical nature may be present when convulsions, globus, and other classical features are quite absent. In such cases anæsthesia may be discovered, or hysterogenic zones, and then the diagnosis is well-nigh certain.

An interesting case of contracture of the left hand following a slight injury to one finger is described and discussed. It is shown that exactly the same deformity can be produced in a hystero-epileptic woman with hemianæsthesia by electrical stimulation of the ulnar nerve. A very ingenious method is described by which hysterical contracture, or the cataleptic state, can be absolutely diagnosed from malingering.

In the ninth lecture a remarkable series of symptoms

following an injury to the sciatic nerve is narrated. After a contusion of the left buttock severe pains were felt in the course of the great sciatic nerve, and then there gradually ensued weakness, with atrophy of both lower limbs, but mainly of the left. The glutei muscles were chiefly affected. Sensation everywhere was perfect. Disorders of the bladder and rectum were present. Indeed, the clinical features of the case pointed to the existence of a lesion of the spinal motor cells. As the tendon reflexes were markedly exaggerated, certain of the motor cells were in a condition of hyperexcitability; but the muscular atrophy indicated that other cells had undergone more profound changes, possibly of a destructive nature.

In the tenth lecture double sciatica is discussed, and the conditions under which it arises are enumerated. It is not uncommon in diabetes, and in certain spinal affections, such as locomotor ataxy and meningo-myelitis. In the case which forms the author's text, the sciatic pains were dependent on new-growth involving the vertebræ and the nerve trunks. Most often, perhaps, the growth is secondary to carcinoma of the breast, as in the instance narrated. It must be remembered, however, that vertebral cancer may give rise to spasmodic paraplegia, quite unaccompanied by pains in the course of nerve trunks.

In the second part of this lecture a case of hypertrophic cervical pachymeningitis is discussed, in which the flexion of the lower limbs was overcome by surgical means, and a practical cure effected. It is pointed out that the spinal affection may undergo resolution, and that the deformity of the legs may be the only obstacle to the upright posture and to walking.

In the eleventh lecture a case of word-blindness is very fully narrated, and in the succeeding lecture the subject is discussed from a clinical and pathological standpoint. Professor Charcot gives a brief analysis of sixteen recorded cases. Usually the onset is sudden, and there is a certain degree of right hemiplegia, which may rapidly disappear. In the early stages there exists frequently some motor aphasia, which gradually passes away. It has to be remembered that word-blindness may exist alone, uncomplicated by hemiplegia. Visual disorders may be present, and in two cases hemianopsia was observed. In three out of the sixteen cases a curious fact was noted. When the patient tried to read he wrote the words, or traced the characters in

space with his index finger. The notions thus furnished by muscular movement may in some measure supplement or aid the vague ideas conveyed by the visual images. Treatment based on this fact was adopted in two cases, and in one (a patient at La Salpêtrière) the result was very encouraging. From the few autopsies that have been made in this affection, it would appear that the disease is situated in the inferior parietal lobule.

In the thirteenth lecture a very complete account is given of a case in which there was sudden loss of the faculty of mental vision (Galton's *mental imagery*). The patient had previously been gifted with a most remarkable faculty for reproducing mentally the forms and colours of objects. After the onset of the disease he was unable to recall mentally the features of his wife and children, or the streets and houses in his own town with which he had been perfectly familiar.

An interesting discussion follows on verbal amnesia, and its complex nature is fully described.

The subject of muscular atrophy has long passed into a critical stage, and hence we welcome Professor Charcot's attempt to bring the various forms of amyotrophy into some classification, provisional though it may be.

The fourteenth lecture is one of the most interesting in the entire work, and will prove of great service to those practically engaged in the diagnosis and treatment of nervous diseases. It is only of late that the condition of the muscles and nerves has received from the pathologist the attention which, on *a priori* grounds, might be expected.

M. Charcot is inclined to believe that pseudo-hypertrophic paralysis, the juvenile forms of progressive muscular atrophy described by Erb and Duchenne, and Leyden's hereditary form, are really varieties of one morbid entity—*primary progressive myopathy*. Under this same heading may be classed those cases of muscular paresis or paralysis in which there is no change in the bulk of the muscles—neither atrophy nor hypertrophy.

In the fifteenth lecture the subject of tremors and choreiform movements is discussed. It is pointed out that although the tremors of disseminated sclerosis and paralysis agitans differ in some very important characters, they have one feature in common, and that is that the oscillations are slow, four or five in a second. In this respect the tremors differ essentially from those seen in alcoholism, chronic mer-

curial poisoning, general paralysis, and exophthalmic goître, in all of which the tremblings are vibratory, and occur eight or nine times in the second. In addition to these two varieties there is a form seen in hysteria which holds an intermediate position, the oscillations being five to seven per second.

After a brief account of the movements observed in ordinary chorea, and some remarks on their essential features, other affections are discussed, such as præ- and post-hemiplegic chorea and athetosis. It is then pointed out that in rhythmical chorea, which is very often allied to hysteria, the movements pursue a regular course, and are co-ordinated, thus differing fundamentally from common chorea. The cases which are given by way of illustration are full of interest, and are accompanied by drawings representing the grotesque attitudes which are sometimes seen in saltatory chorea.

The remainder of the work, which comprises ten lectures, is entirely devoted to the author's favourite subject, hysteria. With this we shall deal in our concluding notice.

Les Démoniaques dans L'Art. J. M. Charcot (de l'Institut) et Paul Richer, avec 67 Figures Intercalées dans le Texte. Paris: Adrien Delahaye et Émile Lecrosnier, 1887.

We have already drawn attention to this joint production of MM. Charcot and Richer.

A fresh interest attaches itself to certain works of Art of the old masters when they are regarded from the neurologist's point of view. Paintings which have been seen numberless times and admired for their artistic merit, but nothing more, are found to possess striking points of attraction when brought into relation with those forms of nervous disorders which have received such a large amount of study in recent times, and upon which such a flood of light has been thrown by the scientific study of the functional disturbance of the nervous system by the practice of hypnotism. It will no doubt be felt by some that sentiment as embodied in Art is in danger of being, to some extent, destroyed by the relentless manner in which the frigid hand of medical science draws aside the veil which the mediæval artist throws over his pro-

ductions. But this is only the common fate of the mysteries of life when dissected by the scalpel of the anatomist.

No one, at any rate, could leave the wards of the Salpêtrière and proceed to visit the picture galleries of the old masters, of the churches where Art has been employed to represent the miraculous scenes of ecclesiastical history, without being struck with the accuracy with which the painters have delineated those convulsions and nervous distortions which may be seen in so concentrated a form in the great Paris Hospital, always celebrated, but rendered more famous than ever by the genius of M. Charcot.

We take, almost at random, by way of illustration of the commentaries made by our authors on the pictures to which they refer, a scene of possession painted by Matteo Rosselli in the Church of the Annunziata, at Florence (p. 46). It is not an instance of exorcism. No priest is present, and there is nothing in the gestures of those who stand by to indicate, as in many other paintings, an attempt to expel the demon. Notwithstanding, three imps are represented as escaping in the curtains of the bed upon which the possessed lies in her clothes, the violence of her convulsions being shown by the presence of two men who have to hold her. A fifth assistant, a female, arrives on the scene, carrying some linen, apparently intended as the means of restraint. The dress of the possessed is partly unfastened, the legs are semi-flexed, the arms separated from the body, and held by the anterior part of the shoulder and the arm, while she gesticulates wildly, the body being flexed forward as described by MM. Charcot and Richer as occurring in the hysteric crisis under the name of "Mouvements de Salutation." In spite of the smallness of the copy made of the picture, it is sufficiently clear that the mouth is open, while the eyes are raised spasmodically upwards, and the whole face is slightly swollen. All these traits belong, it is pointed out, to the second stage of the "grande attaque hystérique," or period of clownism. We have, in fact, happened to choose one of the smaller and more meagre pictures commented upon by the authors of this work, but it is all the more striking to see how cleverly and accurately they read the design of the artist, and make instructive inferences where the ordinary observer would pass them by almost or altogether unnoticed.

We would fain pass on to describe and interpret, with the assistance of MM. Charcot and Richer, other works of art in

which demoniacal possession is represented, but we must content ourselves with quoting the concluding observations on the ecstatics.

In order to render all the varied expressions of those represented in a state of ecstasy, the artists have been able to find invaluable models in hysterical subjects. This assertion will not appear rash or exaggerated to any who like ourselves have seen hysterical patients, even women among the poor, in a certain phase of the great attack. When under the influence of religious hallucinations they assume the attitudes of so true and intense an expression that the most consummate actors could not do better, and indeed the greatest artists could not find models more worthy of their brush. To paint an ecstatic, the artist has, then, sought to express a thought, a sentiment. Everything is done by rule, and presents the figure in a reasonable manner; all the traits, all the movements, have a common object—the expression. We judge of the value of the artist's work according as the object is attained, and the qualities of the expression of the figure are pure, true, and well rendered. In the figures of demoniacs it is no longer the same. We are, then, in the presence of extraordinary attitudes, strange contortions, and deformities of features, which do not respond to any idea or sentiment. It is the period of the "grande attaque," represented under the name of the stage of "attitudes illogiques," in contrast to that which follows and is the stage of "attitudes passionnelles."

Every resource fails the artist, sculptor, and actor in the absence of the exact observation of nature. For it is not sufficient to produce deformities merely at pleasure, and to produce strange effects at will; there is under this apparent incoherence a hidden reason which arises out of a morbid process, while in the nature of the deformities of parts, or the contortions of the whole, as well as in the mode of succession and grouping of all the phenomena, one finds, as our studies of the works of the old and modern masters demonstrate, the indisputable marks of a pre-established order, and all the constancy and inflexibility of a scientific law.

The illustrations which accompany the text are beautifully executed, and render the work one of great artistic value as well as scientific interest.

La Physionomie, chez l'homme et chez les animaux, dans ses rapports. Avec l'expression des émotions et des sentiments. Par S. Schack, Major de l'armé danoise. Paris : Librairie J. B. Baillière et Fils.

There have been so many fruitless efforts made to establish a system of rules whereby to estimate the moral and mental qualities by bodily characteristics, and we have been obliged to reject as useless so many "pseudo-sciences" (as Dr. O. W. Holmes calls them) which as phrenology, palmistry, and graphology, etc., have one by one claimed attention, that at first we were tempted to throw this book aside as but another attempt of the same kind. An inspection of the clever drawings deterred us, however, and we are glad to draw attention to a series of observations, which, if not aspiring to establish infallible laws, at least contain many interesting, and in many cases valuable, suggestions.

A difficulty which meets us at the outset in establishing a science of expression, lies in the fact that everyone must be his own physiognomist.

In other sciences and in the arts many men may use one instrument. A dozen chemists may use the same scales and test-tubes, and there is a recognized system of weights and measures, but the weights and measures of feeling and opinion have no fixed scale; every man must use his own set of instruments and must make allowance for the "personal equation" in his estimate of the dispositions of his fellowmen. "Le caractère personel de l'observateur et ses sentiments ont une influence des plus grandes sur sa façon de comprendre et de juger le caractère et la physionomie d'autrui. . . . nous serons toujours portés à prêter très volontiers, à l'homme qui ressemble à notre ennemi, les mêmes faiblesses qu' à ce dernier, si nous ne mettons soigneusement de côté tout esprit de passion et d'amertume." The face, according to M. Schack, is a register of the dispositions, not of the individual only, but of his ancestors :—"Or si l'on songe que non seulement les traits au repos se reflètent dans la physionomie de l'enfant, mais que l'expression même se transmet par l'hérédité, on comprendra facilement que les penchants, les tendances, les facultés en harmonie avec ces expressions se transmettent également des parents aux enfants." He seems to look on the face as the moulding and solidifying of collective ancestral expressions, saturated with ancestral emotions, modified by each individual, and passed on in relentless

sequence to the next generation. M. Schack attaches to every form of every feature, and to every combination of these, some particular quality of the moral or intellectual nature inherited *or acquired.* For, in contemplating the late-realized force of heredity, we are not to lose sight of the part that each generation plays, and the modifications to which each individual is subject. As some insects change in colour with the changing colour of their food, and as some flowers are altered by a difference in soil, so every man changes in feature, or expression, or voice, or in all of these, with a change of thought, habit, and circumstance. Eyes, mouth, ears, are, as it were, tinged with their food.

"Such as are thy habitual thoughts, such will be the character of thy mind, for the soul is dyed by the thoughts," says Marcus Aurelius, and "Such as is the character of thy mind, so will be thy face, for the face is modelled by the mind," says M. Schack, in effect.

But who shall interpret the subtle minglings of many troubled generations of men which we see blended in one face now? In general this is impossible, admits M. Schack. "Aussi ne sera—ce que chez les individus fortement caractérisés . . . que nous pourrous poursuivre nos recherches; . . . l'immense majorité des hommes échapperait à toutes les règles de notre physionomonie." Many faces would not repay the study, as M. Schack says elsewhere—"There are many insignificant faces, because there are many silly souls."

The physiognomist must not occupy himself at first with ordinary men, but study extreme forms, and "il ne faut pas qu'il évite l'homme pervers sous le prêtexte, futile ici, qu'il aime mieux le commerce de l'homme sage et bon, son rôle lui impose, tout au contraire la fréquentation continue des hommes les plus divers."

After elaborate examination of every feature and of acts, such as walking, handshaking, and bowing, M. Schack brings us to the characteristic part of the book, which owes its value in great part to the fact that its illustrations are all either drawn from historical characters, whose portraits are more or less familiar to us, or from sketches of individuals drawn by the author himself. The stories accompanying the sketches are often very instructive, and the likeness between the person and the animal whose physiognomy M. Schack claims for him or her is sometimes very striking. This part of the book, however, must be read to be appreciated, for the impression of the drawings cannot be fairly conveyed in words.

A third part of the book is devoted to the influence of heredity on the physiognomy.

M. Schack's cautions about indiscriminate and ignorant applications of his rules are probably needed. Cruel misjudgments might be carelessly made by ignoring counterbalancing traits; and in any case definite rules which human nature tends to lead us to apply to others while making favourable exceptions for ourselves cannot be too carefully adopted. In a multitude of observers there might be found no two to agree in all points, so we may say with Socrates, "In our present condition we ought not to give ourselves airs, for even on the most important subjects we are always changing our minds, and what a state of education does that imply."

Lunacy in Many Lands. By G. A. Tucker, Sydney, 1887.

If the time-honoured proverb that "a great book is a great evil" be true, the work before us ought to be very evil indeed, seeing that there are nearly 1,600 pages. A report of the inspection of a very large number of asylums in both hemispheres of the globe must necessarily occupy a large amount of space, and it may, on the whole, be more convenient to comprise it within two covers. Mr. Tucker had, for six years prior to 1865, an interest in a private asylum at Melbourne. Having parted with it, he established at Sydney the asylum called Bay View House, the proprietorship of which he held until 1886. In 1881, his health having failed, and having speculated with great success, Mr. Tucker resolved to collect together facts from all the principal institutions for the insane in the world and report upon them to the Government of New South Wales. Before setting out upon his travels he applied for and obtained an introduction from the Colonial Secretary, who stated that he was about to visit such institutions "in the interest of his business." This is certainly rather an unusual way of describing the mission of a man who considered that his report would be "of benefit to the Colony," and who desired to place his facts "in the shape of a report before the Government." We think that the divergence between these modes of regarding the object of the journey has led to considerable misunderstanding, and was probably the means of placing the traveller in an ambiguous position. The mis-

understanding referred to would have been avoided had it been made perfectly clear that while a Colonial Secretary besought those to whom Mr. Tucker might apply for information to pay him every attention, he was not in any sense deputed by the Government. Be this as it may, Mr. Tucker has visited all the States of the German Empire, Austria, Russia, Denmark, Norway, Sweden, Holland, Belgium, France, Switzerland, Italy, Corsica, Spain, Great Britain, and Ireland, as well as Tunis and Algiers. Prior to this he had visited Victoria, South Australia, Tasmania, New Zealand, and Honululu, whence he crossed the Pacific and inspected all the institutions of the United States and Canada. The number of asylums visited exceeds 400. Altogether he has travelled 140,000 miles.

The work contains a general summary extending over about eighteen pages. The great mass of the volume is occupied with the reports of individual asylums. There will, no doubt, be many who will dissent from the correctness of Mr. Tucker's statements and conclusions, and it is impossible for us to decide with whom the truth lies without personal knowledge. We are bound to say that in some instances in which we possess this knowledge, the report made by the author appears to us to be very misleading. In these instances, however, the impression left by our traveller's report would not be disputed by those having charge of the asylums, for our criticism arises from Mr. Tucker having failed to discover flagrant abuses and grievous defects. Such being the case, it is not unnatural that we should look with some degree of suspicion on the reports of those asylums with which we have no means of being acquainted. In spite of this mistrust, and in spite of communications having reached us commenting on the incorrectness of many of the statements made relative to certain asylums in our own country, we are of opinion that the returns obtained from superintendents of asylums and their comments are of considerable value, and will continue for some time useful for reference by those who require information of this kind. It is not to be denied that the author has spent a great deal of time, labour, and money in this investigation; indeed, he calculates the latter at no less than £3,000. We believe the work has been sent to public institutions and the libraries of those who make the care and provision of the insane their special study. They will find this volume useful, if too much is not expected of it. For the present, at any rate, it will

excite fresh interest in asylums, and if those who are aware of inaccuracies of statement will make the necessary corrections publicly known, the mischief arising from the errors into which Mr. Tucker has fallen will be prevented.

We are open to receive any communications of this nature, provided they are signed by the writers.

Pharmacology and Therapeutics. By Dr. Lauder Brunton. Macmillan and Co., 1887.

It is quite impossible to do justice to a work of the magnitude and importance of Dr. Brunton's within the short space at our disposal—it is much more possible to do injustice. We will not attempt to do more than just indicate the plan and aims of the work. It is divided into six sections, the four last of which treat of materia medica, as it is generally understood, the two first of general pharmacology and therapeutics, and of general pharmacy. It is needless to say that so distinguished a physiologist as Dr. Brunton has put his chief strength into Section I., and it is this part which marks the book as a special book. Herein we find the most careful analysis of the problems of physiology pursued back into the domains of chemistry and physics. From this analysis conclusions are drawn, which, marshalled, are led to the conquest of new territories in the region of therapeutics. The whole aim and object of Dr. Brunton's work is to build therapeutics on sure foundations. Need we say that these same are physiologic? Now, without committing ourselves to judgment on the matter, we would yet point to the extreme complexity of the problems of therapy and to the uncertain sound emitted on the part of physiology. There is a suspicion within us which hints, Are we ripe for this method, which is, strictly speaking, that of applied physiology? Can we discard the method of Hippocrates—the method of Sydenham? We venture these remarks from a very careful consideration of the subject, a consideration which the admirable introduction to Trousseau and Pidoux's work on therapeutics has not a little helped in forming. We sincerely recommend Dr. Brunton's work to the consideration of all who have therapy at heart, which should include us all, for we shall fail to grasp the situation if we fail to perceive the physiologic tendencies of medicine and the claims which are put forth in this direction. We recommend the work, but we recommend it for most careful weighing.

Mental Affections of Childhood and Youth. By Dr. Langdon Down. Churchill.

This small book of 300 pages is really the result of a request by the Medical Society of London that Dr. Langdon Down should give the Lettsomian Lectures. These lectures were highly appreciated, and a further request was made that they might be published, and, in compliance with this desire, they appear in this form with several other papers added, which had appeared in various medical periodicals, and had not been brought together before. The consequence is that within the cover we have rather a mixed set of essays on diseases of childhood and youth. We have not only idiocy treated more or less systematically, and from the point of classification, but also an essay on the result of consanguineous marriages, and another on the relationship of idiocy and tuberculosis. We advise our readers to study the volume for themselves, as it is the result of the observations of a very busy man, who has had more opportunities of watching than recording. Success in our profession is often the destroyer of good original work, and this seems to have to some extent affected our author, for these lectures but enlarge on the idea of some 20 or more years ago, and do not, to our thinking, add many facts nor elucidate more fully the theories of the younger physician. Dr. Langdon Down will ever be remembered as having started the idea that among idiots were to be seen failures in development which were to be looked upon as parallels of certain other races of men who were not highly developed; that, in fact, they were survivals or vestiges. This appealed to everyone at the time when Darwinism was at the very greatest point of its power, but it was seen that many other things beyond external resemblance must be taken to make up the picture of the survival or the relapse in race type. We hoped to find these or some of these links in the volume before us, but we find a repetition of the belief without any more real strength derived from facts.

With this criticism we end our fault-finding, and would fully acknowledge the thoroughly practical way in which the book is put together. Dr. Langdon Down's opportunities have been many for observing the children who are the links between the idiot and the lunatic, those children of neurotic parents who break down as soon as any vital strain

is placed on them, and his comments on such cases are noteworthy.

There are reports of cases of imperfect corpus callosum and fornix, which might be of use in the discussion on the uses of the corpus callosum, though Dr. Down owns that it is very rare to find such commissural defects among idiots.

A paper which is specially interesting, from the various ways in which its results have been received, is that on the condition of the mouth in idiocy. The united experience of those practising among idiots and of dentists is, that with degenerating stock there is a marked narrowing and vaulting of the palate. This does not mean that all idiots have high palates, nor that all with high palates are idiots. A paper from the London Hospital Reports of 1864 is reprinted on so-called polysarcia and its treatment. This is a little outside the scope of this book, we think. The reprint about the result of marriages of consanguinity is interesting, and Dr. Down is one of those who is convinced that the union of blood-relations has some influence in the deterioration of the species. There are essays on classification, the obstetrical aspects of idiocy, and reports of several interesting cases of nervous disease, such as pseudo-hypertrophic paralysis, deserving consideration; and, on the whole, though not a great work as the result of such vast and extended observation, we must be grateful for its appearance.

How to care for the Insane. By Dr. W. D. Granger, Buffalo State Asylum. Putnam, N.Y.

With each development of teaching there must arise a demand for some fresh series of text books; so it is in America with the science and art of nursing. In England we have not got so far, we are content to teach our nurses to use their hands and acquire as much from common sense as possible. But on the other side of the Atlantic a great movement has been begun, and we would warn our younger physicians to be on their guard lest they too will have to protect their rights against women. It appeared to us when in America that the nurses already have to do too much of the practical work, and the doctors, though heads, are not so highly informed as heads should be; that is, we think that just as the head must be served by the hand as part of the same body, so the medical head is best when it has been

served by its own hand, not that of another. The American men seem inclined to neglect the use of their legs, and if they do not take care they will too soon fulfil the prophecy of the future man, who was to be all head, "sans legs, sans teeth, sans everything"—but brain. But to return to the book under review. Institutions for the training of mental nurses being established, it is well they should have handy text books on the subjects of simple anatomy, physiology, and natural science. Dr. Granger has written a primer of this sort which we have already passed into our wards as a stimulus to further knowledge, and as the book is simple and cheap we would suggest that it should be bought, and it will hold its own, at least, beside the "rules and regulations" which have hitherto occupied the mind of the English asylum physician.

The Nursing and Care of the Nervous and the Insane. By Charles K. Mills, M.D., Professor of Diseases of the Mind and Nervous System in the Philadelphia Polyclinic. Philadelphia: J. B. Lippincott Company, 1887.

The number of handbooks recently published in America treating on the care and nursing of the insane indicates that much attention is being bestowed on this subject by American alienists. The work under review is one of a series of handbooks on nursing, issued by Messrs. Lippincott, and has been published, according to the author, in response to frequent requests from nurses, that they might possess some information, in a compact form, as to the care of those nervously affected. This is the only book with which we are acquainted which treats of the nursing of that ever-increasing class—those affected with functional nervous derangements not necessarily insane, although on the borderland of insanity. The nursing and care of the insane forms the last chapter, and comprises only 35 pages, or a little less than one-fourth of the entire work. The other chapters deal with such subjects as massage—the present fashionable remedy in many functional nervous disorders—and electricity, with its various modes of application. We think that the author has devoted too much time and labour to the technicalities of electricity, especially when we consider for whom the book is intended; and he has consequently had to curtail the more important, because practical, sections of his book. In the chapter on the care of the insane he deprecates the teaching

of elementary anatomy and physiology to attendants. From some little experience in lecturing to attendants we have found that such information as may be obtained from Huxley's "Physiology" or other rudimentary works proves of great interest, and enables attendants to grasp the substance of future lectures with a greater degree of intelligence.

