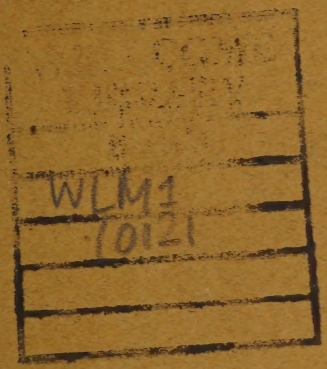

THE JOURNAL

OF

MENTAL SCIENCE

Published by Authority of the
Association of Medical Officers of Asylums and Hospitals
for the Insane.

EDITED BY

C. L. ROBERTSON, M.D. CANTAB.

AND

HENRY MAUDSLEY, M.D. LOND.

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

FRANCIS BACON, *Proleg. Instaurat. Mag.*

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NEW BURLINGTON STREET.

MDCCCLXV.

"In adopting our title of the *Journal of Mental Science, published by authority of the Association of Medical Officers of Asylums and Hospitals for the Insane*, 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.


ROYAL COLLEGE OF

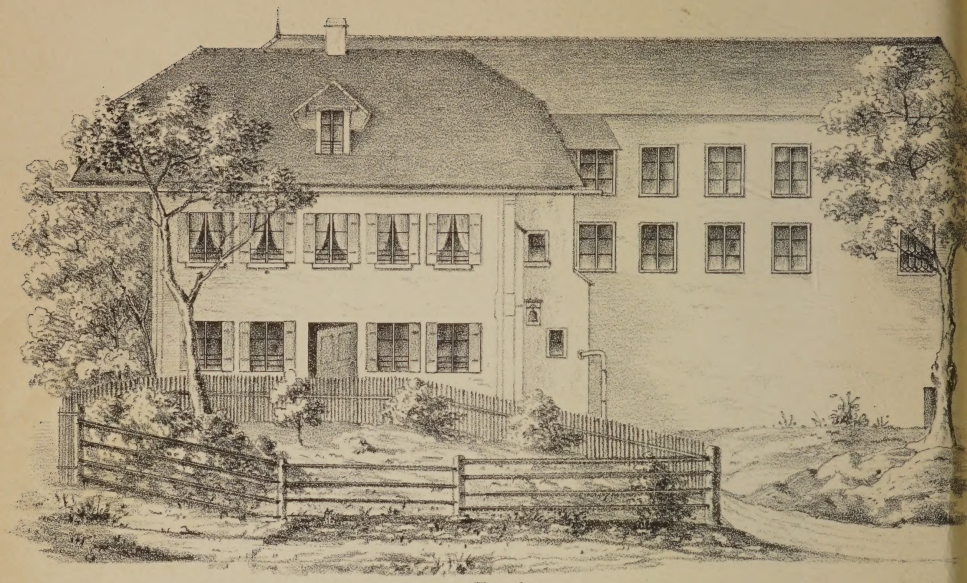
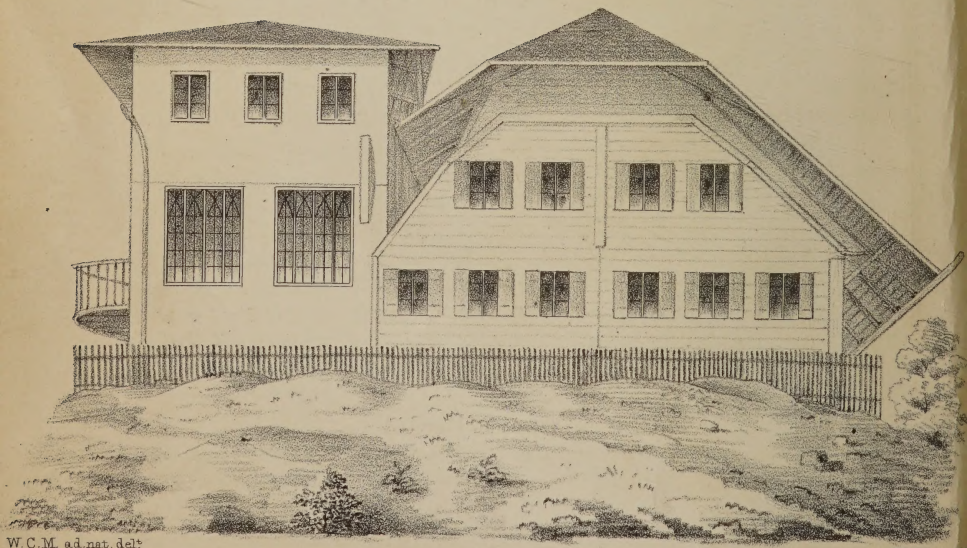


Fig. 1.



W. C. M. ad. nat. del.

W. West, L

Fig. 2.

THE JOURNAL OF MENTAL SCIENCE.

No. 49. APRIL, 1864. VOL. X.

PART I.—ORIGINAL ARTICLES.

Stray Notes on Foreign Asylums, &c. By W. CARMICHAEL MCINTOSH, M.D. Edin., F.L.S., Medical Superintendent of the Perth District Asylum, Murthly.

IN the following stray notes and remarks, the writer details a trip to various places of medical and psychological interest which he made, in company with Professor Laycock, through some parts of France, Savoy, and Switzerland.

The thirtieth Meeting of the "*Congrès Scientifique de France,*" at Chambery, in Savoy, on the 10th of August 1863, presented features of considerable interest medically, in that, at the very head-quarters of the disease, there was to be a discussion on "*Crétinisme.*" Matters, however, rendered it impossible for me to be forward in time for this; but Chambery, the ancient capital of Savoy, must needs have an asylum for the care and treatment of the lunatics of the 543,000 inhabitants scattered throughout the various *arrondissements*, and accordingly this was early visited.

"*L'Asile départemental de Bassens*" is situated at a short distance (two kilomètres) from the city, and reached by a curious drive through narrow lane-like streets, which have many goitrous persons lounging in the doorways, while in the outskirts the road is shaded by fine walnut trees, and bordered by a profusion of vines. The Asylum lies in the valley, surrounded on all sides by lofty hills, yet placed at such a distance from them as to afford a magnificent view of rugged peak, cultivated slope, or, it may be, golden, sunlit summit. From the information kindly afforded by the physician, M. le Dr. F. Fusier, as well as from his Reports, the following would seem to be the history of the institution.

The old Asylum, "*L'Asile des Aliénés du Betton,*" being situated in an unhealthy locality, badly constructed, and liable to severe epidemics of marsh fever, a determination was come to by the administration to erect a new one. The conclusions of the physician, M. le Dr. Duclos, being—(1) That intermittent fevers were endemic in the Asylum. (2) That the great majority of the patients (1 in 1·71) were attacked with the fever during the first year of their sojourn. (3) That on account of the pestilential atmosphere of the locality, the inherent unhealthiness of certain parts of the house, and the excessive damp of the ground-floor, the inmates were prone to bronchial and rheumatic affections, to œdema and scurvy. Accordingly, M. Duclos undertook a trip at the expense of the government to various French Asylums in 1843, for the purpose of arriving at the most enlightened information on the subject; publishing as the fruits of this opportunity of observation a work entitled 'Etudes médicales sur quelques établissements d'aliénés de France;" * and in the same year a more special one, 'Mémoire pour servir à la création d'un asile d'aliénés en Savoie.' While busy arranging the plans of the new asylum with the architect, poor Duclos fell a victim to the deadly intermittent of the Betton; which had proved fatal to his predecessor. The greater part of his life had been devoted to the alleviation of the condition of the lunatics of Savoy, and that too in the most praiseworthy and generous manner; and, when he had but a few hours to live, his final effort was expended in writing to the architect as to whom he should consult. Fusier, his junior and successor, adds, "Le sacrifice de sa vie aux aliénés n'a pas satisfait Duclos, il a encore voulu leur léguer une partie de sa fortune, en assurant à l'asile une rente perpétuelle pour l'entretien d'un malade." The administration of the insane of the Duchy of Savoy testified their regard by erecting a memorial to him in the cemetery of Châteauneuf.† After his death, Fusier was elected physician, having also made a tour through various asylums, and embodied the results of his observations in a very interesting pamphlet on the construction of the internal and other fittings of such institutions.‡

The new building, which has been open for the reception of patients only for a few years, is surrounded by appropriate grounds and enclosed by a stone wall. There is a substantial lodge, with a ponderous walnut door, evidently made with an eye to the safe

* 1 vol. in 4to, 400 pages, Chambery, 1846.

† The medallion bearing the following amongst the rest:

"Père et Providence des aliénés,
Il leur prépara un nouvel asile,
Leur consacra sa vie entière
Et son dernier mot fut pour eux."

‡ 'Etudes médicales faites dans les asiles d'aliénés—les mieux organisés—de France, d'Allemagne et de Suisse,' &c.

custody and keeping of the inmates. It needs but a glance to see that the grounds are well cared for, and the clean sward, tidy walks, and vigorous young trees speak for more than themselves.

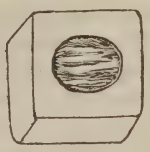
The drive turning to the left brings us through an archway into the quadrangle. The general form of the building is a parallelogram, having in the centre the business rooms, the male division on the right, and the female on the left, each separated from the first suite by a court.

The day rooms are spacious, each having long walnut tables and forms, and generally rather defective in means of recreation and amusement, a want, however, on the male side partly compensated by the extensive engagement of the patients in out-door labour. They were dining when we visited—chiefly on rice soup or vegetable broth and bread, and the men sat at table with their large broad-brimmed straw hats on their heads, just as they had come in from field labour. They politely uncovered, however, on our entrance, most of them rising to their feet.

The dormitories are rather large apartments, with the beds somewhat close to each other, but separated from the wall by a space of several feet to promote free ventilation. The beds generally are made of iron, of good and substantial formation, an end view being seen in the accompanying woodcut,* Fig. 1. They are painted of a yellowish stone or "cane" colour. The coverlets of these beds are of a white downy cotton stuff, which felt heavy for the warmth of the season; sheets of linen, and all the bedding of snowy whiteness. The mattresses for the ordinary beds are stuffed with the broad blades of the common grain of the country, *Zea mais*, maize, or have straw. The former makes a somewhat rough mattress to the touch (not more so than cork shavings), but it is stated to be a very comfortable bed to lie on, and it has the virtue of cheapness. In some beds there were two mattresses, both of the same material. Fig. 2 is the central portion of one of the mattresses for the dirty, having an oval space in its middle uncovered, so as to expose the neatly packed stuffing of straw. The other two portions of the mattress are as usual. For such cases, the bottom of the bed (wooden) is covered with zinc, and slopes to a funnel in the centre. The *modus operandi* is stated to be as follows:—The urine of the patient passes readily through the straw central portion to the zinc funnel without forming a pool about the hips, for the straw acts as a strainer; but the complete covering in of the straw with the coarse canvas packing would not

Fig. 1.

Fig. 2.



* I owe my woodcuts to the *amateur* hand of a lady.

have interfered much with this, and would have been more comfortable. In the single rooms, the beds are of wood, and the garden labourers occupy many of these by way of promotion. A little walnut stand is at the bedside of each of the quiet and clean patients in the dormitories, for holding his effects.

Throughout the institution, a very firm cement, *ciment de Grenoble*, is used for paving passages, &c., and it seems as hard as marble on the polished surface, and mottled grey like the Brussels flagstones. Diagonal stripes of a brownish tint divided the surface into lozenges, and gave it a less monotonous look, and, according to our guide, increased its firmness.

The windows are of two kinds: the most prevalent one has a narrow horizontal sash at the top, opening inwards on hinges, with two lower divisions which fold laterally on the swing principle, and secured by a key which in turning shoots a long bolt into a socket at the bottom. The bars are of iron. The second form is more ornamental, and is chiefly in use at those portions of the establishment occupied by officers; the bars are of flat iron, crossed, and the junction secured by a neat knob of brass; they also open laterally on the swing principle. A third form was observed on coming down a stair (which had ordinary flights of steps and moderately wide), viz., a single frame about three feet wide, and more than a foot in depth, and swung entirely open, so that a patient, if so disposed, had a ready means of abbreviating the descent; but little fear was entertained on this score by the physician. He stated that there was one attendant to about fourteen quiet patients, the proportion amongst excited patients being much greater.

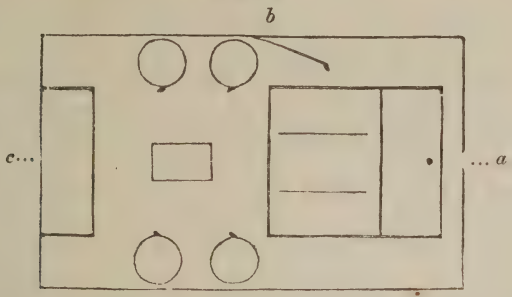
The doors are large, and open in two halves, and the mats are very similar to those manufactured by our fisherwomen from the "bent," which thrives so well amongst the sandy hillocks of the coast line.

The store-rooms showed that admirable order in the arrangement of clean linen, new goods, patients' clothing, &c., often so characteristic of foreign asylums. The shelving consists of simple horizontal boards with perpendicular divisions at moderate distances, so that the order is due mainly to the care and tidiness with which the articles are placed thereon.

The washing-house is in a detached building along with the artizans' shops, and has the arrangement seen in the woodcut Fig. 3. The entrance is at *a*, immediately opposite which is a large stone washing-trough about eighteen feet long, divided by a transverse stone belt (parallel to the entrance wall), and in this compartment a jet of water enters at the dot opposite the doorway. The larger or inner space is further divided by two longitudinal bars of wood (triangular in section), which do not rise to the level of the stone belt. Besides the jet on the bottom of the compartment next the doorway, water can be supplied by the long pipe *b*, which moves on a hinge joint. Four

large circular wooden tubs occupy the lateral walls beyond this, and were filled with steeping clothes, the water trickling away through

Fig. 3.



the stop-cock at the bottom. The small oblong in the centre is an iron clothes-boiler of this unusual shape, with a fire underneath: *c* marks the situation of the hot-water apparatus, which is warmed with charcoal.

The male patients were for the most part clad in bluish coats, vests and trowsers, or else in grey, and almost all had on the large and coarse white straw hats, whose broad brims clouded the swarthy complexions of the Savoyards. On the whole, the patients seem cheerful enough, and to have plenty to eat; but the impression of the moment was that we have here agricultural labour carried to an extreme degree, to the detriment of those amenities and varieties within doors, which now are to be found in many French and Belgian as well as in almost all our British institutions. M. Fusier, in his Report for 1863, enters at length into the reasons for the prevalence of the agricultural element in his moral treatment, and certainly a more healthy and praiseworthy mode is not to be found, especially for those who previously followed sedentary occupations. It is to be marked, however, that it is mainly by "necessity" that in this Asylum "Agricultural labour is carried out on so large a scale," since a great majority of the aliens are bred to a country life. The women again are, for the most part, employed in the laundry and in spinning. It is stated that no camisoles are used in this Asylum, nor was any form of restraint to be seen. There were several goitrous females, and the enlargement was mostly developed on the right side.* Only one female cretin was seen, but there were several cases of general paralysis amongst the same sex.

On the male side, the attendants are laymen; on the female, the entire staff consists of Sisters of Mercy (*Sœurs de Charité de St. Vincent de Paul*), in recording whose praises Fusier's pen is ever eloquent. If these do not make the best of nurses for the insane according to British ideas, they at least look very tidy in their

* A fact first pointed out to me by Professor Laycock.

enormous white butterfly-winged caps, and many are handsome. The *sœurs* sleep in couples in separate apartments, which communicate, by means of a small aperture on each side, with two adjoining dormitories; but the walls are thick and the apertures protected by a grating and blind, so that it would be rather a difficult business for a sleepy *sœur* to be awakened.

With regard to the treatment pursued in the "Bassens," it is seen to consist, from his last Report, of a rigorous observance of the laws of hygiene; of an abundant dietary; of a liberal and judicious use of baths in their various forms; a scrupulous watching of all the physiological and pathological features which present themselves in the course of the malady, and their skilful treatment; and, in short, of many other points concerning which it is much more easy to speak than to write. He also mentions the occasional engaging in vocal and instrumental music of all who will take a part, and the existence of the nucleus of a library for the winter evenings. In commenting on the great development and beneficial influence of out-door labour, he remarks that many physicians, especially the writers, hold forth Gheel as the *Ne plus ultra* in the treatment of insanity, and adds that M. Vermeulen* paid the following compliment to the "Bassens" and its system: "L'asile de Bassens, avec l'organisation du travail telle qu'elle est, et les autres ressources de traitement, possède tous les avantages de Ghéel sans en avoir les inconvénients," a conclusion which some will think not particularly flattering.

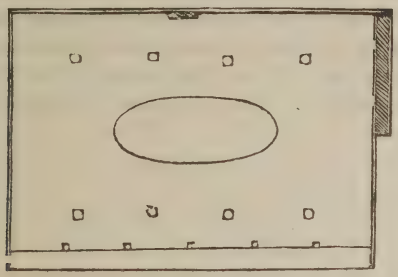
At present the Asylum is mostly peopled by pauper patients, hence rural labour is carried out with ease and suitability. On the 1st of January, 1863, there were 364 patients, of whom 186 were males and 178 females; 19 private patients and 345 paupers; and, as occurs in most asylums, the numbers are yearly on the increase. In both of the last annual reports, the great preponderance of the admissions traceable to hereditary origin is striking; for in 1861-2, of 114 admissions there were 28 cases, or nearly double the highest number under any other known cause, while in 1862-3, of 76 admissions there were 25 in that predicament, whereas none of the other known causes rose above 9. As regards the form of the mental alienation, mania holds the pre-eminence, melancholia second; monomania, dementia, idiotcy and cretinism follow *en suite*, but of the last there was only a single admission within a space of two years. Fusier, seeing that of the 114 admissions in 1861, 80 (44 males and 36 females) were unmarried, and of the 76 in 1862, 51 (32 males and 19 females) were in like condition, moralises thus: "Le *Væ soli* de l'Ecriture a-t-il des conséquences plus étendues?"

The grounds generally are very nicely laid out and as well kept; while the tasteful arrangement of Carolina poplars, walnut trees, arbutus in berry, &c., showed a considerable attention to the finer

* One of the most accomplished Belgian alienists.

feelings of the inmates, as indeed was explained by M. Fusier. There is a single airing-court of similar construction on each side, a sketch of which is seen in Fig. 4. In this there are eight

Fig. 4.



or ten vigorous young trees (chiefly Carolina poplars) planted at regular distances on each side of the central elliptical flower plot, and guarded by woodwork as shown by the small squares of the woodcut. A covered porch runs along one side of the court next the building, and a pump is in the centre of the opposite wall. In one corner of this court are the privies (marked by the shaded portion of the sketch), after the plan of those at Auxerre, this situation of all others, according to M. Fusier, being the most suitable in continental asylums. The defective state of the water-closets in most of the latter appears to have driven him to this plan, which no doubt most effectually rids the establishment proper of some of the evils, but, on the other hand, unfortunately makes fresh ones. The walls surrounding the courts are of a good height, and most substantially built, as indeed is the entire establishment. The edges of the walks in the service courts, &c., are bordered by the fine hard granite of the neighbourhood, very solid, and it is apparent that neither care nor expense have been spared to make the institution worthy of the ancient Duchy.

There is a resident chaplain, who lives in a detached house situated in the luxuriant garden near the laundry; the religious element would therefore seem to be well attended to.* The chapel is just building, and is a very handsome affair, of solid construction, and with considerable architectural pretensions. The garden is cultivated by the patients, and it bespoke good guiding; vines, gourds, beans, cab-

* In the naming of the galleries, however, there is only one saint of Savoy (St. Anthelme) mentioned; the rest, with the exception of Amédée IX, Duke of Savoy, who raised an hospital for the insane at Geneva in 1468, and de Boigne who left a sum of money to the Institution,—are all alienists of greater or less renown, viz., Daquin (of Savoy), Pinel, Esquirol, Fodéré, and Duclos.

bages, flowers and shrubs, all seemed most vigorous, and, thanks to a recent thunder shower, fresh.

In a detached range on each side are the baths, each of which is made of firm cement, a material much used here for large and heavy coping, etc., and, according to M. Fusier, better and more economical than marble. With the exception of one or two at the ends, most are situated in one apartment and without any divisions. For 378 patients, they do not seem numerous. Each has the usual hot and cold pipes turned on by long iron keys (Fig. 5), and the water enters at the foot. At the head of each bath, there are

Fig. 5.

Fig. 6.

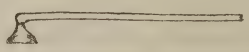


Fig. 7.

Fig. 8.

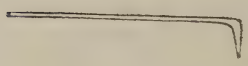


Fig. 9.

various pieces of apparatus for different kinds of douche. Besides the ordinary tube for continual application, there are the *arrosoir* or rose (Fig. 6, and face of rose Fig. 7.) and a curious pipe with a flattened and expanded nozzle Fig. 8, and the latter on a large scale and seen in front Fig. 9, which is calculated to throw a sort of knife-edge stream on the head of the unfortunate beneath. The latter instrument seemed to me to be suited rather for testing the condition of the brain in the post-mortem room, than for effecting a functional change on this organ through the living scalp and cranium. The floor of the bathroom is sparred over for dripping purposes, but this must render it exceedingly cold in winter.

The kitchen has the usual central boilers and oven, of rather limited size, but stated to be sufficient for the wants of the establishment, and the adjacent scullery showed good arrangements for utensils of all kinds. Most of the vessels are of copper.

In many respects this Asylum for Savoy surpasses more pretentious French institutions of the same nature.

The excursion of the *Congrès* to the tunnel of the Alps at Mont Cenis afforded an opportunity for seeing many bronchoceles. From Saint-Michel they swarm all along the valley to Fourneaux. Some have large smooth swellings, others small and flat, and some nodu-

lated or botryoidal, and they occur both in males and females. In this wild and beautiful district the inhabitants are evidently of a degenerate type, which is often exaggerated in those much affected with bronchocele. Such have a short, squat figure, with a squarish face, and occasional obliquity of the eyes, which are frequently also in a state of general ophthalmia or ophthalmia tarsi. Their figures are often badly formed, legs bent, and a want of symmetry and grace is apparent. Like the rest of their neighbours, they have usually a dark, tanned complexion, with dark eyes and straight hair. Between Chamousset and Bourg St. Maurice, cretins and cases of bronchocele abound; scarcely a woman is met but who has some enlargement of the thyroid, and it is also common in men. The cretins seen would have been called "idiots" in Britain, but for the enlargement of the thyroid. Many of the children are very poor specimens, pale and degenerate, but few or no cases of bronchocele occur amongst them. The women have short crinolineless dresses, small shawls and remarkable headdresses. Many of the young married females with children have thyroid enlargement. Their villages are constructed with little regard to the laws of hygiene, and abound with bad odours, though the supply of water is plentiful from the numerous streams and cascades. The colour of their domestic cattle never varies past Moutiers, being of a uniform dun hue, like that of a wild animal; their goats lean, active, and short-haired; their sheep curiosities, and their pigs grotesque, dog-like animals, with pendent ears, lean bodies and long legs. It would appear to be a true saying that France will draw few soldiers from Savoy.

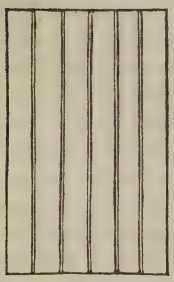
The *Cantonal* Asylum of Geneva is evidently much behind the times, and stands strongly in contrast with the Cantonal Hospital for ordinary maladies; for the latter is a fine new institution fitted up for 250 beds, and with many recent improvements of a superior order. The former lies about three-quarters of a mile to the west of the city, surrounded by a wall with lodge and iron gate, and having a curved avenue of fine walnut and cherry trees to the north or entrance front. A porter in blouse conducts the visitor to the office of the *Directeur*, who obligingly takes him through the house.

The building is of two stories and evidently very old, with low ceilings, defective ventilation, and cement-floored corridors. The female division is on the east, the male on the west. The day-rooms are small, and in one used as a work-room sat more than a dozen women, sewing and knitting in an atmosphere oppressively hot and suffocating, for the windows were closed. Several of these, and many more throughout the house, suffered from bronchocele (a disease, our worthy conductor said, that was aggravated by excessive crying!), and the external and anterior jugulars were sometimes immensely swollen; appearing like large rolling tubes under the projecting skin. The furniture in these day-rooms consists of one

or two tables, forms with green painted backs and a few chairs; a stove with a securely fastened door occupies the centre of the apartment. Near the work-room is an airing-court for the tranquil, pleasantly shaded with acacias and other trees, shrubs, and flowers; it is surrounded by high walls. In another airing-court there was a large pump in the centre, with padlocked handle, and a large marble trough, the gift of a private gentleman. For the convenience and comfort of those females who choose to work in the open air, there was a verandah with tables and seats.

Most of the windows, both in the upper and lower stories, were guarded by formidable iron bars, stretching perpendicularly from lintel to sill. The sashes open on the swing principle, and are fastened by a key and screw. A glance at the woodcut, Fig. 10, will show the very alarming appearance these windows present, even when the sashes are flung open.

Fig. 10.



The stoves for warming the house in winter are placed in the corridors, and covered with the white or marbled porcelain tiles, which give them always a cleanly aspect, further heightened by two circular brass doors which close the grated apertures in the side. In some of the bed-rooms for private patients these glazed stoves project only a few inches from the wall, and have no aperture whatever in the rooms, an arrangement which certainly gives warmth without danger, but of course one much inferior to an open fireplace.

In the day-room for the excited, two of the females (out of a dozen or so) had on *camisoles de force*. One, a young Savoyard, was moving about, talking rapidly and incoherently, pallid and thin from exhaustion, and apparently more in need of good nourishment than straps. The court for this class is less carefully laid out than the foregoing, having only a few trees and little grass, and the occupants did it no credit as regards tidiness. Almost invariably in these continental asylums where *camisoles* are much used, we have a corresponding want of cleanliness, care, and comfort in the persons of the excited patients.

Most of the beds are of iron, somewhat like those at the hospital, but with large wooden knobs on the feet to protect the floors, as seen in Fig. 11. Some in the chambers for the *agités* had circular plates at the foot for fastening the occupants, but the apparatus was quite loose, and had not been lately in action. The mattress for the dirty was a hempen bag filled with straw. In the new infirmary in the city, the beds for such purposes have a single mattress, with a portion of the straw stuffing uncovered in the centre, as in the middle piece of that

Fig. 11.

shown in describing the beds of the "*Bassens*" (Fig. 2). In the private apartments, the beds are very comfortable, with white curtains and a few luxuries of an inexpensive nature. Attendants occasionally occupied beds along with patients, but generally they slept either in their own rooms or in a dormitory. The *Directeur* also pointed out that in a room where the iron bars had been removed from the window, two patients slept, and, moreover, that they could shut or open the window at pleasure. The furniture of some of the single rooms for private patients consisted of a bed, chair, a corner press for clothes, and a row of three clothes pins, not too firmly secured to the wall. Several of the strong rooms were occupied on the female side, and had shutters up, so that the light and fresh air in this sultry weather could not have been very plentiful. One of the unfortunates, however, had made her escape by tearing the iron bars out of their fixings and scaling the court wall. A patient, if really determined to escape, generally finds the means. The floors of these strong rooms are of oak.

The doors throughout are not of a very substantial description, and would readily be smashed by any violent patient. Those for the rooms of the tranquil had a central lock, without handle; an additional couple of bolts were placed on those for the excited. A very old-fashioned square inspection aperture existed in many, opening and shutting by key and spring, but apparently out of use, since no key could be got to fit. The water-closets are of the usual simple form, but, exceptionally, without any disagreeable odour, possibly because they were not in use. We saw the dinner of the patients in the kitchen, and the viands and cooking thereof appeared to be far in advance of the building. Few or none of the patients have knives; their spoons are of pewter, of which also most of the dishes observed in the galleries were constructed.

The matron's room has no less than six apertures of observation, viz., four glazed doors and two small windows, by which she overlooks respectively several portions of adjoining galleries and two airing courts.

This institution of the Genevese is not in keeping with the present age, nor with the enlightened principles of the Swiss physicians, who, I dare say, have frequently urged the erection of a new establishment on a similar scale to the Cantonal Hospital. It is badly ventilated, badly constructed, and the power of applying restraint, seclusion, or anything else, rests in the hands of a non-medical director; Dr. Olivet,* the physician, visiting only twice a week, and he, I think, is quite alive to the defects of the old institution. It is to be hoped that before long the authorities will see the necessity of

* Dr. Olivet is also assistant-physician to the Cantonal Hospital, and as one of the *Commission d'expertise*, appointed to report on the new hospital, shows a valuable practical acquaintance with the construction of such Institutions.

improvement, and that the shabby appearance of its lunatic asylum will no longer be permitted to mar the landscape (physical and moral) of the beautiful Geneva.

L'Hospice d'aliénés de la Waldau, Berne, stands at a distance of fully two miles from the ancient city, on the road to the village of Bolligen. The drive from Berne under the shady walnut trees is very grateful in the melting heat—so favorable to grasshoppers, butterflies, and lizards. The building is rather extensive, a feature which is not to be wondered at in a canton which can afford such fine quarters even for bears; but it has a common-looking appearance at a distance, from the brownish red tiles on its roof. It is flanked on two sides (west and north) by the forest of Schermen, whose green firs throw it boldly forward as it is approached from the south, while in front it has a clear view of the Bernese Alps. It is reached by an embanked branch road, at right angles to the highway, and so narrow that a carriage requires to back out or enter the gate in order to turn, a state of matters which probably has its advantages in some respects.