We can heartily recommend this work as a useful handbook, not only to nurses in general hospitals and those especially engaged in the care of private neurotic cases, but also to asylum-attendants.

The few illustrations it contains are excellently executed, the book is neatly got up, and, as is the case with most American publications, it compares most favourably with any work of its kind published in this country.

T. D. G.

Gehirn (Anatomisch). By Prof. Mendel, Berlin.

This small pamphlet of 60 pages is a reprint of the article by the author in the "Encyclopedia of General Medicine," edited by Dr. Eulenburg. It is handy and complete, and has very good illustrations. In saying it is complete we would not imply that it contains all the anatomy of the brain as developed and divided by the Germans, but it contains the best accepted facts as to the development of the brain, the simplest methods of dividing the brain, the finer and coarser structure and arrangement, as well as the histology general and special. The chemistry of the brain is also given in brief, and the blood and lymphatic systems are described. The ganglia at the base are studied both in relation to their development and their connections.

The cranial nerves with their origins are given, and Dr. Mendel has some original opinions on the nuclei of the seventh.

We should recommend those working at neurological subjects to have this small *brochure* as a very convenient book of reference. Dr. Mendel has given the weight of the brain and its parts careful consideration, and his experience shows that women—German women too—have not only absolutely but relatively less brain than man, and that this deficiency is marked even at birth. He shows, too, that there is no direct relationship between weight or height of body and mass of brain. In man the maximum weight is reached between 20 and 30 years of age, but in woman the

maximum is reached at 20. It declines sooner, too, in woman than in man. As the brain has many other functions besides those of mind to perform, its size does not bear direct relationship to the mental power of the individual. As might be expected, we find all data as to specific gravity, reaction, &c., set forth. The localization of function is accepted, and the irradiation from centres also given, and though this is a German book, Ferrier has at least the credit of being referred to without any jealous qualifications. A very careful description of the minute arrangement of the cortex is given, with a series of parallel sections of different areas. These are diagrammatic, but will be found to be useful, but from what has already been said it will be seen that a useful addition to anatomy, physiology, and neurology has been made, and we welcome the work.

Die Gesundheitspflege in der Mittelschule, Hygiene des Körpers nebst beiläufigen Bemerkungen. Von Dr. Leo Burgerstein. Alfred Hölder, Vienna, 1887, pp. 140.

We can recommend this book to all interested in the important subject with which it deals. After a few pages to the old Greek and English methods of education, the author considers the arrangements which should be made to prevent study injuring the health, and the necessity of inquiring into the capabilities and deficiencies of the pupils. Dr. Burgerstein has a good chapter upon gymnastics and bodily exercises. He gives us much information about the health of children at school-ages; but he does not treat the question of overpressure with the fulness which its importance demands. He points out what he considers Austro-Hungary might learn from the educational systems of other countries, and gives especial praise to the English public schools. He thinks that if it were possible to combine the German striving after ideal culture and the German scientific spirit with the English formation of character, the ideal of education would be reached. There are some things in our upper class English schools which are only suffered because they are old, and which no new establishment could venture to adopt. Boys are sent often to these high-class schools more through the social ambition of the parents than from the hope of getting a good education. At the same time, our new educational institutions bring evil as well as good along with them.

Dr. Burgerstein remarks that in some English schools about which he has information there is scarcely one-fifth of the amount of shortsightedness seen in German ones. This shortsightedness was greatest in the higher schools. In Austria only one per cent. of the pupils in the village schools is found to be shortsighted, in the gymnasia 30 to 35 per cent. In a middle school in Vienna with 406 pupils, only one-third had normal vision; in the lower under-gymnasium more than a third, 39·1 per cent.; in the upper-gymnasium more than 50 per cent. were shortsighted. Dr. Burgerstein quotes the words of Virchow: "First health then education," and gives as his opinion that six hours daily study is enough. This may be quite true, but in this age of competitive examination it is the inspectors and examiners who regulate the educational pressure, and they think little or nothing of the ill-health they may cause by over-exertion. Medical men now and then preach about the folly of injuring the health by too great study, but nowhere do we see more mental effort thrown away in useless directions than in medical curricula and medical examinations, carried on in great part by college examiners, who pull this way and that way till the unfortunate candidate is tortured, as on the rack, to learn what he will cast to the winds when the happy moment arrives that he escapes from their grasp.

Zur Geschichte der Psychiatrie in der 2 ten Hälfte des Vorigen Jahrhunderts. Dr. H. Laehr. Berlin, 1887.

Dr. Laehr has done a useful work in preparing a sketch of the history of the reforms in the treatment of the insane during the second half of the eighteenth century. No one is more familiar with the names of those who fill a prominent place in this history. We have already noticed in a former number his calendar of everything relating to lunacy in every civilized country; the present paper is a fitting pendant to it, and is, we think, of more utility. One is surprised that no similar sketch has appeared in Germany before. It does not admit of quotation, so that all we can do is to refer our readers to the article itself for reference. We may, however, cite the concluding paragraph.

In every country, independently of one another, have occurred similar reforms in psychiatry, because the development of the original soil of Medicine has carried along with it the development of each

branch of the medical art, the latter not being able to develop independently; and because the education of the nation has established the means requisite for its practical application. Philanthropists and physicians can thence surpass antiquity with the inspiration, power, and perseverance, necessary in a reform, and break new ground.

Der Hypnotismus. Von Prof. Heinrich Obersteiner. Wien, 1885.

Prof. Obersteiner, of Vienna, has given a sketch in this pamphlet of 46 pages (reprinted from the "Monatsblättern des Wissenschaftlichen" Club in Vienna) of the past history of hypnotism. He frequently refers to Heidenhain, to whom Germany owes its present interest in the subject. A German physician has recently stated that the Dane Hansen, eight years ago, knew more about hypnotism than all the German doctors put together! It is not necessary to notice this short essay at further length.

The Asclepiad. Third Quarter, 1887, Vol. iv., No. 15.

This journal, altogether written by Doctor Benjamin Ward Richardson, is conducted with as much spirit as ever, and bears as a motto on the title-page *Terar dum prosim.* Another motto might appear on Dr. Richardson's periodical, from Horace, *Omne capax movet urna nomen*, for the capacious Richardsonian urn sends forth every name in turn. In this number we have presented to us "Medicine under Queen Victoria," and the well-known Dr. John Snow, a native of York, is selected as the representative of medical science and art of the Victorian era. An excellent portrait accompanies the sketch. Of more immediate interest to the readers of the "Journal of Mental Science" is the first chapter of the epitome of the advancement of medicine under our Queen. The subject is "The Treatment of the Insane." A copy of the well-known engraving of William Norris, who was chained in the days of Haslam to an upright bar in a cell in Bedlam, is given. The only recompense accorded this unhappy American has been the notoriety of his case wherever the history of the past treatment of the insane has been related. The print having been a familiar sight as long as we can remember, we were not aware that it was extremely rare. Haslam seems to have had no advanced views in regard to the management of the

insane, and he could not conceive it possible that the system which had been for years in operation at the York Retreat, when he gave his evidence before the House of Commons in 1815, was really carried out in that institution. Dr. Richardson describes the treatment of patients in old times by causing them to revolve on a wheel. When we visited an asylum on the Rhine in 1853 a large box in the form of a wheel, capacious enough to admit an excited patient, had been disused only three years. And we have recently seen it exhibited in that institution as a curiosity, useful in reminding the world of the change that has taken place in all civilized countries in the treatment of the insane. The use of such a machine is now restricted to dogs, which are made to revolve by Fürstner and others, for enormous periods of time, in order to ascertain whether they can produce general paralysis of the insane. Had such experiments been made in order to deter the superintendents of asylums from adopting the revolving-wheel treatment, by showing its effects in producing general paralysis, the motive would have been intelligible. As, however, no one is now barbarous enough to employ this apparatus in lunatic asylums, there does not seem any occasion to confirm by experiments on animals the conviction of the ill-effects likely to follow from such a mode of treatment. Unhappy dogs!

Dr. Richardson gives a rapid but excellent sketch of the reform in the treatment of lunatics. "For some time previous to the Victorian era there had been a few good and humane efforts to relieve the insane of a certain amount of the oppression to which they were subjected. Three names in connection with this effort deserve especial mention—Pinel, of the Bicêtre in Paris; the elder Tuke, in the Retreat at York; and Dr. Charlesworth, in the City of Lincoln Lunatic Hospital, in which institution the grand final and triumphant experiment of entire freedom of the insane was carried out."

A description of the treatment pursued at the Lincoln Asylum follows, and due credit is given to Charlesworth and Hill. Of the latter Dr. Richardson speaks from personal knowledge: "I was with Gardiner Hill in his last hours, and told him once again, as I had often told him aforetime, that he had not lived in vain, and that some day the world would recognize him as one of its greatest benefactors. He could not speak, for his speech was paralyzed, but his close grasp of my hand conveyed to me, with all the eloquence of

death, how the hope cheered him in the valley of the shadow."

Then comes Dr. Conolly, with "unexampled opportunities equalled only by unexampled zeal and industry, who showed at Hanwell how grand an advance was secured."

It is a compliment to our department of medicine, for which we thank Dr. Richardson, that he has put "the treatment of the insane" as the most prominent and important instance of progress in his epitome of the good work done during the Victorian era.

An Address to Asylum Attendants "Off Duty"—"Invalided." By the Reverend Henry Hawkins, Chaplain of the Middlesex Asylum, Colney Hatch.

The above has been printed this year, and is characterized by the same qualities as the tracts for attendants which have preceded it. As in everything else, so does it hold good, unfortunately, in the sphere of asylums for the insane —there are chaplains and chaplains; those who hold their office for no higher purpose than to make a livelihood, and those who, like Mr. Hawkins, perform their duties as a labour of love.

We take the opportunity of drawing attention, not only to the tractate above mentioned, but to those which have been in circulation for some time. They are as follows :— "Work in the Wards by Asylum Attendants," "Made Whole, a parting Address to Convalescents on Leaving an Asylum," "Friendly Talk with a New Patient," "Visiting Day at the Asylum." It must be gratifying to Mr. Hawkins to observe the increasing interest which is felt in the welfare of asylum attendants. Nothing can be more certain than that the well-being of an asylum depends upon no one circumstance more than the status of those who are placed hour after hour in the immediate charge of patients. Much is necessarily left to their honour and unseen conscientiousness. Everything, therefore, which is being done at the present day to raise the standard of this class of well-deserving officers merits cordial support and encouragement. There may be two opinions as to how far it is desirable to proceed in the direction of teaching special subjects, including a quasi-medical knowledge of insanity; indeed, we think mistakes may easily be made in this way. But there can be no question as to the desirableness of levelling upwards

as regards the influence which is brought to bear upon attendants. We are aware that many superintendents have a strong prejudice against taking into their service those who have been trained in other institutions. It is difficult, however, to see why there should not be the same gain from thoroughly well-trained mental attendants as is universally acknowledged to be the case from hospital nurses.

Dr. Cowles, the excellent Superintendent of the McLean Asylum, Boston, Mass., has sent us a composite photograph taken from a class of fifteen nurses in that asylum, and whether we look at them singly or compositely, we are charmed with the features, expression, and dress of those whom Dr. Cowles is moulding for such noble purposes. They seem to be a guarantee of the care, attention, and kindness which they will pay to those who have the good fortune to be placed under their charge; and we are much mistaken if there are more than a very few superintendents in British asylums who, seeing this pleasing group, could carry their prejudices so far as to refuse to take into their service any one of this intelligent and modest company. Great credit must be given to the physician who has done so much to train them in the way they should go. We have every hope of their not departing from it when they are old, and, what is much more important, when they are young.

We take this opportunity of noticing a useful and unpretending periodical, entitled "Nursing News," published monthly. The sixth number is before us, and among the articles is one entitled "Notes on Nursing the Insane," by Miss Swain. In it she makes some practical remarks on the duties of nurses. We are glad to see any indication like this of increased interest on the part of ladies in the nursing of the insane. We trust this publication has as large a circulation as it deserves to have.

On the Diagnosis of Diseases of the Brain, Spinal Cord, and Nerves. By C. W. Suckling, M.D.Lond., M.R.C.P. H. K. Lewis. London: 1887.

This little book is obviously intended to be only an elementary treatise, and the author himself regards it as an introduction to the standard works of Ross, Gowers, &c. It is the outcome of post-graduate lectures at Queen's College, Birmingham, on the "Diagnosis of Diseases of the Nervous System." There are a number of woodcuts. If the book is

taken for what it professes to be, the practitioner will not be disappointed in it. He will find it useful to have presented to him, in a small compass, the characteristic features of the diseases of the nervous system, which he is sure to meet with. Mental physicians require some book of the kind, and in the absence of more detailed treatises they will derive assistance from the lectures of Dr. Suckling. We may point out that under "Agoraphobia" the author only speaks of vertigo as causing the difficulty experienced by phobists of this kind, whereas persons suffering from this malady may have a nervous horror of crossing a wide space without having any vertigo. There is a useful table of the reflexes.

Psychiatrie, Ein Kurzes Lehrbuch für Studirende und Aerzte. Von Dr. Emil Kraepelin, Professor in Dorpat. Zweite, gründlich umgearbeitete Auflage. Leipzig: Verlag von Ambr. Abel. 1887.

A favourable notice of the first edition of this work will be found in this Journal, July, 1886, p. 254, and an abstract of its contents appeared in the Retrospect of the same number. The new edition has grown in bulk, extending now to 532 pages instead of 377. In the interval the author has been promoted to a professorship at Dorpat, Russia. One is reminded by the terms of the dedication of a melancholy event which has also happened, for whereas the first edition was dedicated to Dr. B. V. Gudden, then the director of the Munich Asylum, the second edition is dedicated to his memory. We can do no more than repeat our commendation of Dr. Kraepelin's work. An English student of German psychiatry who desires to have it presented to him in a small compass, and with a lucidity which some people fail to discover in most German books, will find the present volume of the greatest use.

A Dictionary of Terms used in Medicine and the Collateral Sciences. By the late Richard D. Hoblyn, M.A.Oxon, 11th Edition. Revised throughout, with numerous additions by John A. P. Price, B.A., M.D.Oxon. London: Whitaker and Co., Paternoster Row; George Bell and Sons, York Street, Covent Garden. 1887.

Hoblyn's Dictionary has always been a favourite, and we are glad to see a new—the eleventh—edition called for. The book is brought up to date, and Dr. Price has spared no

effort to make it worthy of the support of medical men. When the Dictionary of the Sydenham Society is completed it will, no doubt, be the most complete work of the kind issued, but even then a small dictionary like Dr. Hoblyn's will be required. The danger is that the former will be too elaborate, and to some extent defeat the end the Sydenham Society had in view. However that may be we commend the lesser book to our readers. No medical library ought to be without it.

Lehrbuch der Psychiatrie fur Aerzte und Studirende. Von Dr. Rudolf Arndt. Wien and Leipzig: Urban and Schwarzenberg. 1883.

Die Neurasthenie (Nervenschwäche), ihr Wesen, ihre Bedeutung und Behandlung vom Anatomisch-physiologischen Standpunkte für Aerzte und Studirende, bearbeitet von Dr. Rudolf Arndt, Professor der Psychiatrie, und Director der Psychiatrischen Klinik an der Universität, Greifswald. Wien und Leipzig: Urban and Schwarzenberg. 1885.

Der Verlauf Der Psychosen. Von Dr. Rudolf Arndt und Dr. August Dohm, Weiland Assistentarzt der Letzteren. Mit 21, theilweise farbigen Curventafeln. Wien und Leipzig: Urban and Schwarzenberg. 1887.

Our space will not allow of an analysis of these works, but Dr. Arndt has already obtained so high a reputation by his writings that it is unnecessary to do much more than to endorse the verdict of his countrymen.

The earliest of the above works, published in 1883, is a systematic work on mental disorders arranged on thoroughly physiological principles, while the author shows his thorough acquaintance with the pathology of insanity. The work has taken a high position, and does not require our recommendation to increase its reputation. It may be observed that the observations on paranoia are especially complete, and this before the attention of alienists was more particularly drawn to its character.

The second work on the list enters fully into the nature, importance, and treatment of that morbid condition of the nervous system which had a special name given to it five years before by Dr. Beard, but which had long been known by the Germans under the name of "Nervenschwäche." The work shows great research, and it is surprising to see

what an amount of matter results from the suggestion of a term. It seems to enable observers and writers to bring into a focus all that they know about a certain group of symptoms which are by no means new, or recently discovered, and which are like iron filings attracted to one point when a magnet is introduced. As one of the symptoms of neurasthenia, some remarks are made on intoxicating beverages in relation to treatment, to which we would refer our readers.

The third work is devoted to the course of the psychoses, and is a joint production. It contains some carefully prepared pulse-tracings (coloured), each case being accompanied by a chart. The work does not admit of analysis, and as it only extends to 47 pages it should be procured by those who wish to possess a series of tracings made with great care in typical forms of insanity. The tracings in cases of mental stupor are especially interesting. One taken during a condition of great excitement, laughing, singing, &c., is very characteristic (Case 7).

Those who know Professor Arndt personally cannot fail to be struck with his great ability, powers of exact observation, and the clear expression of his views on psychological questions. His writings possess all these characteristics, and we can confidently recommend them to students of Psychological Medicine.

PART III.—PSYCHOLOGICAL RETROSPECT.

1. *English Retrospect.*

Asylum Reports, 1886-7.

(*Continued from p.* 455.)

Argyll and Bute, 1886-7.—The weekly charge to parishes has been reduced from 8s. 8d. to 7s. 8d. per patient for the ensuing year. The actual cost for last year was 8s. $0\frac{1}{4}$d. It is to be regretted that in many asylums the rate of maintenance should so nearly approach that in workhouses.

We are much pleased to find that, even now, the occurrence of preventable deaths is leading to the introduction of improved night supervision. In the report by Dr. Mitchell we read:—

> The unfortunate deaths of P. M. J. and A. B. have led to an examination of all the locks of the Asylum, which are now understood to be in good order, and also to the employment of two night attendants on the male side, and to the placing of epileptics during night in circumstances which admit of a more careful and constant supervision.

Various structural improvements have been effected, but it is noted that the hospital accommodation is insufficient.

Dundee Royal Asylum, 1886-7.—It is most pleasing to learn that this asylum is gradually escaping from its financial difficulties.

The following paragraphs refer to subjects which might profitably engage the attention of several superintendents. Such work is truly in the right direction, and cannot fail to do good:—

The classes and lectures referred to in last report were resumed on an extended basis during the winter evenings, and with satisfactory results. A class for writing and arithmetic was opened early in the season, and was attended by both patients and attendants, the number averaging 19 of the former and 18 of the latter. Progress was tested by competitive examinations, and book-prizes awarded to those who showed greatest proficiency, and also to those who had made greatest progress during the session.

The Rev. Mr. Wilson also gave a regular course of lessons in music on the tonic sol-fa notation, which was much appreciated, the average evening attendance being about 20, and including both patients and *employés*.

A course of lectures was again delivered to the nurses, attendants, and servants, but on a much more extended scale than that of last year. To make this as efficient as possible, attendance was here compulsory, all those employed in the service of the asylum being divided into two classes so as to suit convenience of attendants. Seven lectures were delivered to each, or fourteen in all, and embraced not only the duties required of all in their dealings with the patients, but also included elementary instruction in physiological anatomy and mental science. Copies of a synopsis of each lecture were also provided for those attending. From the interest and attention shown, this system of imparting a thorough knowledge of their duties to those in the employment of the Asylum cannot fail to be beneficial.

A considerable portion of Dr. Rorie's report is devoted to the consideration of the removal of patients to the lunatic wards of workhouses.

Essex.—The Committee have accepted a tender for the erection of a new block of buildings for 450 patients. The estimated cost is £63,873. The enlargement of the laundry is included in this contract. The building of a new chapel is under consideration.

Much progress has been made with alterations in the drainage, and it is hoped that soon all will have been completed in accordance with the most efficient sanitary requirements.

Dr. Amsden has not found the sending of chronic harmless cases to workhouses successful. He has found that, with few exceptions, they have been sent back as unsuitable for workhouses with the existing accommodation and means of supervision.

Fife and Kinross, 1886-7.—Fourteen chronic cases were boarded out during the year. Additional precautions have been adopted to protect the building from fire.

The following paragraph from Dr. Turnbull's report touches on a subject too often overlooked by those talking and writing about the treatment of the insane:—

Three of the male cases illustrate very well the fact that the number of admissions to the asylum is not a matter of mental disorder, pure and simple,

but that extraneous circumstances have a great influence on it. The patients in question were respectively 51, 41, and 35 years of age; in all of them the insanity had existed and been recognized from childhood, and they all had lived for years under the charge of their relatives. There was no special change in their mental state last year to render asylum control more necessary than before—they were in that respect practically the same as they had been for many years before, but their domestic circumstances had changed, depriving them of their former guardians. In one case the sister who took care of the patient was leaving home to be married; in another the frailty of advancing years made the mother unable any longer to manage her insane son; and in the third the relatives were negligent of their duty to the patient. Thus all the three had to be placed temporarily in the asylum. A residence of some months there was distinctly beneficial in each case in improving the bodily health and in training the patient to more orderly and steady habits; then suitable homes were found for them elsewhere, and the three were duly boarded out.

Glasgow District, 1886-7.—In reproducing the following passage from Dr. Clark's report, we would venture to say that we hope that his anticipations of a recovery-rate of 60 per cent. may be realized, though we feel certain that he is doomed to disappointment. His cases show the beneficial results of direct treatment, but they do not differ in any respect from those to be met with in any good asylum where definite medical treatment is adopted.

I believe a recovery-rate of 60 per cent. is possible in a district like ours, where insanity is rarely the development of a mere mental idiosyncrasy, where it is often rather an accident of physical disease, and therefore amenable to direct treatment.

Many gratifying illustrations of the result of individualizing treatment might be quoted, and I am forced by the logic of fact to admit that patients long deemed hopeless have recovered because of persistent attention and care on the part of some sanguine and resolute nurse. A well-equipped medical and nursing staff would extract a more searching and complete history of each case, and many hitherto unknown symptoms when brought to light would stimulate the hope of recovery or amendment [or the reverse—Eds.]. Undoubtedly, also, many wretched hospital cases owe their recovery to patient, intelligent nursing, and liberal dietetic treatment.

As examples of cases open to the influence of direct medical treatment, I may quote (1) the case of a woman admitted in a state of acute depression, suffering from most intractable scrofulous sores, which were only finally healed up after eighteen months of persistent treatment. She was then discharged recovered. (2) A young woman in a very reduced condition, admitted in a state of acute maniacal excitement. She was fed by the stomach pump four times daily for seven weeks, and for a long time continued in a very reduced physical state. After a year and nine months' persistent care she recovered. (3) A young man was admitted in a state of acute delirious mania, suffering from severe scalp wound, inflammation of shin bone, and peritonitis. Local treatment was impossible without the use of frequent hypodermic injections of a hypnotic. After two weeks the mental *furore* ceased, the wound took on a healthy action, and the peritonitis began to disappear. He was discharged after thirteen months' residence. (4) The case of a man in a state of delirious excitement, from the brain-anæmia of heart disease. He was subject to curious sensations; sometimes he felt his bed going up and down like a hoist, and at other times thought himself going round like a paddle-wheel. Under appropriate treatment he improved physically, and was recovered mentally after five weeks' residence. These are only four of several of last

year's cases; they show a very small fraction of our hospital work, and they illustrate more forcibly than any words of mine how much scope there is in such an asylum as ours for the best resources that we can command.

Isle of Man.—Dr. Richardson reports that in some cases in which it was considered judicious, and under proper regulations adapted to each case, patients have been allowed to visit their friends at home. In several instances in which, from various reasons, they had not been visited for some time it is believed a consideration of this kind has had the effect of removing any wish to escape.

Montrose, 1886-7.—We are much pleased to learn that in the dispute between the Managers and the District Board the former have been successful. The General Board of Lunacy decided that the rate of maintenance charged by the Managers was a fair and reasonable one.

Dr. Howden records an outbreak of pneumonia, such as has been observed from time to time in various asylums. In our present state of ignorance, these outbursts are inexplicable, and appear mysterious; but they are deserving of very close study.

On the 10th of March the temperature fell, and strong north winds set in, the weather being in marked contrast to the end of February and the first week of March; *e.g.*, on the 24th February, with a balmy S.W. wind, the lowest the thermometer registered was 46 deg. F., while on the 12th March, with a bitter north wind, it went down to 21 deg.

I do not affirm that the lung disease, which appeared with something like an epidemic character in the middle of March, was due purely to the sudden fall in temperature, because many were seized who were protected from cold both by day and night; besides, I am not aware that either in Montrose and district or in other parts of Scotland, though subjected to the same low temperature, was the prevalence of pneumonia unusual. There can be little doubt, however, that the sudden cold, added to some unknown condition, was an important factor in the production of lung disease. On the 13th March, the day after the lowest temperature, a patient who suffered from fibroid phthisis was seized with bronchitis and died in eight days. On the 17th a man was seized with pleuro-pneumonia, and died in three days. On the 19th another man took pneumonia, from which he recovered. On the 21st two men took pneumonia; one died next day, the other recovered. On the 23rd a strong, healthy young woman was attacked with the same disease, and died on the 4th of April. On the 24th a strong man, who worked on the farm, took ill. On the 25th a man and two women were seized with pneumonia, and a woman with pleurisy. The man and one of the women died, while two of the women recovered. On the 27th a man took pneumonia, and died in four days. On the 28th two men were seized; one died on the 30th, and the other on the 1st April. On the 30th an attendant, a strong young man, took pleuro-pneumonia, from which he ultimately recovered. On the 31st one woman took pneumonia and another pleurisy; the first died on the 4th April, the other recovered. So much for the death-roll of March. On 4th April a case of pleurisy occurred, on the 8th a case of pneumonia, and on the 10th a case of pneumonia; the case of pneumonia on the 8th died, the other two recovered. On the 15th an old woman was seized with pleuro-pneumonia, and died next day. Thus, between 20th March and 16th April we had no fewer than 12 deaths from acute lung disease.

A somewhat similar outbreak occurred in the winter of 1878-9.

Newcastle-upon-Tyne.—The following extract from the Visitors'

report contains a truth which should be laid to heart by more than one asylum officer :—

> They (the Visitors) have not hesitated to call additional skilled counsel when they considered that special knowledge was requisite. Their experience in connection with the main building has taught them that by taking the opinion of a responsible person during the progress of particular works considerable sums of public money may ultimately be saved.

In his report, Dr. Wickham returns to the relation of intemperance and insanity, and we have pleasure in reproducing his remarks :—

> Exception was taken by a reviewer to some remarks in my last report, in which, while giving it as my opinion that it would probably always be a vexed question whether the intemperate habits were the cause of the insanity or the insanity the cause of the intemperate habits, I had said that "in the great majority of the particular cases which have come under my own notice the evidence is in favour of the conclusion that the insanity causes the intemperate habits," and it was urged that if my observations were correct "we are and have been totally wrong in our treatment of such cases. Instead of drunkards being taken to a police-court, they should be committed to an asylum as dangerous to themselves. As a necessary consequence our asylums must be multiplied at least ten-fold."
>
> I am glad to acknowledge the courtesy which I have always received from the review in question, but I venture to remind the critic that his alarm that if my views are correct we must, so to speak, begin at the beginning again, has nothing to do with the truth or otherwise of them. And I take this opportunity of stating that my remarks have been applied more promiscuously than was intended, and, if I may say so, than their words will bear. I did not mean to imply that all drunkards were insane, and that insanity caused the intemperate habits of all such persons. I was speaking only of those cases which had come before myself, in which insanity and intemperate habits had been concomitant, and I remarked that I had interested myself for many years in an attempt to place them in their proper sequence in each case, with the result that an insane neurosis was generally found to have preceded the intemperate habits. Every year strengthens my conviction that if we only search carefully enough we shall find one constitutional taint or another in those who, as we are apt to think at first, have been rendered insane by intemperance. And so long as it is permitted to perpetuate this taint by unsuitable marriages, it is of little consequence that it is nurtured by intemperance and kindred vices, for the commonwealth must continue to pay the penalty of not trying to stamp out the taint itself. To try and check it at the other end is like raising a bank and trying to stop a current without taking notice of the stream which continually feeds it; and it is to be hoped that society will, some day or other, reach such a wholesome state of education in this respect that the intermarriage of the consumptive, for instance, will be regarded with as much repugnancy as is extended now to wedlock within the prohibited degrees of consanguinity.

Northampton.—It is reported by the Visitors that during 1886 a sub-committee was appointed to take into consideration the best method of making provision for the idiot children in the county. This sub-committee, accompanied by the clerk to the Visitors and medical superintendent, visited four idiot asylums and one county asylum where a block has been built for the treatment of idiots. The result of these inspections and deliberations was embodied in a report to the General Committee, the purport of which

was that a block for 48 idiot children should be erected in the west corner of the asylum. Plans for this have been prepared, and will be shortly forwarded to the Commissioners in Lunacy, two of whom have already approved of the site and of the scheme generally.

Mr. Greene reports that the hospital for infectious diseases has been handed over by the contractors. It consists of three blocks. One block contains the dormitory for men, with a day-room, single room, two nurses' rooms, store-rooms, lavatories, and bath-room. Another block has the corresponding rooms for women, and the third block, placed at the rear of the others, consists of the kitchen, laundry, two bedrooms for domestic servants, disinfecting room, boiler house, and mortuary. The hospital will accommodate 14 patients, allowing two thousand cubic feet of space to each patient.

St. Andrew's Hospital.—It is very satisfactory to learn that this great hospital is free from debt. We find nothing in the report calling for special notice, though we are glad to find that Mr. Bayley continues to employ his male patients in garden and farm work.

Northumberland.—The extensive additions to this asylum seem to be nearly complete.

Since the ventilation of the wards and dormitories was improved there has been a marked diminution in the number of deaths from phthisis.

As to out-door exercise, Dr. M'Dowall reports :—

> In order that everything may be done to promote bodily health, increased attention has been paid to the patients exercising beyond the airing-courts. Although for many years almost none of the female patients have used the airing-courts, but have walked beyond them twice a day, this health-giving exercise was enjoyed only in the afternoon by the men. Since the spring, however, they also have walked out every forenoon. Of course, all cannot go—the lame, feeble, and wildly excited must be left behind, but, with these exceptions, every male patient, not usefully employed, walks in or beyond the grounds twice every day, weather permitting. This arrangement has been followed by good results ; the patients have been improved in body and mind, and the attendants have necessarily been called upon to devote increased attention to those placed under their charge.

Norwich.—The Commissioners begin their report by saying :—

> In an asylum where so much is done by the Committee to render the management as good as possible, we regret to find that there is, as yet, no assistant medical officer, and we desire at the commencement of our report to state our conviction that no asylum, even with fewer numbers than are received here, can be adequately supervised by only one medical officer, however zealous he may be, and we hope that the post of assistant medical officer will shortly be filled. We ought, perhaps, to say that this is the only asylum within the limits of our official knowledge which has not such an officer.

Have the Commissioners forgotten the York Lunatic Hospital? Although this strongly expressed recommendation was made in April, we do not find that it has been adopted, and it is not even

referred to by the Visitors in their annual report, nor by Dr. Harris. We hope that he will not fail to urge this most strongly on the attention of his Visitors, because we believe that it is an official error and a personal injury for a man to attempt to direct such an asylum single-handed.

Nottingham (Borough).—Plans have been prepared for the enlargement of this asylum, and the estate has been increased by the addition of 20 acres.

It is remarkable to find that of 60 women admitted last year no fewer than seven were general paralytics.

Nottingham (County).—Although great allowances must be made for such an old building as this, one is surprised to read that "a new drain has been laid under F. 1." No doubt every precaution will have been taken to prevent the escape of sewer gas; but at the very best the presence of a drain under a room must be a constant anxiety and a possible source of danger.

Nottingham Lunatic Hospital.—We are much pleased to learn that an assistant medical officer has been appointed.

The Committee have sanctioned the reception of patients at an initial rate of 25s. weekly. It is, therefore, expected that the unoccupied beds will soon be filled, as the Commissioners do not think it would be easy to find as good accommodation at so low a rate.

Oxford.—The Visitors report that they had the salaries of the attendants under consideration, but that no material alterations had been thought requisite.

We find that the ordinary attendants receive wages varying from £23 to £35 per annum. Without venturing a definite opinion, it is our impression that these payments are below the average in county asylums. The Visitors should remember that the first requisite in asylum management is a thoroughly efficient staff of attendants, and that to secure suitable men the wages should err towards liberality.

The Committee have settled a dietary table for the attendants and servants and ordered its publication in the wards. Why in the wards?

The Commissioners report:—

> As regards exercise, we should like to see a regular system of daily walking exercise beyond the airing courts, but on the asylum estate, instead of such exercise being afforded only once or twice a week as at present. But improvement in these matters can hardly be accomplished without a stronger staff of attendants. Here the proportion of attendants to patients is smaller than commonly prevails in county asylums, and is, in the male division (including in the 16 day attendants a tailor attendant and a shoemaker attendant), one to 13¼; but in the female division (where the day attendants are also 16) one to 17 only.

It must be admitted that the staff is numerically weak.

Perth District Asylum, 1886-7.—An evening class for elementary

education has been formed, and an evening Sunday school meets during the winter months.

On account of overcrowding it has been necessary to enforce the removal of patients not *bona-fide* paupers.

The estate has been extended by leasing between 13 and 14 acres for a term of 19 years.

Portsmouth.—A detached hospital has been built and many minor alterations effected during the year.

The Commissioners recommend the formation of a walk round the estate. If this were made probably many of the 283 patients now taking exercise only in the airing courts would no longer be obliged to be so restricted.

Roxburgh, &c., 1885-6.—The main building has been divided into sections, the division walls carried through the roofs, and iron doors fitted up so that all communication between the various sections can be cut off in the case of fire. This is a most judicious precaution.

It is very sad to think that Dr. Grierson, a man for whom his many friends have the sincerest regard, has been compelled to resign his appointment on account of bad health. In all his relations he is a highly admirable man, and of quite unusual culture.

Roxburgh, &c., 1886-7.—The appointment of Dr. J. Carlyle Johnstone as medical superintendent is notified, and Dr. Grierson is retained as consulting physician.

Steady efforts continue to be made to board out such inoffensive unrecovered cases as no longer require asylum treatment, and it is gratifying to note that these efforts meet with the hearty approval and support of most of the Parochial Boards of the District, though Inspectors of Poor still experience considerable difficulty in procuring suitable homes and guardians for their patients. It is now pretty generally understood that the detention in an asylum of a lunatic who does not require asylum treatment is at the same time an injustice to the lunatic and the most expensive method of dealing with him.

Salop and Montgomery.—A very severe outbreak of typhoid occurred. The following extracts from Dr. Strange's report contain matters of interest relating thereto :—

In my monthly report for May I had to record that there had occurred lately several cases of diarrhœa of a severe type, and also stated my belief that they were due to the well water being contaminated with sewage. I reported that drains in the immediate vicinity of the well had been found leaking, and that the drains were defective and badly laid. In June I had to report that a severe outbreak of typhoid fever had occurred, due, in my opinion, to the well becoming polluted with sewage. The outbreak occurred after the heavy storms in May, and at that time a considerable amount of land water, evidently impregnated with sewage, was discovered to be flowing into the well.

It is worthy of note that the earlier pollution of the well, which was probably caused by sewage, gave rise to a severe type of diarrhœa, and that no case of typhoid appeared until after the second pollution caused by the heavy rains (after the drain supposed to have been at fault had been taken away),

and when the pollution was surface water driven through soil previously impregnated with sewage.

The epidemic lasted 11 weeks, 38 were attacked, many of the cases were of a very severe type, and some were rapidly fatal. Eight persons succumbed.

Coincident with the epidemic were several cases of diarrhœa of a severe type.

The whole of the sanitary arrangements have been examined by Mr. Field, who condemns the whole of the drainage.

Somerset and Bath.—For scalding a patient to death an attendant was sentenced to 12 months' imprisonment—a punishment he richly deserved.

Dr. Wade thinks that the passion for dress which prevails amongst asylum nurses, and in which they are too often encouraged by local tradesmen, frequently leads them into debt, and it is, he fears, to get away from debts which they cannot meet that in many cases they move from place to place.

The Commissioners commend an arrangement by which the names of the outdoor working men are called over every morning by the Assistant Medical Officer before they leave their wards, so that the due medical supervision of this class may be secured.

Staffordshire. Burntwood.—The estate has been enlarged by the purchase of some adjoining land, and the erection of the new dining and recreation hall is progressing.

The Commissioners note as a valuable improvement, and one to be applied throughout, the alteration of the locks on single room doors so as to allow of the doors being opened from the outside without using the key, and consequently without noise. This must obviously tend to the comfort of the patients occupying the rooms.

Although the following paragraph from Dr. Spence's report contains no original truth, it refers to a most important subject, one, indeed, at the very basis of successful asylum management:—

The record of work done during the year is a satisfactory one, and employment has been found for over seventy per cent. of the men and as favourable a proportion of the female patients. To induce so large a number of the inmates of a lunatic asylum to engage in useful work involves the expenditure of no small amount of tact and trouble on the part of those who are in direct authority over them, and especially do the charge attendants merit commendation for the thorough and intelligent interest which they take in this important part of their duty, and for the assiduity manifested by them in pressing on the attention of those under them the great benefit to be derived from properly regulated and suitable employment, outdoor as far as practicable, in the treatment of those mentally afflicted. Plenty of walking exercise is the only substitute we have for outdoor work in the case of the women, but this is carried out in a thoroughly systematic manner, so that no female patient who is physically fit to leave the wards and airing courts is debarred from joining the walking parties.

Staffordshire. Stafford.—We regret to find that serious ill-health prevented Mr. Pator writing his annual report.

The number of attendants in some of the wards appears to be smaller than it should be.

Suffolk.—Extensive alterations and improvements are still in progress; and it would appear as if the Visitors had awakened to the necessity of bringing the asylum up to modern requirements.

Mr. Eager reviews his work during the past ten years and its results. It is quite evident that he has laboured under many difficulties and discouragements, and he is to be congratulated that his efforts have not been fruitless, but promise to be more productive in future.

The following extracts from Mr. Eager's report are somewhat long, but as they refer to the maintenance of an efficient staff of nurses and attendants, we think that they are worthy of attention. He is not quite correct in saying that shortening of the hours on duty has never been suggested; it is in practice in some asylums. We are especially pleased to find him recommending that the nursing staff should be changed every eight hours. We have urged the same reform for a number of years, and feel quite sure that in this direction lies the most urgent reform in asylum management. We are strongly of opinion, also, that no attendant or nurse who has left one asylum should be engaged in another. Such an arrangement would not have beneficial results :—

The difficulty of obtaining and retaining the services of suitable persons to act as attendants and nurses does not abate. Some, who, entering on their duties with scant possessions in a carpet bag, work well and honestly for a time, become independent, careless, and neglectful of their duties when they have had time to pull themselves together and become possessors of a trunk and a fair wardrobe. Some, I am sorry to be compelled to believe, leave us in order to avoid the payment of debts which they have been unwisely permitted to run up at the shops in the neighbourhood. For the most part inconsistent in their demands and ever seeking for that El Dorado where no work and all the luxuries of life can be obtained, they give notice on the least reprimand being given them, even though it may be for dereliction of duty, often of the most flagrant kind. As a rule I refuse all attendants who have held posts in other asylums, from experience looking upon them as wanderers not easily satisfied and frequently ungrateful. It is common to receive applications from attendants who, having passed through four or five asylums, are willing to commence at the first step of the ladder here, and who, if they had remained contentedly in their first post, might have been a good many pounds a year better off with the better prospect of a pension. As I have frequently stated, I believe this unrest to be due to a great extent to the fact that these people are perfectly well aware that if they leave one asylum they will be able without much difficulty to obtain a post in another, as it is well known amongst them that at many of these institutions the authorities seem only too anxious to pick up anyone who has had a few months' knowledge of a lunatic. The authorities of the asylums where this course is adopted do not seem, however, to benefit much if I may judge from the frequent applications I get for the characters of those who have left or who are leaving us. Whilst insisting on the folly as far as they are concerned of the constant movement of our attendants, and on the bad effects upon our patients of the frequent changes in the staff and the consequent influx of new and untried hands, it must not be supposed that I do not fully recognize the trying and arduous nature of an attendant's duties—indeed, none but those who are constantly amongst the insane can be fully cognizant either of the irksomeness of the daily routine or of the responsibility, and the constant exposure to

danger and liability to injury, which these duties impose; and those who perform their duties faithfully deserve indeed from all the greatest consideration. Higher wages, an improved dietary, the provision of rooms fitted up with every requisite for amusement, such as pianos, billiard and bagatelle tables, &c., where attendants may associate during their days and evenings off duty, more comfortable private sleeping-rooms—all these have been provided during the past few years in many asylums with the view of making the asylum service more acceptable, though, I fear, not with a very good result.

No shortening of the hours on duty has, however, as far as I am aware, ever been suggested, and yet I think that, considering the harassing and monotonous nature of the duties to be performed, it can scarcely be expected that an attendant can continue to act conscientiously and actively for twelve or thirteen hours daily, even in wards where the least troublesome class of cases are located. Much less, then, can the imposition of such hours be defended where their duties compel them to be constantly in close contact with the most demented, filthy, and often impulsive persons, and where they must of necessity have much to do which is exceedingly unpleasant and revolting.

If, then, we are to provide for our patients that amount of undivided attention, careful tenderness, and active supervision which is absolutely necessary for their proper care and treatment, if the improvement of their condition is desired and accidents are to be prevented, I believe the nursing staff should be changed at least thrice in twenty-four hours, and that when off duty attendants and nurses should be enabled to get right away from both wards and patients. This can only be done by providing considerable accommodation in a distant part of the grounds, to which should be attached a pleasure garden, where tennis, croquet, and such like games might be engaged in. I am surprised that in those asylums where, owing to the treatment of large numbers together, the maintenance cost has fallen so much below the average, no reduction in the hours of the attendants' duties has ever been attempted with the object of remedying the evil of frequent changes, and of securing a better and more responsible nursing system.

A good and varied dietary, comfortable quarters away from the scenes of their daily labour, less duty and more means of healthy amusement and occupation—these combined are in my opinion the only means by which we shall be able to secure and retain the sort of persons we require for asylum service.

Surrey. Wandsworth.—Gratuities from the Benevolent Fund were presented to 40 patients on being discharged recovered. Sums amounting to no less than £150 were given to those attendants who, by long and efficient service, deserved them.

Many patients complained to the Commissioners that they never saw the Committee of Visitors. The Commissioners rightly think that every patient ought to have opportunity of making known his complaints to the Visitors at each time of their meeting, and that it is especially desirable that the working patients should be able to do so, as it is for the most part patients who do useful work who are the most likely to be soon fit for trial or discharge.

The amount of restraint is unusual for an English asylum.

Surrey. Cane Hill.—The visitors note that a memorial is being adopted by some of the Boards of Guardians in the county for presentation to Quarter Sessions, suggesting that representations may be made to Her Majesty's Government with the view of getting the Parliamentary grant now made towards the cost of the maintenance of pauper lunatics in county asylums extended so as to

include all pauper lunatics whether they are in workhouses or asylums. The visitors concur in the prayer of the memorial, and think that the proposed extension, if adopted, might have the effect of inducing the Guardians to provide special accommodation for more of the old harmless imbeciles.

With a view to retain the asylum for those patients only who had acquired a legal settlement or who were properly chargeable to Unions in the county, the visitors caused an inquiry to be made with regard to several who had formerly been inmates of Bethlem Hospital and who had been removed to the asylum by officers of the St. Saviour's Union. The result was that out of 24 test cases nearly all of them were found to have settlements in Unions in other counties.

The visitors think that the present law should be amended so as to give the county authority or the Committee of Visitors of an asylum the same power to obtain orders of adjudication as is now possessed by a Board of Guardians.

Surrey. Brookwood.—Concerning general paralysis Dr. Barton reports :—

> On going carefully through the previous admissions I find there has been a steady decrease in the number of cases suffering from this fatal disease for some years past. This is very marked on comparing the numbers admitted during the previous ten years. I find the proportion of general paralysis to the admissions during the first half of the decade was nearly 13 per cent., while for the latter half it was only barely 6 per cent. To what cause this decrease may be due I am not prepared to say, but I am inclined to hold with the theory that the existence of general paralysis amongst the pauper classes has been influenced by the prolonged depression of trade and privation consequent thereon, which precludes indulgence in the same degree as formerly in dissipation and drink.
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> A post-mortem examination was made in every case.

Sussex.—The following paragraphs from Dr. Williams's report refer to an important matter which has, so far as we know, received little or no attention :—

> During the last year or two there has been a marked increase in the use of Section lxviii. of 16 and 17 Vic., c. 97, by the provisions of which a lunatic, *not a pauper*, not under proper care and control, can be sent to an asylum on the order of two justices.
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> Many of the cases so sent, however, have been paupers, or the fact of their having become insane has pauperized them. Nevertheless, the word *pauper* was often struck out of the magistrates' "order," although the Relieving Officer certified in the "statement" on the same sheet of paper that the lunatic is chargeable to such and such an Union. If the alleged lunatic is not a pauper it is doubtless necessary to proceed under this section, but if a pauper, to proceed under it would appear to be unnecessary. Formerly this section was only used occasionally, and in cases of great emergency, such as when a lunatic at large was rendering himself obnoxious or dangerous to the public and the friends would not interfere, and the spirit of the section would seem to show that it was specially framed to meet such cases.
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> There is, however, considerable hardship in the working of this section, as will be seen from the following record of a case which is by no means an isolated one. A gentleman of considerable independent means, well educated

and refined, becomes insane, and has strong homicidal and suicidal impulses. He is dangerous both to himself and others, and becomes aggressive in the public thoroughfares. His relations, from various reasons, refrain to take the necessary steps to place him in safety. He falls into the hands of the police; is brought before two justices, who call to their assistance a medical man. He is undoubtedly insane and a danger to the public. They sign an order for his removal to the County Lunatic Asylum, where he has to associate with and be treated exactly in the same way as the pauper lunatics. There he must remain as long as he is insane unless the friends or relations come forward and undertake to be responsible for him, or unless he is made a Chancery lunatic, which takes months, possibly years, to accomplish. To remedy this injustice the Act would seem to require to be amended so as to give the justices power to compel the nearest of kin to take the necessary steps for the lunatic's safe custody, or else to order his removal to some asylum or place where the accommodation will be commensurate with his means and education.

Warwick.—This asylum is now no longer capable of receiving all the patients belonging to the county. In order to postpone the necessity of building the required accommodation a contract has been entered into with the Birmingham asylums for five years for the reception of not more than 100 patients.

Dr. Sankey points out that general paralysis is greatly on the increase in Warwickshire.

	Males.	Females.	Total deaths.
1872-76	17	1	18
1877-81	29	4	33
1882-86	40	10	50

Arrangements have been made for providing a suitable Divine service for Roman Catholic patients. This is much to be commended, and is worthy of imitation in many asylums.

Wilts.—The following paragraph from Dr. Bowes's report records an unusual form of death in asylums:—

> Accidents in asylums have occurred and deaths been caused by eating yew and other poisonous shrubs, but there appears to be no recorded instance of lunatics confined in an asylum eating and dying from taking poisonous fungi, and the following casualty is therefore unique:—On August 28th 130 female patients, in charge of 10 nurses, spent the afternoon and had tea under the trees in the cricket ground. Nothing unusual was noticed until the next morning, when two of the patients were seized with pain in the stomach and violent retching; they presented all the symptoms of irritant poisoning. The cause, by the confession of one of the sufferers, became known, and the usual treatment was adopted, with, in the case of the healthy and strong patient, a good result, but the other, who was delicate and diseased (suffering from fatty degeneration of organs), succumbed after forty-eight hours' suffering.

Wonford House.—A considerable number of structural alterations and improvements, including the remodelling of the drainage and sanitary arrangements, were effected during the year.