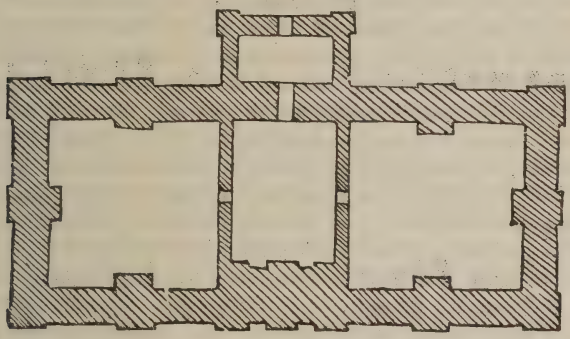
A report,* published in 1855, on the then new asylum, gives us some insight into its origin, and shows how far advanced the Bernese are, *in this respect,* to the Genevese and the people of Zurich, and how they carry out the modest remark about the honorable position of Berne among the Swiss cantons. So early as 1841, the inadequacy of the old hospital was felt, and the building of a new one urged. In 1845, Professor Tribolet, in conjunction with an architect, prepared a plan of the intended edifice, but it was not until 1850 that operations were commenced. We are told in the chronicle of construction that 370,000 tiles were used; and that, when the building operations were stayed by the inclement weather, a protection of wood was given to all the walls. The cost of its erection was 952,823 francs, of which 311,053 were contributed by the town of Berne, the rest by the State. It is built for 230 patients, and the staff consists of a medical director (an officer corresponding almost exactly to our medical superintendent), two medical assistants, a chaplain, and steward; head attendant for males, and head attendant for females, a housekeeper, a male attendant for the infirmary, and female ditto, two bath attendants, chief and assistant cooks (female), two kitchenmaids, a valet, housemaid, porter, gardener, *commissionaire,* and one attendant to about ten patients. It is a rule that the salaries and wages have a rise of 6 per cent. after five years' service, 12 per cent. after ten years', and 18 per cent. after fifteen years' service. The salaries and wages amount annually to about £800. The first physician or medical director was Dr. Tribolet, who had taken so active an interest in the origin of the establish-

* 'Rapport sur le Nouvel Hospice d'Aliénés de la Waldau dans le Canton de Berne.'

ment; and the present one is Dr. Schërer, who, like his predecessor, is also Professor of Psychology in the University of Berne.

At the gate are two lodges, one of which is occupied by the gate-keeper, the other is the stable of the two chief officers. Within this is a handsome court, laid out with flowers and shrubs, and a bowling-green, and having a powerful jet of water playing in the centre, to the height of twenty feet or so. The building has the form of a rectangle, as seen in the woodcut, fig. 12, and the principal entrance is in the centre of the front range. On the sunk

Fig. 12.



flat are the cellars, storerooms, kitchen (where a number of patients assist), apartments for the domestics, &c. Entering on the ground floor by the main door, we have on the left the porter's room, the office of the director, and behind these a parlour and the chief cook's apartment; on the right are the housekeeper's rooms, and others connected with her department. Stretching over the entire front beyond these business rooms, on the same flat, are ranges of galleries for private and convalescent patients, with appropriate courts in front, the arrangements being symmetrical on the two sides of the house—that is, in the western or male division, and the eastern or female division. The water-closets occupy the projecting portions behind, about the middle of each division, the private being separated from the convalescent ones.

Running from each extreme corner backwards are day rooms and dormitories for the quiet incurables, and the same for the noisy; the water-closets being similarly arranged, and projecting into the same court. Forming the northern boundary of the parallelogram for a third of the distance, at either end, are the single rooms for the furious, with a corridor on each side, and bath and water-closets in the usual position. The court for the excited stretches out from this, towards the north or forest side. Occupying the central

third of the same range are the artizans' shops, washing-house, drying room, post-mortem and dead-house; and projecting backwards, so as to form two sides of a rectangular court, are the bath-rooms, while the wood-stores, &c., close in the north end.

There are three large courts included in the great parallelogram, and they are well furnished with trees, flowers, and shrubs; in the service court in the centre, is a fine fountain, with four lateral jets, the supply of excellent water for this and the rest of the establishment coming from beyond the village of Bolligen. The fences around the main building consist of wooden stakes, of similar formation, though not so high, as those at Montrose.

From the front entrance, a handsome and wide staircase leads up to the third flat, the centre of which is occupied in front by the apartments of the medical director and the second medical officer; and above the corresponding parts of the flat beneath are the dormitories of the private and convalescent patients, with the attendants' rooms, and similarly placed water-closets. The dormitories for the quiet, incurable, and turbulent, occupy their respective positions; but instead of sleeping accommodation above the parts of the posterior range devoted to the furious, we have a series of ingenious trap-doors in small apartments, for observing the single rooms below, the attendants' room being situated in the centre, and communicating with the flat beneath by means of a staircase. The laundry, work-room, and store-rooms are situated over the washing-house, &c.

On the fourth flat, in front, we have rather a spacious chapel in the centre, with an infirmary at each side, library, music and billiard-room, and behind these the infirmary kitchen and some other rooms. The galleries on either side were taken up by dining-rooms, day-rooms for convalescent, and apartments for private patients. The receding wing had no fourth flat, and all present in the back range are large clothes-stores and two rooms at the extreme angle of the building.

The beds throughout the asylum are of wood, of somewhat quaint shape, with blocked ends, and set on castors; mattresses of the usual depth, the upper of hair and the under of straw. For the wet patients, Dr. S. mentioned that straw was used. The warming of the bed in winter is effected by a down coverlet, which even in this weather lay on most of the beds.

The single rooms for private patients differed only in quality of furniture, arrangements for washing, &c. The attendants' rooms communicated with the dormitories on either side by doors, and several panes were absent from the glazed portions of these to facilitate their hearing disturbances. Each of the attendant's rooms was supplied with an eight-day clock, and the neatness and order everywhere prevalent highly creditable.

In the day-rooms for the poorer classes, those who cared were

busy with the distaff and spinning apparatus. In those for the private patients, there are pianos and other amusements, while in both there are books, drawn from the library of the institution, and regularly changed. In the ward for the *agités* were two females with camisoles, besides those in the single rooms, who sat with strapped hands and feet in chairs, and at the moment were being fed by the attendants. So far as seen, all these single apartments were supplied with "the chair," and had a fixed privy in the corner, the corridors being on either side.

The clothes store under the rafters (fourth flat) consisted of a very large space, mostly occupied by one vast series of shelves, simply railed off from the lateral space or corridor. The female dresses were suspended. The baths are made of zinc, and have the usual appliances for douches; prolonged warm baths are used, and were in action at visit. All the floors of the corridors, entrance lobbies, &c., are laid with a very hard asphalte, tastefully enlivened by tesselated devices of white pebbles.

The number of females suffering from bronchocele in this institution was something extraordinary; in short, of those we saw, fully one-half were affected with the thyroid swelling in one form or other, some having enormous growths, generally most developed on the right side. Several of the best-developed young female attendants had bronchoceles also.

This asylum, but for the existence of mechanical restraint, would be, under the circumstances, an excellent one. Its ceilings are of a good height, and its apartments generally spacious. It is within a moderate distance of the city, with which it communicates by a good road, and yet quite removed from any troublesome proximity. It commands a fine view, and is protected from the cold winds by the forest, concerning the mossy walks under the shady firs of which its first physician, Dr. Tribolet, speaks most enthusiastically. The old hospital is still standing, a little to the east of the main building.

Guggenbühl's Institution for Cretins.—This was designed by its founder in order to remove the affected from the local influences supposed to reside in the deep valleys of the Alps, the endemic regions of cretinism, as well as to subject them completely to medical and moral treatment. We had heard much of this institution, and were prepared to see a vigorous establishment; but since the death of Dr. Guggenbühl, the whole affair has dwindled into insignificance, and it may be some time before another such as he devotes his energies to the Abendberg and its charges. It is reached by a road from Interlacken, winding to the south-west, where it enters the wood, and becomes only a rugged footpath, which creeps tortuously up the hill. In summer and autumn it is a very attractive journey upwards, for the wood is quiet, vegetation luxuriant, and the glimpses of the lakes of Thun and Brienz through the tall pines are charming.

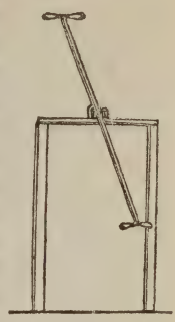
Animal life is scant, however, under such magnificent shelter; a lizard or two, a jay, and a few moths and insects, at the foot of the hill; and higher up a solitary squirrel (probably *S. vulgaris, var. alpinus*) nibbles the cones and darts out of and into a crevice in a gigantic pine. Plant life is more abundant and varied. Be the climber botanist, psychologist, or zoologist, however, it is a sufficiently warm ascent in such weather in spite of the shades of the forest; and he will have an earnest of the difficulty of transporting the necessaries of a large household up this mountain, especially when it is recollected that the backs of human beings or mules are alone admissible, and that there are such drawbacks as snow and ice in a Swiss winter. The place is certainly very inaccessible; besides, it is doubtful if the valleys alone are the cause of cretinism, and whether an institution placed in a more convenient position, and with equal medical and moral means, would not prove quite as successful.

Emerging from the wood, we at once come upon the somewhat flat or gently sloped clearance on which the institution stands, with the apparent entrance front of it facing us, as seen in the upper figure of Plate I. The edifice is a wooden one, and, of its kind, substantially fitted up. To go through it at present, we presume, is but to visit the wrecks of its former state; for there are but five inmates, exclusive of the countryman who looks after the house, his wife and family, and everything has an unused and stagnant look. To be sure, the principal apartments are kept somewhat better, it being customary for visitors to take refreshment here when climbing to the top of the hill to obtain the splendid view, &c.; but this savours rather of formal show than working order. There rest Guggenbühl's books on the shelves of the little study; his midwifery forceps, cranial goniometers, mapped and particoloured skulls, papers, pamphlets, &c., lie scattered about, or peep from corners, just as they might have done had he left them yesterday. The laboratory, with its modest stock of bottles and labelled drawers, still smells of drugs, and the pamphlets of many well-known British and foreign psychologists, &c., lie heaped *en masse* on the floor of an empty apartment, which was just being fitted by him before his death.

The business room, in unpolished walnut, is hung round with the various "diplomas" of its originator, and is that apartment into which visitors are ushered. The schoolroom still has its walls enlivened by coloured lithographs, plates of animals and plants, coloured squares and other geometric figures, plates of gymnastic exercises without machines, &c. Two *balanciers* (one of which is shown in fig. 13) occupy the floor, and many other articles of amusement, exercise, and instruction are seen; but the air of the place is desolate, notwithstanding the presence of a glazed case containing "the work of the patients," which appears to be the

object of most interest to our guide, and reminding us of the "bazaar," or other such receptacle, that is still to be seen in some British asylums, for the purpose of exciting the superstitious wonder and opening the purses of visitors. The dormitories had three or four ordinary-sized walnut beds. Towards the Brienz side of the house were two day-rooms, heated by a stove projecting through the partition in the centre, and having their walls decorated with zoological pictures, fruits, flowers, &c. The baths were loose, and apparently of zinc. At the west end of the wing shown in Plate I, fig. 1, is the chapel, which is neatly fitted up with rows of moveable benches of curious construction, the seat and book-board being united together at the ends; it has a suitable pulpit, &c.

Fig. 13.



Surrounding the Brienz (Plate I, fig. 2), Jungfrau, and entrance sides, is a wooden stake railing, enclosing what at present is one continuous court, but which would seem to have been formerly divided. In this space were several tables and accompanying forms, and at the end several gymnastic arrangements, which evidently are out of use. There were four idiot (cretin?) girls in the court; two sisters, with rather fair hair, contracted and sloped foreheads, grey eyes, and prominent lips and chins. They smiled and shook hands with the strangers, but did not seem to understand what their nurse said. Another had thyroid enlargement, fair hair, a stouter figure, and was aged nineteen. Her features were large and heavy, legs weak and touching at the knees, and gait straddling. The fourth was similar. They were all very much sunburnt, and not very clean in appearance. A social instinct was apparent in them, and they made signs to each other about an old knife. They do not suffer from confinement indoors at present, passing most of their time in the court, and making very discordant noises. Instruction of any kind did not appear to be forced upon them, and, indeed, the person in charge seemed little able for such an undertaking. The fifth inmate, the idiot boy, seemed an active specimen, well up to bringing in faggots from the forest, but dirty, tattered, and wild.

Without, the place looks untidy and in disrepair. That this was not always the case, however, the little arbour, the appearance of the weed-covered walks, and rows of cherry trees testify. On the clearance above the institution were flax, vegetables, and pasture. Close by it are large barn offices, and stabling.

It is very doubtful if this institution answered the purposes for which it was erected, either on physiological or psychological grounds.

Private Asylum (*Prefargier*), *Neuchatel*. This is reached by a long

drive from Neuchatel, by the side of the green lake, past flourishing vineyards, acacias, pines, gardens, and houses, and is quite hidden from view by mantling woods; so that, even for some time after the lodge and gate are passed, the asylum is unobserved.

The building was erected between 1846 and 1848, by a bequest from a private gentleman, and is one of the best asylums in the country, according to the Swiss physicians. It is in the form of a parallelogram, with projections behind, and solidly constructed. A large proportion of the patients are private.

The apartments for the first or best class of patients are very comfortable, and they are liberally supplied with many means of amusement and instruction, *e. g.* dominoes, cards, plenty of books, newspapers, and numbers of quaint coloured French engravings. The furniture of the apartments is substantial and abundant. The airing court connected with them is nicely planted with shady trees, shrubs, and flowers, and suitably supplied with seats; while there is a jet of water and a stone trough at a wall. A curious plan is followed in this and other courts, which were fenced round with a substantial wall and ha-ha, since a hedge is placed along the top of the latter, so as to shut out of view the wall and its climbing trees. This arrangement certainly modifies the guarded look of the courts, especially in summer, and shows how the feelings of the patients are consulted. Several of the other courts had jets of water like the former, and the patients amused themselves by watering the flowers in the plots. In a little arbour in one of these courts was a collection of fine bee-hives, where the interesting creatures might be seen at work through glass coverings, and nothing could afford more amusement to the inmates than the sight of these. The male patients have no uniformity of dress; and the attendants are of the ordinary kind—that is, not connected with any religious order.

I saw several of the tables laid out for supper, and great order and taste prevailed. They use the common knives—sharp throughout, in ordinary cases. The diet seemed liberal.

A very pleasing feature in this institution is the possession of a good-sized schoolroom, wherein are located the library and a tolerable collection of stuffed birds and other zoological specimens, which are used at lectures, &c., for the instruction and amusement of the inmates.

The quarters for the excited are by no means of agreeable memory, and the recollection of them throws a shade over the enlightened principles seen carried out in other parts of the establishment. Sitting in a chair opposite the door of entrance to this ward was a male patient, firmly bound by camisole and straps, the chair being pierced for the passage of urine and fæces. If any argument was needed against the use of these means in such weather, surely it was apparent here—in the total incapacity of the poor patient to

drive away the swarms of flies which revelled on the remnants of food on his lips and face; under the circumstances, this must have been a torment. In each of the single rooms of this suite was a chair, with belts and conveniences for strapping; a bed, straw mattress, and in most cases a patient (amongst others, a general paralytic) securely bound down, hand and foot, in bed—and likewise at the mercy of the flies. The sole attendant present was giving the helpless prisoners their supper, since of course they were prevented from assisting themselves. These single rooms were lighted from the roof, and in the same way as those at Waldau (which were probably copied from this asylum, or other such) had a row of small chambers of observation above, on a level with the attendants' rooms, the latter opening into three corridors. By lifting up the glass trap-door over the refractory room beneath, and opening the skylight of the little chamber, the former apartment can be ventilated. All these complicated arrangements seemed rather absurd.

The bed-rooms for the quiet patients are comfortable, and many of the beds have curtains; in those for the troublesome, straps accompany the bed-clothes. Some of the dormitories are large, and all are very tidy. Hair and straw compose the mattresses; beds generally of iron, the outline of the end being similar to that in fig. 1. The windows fasten by sliding bolt and key, and most have the Venetian shutter outside. The ceilings are of a good height; the floors of the corridors of the usual hard grey cement, glistening with polish.

One lavatory was shown, having a long zinc trough, with the pipes protruding at intervals from the wall above. The water is set through the entire series by means of a lever in one corner; the jets are very tiny. Opposite the trough are a series of presses for clothing. The baths are of metal (zinc), and tolerably deep. Several male patients were undergoing prolonged warm baths at the time of visit, and one had cold applied to his head by the contrivance of a small cistern placed over the end of the bath, and supplying a constant dripping along a cord to a cloth placed on the scalp. No attendant was supervising the process. Water-closets of the usual simple construction, and badly ventilated. There are special closets for the shoes of patients.

The chapel (Protestant) is a very good one, and it was stated that a large majority of the patients attended. There is a spacious and handsome drawing-room for amusements and social meetings, in a line with the physician's office and the business rooms in the centre of the house.

The physician to this institution is Dr. Borel, and the assistant, Dr. Willener, who, amongst other qualifications, is an excellent geologist. I cannot agree, however, with my friend Dr. Borel in his notions of the treatment of the insane; for he cannot understand

how we get on in Britain without camisoles, &c., and he doubts the whole system of non-restraint. I can only again advise him to seek British shores and be convinced.

The grounds about the asylum afford one lovely sylvan retreat, and have evidently been laid out with much care, so as to make an agreeable mingling of shady walks, arbours, grassy lawns, fruit trees, climbers, and flowers. Winding footpaths lead tortuously amongst the trees to the border of the lake (Neuchatel), where there is a wooden house, a small jetty, and three boats. Suitable patients have permission to sail on the lake, to fish, and to bathe; and, for the better convenience of those fond of the latter, a bathing-house is seated amongst the trees, a little to the west of the jetty. Close by the bathing-house is a mound of earth, with a monument to the founder of the institution. The garden is equally rich in vegetables, flowers, and fruit, and the latter vied in size and beauty with any seen in France and Switzerland. Its walks converge as radii to a central circle, in which a fine fount plays.

To the interesting account of the *Private Asylum at Clermont-on-the-Oise,* by Sir James Coxe, in the 'Journal of Mental Science,' for January, 1862, I can add but little. That the farm is pitched in a situation well suited to repay the cultivator is very apparent the moment the eye rests on the rich fields and splendid cattle. My impression of the colony was favorable enough in general, and so far as relates to the agricultural department. It is just such, however, as we would expect to see in every enlightened asylum, only on a larger scale; and whereas in Britain it is usual to send the convalescent and harmless incurables to work at the farm and garden, and to bring them back to the main building, here quarters are fitted up for them at the scene of their labours, and apart from the usual disagreeables of excited or troublesome companions. The laundry, &c., at the *Becrel* might, so far as regards *"air libre,"* have been as well at the asylum proper, except for the supply of water from the sluggish stream called *La Béronnelle,* since the establishment is carefully walled in and guarded; it likewise only lodges the workers. The *"Petit Château"* is a dwelling-house for the lodgment of private females, situated at the north-west corner of the farm, and surrounded by luxuriant vegetation, fine lawn, &c. Considerable order prevailed in the mode of serving the meals at the farm and Becrel; not so much, however, as is to be witnessed at the Imperial Charenton. Their table furnishings are of modern construction.

An Interview with George Victor Townley, and Reflections thereon. By John Hitchman, M.D., M.R.C.P.L., &c., Physician Superintendent of the Derby County Lunatic Asylum.

The public has, doubtless, long ago become wearied of the tale of George Victor Townley, the murderer of Miss Goodwin, of Wigmore Grange, Derbyshire. As, however, important principles are involved in the curious history of his trial—his condemnation—his temporary release from prison—his transfer to a lunatic asylum—and his subsequent removal into penal servitude, an humble contribution to the facts of the case may not be out of place in the pages of 'The Journal of Mental Science.'

At the request of Mr. Leech, the attorney for the defence, I went to the Derby gaol at three o'clock, on the 25th of November, 1863, to see George Victor Townley, for the purpose of ascertaining whether I could concur in the opinion given by Dr. Forbes Winslow, in a report to the attorney, that the prisoner was "palpably unable to distinguish between right and wrong, good and evil." The prisoner had been examined by Dr. Forbes Winslow a week previous to my visit. I had been informed that many of the prisoner's relations were insane, and that a lady I had seen, in consultation with Mr. Gisborne, the surgeon of the gaol, and who had died from puerperal mania, was one of these relations. Mr. Leech, Mr. Gisborne the surgeon, and Mr. Sims the governor of the gaol, were present at the interview. The position in the room which each person should occupy was pre-arranged before the prisoner made his appearance. Being rather obtuse of hearing on my left side, I wished the prisoner to be placed close to me on my right. Mr. Gisborne sat in a somewhat oblique position to his front, and Mr. Sims at a considerable distance to my left. Mr. Leech, the prisoner's attorney, varied his position occasionally, but for the most part stood a few feet away from the right front of Mr. Townley, or leaned on a chair or table. When the prisoner entered the room, he had his hands in his pockets. Mr. Leech pointed to Mr. Gisborne, and Mr. Townley said, "How do you do?" Mr. Leech then told him to take that chair—pointing to a vacant one on my right, which he immediately occupied. He kept his head somewhat depressed and had a confused shy air. He displayed a slight embarrassment of speech at first; but against this, he manifestly struggled, and affected a composure he did not feel. He was under considerable mental tension during the first ten minutes of our interview, as indicated by a clammy state of the tongue, which caused it to give a clicking sound when special circumstances were

referred to, and by his grasping firmly the bottom of the pockets of his trowsers, in which he kept his hands. To my surprise, he did not inquire of Mr. Leech, who I was, or what was my errand; but as Mr. Leech had had an interview with him prior to his coming into the room, I inferred that he had had matters explained to him. However, he did not appear to regard me as antagonistic to his interests, and on reaching the chair, he sat down, crossed his legs, and assumed the air of one expecting to be asked questions. His complexion was fair, and his hair of a light auburn hue, but his general physical appearance was not prepossessing. There was considerable sullenness over the countenance, and his eyes had a downcast, furtive look. The contour of his head was not pleasing, it being defective in the antero-superior portions of the skull, in which the phrenologists allocate the organs of "ideality," "wonder," "imitation," "benevolence," "veneration," and "hope," and having large comparative bulk in the lateral and upper-back portions of the cranium. He had the aspect of one belonging to the upper middle classes of society, whose life had been passed in easy indulgence, and who had not been called upon to exercise either his hands or his intellect in any useful occupation. After a few remarks, I asked, "Has your health suffered from your confinement here?" He said, "No." "Is your appetite good?" "Yes, very fair." "Do you sleep well at night?" "Yes, very well." "Then you feel quite well?" "Oh! yes! I have a few pimples on my skin, it is very trifling," and he looked at Mr. Gisborne, and said, "You," as if to commence a speech to remind that gentleman of a promise, who immediately said, "Oh yes, a little medicine." "I should have imagined," I continued, "that the want of exercise would have produced some slight disorder, such as impairment of appetite." He replied, "I take rather more exercise here than I did when at home." "Have you become thinner?" "No, I have gained rather than lost flesh, since I have been in prison." I may here state that my questions, and his answers will not be recorded further in the precise order in which they were given; but I can pledge myself to their substantial accuracy. I shall not record the few questions put to the prisoner by any of the other gentlemen present, nor more than a brief selection of my own. Through the entire interview of nearly two hours' duration Mr. Townley never put a question to us, but answered briefly, yet not unwillingly, those that were put to him. To resume, "I have been informed that you are a good linguist, what languages do you speak, or read?" "Scarcely any—I am not a linguist." "Perhaps I may think otherwise; do you speak German?" "No." "Do you read it?" "No." "Italian?" "No." "Are you familiar with Latin or Greek?" "With neither." "What language do you speak besides the English?" "Spanish." "Can you not speak French?" "A very little." "What has been your occupation?"

"I have been doing nothing for a long time." "How did you amuse yourself?" "I hardly know, I played music occasionally, and sauntered about." "Did you read much?" "Not much." "Am I to understand that you have been brought up to no pursuit?" "I was in an office in London for a short time, a few years ago, but I did not like it. I could not stay." "What induced you to leave?" "I did not like it—but I was upset by Bessie Goodwin." "Were you attached to her, so long ago as that?" "Yes, she broke it off then, but renewed it again upon seeing me, after some months." "As you have no professional pursuits, how did you expect to maintain a wife?" "Well, I hardly know; there is my father." "Did you expect him to bequeath you money enough to marry on?" "Well, perhaps so." "Do you think that the circumstance of your being without a fixed pursuit had anything to do with breaking off your match with Miss Goodwin?" "Yes, her family disliked me, because I was poor." "Did she make this an objection?" "She has fooled me in every way." "She informed you, did she not, that her affections were placed elsewhere?" "Not exactly, I found out that she was jilting and fooling me." "What are your feelings towards the gentleman whose addresses Miss Goodwin is supposed to have accepted?" "If I thought he knew of our engagement, and I saw him, I would shoot him." "Suppose he did not know of it?" "I should tell him, and challenge him to fight." Mr. Gisborne here said, "Suppose he would not fight?" "I would shoot him dead." "How should you behave towards a man who had wronged you in other respects—taken a picture from you, for instance?" "I should take it from him again." "Suppose he would not let you?" "I would kill him if I could not get it in any other way." "Would you not appeal to the laws of your country?" "I should get my property back." "Surely you would not really kill a man for the sake of a picture?" "I would if I could not obtain it in any other way." "Do you think every man should take the law into his own hand?" "Nobody has a right to take the property of another." "Ought not a man to appeal to the laws of his country for protection?" "Law does not always give redress, and I should recover my own." "Is it right that every man should do the same?" "If they could they would, we are all selfish." "This is what you, unhappily, appear to have done in reference to Miss Goodwin." "She belonged to me." "But not in the sense of property, as a picture?" "Just the same." "You said you would kill a thief to *recover* a picture, but you could not recover Miss Goodwin by killing her?" "I prevented others from taking her from me." "Do you really regard a wife as *property*?" "Yes." "As a slave in America is property?" "Yes." "But a slave-owner cannot kill his slave with impunity?" "She deserved all she got, she deceived me. She was a fiend." The prisoner became slightly agitated, and I said

that I could sympathise with him in the bitter disappointment he must have felt, on hearing that she was resolved to break off the engagement, and I could even understand, that when he learnt that she preferred another gentleman to him, that in the phrensy of the moment he might have wished her dead; "But how came you," I asked, "to be so unfortunate as to possess the means of killing her, how came you to have such a knife?" He blushed slightly, and after a brief pause, he said, "I was determined to see her at all hazards. I did not know what would happen. I thought they would oppose me at the house, and I purchased the knife on my way." "Did you mean to stab any person who opposed you?" "I meant to see her at any cost in spite of my enemies." "Who did you regard as your enemies?" "Old Goodwin and others who wished to set aside our marriage." "That is the conspiracy you refer to?" "Yes." I asked him whether he now felt sorry for what had been done. He said, in a quiet, subdued tone, "You will think me a brute when I say it, but it is better to say the truth; I do not feel sorry as far as Miss Goodwin is concerned, but I do feel sorry for the trouble I have given to my parents and family." He confessed that from the time he received Miss Goodwin's letter (on the 13th or 14th of August), informing him of her preference to another, he had been unable to rest or sleep; that he did not take morphia habitually, but had taken some on the morning of the event. He denied that he had taken much brandy on that day, but had taken some brandy and soda-water. In the course of the interview, Mr. Leech, surprised, or grieved at an observation of the prisoner, said, "This is really a very serious matter, I am by no means sure that you may not be hanged. Have you no fear of this?" "I never knew what fear was." "Do you not think you would fear at the time of execution," I said. With great modesty he replied, "It would be silly to do so, fear never did any good; however, flesh is weak; I may do so; all I know is, it would be very silly." To all inquiries respecting the details of the crime, as far as he knew them, he answered in a low suppressed voice, like a man who felt that he was confessing what was dishonorable to him—still, as something that admitted of palliation, and was evidently not unwilling that I should know all, if I wished. He said in answer to inquiry, "When a man is in a rage he cannot remember *all* that he has said, or done in that rage; to me, upon reflecting on all that has transpired, it appears a maze, a dream." "Do you not know that you stabbed Miss Goodwin several times?" "Yes, I know, she had sadly fooled me, she had done so for months and months; I was mad with rage." "Are you very passionate?" "I am very determined when people offend me, and her conduct was enough to make any one mad. To turn a stronger head than mine." "Then you regret now that your passion was so extreme; you would recall it now if you could?" "If she treated

me in the same way again, I should treat her in the same way." In the course of the very prolonged conversation I had with the prisoner, he said that, "We did not create ourselves, and if a man was unhappy, he had a right to end his own life." I said, "You tell me, that your life has been a miserable one. Have you ever attempted to end it?" He replied, "No—men do not always act up to their professions." I intimated, that as he alleged there was no place of punishment hereafter, and that he had long been very miserable, I was rather surprised that he had not done so. He observed that "he was not *sure* what might take place after death, no one could say *what might be*." To all inquiries about a future state, he repeated that he did not believe in the resurrection of the body. He did not deny that the spirit may re-exist, or rather, that it may separate from the body and live after some sort. He believed it would. I continued my inquiry as follows:—

"What *are* your notions of a hereafter—of a heaven, for instance?" "I don't think any one knows anything about it." "Do you not believe in a future state at all?" "The spirit may exist in some form, we know not how; the body don't rise again." "You think your spirit may exist after the death of the body?" "Yes." "Will it not be affected by deeds done in the body?" "I think not." "Is not man responsible for his acts?" "Not altogether." "Why not?" "Because he is obliged to act as circumstances make him act." "Has he no self-control?" "Not beyond what his organization and circumstances allow." "That being so, if mankind be compelled to act as circumstances make them act, why did you hold Miss Goodwin responsible for acting as circumstances made her act?" Here the prisoner became very pale and enraged, and said, "*she was a fiend, and devil from hell, sent* to tease and torment him, and that the world was well rid of her." This appeared, for a moment, like an hallucination prompting a paroxysm of maniacal rage; but its true nature revealed itself, by my continuing the examination, and saying, "You have informed me that you did not believe in a hell, as taught in the churches; and yet you now say, that Miss Goodwin was a fiend, and devil from hell; how is this?" His exact answer was, "You must not understand me so literally, I don't suppose she came from a place called hell; but that she was an adulteress, and vile and bad, and merited all she got." "Do you recognise no distinction between a lady simply betrothed and a wife?" "None, whatever; she was as much mine as if we had been married." "But supposing this, the adultery is not proved." "A woman's a beast, and deserves death, who flirts with any one after she is engaged." In order to test, as far as possible, the prisoner's power of moral control, I asked questions in relation to his engagement with Miss Goodwin which he would have been quite justified in repelling with indignation, but which he answered gravely, and proved to me that

he had never, until the unfortunate estrangement took place, deviated from those principles of honour which are expected of a gentleman when admitted into the confidence and affections of a lady. Wishing to know whether his speculative views were the result of reading, I said, "You hold peculiar views as to the future—have you ever read Thomas Payne's writings?" "Never." "Strauss' Life of Jesus, or Shelley's Poems?" "Never." "Any of the writings of Theodore Parker, of America?" "Never." "What writers on theology have you read?" "I have read very little." "Your views are the result of your own reflections?" "I once read a chapter of Swedenborg on the resurrection of the body—and agree with him—that it does not rise again."