It is very gratifying to find that at the end of the year no fewer than 65 patients were maintained at rates below the actual cost.

The seaside house at Dawlish is found of increasing service. Two carriages are now used for the patients, and are a source of much pleasure and benefit.

Dr. Deas submits a number of improvements to be undertaken when opportunity offers. They would, no doubt, add much to the efficiency of the hospital.

Worcester.—A new chapel has been opened and an excellent organ provided. The building accommodates 720 persons.

The Commissioners say :—

> We were gratified to hear that the Committee here not only visit the wards frequently, but give to every patient an opportunity of their bringing forward any grievance, ticking off the name of each patient on the list so that he or she has that face-to-face interview with a magistrate, which contents so many.

In too many asylums, we fear, the Visitors avoid the visits to the patients as much as possible, and do not devote that time which this most important, though disagreeable, duty demands.

Yorkshire. East Riding.—A fever hospital has been erected, at a cost of £1,300.

Dr. Macleod's home was entirely destroyed by fire, but has been rebuilt. It is highly creditable to the discipline of the establishment that during the fire there was no vestige of panic.

Yorkshire. North Riding.—Occupation, the best form of treatment, seems to be judiciously pursued at this asylum. Mr. Hingston says :—

> Occupation of a varied nature has thus been provided for the patients, and the benefits accruing to them thereby are very great. The attendants are always instructed that the patients who are working under them are employed, not so much for the value of their work, which is sometimes less than worthless, but for the good they derive from the exercise and occupation. Comparatively few of the men are ever idle, the very worst, comprising those too dangerous to be allowed to handle tools, being provided with work of some kind, such as rolling the lawns or cricket ground, wheeling soil, &c., and in many instances the fresh air and healthy exercise thus obtained have proved most beneficial, and have led to good results.

West Riding. Wakefield.—In spite of all that has been done to bring this building up to modern requirements some of the wards must be dismal in the extreme, seeing that the Commissioners note the fact that at the time of their visit (November) it was necessary to light the gas at mid-day. They very properly conclude that this state of the wards must have a prejudicial effect on the patients.

As many as 250 men and 100 women are entirely confined to the airing courts for exercise.

Many improvements continue to be effected. These include a new mortuary, constructed upon the most approved principles.

Dr. Bevan Lewis is to be congratulated on having reduced the hours of his nursing staff. He says :—

> In April last, the question of long hours on duty having been brought before the Committee for consideration, I was authorized to introduce certain changes in the organization of our nursing staff, such as would practically abolish evening duty after 8.30 p.m. It was considered that the time on duty was unnecessarily prolonged in the case of the day attendants, and that such a concession

would be both reasonable and beneficial. The change was first tried on the male side, and, having worked satisfactorily, was subsequently adopted on the female side. I can now report in very favourable terms of the new departure which has been highly appreciated by the nursing staff, in whose interest it was made.

Yorkshire. South.—The Committee have sanctioned some reduction of the working hours of the male attendants, and a necessary increase of the staff to admit of this being carried into effect. It is to be hoped that this arrangement will be extended to the nurses as speedily as possible.

At the urgent recommendation of the Commissioners the Committee decided to grant to patients discharged on trial a weekly sum equivalent to the cost of their maintenance in the asylum. Dr. Mitchell hopes that such beneficial results will justify this plan of assisting patients at a most critical time, as are stated to have followed its adoption elsewhere.

York Retreat.—This institution shows signs of continued success. A Convalescent Home has been opened at Scarborough for ten lady patients, and also for those patients who every summer visit the sea side. From personal inspection we can speak highly of the arrangements made to secure the comfort and the safety of its inmates.

York Lunatic Asylum.—This asylum has been vastly improved by the alterations recently made under Dr. Hitchcock's supervision. An excellent bowling alley has been added. The improvement in the appearance of the asylum is quite surprising to any one acquainted with it in former years.

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2. *Scandinavian Retrospect.*

(*Continued from p.* 432.)

II. *Medical Gymnastics or Movement Cure.*

By Ellen F. White, Certificated by the Royal Gymnastic Central Institute at Stockholm.

The term "Medical Gymnastics" is used to express the treatment of disease by movements. Ling, an officer in the Swedish Army, and the originator of this system, received his first inspiration on the subject by finding that fencing cured the lameness in his own arm. From this simple fact he was drawn on to think, why should not other affections be also cured by means of movements. So he went through a complete course of anatomy, physiology, and pathology, and gradually evolved the whole of his system, which embraces, not only medical, but also military and hygienic or educational gymnastics. The object of hygienic gymnastics is to preserve the balance of power in the body; that of medical gymnastics is to restore the balance when it has been

disturbed by loss of proportion between the parts. The blood is the carrier of life and of disease. If the stream to any part be above or below the normal supply, disease is the result. Can the flow and the actual quality of the blood be regulated by gymnastics? The experienced gymnast at once answers "Yes." The very fact that the hands and feet become warm through exercise shows that the sluggish circulation has been quickened, and that more and fresh blood has been brought to them from some other part which has in consequence become poorer, perhaps to its own benefit. Ling, by his marvellously clear insight into anatomy and physiology, was able to think out and arrange movements for all parts of the body, by means of which the supply might be decreased or increased, or the nutritive quality improved, all according to the exigencies of the case. Nor is the control of the circulation the only weapon in the hand of the gymnast. By constant pressure the form and direction of the parts may be changed, and swellings caused by accumulation of matter may be reduced and absorbed.

Movements are of two kinds—active and passive. The active movements may be "free," that is without any extraneous help; or "compound," that is with the assistance of the operator. The nature and the amount of required assistance varies with the strength and capacity of the patient. In "free" movements the patient has only himself to depend on, and unless he has already had some gymnastic training the result will be a wavering, uncertain exercise, lacking form and concentration. The touch of a practised hand giving support or resistance where, and only where and when actually needed, at once guides the refractory limb in the right direction; and firm and decided movement is the result. Slow and quick movements act differently, and the operator can regulate the time and strength of a movement by the way in which he weighs, lengthens, or shortens the natural levers in the body. Take, for instance, "double plane-arm bending." The patient's arms are stretched forwards, with the hands the same height as the shoulders, and rather more than shoulder breadth apart. The movement to be executed is to move the arms in the same plane, without bending the arms, as far back as they will go without bringing the shoulders forward. The gymnast places his hands behind the wrists of the patient, giving more or less resistance. By placing the hands behind the patient's fingers the force required for the movement is much increased.

Apparatus also is used, chiefly as the means of isolating the movements to a certain part of the body; or as the means of obtaining complete relaxation of the muscles under a passive movement.

Passive movements are described as absorbent in their effects, and belong peculiarly to medical gymnastics. In these the patient must not contract his muscles at all, but let himself be perfectly "limp." For most people this is not at all easy. At the first

touch the muscles contract, building up a barrier between the operator and his work, rendering the operation far more difficult, and sometimes nullifying entirely the effect to be produced.

"Massage" forms one part of the passive treatment. It is given on the bare skin, and is resorted to chiefly for rheumatism and for swellings of all kinds, in conjunction with active and other passive movements for increasing the circulation. Important as massage is, it forms only a part of the passive treatment. Other passive movements are percussions, vibrations, frictions, slapping, kneading, &c., with nerve and vein and artery pressures. Most of these have a stimulating effect on the nerves. I saw one little girl who had no power of dorsal flexion in her right wrist. As the doctor pressed firmly upon the radial nerve the hand lifted itself for a few moments and then sank back to its former position, lifting itself again under renewed pressure. The doctor told me that when she first came to him the lifting of the hand had been very feeble. She had now begun to lift it herself a little after each nerve pressure, and he hoped to effect a complete cure after a few months.

Compression of the jugular vein is sometimes used for headaches. By pressure on the pneumogastric nerve palpitation of the heart may be checked. Percussion is given either with the half-closed fist as "sacral" percussion, or with the ulnar side of the hand, as on the head or spine.

In the treatment of the patient the whole system is considered, and not only the local evil. Thus headaches would be treated by specific movements, but also by movements directed at the root of the evil, whatever it may be. The health of the whole body depending on the blood, the organs concerned in preparing the blood for use, and for regulating its circulation, are first to be considered. Each prescription begins with a respiratory movement to increase the amount of air inspired, and consequently the quantity of oxygen in the blood. Hence it is important that the air to be inspired should be as pure as possible. Then comes a movement for the circulation, bringing all the muscles of the body into play. Then the local disease is attended to; and, lastly, the digestive organs, to stimulate secretion and absorption in the alimentary canal, and to strengthen the action of the bowels. By different positions and points of support, an infinite variety of movements may be produced suitable to all ages and all degrees of strength. The same movements may be taken standing, sitting, reclining, lying, or kneeling. And even these five fundamental positions may be very much modified and varied. In most cases the simpler the movement the better, for the action is then more concentrated, and the form is more easy to watch.

Indigestion is most effectually cured by gymnastics; it is one of the diseases most frequently handled in the gymnasium. Dr. Classon, Professor of Anatomy in Upsala, says, in relation to this

subject :—"It is from the digestive and other mucous membranes and glands that the blood supply to the working muscles is obtained. Gymnastics can also be made, in the sense alluded to, to regulate the blood quantity and the function of these organs. The increased waste and repair in the working muscles afford means of reacting on the digestive apparatus. It has been said that in gymnastics is to be found the only true stomachic we possess. This expression becomes more correct, nay, almost literally true, if we take into consideration the muscular coat of the stomach and intestines. An increased activity in the voluntary muscles produces, for example, a similar activity, and consequently greater development, in the involuntary muscles."*

Many patients with obstinate constipation have been effectually cured, as well as those with diarrhœa, a fact which might be of some value as a preventive in cholera, but only, perhaps, if given immediately upon the appearance of any premonitory symptoms. I am told that Mr. Bampfield, who was a Navy surgeon in the early part of this century, had great opportunities of observing the symptoms of Asiatic cholera in Calcutta, and he found that the cramps attending its attack could always be entirely relieved by pressure; by which, also, he used to cure ordinary cramps.

Patients with disease of the heart apply frequently for relief, which can be given in almost all cases. Of course, where there is organic disease of long standing cure cannot be expected; but great relief may be given, especially where the movements can be repeated many times a day.

Hypertrophy of the heart and the nervous palpitations so frequently following general debility are almost without exception cured by gymnastics. The movements are "derivative," thus lessening the pressure on the heart. "Derivative" or "Abstractive" movements are those which conduct the blood away from any part. Thus foot rotation is a derivative for the head, arm movements for the chest, especially if they be passive and do not increase the action of the heart. Vibrations, percussions, and passive movements with feet and under arm, and very gentle respiratory movements are the chief exercises used in such cases, the operator keeping very strict watch that the action of the heart is not increased.

We have now a little girl under treatment for valvular insufficiency, caused by rheumatic fever, and curvature of the spine. After every trunk exercise a "derivative" movement is given to quiet the action of the heart. The peculiar whistling sound is now scarcely audible, and her back is nearly straight. [During the four or five weeks since the foregoing was written a complete cure has been effected. The girl has been again examined by her

* From "Kinetic Jottings," by Professor Georgii (p. 252).

father, Dr. Södermark, and he declares that he cannot now trace any sign of valvular insufficiency or other disease in her heart.]

In the early stages of consumption a complete cure may be effected. In this disease great pains are taken to widen the chest and to improve the digestion and circulation. A gentleman of consumptive tendency after six months' treatment had gained three inches in width across the chest, with a corresponding improvement in health. He now hopes to be able to settle down at home instead of wandering about the Continent in search of health.

Something ought now to be said about spinal complaints. In cases of acute inflammation no active movements can be even attempted; and where the bones have grown together the back cannot be straightened again. But the chest can be widened, the general health improved, and the patient enabled to hold himself up instead of depending on artificial support.

The treatment for curvatures, where there is no complication with inflammation, has for its object to make the muscles contract on the convex side, thereby stretching the too strongly contracted muscles on the concave side. The exercises must be most carefully watched, and should never be taken save with bare back, so that the operator can see the effect of each exercise and watch the progress made from day to day. There is a very great variety of movements for this deformity and all its complications.

In his Fothergillian Prize Essay on the spine Mr. Bampfield gives movements, both active and passive, with and without the aid of the elaborate mechanical contrivances then in use for the cure of curvature by the active exercise of the muscles. The movements were to be continued "till fatigue be produced," which was to be succeeded by an interval of complete rest in the horizontal position.

By the use of stays and other supports the back may be held straight, but no strength can be given by them to the weakened muscles, which grow weaker day by day from disuse. The length of time necessary to effect a cure depends very much upon the strength and capacity of the patient, and also on his degree of stiffness. Two or three months are often enough to strengthen the back if the curvature be slight, and the patient bring his will to help in maintaining a good position out of the gymnasium. It is better to give milder movements twice or three times a day than to tire-out the patient with strong movements once a day.

Here, also, attention must be paid to the general health and the style of the clothing. The female clothing is quite as inconvenient in Sweden as in England, with stays and improvers, buttons, bands, and strings almost endless, and the dress tight across the chest. One little girl now under treatment for a double curvature was told to make her things fasten down the back to facilitate exposing the spine to view under the exercises. She simply turned

them round and put them on, hind-before, thus giving at the same time more room for her chest.

Rheumatism, sprains, and stiff joints and swellings of all kinds are treated by massage in conjunction with active and other passive movements, given while the muscles are pliable from the massage, thus slowly accustoming them to contract freely.

Sprains may be cured very quickly. The manipulation should begin at once, and should be repeated twice or three times a day. For stiffness after a fall the remedy is rapid. I was calling one day at a friend's house and found the little boy on the sofa, very unwilling to move. He had slipped on the polished floor and bruised his leg, so that it was painful to walk. Much against his will, I began to rub him, and in a quarter of an hour sent him back to play in the nursery, much to the amazement of his father.

In disorders of the thumb, arising very often from writing and from various mechanical pursuits, massage is used with active and passive movements, rotations, bendings, and stretchings for the whole arm and for each individual joint. This being a local affection of the muscles, they require strengthening by improving the circulation and action of the nerves.

Adhesions, whether with rheumatism or otherwise, are broken up with more or less powerful massage, succeeded by a forcible bending of the joint as far back as possible. A cure is thus effected by slow degrees, depending very much upon the nature of the case, its cause, and the length of its duration.

Hip disease in like manner is very successfully treated even when the abscesses have formed and are actually open, improvement often being visible almost from day to day.

In nervous twitchings and convulsions very great benefit is derived from the movement cure. In this case the muscles are gradually brought under the perfect control of the will.

Hyphochondria, hysteria, and other nervous affections are frequently treated in this manner with good result. Under such rational occupation, and exercise of the mind in conjunction with the body, the mind also recovers its balance, its health improving with that of the body.

In cases of insanity, on the other hand, the body often seems to retain its healthy condition. But seeing how seriously in many persons the state of the optic nerve, for example, is said to be affected by a slight disturbance of the spinal balance or other condition from so apparently trivial a cause as that of wearing high-heeled boots, it would be but reasonable to expect that some other of the brain-nerves also may be brought into a healthy condition by operating upon the spinal system through properly directed movements. How far the other sensory nerves may be influenced by spinal action remains yet to be investigated; but other brain-nerves which are connected with the internal organs of respiration, circulation, and digestion, and with certain muscles also, may in

any case be influenced by improved spinal action through the aid of properly directed movements.

We must always keep in mind, and here especially, that the use of gymnastics, whether hygienic or medical, is *not* to develop or strengthen the muscles or the muscular system, but to preserve, or it may be to restore, the proper balance between all the vital functions of the body. When these are in proper order the proportionate strength of the muscles is a natural consequence.

Unless the movements are perfectly passive they involve a systematic expenditure of brain power in order to execute the movements correctly. This expenditure must be specially and carefully provided against. An ill-directed energy of the brain may be then guided to other more wholesome channels, as one might set a child with a so-called "mischievous tendency" to some manual labour to prevent its spending its energies in doing mischief.

Nervous irritability is often a precursor of settled madness. But the effects of gymnastics on insanity, arising from organic disease of the brain, have been, as yet, but little studied. It is unlikely that any relief in such disease would be afforded by working upon the cerebral nerves. Where, however, the insanity is known to have arisen from pressure, from imperfect circulation, or from derangement of some other parts which may be reached and handled by gymnastics, a cure is often effected, the madness disappearing with the removal of the physical derangement; the quieting effects of the movements on the nerves assisting the cure. There is evidently a rich field open for investigation in both these directions, with the prospect of great results, if taken up as a special branch of the system. The same may be said as to the application of gymnastics to specially female disorders, which is, as yet, much questioned by the medical faculty. Still, there are some gymnasts who make this branch their speciality with more or less success.

Chronic diseases are those which come, at present, more frequently under treatment, but the practice of treating acute cases by gymnastics is gaining ground. It is expected that in course of time medical gymnastics will be almost entirely under medical control.

Young medical students are encouraged to go through the course of instruction given at the Institute. Students are not admitted under 20 or over 30 years of age. The qualifications required of all students who apply for admittance to the Institute are: (1) A certificate of health and freedom from organic disease and deformity, flat foot, or other defect. (2) A good school certificate; and, for native candidates (3) A certificate of confirmation, or failing that, as in the case of some foreigners, a personal recommendation from some clergyman. A foreigner must, of course, have mastered the language to enable him to follow the given course of instruction readily and accurately.

Sweden is now over-run with so-called gymnasts who have been a few months, or it may be a few weeks, under some teacher, and who then begin to practice on their own account, bringing great discredit on the whole system by their faulty and inefficient work. It is to be hoped that in a short time no one will be allowed to practice without a diploma.

On leaving the Institute the student has acquired a certain amount of practical as well as theoretical knowledge. But he (or she) still lacks the requisite experience, and it becomes advisable for him to work for a year or more under some able gymnast before depending entirely on himself.

In medical gymnastics the brunt of the work falls upon the hands and arms, and a large firm hand is a great advantage. Delicate, tapering, flexible fingers are quite the reverse. Height also is an advantage if strength be in proportion. A short gymnast has some difficulty in handling a large and heavy patient. The eye also must be trained to watch accurately the effect of the movements, and, in conjunction with the hand, to detect the slightest deviation from the correct form.

Anatomy and physiology are needed for the educational branch. How much more so are they required for the medical. Some little knowledge of pathology also is imparted, but more careful instruction is given in the treatment of diseases. The diagnosis is commonly given by a physician, the treatment then being prescribed by the gymnast. The more expert and experienced gymnasts often draw up their own diagnosis. If trained assistants having no theoretical knowledge are employed very careful supervision is necessary.

A certain amount of apparatus is requisite, but this need be neither elaborate nor expensive. Two wooden stools, a bench, over which the patient can sit astride, a couch with a hinged back, which can be placed at any angle, or lowered to a level with the seat, and a horizontal bar, which can be raised or lowered to any height, are all that are really required in ordinary cases. The usual furniture of a room, a sofa, music stool, &c., can all be used if the gymnastics are given in the patient's home.

It would be impossible in such a cursory sketch as this to go into further details. But I would add that Professor Georgii's "Kinetic Jottings" will be found to contain much interesting matter on the subject of the "Movement Cure." I have but indicated some few of the many ways in which the system may be applied. It will be seen from what has been said that the course of instruction must be tolerably severe, and indeed I was cautioned seriously against attempting it. The requisite skill of hand and accuracy of eye can be acquired only after long and persevering practice. It is not until after a year spent in daily practice upon one another that students are allowed to help with patients. The daily practice in educational gymnastics is of great assistance in training the eye to take in different forms with accuracy.

A great future, I hope, is before us in England if only the leading members of the profession can be led to look carefully and fully into the working of the system, and to test its true value by their own observation of its results. I have shown what is required of those who come to learn. Should there be any who are disposed by similar training in this Institution to devote themselves to the relief of those many cases of bodily suffering which cannot be reached so readily or effectually by the ordinary modes of medical treatment, I cannot but commend to their notice the farewell words addressed by Professor Törngren to myself: "Should any other countrywoman of yours feel inclined to come she would be most heartily welcomed."

Some apology may seem due for my thus venturing to urge this subject so strongly upon the notice of medical men and women in England. I am quite aware that massage has been much used, and with great success. I am aware that something has been done in the way of medical direction of movements for the restoration of the action of the muscles in cases of rheumatism, adhesions, or injury; and there is now in London an institution for giving passive movements by mechanism. But I believe that, comparatively speaking, few have known at all of gymnastics hitherto as more than a mere series of stereotyped exercises, given by persons absolutely without medical qualification or any proper anatomical or physiological knowledge, and given for the exercise of the limbs and the development of the muscles, often it may be to the detriment of the general health, and almost certainly to failure in the case of any special ailment. But impressed as I have been with a deep sense of the value of the system as carried on in the Institute at Stockholm, I would with much deference invite inquiry into its merits, being most anxious that its highly scientific nature should be investigated, and that the true reasons for its highly scientific study should be pointed out, and more generally known and understood.

P.S.—Since the foregoing was written the practice of medical gymnastics has been placed under strict medical supervision, and the course of instruction is becoming more severe. Young medical men taking it up will now have to give two years to the preparatory course, and then one year to the medical. They that have obtained their certificate are now entitled to the prefix (not as it would be in England the suffix) of "Gymnastik Director."

No one may now practice without the certificate of the Royal Central Institute, and no patient may be treated without a declaration or recommendation from a physician that the patient may receive medico-gymnastic treatment. The first offence will be punishable as "quackery," the second will be visited with a prohibition to practice, which will be a deprivation of the benefits of that certificate. So that they who attempt to take patients with-

out a doctor's declaration, as well as they who have not passed the examination, are alike restricted. The propriety of this must be apparent to all who have made themselves acquainted with the system, for they will see that great and irremediable mischief may be done by an ill-advised application of this mode of cure.

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3. *French Retrospect.*

By D. Hack Tuke, F.R.C.P.

Reports on the administration of the departments for Epileptics and for Idiots and Imbecile Children at the Bicêtre.

We regret that a notice of these admirable Reports which have appeared yearly under the auspices of the Progrès Médical, has not found a place before now in our Journal. With a limited space at our command, and an unlimited material making demands upon that space, we are compelled to omit much of which the intrinsic merit calls for notice.

The reports consist each of two parts, the first of which deals with the history of the development of the above-named departments, and in particular records the patient, untiring endeavours which the *chefs de service* have brought to the improvement of the administration of these departments, including the formation of a separate department for the treatment of children who are weakminded and idiots. This part has, of course, a special interest for the great People whom it concerns, and it will suffice for us to express our hearty sympathy with the movement and our pleasure at the progress made. To us as Englishmen it is most gratifying to find that our own institutions of Earlswood and Darenth have such commendation from our neighbours.

The second part is clinical, and contains much that interests the specialist in nervous diseases, much that interests the worker in general medicine. An exhaustive critique of this part would take us beyond the limits assigned, but we may select here and there from the 1885 volume. The records of twenty-one cases of epilepsy treated by means of curare are given. The treatment was by subcutaneous injection, and was maintained for periods of three and six months. The conclusions are that the drug is not amongst those serviceable in epilepsy. Of the twenty-one cases one only was distinctly benefited. With these results, it is scarcely worth while giving details as to doses, etc.

Twelve cases of epilepsy treated with sclerotic acid, either by the mouth or subcutaneously, derived benefit in five cases. Four of these cases were under treatment more than a year. The results are described as "peu encourageants," which probably means that, in the cases benefited, the benefit was not striking. A foot-note points out that these negative results accord with the experience of Dr. Gowers as to the uselessness of sclerotic acid in epilepsy.

An outbreak of rötheln at the Bicêtre furnished the materials for an inquiry into the nature of this specific exanthem. It is pointed out that

the affinities of this affection are with measles and not with scarlet fever. The likeness to measles they would make to be that, not of twin-sisters, but of half-sisters. "Non deux sœurs jumelles, mais à un certain degré, demi-sœurs." They further suggest that the likeness is something of the kind which obtains between variola and varicella! We are tempted to ask what is that likeness? That no real advance has been made in this vexed question will become apparent, we think, if inquirers will turn to p. 107 and consult the "diagnostic." We must confess to some malice in having picked up this apple of discord grown on *arriéré* soil. A case of some interest of congenital idiocy with horse-shoe kidney is detailed. There was a very marked phimosis in this case, which apart from its interest in relation to malformation of other parts, presents this further suggestion that it, and not the horse-shoe kidney, with its anteriorly-placed ureters was the cause of the micturition trouble observed.

Some admirable plates illustrate an interesting case of epilepsy with cerebral hæmorrhage.

These few selections may illustrate the kind of work which the Bicêtre reports undertake. It is clearly the kind of work which large institutions alone can undertake. We heartily commend the great zeal, which must lead to the accumulation of a most valuable *matériel* of clinical and pathological results. H. S.

L'Automatisme Somnambulique devant les Tribunaux. Par Dr. Paul Garnier. Paris: J. B. Baillière et Fils, 1887.

La Psychologie du Raisonnement; Recherches Expérimentales par L'Hypnotisme. Par Alfred Binet. Paris: Felix Alcan, Editeur, 1886.

Animal Magnetism. By Alfred Binet and Charles Féré. London: Kegan Paul, Trench and Co., 1887. (The International Scientific Series.)

We are glad to see the subject here treated of placed in such trustworthy hands, and only regret the title of the book. It is a pity to retain this misleading term, especially when "hypnotism" is now in general use. We hope to return to this work in our next number, in the meantime recommending our readers to obtain the volume.

Le Langage Intérieur et les Diverses Formes de L'Aphasie. Par Gilbert Ballet. Paris: Felix Alcan, Editeur, 1886.

Les Phénomènes Affectifs et les Lois de leur Apparition. Par Fr. Paulhan. Paris: Felix Alcan, Editeur, 1887.

The number of works on hypnotism and allied subjects which have appeared in France during the last two or three years is so great that it is difficult for the reviewer to keep pace with them. They show the extraordinary interest which hypnotism has excited, and how its bearing upon psychology, both in its pure and medical aspect, has become evident to French physicians. Dr. Garnier is well qualified to express an opinion on somnambulism, from his position in connection with the

special infirmary for the insane who come under the notice of the Paris police. He more especially regards the subject of hypnotism in its legal aspects. Blind impulses due to somnambulism are obviously of extreme importance, the subject being totally unconscious of the acts he has committed. He reports the case of a young man charged with theft.*

M. Binet has written a book in a scientific spirit, in which psychological questions are viewed in their relations to hypnotism, not by any means exclusively, but as a help to other methods of inquiry. His theory attempts to explain the process of reasoning by means of images and sensations, and by these properties alone. Nothing intervenes; hence, strictly speaking, the expression, "I reason," is not correct. "It is incorrect to say that a judgment is the act by which the mind compares. It is as if I said that chemical combination is the act by which chemistry reunites two bodies. As the combination of bodies directly results from their properties, so mental combinations, and especially reason, result directly from the properties of images" (p. 161).

M. Ballet's book is written in a very clear style, and the title is happily chosen as representing the extraordinary phenomena so little realized by the world in general, which occur in consequence of subjective conditions which form a world of their own. The work bears more especially upon the different forms of aphasia. The condition known as word-deafness and that of word-blindness are described lucidly, assisted by the diagram or scheme of M. Charcot. Thus, with the infant acquiring the idea of such an object as a bell, this sounds in its ear, the vibrations are transmitted by means of the auditory nerve as far as the common auditory centre, that is to say that portion of the cortex whose function it is to perceive sounds; the vibration and commotion are preserved by the cerebral cells, which henceforth are differentiated. The sound of the bell will become part of the "deposits," so to speak, of the brain, and the deposit will be persistent and durable according to the frequency with which the differentiated cells perceive the vibrations of the bell. The infant who experiences the sensation and remembers the sound has not yet the *idea* of the bell. This presupposes, in effect, the association of different memories and images resulting from many sensorial impressions—the visual impression which will reveal to the subject the general form of the object, its relief, its colour, and the tactile relation which will serve to render the form more precise, and give the notion of the consistency of the bell. In short, the infant will have a complete idea of the bell only at the moment when the intelligence will *associate* the various auditory, visual, and tactile images with one another.

Manuel Pratique de Médecine Mentale; par M. Régis. *Avec une Preface,* par M. Benjamin Ball. Paris: Octave Doin. 1885.

Too long a time has been allowed to elapse between the appearance

* A report of this interesting case will appear in our next number.—Eds.

of this work and our notice of it. We commend this Manual for what it professes to be—a practical guide to mental medicine in a portable form. It is not necessary to analyze the book. A few words may be said on the section on "*manie suraigue*," or *délire aigu*. Mental physicians in England are but too familiar with Acute Delirious Mania and its most serious character. M. Régis' description of the symptoms would seem, however, to mark a more intensely fatal condition of the system than the form which usually presents itself to us in England. He observes that the correct way of regarding it is to admit a state of hyper-acute mania, sometimes *simple*, consequently without any lesion, and sometimes *associated* with other morbid conditions, as general paralysis and alcoholism, in which there are certain morbid changes. Then follows the description:—"*Délire aigu* is almost always preceded by a stage of premonitory depression, which in certain cases leads one to suppose that the patient labours under an attack of melancholia. Shortly agitation supervenes, and in a few days, sometimes in a few hours, it reaches its highest point of acuteness. The tongue becomes dry, fever is lit up, the pulse exceeds 120, the temperature rapidly rises to between 103·5 and 105 ; the head is hot, the eyes haggard, the skin covered with greasy perspiration. The patient looks terrified, he is a prey to extreme agitation ; he utters incessant cries, constantly spits, or the saliva runs from his mouth ; he has a horror of food, and sometimes approaches a condition of hydrophobia. At this moment cure is still possible, but the disorder is much more likely to end in death, which happens between the fifth and the tenth day. Then the fever increases ; a comatose condition succeeds to the agitation; the pulse becomes more frequent and weaker ; the tongue and the lips become covered with sordes, the breath is fœtid, the breathing oppressed ; the excretions are passed involuntarily ; there is persistent insomnia ; twitchings, convulsions, general or partial, occur ; *typhoid* symptoms follow ; there is diarrhœa, the pulse is imperceptible, the coma becomes more and more profound ; lastly, fainting-fits occur, and the patient dies, either suddenly during syncope or slowly from nervous exhaustion." It will be seen from the above, that the description of acute delirious mania would be incomplete, according to English experience, were so intense a form as this to be the only one presented to the student. A series of cases occur, doubtless requiring the greatest possible care and treatment, marked by delirium and prostration, and usually with some rise of temperature ; but the majority of cases recover if placed promptly under care. We should like to know from French alienists whether they are not familiar with cases of this kind as well as the extreme form described by M. Régis. The Manual commences with a brief, but useful historical sketch of the insane in ancient times. The book is very well got up.

Le cerveau et l'activité cérébrale au point de vue Psycho-physiologique. Par Alexandre Herzen. Paris : J. B. Balliere, 1887.

We are obliged to defer a notice of this able work to our next number.

PART IV.—NOTES AND NEWS.

THE MEDICO-PSYCHOLOGIGAL ASSOCIATION.

The Quarterly Meeting of the Medico-Psychological Association was held at Bethlem Hospital, on November 11th. The chair was occupied by Dr. F. Needham, and there were also present Drs. Robert Baker, Fletcher Beach, David Bower, G. F. Blandford, Edward East, J. E. M. Finch, Robert Jones, H. Rooke Ley, A. McLean, W. J. Mickle, J. D. Mortimer, J. G. McDowall, H. Hayes Newington, J. H. Paul, H. Rayner, H. Sutherland, Alonzo H. Stocker, R. G. Smith, R. Percy Smith, D. Hack Tuke, T. S. Tuke, C. M. Tuke, D. G. Thomson, Samuel Wilks, J. F. Woods, Ernest W. White, T. Outterson Wood, &c.

Dr. D. HACK TUKE, after referring to the gift of £1,000 which had been made by Mrs. Holland, the sister of the late Mr. Gaskell, the interest of which is devoted to an annual prize, announced that he had recently received from Mrs. Holland a letter, saying that her sister and nieces desired to make some addition to the testimonial to her late brother, and enclosing a cheque for £340, the amount having been contributed as follows:—

	£
Mrs. Robson, Lymm, Cheshire	200
Miss Gaskell, Manchester	65
Miss J. Gaskell, Manchester	25
Mrs. W. Grey, Wilmslow, Manchester	25
Miss Gaskell, Weymouth	25
	£340

The cheque had been duly paid into the bank, and it now remained for the Treasurer, Dr. Paul, to have the amount invested when the proper time should arrive, and it would also be included in the trust deed. This additional donation was very welcome.

The PRESIDENT said that this was very satisfactory news, and he felt sure that the Association would wish to convey their thanks to the ladies who had so generously supplemented the former act of benevolence, for which they were indebted to Mrs. Holland (applause).

The following gentlemen were elected members of the Association, viz.:—E. G. Thomas, M.B.Ed., of Caterham Asylum, Surrey; Theo. B. Hyslop, M.B.Ed., Glasgow District Asylum, Bothwell; W. Habgood, L.R.C.P., Ass. Med. Off., Banstead Asylum, Surrey; Eric Sinclair, M.D. Glasgow, Med. Supt. Gladesville Asylum, New South Wales; Chisholm Ross, M.B.Ed., M.D., Sydney, Ass. Med. Off., Gladesville Asylum, New South Wales; Herbert Blaxland, M.R.C.S., Med. Supt., Callan Park Asylum, New South Wales; Leslie Earle, M.D.Edin., Melbourne, Royston, Herts; G. F. Fitzgerald, M.B., B.C. Cantab., County Asylum, Cane Hill, Surrey; Graham A. Reynolds, M.B., C.M., Rarnwood House, Gloucester; J. F. G. Paterson, M.R.C.S., Camberwell House, S.E.; W. A. Anderson, County Asylum, Barming Heath, Kent.

Dr. PERCY SMITH showed the brain of a patient who died recently in Bethlem Hospital, exhibiting the following condition:—Lying between the dura mater and arachnoid, and slightly adherent to the former, was found at the post-mortem examination, extensive hæmorrhagic pachymeningitis.

This condition is roughly symmetrical, and extends over the whole of the upper surface of the brain as exposed by removal of the calvaria, reaching from the anterior edge of the frontal lobe on the left side as far back as the parieto-occipital fissure, while on the right side it extends to the back of the hemisphere. The new membrane also dips for a short distance into the fissure

between the two hemispheres. In front the membrane descends beneath the frontal lobes, passing across from one to the other, and terminating on the left side at the posterior edge of the anterior fossa of the skull; while on the right side it descends partly over the anterior extremity of the temporo-sphenoidal lobe, thus partly lining the middle fossa. Lying in the left middle fossa, and covering the under surface of the left temporo-sphenoidal lobe, was a separate pachymeningitic sac, forming a sort of pad, the posterior end of which lay on the upper surface of the tentorium cerebelli. The membrane was everywhere found to form a closed sac, resembling the pleura in arrangement, and on the right side it was torn in process of removing the skull-cap, and some serous and bloody fluid escaped. Numerous small and large hæmorrhagic patches are scattered throughout the membrane.

The pia mater can be easily raised from the convolutions; these are nowhere wasted, but on the left side slightly flattened. There are no naked-eye changes in the cerebral arteries, and there is no sign of descending changes in the motor tract or spinal cord.

The whole brain is small, and weighs only 36 ounces, but appears to be normal in structure.

Clinical Notes of the Case.—Allan J., æt. 18, admitted into Bethlem Hospital January 1st, 1887.

Family History.—Father was formerly a patient in Bethlem, having been admitted in July, 1874, suffering from general paralysis. He was discharged after sixteen months' stay in the hospital, and subsequently died elsewhere. Of the father's immediate relatives a sister had died of phthisis, and a brother of hydrocephalus, while a maternal uncle had died insane.

As far as could be learnt of the previous history of our patient, he had always been of a happy, sensitive, and emotional disposition, and was able to learn easily and remember well; he had been to school abroad, and could speak German almost perfectly. After leaving school his mother had kept him at home, doing nothing for some months, and eventually he went as a clerk in an office. His illness began early in 1886 with depression of spirits and loss of memory, and from this time he became steadily worse, and on admission to Bethlem he was quite unable to take care of himself. He could not converse, in fact he only repeated the word "see" in answer to any question, and, even when sitting still, would constantly use the same word. He was dirty in habits, restless and troublesome about his food, in fact was completely demented.

His circulation was extremely feeble, his hands being always blue and flabby, but no disease of heart or lungs could be detected. His pupils were equal and acted to light, and his knee-jerks were very brisk.

There was no sign of any ocular or other paralysis. His gait was fairly steady, but he walked with knees and back rather bent. He was not known to masturbate. He became progressively weaker physically, and eventually became unable to walk, and had to sit by the fire in an arm-chair all day. His legs gradually became more and more flexed, he was always moving his hands restlessly, fidgeting with his clothes. He never appeared to be in pain, though his eyebrows were generally drawn up and corrugated. In August it was noticed that his right arm was becoming flexed and rigid, and this condition prevailed more and more till his death; and even after death it was not possible to straighten it; his left arm became slightly flexed and drawn across his body, but was not rigid. He had no convulsions or vomiting. The eyes were examined as recently as the day before his death, and no optic neuritis was found. He died rather suddenly from pneumonia and syncope.

Dr. Fletcher Beach inquired whether there was any history of syphilis. He had had a case some time back with very similar symptoms. It was a child of nine or ten years of age, and the father had been under the care of a physician for syphilis.

Dr. Percy Smith said that in his case there was no history of syphilis so far

as he knew. There was only one other child in the family. One of the children was born five years before the appearance of general paralysis in the father, and the other three years before it.

Dr. SAVAGE said that he felt a special interest in this case from the fact of the very marked pachymeningitis at a very early age. For the last month or two the patient had all the appearance of a person suffering from general paralysis. He had seen the father at Bethlem, and he had also seen the sister, who was perfectly healthy. There was no history to be got at of syphilis in the father, and the boy had no signs of it. Unfortunately, he had no record of the father's post-mortem, but there was the fact that the father died of general paralysis and the son of progressive dementia with pachymeningitis at the age of nineteen.

Dr. WILKS referred to the effusion of blood, saying that in general paralysis there were often distinct apoplectic attacks which might correspond to those special effusions. The condition disclosed was apparently recent, and he apprehended that there had been distinct attacks of effusion in this case.

Dr. RAYNER said he had never seen a case of the sort so early in life.

Dr. PERCY SMITH said that as to a distinct attack at the onset they only knew that the boy had got progressively weaker. He had no convulsive attacks. When he died he had a sort of faint more than anything else—no convulsion—and he had pneumonia, and at the same time he got more anæmic and cachectic. With respect to the effusion the membrane at the post-mortem did not seem to be independent of the dura mater. There was a distinct sac on each side. Between the outer and the inner layer was lying some remains of the clot. The separate pouch seemed to be a distinct sac, which, when it was first opened, contained some fluid. It would be rather difficult to say that it did not originate from some effusion.

Dr. HACK TUKE said that in the Prize Essay by Dr. Wiglesworth, which would appear in the next number of the Journal, the true nature of the false membrane in pachymeningitis was fully considered.

Dr. WHITE read a paper on "Athetosis connected with Insanity," communicated by Dr. Greenlees, Assistant Medical Officer at the City of London Asylum at Stone.

Dr. FLETCHER BEACH said that as regards the case alluded to, which he had described in the "British Medical Journal," he had at first thought that it might be a case of athetosis, but he now thought that it could not be so on account of the character of the movements.

Dr. MICKLE said that he thought the cases referred to often followed upon extensive lesions of the cortex from various causes. He had a case at that time of a boy whose history was imperfect, but who was demented and imbecile, and had been for many years subject to epileptiform convulsions. He had never himself yet seen the boy in a convulsion, but they appeared to be of a usual type, and he entertained no doubt that they were what were very properly called epileptiform convulsions. In that case some critical brain damage had occurred which led to secondary degeneration descending to the cord. The patient had been in a state of stationary hemiplegia evidently of long duration. The limbs affected had undergone an inconsiderable amount of atrophic shortening and distortion, the foot affected being, when comparatively at rest, somewhat in the *talipes varus* position, and there were athetosic movements of the side affected, chiefly in the upper limb, but also seen in the lower. The movements were of typical form, and the case, so far, resembled that brought before them. In the majority of cases of athetosis no doubt the movements were post-hemiplegic. In the case he mentioned the paralysis was marked. The boy had been growing worse in some respects, and if the case should unfortunately come to a necropsy it would be an interesting one in which to determine the relation of lesions to the symptoms mentioned.

Dr. RAYNER said that he also had seen a case of athetosis on one side in

which there was the history of injury with loss of brain substance. He did not see the end of that case, so could not quote the post-mortem appearances, but the fact went to bear out what Dr. Mickle had said, viz., that the condition might be due to cortical injury, and not to fibres lower down in the brain.

Dr. WHITE remarked that it was an interesting thing that the left forearm and the right foot were the most athetosic in the case referred to.

Dr. SAVAGE read the following paper on "Notes on the International Congress in Washington":—

Mr. President and Gentlemen,—The first question asked on both sides of the Atlantic after the meeting of the Medical Congress at Washington was as to whether it had been a success.

It is not for me to say whether the whole Congress was all that its well-wishers could have desired, but I can truly say that as far as our special section was concerned it was a success. The meetings were constantly well-attended, and the papers were interesting and fairly well discussed. The papers and discussions were held in French, German, and English, and so the section deserved to be called International. I shall leave to others the task of telling what they saw in American asylums and similar institutions, while I chiefly concern myself with the papers read in the section itself.

I think it only right to say that the reporting in our section was exceptionally good, being done by Dr. McGarr, Assistant Physician at Utica Asylum, who was able to report in shorthand, and thus to save a very great deal of trouble to the speakers.

Our section was honoured by the selection of Dr. Blandford to give one of the general addresses, and though the notice given to Dr. Blandford was of the shortest, yet he was able to give a most interesting address on the treatment of recent cases of insanity in asylums and in private houses. The audience was large and appreciative.

Dr. Andrews (of Buffalo), the President of the section, gave a very good address of the kind which was expected from him, as it was full of facts specially interesting both to strangers and to Americans, allowing the latter to take stock of their advance and of their dangers at the same time that strangers were enabled to compare their own condition with that of their hosts. Dr. Andrews first paid well-merited praise to the late Dr. Gray, of Utica, who was to have been President. Next he dealt boldly with the statistics of the insane in America. He showed how the numbers of those in asylums was rapidly increasing, and that the increase was greatest in the more settled and established parts; thus in the New England States there is one insane person to 359 of the population, whereas there is only one to 1,263 in the Western New States; and in the South this is also apparent, for on the Seaboard States there is one to 610, and in the extreme South one to 935. Among the negroes insanity is said to occur only in one to 1,097, but the President pointed out that among this race the increase of

insanity is at present greater than among any other class of the inhabitants. The rapid increase in the number of asylums is shown by the fact that fifteen new asylums have been built since 1880. Other speakers will refer to some of these, and to their special advantages or defects. In America one is more struck than elsewhere with the separate State Laws of Lunacy, and it seems that sooner or later more uniformity must be established. There are but two States without asylums of their own, and there are but two in which special provision is made for criminal lunatics. New York alone has an asylum for the chronic insane. It was pointed out that at present the block-system of architecture modified in one way or another is the most popular, and that electric lighting has made great progress. The systems of heating differ, as the President pointed out, from ours in the use of metal radiators, and the ventilation depends either on fans for driving in or for extracting air. Assistant medical officers in some States have to pass examinations before the confirmation of their appointment, and Dr. Andrews said that the wicked system of political appointments is nearly, if not entirely, abolished. As might be expected, our American President spoke more openly of some modes of treatment than we are in the habit of doing. I doubt whether anyone in English asylums would talk of oophorectomy or castration as "accepted modes of treatment."

The address was thoroughly practical, and followed as it was by one from Dr. Hack Tuke on the various modes of providing for the insane and idiots in the United States and Great Britain, it was very suitable to begin the work of the section with.

Dr. Tuke, being an Englishman, he will pardon my passing over his paper, which was fully appreciated, with the remark that the only point which was really discussed was that of non-restraint, and it seems to me that we are very much at one with the majority of the American alienists, but that they having been accused of being behind their cousins have resented the impeachment, and are consistent in defending their action in this respect. There can be no doubt that restraint is very rarely used in the best asylums, but the feeling which actuates the two nations seems to differ. With us the latter has grown into a fully-organized feeling of humanity above law, but with the Americans it seems to be the result of their law-abiding and not organized humane feeling.

Dr. Hurd (of Pontiac) gave a carefully-studied paper on the various relations of religious delusions and their association with other morbid states of mind and body. It seems to us that he has got as far as the collecting stage, but not yet to that of the philosopher. The deep altruistic relations which connect religion and sexual desire deserve fuller study.

Dr. Spitzka (of New York) exhibited two very interesting specimens, the most interesting being the nervous tissues of a

girl of 24, who had lost both father and brother with similar obscure nervous symptoms. The symptoms had begun when she was about 14, and had very closely resembled those of insular sclerosis. There was scanning speech, tremors, progressive inability to control her limbs, dropping of small things from the hands, with finally coma and death. Post-mortem : the disease was found to be spread through the brain and cord in the form of very numerous miliary aneurismal sacs. These were present in both white and grey matter. The dilatations were most numerous in the brain, but largest in the cord.

This case seems to merit special consideration, and it is well that it should be recorded. As Spitzka said, "First it illustrates how a multiple affection not involving coarse tissue change may ape the clinical picture of disseminated sclerosis to a certain extent; second, it shows how an apparent family type of nervous disease may be in reality but a manifestation of the tendency to degeneration of that system which is as profoundly under the control of hereditary influences as any other—I mean the vascular."

A very incomprehensible paper was read by Dr. Clark (of Toronto) on remissions and intermissions in insanity and on chemical, psychic, and vital forces, but it appeared to be a hazy semi-spiritualistic paper which, as far as I could learn, no one understood.

Drs. H. Wardner and Bower (of Bedford) read papers on occupation of the insane, and though interesting as showing what can be done on a small scale, I still think they have not solved the problem of employment for the larger hospitals where patients of the middle classes are received.

In a paper by Dr. Fisher (of Boston), "Monomania" was discussed, and, though nothing new was brought forward, reasons were given for retaining the old word and not accepting in full the German term, paranoia. As time pressed, no discussion took place on this paper; and here I may say that the real difficulty of this, as with most Congresses, was that the subjects were too many and too diffuse to allow of fair, let alone full, discussion.

No Congress would be complete without attempts to classify, and this one was marked by two elaborate attempts to arrange the disorders of the mind into more or less natural groups by Drs. Channing and Hughes (of St. Louis).

I do not think that any good will result from giving you the details of the suggested classifications, for they, like the rest, do not get beyond the market gardener's stage, and certainly do not approach nearer than other forms of arrangement—the natural orders of the botanist. Dr. Hughes did not do justice to himself or to his subject by the ill-arranged way in which his paper was brought before the section.

Dr. Hughes pointed out the unsatisfactory method of looking upon all idiots as alike, though the causes and conditions of arrested

mental growth may vary almost infinitely. This is true, but, in classifying, we have in the first place the ruin to examine and not the causes of the disease.

Dr. Mendel (of Berlin), who by his genial presence did much to make our section attractive, read a paper on the origin of the facial nerve, giving a new or hardly described root; his paper was in German, and most of those present felt that justice could not be done to it without studying it *in extenso.*

Dr. Homans (of Helsingfors) read a very interesting paper on the result on the nervous system in dogs, of amputations of the several limbs at different parts, so that the different degrees of secondary wasting could be traced.

Dr. Homans thinks he has discovered a special set of sensory cells. He gave interesting details of the peripheral degeneration as seen in the divided nerves, and these are of great importance in tracing the so-called secondary changes and seeing whether they are direct transmissions of degenerations or if they are simultaneous changes occurring in the two ends of the nerve chain.

Dr. Otto read a description, in German, of his method of staining with aniline dyes. The three last papers were illustrated by specimens and photographs.

Dr. Langdon Down presented a short paper on the meaning of the prow-shaped skull and its relations to the neurotic type of mind.