The above questions may be regarded as strictly representative ones, and precisely accurate, both as to their form and replies, and have been reproduced in this paper to illustrate the healthful condition, or otherwise, of the prisoner's mind in relation to the especial crime with which he was charged. They do not, however, convey an accurate idea of the *general* intelligence of the prisoner. His replies as to matters of fact were pertinent and clear, but when, in the course of my inquiry, *reasons* were solicited for some of the opinions which he avowed, he hesitated in his reply—did not attempt to argue, or to illustrate by additional facts the truth or plausibility of his opinion, but simply reiterated it. Indeed, his *manner* impressed me with the belief that they were not convictions formed after mature thought, or derived from the written thoughts of others, but flimsy theories, which having been invented to pacify his own feelings, became gratifying to him as ministering to his self-love and importance, and supplying a shadowy pretext of justification for his crime. It was, however, at the same time clear, that his intellect was below the average standard of men living in great cities, and moving in the same sphere of society as himself; he could not perceive the consequences of any act a few stages beyond that which fell under his immediate senses. His judgment appeared unable to recognise the distinction (where his self-love was interested) as *property* between an inanimate thing—such as a picture—and a living, intelligent woman, in the character of a wife; nor would he acknowledge a distinction between an act of adultery in a wife, and the acceptance, by a lady simply betrothed, of an offer of marriage from a gentleman other than the betrothed; he called both acts and each actor by like names—adultery and adulteress—and awarded to each a like penalty—death! Nor did his intellect appear capable of recognising the confusion and the wrong which would ensue to the young, the feeble, the aged, and the female sex generally, if each individual were left to follow his own caprice, and to obtain justice solely by the aid of his own strong arm. While he gave out his wild opinions in a dogmatic form, he was incapable of sustaining them by

logical arguments, and if the fallacy of any one of them were pointed out to him by another person, he did not seem either to controvert or even to recognise it, but, in a confused manner, reiterated his determination to act upon it. Sometimes, indeed, he became irascible when the fallacy of some were explained, for instance, as shown in the dialogue; when it was suggested to him, that, admitting the truth of his statement that individuals were irresponsible, inasmuch as they acted as they were compelled by circumstances to act—then Miss Goodwin was blameless towards him, inasmuch as she acted only thus, in preferring another gentleman; he became enraged, and called her by the vilest epithets, such as "fiend," "devil," and "adulteress."

At the conclusion of my interview, I said to Mr. Sims, the governor of the gaol, "This is a very different case to the one I saw with you at the last assizes, and who was, upon my evidence before a jury, removed from the dock as being too insane to plead. He, as you remember, could converse rationally on most business matters, but became agitated, and talked insanely, when special hallucinations were referred to." The governor said, "A very different case, indeed. I have never seen Mr. Townley excited as that man was, since he has been in the gaol."

Reflecting fully upon the conduct of Mr. Townley, I could not discover in him any of the recognised forms of mental disease; he had no hallucination whatever; what appeared to be hallucination proved otherwise, on deeper inquiry; such as his "enemies," Miss Goodwin being "a fiend sent from hell to tease and torment him," and his "killing her to repossess her" (monomania). There had been no recognised change in his character (moral insanity) or feelings, beyond what an intense disappointment of an amative nature might explain as a transient passion, such as rage, jealousy, or grief. There had been no sudden, irresistible impulse to destroy, *without external provocation or cause* (homicidal mania). There was no absolute imbecility (dementia); least of all, were there the volubility, the sleeplessness, and frantic action of recent *mania*; there was none of the sombre aspect and taciturnity of "melancholia," and there was no desire whatever either to attract attention to any special opinions or facts; to make any observations; or to ask any kind of question (except the simple one to the surgeon about some medicine), through an interview of nearly two hours' duration. Therefore, sincerely as I wished to find a fellow-creature guiltless of crime; great as was my anxiety to spare Derby the pain, the confusion, and uproar attendant upon a public execution; diffident as I felt in coming to a conclusion adverse to the one enunciated by so well-known a psychologist as Dr. Forbes Winslow, and strong as was my desire to aid

the defence, I was unable to forward to Mr. Leech other than the following opinions respecting the mental condition of his client: namely, "That he possessed a feeble intellect associated with strong emotions; that these conditions, aided by an hereditary predisposition to mental disease, may at no distant day cause him to become insane, but that, at the present time, he was a rational and responsible person." The conclusion of my report to that able attorney was as follows:

"I *infer* a proneness to insanity in Mr. Townley from the eccentricity of his opinions and habits; from the strength and violence of his emotions; from his physiognomical expression; from the configuration of his head; from these in combination, but CHIEFLY from the fact that some of his relations, one of whom I have seen, have died from acute mania. I *allege* that Mr. Townley *is not now insane*, in the legal sense of that term, because he is under no hallucination; because, absurd as are his dogmas, in reference to man's responsibility, they are theories entertained by hundreds of persons who are capable of all the duties of social life, and who describe themselves as 'Necessitarians,' or by other sectarian titles —moreover, the theory has been eloquently, however fallaciously, advocated by the distinguished poet, Percy B. Shelley. Again, although Mr. Townley refers to a wife as *property*, yet he does so, in the same sense as an American slaveholder describes his slave as a 'chattel;' and in regarding betrothals as equivalent to marriage, and as an insurmountable impediment to marriage with another party; he is in harmony with our ecclesiastical laws prior to the reign of George the Second, and (as I believe) in accordance with the present laws of Scotland. His wild opinion that the violation of a betrothal vow is equivalent to an act of adultery, betrays a gross error of judgment, but not an *insane* conclusion;—the punishment he allots to the crime of adultery finds precedents in Jewish and Roman law, under such wise legislators as Moses and Constantine, and cannot be regarded as an insane decree, however wicked it may be, when inflicted by an individual without a proper appeal to the public tribunals of his country.

"From the above facts—but, primarily and mainly, because the feeling which prompted Mr. Townley to the criminal act *did not spring from an hallucination, from a subjective imagination within his own mind*, but was excited by the conduct of a second person—was created in fact by a *real and deep injury* inflicted on him by an individual to whom he was warmly attached, and from whom he had a right to expect better things—I infer that Mr. Townley is *at the present time* a rational and responsible person."

In the above report, Mr. Gisborne, surgeon to the gaol, fully concurred—which was a great collateral support to my testimony, as

that gentleman had been in attendance upon the prisoner many weeks; and, moreover, had enjoyed the advantage of knowing the facts and opinions recorded by Dr. Forbes Winslow, as the result of his visit, a week prior to my interview with the prisoner.

Of many of the curious incidents which transpired at and after the trial, the nation has already been apprised; there are others, but, it is well for the sake of public virtue that they should sink into oblivion. The scandal to Justice and to Science can now only be redeemed by an improved criminal code and a better form of judicature. There is every probability that this good will be achieved; a great and flagrant defect in the medical jurisprudence of insanity has been laid bare;—the public mind has been alarmed at the ready escape for criminals, which petty legislation had inadvertently provided, and reform is at hand. The crisis has been reached—which, according to Lord Wednesbury, seems to be a *sine quâ non*—before a change can be effected in any of our institutions. "It continually happens," he said, on the first reading of his wise measure, the Lunacy Regulation Bill, "in this country, where our legal system is the growth of ages, imperfections are naturally to be found which are patiently endured until some event occurs which places its defects so flagrantly before us, that we set ourselves at once to the duty of remedying them." The whole subject of the plea of insanity in criminal cases requires revision; and with revision will disappear many of the axioms which have hitherto guided the decisions of our judges. Although, from the earliest ages, madness has been common to man, and some allusion to its characteristics and to its treatment, such as it was, may be found in the pages of Hippocrates, Celsus, Paulus Ægineta, and particularly in the writings of Aretæus, and Cœlius Aurelianus; yet, in truth, it is only within the memory of man, that it has been studied apart from the mysticism which credulity and superstition had thrown around it, and its varied forms detected, classified, and recorded by a number of observers under the light which physiology, and pathology have furnished for its elucidation. The great jurists who have attempted to give definite ideas to the two simple terms employed in Roman law to the insane (dementes), namely, to those of weak understanding, "mente capta," and to the maniacal, "furiosi;" or, to the equally few classes into which the insane (non compotes mentis) have been divided by the common law of England, namely, "idiocy" and "lunacy," were *familiar* only with the *malady distorted, aggravated, and disguised by barbarous treatment.* When, the famous lawyer, Lord Coke, classified the insane as follows:

"1st, Idiota, which from his nativitie, by a perpetual infirmitie is non compos mentis."

"2nd, Hee that by sicknesse, griefe, or other accident, loseth his memorie and understanding."

"3rd, A lunatique that hath sometime his understanding and sometime not, aliquando gandet lucidis intervallis; and, therefore, he is called non compos mentis, so long as he hath not understanding."

"Lastly, Hee that by his owne vitious act for a time depriveth himself of his memorie and understanding, as he that is drunken."

[Lord Coke further says that "Littleton expleineth that a man of no sound memorie to be non compos mentis; and that many times (as it here appeareth) the Latin word explaineth the true sense, and calleth them not amens, demens, furiosus, lunaticus, fatuus, stultus, or the like, for non compos mentis is the most sure and legal.]—('Coke on Littleton,' 246, a.)

Or, when the good Sir Matthew Hale enunciated the two forms of insanity—total and partial; [requiring the presence of the former to preserve the life of the criminal, but being satisfied with the latter to invalidate civil actions, and thus giving an opportunity to a Frenchman, Guislain, to utter a small sneer at the expense of that great man, to the effect "that this judge set a higher value upon property than upon human life,"] there was no general knowledge of lunacy existing among the great masses of the medical profession. Nay, even so late as 1723, when judge Tracey passed his harsh sentence on Arnold, and fulminated the rash decree, that to be exempted from punishment, "a man must be totally deprived of his understanding and memory, and know not what he is doing, no more than an infant—than a brute—than a wild beast," Pinel had not arisen to strike off the fetters of the maniac. The insanity with which mankind was familiar was *chain-madness,* furious, rampant, and total, and which found its fit symbols in such ornaments as those described by Stowe as having been placed at the *new* asylum in Moorfields, "The gate or entrance is all of stone, with two figures of a distracted man and *woman in chains over the gate!*"

"Old and young, men and women, the frantic and the melancholy, were treated worse and more neglected than the beasts of the field. The cells of an asylum resembled the dens of a squalid menagerie; the straw was raked out, and the food was thrown in through the bars; and *exhibitions of madness were witnessed which are no longer to be found,* because they were *not the simple product of malady,* but of malady *aggravated* by *mismanagement.*" — 'Conolly on Treatment of Insane,' p. 33. We are too apt to forget this, and to rashly condemn the men who then sat in the judgment seat. The facts which met the eye of ordinary observers, and approved themselves to "common sense," *were such* as to justify the legal dogmas of that age, because they could not know that the frantic

acts they saw were not the simple "products of malady," but distortions and exaggerations produced by maltreatment. Mental diseases, in their various shades, were unknown to the time in which these great jurists lived. This is *the fact* which psychologists should *now* urge upon the attention of the legislature. It is useless, nay, it is utter folly, to attack the wisdom of such men as Coke and Hale. They were wise in their generation; but it is as futile to search *the ancient statutes,* for guidance in the regulation of mental diseases at the present day, as it would be to seek for confirmation on the movements of the heavenly bodies from the pages of Aristotle, or Ptolemy. The beneficent example of Hanwell sustained by the genius, and enforced by the eloquence and graphic power of a Conolly, has become a universal experience, and the veriest tyro, who now observes mental diseases unexaggerated, and undistorted by external causes, knows that to insist on "*total*" insanity, or to demand an utter extinction of the sense of "right and wrong," before you can admit the plea of irresponsibility is to call for a test, at once fallacious, *unjust,* and cruel. What, then, is to be done? The minds of the great jurists—Coke, Hale, and Hardwicke;—of Lyndhurst and Brougham, have attempted, and have failed to propound a brief theorem, which shall embrace the requirements so graphically stated by the judicious Hale himself:—"That all circumstances be duly weighed and considered, lest on the one side there be a kind of inhumanity towards the defects of human nature; or, on the other side, *too great an indulgence given to great crimes.*"—('Pleas of the Crown,' 30.) Nor has the genius of Esquirol and Bucknill, aided by their vast medical experience, enabled more to be said of the medical philosophers. The truth is, that the subject itself is too vast, too *varied* to be embraced within a verbal axiom. It is time (to use a phrase of Goethe's) for men "to learn to know how to keep within the limits of the knowable." As it is impossible to state why a stone falls to the earth other than by saying—through the law of gravitation the lesser is attracted by the greater—which is simply clothing the response in pompous phraseology, and leaving the why, unanswered; so is it impossible to describe in few and simple words a *condition* which shall embrace *all* those mental diseases which fairly exempt from guilt, and, at the same time, exclude the varied forms of sinfulness and crime. But while this may be impossible, it is quite within the scope of practical men to detect and describe any special case of insanity that may present itself, and to adjudicate upon the patient's power of self-control. The instinct which long familiarity with a subject engenders, would enable physicians thus to aid the cause of justice, even while they may fail to satisfy the exactions of verbal criticisms, or meet the requirements of a subtle philosophy; just as a miner may detect and appreciate a valuable ore, without being able to describe its form with mathematical accuracy, or to ex-

patiate on its chemical constituents. As then there is no individual, distinctive characteristic of mental unsoundness which will apply to *all* cases, it follows that no statutory clause can be enacted by which the responsibility or irresponsibility of any special individual can be defined and tried, and hence the necessity of a *Board* or *Commission of experienced men* being appointed by statute to examine, over a considerable period of time, *each* alleged case of insanity, and to report upon it for the guidance of the Court at the time of trial. A knowledge of insanity comes no more by intuition than a knowledge of surgery; and therefore, in the organization of such a Board as the above, it is essential that the majority of persons appointed thereon should have had some experience in the treatment of insanity, or been familiar with the manners and habits of the insane. Of the thousands of general practitioners in this kingdom, how few are there who have had any opportunity of observing or treating a case of insanity? At the present moment, there is no place in England in which a systematic course of clinical instruction is given in lunacy cases. The wards of St. Luke's and Bethlehem Hospitals are open for a short period to the visits of a few pupils, but, beyond these, there is no available place for studying mental diseases in this country. It is not surprising, therefore, that many of the medical certificates which are presented to the superintendents of county asylums for the admission of pauper lunatics are vague, imperfect, and unsatisfactory, and intimate how dangerous it would be to leave the decision of such grave questions as the real or feigned insanity of criminals, as Sir George Grey has done in the bill before the House of Commons, to any physician or surgeon who may happen to be a "registered practitioner." There are before me now two medical certificates which *leave wholly blank* the spaces appointed by statute for the detail of "Facts indicating insanity," as observed by the medical man himself, and as described to him by others. A third gentleman, willing to be comprehensive, and scorning details, under the usual stereotyped phrase of "Facts," boldly writes, "*Every* indication of insanity that can possibly present itself." What an interesting patient, who, at one and the same moment, presents the silence and gloom of melancholia and the loud volubility and laughter of mania!! A fourth practitioner, under the printed statement of "*Facts indicating insanity* observed *by myself*," writes the simple word, "*Pneumonia*."!! While under the printed statement of "*Facts indicating insanity communicated to me* by others," the same cautious observer and graphic describer has appended the solitary word, "Excitement!" I do not know that this can be exceeded. From a heap of certificates I take a *fifth*, as illustrative of the *kind*, and number of *facts*, which some "registered practitioners" deem sufficient to constitute *insanity* in the persons exhibiting them. I hope my friends, embarrassed by

business or studies, may not fall under this surgeon's notice, for the following is the *sole* indication of madness which he records: "being *restless, uneasy,* and *sleepless*"! I often wonder whether the surgeon ever had the toothache. A sixth, would lessen the labours of the Divorce Court, for he is gallant enough to record the following fact, as a sufficient and positive proof of mental derangement: "violent language to his wife"! These examples will suffice to illustrate my observations; if more be needed, it may, perhaps, be found in the certificate of a frank gentleman, who gravely records, as a proof of his patient's *insanity,* the solemn *fact,* "He calls me a fool." No disrespect is meant to the medical profession, as a body, by these remarks, any more than it would be discourteous to the members of the College of Physicians to intimate that the tying of the internal iliac artery, or the amputation of the hip-joint, would be better entrusted to the surgeons of our great hospitals than to them. The time has arrived when a great change should take place in the entire proceedings of our criminal courts in cases of alleged insanity. It should be made incumbent on the defence to notify to the Home Secretary, or, better still, to a public prosecutor, whenever it is the intention to put in a plea for acquittal on the ground of insanity; and that then the prisoner should forthwith be placed under the frequent inspection of a commission, to be appointed by statute, and to consist of any one of the Commissioners in Lunacy, of the medical superintendent of the lunatic asylum of the county in which the crime is committed, and the surgeon of the gaol in which the prisoner may be confined. That their conjoint report, or the report of the majority, *and that report only,* should be produced before the court for its guidance; but that it should be in the power of either the prosecutor or the defence to place all or either of the writers of the report in the witness-box, to explain on oath any portion of the report, or to be cross-examined in reference to their statements.

The English public ought not to be satisfied so long as a power remains to an attorney to call in medical man after medical man to see his client, until he can discover one weak enough to be imposed upon by the murderer, or base enough to connive at a nefarious plea of insanity, and to aid in its assertion. Townley never feigned insanity. With all his crimes, when his spirit of revenge was satisfied he appears to have answered questions in a truthful manner, and yet, even under these circumstances, medical men could be found, who could conscientiously testify to his insanity. How many more could be procured to testify to the insanity of a prisoner who, like Ulysses or David, should *feign* madness? If a prisoner, like as did David of old, "changed his behaviour before them, and feigned himself mad in their hands, and scrabbled on the doors of the gate, and let his spittle fall down upon his beard,"—are there not many members of the medical profession who would say, with Achish, "Lo, ye see

the man is mad"? Are there not many, who, biassed by some theory, or influenced by too sensitive feelings, would rejoice to have such plausible facts to allege in justification of their statement?

Justice, then, to the public, and justice to the insane, demand that a competent Board, having its constitution defined by statute, should be appointed, to meet the varied cases which are occurring constantly in our criminal courts, and I respectfully urge its adoption upon the attention of the public and the legislature. It is not only special cases, like to the one which has immediately evoked this paper, which demand such an arrangement in our criminal procedure, but the grave question of crime itself demands to be investigated upon psychological principles. Law and medicine have been long antagonistic upon this question, and the populace, unfamiliar with the phenomena of mental disease and with the mutual sympathy of mind and organization, has sustained the former, and smiled with incredulity on the statements of the most trustworthy observers among the latter, as it smiled in a former age at the statements of Copernicus and Kepler in respect to the movements of the celestial bodies—but, "*E pur se muove*"—and the time will come when truths, now despised, shall be as generally accepted as is the axiom of the earth's revolution.

Memory and the Brain. By the Rev. W. G. Davies, Chaplain of the Joint Lunatic Asylum, Abergavenny.

Memory is an attractive theme, and one on which it is important that just views should prevail. It seems, however, that there is too much inexactness in the views which are commonly entertained about memory. It is generally supposed to be a repository, or something analogous to a tablet, which receives or retains impressions. Now, these notions, when the facts of the case are minutely investigated, fall short, in many respects, of the truth. This may be partly accounted for by the difficulty which, at first, invariably exists to find words to express mental operations, for men, at the outset, are forced to use, in an analogical sense, words already associated with physical phenomena, in order to designate those of mind. When, therefore, we speak of memory as a receptacle of impressions, after the manner of a tablet, we may perhaps mean no more than this, that there is some kind of analogy between memory and a tablet. Allowing that there is truth in what is here stated, it nevertheless seems that the words which are usually chosen to describe the phe-

nomena of memory, are intended to convey the idea that knowledge exists in the mind in a latent condition, that it resides there even when it is not manifest in the form of consciousness or cognition, and to deny this will be deemed a grave error by some, and, indeed, present a paradoxical air to all. But let us examine the facts of the case.

Where is the seat of memory? In the present state of our knowledge, no inference seems so conclusive as that which indicates that it is located in the brain. But how is knowledge retained by the brain? Say that the cellular neurine of the brain receives and preserves certain impressions. But an impression, if it be anything of a pictorial nature, specially presupposes something as its recipient, and one recipient cannot retain more than one impression. Besides, what is there in a vanished cognition to retain? While a cognition is experienced there is, of course, a retention of it, but when the cognition is not a cognition, what is there left for the brain to store up?* On such a hypothesis also, the capacity of the brain for retaining knowledge must be limited, and the wonder of the villagers in Goldsmith's famous poem was not in the least out of place. I am fully aware that I am here propounding a theory of memory, which no longer obtains among intelligent psychologists, and that by impression must be meant simply an effect of some sort produced upon the brain, and possessed of a certain degree of persistence; still it will not be throwing words away, if what has now been stated help to introduce more clearly to the reader, the view which is here about to be taken of this topic.

It seems at present to be generally known, by those who make a study of mental science, and more especially by those who devote themselves to the study and alleviation of pathological conditions of the human mind, that every manifestation of thought and feeling depends upon cerebral action. When there is no cerebral action there is no thought, no feeling, no recollection. "The activity of the vesicular neurine of the brain," says Dr. Bucknill, "is the occasion of all these capabilities. The little cells are the agents of all that is called mind, of all our sensations, thoughts, and desires; and the growth and renovation of these cells are the most ultimate

* The various theories which have attempted to account for it by traces or impressions in the sensorium, are obviously too unphilosophical to deserve a particular refutation. 'Elements of the Philosophy of the Human Mind,' chap. vi, sect. i, Dugald Stewart.

Our ideas being nothing but actual perceptions in the mind, which cease to be any thing when there is no perception of them, this laying up of our ideas in the repository of the memory, signifies no more but this, that the mind has a power, in many cases, to revive perceptions which it has once had, with this additional perception annexed to them, that it has had them before. And in this sense it is that our ideas are said to be in our memories, when indeed they are nowhere, but only there is an ability in the mind when it will to revive them again. Locke's 'Essay,' Book ii, chap. x, sect. 2.

conditions of mind with which we are acquainted."* And again, "Not a thrill of sensation can occur, not a flashing thought, or a passing feeling can take place without changes in the living organism, much less can diseased sensation, thought, or feeling, occur without such changes."† "The existence of any pathological state in the organ of mind will interrupt the functions of that organ and produce a greater or less amount of disease of mind, that is, of insanity." Presuming, then, that it is more likely to be right than otherwise, to state that every act of mind depends upon cerebral action, I consider that memory, in so far as it is a latent power, is no more than an aptitude developed and established by practice, in the vesicular neurine of the brain, to repeat certain actions as the antecedents of thought. Thus considered, there is no more limit to the brain in the reproduction of thought, than there is to the hands in the reproduction of movements. There are those, however, who to this view will object, that the mind, independently of the brain, is the repository of knowledge. The obvious reply to this objection is, that apart from its manifestations as consciousness, we cannot frame a notion of mind. Mind out of operation is to us a perfect incogitable. Man's sole acquaintance is with its operations. Since, therefore, we know nothing of mind as a substance (*substans*), we are also incapable of knowing how it is a repository of knowledge. It is not here denied that it is not such a repository, but what is stated is, that to man the means of knowing this is not given. To say, therefore, that memory is a power which the mind possesses of treasuring up knowledge, is a statement which conveys no new information, and yet cannot be made more explicit. The only explanation which it is possible for us to gain of memory, considered as a latent power, is a physiological one. Memory in operation can be analysed exclusively by the psychologist, the reflective observer; but memory, as a latent power, can only be explained by the physiologist, the outward observer.

Some philosophers, with a view of showing the independence of the mind upon the body, maintain that it is never at rest, that it is, in its very essence, an activity. The evidence which is procurable on this point seems, however, as Dr. Laycock has shown, to indicate the contrary. As to the theological aspect of the question, it is the same whether the soul, in this life, be regarded as dependent on the body, or the contrary; all that is required being, as Bishop Butler argues, in his 'Analogy of Religion,' that the soul at death, after the manner of the development of the chrysalis into the butterfly, should enter a higher state of existence. That there are some men who never seem to themselves to sleep without dreaming, is likely enough, because we know that the mind may be brought by over-

* 'Psychological Medicine,' p. 351.
† Ibid. p. 356.

work into a state of excitement which is hostile to unbroken repose. If, however, the majority of men were canvassed on this point, there can be little reason to doubt that their testimony would be to the effect that during sleep they enjoyed, with few exceptions, calm and unbroken repose. One eminent metaphysician, Sir William Hamilton, who held the ceaseless activity of the mind, and thought he discovered this in his own case, was a man who accomplished such a vast amount of head-work as to astonish most people; and that in doing this he overtaxed even his gigantic intellect, and brought his brain into a state of unhealthy excitement, may be inferred from the fact that some years before his death he fell a victim to paralysis. If mental effort necessitates cerebral action, as in the opinion of the most advanced medical psychologists it does, incessant activity of mind would over-tax the brain, and induce derangement of its functions. "Exertion of the brain," says Dr. Bucknill, "if kept within due limits is followed by a state of repose peculiar to itself; but carried beyond these limits, the excitement of its function, while it produces rapid exhaustion of power, also renders the organ incapable of such repose and renovation. Over-work produces exhaustion accompanied by excitement, which continues the over-work, and accelerates the exhaustion."—'Psychological Medicine.'

The theory of memory herein embraced is gathered from the following facts. It is observable that our moving organs acquire, by repeated efforts, a facility, either to retain certain positions, as the turning out of the feet, or to reproduce certain movements. There appears to be a neuro-muscular, as well as a purely mental retentiveness. The drill of the recruit, the execution of the musician, handicraft proficiency, sleight of hand, do not simply involve mental adhesiveness, but also neuro-muscular adhesiveness. This is clearly seen in those voluntary movements which, by constant repetition, become automatic, that is, such as to dispense with the continuous guidance of the mind. Now here we have a kind of adhesiveness which is open to observation, and it is found to be a readiness gained by repetition, in the neuro-muscular system, to retain certain positions, or to execute certain movements. And since we thus know one kind of retentiveness, we are naturally prone to think of another kind, in the light of that with which we are familiar. This tendency, however, must be controlled by evidence. Due account must be taken of the differences between the phenomena to be explained, for these differences may be so great as to invalidate any inference drawn from the known to the unknown case. Still when these differences are fully taken into account, we cannot fail, at once, to perceive that there is, at least, a striking analogy between the memory of the mind, and what we may figuratively call the memory of the moving organs. And this analogy affords sufficient *primâ facie* evidence to

justify further inquiry. Starting, then, with the presumption that both neuro-muscular and mental retentiveness come under the same law, further evidence of this is sought, and it has to be discovered, in the first place, that mental manifestation involves cerebral action, which is shown by the following facts. It is ascertained that intense thought or excitement is attended with a more rapid circulation of blood to the brain, that a feeling of fatigue follows such thought or excitement, and that the secretion from the kidneys, after such an occurrence, exhibits an increased waste of nervous tissue; that diseased states of the brain interrupt its normal working, and produce a greater or less amount of mental aberration, thus manifestly showing the dependence of rational thought on the legitimate action of a healthy organ, and of mental derangement on the faulty action of a diseased organ; and, finally, that pressure on the brain is followed by loss of consciousness, and manifestly because cerebral action is by this means obstructed. What do these facts severally, and *à fortiori*, collectively indicate, but that mental manifestation is invariably preceded by action of the brain?

We have, in the second place, to show that memory, like manual skill, *e. g.*, is perfected by repetition. This, however is so well known, that to mention it is enough. Having then shown that memory involves cerebral action, and is developed and established by repetition, we are able to infer that both neuro-muscular and mental adhesiveness come under the same law. As the one is, an aptitude, developed by repeated efforts, to reproduce certain actions, so is the other.

From the foregoing remarks, it must be seen, that an act of memory is something like a repetition of the process by which we first gain the knowledge of an object. Mr. Bain puts the question, "What is the manner of occupation of the brain with a resuscitated feeling of resistance, a smell or a sound? There is only one answer, so far as I can see. The renewed feeling occupies the very same parts, and in the same manner, as the original feeling, and no other parts, nor in any other manner that can be assigned."—('The Senses and the Intellect,' p. 333.) There must, however, be a marked distinction between memory and perception, else how are they so clearly distinguished by all sane men? An act of perception, I have called * a bi-une fact, because it is invariably a synthesis of cognition and object. Take away either of these elements, and you annihilate perception, the bi-une fact, cognition *plus* object. Now an act of memory is not a bi-une fact. In it the only constituent of perception, which is reproduced, is the cognition. As the former is composed of cognition *plus* object, so the latter is simply cognition *minus* object.

* 'Consciousness the Standard of Truth, or Peerings into the Logic of the Future,' p. 27.

This view is not in accordance with that which Mr. Bain takes of the subject, who says, no currents, no mind. According to him "a stimulus, or sensation, acting on the brain, exhausts itself in the production of a number of transmitted currents or influences; while the stimulus is alive these continue, and when these have ceased the impression is exhausted. The revival of the impression is the setting on of the current anew, &c."* Mr. Bain holds that recollection is a revival of the original action of the brain and nerves, and that it is always a current action. Undoubtedly an act of memory is a revival, in some sense, of the original operation, a revival that is, of the cognitive element of perception, but it does not go so far as to be a renewal of the current action which attended the original process. For instance, the afferent nerves convey a message to the centre of cognition, then the efferent, perchance, convey a message from this centre to the locomotive organs of the body. Now if this process has to be reproduced every time we call it to mind, it is quite clear that the initiative cannot be taken, as in the first instance, at the peripheral extremity of the afferent nerves, but at the centre, where these have their origin. Are we to suppose that in each act of memory, and, indeed, of thought, the current is reversed in the centripetal nerves, and that a message is despatched from the brain to their peripheral terminations? Such a supposition is entirely opposed to the evidence of consciousness or experience, and appears, from the liability incurred of confounding in-going with out-going currents, to involve a complete derangement of our sensational system. For according to this view, how should we be able to distinguish recollection from perceiving, except it were by the greater faintness of the former? And if recollection happened to be unusually vivid, even this mark of distinction would be lost.

In the case of the efferent nerves, it must be allowed that this objection does not bear with equal force against Mr. Bain's theory. Nevertheless, even as to these, the evidence for a current action does not seem to justify the confidence with which Mr. Bain affirms its existence. Who, for instance, can fail to see that there is a difference, other than that of degree, between mental articulation of words when one reads or thinks, and the actual, audible articulation of them? Who can fail to see that there is a difference in kind between one's mere thoughts of dancing, running, or leaping, and one's performance of these acts themselves? It must, however, be conceded that in such instances there is something like an effort made to put the muscular system in motion, accompanied by a counter effort to arrest such motion, or something of the kind, especially in instances of great mental effort in such directions. There is, however, the unmistakeable fact of arrested motion, and this check must occur in the mental centre. Consequently, in such cases there

* 'The Senses and the Intellect,' p. 61,

can be no current of nerve-force in the centrifugal nerves. This is a very important fact, when we consider, that it constitutes the difference between perception and memory.

To show that recollection may be carried on without the aid of the efferent nerves, simply by the vesicular neurine of the brain, I adduce the following quotations. "Experiment and observation, in our opinion, prove beyond doubt that the seat, not only of the intellectual, but also of the instinctive functions of the brain, is the convolutions of the cerebrum proper."* Here nothing is said of the necessity of the fibrous or conducting portion of the brain to the exercise of thought. But as still more to the purpose, the following words may be adduced: "It is sufficiently proved that the medullary substance of the brain, forming so large a portion of its mass, is merely a conducting medium. Pathological conditions may exist in this white substance in the cerebellum, the corpora striata, and thalami, without affecting the mental functions. Sensation and motion will be affected, but judgment, memory, and emotion may be left intact."† Circumscribed effusion of the blood in the white substance of the brain often produces loss of mental functions, when it first takes place, from the pressure which it exerts on the gray matter of the convolutions. But when the mischief occasioned by this pressure has been removed, by the adaptation of the blood in the cerebral vessels to the contents and capacity of the cranium, the powers of mind return, while those of motion remain injured, until the integrity of the torn substance is restored."‡ From these passages it appears that the convoluted hemispheres can act independently of the nerves of motion, and, indeed, of the whole medullary substance, that is, without necessitating that current action in the centrifugal nerves, which takes place when the articulating organs, *e. g.*, are put in motion. For is it credible that any current, however slight, can pass to these, while they remain perfectly at rest? In opposition to Mr. Bain, then, I cannot avoid the conviction that we do mentally repeat words without the co-operation of the efferent nerves, which communicate with the articulating and vocal organs, and, consequently, without "feeling the twitter of these organs just about to speak out."

While holding this position, I must not neglect to state, that in the case of the mental emotions there is an apparent exception to what has now been maintained. Among the emotions of the mind, there is a great aptitude for being called into activity by the mere recollection of the circumstance which originally excited them. Our emotions, however, be it observed, are not resuscitations of former emotions, but are regarded as fresh and fresh every time that the remembrance of the exciting circumstance stimulates them into

* Bucknill, 'Psychhlogical Medicine,' p. 353. † Ibid., p. 354.
‡ Ibid., p. 354.

action. Emotion has no memory, is not self-conscious, but forms an object of perception, and need not be remembered, the emotion itself being so readily excited.

It may not now prove uninteresting, were we to apply the view of memory here embraced to account for the loss of memory as the first failure of mind in dementia, as well as in old age.

In dementia it seems that owing to a diseased condition, the brain fails to act with its customary power and facility. And the reason why memory is the first to fail is because it comes into existence subsequently to, and as a result of, the originating powers of the intellect; and consequently is stimulated into action less strongly than these, which so long as a related object is presented to them, and they have not wholly been destroyed, are constrained to act. Every one must see that if a man who is not wholly demented, has his hand squeezed, he must perceive it, although he may be in a state to forget, in a few seconds afterwards, that it was squeezed. Memory, for this reason, should also be the first to fail, it is, physiologically considered, a revival of a former cerebral action, and if that action be weak, the possibility of its renewal will be proportionately lessened, and perhaps be null. Moreover, since memory is a consequence of the originating faculties, or, as Mr. Morell says, a *residuum*, it must either be prior to, or contemporaneous with, them in decay.

In old age, memory fails, because the brain, in common with the whole organic system, decays. Loss of memory is a result, of course, of this decay, in the same manner as it is of disease in dementia, cerebral action does not take place with its former rapidity, ease, and force. The events of youth are remembered, while recent events make no stay in the memory, because the former events produced a strong effect upon the mind when it was in its prime, because they so frequently formed the subject of thought and conversation during many years of life, and consequently have been, by repetition, so firmly established that it would be as easy for a Chelsea pensioner to forget his drill, as for a man to forget such events. It is clear therefore that the incidents which befell a man in the youth and maturity of his life will be remembered, when the senile mind has lost its capacity for recollecting recent occurrences.

It is recorded that some persons during fever have remembered things which they had long forgotten. This is a strange phenomenon, but may, perhaps, be thus accounted for. When the brain is in a diseased state of activity, certain cerebral actions get reproduced, which but for that abnormal violence of action would be incapable of revival, because disuse had so greatly weakened the tendency to it. It is well known that some persons during mania manifest a brilliancy of intellect without a parallel in their previous sane state. The porter, who when drunk left a package in a certain

place, but when he became sober, forgot where he had left it; and only remembered the place when he again transgressed, may be viewed as exhibiting a phenomenon similar to that exhibited by some persons during fever. In the stupidity arising from excess of drink, he deposits the package in a certain place, and the act, owing to his stupid condition, leaves but a slight effect upon his memory, so slight that when he gets sober, he cannot recall the act, but not so slight that when the brain is next stimulated to increased activity by drink, he fully remembers the place in which the package was left.

An attempt has been made during the foregoing remarks to elucidate memory from a physiological point of view, and it has been seen that, regarded as a latent power, it is not competent for us to explain memory in any other way. From this investigation, however, it clearly appears that physiology has no other explanation of mental facts to yield than this, namely, that each act of mind is preceded by action of some sort in the vesicular neurine of the brain. But how cerebral action is followed by thought, we probably shall never know. We must rest content with the knowledge that such is the fact, and remember that, in this life, we know but in part. "How any combination of cells," says Dr. Bucknill, "can be attended by processes of thought is to us inconceivable, but it is not more inconceivable than that similar combinations should result in the phenomena of life, or that a combination of atoms should result in the movements of the solar system. All that we can say is that the cerebral cell and gravitating atom are creatures of the almighty Creator, acting in obedience to laws impressed upon them by his fiat—laws whose phenomena we can trace, but whose ultimate nature we cannot understand." It must always be felt that there is a wide chasm between the activity of the brain-cells and thought, when we attempt to get the former to throw light upon the latter. To say, for instance, that cerebral action is thought, is just as if we were to say that fire applied to the hand is pain, or that the mere vibration of a tense string is sound, to which it bears no resemblance. We can never therefore expect to gain an analysis of thought by means of the anatomy and physiology of the brain. In the analysis of mind, thought is both the agent analysing, and the immediate object analysed. While, however, cerebral action affords little light in the investigation of mental processes, it seems quite possible that a knowledge of the laws of thought may throw considerable light on the nature of the brain's working. For example, differentiation in thought would seem to require a corresponding differentiation in the cerebral activity which invariably accompanies thought. And this differentiation in brain-action requires that different portions of the brain be set apart for the performance of special functions. This principle I can here, however, simply

allude to, for I must hurry on to notice memory as an active power.

Memory, as is well known, operates in the manner set forth by the laws of association. But, as I have elsewhere* endeavoured to show, the laws of association, that is indeed, the laws of memory in operation, are derived from those primary operations which originate knowledge. The law of contiguity, the first law of association, is derived from perception, the first originating faculty; and the law of similarity, the second law of association, is derived from conception, the second originating faculty. The most important law in connection with memory is the law of similarity, which describes the mode in which conception operates. When the mind recalls a fact, or repeats a thought, there springs up a consciousness of identity between that recollection or thought and a previous act of mind; and it is this knowledge of identity between past and present acts of consciousness which constitutes recollection. Were thoughts to crowd ever so rapidly into the mind, still we should have no remembrance of having experienced them before, were it not that conception recognises their identity with previous thoughts. Indeed we should not be able to keep any thought for the shortest period before the mind, because this implies a thread of consciousness; that is, the consciousness of the identity of the present thought with the thoughts immediately preceding. Thus, to constitute the continuance of a thought in the mind for any, even the least time, the identity of a^1 with a^2, a^3, &c., must be cognised, and this is an operation of memory, which therefore, is principally the function of that faculty which apprehends resemblance among objects, namely, conception.

But remembrance also largely results from different mental modes suggesting each other. Thus, an earthquake may suggest internal fire, and that Vesuvius, and that, Herculaneum and Pompeii. And this is the usual way in which facts are recalled to mind. We must not, however, lose sight of the fact that no renewed knowledge of an earthquake would be possible, were it not that we recognised the identity of that knowledge with, or at least its similarity to, our previous thoughts of one. Neither could we think of internal fire, Vesuvius, Pompeii, and Herculaneum, did we not recognise the identity of our previous thoughts immediate and remote with our present thoughts of them.

The distinction between identity and similarity as just used is this:—When, according to the law of contiguity, a mental mode suggests a different mental mode, as for instance, when the thought of night suggests that of stars, if the different mental mode suggested be regarded as identical with a past mode, such suggestion is an act of memory; but if the different mental mode suggested be

* 'Psychological Journal,' Oct., 1862.

regarded as simply similar to a past mode, such suggestion is an act of bringing a particular instance under a concept or general notion, and is more properly called conceiving or thinking than remembering. Of course, memory is involved in this act, because a concept, to have any existence, must be viewed as identical with itself in its immediate and remote manifestations. Every intellectual operation presupposes memory, because no thought which has not some degree of persistence is possible; and this persistence is the effect of retention, or in physiological language, of the continuance of a cerebral movement. What, however, is commonly called remembrance is an act in which a present thought of an object is known as identical with the original thought or cognition roused by that object. When our thoughts are not regarded as coinciding with past perceptions, in such a manner as to be exact reproductions of the cognitive element of the latter, but are simply a revival of a general view of such perceptions, and of none of them in particular, the mind is then said to operate through concepts, there is no appeal to memory proper. When, as in a work of fiction which is meant to be life-like, we imagine events, we then closely imitate the action of memory, we relate the events as if they were identical with what had come under our observation. If we think through the medium of concepts, we abstract the attention from those minute and unimportant circumstances which must be attended to when we are called upon to exercise remembrance.

Mr. Herbert Spencer gives an account of memory which is highly instructive but somewhat at variance with that afforded in this article. He says that remembrance begins where the purely automatic actions of the nervous system terminate, and that an act of memory tends by repetition to become automatic, and then, in the common acceptation of the word, ceases to be remembrance at all. "This truth that memory comes into existence when the connections among psychical states cease to be perfectly automatic, is in complete harmony with the obverse truth, illustrated in all our experience, that as fast as the connections of psychical states we form in memory become, by constant repetition, automatic, they cease to be part of memory. We do not speak of ourselves as remembering those relations which have become organically or almost organically registered; we remember those relations only of which the registration is not yet absolute. No one remembers that the object at which he is looking has an opposite side; or that a certain modification of the visual impression implies a certain distance; or that a certain motion of the legs will move him forwards; or that the thing which he sees moving about is a living animal. It would be a misuse of language were we to ask another whether he remembered that the sun shines, that fire burns, that iron is hard, and that ice is cold. Though on hearing the voice of some unseen person

slightly known to us, we speak of ourselves as recollecting to whom the voice belongs; we do not use the same expression respecting the voices of those living in the same house with us. And similarly, though when a child the reader's knowledge of the meanings of these successive words, was at first a memory of the meanings he had heard given to them; yet now their several meanings are present to him without any such mental process as that which we call remembrance."*

There is much truth in the above quotation, but I think that maturer consideration would lead Mr. Spencer to modify his views on this subject. It has been seen that memory involves action in the vesicular neurine of the brain, but now the question occurs, can such action take place without revealing itself in the form of consciousness? For if it is possible for memory to become automatic, there must be action in the brain-cells without the attendant result, the manifestation of mind. It seems to me that this never occurs, for is it credible that cell-action in the brain should disclose itself in the form of consciousness as the rule or intention of its working, and then sometimes cease to do so? Does the organ of vision ever act when we do not see, or the organ of hearing when we do not hear? The action of these organs even when they are deranged, and when there is no external object to excite them, reveals itself as seeing and hearing. "The little cells," says Dr. Bucknill, "are the agents of all that is called mind." Since therefore the cells are the agents of mind, the intention of their action evidently is to make mind conscious, *i. e.*, perceiving, conceiving, remembering, reasoning, emotional, and desiring. In proof of the theory of unconscious cerebral action, that is, in more exact terms, of vesicular activity, less its consequent consciousness, I can discover no evidence. The mental phenomenon which this theory is intended to explain can be otherwise accounted for, and it is only after the failure of all other explanations of the phenomenon in question, that the explanation which this theory affords is admissible. But let us state the case more fully. When we study a given subject for some time, and then perhaps, owing to mental exhaustion, abstain for a season from doing so, it is found, upon resuming our attention to the subject, that it has in the meanwhile assumed a more orderly and defined character. How is this to be accounted for? Some psychologists make it the effect of unconscious cerebral action, that is, properly speaking, of cerebral action unaccompanied by consciousness. But how are we to know that such action has taken place if it has not revealed itself? We know it, it is said, by the result. Our knowledge, without any exercise of thought, has reached a more advanced stage, consequently the brain must have been working without disclosing the fact. The objection, however,

* Spencer's 'Principles of Psychology,' p. 551.

to this explanation arises from the fact that cell-action in the brain is the invariable antecedent of consciousness or knowing, and since cell-action thus discloses itself, the supposition that it also takes place when it does not thus disclose itself, can only be allowed in the absence of an explanation more in keeping with the facts of the mental world. Which is the most natural presumption in this case? This, that when there is no revealing of thought there is no cell-action in the brain. The explanation therefore which is most in agreement with this presumption is this, namely, that the phenomenon under consideration results from the greater persistence and obtrusiveness of the more oft-repeated, than of the less oft-repeated thoughts. For those ideas which have been in existence the greatest number of times will be the best retained. Now let us suppose that after studying a subject, the various ideas arising from it are in a confused order; and let 100 represent the thoughts most frequently repeated, and 1 the thought once occurring. Say, then, that the thoughts occupy, at first, the following confused order:— 90, 50, 70, 100, 40, 10, 1, 30, 80, 20, 60. It is evident that the thoughts, in proportion to the frequency of their repetition, will tend, by a sort of mental gravitation, to assume the following order: 100, 90, 80, 70, 60, 50, 40, &c., the ideas represented by the smaller numbers perhaps dying away completely, while those represented by the larger numbers may also have lost something, and that in the ratio of their less frequent renewal. Now the very tendency of the ideas thus to adjust themselves, or their aptitude, in proportion to their frequency, to become fundamental, and the readiest to be recalled to mind, is sufficient to account for the phenomenon in question, and is far more conformable with the psychological principle, that the activity of the vesicular neurine of the brain is the occasion, not to say the origin, of every manifestation of mind.

It may, perhaps, be urged against the foregoing view that it has very long ago been known that mental operations take place unconsciously. For instance, it is still a debated question as to what takes place in a simple act of reasoning, some logicians maintaining that the syllogism is the type of all reasoning, and some denying this. If we were conscious of the reasoning process, there would not be this difference of opinion. Reasoning takes place, and most men only know its result. Any objection, however, drawn from this source is easily got rid of. We have no *reflective* consciousness of mental processes, till such time as, by diligent reflex observation, we have found out their nature; that is, in short, we know nothing till we know it. But to say this is a very different thing indeed from saying that cell-action in the brain takes place without the attendance of consciousness of any kind. We require to have a clear understanding of the difference which there is between reflective consciousness and direct consciousness. We cannot observe a rose

without being conscious, and without being aware that we are observing the rose, but we are almost certain to be examining the rose without thinking in the least of the mental process which is going on, that is, without any exercise of reflective consciousness. The objection here noticed then is of no avail against the doctrine that cell-action in the brain is invariably followed by consciousness.

We may also express the law which we are considering in another way. There are in thought two extremes, the one of resemblance, the other of difference. The former is represented by the *summum genus*, the latter by proper names. The former is the extreme of generality; the latter, of individuality or uniqueness. Now memory, since it is developed and established mainly by repetition, has its principal abode in the region of the general, and is more at home with the more general than the less general. Hence it follows that ideas will fall in, and be retained in proportion to the rank which they hold as genera or common notions.

In the examination of this subject, due importance must also be given to the fact, that when a subject of study which, from mental fatigue, had for a time been set aside, is again resumed, the mind has recovered from its prostration, and is capable of viewing the subject with renewed vigour. Then, to use a metaphor, the eye was dim, and the landscape obscured by mist; now the eye is keen, and so clear is the air, the hills seem close at hand. Besides, during the interval in which the mind has been resting, many ideas in connection with the supposed subject would spring up spontaneously, and lead to unsought trains of thought which would deepen one's familiarity with it.

As favouring the view herein advocated in opposition to the theory of cerebral action without consciousness, I may also point to the fact, that mental force is in proportion to the energetic action of the vesicular neurine of the brain, violent activity of cell being attended by unusual mental power, and feeble activity of cell being attended by a feeble display of mind. This fact shows, according to the law of concomitant variations, that when consciousness is null, so also must cell-action be null. Besides, what conclusion are we to draw from the fact of cerebral fatigue, if the brain is prone to continue in action, although from sheer exhaustion the mind ceases to operate in a certain direction? Couple with this the tendency of the brain when overworked to become excited, the excitement continuing the overwork until the brain becomes deranged. If mind, therefore, as pathological conditions of the cerebrum chiefly indicate, cannot operate without the agency of the brain-cells, the converse seems to be equally evident, namely, that these cells cannot act without a consequent display of consciousness. For instance, the organ of vision cannot act without seeing, the organ of hearing, without hearing, the organ of smell, without smelling, the organ of taste, without tasting,

the organ of touch, without actual sensations, and the moving organs, without moving. Can the organs of emotion act without a manifestation of emotion? No one has supposed that they can. Then why should they suppose that the organs of thought can act without thinking? If it is to account for the phenomenon under consideration, that can be elucidated in a manner more in conformity with the facts of the physiology, psychology, and pathology of the mind. I really fail then to see what evidence, of a conclusive character, there is to support the theory of so-called unconscious cerebral action. In holding this opinion, I do not for a single moment overlook the fact, that there is an automatic action of the moving organs. For no one can possibly doubt that after long practice, such movements as those concerned in eating, walking, talking, and many others, can take place without the constant direction and superintendence of the mind, and consequently, be it observed, without involving action in the vesicular neurine of the brain.

But how, in accordance with this view, can we explain the fact mentioned by Mr. Spencer, namely, "that no one remembers that the object at which he is looking has an opposite side." Well, if a person does not remember this fact, he must either perceive it, or infer it. But he does not perceive it, because the opposite side is out of sight. Does he then infer it? This we have to ascertain. As soon as the object is looked at, the thought of the opposite side is instantaneously present. Were an appreciable interval to elapse, from the moment when we first looked at the object, until the moment when we thought of its opposite side, we should be remembering that it had this side. When no such interval elapses there is, says Mr. Spencer, no remembrance. But there is no difference in kind between the two cases. It is true that when recollection has become perfect, the presentation of some of the qualities of an object to perception so instantaneously summons its remaining qualities before the mind, that it seems as if we had a simultaneous perception of them all. Such, however, is not the case, for when, for example, we subject our visual perceptions to a strict examination, we discover that one thing suggests another, as in an act of memory, but so instantaneously and perfectly that it escapes detection. But shall we say that, on this account, it is automatic, that it is a cerebral action unattended by consciousness? I certainly think not. What is the difference between the two cases? An appreciable interval, and an inappreciable interval, between the existence of the suggesting and the suggested. A lad is asked a question in history, and after taking some time to think, he gives the correct answer. This is remembering with difficulty. He is asked another question, and he gives the answer immediately. This is remembering with ease. A certain word is uttered in his hearing, and the meaning instantaneously flashes into his mind. This, according to Mr. Spencer, is not an act

of memory, but an automatic operation. But why automatic? Because the interval alluded to is not perceivable. But to fail to perceive that which is not perceivable does not involve automatic action, but no action at all. An inappreciable interval is to the mind as no interval, and where the mind does not operate, it is presumed that there is no action in the brain-cells, and where there is no cerebral action, of course, there is no automatic cerebral action. With the difference here pointed out then, a visual perception, as to its suggestions, is so much like an ordinary operation of memory that, philosophically speaking, it is at least not incorrect to say that one *does* remember that the object at which he is looking has an opposite side. It must, however, be conceded that such language is not in accordance with common parlance, but to appeal to a popular tribunal for the meaning which words shall bear in scientific nomenclature, is to appeal from a higher tribunal to a lower. Were we to defer to popular judgment in fixing the exact meaning of the word memory, this word would have to represent the very crudest view of the subject treated of in this article. According to the most popular notion of seeing, instead of having to infer that rays passed from an object to the eye, we should have to infer that nerve-fibrils passed from the eye to the object.

But now, if there is so much reason for saying that we remember that an object has an opposite side, what correctness is there in the usual statement that we infer the existence of this opposite side? Are these two statements opposed to each other? Nay, they are quite compatible. Both remembrance and inference come under the head suggestion; but in inference, the suggestion is unavoidable, and not dependent on repetition, whereas in remembrance it is not unavoidable, and does depend on repetition. An act of inference, however, not to mention that all thought involves memory, is remembered every time that it occurs again to the mind as identical with its former presentation. When Cheselden, a young man who was couched for cataract, had once seen that a certain object had an opposite side, he could not afterwards avoid concluding, by an act of spontaneous or implicit induction, that it had such a side. This would occur to his mind as necessarily as it occurs to the mind of every one, after the first trial, that fire burns; but this would also involve remembrance. On the other hand, there was no inference concerned, when, seeing the cat, he could not call to mind whether the animal's name was cat or not, and could not decide till he laid hold of the creature, for then he knew from his sense of touch that it was the cat. This was simply a case of an object suggesting its name. And the suggestion not being unavoidable, and being dependent on repetition, it did not infallibly occur to the young man that the animal he saw was puss. The higher mental operations presuppose the lower. The consequence is that there can be remembrance without inference, but no inference without remembrance.

On Hereditary Insanity. By Hugh Grainger Stewart, M.D. Edin., Medical Assistant in the Crichton Royal Institution, Dumfries.

The hereditary transmission of disease, or of a tendency to it, has of late attracted more attention than it formerly did, and medical literature has been enriched by many able and learned disquisitions on the subject. Its importance seems to be generally appreciated, to a certain extent, but not to so great an extent, as a more perfect knowledge of its operation, and the vastness of its influence, would justify. From Burton's 'Anatomy of Melancholy' may be quoted many passages by ancient writers, showing a lively appreciation of the fact of hereditary transmission, especially of disease. Fernelius[1] says, "Such as the temperature of the father is, such is the son's, and, look, what disease the father had when he begot him, his son will have after him, and is as well the inheritor of his infirmities as of his lands." "And where the complexion and constitution of the father is corrupt, then," saith Roger Bacon, "the complexion and constitution of the son must needs be corrupt, and so the corruption is derived from the father to the son." Burton also quotes passages from Hippocrates, Buxtorfius, Lemnius, Paracelsus, Crato, Bruno Seidelius, Daniel Sennertus, Forestus, Rodericus a Fonseca, Lodovicus Mercatus, and many others, referring to hereditary transmission, or the transmission of melancholy. The last mentioned wrote a book on the subject, 'De Morbis Hereditariis,'[2] and therein first notices what is now called atavism. "It skips, in some families, the father and goes to the son, or takes every other, and sometimes every third, in a lineal descent, and doth not always produce the same, but some like, and a symbolising disease." This last remark is of importance, as anticipating a fundamental principle in modern investigations into the subject.[3] Burton himself highly estimates the importance and power of hereditary transmission, when he says,[4] "These secondary causes, hence derived, are commonly so powerful that (as Wolphius holds) they do often alter the primary causes and decrees of the heavens." This most learned and far-seeing author mentions facts, and hints at conclusions which are only now being understood and arrived at, and shows that an appreciation of the truth of hereditary transmission had formed the basis of laws forbidding the marriage between persons in any whit allied, and of those stern and

[1] Burton, 'Anatomy of Melancholy,' vol. i, p. 89.
[2] Mentioned by Burton, by J. H. Steinau, in his 'Essay on Hereditary Diseases,' p. 2, and by Whitehead on 'Hereditary Disease,' p. 15.
[3] Whitehead, id. lib., p. 15.
[4] Burton, vol. i, p. 89.

implacable decrees, which, among certain Indian tribes, and even in Scotland, at an early period, necessitated the destruction of those that suffered from madness, gout, falling sickness, or any such dangerous diseases.[1]

More careful and statistical investigations have, in modern times, been undertaken, for the elucidation of the subject of hereditary tendency, especially in reference to insanity, by Esquirol,[2] Guislain,[3] Thurnam,[4] Baillarger,[5] Brigham,[6] Hood,[7] and others; whilst able elucidations, and philosophic disquisitions, have been written by Whitehead,[8] Leubuscher,[9] Steinau,[10] Maudsley,[11] Moreau,[12] &c.

In all treatises on insanity a few pages are devoted to the consideration of the hereditary tendency; for the most part, however, nothing new is stated. The remarks of Crichton,[13] Burrows,[14] Combe,[15] Morrison,[16] Marcé,[17] Moreau,[18] Tuke,[19] and Morel,[20] are well worthy of careful perusal.

The subject has thus been well investigated, but there still remain certain points on which our information is imperfect, and some of which I hope to elucidate in this paper. Considering that the records of the cases in the Crichton Royal Institution afforded a good field for such an investigation, I have gone carefully over them, and tabulated the results. The statistics thus obtained embrace the cases admitted since the opening of the Institution, in 1839, to the end of last year, 1863, a period of twenty-four years, and show, in mass, the general history of 901 cases of insanity. The records of the cases were made by Dr. Browne, from 1839 to 1857; by Dr. Dickson, from 1857 to 1859; and by myself, from 1859 to 1863. These records are generally elaborated from answers given to certain queries forwarded to the friends, and filled up by the medical adviser of the patient applying for admission. The query respecting hereditary

[1] Burton, pp. 92, 93. Burton's authority, that such laws existed in Scotland, is Boethius, a somewhat credulous historian.
[2] 'Des Maladies Mentales.'
[3] 'L'Alienation Mentale.'
[4] 'Statistics of Insanity.'
[5] Quoted in Sir Alex. Morrison's 'Lectures on Insanity.'
[6] Quoted in Tuke and Bucknill, 'Psychological Medicine.'
[7] Hood, 'Statistics of Insanity,' 1862.
[8] Whitehead, on 'Hereditary Disease.'
[9] 'Journal of Psychological Medicine,' 1848.
[10] 'Essay on Hereditary Diseases,' 1843.
[11] "On Hereditary Tendency," in the 'Journal of Mental Science,' for January, 1863, and January, 1864.
[12] Moreau (de Tours), 'La Psychologie Morbide.'
[13] Crichton, on 'Mental Derangement.'
[14] Burrow's 'Commentaries on Insanity.'
[15] Combe, on 'Mental Derangement.'
[16] Op. cit.
[17] Marcé, 'Des Maladies Mentales.'
[18] Moreau, op. cit.
[19] Tuke and Bucknill, op. cit.
[20] Morel, 'Des Maladies Mentales.'

tendency is the following: "Is the patient, or his relatives, subject to any hereditary, nervous, or periodical disease, and what? or have they manifested any peculiarity, eccentricity, or prominent propensity, or tendency to crime?" From the answer given to this question, and from any other sources of information he may possess, the reporter makes up a statement on this point. During the first ten years of its existence, pauper as well as private patients were admitted into the Crichton Institution, but, since the opening of the Southern Counties' Asylum, in 1849, private patients only have been received, so that the statistics are made up from cases occurring in the lower, as well as in the middle and upper classes of society, although those belonging to the two latter predominate. In recording the cases, no greater pains were taken in ascertaining the fact of hereditary transmission, than were employed in ascertaining any other fact in the history of the case.