Dr. Bishop (of Chicago) read a very interesting paper on a subject which deserves more special study from our point of view. He looks upon hay-fever as a true neurosis, and not as depending on pollen. For years past I have taught that this affection is most common in members of neurotic families, and, again, that it may alternate with neuroses, a patient when insane not having hay asthma; but though this is true it does not follow that it is to be looked upon as a neurosis. I believe that the experience of some who discussed the paper is not uncommon—that hay-fever may be developed in later years, and under conditions of nervous weakness. In this case it may, if you like, be called an acquired or inherited nervous weakness.

A paper, not needing notice here, was read by Dr. G. Eliot on "The Treatment of Neuralgia in Private Practice."

The next paper, on "Border-Land, Early Symptoms, and Early Treatment of Insanity," by Dr. Russell, was chiefly interesting from the very vigorous protest raised by Dr. Gundry against assuming insanity in every case where a single symptom, which may be associated in some cases with insanity, has occurred in the lives of great men. He ridicules the evidence of insanity in Cæsar and Napoleon, and also does not think there is evidence of insane hallucinations in Luther. We are quite in accord with him in thinking that the border-land has been too much used. There is a border-land which patients may pass through in going into or out of an attack of insanity, and there is a border-land in which

some neurotic people always dwell, but there are many symptoms which occur with insanity which do not necessarily point to its presence in any individual case by their presence alone.

Special attention is called to the interest of the paper by Dr. Cowles (of the McLean Asylum, near Boston) on "Nursing Reform for the Insane." This paper deserves very careful study, but, as Dr. Blandford will probably refer to the whole system of the training of nurses as followed by the officers of the McLean Asylum, I shall say no more.

Dr. Mendel read a short paper in which he objected to the term moral insanity, and thought that all cases of moral insanity so-called might better be classified under the heads of paranoia or weakmindedness. The general feeling, however, was that till we had a complete system of classification, we must be content to use terms which bear a fairly definite relation to groups of cases. I had the honour of reading papers and maintaining a discussion on the relationships of insanity with syphilis, in which I was ably assisted by contributions from Drs. Shuttleworth, Beach, Wiglesworth, Mitchell, Warner, and others.

This discussion would occupy too much time and space to be reconsidered here, but I trust when the full report of the Congress appears it may not prove altogether unworthy as representing English psychiatric study.

One rather strange example of the uses of the section may here be given. A man suffering with loco-motor ataxic symptoms made application to the President of the Congress (Dr. Davies) to have his case examined and finally settled. The President sent the patient to our section, and our President deputed Dr. Mickle and me to examine and report on him. This we did, with what result I know not.

Dr. Mendel showed some dogs' brains in which adhesions between brain and membranes had occurred. These were from Portugal, and we had not full details, but they were said to have been caused by constant rotatory movements which were conveyed to these dogs. I must say without further observation I am not prepared to accept these brains; and so my task is done. We who went had hearty welcome, much good fellowship, and we believe that our time was well spent. I need not enter into the subject of dinners, receptions, and other entertainments which did so much to contribute to our pleasure and to the upsetting of our digestion.

The PRESIDENT said that it was very gratifying to find that their own section of the Congress had been so successful.

Dr. BLANDFORD said he fully endorsed all that had been said as to the success of the psychological section of the Congress, and would add that the gentleman who contributed chiefly to the success of that section was Dr. Savage himself.

The speaker then read the following paper:—

I have been asked to give you my experience of American

Asylums, and, although this is very small, I do so with pleasure if only to bring back the memory of the warm welcome with which I was received at those institutions. I must commence by saying that I did not visit them with any idea of making a complete inspection, neither did I make any notes with the view of writing on the subject. The whole number visited was only six, my time in America being but brief. My companions not being psychologists I was not so free as if I had been travelling alone. I greatly regret that I was not able to visit more asylums, to many of which I had invitations from the superintendents to which I should have been glad to respond. Now, of the six asylums visited four were for paying patients, answering to our hospitals, such as Barnwood House and those at Northampton, Cheadle, &c. These were the Bloomingdale Asylum at New York, the Pennsylvania Hospital for the Insane at Philadelphia, the Friends' Asylum for the Insane at Philadelphia and the McLean Asylum at Boston, which is a branch of the Massachusetts General Hospital—as the Bloomingdale is a branch of the New York Hospital, and the Pennsylvania a branch of the Pennsylvania Hospital. The two for the lower classes were those at Washington and at South Boston, which is the asylum for the city of Boston. It is to be noted that three of these were under orders to move further away from the cities near which they are situated, though I did not hear that there was any prospect of these changes being immediately carried out. As with us, such moves are talked about for some time before they are brought into effect. From this it will be seen that the asylums I saw were for the most part of somewhat ancient date and built on the one block or conjugate plan, with a central administration building and wings; but in addition to this several of them had detached buildings or villas in the grounds for quiet patients and for those wishing better accommodation than the asylum-wards. I was greatly pleased with a house lately erected at the Bloomingdale Asylum for such patients by Dr. Nichols. There is one also at the McLean Asylum, and one is being built at the Pennsylvania Hospital, and at many hospitals which I did not personally visit. I read that the system of detached blocks, connected by corridors, is being adopted. At the fine asylum at Washington, so ably presided over by Dr. Godding, the main building is supplemented by various detached blocks, some of which have been built economically for the reception of quiet patients; one is for people of colour, of which there are great numbers at Washington, and one is for working patients who are to live by themselves and go to and come from their work without disturbing others. When we enter the wards, we find that they consist for the most part of long corridors or galleries, with dormitories opening out of them on both sides. The light comes from the end or ends of the room, and the result is that there is not much of it. We all

recollect asylums built on this plan in our own country. A dark room in America, however, is not such an unmixed disadvantage as it is with us. You must remember that they have a summer in which the heat is almost tropical. To every window throughout the country are shutters to shut out the sun and render the room dark. Every house has its verandah, or, as it is called, piazza, to afford shade. Not only have they shutters to keep out the sun, they are obliged to have wire doors and wire windows to keep out the flies, mosquitos, and other winged abominations which infest their country. So that when we are inclined to condemn their rooms as dark we should remember that light connotes heat and flies, while darkness gives coolness and rest. The end window of the gallery is frequently partitioned off by a wire trellis work so that the patients cannot approach the glass, and this interval is often filled by plants, birds, and the like. In the older asylums we meet with metal window-frames, and windows are much guarded by wire-work such as was in vogue here in former times. Each gallery or ward is complete in itself; the patients live there, eat there, sleep there, wash and bathe there. Each has its dining-room, and I found the table neatly laid for its occupants, probably twelve to twenty in number, the service suited to the class of patients, and often flowers to brighten the whole. I did not see a common dining hall, so far as I remember, in any asylum. Now, this method of administration, like most things, has its advantages and disadvantages. A small number of patients is more easily looked after than a large, and the eating of each individual can be better noted. But the monotony of the perpetual life in one ward is not relieved by the change to a common dining hall, which is a disadvantage. The distribution of food, too, is an important matter, but the Americans are so clever in all mechanical details with their tunnels, tramways, elevators, dumb waiters, and the like, that this seems to them no difficulty, and each ward receives its food in due order from the kitchen department. Yet I find in a paper by Dr. Seip, of the Danville State Hospital, giving an account of a visit to European asylums, that he approves of the system of associated dining rooms. He says that the patients march to the hall, and the meal, effectually supervised, having been served, they return to the wards; the working staff go to their places, and the full complement of attendants are left to occupy the patients instead of spending never less than two hours after a meal in dish-washing, as is the rule in such asylums with ward dining-rooms. He applies the same argument to baths. In the American asylums each ward has its bath, lavatory, and closets. Dr. Seip thinks that time is wasted by this method, and says that five or six hours are spent on a bath-day in a ward of thirty patients, and that this amount of time is largely reduced by the wholesale treatment in a large bath-room. For the class of patients I saw, a bath-room in the ward appears to me far more

comfortable, and it is not necessary that the whole number should bathe on the same day. The system of baths and the supply of hot and cold water are very good, as is everything mechanical. The same remark applies to the ventilation and warming. You will recollect that after one of their almost tropical summers they have to endure all the rigour of an almost arctic winter, a winter such as we at our worst never experience, with the thermometer at 20° below zero, and deep snow lying in their grounds perhaps for months. Such cold necessitates apparatus for warming beyond anything we require, and in every asylum we find a system of steam boilers, engines, and machinery on a very costly scale. For in the asylums, and, in fact, throughout the country, the temperature indoors is maintained at not less than 75° F., which we should consider very high, in fact, oppressive, but which may be beneficial to some melancholic and demented patients. You will, moreover, understand that it is difficult to take patients out of such an atmosphere into intense cold when all the place is covered with snow, and I gathered that they go out very little in the winter, and are, in point of fact, very much confined to the house. So that what with the great cold and the great heat, when it is too hot to be out of doors, patients are much less in the grounds than they are in our asylums, where we can keep them often almost all day in the open air. The Americans are not fond of out-door exercise or of going for a walk in the sense of a constitutional. In-door amusements and occupations were well promoted. There are good recreation halls, which are sometimes used as chapels. Here entertainments, drill, calisthenics, and music are liberally provided by the asylum staff, and tea parties are given by the matrons frequently. I gathered, however, that there is not much social meeting of the two sexes of patients, and that of this there is probably less than with us. Of officers, certainly of medical officers, I should say the supply exceeds that of our own. At the Pennsylvania Hospital for the Insane, where the daily average was last year 393, there are five medical officers; at the McLean Asylum, where they average 169 patients, there are three; at the State Hospital at Norristown, Philadelphia, where the average is 1,426, there are three gentlemen physicians for the male department and three ladies for the female, besides a lady who is the resident pathologist, and a gentleman ophthalmologist; at the Danville State Hospital, averaging 798, there are four medical officers, all gentlemen. I mention these because I am able to give the numbers. I have not the statistics of others which I know to be as well officered. The number of attendants also seemed to be liberal, especially at night. Thus at the McLean Asylum, which, as I have said, numbers 169, there are fifteen attendants, seven men and eight women, on night duty. This is the asylum which has a training school for attendants, where either men or women can have a two years' course of training in

general nursing, with special reference to the care of cases of nervous and mental disease. They are employed as assistants in the wards of the asylum, they attend lectures and demonstrations given by the medical staff, the superintendent of nurses, and head nurses. They receive during the first year, the women £30 and the men £55; during the second year the women get about £36 and the men £60; while, after graduating, the women are paid some £60 per annum and the men can rise to upwards of £70. These seem high wages to us, but the cost of labour, as you know, is very high in the States compared with England. At the Pennsylvania Hospital lectures are given to the attendants on anatomy, chemistry, physiology, hygiene, and on their special duties. Dr. Andrews told us at the Congress that "in the State of New York, attendants and all *employés* in public asylums have been placed upon the Civil Service List, and are subject to examination before a Board organized for the purpose. This makes them State appointments, and renders them entirely independent of political influence both in appointment and continuance in place." And he goes on to say that "an extension of this system would do away with the present evil existing in some States which arises from the positions of attendants being considered places of patronage for the party in power." Our superintendents would be much aggrieved were they to lose their old attendants on a change of the Ministry. Passing from officers and attendants we come to the patients. These appeared to me to be much the same as any that we should meet with of the same rank in life in our own asylums. Not more seemed excited, not more demented. I saw some recent and acute cases, some, not many, restrained by means of a strait waistcoat; and this brings me to the question of mechanical restraint, one which has been truly a "burning" question in America as in England. I believe that in America mechanical restraint has greatly decreased within the last ten years in the best asylums, and is decreasing; probably in such asylums there is less than we should find on the continent of Europe. Our President at the Congress said that he believed that the opinion in England and America was practically the same, viz., that restraint might occasionally be necessary, but that non-restraint should be the rule, restraint the exception. I have but one remark to make on the subject. In no asylum that I visited did I find a padded room, and Dr. Tuke, I think, only found one. There seems to be an objection to them, an objection, I cannot help thinking, founded considerably on sentiment, as is a great deal of the objection to mechanical restraint in that extreme view taken of it here to which the name of Conollyism has been given. There seemed to be an objection to placing a patient in solitary confinement such as a padded-room or seclusion-room, and I saw several in restraint in the wards, who, in my opinion, would have been better if alone, or alone with an attendant, and not exciting other patients or excited by them. In

the leading American asylums I believe mechanical restraint to be now used but little, but I have no doubt that it is used far more in the poorhouses and almshouses which exist in large numbers throughout the States, and contain large numbers of the insane. The patients, however, are being gradually removed, at any rate in some States, to the State Hospitals. In this respect they are going through much the same experience as befell us here when County Asylums were first established for the reception of the pauper classes. As regards treatment, I found that all the best known drugs were freely used in the asylums I visited—hyoscine and hyoscyamine, paraldehyde, chloral, the bromides, and morphia. I did not find that treatment by means of baths was carried out, whether by the prolonged warm bath or by shower baths. The latter I did not see anywhere, and I believe that they do not exist. The pathology of insanity and brain disease is not neglected in America. At the Washington Asylum there is a most excellent pathological laboratory, fitted up with every convenience for post-mortem examination and for illustrating the histology and morbid anatomy of the brain. Not only here, but in other asylums is there a special pathologist, and the reports generally show that this department is not neglected.

Dr. MICKLE said that he saw very little indeed of the American institutions during this trip, having arrived at Washington in a very dilapidated state and with a very severe sore throat. The place was then in intense heat. He was very much interested in the pathological museum. There were to be seen there a number of skulls of soldiers dying of their wounds in the civil war, and among them some of very special interest, in which bullets, striking the head, had not damaged the external table of the skull, but, although externally the skull appeared to be intact, its internal table was fractured opposite the point of impact of the bullet, and the fragments in some cases were driven into the meninges and brain. Among other objects of interest he saw there was the spinal column of John Wilkes Booth (the murderer of President Lincoln), who was shot in the spinal cord by one of the soldiers pursuing him. Then, as illustrating the perpetuation of error from generation to generation for lack of independent original investigation, and therefore of some psychologic interest, was a manikin which, for many generations, had served to demonstrate anatomy in Japan, and among other peculiar arrangements of that specimen was this—that the lungs were carefully wrapped round the stomach to keep it warm! By the kindness of Dr. Godding he, like others, went to the Washington Asylum and was much interested in what he saw there. One thing which particularly struck him was the very large number of different races found among the patients—patients from all quarters of the globe, including the native red man and the semi-naturalized negro. The Washington Asylum was splendidly situated, commanding a fine panorama of the surrounding country for many miles. The pathologist of the institution exhibited a number of brains prepared according to a method of his own. The brains, after being placed for a short time either in alcohol or in a solution of chromic acid or of chromates, were placed in a chloroformic solution of Japan wax, and the result was very good, the outlines being in a number of cases preserved very well. The pathologist, who evidently is one of whom the profession will hear again, also exhibited a number of microscopical slides. Dr. Witmer, another of the assistant-physicians there, had devoted an enormous amount of time to promoting the convenience, comfort, and interests of the foreign members of the Congress, and personally he

was much indebted to him in this respect, and he was indebted to Dr. Witmer for seeing a case which had been one of ear disease with mania, and in which the patient, after mental recovery, remained perfectly deaf, but was able to understand every word uttered by those she knew by watching the motion of the lips. Dr. Savage had not said much about the entertainments, but it might be said that the proceedings of the psychological section of the Congress wound up with a very enjoyable banquet given to the foreign members by the American members of the section, and at that banquet not only was there a most *recherché* bill of fare, but, the labours of the section being closed, there was a feeling of lightheartedness among the members, which was the very soul of conviviality.

Dr. BOWER corroborated what had been said by Dr. Savage and the other members who attended the Congress.

Dr. SAVAGE, in reply, said that one or two things had struck him in the course of the discussion. One moot point had been that of an observation ward for suicidal cases, and he had seen something of that sort particularly novel in the asylum at Worcester. At the end of each wing there was built out a large circular building with just one entrance from the main ward. This was the case on two floors—day-room on the ground floor and bedroom on the upper floor—and in that very large circular chamber the one attendant was able to sit near the door, and the whole of the building would be under his eye at once. It was splendidly lighted up, and the attendant was provided with a lamp which could be used as a reflector. He believed he had urged objections to observation galleries, but that one large chamber was as nearly free from danger as anything could be. As regards airing-courts, unquestionably they saw none, or scarcely any. Probably the explanation given by Dr. Blandford was a true one. The Americans seemed developing at such a rate that they would soon be without feet or hair or teeth. Dr. Hack Tuke had, in his book on his own American trip, mentioned "night medical officers" being employed as well as night attendants, so that one assistant medical officer would be on duty the whole night. It was rather onerous work, no doubt, but had its advantages. Another point which suggested itself was—What is the relative value of the *female* medical officers? He was sorry to say that when he put this query in America the answer always was: "Well, do not introduce them into England. You know they are very kind and very sympathetic, but we do not get such an equivalent of work out of them as was expected." I said, "But my friend, Dr. Tuke, is disposed to look upon them as presenting some advantages." The answer was, "Well, yes, Dr. Tuke is very kind and sympathetic, but he has not to work with an assistant medical officer who is a lady!"

Dr. SAVAGE, in reply to Mr. C. M. Tuke asking when the members of the Association would have an opportunity of reading some of the papers considered at the Congress, said that the papers were really the property of the Congress. The whole of the papers would be published within twelve months. He believed that their own section would be extremely well edited, because the secretary of the section was the editor of an American journal. He thought, from what he heard, that it was likely that the sectional meetings would be published separately, but he might state that the American journal published at Utica contained a very good *résumé* of the proceedings of the Congress, and the superintendent of that asylum was rather anxious that members of the Association should know this, and if gentlemen wishing to have copies of the American journal would send in their names through him, copies should be ordered for them.

Dr. HACK TUKE said he should like to express his obligations to Drs. Savage, Blandford, and Mickle for the very interesting accounts they had given of the Washington Congress, which had been more especially so to himself, as he had visited America three years ago, and reported upon asylums there. The result of more recent inquiries seemed to be upon the whole very satisfactory. During the past three years it was evident that still further development had been made in the direction which he had indicated in his book, of having either entirely

separate buildings, or blocks connected by corridors with the main asylum, so as to break up more and more that congregate system which had been so long in use in American asylums. In regard to mechanical restraint, it appeared that even less was now used than a few years ago. As regards the training of mental nurses, he had been very much interested in that matter when he was in America. Dr. Cowles was, so far as he knew, the only superintendent in America who strongly advocated having female attendants on the male side of the asylum, considering that it had an enormous influence in promoting refinement and self-control among the patients. The employment of female attendants in this way was one thing, their training for their own sex another—the former was beset with difficulties, but the latter was no doubt a most valuable thing. As he had remarked to Dr. Cowles, when writing to acknowledge the photographic group of his nurses, the difficulty would be to retain fifteen nurses in service who were so good looking. As regards lady physicians, he was well aware there were two sides to the question, and had spoken of their employment as an experiment.

Dr. SAVAGE exhibited a machine called "The Allen Surgical Pump" (Truax and Co., New York), and explained its manipulation. The inventor claimed for this pump that it could be used to aspirate and to inject, also as a stomach pump, uterine dilator, urethral dilator, and tampon, for litholapaxy, embalming, direct transfusion, transfusion of defibrinated blood, and as a syringe or douche. If the opening of the tube should become clogged a backward turn of the crank would free it. As an aspirator, it was stated to be superior in several ways; thus, there were no connections requiring air-tight joints, and no bottles to empty. In the common aspirator the air was exhausted from the bottle, the connection opened, and a force often excited which would draw in the tissue. With the apparatus exhibited just the force required was exerted. If the pus should be thick and flow slowly, a powerful force would be got, while if the pus was lighter, flowing freely and fast, it would supply the tube, and the force would be proportionally less. In rinsing the bladder the force could be regulated by the operator by a slow motion of the crank. The apparatus was at the same time a force and vacuum pump.

Among other exhibits were photographs of nurses and probationers at the McLean Asylum in Boston, and the spinal cord from a case of acute general paralysis of the insane, showing bony plates in arachnoid.

SCOTTISH MEETING.

A Quarterly Meeting of the Medico-Psychological Association was held in the Hall of the Royal College of Physicians, Edinburgh, on the 10th Nov., 1887.

Dr. Howden was called to the chair; the other members present being Drs. Blair, C. M. Campbell, J. A. Campbell, Clouston, Ireland, Carlyle Johnstone, Keay, Macdowall, Maclaren, R. B. Mitchell, G. M. Robertson, Ronaldson, Rorie, Turnbull, Batty Tuke, Urquhart, Watson, and Yellowlees.

The minutes of last meeting were read, approved of, and signed.

Frank Lang Collie, M.B., C.M.Aberd., Clinical Assistant Medical Officer, Perth District Asylum, was elected a member of the Association.

Dr. HOWDEN showed the plans of the proposed detached infirmary building for Montrose Royal Asylum. It has been designed to accommodate 100 patients, 50 male and 50 female, at an average cost of from £130 to £140 per bed. Provision was made for a section with all necessary appliances, capable of being entirely cut off from the general sick-rooms, and intended for use in specially repellent cases, such as gangrene, &c. The plan of independent ventilation for each department has been adopted.

Dr. RORIE read a paper on "The Present State of Lunacy Legislation in Scotland."

Dr. CLOUSTON said he was sure they were all obliged to Dr. Rorie for his historical review of lunacy legislation and practice in Scotland. In 1857 they

really had only English experience to guide them. Our Act was largely founded on the English Act. Following the lines that experience pointed out, the Scotch Lunacy Law and the Scotch lunacy system had become greatly changed. He thought that Dr. Rorie, perhaps, meant his paper as a flag of warning against certain dangers. The tone of his communication was in some way rather adverse to the present practice in Scotland. There was no doubt whatever that some things had been carried out neither in accordance with the Act nor with common sense. Different districts carried out different practices, and this had advantages and disadvantages. Dr. Rorie showed in his paper that the general Board of Lunacy and the Parochial Boards have been undergoing a process of education. The Parochial Boards are taking, on the whole, a larger and more enlightened view of their duties in regard to the insane than they did in and after 1857. He did not think that asylum superintendents could take a line antagonistic to the local authorities having a certain amount of control over the incurable insane. It was natural that they should feel a little hurt that, while having control in other matters, a line of demarcation should be drawn against them in the matter of lunacy. He thought it was necessary that they should look at this matter from the Board's point of view as well as their own. He was quite prepared to homologate what has been done with regard to licensed houses for boarding-out patients and poor-houses. And looking to their present experience of the best method for providing for pauper insane of the different classes, he did not think there was anything better than the three methods in use—the asylum for the curable, the dangerous, and the troublesome, the lunatic ward of the poor-house for the easily managed incurable, and the boarding-out for those still more quiet and more fit for family life. When these three methods had been carried out, under proper conditions, the problem of dealing with the insane had been very successful. Dr. Rorie would agree with him that the weak point in the Scottish system is the selection of the patients for these various modes of treatment. By devising a practical scheme for deciding how these patients are to be allocated, this weakness would be removed. At present they were in a mass of confusion. If the Parochial Boards will accept the control of the incurable and those easily managed, every one of them should help those Boards to make a suitable selection. They claim that the medical officers of asylums should be the sole judges in this matter, and that it is not for laymen to say who are and who are not fit for the asylum, or for the poor-house, or for boarding-out. What they have to make provision for is, who shall be the authority in selecting these patients. What he did by way of compromise in the Royal Edinburgh Asylum, after years of trial, was to select and recommend out of the patients those whom he thought suitable for the poor-house or to be boarded-out. Parochial Boards do something more than this, they sometimes send those whom they think quiet and manageable to be boarded-out without sufficient consideration, and not by medical authority, and hence some of the failures of the system. He would say that they must take the members of the Parochial Boards along with them in this matter. He did not think that they could take the position that the Parochial Boards are to have absolutely nothing to do with the selection. He thought that if the powers of the three authorities, the asylum doctors, the Parochial Board, and the General Board, were defined in this matter, they might get a good workable system. He did not quite agree with the tone of Dr. Rorie's paper. It was right that the question of economy should be one main question in the treatment of a chronic incurable lunatic. He thought the ratepayer must have a great deal to say as to it, for such a patient, though his general management and treatment should be founded on medical principles, commonly needed no active medical treatment. Regarding Dr. Rorie's contention that as a lunatic was only deprived of his liberty because he was dangerous, therefore we should discharge him from an asylum when he ceased to be so—that would never hold water. The lunatic is not sent to us under common law because he is dangerous, but by the Sheriff under statutory law. He did not think that they had to do with the question of danger. He

thought that the old notion of the common law would be altered by-and-bye. It did not represent fact as regards lunacy, and the lawyers themselves will no doubt give up contesting that danger is the only ground for deprivation of liberty *quoad* lunacy.