In considering, in detail, the following questions, I shall endeavour to place at the same time, before the reader, a general view of the results obtained by other investigators, in such a form that they may be easily compared with those which I bring forward.

I shall consider the following questions:

I. *The proportion of the insane having an hereditary predisposition to the disease.*
II. *The proportion in the hereditarily predisposed, having their parents, or collateral relations, affected.*
III. *The influence of sex in transmitting insanity.*
IV. *The influence of sex in receiving hereditary insanity.*
V. *The frequency of the transmission of the different forms of insanity in the hereditarily predisposed.*
VI. *The age on first attack in hereditary cases.*
VII. *The number of previous attacks at the time of admission.*
VIII. *The domestic condition.*
IX. *The proportion of recoveries and deaths in hereditary and non-hereditary cases.*
X. *The duration of life in hereditary insanity.*

I.—*The proportion of the insane having an hereditary predisposition to the disease.*

Authorities vary very much in their computations of the frequency of hereditary transmission; and this variation may be accounted for in many ways. Among the poor, little is known of ancestry. Esquirol says that the women at Salpêtrière are frequently ignorant of the names of their parents; among the rich, on the contrary, every information may be obtained, but, not unfrequently, it is entirely withheld, or only partially imparted. Different views are held as to what constitutes sufficient evidence of hereditary trans-

mission; some authors call only those cases hereditary, in which mental disease has been known to exist in the direct line; "but it is important to remark," says Guislain,[1] "that the transmission is not always direct; that the father of an insane person may not have been affected, while the grandfather, or aunt, or uncle, or cousin, may have presented symptoms of this affection." In asylums where acute cases only are received, it is easily to be understood that hereditary tendency does not reach a figure so elevated; probably such cases are more frequently caused by other conditions than insanity being present in their forefathers; on the contrary, in an asylum where epileptics, idiots, imbeciles, and incurables are received, the hereditary predisposition appears in a much higher proportion. When mental disease appears in an individual, some authors recognise it as hereditary if the parents have suffered from any nervous disease; while others hold, that unless the parents have been actually insane (some even demanding that the insanity be of the same form), there is no evidence of hereditary transmission. When so many difficulties are to be overcome in getting at the truth, and when so much variety of opinion exists as to what constitutes hereditary predisposition, it is not wonderful that the following table should show such an amount of discrepancy.

TABLE I.

Showing the number of cases of Hereditary Insanity found by various authors, and the per-centage in the whole number of cases under observation.

Authors' Names.	No. of Cases.	No. of Hereditary Cases.	Per-centage.
[2]Esquirol			
In Salpêtrière . .	789	105	13·30
Private House . .	431	150	34·80
Charenton . . .	1075	337	31·34
[3]Guislain	224	56	30·00
[4]Another computation . .	322	19	5·96
[3]Holst	467	323	69·00
[3]Jessen	522	360	65·00
[3]Parchappe	—	—	15·00
[3]Aubanel and Thore . .	549	24	4·37
[3]Michea	—	—	50·0 to 75·0
[3]Damerow	773	187	24·29
[3]Webster	—	—	32·00
[3]Brigham	1181	315	26·67
[5]Thurnam	469	153	32·6
Including collateral . .	469	224	47·7
[6]Hayner	192	23	11·97

[1] Guislain, quoted by Morel, op. cit., p. 115.
[2] Esquirol, op. cit., vol. i, pp. 62—64, and vol. ii, p. 682.
[3] Quoted by Tuke and Bucknill, op. cit., pp. 241-242.
[4] Guislain, 'Traité sur les Phrenopathies,' pp. 5-6.
[5] Guislain, 'l'Alienation Mentale,' vol. i, p. 154.
[6] Thurnam's 'Tables and Statistics of the Retreat,' p. 77.

Authors' Names.	No. of Cases.	No. of Hereditary Cases.	Per-centage.
[1]Burrows	—	—	85·71
[2]Noble	—	—	40·00
[3]Hood	3668	361	9·59
[4]Morel	—	—	20·0
[5]Marcé	56	24	42·85
Another computation . .	—	—	90·0
[6]Howe	420	355	84·52
[7]Moreau, de Tours . . .	—	—	90·0
[8]Ellis	1380	214	15·36

The results obtained in the foregoing table are interesting, as showing the marked rise in the per-centage of hereditary cases, when good opportunities are afforded of obtaining an accurate history of the patients; and the reverse, when their large numbers make a perfect examination difficult or impossible. Thus, Esquirol, while he discovers only 13·30 per cent. in Salpêtrière, finds 34·80 per cent. in his own establishment; Dr. Hood, in Bethlem, finds 9·59 per cent., while Thurnam, at the Retreat, finds 47·0 per cent. among his cases generally, and 51·0 per cent. among those occurring in the Society of Friends; while MM. Aubanel and Thore, at Bicêtre, found only 4·37 per cent., Dr. Burrows declared, as the result of his experience in private practice, that 85·0 per cent. of insane cases were hereditary. It may thus fairly be inferred, that the more perfect our information concerning the patients, the higher, up to a certain point, will be the per-centage of hereditary cases.

The high estimates of the frequency of hereditary transmission, made by recent French writers, are interesting and important. M. Moreau (de Tours)[9] says, "as we understand it, and as we believe it should be understood, hereditary predisposition is the source of nine tenths, perhaps, of mental maladies." M. Trelat observes, that we now find this tendency existing in a great number of cases, where former observers had not thought of looking for it; and Moreau gives us an idea of the indications that he regards as showing a tendency to nervous disease and insanity.[10] These are to be found in simple diseases of the nerves, such as convulsive movements of the eyelids, of the lips, of the different muscles of the face, grimaces, jerks of the head and shoulders, trunk, or extremities, stammering, certain defects in the pronunciation, &c. In all these, Moreau detects a tendency to nervous disease and to insanity

[1] Burrows, op. cit., p. 104.
[2] Noble, 'Elements of Psychological Medicine,' p. 225.
[3] Hood, 'Statistics of Insanity,' pp. 53, et seq.
[4] Morel, op. cit., p. 114.
[5] Marcé, op. cit., p. 109.
[6] Howe, 'On Idiocy,' p. 57.
[7] Moreau, op. cit., p. 116.
[8] Ellis, on 'Insanity,' p. 42.
[9] Moreau, op. cit., p. 116.
[10] Ibid., p. 150.

that may be transmitted.[1] M. Renaudin observes, that hereditary predisposition plays a part in the evolution of mental alienation, which is better appreciated to-day, and which, perhaps, is more important than it has been in other times. It is not at the first step that mental alienation ordinarily becomes the result, and two or three generations may pass, having proteoform modifications of nervous disease, before arriving at the final result—insanity. Taking into their consideration such a vast field of morbid nervous manifestation, it is not to be wondered that M. Moreau and others think that there are infinitely few cases of insanity in which there may not be traced hereditary predisposition, as they understand it.

In ascertaining the fact of hereditary predisposition, it is necessary to take into account cases of insanity occurring in collateral branches, as well as in the direct line of the family. It is obvious that eccentricity, mental peculiarities, and strong hereditary predisposition to mental disease, not amounting to insanity, may exist in many members of a family, although the father and mother have never been insane, the disease may have appeared in the uncle, or aunt, or even cousin, and in that way may its hereditary origin be discovered. In proportion, however, as this relative, so affected, is removed, so are the chances of fallacy increased. In a group of families, whose history is well known, and in which a tendency to hereditary insanity exists, it is not uncommon to see, here and there, a member afflicted with mental disease, traceable to some progenitor who had originated the tendency, the occurrence of which case would be inadequately accounted for, were we ignorant of the hereditary taint. In the same manner in the mass of cases that come before us, of whose ancestry we know little or nothing, we are forced to examine carefully collateral branches, and see if there we have no trace of the disease, which may, as in the other case, have the same origin. In such circumstances the probability of the hereditary origin of the disease is greatly increased, should more than one near relative have suffered from the malady.

In examining the condition, as to hereditary transmission, of the cases admitted into the Crichton Institution, I carefully ascertained whether there existed, or had existed in the direct line, or in collateral branches of the patients' family, insanity or eccentricity, and, if so, what relative had been affected. When a cousin in the *first* degree, or any nearer relative had suffered from such disease, the case was placed in the first, or hereditary class. In the *second* class were placed those whose relatives had suffered from some hereditary disease, not insanity, or in whose parents there was found some disease, or condition, which had apparently produced the insanity in their offspring. The *third* class comprises the cases in whose families, it was stated, no hereditary disease of any kind existed;

[1] Moreau, op. cit., p. 155.

and in the *fourth* class the condition, as to hereditary tendency, was unknown.

The following table shows the numbers and per-centage, or the total number of cases, in each class, distinguished on the principles above enunciated.

Table II.

Hereditary Insanity, or Eccentricity.	Hereditary Diseases, not Insanity.	No Hereditary Disease.	Hereditary condition unknown.
447 49·61 per cent.	49 5·43 per cent.	245 27·19 per cent.	160 17·75 per cent.

In 181 of the cases, only one relative of the patient was known to be insane, whilst in 266 cases, more than one relative had been affected.

It will be observed that these results approach very nearly those obtained by Thurnam, at the Retreat, with which they may be fairly compared, when he takes into consideration the insanity of collateral relatives. The per-centage falls far below the estimates of the later French, and some English authors, owing to the wider view they hold of what constitutes hereditary predisposition.

II.—*The numbers of the hereditarily predisposed, whose parents, or collateral relatives, were affected.*

So far as I know, there are no statistics published having reference to this point; as, however, it is an important one, I append the following classification of the hereditary cases. They are divided into five classes, according to the propinquity of the nearest relative known to be, or to have been, insane.

The *first* class contains those cases in which mental disease had appeared in the direct line—whose parents, or other ancestors, had been insane. In the *second* are those whose brothers or sisters had been insane. In the *third*, those having uncles or aunts so affected. In the *fourth*, those with cousins insane; and in the *fifth*, those whose near relatives—relationship being unknown—had been insane.

Table III.

	Male.	Female.	Total.
Parents or ancestors insane	127	88	215
Brothers or sisters insane	79	64	143
Uncles or aunts insane	18	16	34
Cousins insane	10	8	18
Relatives, relationship unknown, insane	19	18	37
Total	253	194	447

III.—*The influence of sex in transmitting insanity.*

When both parents have been insane, it is concluded that there is small chance of escape for the offspring; but, even in such a case, the disease may only appear in some of the children, while the rest may be exempt, at all events, from an actual outburst of the malady.

Esquirol[1] first observed that insanity is oftener transmitted by the mother than by the father, and that the former may also, during her pregnancy and lactation, communicate disease to her offspring. The observations of Thurnam,[2] Brigham,[3] and Baillarger,[4] have confirmed these statements. In the following table the statistics of the two former are shown. I am unable to give Baillarger's results in a similar form.

TABLE IV.

Thurnam.		Brigham.	
Paternal influence.	Maternal influence.	Paternal influence.	Maternal influence.
39	40	79	91
Per-centage in all cases under observation.		Per-centage in all cases under observation.	
8·3	8·5	6·7	7·7

The next table shows these influences as observed in the cases in the Crichton Institution.

TABLE V.

CRICHTON CASES.

Paternal influence.	Maternal influence.
82	68
9·1 per cent.	7·5 per cent.

It will be observed that this table does not confirm the dictum of Esquirol and Baillarger, as to the preponderance of the mother's influence in transmitting insanity.

In Thurnam's experience the paternal and maternal influence is nearly equal. In Brigham's, the latter prevails; while in mine the former predominates. It is, however, to be remembered that the number of males under treatment in the Crichton Institution is much greater than the number of females, a condition which is reversed in Thurnam's experience, while in that of Brigham the sexes are nearly equal. To supply a means of comparison, I have added to the foregoing tables the per-centages of the cases influenced by the father and mother, in the whole number of cases under the observation of the different authorities. From this it appears, that in Dr. Brigham's experience the mother's influence was more powerful

[1] Esquirol, op. cit., vol. i, pp. 65-67.
[2] Thurman, op. cit. table 14.
[3] Tuke and Bucknill, op cit., p. 243.
[4] Quoted by Morrison, in op. cit., p. 295.

than the father's by 1 per cent., that in Thurnam's it was nearly equal, and that in my own, the paternal influence was more powerful than the maternal by 2 per cent.

Another question of importance arises under this head. *Is the insanity of the mother more dangerous to the females than to the males?* Thurnam and Baillarger answer in the affirmative, and the latter further observes,[1] that the father's insanity is slightly more dangerous to the sons than the mother's; whilst the mother's is twice as dangerous to the daughters. On this subject I subjoin the following table, showing the paternal, and maternal influence on the number of males and females.

TABLE VI.

THURNAM.				BRIGHAM.			
Paternal influence.		Maternal influence.		Paternal influence.		Maternal influence.	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
19	20	17	23	42	37	35	56
8·5 p. cent.	8·1 p.cent.	7·6 p. cent.	9·3 p.cent.	7·07p.cent.	6·3p.cent.	5·9 p.cent.	9·5 p.cent.

CRICHTON CASES.

Paternal influence.		Maternal influence.	
Male.	Female.	Male.	Female.
49	33	37	31
9·4 per cent.	8·7 per cent.	7·1 per. cent.	8·1 per cent.

From these tables it appears that the paternal influence acts more powerfully on the males than the females, and that the maternal influence affects more the latter than the former.

Dr. Burrows[2] considers that a child, physically resembling its insane parent, will more probably suffer from mental disease, than one resembling the sound parent. This, indeed, seems a natural conclusion. We have, however, Moreau,[3] on the other hand, stating that there is a "law by which the series of organs which hold under its dependence the psycho-cerebral organization, and that which gives the resemblance, or analogy of physiognomy, are transmitted separately, from the parents to their descendants. So, every time that an individual has presented an analogy of physiognomy, more or less striking, with one of his parents, he owed to the other parent, his cerebral organization, as the presence of the hereditary evil has attested."

[1] Quoted by Tuke, op. cit., 243. [2] Burrows, op. cit., 106.
[3] Moreau, op. cit., p. 141.

IV.—*The influence of sex in receiving insanity.*

Table, showing the number of the sexes that laboured under hereditary insanity, and the per-centage of each sex in the total numbers under observation.

TABLE VII.

	Male.		Female.			Male.		Female.	
	Nos.	Per cent.	Nos.	Per cent.		Nos.	Per cent.	Nos.	Per cent.
[1]Hood	121	8·58	240	10·62	[5]Esquirol ...	—	—	105	13·30
[2]Guislain.....	7	4·75	12	7·172	Mania in his own establishment..	38	32·20	37	24·66
[3]Thurnam ...	65	32·82	77	35·48	Salpêtrière ...	—	—	88	21·83
[4]Marcé, puerperal mania	—	—	24	42·85	Crichton Institution ...	253	48·56	194	51·05

The foregoing table requires no comment, as it indisputably shows the greater liability of the female sex to suffer more from hereditary insanity, than the male. One of Esquirol's observations, however, does not concur, but the others strikingly affirm the conclusion arrived at.

V.—*The frequency of the different forms of insanity among hereditary cases.*

The form of mental disease most frequently transmitted from parent to child, was among the questions much discussed by the earlier writers; but recent observers have come to the conclusion, that, all varieties of mental disease are transmitted, and that a different form may appear in the child, from what existed in the parents. But actual insanity, such as mania, melancholia, dementia, monomania, imbecility, idiocy, and even general paralysis, is not all that is transmitted. In those families in which we have hereditary predisposition to mental disease, we find also epilepsy, hysteria, chorea, apoplexy, paralysis, hypochondriasis, convulsions, high nervous irritability, eccentricity, ill-regulated conduct and temper, immoral tendencies, false and erroneous understandings, stupidity, and waywardness.[6] To these, Whitehead[7] and Marcé[8] add obliteration of one or more of the sensorial faculties, such as hearing or sight; and

[1] Hood, op. cit., p. 51, et seq.
[2] Guislian, 'Les Phrenopathies.' pp. 5 and 6.
[3] Thurnam, op. cit., Table XIV. The 71 cases before alluded to, are not here included.
[4] Marcé, op. cit., p. 109.
[5] Esquirol, op. cit., vol. i, pp. 62—64, et vol. ii, p. 144.
[6] Prichard on 'Insanity,' p. 161.
[7] Whitehead, op. cit., p. 42.
Marcé, op. cit., p. 109.

the former observes, in such cases, a vicarious action, by which the child, born blind or deaf, of insane parents, is often in no way defective in its mental faculties.

To the sad list of ills that the hereditary predisposition frequently bestows on its inheritors, Moreau[1] adds the rarer gift, genius. However it may be accounted for, certain it is, that those who shed a lustre on the age in which they live, are sometimes members of families, in which nervous disease, and even insanity itself, is present, and that they frequently, in their own persons, exhibit nervous anomalies, and deep moral perturbations, which are not accidents in, but probably necessities of, their organization.

Haslam[2] well observes that "hereditary predisposition shows itself in those who, although they do not exhibit the broad features of madness, shall yet discover propensities equally disqualifying for the purposes of life, and destructive of social happiness."

The hereditary tendency to suicide, is illustrated in many instances, and numerous cases are detailed by authors. Burton, and Crichton, insist on its importance in melancholy, and Combe[3] says that hereditary predisposition is one of the most fruitful sources of mania, and Moreau[4] that it is recognised as the frequent source of propensities to crime. Morel[5] and Marcé,[6] however, unite in thinking that, as a rule, particular forms of mental disease are not inherited, and that it is only in rare instances that exactly the same form appears in parent and offspring, suicide being possibly an exception. All forms of insanity—mania, melancholia, monomania, and general paralysis, appear reciprocally to reproduce each other; and just as we have in the course of an individual case, varying forms of mental disease, so, in the line in which hereditary predisposition exists, we find, in the same way, similar varieties of disease appearing in different individuals of the race. This is not unfrequently seen in individual families, where you have disease of the parents manifesting itself in the children in various forms; one is eccentric, another maniacal, another melancholic, and so on. Many such instances could be referred to and recorded, in illustration of this statement.

The following table shows the proportions of hereditary cases in the different forms of insanity, as observed in the Crichton Institution, and by Esquirol.

Table VIII.

Mania.	Melancholia.	Monomania.	Moral insanity.	Idiocy and Imbecility.
51·0 per cent.	57·7 per cent.	49·0 per cent.	50·0 per cent.	36·0 per cent.

Dipsomania.	General paralysis.	Dementia and Fatuity.
63·4 per cent.	47·6 per cent.	39·5 per cent.

[1] Marcé, op. cit., p. 108, Moreau quoted. [2] Haslam, on 'Madness,' p. 230.
[3] Combe, op. cit., p. 92. [4] Moreau, op. cit., pp. 111, 112.
[5] Morel, op. cit., p. 116. [6] Marcé, op. cit., p. 106.

ESQUIROL.[1]

Mania.	Melancholia.
24·9 per cent.	48·67 per cent.

Melancholia, after dipsomania, seems to have the greatest tendency to appear in the hereditarily predisposed, and idiocy and imbecility, dementia, and fatuity, the least. I have not been able to construct a table showing the form of insanity appearing in the father, and contrasting it with that which appeared in his offspring. The materials at disposal for such a purpose are necessarily very few, and difficult to obtain.

Moreau[2] considers hereditary predisposition complete, when the descendants have the same intellectual disorders as their parents, produced by the same causes, at the same time of life; and incomplete, when the disorder is not the same as in the parents, but manifest a filiation to their disease.

Cases of hereditary predisposition have been divided into four classes.[3] *First,* those in whom the nervous temperament is congenital, such cases are more liable to insanity than others, they become easily excited under different circumstances, and the nervous condition created by the hereditary tendency is such that the most trifling causes produce in them madness. *Second.* In this class hereditary predisposition manifests itself in intellectual, physical, and moral phenomena, which approach insanity. The insanity appears more in the acts than in the words. Such cases are eccentric, irregular, and sometimes immoral in action. They are incapable of directing their faculties to any wise or useful object; they may have some brilliant points, but, in spite of these, they are intellectually sterile, and sometimes physically so. They produce absurd schemes, are discoverers of utopian impossibilities, and attempt the resolution of insoluble problems. Their mania is of short duration, and comes on in sudden paroxysms, in which they commit dangerous acts. The nervous temperament generally prevails, and periodicity is well marked. *Third.* This class consists of imbeciles, and idiots of small head, and low stature, hereditary predisposition having existed in the line of their progenitors for several generations. *Fourth.* Idiots, and imbeciles, are comprised in this class, produced from parents who themselves had no hereditary taint, but who had, from some cause or other, communicated this sad inheritance to their offspring.

In conclusion, it may be remarked that the various forms assumed in hereditary insanity, have a striking analogy in those assumed in the hereditary tubercular disease, for just as we have imbecility, idiocy, mania, and other forms of insanity, coming on at various periods of

[1] Esquirol, op. cit., vol. ii, p. 144. [2] Moreau, p. 114.
[3] Morel, op. cit., p. 258, et seq.

life, so we find hydrocephalus,[1] tabes mesenterica, scrofulous enlargement of the lymphatic glands, and phthisis pulmonalis, appearing at different periods of development. As in the former case, we observe one form of insanity being transmitted and appearing, in the next generation, in a different form; so also in the latter, we have different forms of the tubercular disease, apparently generating each other, in an infected race. A maniac may produce a melancholic or imbecile, while a phthisical patient may generate a hydrocephalic or scrofulous child.

VI.—*The age on first attack in hereditary cases of insanity.*

Esquirol[2] observes that, in hereditary cases, the disease often comes on at the same period of life as in the progenitors; and he and others detail many cases in illustration.[3] *Hérédité* appearing at the same time of life, and pursuing the same course in the offspring as it did in the parent, is called by Moreau perfect.[4] Mental derangement is not likely to occur until the mind is fully developed. Should it appear before this period, or just at it, without there being any other cause likely to induce disease, it is probable that the source will be found in hereditary predisposition. Crichton[5] states that, after the age of thirty, sometimes much earlier in life, the hereditarily predisposed to melancholy begin to have indescribable sensations of anxiety, and internal uneasiness, of which they can give no good account, resulting in an attack of mania. In the second of his able papers on hereditary tendency in the 'Journal of Mental Science,'[6] Dr. Maudsley observes that hereditary mania is apt to appear at the age of puberty, and that in the decline of life melancholia and hypochondriasis, having a similar origin, become established.

It may thus be concluded, that no age is exempt from hereditary mental disease, as cases are recorded of mania appearing even at the time of birth,[7] at the age of puberty and manhood, and in the decline of life, so old age may bring with it the circumstances necessary to the evolution of a disease which has been lying dormant for nearly a life-time.

The following table shows the age at which insanity first appeared in the predisposed, and alongside is placed, for comparison, a table from Thurnam,[8] showing the age at the first appearance of insanity in cases generally.

[1] Ancel, on 'Tuberculosis,' p. 379.
[2] Esquirol, op. cit., p. 65, et seq.
[3] Burrows, op. cit., p. 104. Morrison, op. cit., p. 296. Pagan, 'Med. Juris. of Insanity,' p. 35. Combe, op. cit., p. 94.
[4] Moreau, op. cit., p. 114.
[5] Crichton, op. cit., vol. ii, p. 229.
[6] For January, 1864.
[7] Crichton, op. cit., vol. ii, p. 355.
[8] Thurnam, op. cit., p. 71.

TABLE IX.

	Crichton Institution Cases.		Thurnam.
	Hereditary cases.		Cases generally.
	No. of Cases.	Per-centage.	Per-centage.
Between 0 and 10 years	9	2·30	0·96
„ 10 „ 20 „	62	15·85	12·77
„ 20 „ 30 „	128	32·82	32·53
„ 30 „ 40 „	87	22·31	20·0
„ 40 „ 50 „	73	18·71	15·9
„ 50 „ 60 „	20	5·13	10·6
„ 60 „ 70 „	8	2·05	6·03
„ 70 „ 80 „	3	0·77	0·97
„ 80 „ 90 „	—	—	0·24

From this table it appears that the predisposed cases are apt to suffer earlier in life than other cases, that they suffer more at the age of puberty and manhood, and decidedly less as old age approaches.

VII.—*The number of attacks in hereditary cases.*

The influence of hereditary predisposition on the number of attacks of insanity is shown at a glance in the following tables :

TABLE X.—*Crichton Institution.*

	Hereditary Cases.		Non-Hereditary Cases.	
	No. of Cases.	Per-centage.	No. of Cases.	Per-centage.
First attack.....	284	64·69	192	80·0
Not first attack	155	35·33	48	20·0

TABLE XI.—*Cases generally.*

	Thurnam.[1]		Hood.[2]	
	No. of Cases.	Per-centage.	No. of Cases.	Per-centage.
First attack	324	78·07	635	67·62
Not first attack.....	99	21·92	304	32·37

Hereditary cases have thus a much greater tendency to relapse than other cases. This point in their history may be still more forcibly illustrated. The number of individuals readmitted during

[1] Thurnam, op. cit., Table XII.

[2] Hood, op. cit., p. 77.

the last twenty-four years to the Crichton Institution is seventy-eight, and of these no less than fifty-one belong to the hereditary class of cases. The following table shows their mode of distribution.

Table XII.

Hereditary mental disease.			Hereditary disease not mental.			No hereditary disease.			Condition as to hereditary disease unknown.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
32	19	51	2	3	5	8	6	14	7	1	8

Some of these patients have been admitted from two to ten times. This tendency of hereditary insanity to recur is one of its most important characteristics, and claims our special attention in the prevention, prognosis, and treatment of such cases. When a patient is frequently admitted into an asylum, it may be almost safely concluded that he labours under hereditary insanity. Such cases are not uncommon, and much may be done, especially in those occurring among the upper and middle classes, to prevent the recurrence of the malady.

VIII.—*The domestic condition of those having hereditary insanity.*

The domestic condition of those having hereditary predisposition, is in the following table compared with results obtained by other observers in ordinary cases of insanity.

Table XIII.—*Crichton Institution.*

	Hereditary Cases.		Non-Hereditary Cases.	
	No. of Cases.	Per-centage.	No. of Cases.	Per-centage.
Married	133	29·75	69	28·4
Single	297	66·44	156	64·2
Widowed	15	3·35	18	7·4

Table XIV—*Cases generally.*

	Thurnam.[1]		Hood.[2]	
	No. of Cases.	Per-centage.	No. of Cases.	Per-centage.
Married	117	24·9	1822	49·6
Single	308	65·6	1612	43·9
Widowed	44	9·3	234	6·3

On the whole, it will be seen that, at the time of attack, fewer hereditary cases are, or have been married; and it is somewhat interesting to notice the marked lowness of the per-centage among the widowed, probably owing to the hereditary disease appearing earlier in life, as has been seen in a former part of this paper.

[1] Thurnam, op. cit., Table VIII. [2] Hood, op. cit., p. 27.

IX.—*The proportion of recoveries and deaths in the hereditary and non-hereditary cases.*

The per-centage of recoveries is higher among the hereditary cases than among the non-hereditary ones; while the per-centage of death is lower among the former and higher among the latter. The former result is partially attributable to the number of re-admissions in the former class.

TABLE XV.—*Crichton Institution.*

	Hereditary Cases.		Non-Hereditary Cases.	
	No. of Cases.	Per-centage.	No. of Cases.	Per-centage.
Recovered	163	36·9	79	32·2
Died.....	92	20·6	56	22·8

TABLE XVI.—*Hood.*[1]

Hereditary.	Not Hereditary.
Per-centage in Hereditary Cases.	Per-centage in cases not Hereditary.
Recovered ..... 60·3	46·1
Died ..... 4·98	5·26

It will be observed that this table, constructed from Dr. Hood's statistics, agrees in a striking manner with that which goes before. The high per-centage of the recovered among the hereditary cases, is very remarkable, and indicates the curability in the early attacks of this form of mental disease.

X.—*The duration of life in hereditary insanity.*

I believe it will be found that the duration of life is shorter among this class than it is among the insane generally. Appended is a table showing, at a glance, the number of deaths occurring in decennial periods of life in the Crichton hereditary cases, contrasted with Thurnam's similar table of ordinary cases.

TABLE XVII.

	CRICHTON. Hereditary Cases.		THURNAM.[2] Cases generally.	
	No. of Cases.	Per-centage.	No. of Deaths.	Per-centage.
Under 10 years	1	1·13	—	—
From 10 to 20 years ...	1	1·13	—	—
20 — 30 „ ...	7	7·95	13	9·35
30 — 40 „ ...	23	26·13	17	12·23
40 — 50 „ ...	26	29·53	21	15·10
50 — 60 „ ...	17	19·31	27	19·42
60 — 70 „ ...	8	9·09	27	19·42
70 — 80 „ ...	5	5·68	19	13·66
80 — 90 „ ...	—	—	14	10·07
90 —100 „ ...	—	—	1	0·71

[1] Op. cit., pp. 53—55.

[2] Op. cit., Table XXIX. Members of the Society of Friends are believed to live longer than other people.

The mass of the hereditary cases die between the ages of thirty and sixty, while the mass of the insane generally, die between the ages of forty and seventy.

I have endeavoured in this contribution to give some glimpses of the natural history of hereditary cases of insanity, as viewed in the mass—as formed into a group. I have tried to estimate their numbers, trace their origin, and observe the time of life when disease appears in them. I have passed in review the influence of sex, both in producing and receiving hereditary insanity; the most frequent forms in which the disease manifests itself—the domestic condition in which it finds those who are the subjects of its attack; and finally, its influence in the recovery, death, and duration of life of its victims. In passing I have touched on many interesting topics that are yet to be worked out, and there remain over an immense number of points in the history of such cases, which would, if well investigated, enable us better to understand the group of mental diseases with which we have been dealing. These researches are offered to the Profession in the hope that they add something to our knowledge of hereditary insanity.

An Oasis in the Desert of German Restraint.—A Note by Baron Mundy, M.D.

Dr. Ludwig Meyer, of Hamburg, has had the courage to defend the non-restraint system in Germany, and also himself to practise it in the Hamburg Asylum with the best success. It is true that Dr. Meyer had previously visited England, and examined with careful eyes, impartial goodwill, and practical mind, the non-restraint system. Why do not such physicians as Casimir Pinel of Paris, Renaudin of Mareville, Dick of Klingmünster, Neumann of Pöpelwitz, and Erlenmayer of Coblenz, visit England also, and with the same honest intentions as Meyer, study a system which has been practised here for more than twenty years amongst a population of insane amounting to 50,000 patients? It must be a blessing to suffering humanity and a disgrace to those who have the boldness not only to assert that they do not comprehend these facts, but also to call the system an *English swindle*, to hear the voice of Dr. L. Meyer in the *Desert of German Restraint.*

Having for three years been an eye-witness of the non-restraint system in England, and having repeatedly visited more than fifty asylums in this kingdom, I reserve to myself the right to reply

at the proper time, and in a more fitting place, to the adversaries of this important cardinal basis of practical phrenopathy. I give here only a few extracts from Dr. Meyer's article (see *Allgemeine Zeitschrift fur Psychiatrie sechtes Heft*, 1863, pp. 542—581), for the satisfaction of my English colleagues who so indefatigably practise this great work of Dr. Conolly, and also for the instruction, and if possible the conversion, of the enemies of non-restraint :—

"More than a quarter of a century has passed," writes Dr. Meyer, "since the English asylums undertook to do away with the last remnants of imprisonment and restraint. The immense importance of this idea is shown by the magnitude of the opposition raised by the alienists of England. The enthusiasm of Conolly and his adherents was not less than the bitter excitement of his opponents. When the former made the abolition of mechanical restraints—the chief aim and test of the efforts of alienists—when they saw, in these restraints which then in English (and still in many French and German) asylums, were regarded in the light of therapeutical agents, only the embodiment of all the gross mismanagements which had so often raised a storm of public indignation against these institutions, their opponents were not slow to declare the results of the so-called new system mere delusions, chiefly intended to lead public opinion astray, and to aggravate the unhappy lot of the patients. The harmless strait-jacket was, they said, only exchanged for the rough hands of the warders, and they added, 'Is this the success of the new system that violent patients are deprived of fresh air and exchange the movements of the whole body for the narrow limits of the padded-cell merely to abolish the strait-jacket, which for the moment protects the useless limbs better than fetters ?'

"Having thus gone from defence to attacks, they in time assailed the personal honour of the reformers. They accused them of insincerity and hypocrisy; they said, they could as little as before give up measures of restraint, the fettered patients would be withdrawn from the sight of foreign visitors, and, to save appearances, bear in addition to their old sufferings the hardships of isolated confinement. Facts have long overstepped the bounds of this individual warfare; the powerful concussion of minds was a sign that Conolly's reform had really touched the vital part of the whole of mental science. In fact, the use of mechanical restraint is so very much opposed to the ideas of rational cure, that the desire to remove it necessarily strongly impressed itself on the generous men who commenced the new era in the cure of the insane, insomuch as they wished that the insane should be entrusted to the physician as a right and a duty. How near the idea of the non-restraint system must have been to that of Pinel, we may divine from the trouble the adherents of the

restraint measures have taken to prove the right of priority in his favour against the English physicians.*

"He, like Esquerol, surely only admitted measures of restraint as an evil gained from prisons, and which could not immediately be given up. The necessity of the time only excused the momentary use of mild restraint measures. There is no doubt but that the idea of non-restraint already existed in the minds of the fathers of psychiatry. Tuke, Pinel, Esquirol, to whom the insane were given over as an inheritance from prisons and still worse places, knew how to impress on their reforms the spirit of gentleness and foresight, the true manner of action for a physician. If they did not succeed (as it was impossible that they then should) in radically destroying the old prejudices, yet they paved and smoothed the way on which, in our time it was reserved for Conolly, to obtain his splendid successes. The mastery of this idea, together with the commencement of a rational system of curing the insane, are such incontestible facts that they have often been made use of in France for the purpose of stealing from the reforms of Conolly a part of their lustre.

"It is always a fact, and indeed a plain prosaic fact, against which dogma falls to pieces; and the egg of Columbus continually invites fresh surprise. It was the simple experience that order and discipline, combined with the welfare of every patient, worked better than those terrible instruments resembling those in the torture chambers of the prisons of old, and which formed a standing inventory in all asylums that cut away the very ground from under their feet. The greatest triumph of the idea of non-restraint is, that measures of coercion have ceased to be valued as a part of the cure of the insane. 'Posterity will hold the name of Conolly in grateful remembrance for the annihilating condemnation which he hurled against the agents of coercion.' †

"German and French physicians who have tried to study from their own observations the system of Conolly in the English institutions, have often asked for an explanation of the fact that England has offered so favorable a field for the development of this system. It is strange that the solution which is apparent has been entirely overlooked; it lies in the relatively advanced development of the English asylums which, in spite of all short-comings, had long before Pinel a certain organization, combined with the national wealth and public feeling of charity which contributed abundantly to their support. It has been said that the introduction of the non-restraint system was particularly well adapted to the temperament of the English insane and to the character of the whole nation, also to the

* Casimir Pinel, 'Journal de Medicine Mentale,' 1862. "Examèn de non-restraint." Guislain, 'Leçons Orales,' tom. iii, p. 232, c'est Pinel qui a conçu le premier l'idée de renoncer aux moyens de contrainte.

† Guislain, 'Leçons Orales,' tom. iii, p. 231.

peculiarities of the class of the population who are employed as attendants in asylums.

"On the other hand, the opponents of the system have tried to prove that non-restraint was introduced as a contrast to the horrible manner in which the English asylums were managed, forgetting, in their blindness, that the great national superiority of that country lies in its open and fearless discussion of all matters of public welfare, in the denunciation of all wrongs and short-comings, the cutting criticisms which the asylums had to undergo both from the press and in Parliament. They said that the reform became radical and great in the same ratio as the abuses had exceeded those which could elsewhere be found. The opponents of the system imagine themselves miracles of profundity, because to substantiate their reasonings and strengthen their weakness they quote the endless English documents, the commissions of inquiry, the parliamentary proceedings, the denunciations of the press; documents which, together with the general popular indignation, speak for themselves. They continually quote the exclamation of Sir C. Kennet, in the parliamentary session of 1815: "Bedlam covers England with shame!" The motions of Lord Ashley and Mr. Robert Gordon in 1828, and the energetic reports of the Commissioners of Lunacy in 1844; nay, they even quote every one of the following reports of the Commissioners in their various departments.

"But those who do not deduce from these official reports the fact that public opinion in England, both of Parliament and the Press, has, comparatively speaking, early and energetically taken an interest in the insane, now also forget that it is customary in England to introduce every reform with great outcries and searching inquiries, and that more much has been done there for the insane than in other countries. *For how fared the insane at the same epoch in France and Germany, and what is the position of the insane at this moment in those countries?* Why, until this very day, many French asylums have suffered and still suffer under such crying evils, that the latest reports of Girard de Cailleux on the condition of the Parisian and departmental asylum, far surpass in number and intensity of complaints the English parliamentary reports of twenty years ago. And is the development of the condition of the insane in Germany better? There are no grounds for such a supposition; it need not be pointed out that there are no such documents of indictment; for in what German state is there a superintending board for the insane, or a board of lunacy commissioners? Who would dare to write, nay, more, publish to the last letter such documents?

"In none of the larger German States have lunacy affairs been deemed worthy of official recognition, and it is a reproach to the physicians of the insane, that the superintendence over asylums is

merely put by government as an accidental duty on the shoulders of *Gerichtsärzte* and *Regierungs medicinal Räthe.*

"Wretched asylums, with all their attributes, could and can still be seen in Germany by those who do not confine their psychiatric investigations to the so-called model asylums built only for architectural show. 'Twelve years ago (writes Dr. Meyer) I saw in an asylum—and by no means an inferior one—a number of raving lunatics, some naked and covered with their own ordure, lying behind wooden lattices along the walls of a room. I distinctly remember that none of the visiting students of medicine and young physicians, who were shown over the institution by the assistant, manifested any particular indignation on the subject; it was supposed that those arrangements were necessary, and, perhaps, such are still in existence. Similar, or perhaps worse, things were in existence at Cologne in 1854.'*

"'Five years later (he continues) I visited a larger asylum, which stood in the best repute, but I have never seen a prison of so gloomy a character; the arrangement of the cells impressed every sense with the idea of a menagerie. That England has not at any time been influenced by the superior knowledge of France or Germany no one will deny, and much less has the former allowed any one to be beforehand in action; so much has been acknowledged at different times by French authorities of the first rank.'†

"With those who still defend the therapeutics of restraint measures, we have here nothing to do; the basis of their ideas is out of the pale of medicine, and I feel no desire to enter on a polemical discussion on philosophical or theological quibbles. But even the honest opponents who look upon measures of restraint as needful, and who, in spite of good will, have not yet succeeded in abolishing this state in their institutions, seem to me to misinterpret the scientific parts of this question, as they try over and over again to enter the grounds of casuistry.

"No doubt but that for practical application every single case must be prescribed for separately, but what, we ask, is proved or refuted if in such and such an institution a strait-waistcoat was at such and such a time necessarily employed? Is it not possible to look on this certainly universal proceeding in any other light than that of rendering non-restraint impracticable, or as necessitating an agreement with Dr. Neumann in his proclamation of it as an *English swindle?*

"The weight of observations in number and time transfers this question from the district of special casuistry to the realm of general statistics, the simple laws of which are open to public opinion with-

* See Reisebericht von Welling, 'Allgemeine Zeitschrift für Phychiatre,' vol. xiii, p. 54.

† 'Ferrus des Alienés,' p. 64.

out any specific knowledge of the matter. Whatever has been acknowledged in this department as correct is no further open to the objections which are still urged by the opponents of non-restraint. The power of these facts, which the non-restraint system proved, found its echo in the rapid development of the system in England, Scotland, and Ireland. But we see a much more important victory of Conolly's ideas in the acquisition of the open defence of the French and German physicians, who at one time formed the closed phalanx of the opposition. The names of Morel and Griesinger,* are guarantees that even in Germany the question is decided, and, indeed, entirely in favour of non-restraint. In England itself there is now no further question about the non-restraint system; it is considered settled. The knowledge that has been acquired has already found its application in the newest asylums, which are now only distinguished from other hospitals by more liberty of action within the walls, and more intercourse with the outer world. It would be difficult to find in England those asylum superintendents who, only ten years ago, let no opportunity pass of making converts for the non-restraint system, and who saw in every foreign visitor a missionary, whom they hoped to gain over to their views."

"I have spent," writes Dr. Meyer, "many hours in conversation with English physicians for the insane, but if I had not put the direct question about the non-restraint system, it would not have been mentioned by them in any manner. If I introduced some of the well-known German and French objections (I confess I did so from a feeling of duty, having already refuted them from my own experience), I was generally offered hospitable accommodation, and every facility for observation. On remarking that I should try to do away altogether with restraint measures when the new asylum at Hamburgh should be opened, I received the rather indifferent reply, 'It will succeed if you are really in earnest.'

"This is the calmness of success, and the same impression is made on reading the last years' reports of the Commissioners of Lunacy, and comparing them with former reports. Remarks on non-restraint, such as used to abound in the former reports, for the purpose of influencing public opinion, and as a means of confuting the followers of the restraint system, are altogether wanting in the reports of the last three years, 1859-60-61, and not a single word has been said on the absolute non-restraint, which has ceased to excite even a theoretical interest; restraint and non-restraint have ceased to be party watch-words or creeds—*non-restraint has become a fact.*

"It has often and impressively been demonstrated by Conolly, Morel, and others, that the system of non-restraint does not exchange one kind of power for another, but that its chief power lies in the general spirit of tranquillity, and in the degree of secu-

* Griesinger, 'Die Pathologie der Psychischen Krankheiten,' 1861, p. 506.

rity which the discipline of the patients themselves procure; but, notwithstanding this fact, established by experience, the opponents of the non-restraint system repeatedly conjure up the ghost of the 'rough keeper's hands' into the arena of controversy, and weigh with all seriousness the drawback of isolation as compared with the delights of the strait-waistcoat.

"We must leave it to these disputants to continue spinning their web as far as it may reach. I have only considered it right, in the interest of the honest sceptics, to quote the statistical returns of the English asylums respecting seclusion, the returns with regard to attendants, and the work performed, from the reports of the Commissioners of Lunacy.

"The condition of the Hamburg Asylum has acquired a kind of celebrity more from the philanthropy than the professional reports published. However much exaggeration and falsehood these descriptions contain, they at all events prevent the necessity of my mentioning the insurmountable difficulties which would stand in the way of removing the restraint system and introducing a new arrangement based on Conolly's ideas. The physicians of the asylum themselves, although all of them persuaded of the propriety of the non-restraint system, would have rejected any plan for its introduction, three years ago, as perfectly Utopian, but for two years past the application of restraint to the male patients has been unnecessary; in the female department, which contains 100 more patients than the male, it has occasionally been found necessary to apply the foot or chest straps to some of the patients to prevent their disturbing the peace of the dormitory. For a number of 330 female patients, there are only at disposal four isolated rooms (and these only to be had with difficulty) for protecting the quietness of the night's rest, and restraint, therefore, must assist when this scanty accommodation does not suffice. There were rarely more than two patients restrained, never more than four; the period of restraint was generally from four to five hours, no patient being ever restrained for an entire day. These cases of restraint were of so mild a character that disciplinarians would have resorted to more violent means. These cases of restraint, however, stand in no relation to our question, and in all essential points we may consider the introduction of non-restraint in our asylums as established. The abolition of restraint in this position, surrounded by local difficulties, has been highly instructive, and the result, therefore, is so much more striking.

"I have no hesitation (adds Dr. Meyer) in fully bearing out the maxim of the English physicians, that the abolition of restraint has a beneficial influence on the temper of all the insane, and disposes them to submit more willingly to the wishes of the physicians.

"The number of really raving maniacs has in a department of 230 males so completely diminished, that many weeks often pass without

the four isolated rooms being used at all. Since the introduction of non-restraint among females, no case of regular furious mania has occurred among 500 lunatics, no bodily injury of any moment to the insane or the attendants, and no continued refusal of food. The number of workers is continually increasing, and that of the sick diminishing. The accidents and escapes have not increased, though the opportunity for both is not wanting, considering the situation of our asylum, the garden, which is cultivated by patients, lying between a deep town moat and two frequented streets, from which it is merely separated by a light railing. With the introduction of the non-restraint system, we feel the local difficulties less, which oppose a consistent psychiatric treatment, whilst the insane endure their painful position with more patience, and at times even with gaiety. Facts are stronger than the will of any individual! As long as the German asylums must waste all their best energies on the care and discipline of the miserable and neglected insane, so long will they be unable to bring forward their experience for or against the question of non-restraint; and the often cited words of Conolly, 'Restraint is neglect,' receive their full signification when applied to the condition of the insane in certain countries."

Thus writes and acts Dr. L. Meyer, of Hamburgh; can any one judge more simply, truly, and honestly of the non-restraint system, or write more rationally concerning its merits than this distinguished German physician does?

[*Editorial Note.*—We are indebted to Baron Mundy for this able and impartial analysis of Dr. L. Meyer's paper on the non-restraint system. Amid all the misrepresentation regarding the English treatment of the insane made by such writers as Neumann, Erlenmeyer, Renaudin, Casimir-Pinel, &c., and which we have endeavoured from time to time to expose in these pages, it is really refreshing to read so truthful a record of the success which has attended the introduction into the Hamburgh Asylum of the English non-restraint system.

We cannot, however, close this note without adding our sincere acknowledgments of the frank and hearty testimony which Baron Mundy has for several years borne throughout Europe to the success of the English system. A visitor, at all hours and seasons, to several of our county asylums, he has placed himself in a position—never before held by a foreigner—of forming a just opinion of the practical working of the system. Why do the angry opponents of non-restraint not follow his example, and come and judge for themselves if the fact, which they have the impudence to deny, on the strength of their own crude reasoning and wretched practice, be, after all, true or not?]

CLINICAL CASES.

I. *A Case of primary Cancerous Tumour of the Brain, with Remarks.*

By G. Mackenzie Bacon, M.D., M.R.C.S.; late Assistant Medical Officer of the Norfolk Lunatic Asylum.

The following case derives interest from its comparative rarity, and from the fact that its history may be detailed with tolerable completeness, both as regards the mental phenomena and the structural lesion. It possesses also, another attraction, in the interest it may awaken as to the exact nature of the morbid growth, for the pathology of such cases is by no means an undisputed point.

Case.—*Congenital imbecility—Attacks of recurrent mania—Imperfect hemiplegia—Subsequent paraplegia and death—Post-mortem appearances—Tumour of brain (probably cancerous)—Microscopical examination.*

Stephen Kemp, æt. 34, a labourer, was admitted into the Norfolk Asylum for the second time in July, 1861, and remained till his death, May 3, 1863. He was from birth of deficient intellect, but pursued the even tenor of his ways pretty harmlessly till about the age of puberty, when he became violent, and liable to wander away. Hitherto he had lived with his mother, and been at times employed in the fields, but he was now sent to the County Asylum, where, however, he was not detained very long. For seventeen years he remained at large, under the care of his mother, and was returned to the Asylum in July, 1861. At that time he appeared to be a stout, hearty countryman, robust and rubicond. His mental capacity was very small, and he was described as "a good-tempered fool, unfit for any steady employment, and quite satisfied with passing his time in shouting at the train, and in running wildly about the courts." For the next year he had recurring attacks of mania, more or less active, being during them noisy and demonstrative, but not violent.

In May, 1862, he first showed signs of bodily ailment, the muscular power of the left leg and arm being much impaired. These symptoms came on very gradually, and he could all the time drag himself about, though unable latterly to dress without assistance, but after a month he improved a good deal.

In September he was weaker, and both his lower limbs were then most affected, the left arm having almost recovered its motile power. During the previous six months he had been occasionally noisy and excited, but much less so than formerly.

In December he was quite paraplegic, had but little sensation in the legs, and complained a good deal of lumbar pain. He was quiet, had to be fed regularly, and required great attention, and seemed indifferent as well as of diminished intelligence. For the last four months of his life he remained an helpless lump, and died very gradually, not particularly wasted, without bed-sores, or any obvious indications of disease, beyond the paraplegia.

Post-mortem.—Body somewhat emaciated; viscera in chest and abdomen healthy; membranes of brain healthy. On slicing the right hemisphere, the white centre had a bright pinkish hue, and seemed softened, but on continuing the section deeper the cerebral substance was denser, and the right ventricle when exposed was found almost obliterated by a hard mass, of gelatiniform appearance, with spots of effused blood, like old apoplectic clots. This mass extended upwards through the roof of the ventricle, causing an induration of some portion of the hemisphere, and was of the size of a small orange. A similar growth, of less size, was seen commencing in the left hemisphere, but external to the ventricle.

Microscopical Examination.—Dr. Eade, of Norwich, well known for his skill and experience in the use of the microscope, kindly examined the tumour, and furnished the following particulars of the microscopical appearances:—"The tumour presented an irregular nodulated appearance. Sections of various portions of it showed a more or less brain-like appearance, and a varying degree of consistency.

"Under the microscope the following elements were found:—

"1. Large irregular cells, mostly with one large eccentric nucleus.

"2. More or less rounded or oval cells, with one nucleus, which was variously centric or eccentric.

"3. Cells in every stage of elongation and fibrillation, from the mere oat-shaped or pyriform cell to the long delicate fibrillæ or fibre cells. These elongated cells were all granular on the surface, and many of them had a long, bulging, central nucleus, some appearing more or less perfectly joined at their extremities in a rudimentary attempt to form fibres. These elements varied greatly in relative amount in the different portions of the tumour: the firmer portions containing the largest proportion of fibres, and the soft and diffluent portions being chiefly composed of the rounded or oval cells."

The writer regrets that no examination was made of the spinal cord, but illness prevented his completing the autopsy.

The results of cerebral pathology are so unsatisfactory, as explanatory of morbid mental phenomena, that one looks with eagerness to cases where an obvious lesion exists, in the hope of gaining some fresh light, but the present instance hardly favours such hopes, for the man's mental condition seemed hardly altered till the loss of physical power extinguished the vivacity of his emotions. There is also a curious want of coincidence between the extent of the disease and the paralysis.

In reviewing this case, one is chiefly struck by the rarity of a large tumour in the brain, still more so of a malignant one; and also by the comparatively slight symptoms produced.

Dr. Sutherland states, in his 'Croonian Lectures,' "It is rare to find tumours in the substance of the brain, in cases of insanity; in 200 cases, tumours were found in only four;" while the French statistics ascribe twenty-two out of 8289 deaths to *cancer* of the brain. The case is, moreover, singular, as an instance of *primary* cerebral cancer, unassociated with other disease, for in the ordinary way cancerous deposits within the cranium are *secondary* to disease elsewhere. The only local sign, too, supposed to indicate the existence of tumour in the brain, viz., headache, was entirely absent throughout. In

treating of this subject, Dr. Walshe remarks: "The presence of a tumour in the brain must, we should expect, be productive of some form of paralysis. The fact is, however, otherwise, for Calmeil found three eighths of those with organic disease of the encephalon free from paralysis. Of the five eighths paralysed he found four eighths hemiplegic. Or, as is much more curious, *paraplegia* may be the form observed. Esquirol relates a case in which the anterior extremity of each hemisphere contained a cancerous mass, while the lower limbs only were paralysed. Durand-Fardel refers to four such cases. Hemiplegia, again, may be followed by paraplegia."

The above quotations would tend to show, that (though the cord was not examined) the symptoms might be referable to the brain alone. Dr. Walshe further states: "It is impossible to calculate the real duration of the disease itself, but the affection rarely proves fatal in less than a year; and unless when the cerebral cancer is associated with similar disease in other parts, the individual is not cut off by the progress of the special cachexia."

Rokitansky is of opinion, "that cancer of the brain very often occurs quite alone in the organism." In the latest English work on pathology, that by Dr. Wilks, the author says: "As a rule, tumours in the brain are found there as primary deposits, and nowhere else in the body, and this has led us, sometimes, to suppose they are not malignant; but it must be remembered that the brain, being so important an organ, the disease is fatal before it can be elsewhere propagated, as would be the case in many other instances were the organs equally vital in which the growth occurs. We must not, therefore, as I constantly hear it said, call a tumour in the brain necessarily innocent, because all the rest of the body is unaffected."

Regarding the case, then, psychologically, we fail to connect, in any way, the mental and bodily symptoms; while, pathologically considered, we find an uncommon instance of disease, baffling diagnosis, and hardly offering any grounds for better success on a future occasion; and, further, though it is the rule that primary cerebral tumours are fibrous or fibro-plastic in their nature, in the present instance the growth was, judging by its general appearance and microscopical characters, evidently cancerous.

Note.—While staying in Florence lately, I found in the Pathological Museum of the large hospital known as *S. Maria Nuova*, a specimen of primary cancer of the brain, so interesting in itself, and so well illustrating the subject, that I append the following history of the case derived from the records of the museum:

Primary Cancer of Brain.—*History of case.*—A man, æt. 28, had suffered from epilepsy from infancy. During the last few months of his life he became almost blind, and for this reason came to the hospital for treatment. He got no benefit from the means employed, the epileptic attacks became worse, and he died one day after a fit of unusual severity.

At the *post-mortem* a cancerous tumour was found in the brain. It was of

great size; when fresh had the colour of bright peach blossom; was of gelatinous and semi-transparent aspect, and situated in the right cerebral hemisphere. The cancerous mass extended upwards to the under surface of the cortical structure, forwards nearly to the anterior extremity of the hemisphere, backwards as far as and invading the thalamus opticus, and downwards as far as the level of the base of brain. A horizontal section made immediately below the corpus callosum on the right side, showed the extent of the surface of the tumour, the colour of which was lighter than that of the cerebral substance surrounding it, while it was seen to stretch across the greater part of the breadth of the left ventricle. The middle cerebral lobe was quite pushed back by the morbid growth which rested on and compressed the olfactory nerves. The meningeal veins were gorged, the cerebral convolutions flattened, and the ventricles contained half a pint of limpid serum. *No cancer existed in any other part of the organism*, though a most careful examination was made, assisted by the microscope. A microscopical examination of the tumour showed cancer cells, many of which were incomplete, because reduced to a single nucleus, with a diameter of 18 to 24-1000th of a millimetre, whilst those cells that were entire had a diameter of 24 to 36-1000th of a millimetre.

The pathological Professor remarks "that this case deserves attention from the great size the tumour had attained without inducing grave disturbance of the nervo-cerebral functions, excepting the amaurosis and epilepsy;" but he does not consider "that the epilepsy could be due to the presence of the tumour, as the latter must have been developed very rapidly, while the fits had existed for more than twenty years."

II.—*The case of James Snashall.* By C. L. Robertson, M.D.

Some prejudice against the use of the wet sheet and of digitalis in the treatment of recent mania having been raised by the proceedings at an inquest held at Brighton, on the body of James Snashall, who died suddenly at Hayward's Heath, on the 20th February last, I have thought it right briefly to lay the history of the case before the members of the Association of Medical Officers of Asylums and Hospitals for the Insane.

Case.—*General Paresis—Mania—Extreme violence—Use of the wet sheet and of the tincture of digitalis—Relief of the maniacal symptoms—Sudden death—Inquest—Rupture of a large vessel, and effusion of two ounces of blood on the right anterior hemisphere of the brain.*

History.—James Snashall, admitted at Hayward's Heath, February 3rd, 1864. Married; age 44; a dairyman. Had shown symptoms of insanity for twelve months, with delusions and occasional paroxysms of violence; on one occasion attempting to murder his wife; restless nights, saying the devil had got him, &c., &c. *Cause.*—Excessive sexual indulgence. Was about three weeks in the Brighton Workhouse. His conversation and habits there were most obscene. He also threatened to murder the warder, and on one occasion he was so violent that the use of the strait-jacket was resorted to. Notwithstanding these acts of violence, the question in the legal statement whether dangerous to others was filled up in the negative. Disease hereditary.

State on admission.—A tall powerful man; appearance of bed-sores on the sacrum; noisy and excited; difficulty of speech; tremor of tongue, which

was foul; gait unsteady; conversation incoherent and rambling; attempting to undress himself and expose his person; stated not to have slept the previous night; appetite large; pulse full and rapid; face flushed, head hot. He was ordered a warm bath for an hour, with cold to the head, and ʒj of the tincture of digitalis to be followed with ʒss three times a day.

Progress.—February 4, 11 a.m. Became very violent yesterday evening, and nearly tore the padded-room down. As bad a case of mania and general paresis as I ever met with. It required four men to hold him. The digitalis had taken no effect. Was ordered at 10 p.m. to be packed in the wet sheet,* to be changed every two hours. The difficulty of placing him in the sheet, owing to his resistance, was so great, that the head-attendant feared to disturb him and again renew the struggle,—the more so as he became calmer towards morning,—and he was left in the sheet till 6 a.m.,† when he had a warm bath and was dressed. At 10 a.m. he was quiet, and had eaten a good breakfast. Had taken ʒiij of the tincture of digitalis since admission.

February 8th.—Habits filthy; very troublesome and noisy, but the violence subdued; pulse 60, steady. Digitalis to be reduced from ʒjss to ʒj in the twenty-four hours. A superficial excoriation on the right arm inflamed and skin broken, arising partly from the efforts he made to get out of the wet sheet on the night of his admission, the only occasion on which it was used, and also from his subsequent rubbing of the surface in his constant attempts to take off his clothing.

February 11th.—Though still noisy and restless at intervals, he lies quiet at night, and is wonderfully improved since admission. Says he is quite well, and is going to kill the pigs for us to-day. No sickness. Appetite good.

February 15th.—A restless night; out of bed knocking at the door and

* *The process of packing in the wet sheet.*—In a paper read at the Brighton and Sussex Medico-Chirurgical Society, April 4th, 1861, and published in the *Journal of Mental Science*, for July, 1861, "On the Sedative Action of the Cold Wet Sheet in the treatment of Recent Mania, with cases," I gave the following description of the process of packing in the wet sheet: "The method by which the wet sheet is applied is very simple. A piece of mackintosh cloth is laid over a mattress, and a folded blanket laid over that. An ordinary sheet is then wrung out of cold water, and laid on the blanket. On this the patient is laid on his back, and the sheet is rapidly wound round him, so as to include the arms in its folds. The blanket is then tucked over the body, and three or four other blankets over these. There is often a little shivering at first, but this passes off as the sheet gradually warms, and the blood is so determined to the surface." In some few cases of mania I have found it necessary, in order to keep the patient in the sheet, to pass one of the patient's arms through one of the roller-towels, wetted, which is then passed behind the back, and round the other arm over the chest, The weight of the body keeps the towel and arms in their place. Usually this precaution is not needed; the patients remain calmly in the wet sheet until taken out. The sheet is changed for a fresh one every hour and a half or two hours, and at each change reaction is promoted by the affusion of pails of tepid and cold water, or by rubbing in the dripping sheet, followed in each instance by friction.

† The result of thus leaving the patient all night in the wet sheet was to convert the process into the sweating treatment, as formerly, before the introduction of the lamp-bath, practised at Malvern. The sheet becomes *quite dry* in about two hours, and the heat of the body, retained by the blankets, acts as a sudorific. Dr. Chambers thus treats cases of rheumatic fever at St. Mary's Hospital; and Dr. Wood, visiting physician at St. Luke's Hospital, informed me that he had frequently found this method of the sudorific treatment—wrapping in dry blankets without any wet sheet—of value in cases of acute mania. It is, however, a method of treatment which is not to be recommended when the similar and more powerful agency of the Roman bath can be obtained.

calling. Had gtt. xv of digitalis every two hours. Continued restless all day.

February 16th.—Restless all day, wandering up and down. Vomited some of his dinner from bolting his food. No actual sickness. Appears strong. Walks better than on admission. Says he is quite well.