Dr. WATSON, continuing the discussion, said—As one of the medical officers of the much-derided so-called parochial asylums, he begged to draw attention to one or two points that Dr. Rorie and subsequent speakers must have misapprehended. In the selection of patients it was his invariable experience that the Parochial Board is entirely guided by the medical officers in the selection of patients for the lunatic wards of the poor-houses, and also for boarding-out. So much was this the case that it was impossible for the Parochial Board, at its own hand, to board out any patients. The superintendent, according to a regulation of the Board of Lunacy, must take the opinion of the medical officer of the asylum, and be guided by him; and he cannot discharge the patient unless the medical officer signs the minute—the latter having complete control. [This view gave rise to a short general discussion, several members expressing their dissent.] Dr. Watson, continuing, said there was no reason why the Parochial Board should not be represented in the government of a chartered asylum. With regard to the instability of the Parochial Board, he found in his own district that out of the 33 members they had in 1880 no less than 13 were still remaining. It was only the members that were not of great consequence that shifted about.

Dr. YELLOWLEES said that he had not noticed in Dr. Rorie's paper any reference to asylums for the chronic insane of the pauper class. He believed that a better, healthier, and happier home could be made for the chronic pauper insane in an asylum of this kind than in the wards of poor-houses, and at an expense very little greater. He had hoped to find this question solved at the Willard Asylum, in the State of New York, an asylum specially intended for chronic patients, which he had lately visited, but had been disappointed. It was an admirable institution in every respect except the vital one of economic maintenance. While economy was not the main thing, it certainly came next in importance to the welfare of the patients. He thought that the Parochial Boards were only doing their duty to the ratepayers in seeking the least expensive mode of providing for their incurable cases, and were therefore entitled to our co-operation. In practice he had not found the Parochial Boards unreasonable, and had had no difficulty as to the selection of patients whether for poor-houses or for boarding-out. He felt it his duty to point out suitable cases, and frequently parted with useful patients rather than keep them in the asylum at needless cost. There was a certain limited class of patients—those who had seen better days, and had a better education than the others—who deemed the poor-house a terrible degradation, and who were able fully to appreciate the amenities of an asylum. He had always held out firmly against such cases being relegated to a poor-house. Speaking from a limited experience, he had not found the boarding-out of pauper patients satisfactory, although, when both patients and guardians were carefully selected, he believed it often answered well.

Dr. J. A. CAMPBELL, of Carlisle, as one of the two English asylum physicians present, thanked Dr. Rorie for his interesting paper, and hoped it would shortly appear in the Journal, more especially the portion which gave a tabular statement concerning the positions of the insane in asylums, workhouses, and boarded with relatives or others. So far as he could gather from the paper, there were fewer boarded-out now than in 1859. The boarding-out system in Scotland has been much eulogized. A calm and judicial history of its working so far, its merits, its difficulties, its defects, dealing both with patients and the public and touching on the pecuniary question, would be interesting and useful. The opinion that "a boarded-out dement is better off than an asylum patient or a British working man" is open at least to doubt; and the weekly expenditure shown by Dr. Lawson in the 26th Report of the Commissioners in Lunacy for Scotland of a boarded-out lunatic who lived with his sister, and whose cost

for everything was 3s. 1½d. a week, and who had only ¾lb. of animal food a week, would make one fear that he was undergoing a process of slow starvation. Enthusiastic and glowing descriptions which avoid mention of all drawbacks tend only to engender distrust, and are far too common in new developments of modes of treatment of the insane. In the lately proposed new legislation for England it was suggested to follow certain of the Scotch procedures, notably an expiry at a given date of order of detention. I should like to hear the opinion of members on this point. I think that the provision of expiry of order is merely a mode of increasing the duties of the superintendent without in any way benefiting the patient. In any future Scotch legislation Sec. 90 of cap. 71 of Victoria 20 and 21 should be omitted. It gives a Justice power, on the sworn evidence of any credible witness, to grant a warrant for the detention of any alleged lunatic and his transmission to the nearest town for examination. The power of treating patients for insanity for six months without any formality should, in my opinion, also be altered. I think it is open to much doubt whether it is a good plan to allow one of the medical certificates which consign a patient to an asylum to be given by one of the medical staff of that asylum. I am of opinion that more power in dealing with insane in private dwellings who are not under certificates should be given to the Commissioners in Lunacy. A perusal of Sir A. Mitchell's book on the insane in private dwellings clearly shows the need of this. I quote: "Indeed, in one remarkable case which I shall presently detail, all the efforts of the Board to liberate the patient were without success." So far as I can find, no further powers have been given to this Board since this book was written. In England the law provides distinctly that any lunatic not properly looked after, be he rich or poor, shall be dealt with by the Relieving Officer, under penalties if he neglects his duty.

Dr. HOWDEN agreed with Dr. Clouston and Dr. Yellowlees that it was beneficial to the insane poor that they should be provided for in various ways. Curable asylums, lunatic wards, or chronic asylums, and private dwellings had each their advantages according to the requirements of the lunatics. He had not found any difficulty in working with Parochial Boards under the present system, and found them always glad to be advised as to the suitability of cases to be transferred to lunatic wards or private dwellings. He thought that the discharge of uncured patients was justified by the result; and in support of this view stated that of 124 uncured pauper patients discharged during five years from the Montrose Asylum only 17, or 13·7 per cent., had been returned. During the same period 176 patients were discharged recovered, of whom 42, or 23·8 per cent., had been returned. In Forfarshire the boarding-out system appeared to be on the increase. From the parish of Dundee alone the number of pauper lunatics boarded in private dwellings had risen from 29 in January, 1885, to 88 at the present date. They were much indebted to Dr. Rorie for his paper, and would take his hint to keep their eyes open as regards future legislation. He did not see any practical way by which Parochial Boards could be represented on the Boards of chartered asylums. At the same time, if they were, he was not satisfied that their representation would be injurious to the interests of the asylums.

Dr. TURNBULL considered that an essential point in lunacy legislation should be elasticity. Different cases of insanity required different methods of procedure in dealing with them; and the nearer our system comes to providing the varied requirements for all the different cases the better it would be. All cases do not need to be in asylums; and, therefore, care under private guardianship, or boarding-out, should be a recognized part of our lunacy system, and should be suitably provided for in our legislation. Similarly, an asylum for chronic cases, and the lunatic wards of a poorhouse, supply suitable care for a certain class; and in moving patients to them from the ordinary asylum the procedure should be simple and expeditious, and not hampered by unnecessary restrictions. He thought the responsibility of the removal of unrecovered patients from asylums should not be entirely in the hands of the medical

attendant; and the present system, he thought, could be made to work quite smoothly. If the friends of an insane patient are willing to care for him, we have no right to insist on parochial relief being accepted by the friends, and on the patient being placed in an asylum. Similarly with patients already in asylums, if the friends are willing to undertake their care they ought, under due restrictions, to have the power of doing so, and must, of course, take the responsibility. The medical authorities should advise what they think is best in the interests of the patient, but are not entitled to enforce continued detention in the asylum unless there is a distinct reason for it, such as the patient being dangerous. This latter emergency is already provided for in our lunacy statutes. In a recent case the Parochial Board had referred the matter to him; and he advised very strongly against the patient's removal, but could not prohibit it. The friends persisted in removing the patient, with the result that in four days they had to bring him back to the asylum again. He thought the friends would in that way be thoroughly convinced that asylum control was necessary for the patient, and was not urged by the medical officer merely as a fad of his own. He considered that in the case of pauper patients it was unobjectionable and often convenient that one of the certificates might be signed by the medical officer of the asylum. With regard to the renewal certificate on the expiry of the Sheriff's order, he thought the certificate served a very good purpose, and ought to be kept in force.

Dr. YELLOWLEES observed that he found Parochial Boards only too ready to accept the statements of friends regarding their ability to provide for patients; and only too ready to take the view that, if a patient was not "dangerous," he might be safely removed. From the medical point of view, it was not primarily a question of saving the rates, but the lunacy of a pauper and the curability of his disease.

Dr. J. A. CAMPBELL said that if the friends of a pauper in England wished to take him out of the asylum they can make him a private patient, and so remove him. Before the patient can be withdrawn, however, the friends must sign an obligation that they are willing to maintain him; but he will not be discharged if he is dangerous or suicidal.

Dr. MCDOWALL said that in Northumberland the parochial authorities are in the habit of keeping patients in the wards of the workhouse, and then sending them to the asylum when they become troublesome. He would be glad if future legislation would make this illegal.

Dr. IRELAND concluded the discussion on Dr. Rorie's paper by urging the necessity of lunatics being provided with proper medical care. The happy results were seen in the number of patients who had recovered as shown by Dr. Rorie. He would regret to think that pauper lunatics in workhouses should be deprived of such aid, and there could be no doubt that in many cases they were subject to more restraint than in ordinary district asylums.

Dr. KEAY read the next paper on "A Case of Insanity of Adolescence."

Dr. YELLOWLEES said he did not like to permit so interesting and important a case to pass without comment. He was not quite sure if it was a case of insanity of adolescence. Dr. Keay had pointed out the difference between it and other cases, and mentioned constant and invariable depression as one of the symptoms. He (Dr. Yellowlees) had found a prominent symptom of insanity of adolescence to be unceasing mischief-making, as if for the mere pleasure of giving trouble. He could not in too strong language say how injurious it was to a patient of this character to be engaged in a constant struggle with attendants, especially if he succeeded in escaping. If there ever was an occasion for locked doors and rigid seclusion this was one.

Dr. IRELAND followed. He asked what was the insanity of adolescence? He was not favourable to the multiplication of technical terms, but they should be strictly defined. He had noticed the question asked in an examination paper set by Dr. Clouston for the new certificate of the Association. He (Dr. Ireland) had put the question to a prominent member of the Society, but he did not seem

to know. Dr. Keay's case was that of a man who had inflammation in the glandular system, which ended in blood poisoning. Now, adolescence is a mark of health, and he could not see that in the matter of clearness anything was gained by the term "insanity of adolescence."

Dr. ROBERTSON read a paper on "Reflex Action of Automatic Speech."

Dr. TURNBULL expressed the thanks of the meeting to Dr. Robertson for his paper.

The members dined together at the Edinburgh Hotel after the meeting.

The next Scottish Quarterly Meeting will be held on the second Thursday of March, 1888, in Glasgow.

IRISH MEETING.

The Quarterly Meeting of the Medico-Psychological Association was held in the Richmond Asylum, Dublin, on December 1st, 1887. There were present: Dr. Duncan (in the chair), Dr. Patton (Dublin), Dr. J. Molony, Conolly Norman, F.R.C.S.I., Dr. Myles, Dr. Cope, E. M. Courtenay, M.B.

William Thornley Stokes, Esq., M.D., Visiting Surgeon, Swift's Hospital, proposed by CONOLLY NORMAN, F.R.C.S.I., seconded by JOHN MOLONY, M.D., was duly elected a member of the Association.

Dr. COURTENAY stated that, having at the last annual meeting handed in his resignation of the post of Irish Secretary, he was requested to continue in office until an appointment could be made. He was then directed to obtain the sense of the Irish members as to the name of the candidate they would select to be laid before the general meeting for appointment. He, therefore, proposed Mr. Conolly Norman as the most fitting selection, if for no higher reason as the superintendent of the largest Irish asylum, and as living in the Metropolis.

Dr. PATTON seconded the resolution, which was agreed to.

Dr. COURTENAY begged to call the attention of the meeting to the Bill introduced during the last Parliamentary Session to amend the Superannuation Act at present in force in Irish asylums. The Bill had not only been introduced, but had passed through the House of Commons, and had only been stopped by having no seconder in the House of Lords. The object was to introduce a scheme of superannuation very much in conformity with that in force in English County Asylums, and to this no one could object, except in so far that the pension given was so large, and the period of service so short, that in England, where it was necessary that pensions should be ratified at Quarter Sessions, the award made by Asylum Committees was nearly always sent back to them, and the unfortunate pensioner was satisfied to take a very small part of what he was entitled by law. But what he had to object to, and what was the interest of every one connected with Irish lunatic asylums to oppose, was a clause stating that pensions should be granted at the will of Boards of Asylum Governors, "and not otherwise." It was unnecessary for him to point out, without going into any political discussion, that the management of asylums would undoubtedly in a few years be thrown into the hands of men of very different feelings to those who at present are appointed governors of asylums, and that it would undoubtedly occur that men holding office in asylums would at the end of their years be thrown out, without being granted the pension they had looked forward to as the support of their old age. He, therefore, considered that this was a subject of importance to every Irish superintendent. He had attempted to have it opposed in every way in his power in the Commons, in which he was ably supported by Dr. Nugent; but the passing of the Bill was kept so quiet that it had only been heard of before the third reading, and was only thrown out of the House of Lords as it had no seconder. He, therefore, considered that some action should be taken to amend the Bill during the next Session.

Mr. CONOLLY NORMAN concurred with Dr. Courtenay. In his opinion the clauses of the proposed Bill absolutely excluded men in the

position of medical superintendents from any chance of pension. The very fact of so large an amount as two-thirds of their pay, and allowance being allowed them after fifteen years' service, would cause Boards of Governors at once to reject any claim to pension in their case. An attendant might by chance be given £40 a year on retirement, but the chances of a physician obtaining £400 from a board, constituted as public asylum board, would be, after a few years, if the power of refusing was left to them, simply hopeless.

Dr. DUNCAN suggested that a petition be drawn up to the Chief Secretary, praying that the Bill be taken into consideration by the Government as to whether they would not insist on retaining the power of having some voice in the superannuation of their own officers.

Dr. COURTENAY seconded the proposition, which was agreed to.

PELLAGRA.

In the neurological Section of the annual gathering of German Naturalists and Physicians, held at Wiesbaden, Sept., 1887, Dr. Tuczek, of Marburg, presented an able and elaborate report on the nervous disturbances witnessed in Pellagra, of which we hope to make further use, but in the meantime it may be stated that Dr. Tuczek based his report on a study of Pellagra in northern Italy, which he had made during the months of April and May, 1887. About three hundred and fifty patients had come under his notice, and eight autopsies. Amongst the psychoses observed in Pellagra, melancholia stood first, and in particular the variety named melancholia with stupor. In respect of other cerebral symptoms, *e.g.*, vertiginous attacks and twitchings, like those seen in cortical epilepsy, Dr. Tuczek was able to confirm the statements made by numerous Italian writers on Pellagra. He was also able to confirm the observations on cord symptoms, viz., paræsthesias, motor and sensory palsies, vaso-motor disturbances. Of three hundred cases he found the knee-jerk exaggerated in two-thirds of the number; the exaggeration amounted to the most intense form of patella clonus in some of the cases. In twenty-three of these cases there was ankle-clonus as well, and in general, exaggeration of the tendon reflexes of the upper limbs, also more or less distinct of the other symptoms of spastic spinal paralysis. In seven cases the knee-jerk was wanting; in none of these cases was there ataxy. In the remaining cases there was either diminution, or no essential change in the tendon reflexes. Difference in the liveliness of the knee-jerk on the two sides was frequently observed. The author showed in photographs the chief types of psychosis in Pellagra, also the skin-affections. He showed, by means of preparations, the trophic lesions of the tongue; and he then discussed the post-mortem appearances in Pellagra. In all eight cases there were degenerative affections of the spinal cord, in two cases of the posterior columns only; in the other cases combined disease of the posterior columns, and of the hinder portions of the lateral columns. Preparations were shown. The clinical and anatomical investigations speak in favour of the toxic theory, which points to the prolonged use of diseased maize. Dr. Tuczek drew attention to the analogous toxæmias, Ergotism and Lathyrism, and laid stress on the point that, as in other forms of toxæmia, so in "Maïdismus" or the "Maïdic psycho-neurosis" the nervous disturbances were not exactly progressive.

AMERICAN PROBLEMS OF PSYCHIATRY.

[Having admitted Dr. Kiernan's paper into our Journal (July, 1887), we consider it only fair to place the following criticism on record which appears in Mr. Wines's "International Record of Charities and Correction." *Audi alteram partem.*—EDS.]

"The 'Journal of Mental Science' for July publishes an article, by Dr. J. G. Kiernan, on 'American Problems in Psychiatry,' illustrated by a study of Cook county insanity statistics. It is a strange mixture of truth and exaggeration, or misstatement, and characteristic of its author. It is a matter of regret to us, as we presume it will be to the neurologists of the United States generally, that the Cook County Hospital, which has been managed by a Committee of the County Board, of which several of the members and the warden of this hospital appointed by that Committee are under indictment for corruption in office, should have been selected as a typical American institution, to be held up to the view of English readers in the year which witnesses the meeting of the International Medical Congress in our national capital. The degree of conscientious adhesion to truth exhibited by Dr. Kiernan in his allegations may be judged by his quotations, as where he represents the Illinois Commissioners, for instance, as having said that 'Dr. Spray deserves credit for having *entirely* dispensed with the use of restraint,' when they said '*almost* entirely;' or where he charges that 'the Illinois county insane are to-day chained, naked, and filthy, in dungeons with only an opening in the door-top for air, light, and heat, through which food is pitched as to a dog,' giving the State Board of Charities as his authority. This charge, which was never true of the insane of Illinois as a class, but only in exceptional instances, is not true 'to-day' of any insane man or woman in any county poorhouse in the State. But the subject deserves no further notice at our hands. His slurs upon the Illinois Board of Charities were fully refuted in our issue of July, 1886."

FORGING CERTIFICATES OF CHARACTER.

Edwin Jones, late porter in the employment of the Worksop Poor Law Guardians, was charged with having on the 6th of October offered his services to the Guardians on the production of a forged certificate of character.—The Clerk to the Guardians (J. S. Whall) prosecuted, and said that the prisoner, among other applicants, presented one from Dr. Jepson, Medical Superintendent of the City of London Asylum. He produced documents which he said were original ones. Dr. Jepson was present, and would give evidence before their worships that he had never written such a certificate in his life, and that the man, instead of being in the asylum four years, had only been in it six weeks, and instead of leaving of his own accord, he was discharged for abstained leave. The following was the certificate produced :—

City of London Asylum, January 15th, 1886.

I herewith beg to state that Edwin Jones has been here four years. He is an excellent attendant, kind to the patients, steady, sober, intelligent, and trustworthy; and not afraid of work. He leaves of his own accord, and I am sorry to lose him.

Octavius Jepson, M.D.

Dr. Jepson swore that he never wrote the letter or any portion of it.—Mr. Beevor: It appears you have attempted a great fraud upon the Guardians of the Worksop Union. You will have to pay a fine of £10 and costs, or in default of payment go to prison for two months.

PENSIONS OF MEDICAL SUPERINTENDENTS.

On the 9th December a meeting was held at the County Hall, Derby, of the representatives of nine out of 16 Boards of Guardians in the County, in order to discuss with the Visiting Justices of the County Asylum the question of the cost of maintenance of the patients. The meeting originated in the action of Chesterfield, the largest Union in Derbyshire. Dr. Murray Lindsay was present, and was able to show that the cost of patients in the asylum, so far from being excessive, as alleged, was a halfpenny per week less than the average of all the asylums (8) of nearly equal size. The maintenance charge has been reduced

three times in less than two years—3d. per week on each occasion. It now stands at 9s. 6d., improvements having been effected at the same time by additions to the day and night attendants; also better diet. Under cover of a discussion on the maintenance charge, an attack was made on the salaries of medical superintendents and their pensions, which are regarded as excessive. The Chairman of the largest Union objected to pensions altogether, on the ground that the large salaries now paid were amply sufficient. One gentleman said that he would rather a larger salary was paid than that a pension should be given. It is probable that Magistrates are becoming more influenced by the objections raised by Guardians than many suppose, and it is by no means improbable that in the near future the pensions of county superintendents will participate in the general reduction of income in this country, and the depression of trade and agriculture. It may, indeed, be said that the tide has already turned. The Pension Committee of the Association will, of course, do all in their power in the interests of the medical superintendents of county asylums. These will, no doubt, be fully alive to the importance of united action in supporting this Committee in the course it thinks best to pursue, whatever that may be.

We append the following list prepared by Dr. Williams, of Haywards Heath:—

List of Pensions granted to Medical Superintendents of County Asylums in England and Wales.

Superintendent's Name and Date of Retirement.	Name of Asylum.	Amount of Pension.	Proportion to Salary and Allowances.	Length of Service.
1887. Dr. Jepson ...	City of London	£800	Two-Thirds.	23 years.
1887. ,, Pater ...	Stafford ...	£300	One-Third.	13 ,,
1886. ,, Symes ...	Dorset ...	£450	One-Half.	32 ,,
1886. ,, Hills ...	Norfolk ...	£600	Two-Thirds.	25 ,,
1886. ,, Gilland ...	Berks ...	£400	One-Half.	16 ,,
1885. ,, Manley ...	Hants ...	£800	Two-Thirds.	29 ,,
1883. ,, McCullough	Monmouth, &c.	£730	Two-Thirds.	25 ,,
1882. ,, Toller ...	Gloucester ...	£550	One-Half.	19 ,,
1882. ,, Brushfield ...	Surrey ...	£700	Two-Thirds.	16 ,,
1881. ,, Sheppard ...	Colney Hatch	£450	One-Half.	20 ,,
1880. ,, Davies ...	Stafford ...	£250	One-Third.	22 ,,
1878. ,, Holland ...	Lancashire ...	£750	Two-Thirds.	28 ,,
1876. ,, Kirkman ...	Kent ...	£400	One-Half.	12 ,,
1876. ,, Broadhurst ...	Lancashire ...	£300	One-Half.	33 ,,
1876. ,, Kirkman ...	Suffolk ...	£600	Two-Thirds.	45 ,,
1874. ,, Denne ...	Three Counties	£500	Two-Thirds.	20½ ,,
1872. ,, Begley ...	Hanwell ...	£466	Two-Thirds.	34 ,,
1871. ,, Hitchman ...	Derby ...	£400	One-Half.	21 ,,
1870. ,, Boyd ...	Somerset ...	£450	One-Half.	21 ,,
1868. ,, Hill ...	North Riding	£533	One-Half.	20 ,,
1868. ,, Ley ...	Oxford ...	£250	One-Third.	23 ,,
1867. ,, Lawrence ...	Cambridge ...	£50	———	7 ,,
1864. ,, Huxley ...	Kent ...	£350	Two-Thirds.	17 ,,
1862. ,, Williams ...	Gloucester ...	£300	One-Third.	17 ,,
1851. ,, Prosser ...	Kent ...	£150	———	13 ,,

Average length of Service—22 years. Average Pension—nearly £500.

EXAMINATION IN PSYCHOLOGICAL MEDICINE.

The next examination in Ireland for the Certificate of Efficiency in Psychological Medicine will be held at the Richmond Asylum, Dublin, Thursday, February 16, 1888.

Correspondence.

MEDICAL AND CHEMICAL ASSESSORS.

To the Editors of "THE JOURNAL OF MENTAL SCIENCE."

SIRS,—I respectfully submit the annexed measure to the consideration of your readers. I shall not trespass upon your valuable space by sketching, or commenting upon, the history of the decline and fall of medical expertism in England. The fact remains. The instant reverence with which medieval tribunals bowed to its verdict; the tolerance shown, for example, by our own House of Lords to the usurpation of their judicial functions by the seven noble kinswomen to the Countess of Essex, who were all "sticklers for the nullity," has ceased, and very few and very feeble have been the voices raised to condemn the dictum of Bonnies—*l'expertise n'est qu'un verre qui grossit les objets.* The discreditable feud between legal and medical expertism is not to be terminated by concealing it under a thin veneer of superficial courtesy or a false analogy to the duties of counsel. It is the logical issue of the historical accident which, as civil procedure in England gradually became inquisitorial, substituted the medical advocate for the scientific assessor.