February 19th.—Troublesome, restless, noisy, and destructive. Was visited on the 17th by his wife and sister-in-law. Was sick during the night of the 17th, caused it is supposed by some cake given him by his wife. The digitalis was omitted on the 18th, as a precautionary measure.

February 20th.—Died suddenly at a quarter to 1 p.m., while sitting quietly in the ward. Had taken his breakfast as usual, and had also had a warm bath. The following certificate of death was sent to the Coroner for East Sussex :—*Mania. General Paralysis of the Insane. Sudden.*

In consequence of the difficulties previously raised by the Brighton guardians, I was unable by an examination of the body to determine the actual cause of death. I have already in a communication that I addressed to the Commissioners in Lunacy, strongly insisted on the necessity of an examination of every patient dying in a public asylum. So much is due to medical science, and I think that any two of the visiting justices should have authority to sanction a *post-mortem* examination of any lunatic dying in the county asylum. The coroner did not appear to consider an inquest necessary, and the body was removed to Brighton for burial on the 22nd February. I regret that I did not by private letter advise an inquiry into the cause of this sudden death, and I certainly concur with, and shall in future urge the advice of the Coroner for Middlesex, recorded in Dr. Sheppard's annual report (1863), "to hold an inquest upon all cases of sudden death not occurring under the immediate eye of an official."

It would appear that Snashall had on the 17th complained to his wife and sister-in-law of the soreness on his arm, and had attributed it to being strapped down, and had otherwise—as such lunatics will—complained of ill-treatment, and of sickness caused by the attendants kneeling on him. He had moreover bruised his forehead in his restless knocking about the ward. Placing these complaints and external marks together, the wife, as was perhaps only natural, believed that he died from mistreatment. She therefore went to Mr. Sewell, the parochial surgeon of the district, and he wisely took steps for holding an inquest on the body. The post-mortem was performed in my presence on the 25th of February, and revealed a large clot of recently effused blood on the right hemisphere of the brain. The other organs of the body were healthy. There was no trace of injury or inflammation in the abdomen. The inquest was held on the following day, and resulted in a verdict of "*died from apoplexy.*"

There was some conflicting evidence between the attendant in charge of the ward and the wife and sister-in-law as to a statement of the former, but which he strenuously denied, that Snashall had been sick after every meal. It was on the other hand distinctly sworn by the head attendant, Mr. Knox, and by myself, that on no occasion had Snashall been sick except on the night of the 17th, after his wife's visit, as already related. The latter part of the inquest was hurried, and I left before the Coroner's summing-up, in order to catch the last train home, or I should have had the fact more clearly explained to the jury that sickness was the very symptom my attention from the first was directed to; that the digitalis might fairly have produced it, but that on the contrary the appetite continued good, and the patient himself repeatedly assured me before the 17th, that he had never had any sickness at all, and that his wife must have confused the patient's story into a belief of a similar statement by the attendant.

I have thus carefully related the history of this case. It will, I think, be evident that the treatment pursued had nothing whatever to do with the cause of death. The wet sheet, or rather the struggles to get out of it, caused a superficial excoriation, which was farther inflamed by subsequent rubbing, on the arm "an inch and a half long and half an inch wide," certainly not a very alarming complication when the extreme symptoms of violence and excitement present on admission are taken into account. The digitalis in two or three days exerted its specific power* in calming the mania of general paresis. The sickness on the night of the 18th of February, I attributed to some indigestible food given him by his wife, but as a precaution I at once discontinued the digitalis. On the night of the 19th, I believe owing to the want of the digitalis, he was again noisy, restless, dirty, and destructive. On the morning of the 20th, he had a warm bath and was calm again. I should doubtless have renewed the digitalis that night had he lived. He died about 1 p.m. of the 20th, of apoplexy caused by the sudden rupture of a large cerebral vessel and the effusion of two ounces of blood on the anterior hemisphere of the brain. The calming effect of the digitalis on this patient supports my view of the specific action of this drug in controlling cerebral excitement. Its effect was manifest on the third day of its administration.

In Dr. Richardson's 'Medical History of England' now publishing in the 'Medical Times,' there is an account of the Stafford County Asylum, and under the section "principles of treatment," the author observes that "in the medical treatment of the insane, particularly during periods of maniacal excitement, Dr. Bower uses full doses of digitalis with great advantage. His remedy is of special value where there is disease and excitability of the heart. In these cases the digitalis acts like a charm; it produces calm without leading to sopor; it exerts no bad effects on the digestive functions, and it leaves no serious depression behind. Thus it is far preferable to narcotics in cases for which it is suitable" ('Medical Times,' March 12). It is gratifying to me to find my statements of the value of digitalis in the treatment of mania thus supported by Dr. Bower's experience, and endorsed by so accomplished a writer as Dr. Richardson.

The wet sheet, the night on which it was employed, hardly exerted its usual calming influence on Snashall. I do not regard cases of general paresis as those in which its continuous use is indicated. It was the special emergency of the severe paroxysm of mania on the night of his admission, which induced me to have temporary recourse to its use. Since the publication in 1861 of my paper already re-

* See "Cases illustrating the use of digitalis in the treatment of mania;" *Journal of Mental Science*, January, 1864. Quoted with approval in the *American Journal of Insanity*.

ferred to "on the sedative action of the cold wet sheet in the treatment of mania," I have used it with benefit more than a hundred times, and on no occasion I have seen the slightest injury or suffering to the patient result from it. I have used it in mania both recent, recurrent, and puerperal, and with special benefit in cases of mania complicated with epilepsy. In cases of mania with uterine irritation the wet sheet will be found most soothing.

Subsequently to the publication of my paper my views of the therapeutic value of the cold wet sheet in the treatment of mania were confirmed by Dr. Boyd, in *the fourteenth report of the Somerset County Lunatic Asylum for* 1861. Dr. Boyd, one of the most experienced of asylum superintendents, and an able pathologist, thus records his adhesion to this method of treatment: "*Packing in the wet sheet has proved of great utility in producing sleep where opiates, given in as large doses as deemed prudent, had failed. It has been tried this year for the first time after the manner witnessed by Dr. Madden, at Boppard on the Rhine. In several instances the relief was immediate where excitement, restlessness, and want of sleep had continued for several days, resisting all anodynes they have fallen off in a few minutes in the 'pack,' and although the sleep there has not been of very long continuance in any instance, still the patients afterwards became more manageable and more disposed to sleep.*"

One sees thus on how slender a foundation a cry of ill-treatment against an asylum may be raised. I can only add, in conclusion, that I never felt more satisfied of having treated a patient, according to the measure of my ability, both wisely and well.

Hayward's Heath; *March*, 1864.

PART II.—REVIEWS.

SYPHILITIC DISEASE OF THE BRAIN.

1. *Des Affections Nerveuses Syphilitiques.* Par Dr. Leon Gros et E. Lancereaux. Paris, 1861, pp. 486.
2. *Ueber die Natur der Constitutionell-syphilitischen Affectionen.* Von Rudolf Virchow. Archiv. Band XV.
3. *Das Syphilom, oder die Constitutionell-syphilitische Neubildung.* Von E. Wagner. Archiv der Heilkunde, 1863.
4. *Ueber Constitutionelle Syphilis des Gehirus.* Von Dr. Ludgwig Meyer. Allgem. Zeitschrift für Psychiatrie, 1861. Band III.

From an early period of medical inquiry syphilis has been known to affect, more or less seriously, the whole system; but it is only recently that systematic attempts have been made to trace its ravages in the internal organs of the body, and to investigate the nature of the mischief which it produces. The result has been to prove, that not an organ or tissue in the body can escape its injurious influence: a merciless and stealthy enemy, it mines alike in the coarser structure of bone and in the delicate tissue of the nervous system, too frequently bringing destruction and death in its train. For, as through the nations of men the blast of the pestilence passes, slaying many mortals, prostrating in grievous sickness many more, and permanently enfeebling some who do not perish, so amongst the individual organic elements of the body the fatal virus creeps, destroying some, and injuring for life others. Once introduced into the body, it seizes on its victims amongst the aristocratic elements of nerve as well as amongst the more lowly elements of epithelial structure; and although it appears to have some preference for particular parts, yet no tissue is actually too high for its ambition, no tissue too low for its attention. And as in the times of old, men cried out in prayer and supplication to the gods to be delivered from the pestilence, so, in the disorder of function, and in the outcry of pain, do the individual organic elements of the body pray for deliverance from the poison with which they are afflicted. Active and subtle are many of the poisons which chemistry makes known to us, but far more potent and more subtle than chemical poison is the organic virus. In quantity so minute as to be inappreciable by human sense, it may enter

the organism, and become the active cause of extensive disease, and even of death. One chancre produces poison enough to infect a whole city-ful.

Into the world of intense and delicate activity of organic element the senses of man have not yet succeeded in entering. We know nothing of those intimate processes which take place in the cell as it exercises its function in health, and assimilates nutrient material in the maintenance of its state. Equally ignorant are we of those perversions of healthy activity in the delicate processes, which declare themselves in disordered function when disease commences: it is only when the morbid action has advanced, or been continued for some time, that the gross products of disease are recognisable by our senses. The microscope has certainly done something to extend and sharpen our sight, but into the essential activity of the organic element the microscope cannot penetrate. For the present, we must be content to assume, that where disordered function is manifest there are delicate organic changes, though we cannot trace them. But, although we thus trust where we cannot trace, it is not an ill-grounded and unreasonable faith; for it rests on that certain conclusion which the investigation of nature makes axiomatic—that wherever change in the manifestation of force appears, there is of necessity implied a corresponding change of matter: the forces of nature are the modes of activity of matter.

When we come to observe the course of syphilitic disease, we find that, with it as with other diseases, there may be various and severe symptoms, without any corresponding morbid change being discoverable after death. It is well known that before the visible signs of secondary syphilis appear, there often occurs what has been called the fever of invasion. The feelings of utter weariness and prostration, the aching of the limbs, the occasional violent and persistent pains in the head, which precede the outbreak of secondary syphilis, testify with certainty to the poisonous influence of the syphilitic virus. The eruption on the skin, or the sore throat which occurs, is really only the outward, visible, and comparatively harmless sign of an inward and serious mischief. We are accustomed to speak of the outward manifestations as the secondary symptoms, and to look on the preliminary symptoms as belonging to the fever of invasion; but in reality there is no true fever, and the disturbance which is so called is the outward expression of a poisoned organic system. The determination to the skin and mucous membrane follows; and it is most probable that the affections of these parts are beneficial evidences of the attempt to get rid of the poison. At any rate, the internal disturbance is far more serious than the external, and may, as we shall see, lead on to the most destructive consequences, without any external manifestations. And yet, if an individual who had suffered from violent pains in the head, were to die at this early stage

of the disease, it is almost certain that no morbid changes to account for the symptoms would be found in the brain or elsewhere—with such penetrating subtlety does the creeping venom steal into the most intimate and delicate processes of organic life! With the utmost ease and rapidity it enters into that mysterious world into which man, with all his appliances and all his industry, cannot in mind follow it.

Because there are no visible signs of syphilis when the mischief is altogether internal, the nature of the disease is apt to be mistaken. The pains in the limbs are probably thought to be rheumatic, and the severe headaches which occasionally occur, are attributed to anything but the right cause. Now, nothing is more certain than that genuine syphilitic headaches will come on, without any external morbid changes, in one who has suffered from syphilis. The following example may supply an apt illustration:—"A young gentleman, recently cured of primary syphilis, married a beautiful lady, of the strictest virtue and of the soberest education. Within the first twelvemonth they had a son born perfectly healthy, and who continued so. This was followed by three miscarriages, till, at the end of the third year, she was delivered of a female child with an eruption on the face, sores at the angles of the mouth, and an affection of the nose, so that Mr. Foot, and two other surgeons who saw the infant, declared the disease to be syphilis. The gentleman had, during the first year of his marriage, often complained of headache and symptomatic fever, but within a month after the child was born, he had offensive discharge from his nose and palate, while a large node formed on his forehead, with thickening of the elbow-joint and nocturnal pains."

It should ever be borne in mind that pain is as certain a symptom of disease as an ulcer or swelling, or other visible morbid change. And although it is not possible to distinguish the specific pain of syphilis as its specific eruptions may be distinguished, yet there are sometimes to be recognised in the headaches of syphilis certain peculiarities. The pains are severe, and not fixed to any particular spot, are increased by movements, are attended with giddiness and a confusion of consciousness which, at times, seems to threaten an actual loss thereof; the pain sometimes extends, as it were, into the scalp in neuralgic form, and there may be actual tenderness in parts on pressure; there is the greatest prostration without any true fever, and loss of appetite occurs without any gastric disorder. If the pains continue, there is rapid falling away of flesh and strength; and delirium even may come on, after miserable nights of interrupted and imperfect sleep. Ultimately, perhaps, the specific character of the disease more clearly displays itself in inflammation of the throat, in a cutaneous eruption, or in more serious forms still. The rapid way in which the cerebral symptoms generally disappear under ap-

propriate treatment, proves the absence, up to this point, of any serious morbid change in the nervous elements.

Of late many other forms of nervous disease, besides headaches, have been said to owe their origin to constitutional syphilis. MM. Gros and Lancereaux have, for example, collected many cases of neuralgia of the different cerebral nerves, which, after having resisted all other treatment, were at once cured by the specific remedies for syphilis. They report, also, many cases of syphilitic epilepsy in which the antisyphilitic treatment was immediately successful. Observations, again, have been made of various cases in which a local or more or less general paralysis was attributed to the syphilitic virus, and which, at any rate, were cured by the specific treatment. A syphilitic amaurosis is generally admitted; a syphilitic mania, yielding to specific treatment, has been described; and Ricord allows catalepsies to be sometimes of a syphilitic origin. General paralysis is frequently the result of syphilis, according to Esmarch and Jessen.* Now, as it is admitted in these cases that the disease may exist for a long time as the only syphilitic manifestation, and as the diagnosis is founded mainly on the speedy recovery which takes place under specific treatment, there is plainly great uncertainty as to its accuracy. It is very possible that the particular disease may occur quite independently in one who has suffered from constitutional syphilis, and be then modified by the latter, in which case it may not improbably be benefited by specific remedies. The hold which constitutional syphilis has upon the organic elements is so fast and intimate that it very frequently affects the character of diseases which subsequently arise, without being the direct cause of them; it has modified the original nature of the element, and it would seem, therefore, that the diseased action in which the latter is engaged must somehow express the change.

What is the nature of the syphilitic virus, and in what manner it produces its vast effects, are questions which must be left to the decision of a wiser posterity. We can only say that we have examples of similar action in other morbid poisons. The minutest quantity of the virus of smallpox introduced into the body affects its elements in such a manner as not only to produce a particular disease, but to confer an immunity from the action of that virus for the future. Unfortunately the syphilitic virus, though seemingly producing equally lasting effects, does not confer an equal immunity from second attacks. Nowise beneficial, its influence is, nevertheless, even more enduring than that of smallpox; for it may be transmitted to the child by the parent—by the father even when the mother is quite sound. What an unhappy dispensation! The virus which does not apparently injure the health, and the effects of which are

* 'Zeitschrift für Psychiatrie,' xiv.

beneficial, cannot be transmitted in generation so as to confer on the offspring an immunity from the disease which it produces, whilst the virus which is so damaging to the health, and the effects of which are so blighting, is transmitted with great certainty to the child. The scourge of vice has, indeed, a long and heavy lash.

So far have been indicated in a general manner the serious symptoms which may appear, and the results which may follow, in constitutional syphilis when we have reason to think that there is no recognisable morbid change in the organic element. It is true that it is the custom to speak of congestion of the brain or of chronic inflammation in such cases; but for the most part these terms are vaguely used to conceal ignorance, or improperly used to cloak assumption. One fact those who so fluently employ them would do well to bear in mind, namely, the fact that all the symptoms which are produced by congestion of the brain, may be the result of a deficiency of blood in the brain. And it is not by any means unlikely that the latter condition may exist in that very depressed state of health which is described as syphilitic cachexia, and even by Ricord as syphilitic chlorosis. Another and more serious objection to the use of those terms, as commonly in practice, is that they tend to fix attention upon the blood-vessels as the primary and active agents in the morbid changes, whereas the elements of the tissue are the active causes of the disturbance, and the condition of the blood-vessels is really secondary. The syphilitic virus has, no doubt through the medium of the blood, inflicted a positive injury on the elements of the tissue similar to that which a direct mechanical or chemical irritant may inflict on a part to which it is applied; and the result of the depressed vitality, or more or less complete suspension of functional activity, in the organic elements, is an inflammatory congestion. The experiments of Lister ('Phil. Trans.') have proved that the accumulation of blood corpuscles which follows the application of an irritant to a part, is the result of the direct action of the latter upon the tissues. These suffer a diminution of functional power, "are in some degree approximated to the state of ordinary matter," and, as a consequence of that, the blood discs, red and white, assume in proportion to the severity of the affection a degree of that tendency to stick to one another, and to neighbouring objects, which they exhibit when withdrawn from the body. Of all the false and perverse notions which have prevailed in pathology, perhaps none have been more directly contrary to the truth, and more strangely blind to the first principles of physiological thought, than that which assumed an "increased action of the blood-vessels" in inflammation, and an "increased vitality" in the part. What is the nature of the injury done to elements of the tissue by the syphilitic virus, in consequence of which an inflammatory congestion ensues, we know not; but of the reality of such injury we have

positive evidence, both in the disorder of function and in the congestion, when it exists.

We proceed next to an account of those morbid products which have been met with in advanced cases of constitutional syphilis. It is now admitted that a new morbid product of indefinite structure may be formed in any of the organs of the body as the result of syphilis; and it seems probable that the formation has often been mistaken for tubercle, or even sometimes for carcinoma. This *syphiloma*, as it has been called, may exist either as a diffuse infiltration through the tissue of the organ, or in the form of a tumour, not distinctly defined, soft, and of homogeneous appearance—usually described in France as a *gummy* tumour. Wagner has met with syphiloma in the skin, periosteum, bone, dura mater, and the soft membranes of the brain; in the mucous membrane of the mouth, throat, stomach, intestinal canal, larynx, trachea, and bronchi; in the liver, spleen, pancreas, lungs, brain, glands, kidneys, and testicles. In adults, it appears most frequently in the skin, periosteum, bones, liver and spleen; in children, most commonly in the skin and lungs. Wagner has within the last two years seen six cases of syphiloma of the lungs in new-born children; in five of these cases it was diffuse, and in the sixth case there were single circumscribed knots in diffuse syphilomatous lungs. The children, all of which died after a few respirations, were born from four to six weeks before their time, of syphilitic mothers. Howitz describes four similar cases of what he calls "syphilitic infiltration of the lungs." When syphiloma occurs in the nervous system, it may, as in other parts, be either diffuse or in the form of a tumour; it is met with most frequently in the cortex of the brain and the adjacent membranes.

Lebert was one of the first to give a general description of the microscopical characters of syphiloma; but Virchow, whom we shall follow here, has most clearly pointed out its relations to other morbid products, and to the proper elements of the tissue. At the outset, he says, the gummy swelling is, like the substance of granulations, an exuberant growth of connective tissue, and its further development takes place in two directions. 1. Either the formation of cells predominates, and then the intercellular substance is soft, jelly-like, mucous or fluid—the mass either through degeneration becoming puriform and finally ulcerating, or remaining jelly-like and coherent. 2. Or the cell-formation is limited, and the intercellular substance increases; the cells are spindle-shaped, or have the stellate form of the cells of connective tissue, or the round form of granulation cells. Ultimately fatty degeneration takes place, and dry yellow knots appear in the product. In the first case, the process resembles the heteroplastic formation of medullary cancer, or of sarcoma; in the second case, the hyperplastic process of sclerosis,

or of fibroplastic tumours. Histologically, syphiloma exhibits nothing by which it can be distinguished from other inflammatory products. If we seek, says Virchow, for a special product to which it is most like, it is that of *lupus;* if for an analogous swelling, *sarcoma*—in which two forms are distinguished according to the relative preponderance of cells and fibres; if, after a change like the fatty degeneration of it, there is the *atheromatous* degeneration of the arteries, "of which, it may be asked, whether it is not also syphilitic?" Then again, it is often difficult, if not impossible, to distinguish the syphilitic product from tubercle.*

It has been shown by Virchow that the starting point for the formation of syphiloma, wherever it occurs, is the connective tissue and its equivalents; the specific elements of the tissue of the organs undergo atrophy as the result of the hypertrophy of the connective tissue, and at last become necrobiotic. He maintains that the specific irritation of syphilis acts no otherwise than the irritation which produces a simple inflammation. Robin and Wagner, on the other hand, uphold the specific character of the syphilitic product. They are forced to confess that the cells do not differ in shape from those of tubercle, of cancer, or of other morbid products, and that no chemical difference can be recognised; but they feel bound to assume differences, physical and chemical, chiefly because of the specific cause of the disease and of the influence of specific remedies. Whatever be the truth in this matter, it is well to add that the indurated base of the chancre exhibits a similar hypertrophy of connective tissue, and a similar ultimate fatty degeneration of elements, to those which are recognised in the gummy swellings of the internal organs.†

What are the symptoms which should reveal to us the formation of this morbid product in the brain or its membranes? It would

* In a valuable paper in the 'Guy's Hospital Report' for 1863, Dr. Wilks gives the results of his observations on syphilitic affections of the internal ogans. He objects to the name *gummy* tumour for the morbid product, because it is a firm, yellowish, albumino-fibroid exudation. Following a suggestion of Virchow, he thinks that the lardaceous or waxy organ is an ultimate effect of syphilis, although it may also be met with where there has been no syphilis. The effects of syphilis upon the blood-vessels he believes to be, not to produce atheroma, but rather a fibroid degeneration—thickening of the coats of the vessel, and diminution of its calibre.

† It is scarcely necessary to add, that the best observers are perfectly agreed as to the existence of a delicate connective tissue containing cells and nuclei throughout the brain (neuroglia, *Virchow*). From the proliferation of these nuclei, the syphiloma no doubt chiefly proceeds; but it is probable that the nuclei of the capillary vessels, and even the proper nuclei of the neurilemma of the nerve fibre, may be starting points. In this mode of production syphiloma only agrees with pus, cancer, and tubercle; and Rindfleisch thinks he has in one case traced the development of tubercle cells from the nuclei of the external coat of the arteries of the pia mater. Dr. Haldane ('Ed. Med. Jour.,' 1862), gives an account of the production of a new formation in the muscular substance of the heart (which he regards as syphilitic) by proliferation of the nuclei of its fibres.

not be extravagant to say that all the symptoms which may be produced by any other disease of the brain, may be produced by syphilis. Epilepsy, paralysis—local or general, hemiplegic or paraplegic, dementia, delirium, mania and melancholy, are all said to occur as the results of syphilis. Soberly speaking, it may be said that a great multitude of cases have been collected by different authors; but, as may well be imagined, many of these are exceedingly doubtful. Each observer is driven to confess the extreme difficulty of distinguishing examples of syphiloma from those of tubercle of the brain; and Wagner expresses a belief that most of the cases of so-called tubercle of the brain, which are met with without tubercle being found in other parts of the body, are really cases of syphilitic disease. MM. Gros and Lancereaux have shown a most praiseworthy diligence in the collection of observations from different quarters; and whosoever desires to gain an adequate notion of the confusion and uncertainty which prevail in this department of pathology, could scarce do better than peruse their book. He will find it eminently French. It is not too much to say that in a very imperfectly reported case, where the facts for the formation of an opinion are so "conspicuous by their absence," that an angel from heaven could make nothing of the question, whole pages are sometimes devoted to discussing whether it might or might not be syphilis. We may illustrate this habit of mind by supposing a scientific Frenchman to be walking along a road across which a blackbird flies, and perches in the adjacent hedge—he has not seen anything of the bird, his attention being otherwise engaged, has noticed only that some bird has flown across the path. What bird then was it? Was it an eagle? Certainly it is not an eagle; for in the first place, it is not half big enough for an eagle, and, in the second place, eagles are not in the habit of perching in hedge-rows. The little bird is not then an eagle. If the little bird is not an eagle, is it not perhaps an owl? That is not probable; for, as M. Grandhomme (some distinguished French naturalist) has pointed out with admirable truth, owls do not fly across roads in the day-time. And were it true that owls did fly across roads in the day-time, still they do not perch in hedges, but on trees. Moreover—and this consideration is decisive of the question—the hedge is so close that it would be impossible for an owl to enter it. Well, then, the little bird is not an owl. If the little bird is not an owl, is it not a bat, or a sea-gull, or a vulture, or any other bird except the bird which it happens to be? By adopting this pleasant style of argument by exclusion, it is obviously easy to swell little matter into large bulk; and some people in England, fancying the method to be very logical and very clever, would almost begin, in the diagnosis of a doubtful disease, by excluding an old pair of boots.

Although its wordiness is a fault in their book, it must not be

supposed that MM. Gros and Lancereaux have not furnished valuable formation. They cite numberless authorities, and give quotations in abundance. Is it necessary to add that almost all the authorities quoted are Frenchmen, of many of whom the world never heard, and in whom—now it does hear of them—it cannot put great confidence? It is a pity that, while they were about it, the authors did not give a well-digested *resumé* of the present state of knowledge on the subject, both as it is in France and as it is *out of France*. Sydney Smith thought that it would require a surgical operation to introduce a joke into a Scotchman's head; but it is very doubtful whether by the most clever surgical operation the idea of the *non-ego* could sometimes be introduced into a Frenchman's head. When an idea from other countries passes into France, it is often very much like putting a spoonful of oil into a tumbler of water; they are in the same vessel, but, however much shaken, they will not mix.

As any attempt to define the symptoms which follow syphilitic disease of the brain and its membranes, must in the present condition of knowledge be unsuccessful, either from a hopeless vagueness or from a false precision, it will perhaps be best to give a brief summary of a few well-reported cases. Dr. Ludgwig Meyer gives us descriptions of seven cases, four of which came within his own observation, the remaining three being selected out of recent literature.

1. Syphilitic ulceration and cicatrices of skin; cicatrix of *glans penis*. Swelling of the right side of skull. Stupidity with paralysis, especially of right side, finally ending in stupor and death. Syphilomata of skull, of dura mater, and of cortex of brain, with extensive softening of the left hemisphere. Right side of liver much contracted through large cicatrices, such as, according to Virchow, are peculiar to syphilis. The microscope revealed in the morbid product hypertrophy of connective tissue from proliferation of cells and nuclei, with fatty degeneration in parts of it.

2. Secondary syphilis; pains in the bones. Hypochondriacal melancholy; and, after three years' general progressive paralysis with delusions of grandeur. Repeated apoplectiform attacks; death. Syphilomata of dura mater, extending from cortical layer, with secondary softening of it; central white softening. The microscopic appearances as in the first case. The sisters of this patient were also insane.

3. Several syphilitic infections; indurated chancre; caries of frontal bone; partial paralysis. Dementia after four years. Hyperostosis of right tibia, with syphilitic osteoporosis of its surface; hyperostosis of skull. Gummata of dura mater undergoing retrograde metamorphosis; adhesion of dura mater to the brain, and atrophy of the convolutions. Pericarditis of specific character; old syphilitic hepatitis. Under the microscope no nervous elements were seen in

the adherent cortex of the base of the brain, but fatty degeneration, many amyloid bodies and connective tissue fibres. In this patient a cicatrix on the forehead, which was the result of an injury in childhood, repeatedly broke out, and the bone finally ulcerated.

4. Several syphilitic infections probable. Severe lasting pains in the head, not fixed, with great restlessness and occasional delirium. Specific ulceration of the angle of the jaw with swelling of the glands. Death, after a convulsive attack with loss of consciousness. Old syphilitic hepatitis; numerous syphilomata in the liver. Cicatrix of left nympha; and syphilitic affection of pharynx. At the base of the skull, on the *sella turcica*, an elastic doughy swelling of the size of a nut, continuous with the bone, which was softened. The tumour had penetrated the dura mater, and consisted of a reddish-grey substance; it was not examined by the microscope. At first it was considered carcinomatous, but afterwards, on account of the appearances in the liver, syphilitic.

5. Many syphilitic infections. Persistent pains in different parts, which were treated as neuralgia. Commencing disorder of intelligence; epileptic attacks, beginning at the fortieth year, and, after six months' continuance of them, a maniacal attack; difficulty of speech; incomplete paralysis of left side, with muscular contraction; complete loss of consciousness, and violent convulsions, especially of left side; death. Adhesion of the membranes to the right lobe; general thick fibrinous coating of the dura mater; extensive softening of the anterior and middle lobes of the right hemisphere.

6. Probable syphilitic infections. Apoplectiform attack at twenty-five, with left hemiplegia; epileptic attacks; outbreak of mania at thirty-five; increase of paralysis at forty-four, till complete; dementia; death at forty-five. Gummy swellings on both frontal bones, the one on the right side penetrating the bone; gummy formations on dura mater, with general thickening of the membrane; softening of almost all the brain. Syphilomata of the liver. The case is reported by Calmeil.

7. Epileptiform attacks; in a while continuous pains in the head, with vertigo; paralysis of left side, with difficulty of speech; dementia; death. Cicatrices of buboes. Gummy formations in dura mater and cortical layer, with softening around; cyst in the corpus striatum. Old syphilitic hepatitis; syphilomata in the liver.

Many more such cases might be quoted from the different authors, but one more must suffice here.

8. Epileptic attacks in a man æt. 52, who, years before, had suffered from a chancre; violent headache, and swellings on the head; pneumonia; death. In the dura mater corresponding to the anterior end of left hemisphere a smooth tumour, to which the soft membranes beneath were glued. In the parenchyma also were three

round, firm tumours. Structure of all of them formed by growth of connective tissue, with abundant proliferation of nuclei; spots of fatty degeneration*

The glueing of the dura mater to the soft membranes beneath, and to the surface of the brain, by plastic formation, has by some been considered almost pathognomic of the syphilitic character of the inflammation. In thirty-one post-mortem examinations of persons who had died with cerebro-spinal syphilis, MM. Gros and Lancereaux state that there were found plastic deposits, infiltrated or not, in twenty-two cases; in seven cases there was softening of the brain; and in two were found purulent foci, or what were considered as such.