In drafting this measure, which is borrowed partly from the resolutions of an American medico-legal society, and partly from the Admiralty Jurisdiction Acts, I have had the benefit of the invaluable advice of Dr. Maudsley, and of my friend Dr. Henry D. Littlejohn, of Edinburgh.

I am, &c.,
A. WOOD RENTON.

3, Middle Temple Lane,
17th October, 1887.

MEDICAL AND CHEMICAL ASSESSORS ACT, 1888.

Be it enacted, etc., as follows:

1. This Act may be cited as the Medical and Chemical Assessors Act, 1888.

2. In the interpretation, and for the purposes of this Act, the following terms shall have the respective meanings hereinafter assigned to them, that is to say:

"Medico-legal" issue shall mean any issue arising upon the trial of any civil cause or criminal prosecution for the determination of which the opinion of medical or chemical experts may be deemed necessary.

"Judge" shall mean any person or persons invested by law with judicial authority, before whom, in the lawful exercise of such authority, any medico-legal issue may arise.

"Registrar" shall include any person who acts in the capacity of a registrar to any judge, as hereinbefore defined.

3. The provisions of this Act shall apply to the United Kingdom of Great Britain and Ireland.

4. Upon the commencement of this Act duly qualified persons shall forthwith be appointed as follows to act in the manner hereinafter provided as medical and chemical assessors in England, Scotland, and Ireland respectively: The Lord Chancellor of England shall appoint twenty-four medical and twenty-four chemical assessors; the Lord President of Scotland

and the Lord Chancellor of Ireland shall each appoint twelve medical and twelve chemical assessors, to act within their respective jurisdictions.

5. Every assessor shall receive notice in writing of his appointment, and every such appointment shall be for the period of three years from and after the date of such notice.

6. (i.) At any time before or during the trial of any civil cause or criminal prosecution, any judge may require the registrar to summon to his assistance not less than three medical or chemical assessors.

(ii.) Every assessor so summoned shall be bound to attend at the trial and assist the judge in the manner hereinafter provided, and for every wilful disobedience to such summons shall be liable at the discretion of the judge to a penalty not exceeding five pounds, and shall receive for his services a fee, fixed by the judge after the trial, of not less than five guineas a day or for any part of a day, together with such an allowance for travelling and incidental expenses as the judge may direct.

(iii.) The said fee and allowance shall be payable out of the county rates.

7. It shall be the duty of every assessor summoned to and attending any trial as aforesaid to assist the judge by answering any questions, and by expressing in open court his opinion with reference to any medico-legal issue that may arise or may have arisen therein. But the judge, or in cases tried with a jury, the jury, shall not be bound to follow the opinion of any, or of a majority, of the assessors, unless he or they concurs or concur in it.

8. Nothing in this Act contained shall affect, or in any way prejudice, the right of any party to any civil cause or criminal prosecution to support his case, as hitherto, by the evidence of medical or chemical experts.

9. This Act shall commence and take effect from and after the first day of January, 1889.

10. Section fifty-six of the Judicature Act, 1873, from and including the words "other than" down to and including the word "crown" is hereby repeated.

Obituary.

DR. J. N. RAMAER.

Psychological Medicine in Holland received a severe blow on the 2nd of November, 1887, by the decease of Dr. J. M. Ramaer.

He was born on the 20th of April, 1817, at Bois le Duc, and attended the grammar school at that place. His schoolfellows say that he was one of the best scholars, and that he displayed a great aptness in mastering difficulties. He afterwards studied medicine at Utrecht, where he was a pupil of Professor Schroeder van der Kolk. His medical degree was taken at Groningen, to which place his parents moved after a few years. The degree of M.D. was conferred upon him after his writing and defending a dissertation: "De Æthiopica generis humani varietate."

After leaving the University of Groningen he set out on a tour to the schools of Vienna, Münich, and Paris, previously to his settling as a physician at Rotterdam in 1840.

The lessons of Professor van der Kolk caused him to make nervous and mental diseases his favourite study, and it was at the recommendation of this great anatomist and neurologist that Ramaer was appointed medical superintendent to the lunatic asylum at Zutphen. He was appointed in 1841 and entered upon his duties on 18th January, 1842.

It was in 1841 that the first law was passed in the Netherlands which greatly improved the lot of the insane, and it shows the great trust which Van der Kolk, the *auctor intellectualis* of the law, put in Ramaer, then only 24 years old. His subsequent career showed that the trust was well deserved. He devoted his energy and powers to the Zutphen Asylum till 1863, when he was appointed medical superintendent of the asylum at Delft. He stayed at Delft six years, and on the 1st of July, 1869, he moved to the Hague, where he settled as

physician for nervous and mental diseases. The Board of Governors of the Delft Asylum, wishing to profit by his experience and learning, appointed him consulting physician to their asylum. This honourable post he resigned in 1872, having obtained a call from the Home Office to be inspector of lunatic asylums.

It is only natural that a law, however excellent, should have many deficiencies which are only discovered after such a law has been in existence for some time. And so it was with the law passed in 1841. When Ramaer came into authority he kept urging the necessity that the old law should be recalled, and another and better one be substituted. His endeavours were successful, and on the 1st of October, 1884, he had the satisfaction of seeing the present law of lunacy issued.

It was during his stay at Zutphen that he started the plan of uniting the different medical associations of different places into one general medical society, and it is in a great part owing to his increasing endeavours and unfailing energy that he saw his favourite plan improve, and when the general medical association celebrated its twenty-fifth anniversary, Ramaer had the great satisfaction of delivering the presidential address.

Another medical society gratefully recognizes him as its founder, viz., the Psychological Society, of which he resigned the chair when appointed to be Inspector of Lunacy.

The King decorated him with the Order of the Lion, and its device, "Virtus nobilitat," was well placed on his noble breast.

He was an honorary member of several learned societies, one of which was the Medico-Psychological Association of England. He was the author of several papers relating to our branch of medicine.

If it may be said that he tasted the sweets of life, still he suffered from bereavements. He lost an only daughter, a son (a promising young barrister), and a well beloved wife. An indefatigable worker in his asylum and his study, he was a kind father and cheerful friend, and those who enjoyed his friendship and hospitality all agree in their praises of his conversational powers and the vast amount of his general information.

He encouraged work, and stimulated young physicians to search the vast field before them.

His death was occasioned by a comparatively trifling cause. While cutting a corn his knife slipped, and he received a small wound, which caused him little, if any pain. Unfortunately he neglected this small scratch, and continued walking. Very soon after an abscess formed, and, notwithstanding the best nursing and the most stringent antiseptic treatment, sloughing set in, and in a few weeks caused his death.

A good and a noble man has departed this life; well may his family weep for him, but let those he left behind, find consolation in the consciousness that the deceased bore a name which was honoured and respected throughout the land.

F. M. Cowan, M.D.

Dordrecht.

[We add our lively regrets to those of Dr. Cowan at the loss of this able and genial physician, who became an Honorary Member of the Association a year ago. He took an active part in the Congress of Mental Medicine held at Antwerp in 1885, and at the recent inauguration of Guislain's statue at Ghent. He was present as the representative of Dutch Psychology, and he delivered an able and feeling speech at the banquet. We trust that as impartial and experienced an Inspector of asylums will be appointed his successor. He certainly will not be more so.]

DR. FOVILLE.

As the last sheet goes to press the melancholy intelligence reaches us that this eminent alienist is dead. The distinguished son of a distinguished father, he has occupied for many years an honourable position in psychological medicine as the Medical Superintendent of large Asylums, and as an Inspector of Institutions for the Insane. Till quite recently his friends looked forward to his continuing to fulfil his responsible duties for many years. We are informed that the first symptoms of his disorder made their appearance last July, and demanded absolute repose for some time. He had regained his health, when in October he had to resume his official inspection of asylums. During his visit for this purpose to the south of France he got a chill one evening, and the symptoms reappeared with such severity that he was obliged to return home to Paris, when he took to the bed which he never left. For the last three weeks it was but too clear how the disease would terminate, and he died of Bright's disease December 15th, 1887. As his friend M. Motet truly says in communicating to us the sad news: "Mental Medicine has sustained a severe loss, and the Department of Asylum Inspection will not easily find another man so profoundly honest, whose just and impartial mind solved in the best manner the most delicate questions as they arose." With his bereaved family and his colleagues, who so greatly deplore his loss, we express our most cordial sympathy and heartfelt regrets. We do not forget his generous appreciation of the work done by Englishmen in reforming the condition of the insane, and the justice he rendered to our asylums in the well-known work written a few years since, which showed how thoroughly conversant he was with our lunacy legislation as well as our institutions.

Our space will not allow of more than this brief tribute to the memory of our lamented *confrère*. In our next number we shall give a sketch of his life and writings.

Appointments.

Burd, E. Lycett, B.A., M.B., B.C.Cantab., appointed Second Medical Visitor to the Private Asylums of Salop and Montgomery.

Hyslop, Theo. B., M.B., C.M.Edin., appointed Assistant Medical Officer to the Royal Albert Asylum for Idiots and Imbeciles, Lancaster.

Williams, Dr. S. D., Medical Superintendent of the Haywards Heath Asylum, has resigned, after holding the appointment 20 years.

We regret that we have been obliged to postpone Reviews of numerous works, as also an excellent Address by Professor Mierzejewski, at the University of St. Petersburg.

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Stewart, Rothsay C., M.R.C.S., Assist. Med. Officer, County Asylum, Leicester.
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Tuke, Daniel Hack, M.D. Heidel., F.R.C.P. Lond., M.R.C.S. Eng., formerly Visiting Physician, The Retreat, York; Lyndon Lodge, Hanwell, W., and 63, Welbeck Street, W. (*Editor of Journal.*) (PRESIDENT, 1881.)
Tuke, Thomas Harrington, M.D. St. And., F.R.C.P. Lond. and Edin., M.R.C.S. Eng.; 37, Albemarle Street, and The Manor House, Chiswick. (*General Secretary*, 1862-72.) (PRESIDENT, 1873.)
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Tuke, T. Seymour, M.R.C.S., Manor House, Chiswick.
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Urquhart, Alexr. Reid, M.B., C.M., Physician Supt., James Murray's Royal Asylum. (*Hon. Secretary for Scotland.*)
Virchow, Prof. R., University, Berlin. (*Hon. Memb.*)
Voisin, A., M.D., 16, Rue Séguin, Paris. (*Hon. Memb.*)
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Walker, E. B. C., M.B., C.M. Edin., Assist. Med. Officer, County Asylum, Haywards Heath.
Wallace, James, M.D., Medical Officer, Parochial Asylum, Greenock.
Wallis, John A., M.B. Aberd., L.R.C.P. Edin., Medical Superintendent, County Asylum, Whittingham, Lancashire.
Walmsley, F. H., M.D., Leavesden Asylum.
Walsh, D., M.B., C.M., Assistant Medical Officer, Kent County Asylum, Barming Heath.

Ward, Frederic H., M.R.C.S. Eng., L.S.A., Assistant Medical Officer, County Asylum, Tooting, Surrey.
Ward, J. Bywater, B.A., M.D. Cantab., M.R.C.S. Eng., Medical Superintendent, Warneford Asylum, Oxford.
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Westphal, C. Professor, Kronprinzenufer, Berlin. (*Honorary Member.*)
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Wiglesworth, J., M.D. Lond., Rainhill Asylum, Lancashire.
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Wilkes, James, F.R.C.S. Eng., late Commissioner in Lunacy; 18, Queen's Gardens, Hyde Park. (*Honorary Member.*)
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Willett, Edmund Sparshall, M.D. St. And., M.R.C.P. Lond., M.R.C.S. Eng., Wyke House, Sion Hill, Isleworth, Middlesex; and 4, Suffolk Place, Pall Mall.
Williams, S. W. Duckworth, M.D. St. And., L.R.C.P. Lond., Medical Superintendent, Sussex County Asylum, Haywards Heath, Sussex.
Williams, W. Rhys, M.D. St. And., M.R.C.P. Ed., F.K. and Q.C.P., Irel., Commissioner in Lunacy, 19, Whitehall Place. (*Hon. Member*).
Wilson, G. V., M.D., Assist. Med. Officer, District Asylum, Cork.
Wilson, Jno. H. Parker, H.M. Convict Prison, Brixton.
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Wood, William, M.D. St. And., F.R.C.P. Lond., F.R.C.S. Eng., Visiting Physician, St. Luke's Hospital, formerly Medical Officer, Bethlem Hospital; 99, Harley Street, and The Priory, Roehampton. (PRESIDENT, 1865.)
Wood, Wm. E. R., M.A., M.B., F.R.C.S. Edin., Leighton House, Stanmore, Sydney, New South Wales.
Wood, Thomas Outterson, M.D., F.R.C.P., F.R.C.S. Edin., M.R.C.S. Engl., 40, Margaret Street, Cavendish Square, W.
Wood, B. T., Esq., M.P., Chairman of the North Riding Asylum, Conyngham Hall, Knaresboro. (*Honorary Member.*)
Woods, Oscar T., B.A., M.B. Dub., Medical Superintendent, Asylum, Killarney.
Woods, J. F., M.R.C.S., Med. Supt., Hoxton House, N.
Workman, J., M.D., Toronto, Canada. (*Honorary Member.*)
Worthington, Thos. Blair, M.A., M.B., and M.C. Trin. Coll., Dublin, Med. Supt., County Asylum, Knowle, Fareham, Hants.
Wright, Francis J., M.B. Aberd., M.R.C.S. Eng., Northumberland House, Stoke Newington, N.
Wyatt, Sir William H., J.P., Chairman of Committee, County Asylum, Colney Hatch, 88, Regent's Park Road. (*Honorary Member.*)
Yellowlees, David, M.D. Edin., F.F.P.S. Glasg., Physician-Superintendent, Royal Asylum, Gartnavel, Glasgow.
Young, W. M., M.D., Assist. Med. Officer, County Asylum, Melton, Suffolk.
Younger, E. G., M.D. Bruss., M.R.C.P. Lond., M.R.C.S. Eng., Asst. Medical Officer, County Asylum, Hanwell, Middlesex.

ORDINARY MEMBERS - - - - - - - -	356
HONORARY AND CORRESPONDING MEMBERS - - -	60
Total - - - - - -	416

Members are earnestly requested to send changes of address, &c., to Dr. Rayner, the Honorary Secretary, County Asylum, Hanwell, Middlesex, and in duplicate to the Printer of the Journal, H. W. Wolff, Lewes, Sussex.

List of those who have passed the Examination for the Certificate of Efficiency in Psychological Medicine, entitling them to append M.P.C. (Med. Psych. Certif.) to their names.

Black, Victor.
Cowper, John.
Cram, John.
English, Edgar.
Fraser, Thomas.
Howden, Robert.
Hyslop, Thomas B.
Macpherson, John.
Melville, Henry B.
Moore, Edward Erskine.
* Mortimer, John Desmond Ernest.
Nairn, Robert.
Neil, James.
Pearce, Walter.
Rigden, Alan.
Robertson, G. M.
Scott, J. Walter.
Steel, John.
Simpson, Samuel.
Slater, William Arnison.
Smith, Percy.
Symes, G. D.
Thompson, George Matthew.
Wood, David James.

* To whom the Gaskell Prize (1887) was awarded.

OBSERVATIONS AND SUGGESTIONS

ON THE

LUNACY ACTS AMENDMENT BILL

BY THE

PARLIAMENTARY COMMITTEE

OF

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

OBSERVATIONS AND SUGGESTIONS ON THE LUNACY ACTS AMENDMENT BILL BY THE PARLIAMENTARY COMMITTEE OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

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1. The Medico-Psychological Association, composed of upwards of four hundred medical men engaged in the treatment of insanity, feels that it would be neglecting a public duty if it failed to express the views which experience has led them to form with regard to lunacy legislation.

2. The Committee of this Association specially appointed to consider the Lunacy Bill desire to draw the attention of members of the House of Commons to the great and important alterations which, by the Bill now before the House, it is proposed to adopt in the practice regulating the admission of insane persons into asylums and hospitals.

3. The Bill proposes to throw upon a judge, magistrate, or justice the responsibility of deciding whether, in a case of lunacy, the medical evidence is sufficient.

4. The Committee have very carefully considered this provision, and have come unanimously to the conclusion that the personal intervention of the magisterial authority in the manner proposed is undesirable, and will lead, if adopted, to delay in treatment, and to attempts at evasion of the law, and will certainly be antagonistic to the welfare of the diseased persons.

5. The encouragement of personal interviews between the magistrate and patient is not in accordance with the Scotch law, which has been taken as the basis of the new procedure, and which has been used as the strongest argument for the introduction of the magisterial intervention.

6. The Committee are of opinion that it is undesirable that a magistrate should be called upon to decide questions which are of a purely medical character, and still more undesirable that it should be legally practicable for a magistrate to

overrule the scientific opinion of two medical men who might be among the most eminent of their profession.

7. The Committee are strongly of opinion that the power of these authorities should be purely *ministerial*, and that when any doubt arises on what is a medical question they should have power to refer the case to the decision of a medical man to be named by them, but that they should not themselves have the power to personally visit and examine the alleged lunatic.

8. The insanity of childbirth may be taken as an instance in which the intervention of a magistrate might be required under the provisions of the Bill as it now stands, and would be in every respect most objectionable. A magistrate might be called upon to visit such patient, and it would apparently be his duty to determine a sufficiency of mental disease, and consequently to determine a medical question, and to prescribe whether a certain line of treatment should or should not be adopted. It is probable that if, consequent on such a decision, a suicide or homicide occurred, public opinion would be strongly expressed on the decision of a medical question of vital importance by a legal authority. Surely in such a case it would be more desirable in every way that the magistrate should have power to appoint a medical man to visit the patient than that he should personally have to do so.

9. The Committee feel that the change suggested by them is opposed to the scheme of the Bill as it has passed the House of Lords, but they hope that the remarks they have made may recommend their proposal to members of the House of Commons, many of whom, as magistrates, will no doubt feel how difficult would be their position if called upon to decide a question as to the sanity or insanity of any person who might be brought before them, or whom they might be called upon to visit.

Passing to the consideration of the Bill as it now stands, the Committee desire to make the following observations :—

Clause 3. Sec. 7.

Clause 3. *Sec.* 7.—The proviso that a medical practitioner who signs an urgency certificate should not sign the certificate on the subsequent petition is open to objection. It is not in accordance with the Scotch practice from which the procedure is adopted, and it would involve obtaining the service of three medical men, which is often difficult in country places, in addition to the increase of expense which it would necessitate.

Sec. 11.

Sec. 11.—The amount of the fee should be fixed.

. 8. *Sec.* 8.—We read this Clause as permitting consultation after one of the certificates has been signed.

use 5. m 7. Clause 5. *Form* 7.—If this very objectionable provision is adopted some specified time should be laid down within which the judge, magistrate, or justice, after receipt of notice in Form 7, should visit the patient or have him brought before him, and also a specified time within which, after such visit, he should send his report to the Commissioners in order to prevent undue delay in these matters.

use 9. Clause 9.—Under this Clause (9), which provides that patients are not to be received under certificates of "*interested persons*," the Section (3) which debars any person who is a member of the Managing Committee of a Hospital for the insane from presenting a petition or signing a certificate appears to be wholly uncalled-for, as such member cannot with any propriety be regarded as an interested person. This section is felt to be not only quite unnecessary, but it would prove practically inconvenient in many instances. It may be added that when a physician examines a patient with a view to signing a certificate, he does not necessarily know to what asylum he may be admitted, and the certificate he signs may, if this Clause remains, prove valueless, and the friends of the patient be put to the needless expense and trouble of obtaining another in its place. For these and other reasons it is urged that the disability thus attached to the medical member of the committee of a hospital should be removed.

ause 28. Clause 28.—This Clause forbids the reception of single patients in the houses of medical practitioners, except in cases of unsoundness of mind of a temporary character, or from decay of mind in old age, or where the patient is voluntarily desirous of submitting to treatment while the house of any other person remains open.

The Committee protest strongly against this Clause being allowed to pass; they feel that it is most unfair that the houses of medical men should be singled out in this manner as being unfitted for the care and treatment of single patients. The Committee believe that in a very great number of cases this plan of treatment confers the greatest benefit upon patients, and there does not appear to be any need for a provision of this description. Its effect will be to induce the friends of patients to send them abroad.

auses 50, 1, 52, 53. Clauses 50, 51, 52, and 53.—These Clauses introduce many new provisions with regard to hospitals which are

entirely opposed to the principle of local government from which so much of their success has hitherto been derived.

Clause 54. CLAUSE 54.—This Clause provides that where an officer is transferred from one county asylum to another in the same county his service in all such asylums shall be counted for the purpose of computing his pension.

The Committee wish to point out with reference to this Clause that it would be only fair to extend it to cases where a medical officer is transferred, as often happens, from an asylum in one county to an asylum in another county. As the Clause stands at present it refers only to service in the same county.

In case a difficulty should arise as to payment of the pension by different counties, it is submitted that this may be obviated by each county paying in proportion to the length of service and rate of pay of such officer in each county. The Committee think that in reckoning the number of years service of a Medical Superintendent for the purpose of computing his pension, the Committee of Visitors should be empowered to add any number of years not exceeding seven to the period of his service.

Medical officers who hold the position of superintendents have frequently held subordinate office for a considerable number of years, and have also spent several years in acquiring their professional knowledge.

The Committee also consider that a Clause should be inserted in the Bill giving power to medical superintendents to appeal to the Home Secretary in the case of refusal or reduction of their pensions.

Clause 58. CLAUSE 58 is considered to be peculiarly objectionable, as being quite uncalled-for, and as being capable, under conceivable circumstances, of being used as an instrument of great public injustice.

There is probably no precedent for such extensive powers, practically without appeal, being given by an Act of Parliament to any department over large public institutions which, for many years, have been fulfilling a great public requirement, and which, as the reports of the Commissioners in Lunacy bear witness, have been conducted with remarkable efficiency and success.

It must also be noted that, in this Clause especially, a responsibility under severe penalties is thrown upon the superintendent of the hospital, which he, as the paid servant of the Committee of Managers, could have no possible power of discharging except by their permission.

ause 70. CLAUSE 70.—It is suggested, as this Clause provides for the re-taking of patients, who may have escaped into Scotland or Ireland, and as 25 & 26 Vict., c. III., sect. 38, declares failure to return from leave of absence or trial to be an escape, that it shall be made clear in this Act that the power to send leave patients on leave of absence or trial to *any* place may be extended to a place in Scotland or Ireland; and that patients detained under the order of the Court of Chancery shall be included in this provision. It is also suggested that Lunacy authorities in Scotland or Ireland should have similar power to give permission for sending patients under their jurisdiction on leave of absence to any other of the divisions of the kingdom.

orms 2, 11, 12, 17. *Forms* 2, 11, 12, and 17.—The statutory question "whether any near relative has been afflicted with insanity" is looked upon as unnecessarily inquisitorial.

On the removal of private patients from registered hospitals, county or borough asylums, and licensed houses, much difficulty is frequently experienced, and it is hoped that the present Bill will contain some provision which will lessen, if not altogether remove, the evil complained of. At most of the registered hospitals, and at some licensed houses, patients in indigent circumstances, but not paupers, are admitted for a limited time, or so long as they can be paid for in part; it follows then that yearly a large number of such cases require to be removed to county, or rate-supported institutions. At present very distressing and even dangerous results follow from the inability of the relieving officer to receive such cases direct from the hospitals. It has been suggested that on the receipt of a notice from the registered hospital that a person of unsound mind, and not fit to be at large, is to be removed, the relieving officer should be required to fix the time for the direct transfer of the patient to the infirmary or magistrate's court without the removal of the patient to the home of the friends being necessitated.

The Committee suggest that a Clause might be introduced to the following effect:—

"It shall be competent for a magistrate of a county to sign an order for the removal to the county asylum of any insane patient in a registered hospital (or a licensed house) in regard to whom a certificate of insanity and *primâ facie* evidence of chargeability, from the medical officer of the registered hospitals, &c., are presented."

The Committee recommend most urgently that provision

should be made for giving clinical instruction in insanity in the county and borough asylums by medical officers of those institutions.

In conclusion, the Committee of the Medico-Psychological Association would seek to impress most earnestly on the members of the House of Commons that insanity is a symptom of disease, and that the primary aim and object of all legislation in regard to it should be the care and proper treatment of the afflicted persons who suffer from it.