In general terms it may be said, that the symptoms in a fatal case of syphilitic disease of the brain proceed somewhat as follows:— Severe pains in the head, sometimes of rather a neuralgic character, with vertigo; noise in the ears or deafness, double vision or amaurosis; paralysis variable as to seat and extent, implicating only a single nerve, or hemiplegic or more or less completely general. The intellect suffers, ideas are dull and confused, and speech slow; the memory fails, and dementia gradually increases. Sometimes there may be a hypochondriacal melancholy, or, more rarely, a maniacal excitement. In the last period of the disease, epileptiform or apoplectiform attacks and coma announce the fatal end. Of course the symptoms will vary according as the morbid product is local or general, and according to the seat of it. None of them, it is plain, have any special character; and the diagnosis of the nature of the disease, uncertain at best, must rest mainly on the previous history of a syphilitic diathesis; on the appearance of the disease at an age in which such nervous affection from other causes is unusual; on the absence of other recognisable causes of such disease; on the regular order of succession of the numerous and varied nervous

* In the 'Allgm. Zeitsch. für Psychiatrie' for 1863, Band xx, two cases of supposed syphilis of the brain are related by Dr. Westphal, of Berlin. The symptoms were those of gradually increasing paralytic dementia; and gummy formations, with partial softening, were met with in the brains.

In an essay 'Des Affections nerveuses Syphilitiques,' M. Zambaco reports some cases in which, after previous syphilis, the phenomena of paralytic dementia gradually appeared, and after death no gummy tumours, but the morbid changes usually met with in general paralysis were found.

In the 'Wiener Medizinal-Halle Zeitschrift,' of February 21st, 1864, is the notice of a paper on "Syphilis of the Brain in relation to Insanity," by Dr. Leidesdorf. He relates three cases in which constitutional syphilis existed,—in one case, with insanity, paralysis and epileptic attacks; in a second, there was insanity without paralysis; and in the third, there was hemiplegia without insanity. The insanity in the first case was dementia paralytica; in the second, it was fury passing into noisy dementia, which, though seemingly hopeless, was cured by iodide of potassium; the third, who finally died, had twice applied at the Klinik of Professor Oppolzer, and on each occasion had recovered under iodide of potassium. After death a tumour, considered to be syphiloma, was found at the base of the brain.

symptoms; on the inefficacy of ordinary remedies, and on the more or less favourable results of specific treatment. In the appreciation of these considerations we may sometimes obtain a sort of instinctive certainty of the nature of the disease, when it would not be easy to give positive reasons for our belief.

Is syphilis curable? He is a bold writer who can say positively that it is. Many a one who has felicitated himself on his happy recovery from the disease which in the riot of youth he had contracted, has found after years have passed, and he perhaps is surrounded by a family, that though he may have forgotten it, yet it has not forgotten him; that, though sleeping, it was not dead. When health is brought low by other disease, it may again break out, or may communicate a specific and obstinate character to the disease which comes on independently. A moderate experience in the out-patients' room of a large hospital will surely impress this truth in a striking manner. In fact, a rough rule of treating in such cases every disease, which, after due trial, will not yield to ordinary measures, with specific remedies, will be found to be followed by frequent success for the time. A fact mentioned in one of the cases which have been reported, offers an excellent illustration of the eager way in which the syphilitic poison seizes upon the tissue the vitality of which is low. It is said that a scar on the forehead, the result of an injury in childhood, frequently broke down in ulceration; the vitality of the organic elements of the cicatrix does not reach the degree of life of the natural tissue, and the virus takes advantage of the weak spot. In another case there was a hereditary predisposition to insanity, and it is not unjust to suppose that the syphilitic virus was in that instance determined to the brain, attracted by the innate feebleness of nervous element which such hereditary taint implies. The weak element or organ is ever the sufferer; here, as in other things, it is too true, that to him that hath shall be given, and from him that hath not shall be taken away even that which he hath.

It can admit of no doubt that by appropriate treatment all signs of syphilis may be made to disappear, and that it may, perhaps, never appear again in the individual for the rest of his life. It is highly probable, too, that there is a constant disposition in the organic elements to throw off the acquired nature which they owe to the syphilitic virus, and to revert to their primitive sound type; so that the tendency to a recurrence of syphilis becomes less with each year of immunity. But if, emboldened by these considerations, we say positively that syphilis is curable, then perhaps the next case of the disease which presents itself dashes hope and faith to the ground. It is certainly impossible, in any case of syphilis, to say, without some distrust, that the disease which has gone from our view has gone for ever—that it is not latent in the system, waiting

for an opportunity of attack. As some compensation, however, for such persistent hostility, it is comfortable to reflect that it readily yields for the most part to suitable treatment, when it has made its hateful appearance. Nothing less than astonishing in some cases are the results of specific treatment; the worst symptoms disappear quickly, as if from the waving of an enchanter's wand. Dr. Wilks relates the following striking example:—R. C., æt. 36, had been attacked with several fits, in which he foamed at the mouth and bit his tongue; in some of them he had not lost consciousness. On admission into the hospital there was loss of power in the left arm, and he complained of violent headaches. Soon after admission he had three fits, in which he was very much convulsed, and screamed out like a madman in his worst mood. Total paralysis of the left side followed; sensation was perfect; there was great difficulty of swallowing, and the man was thought to be dying. From his wife, who had been sent for to see his end, it was ascertained that she had had several abortions, and that he had suffered greatly from pains in his limbs; his femur and one clavicle were found to be enlarged. Syphilis was diagnosed, and ten grains of iodide of potassium were given three times a day. The man improved immediately, in the most remarkable manner; he had only two more fits, and in a month left the hospital with a slight dragging of the leg.

And now, having made a general survey of the extent of operation of the syphilitic virus, of its secret and persistent action, and of the vast effects which it may produce—having, in fact, followed the fatal venom with a faithful adherence to such facts as are available—we may, in conclusion, glance at its relations in a higher sphere, and learn the larger lesson which its history teaches. Whether, then, we regard the individual cell struggling for life in its social relations with surrounding cells, or whether we regard the individual mortal living in social relations with other beings, it is all too certain that "to be weak is to be miserable." Upon the individual cell, feeble by nature and compelled to put forth all its energies to maintain its state, the syphilitic poison comes, and acting like a destructive ferment, hastens that retrograde metamorphosis towards the inorganic, which the vital activity of the cell is raised to its utmost tension to resist. There is no reserve force available to counteract the fatal influence; paralysed by the virus, all resistance ceases, and the cell or organic element runs quickly through the downward scale of life to death. As in chemistry it is seen that the ferment excites a series of changes whereby one substance becomes transformed into others; so, in the phenomena of life, it would appear that the organic virus produces a sort of fermentation through which the highly organic element undergoes a retrograde metamorphosis into simpler elements, and ultimately into inorganic matter. The nearer, then, in the downward scale of life that the organic element is

brought towards the inorganic, from the lowering of its vitality, the more ready it is to undergo the retrograde metamorphosis under the influence of the syphilitic poison. Perhaps it is on account of the lower kind of its vitality that the starting point of the morbid syphilitic product is almost always in the elements of the connective tissue.

Rising from the individual cells, by which the social union of which the organism is constituted, to the individual whole thus constituted, similar considerations necessarily apply. When the general health has from some cause been reduced to a low ebb, the effect of syphilis are most serious, and may be fatal; when the effects are not so general, it is the weak organ, or the part which has been enfeebled by injury, that is attacked; and when disease occurs independently where the syphilitic diathesis exists, we have already seen how prone the morbid action is to take on a syphilitic character. Alike in the individual cell and in the individual organism is the syphilitic virus hostile to life. Abortions very frequently take place where the father or mother is syphilitic; and even when a child is born under these circumstances without any outward and visible signs of syphilis, it is by no means certain that the virus has left it unaffected. There is reason to believe that some cases of hydrocephalus in children are really of syphilitic origin; and it is a not ill-founded suspicion that many a withered infant has slowly pined away from syphilis without the specific cause of its death having been directly recognised. When, however, the offspring does not come to a premature end before birth, and does not perish a few months or years after birth, its intellectual life may still be rendered abortive by the hereditary taint with which its nervous elements are infected, and which predisposes it to break down into madness under the pressure of circumstances, or to lapse into drivelling idiocy. Who, indeed, can venture to set bounds to the effects either of a vice or of a vice-produced poison once let loose amongst beings so closely bound together in social union as men are! Can a single cell in the organism suffer and the surrounding cells altogether escape? And how rarely will a single mortal suffer without more or less implicating others!

The syphilitic poison appears to have a certain consciousness of its dignity and position in nature; for it will not affect the animals.*

* This is not so certain as it has been represented to be; for it would appear that man's next of kin may suffer from syphilis. At the Manchester Medical Society, Mr. Lund exhibited the skull of a male monkey said to have died of syphilis. The bones were worm-eaten, as if from recent caries. During life the penis was extensively ulcerated, and the hair had fallen off in patches. A female, which had been confined with this animal, suffered from condylomata of the vulva and the anus. It was the decided opinion of the keeper that syphilis is communicated by the sexual intercourse of monkeys. ('Brit. Med. Journal,' Feb. 27.)

Man may take to himself the credit of having created it, and of maintaining it in being. Endowed with a godlike reason, by which he is raised so high above other animals, he has in this matter, as in many others, used it in making himself more brutal than the animals. But the avenging punishment has not been wanting; and, with a singular fitness, that poison which man's vice has created may sap the foundation of his misused reason, and reduce him to a state of paralytic dementia in which he is even lower than the animals. And here, again, we learn that lesson which every object in nature, however insignificant, when rightly regarded, teaches—that the least things and the greatest, the meanest and the most exalted, are indissolubly bound together as elements in the mysterious universe.

> "The gods are just, and of our pleasant vices
> Make instruments to scourge us."

H. Maudsley.

1. *On Chronic Alcoholic Intoxication.* By W. Marcet, M.D., F.R.S. Second Edition. London, 1862, pp. 255.
2. *Drink Craving. An Outline.* By Robert Bird, M.D., Bengal Medical Establishment. 1863, pp. 55.

It must be allowed to be striking evidence of man's instinctive dissatisfaction with the world, that in all parts of it and in all times he should so eagerly have recourse to some stimulant by means of which, for a time, he rises above the "low-thoughted care" of his "frail and feverish being." Alcohol, opium, Indian hemp, betel-nut, and even tea and tobacco are some of the means which he has thus found out to supplement the deficiencies of his existence. Unmindful, too, of the painful awakening to the realities after his debauch, he goes to his indulgence on each occasion with increased appetite, quite content seemingly to "wail a week," if so be that he can get a few minutes' mirth, to "sell eternity," if so be that he can "get his toy." Can we, then, look upon this great and universal longing after an ideal world, howsoever created, as evidence of that inborn aspiration for something higher and better than the present, which raises man so much above other animals! Or is it one of those wicked passions that form the strong cords which, traversing the infinite wastes of chaos and the burning realms of Hades, fasten the heart of man so securely to the Satanic throne? Unfortunately, we possess no exact and reliable information on the physiological effects of alcohol upon the human body. Some have thought that it stayed the waste of tissue, diminishing the quantity of urea and carbonic

acid given off by the organism; and if that were so, there would be a good reason for the prevalence of the appetite. Others, on the other hand, affirm that it does nothing of the kind, and that in certain forms it actually increases the amount of carbonic acid given off; these would describe it as a slow poison, which, if men were wise, they would shun with horror. We are thus required to believe that from the earliest period of his existence up to the present time, man has exhibited a persistent instinct to poison himself without having hitherto succeeded.

Painful beyond all palliation as are the miseries often produced by drunkenness, we ought not to forget that many great works of human thought have owed much to alcohol. Those men who constitute what is called the genius of the world, have not, on the whole, been remarkable for abstemiousness in this regard, insomuch that Dr. Macnish, in his 'Anatomy of Drunkenness,' enumerates genius amongst the causes of the love of stimulants. The ardour of temperament, the sensibility of nature, the expansiveness of feeling, and the enthusiasm of heart, which often distinguish such men, and contribute much to their greatness, are qualities which find gratification in the enlivening effects of alcohol. Then again, the great contrast which there is between the lofty aspirations of their inner life, and the low dreary monotony of actual existence, drives them into a sort of despair from which they escape to the false visions of unrealities. When the life of man is seriously contemplated by him who is not content to "sleep and feed—a beast, no more," and to allow his "godlike reason to rust in him unused," but would search out the meaning and aim of all the labour which is done under the sun, then there is no other conclusion to be come to than that of the preacher, that life is a vanity of vanities. It is not every one who is sufficiently cold-blooded by nature, or sufficiently philosophical by acquirement, to be able to accept this result calmly, and to go on in the routine of life, indifferent to the oppressions which are done on the earth. And those who cannot help feeling very acutely the evils which they witness, are exceeding apt to get by artificial means visions of a brighter kind; to them the temptation to flee away from the actual is an irresistible one. If, then, it be an error to use stimulants in moderation, and a vice to use them beyond moderation, those who can look beyond the circle of their own conceit will generally find an excuse for the indulgence in the cause which has induced it.

One-sided, earnest, and intolerant, as enthusiastic reformers mostly are, the advocates of teetotalism have taken a narrow view of their subject; and not a few of them, cold-blooded by temperament, have assumed a merit in that which, whether it be a virtue or a defect, is a constitutional quality for which they are nowise responsible. Dr. Bird's estimate of them is scarce more favorable than Falstaff's was, who affirmed of sober-blooded youths that "they

are generally fools and cowards," that "they fall into a kind of male green-sickness," and "when they marry they get wenches." "If I had a thousand, the first human principle I would teach them should be—to forswear thin potations, and addict themselves to sack." Dr. Bird thinks he has observed that "some teetotallers are great scandal-mongers; that others, in virtue of the abstinence which they practise, are vain of and ostentatious about their superior goodness; and others, again, are excessively libidinous—pickpockets are so, and they are exceedingly temperate. I have found natural teetotallers, as a whole, to be selfish, uncharitable, and badly qualified for the offices of friendship. But there are various classes of them, and the majority of them are teetotallers only in name, for when they are not great smokers, they are most probably great tea-drinkers, great swillers of ginger-beer, or great gluttons. I hope to see Great Britain more temperate than at present, but never teetotal." Without adopting such extreme views, we may still think that the teetotallers, as a body, have not exhibited a sufficiently comprehensive spirit in their assaults upon stimulants. It is a question for a larger reason and a more tolerant judgment than such men usually display, whether it is not, on the whole, a necessity that a man should cherish his faults in the same proportion as he cherishes his virtues. Watching with pain the baneful effects of some passion in another, it is easy enough to give thanks that we are not as that man is; but it is not so easy to perceive in that very vice the evidence of virtues which we, perhaps, do not possess.

All right-minded men will heartily wish success to the teetotallers in the efforts which they make to diminish drunkenness by appealing to the reason of mankind; but it argues a most intolerant bigotry, and it is a monstrous blunder on their part, to attempt to proscribe the sale of intoxicating liquors, and to make men virtuous by Act of Parliament. Such compulsory enactments are not only an unwarrantable interference with individual liberty, but they notoriously have the effect of adding hypocrisy of the worst kind to the vice of drunkenness, and of rendering the latter more demoralising and more dangerous, because more secret. A state which should undertake to protect men in good health of mind and body from the effects of their own vices, would find out, before very long, that it had no *men* to protect; that it had, by its too great attention, deprived them of all those qualities which entitle them to that name. Like most other people who labour for reform, the teetotallers are far too eager for results: they are absurdly anxious that everything should be accomplished within a few years, or, at any rate, within the term of a single life; that mankind should become wise and virtuous by magic or by miracle. But the development of humanity is not like that of a mushroom: in the progress of mankind centuries are but seconds; and if a great reform is accomplished in one

century, there is no need to complain. The advocates of total abstinence may be well content with the progress which they have made, and have no need to get impatient and angry because so many yet perish from drunkenness, and so many more are rendered miserable. It is the way of nature to sacrifice thousands of individual lives in the course of its progress: of fifty seeds, "she often brings but one to bear;" and of fifty mortals it is abundantly evident, and it is a wise provision, that one "rots, perishes, and passes" as a useless abortion.

It is because of the very grave objections which exist to any plan of compelling men to be virtuous in regard to alcoholic indulgence, that great doubts exist in many minds as to the propriety of establishing asylums or sanatoria for the so-called dipsomaniac. When such an unlucky mortal makes his appearance in a family, it may be fairly doubted whether it is not better to give him unlimited access to a gin-barrel, and to permit him to drink himself to death, than to make him virtuous for a time by compulsion; for, in reality, if he is to be made virtuous for life, he must, in nine cases out of ten, if not in ninety-nine cases out of a hundred, be under restraint for life. If dipsomania could be distinctly defined as disease, which it undoubtedly is in some cases, then there would be a fair argument for depriving the individual of his liberty. But where the indulgence in drink is merely a vice, and the individual is as reasonable as any other man as soon as the opportunity of gratifying his passion is taken away, on what principle is he to be deprived of his liberty? The difficulties in the way of such restraints are insuperable, whilst the benefits that might result from them are very doubtful. And, furthermore, it is much better, in accordance with the great principle that the state should interfere as little as possible with the liberty of the individual, that a few should suffer, than that a few should be saved for a time from their own follies in spite of themselves, and the excellent spirit of individuality in a community be violated.

For these reasons we cannot quite agree with Dr. Bird as to the necessity of legally committing the victims of drink-craving to a sanatarium specially organized for their treatment. The Scotch Commissioners in Lunacy, in one of their reports, expressed their opinion on the importance of adopting some plan for the legal detention of those afflicted with the morbid craving for drink; but though the evil is undoubtedly a very great one, the practical difficulties in the way of such a remedy as the commissioners suggested, do not seem to have been sufficiently considered. Dr. Bird argues strongly, and perhaps successfully, in favour of drink-craving being dependent upon pathological conditions of the body, and gives a few striking cases in illustration. A little girl, two and a half years old, suffered, when about ten months old, from indigestion and diarrhœa, appa-

rently in connection with teething. Food of any kind was not tolerated, and everybody supposed that speedy death must ensue. In the course of treatment port wine was prescribed, and from the very first was relished by the little patient. "The infant took it greedily, and very soon began to cry for it as in health she might have cried for the breast." The wine was given freely, to the extent of from twenty to twenty-four ounces daily, so that the child became the talk and marvel of the neighbourhood. To satisfy its importunities, gin was once substituted for wine, and, after that, gin became the favourite drink, and it drank at least a pint of this a day. "Food, of any kind, she would never taste during that time." As she gradually recovered, and her appetite for proper food returned, the drink-craving disappeared, and the child is now strong, healthy, and sober. Besides the evidence afforded by such cases, the hereditary transmission of the drink-craving would appear to indicate a cause in some condition of the nervous element. The following instance is given by Dr. Bird:—A small landed proprietor was much given to strong drink, and ultimately died, a confirmed sot, of paralysis and kidney disease. He left six children—three sons and three daughters—who, in time, all became drunken. The second son fell into every kind of debauchery, and finally died miserably in a hospital in New York. The third son, who was brought up to the ministry, used to drink the sacramental wine, and went drunk into the pulpit, so that he was expelled from his office, and finally died in a workhouse. The eldest daughter tapped a barrel of rum in her husband's absence, and was by him discovered dead under it. The second daughter also died in a drunken paroxysm. The third daughter, still alive, gets drunk whenever she can, and is barren, as her dead sisters were. The eldest son drank more moderately than his brothers, but was notoriously intemperate. He died a violent death, leaving a family of two sons and three daughters. The eldest son died after a career of reckless dissipation; the eldest daughter was extremely delicate, and died in childbed; the second is scrofulous; the youngest is married, but barren. It is a great pity that men cannot be brought to realise the important truth, that an inheritance, far better than land or wealth, which they may leave to their children, is that of a good nature—the "confidence of a good descent." It is a great blessing, however, that when men do neglect this truth, nature takes the matter out of their hands, and, with the determination that progress shall not be frustrated by human follies and vices, puts a stop to propagation by sterility and idiotcy. Of 300 idiots in the State of Massachusetts, whose history Dr. Howe investigated, as many as 145 were the offspring of intemperate parents.

By acquiring a knowledge of those physical laws which govern the development of mankind as surely as they govern the formation of a crystal or the germination of a seed, human reason will be enlightened

and expanded, and human will strengthened and rightly directed. Then the folly and the cruelty of vice will be made so plain, that to sin against the physical laws of human development will appear as great a folly as it is to break the physical laws which are now known. Meanwhile the abortive lives which vice produces, and the great miseries which are witnessed, are examples excellently well adapted for the formation of correct inductions in the spirit of positive science; they are pathological instances—experiments supplied by nature—tending to the correction of unjust theories, and to the establishment of true generalizations. Far, then, from being useless, they are beneficial, as they are inevitable, in the purpose of nature; with mankind generally, as with man individually, it is out of suffering that knowledge comes. In this great development, it would be absurd to look for striking results in one generation or in one century; and to complain that such do not occur in our time, would be all one as if the earliest savage had complained that he had not the steam-engine and the electric telegraph. If each age would but believe that the whole universe had not been created solely for its satisfaction, and if each individual in the age would but learn that he is a very insignificant atom in the great whole, then, perhaps, it might be possible to look with less impatience, and with more calmness, on those events which are painful, and do not accord with the human ideal of what should be.

Dr. Marcet's work must be well known to most of our readers. After a few preliminary remarks on the influence of spirituous stimulants on the healthy body, he proceeds to describe in detail the symptoms and pathology of the disorder which is now known as chronic alcoholism. He has also introduced into the present edition the account of a series of inquiries which he undertook in order to ascertain to what diseases those who drink too much are principally exposed. Although we are of opinion that Dr. Marcet's estimate of the value of oxide of zinc as a remedial agent in this affection is an exaggerated one, we regard the book as a valuable contribution to our knowledge, and can recommend it as containing a complete and practical account of the matters with which it deals.

Topics of the Day: Medical, Social, and Scientific. By James Ansley Hingeston, M.R.C.S. Pp. 400. Churchill and Sons. 1863.

It is apt to produce a bad impression upon a reader when, on opening a book, he meets with such a sentence as this:—"The brain of man is double," says Hippocrates, "just as it is in all other animals." One might well ask, does the brain of man, then, exist in all other animals? Unfortunately, this specimen of "Dean's Eng-

glish" is not singular. "The lycanthropy of Avicenna, described by Ovid in the Metamorphis of Lycaon, King of Arcadia, reigned epidemically at Alkmäest, in 1572. *These* (sic) maniacs ran about barking furiously, and aiming blows at every dog they met." In spite of what he says, it is probable that the author does not mean to describe Ovid and Lycaon, but those who suffered from lycanthropy, as the maniacs who barked furiously. "The mechanism of the beaver is like our own, because ours is the *same* (sic) as his." If there is an *identity* of mechanism, the argument for a *similarity* was scarce needed. There is hardly a page of the book in which the sense is not offended by careless expressions, such as those quoted, and they are the more blameable as the author's style is commonly ambitious, not unfrequently inflated, and occasionally very pretentious. Whatever could have moved an author, who can write with such learning as Mr. Hingeston does, to construct such a bombastic and obscure sentence as this:—"From the maggot that leaps from a nut as we crack it on our plate after dinner, and the caterpillar that eats up the leaves of our favourite convolvulus in the garden—from the fish that cleaves the green, transclucent wave, and the bird that wings the breeze of incense-breathing morn—from the lion that roams the desert wild, and the horse that tramps the battle-field, or prances before the lady's equipage—up to man, the master of them all, there is one all-pervading nervous system, progressively diminishing in a downward scale of analytic exhaustion, till it ends in the mere microscopic globule of a brain, by which they all communicate and hold their relative and interdependent existences, according to their various forms and needs, and types of organization, function, growth, location, and pursuits." Such a specimen of style is very well calculated to make the reader's attention undergo that process which Mr. Hingeston describes as one of *progressive diminution*.

Faults are not limited to grammar and style only. Here is, in an essay on the "Human Brain," some information which must astonish an anatomist. "The fibrous structure of the brain itself is made up of all the fibres of all the nerves from all the different points in every different part of the body." How it happens that such a multitude of fibres gets into the brain without making the spinal cord any thicker in the neck, does not appear, as it does not appear why modern investigation into the anatomy of the nervous system has been completely ignored, or why Mr. Hingeston should have written such an essay. As an example of pretention out of all proportion to power, of the show of learning without true knowledge, and of inflated, obscure, and desultory writing, an essay on "Ethnological Psychology" will not easily be surpassed. Even the utter absence of anything like plan in an essay, is less afflicting than the marked deficiency of cultivated taste in composition. When we would sin-

cerely follow the author with attention in his argument, our sympathy is inevitably turned away by some such sentence as this:—"This social fact staggers us just as much as the point of the bayonet in the deadly charge." A strange enough effect for any social fact to produce, when it causes a perturbation anywise resembling that which the point of the bayonet causes; but stranger still must be the effect of the social fact which, as the author's language expresses it, actually staggers the point of a bayonet!

Lest these strictures, which we have felt it necessary to pass upon faults that deserve even more severe censure, should give rise to an unjust opinion of the essays, we quote, by way of correction, one of several thoughtful passages which will be found scattered throughout them. "Many a culprit at the bar of justice is the victim of disease much more than the condign felon of an impartial verdict; and a medical philosopher with the lantern of a modern Diogenes might, among the convicts of Portsmouth, or in any one of our penal settlements, read a tale in the history of each of those unhappy outcasts, so pitiful and pathetic, that, according to the apt hyperbole of the dramatist, 'our tears would drown the wind' at the recital of it. We are the prey of circumstances—our usefulness and happiness, nay, our very characters and influence depend upon events over which we have not the slightest control. Our birth, name, lineage, country, epoch, fortune, age, and place, we must receive such as they are bestowed upon us, we must take them, such as they are, for we cannot choose. A misshapen skull, a hump-back, a clubbed-foot, a defective liver, a weak stomach, and a degenerate set of nerves belong to our family ancestry, and descend to us either as a collateral bequest, or as our patrimony by right; and if they prove themselves to be heir-looms or legacies which fail to help us forward in the path of life, we must submit to the failure and abide the consequences of our innate errors and defects. Society must protect itself; and the *forum judicii* cannot pretend to draw the precise line of demarcation between *actual* transgressions and *possible* imbecility which belong alone to the casuistry or moral theology of the *forum conscientiæ*. Time, the father of experience, has no leisure for deciding subtleties so delicate as these. He divides and swallows down the good and the bad, and—*the world goes on*."

It is not often that essays written for periodicals will bear, with advantage, republication in a collected form; and there is usually no sufficient reason why they should be republished. Mr. Hingeston has certainly not been well advised in disinterring his productions from the peaceable oblivion into which they had passed, and in thus challenging a criticism which, if honest and capable, must be unfavorable. What may be allowed to pass without censure as a passable essay in some journal, may be quite inexcusable in a book. And certainly any one who publishes a volume of essays ought to re-

member that there are ideas which are congruous and ideas which are incongruous; that there should be some plan or system in an essay; that there should be definite ideas beneath words; and that nothing satisfactory comes of heaping words together merely because they are big sounding.

Psychiatrische Briefe, oder die Irren, das Irresein und das Irrenhaus: eine vollständige systematische Darlegung aller Seelenkrankheiten in klassischen und naturgetreuen Beispielen für das gebildete Publikum. Erläutert von Dr. Med. Joh. Aug. Schilling. Mit einer nach Photographie in Holz geschnittenen Abbildung des Kaulbach'schen Narrenhauses und einzelner interessanter Narrenköpfe desselben. Nach Original von W. v. Kaulbach, Holzschnitt von Braun und Schneider, Photographie von J. Albert. Augsburg, 1863.

We warn our readers not to be misled by this extensive title, nor to purchase Dr. Schilling's work. It is bald in style, and is addressed to the public at large. Such a prostitution of medical knowledge does not at all recommend itself to our notions of what is due to science and becoming to its followers.

Der Mensch und seine Psychische Erhaltung; Hygienische Briefe für weitere Lesekreise. Von Dr. Theodorich Plagge. Neuwied, 1864.

This is another of those mushroom products which spring up so profusely out of the rich German soil. It will not repay perusal, and is certainly not worth purchasing.

Schmidt's Jahrbücher, Jahrgang 1863, Nr. 11. *Cap: Psyschiatrik.* (November, 1863.)

The November number of this well-known Year-book contains, under section *Psyschiatrik,* a review, by Dr. Flinzer, of the question of the colonization of the insane. Contrary to our expectations, this first notice in *Schmidt's Jahrbücher* of this important question is most superficial. A list of the *literatur* of the subject is given, apparently copied from Duval's book on Gheel. The writer speaks of *Sainte-Anne,* and the failures of *Guislain, Vermelen,* and *Bulkens,* as deserving of mention. When did Guislain attempt to found such a colony? or Vermelen? and where did Bulkens fail? At Gheel?

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

I.—*Foreign Psychological Medicine.*

By J. T. Arlidge, A.B. and M.B. Lond., M.R.C.P. Lond., &c.

Etudes Pratiques sur les Maladies Nerveuses et Mentales, accompagnées de Tableaux Statistiques suivies du Rapport à M. le Sénateur Préfet de la Seine sur les Aliénés traités dans les Asiles de Bicêtre et de la Salpêtrière. Par le Dr. H. Girard-de-Cailleux. —Such is the title of the recently published work by Dr. Girard, the Inspector-General of Asylums of the Department of the Seine. It conveys the results of twenty years' experience and observation in his capacity of medical superintendent of the Auxerre asylum, to which he has given a European fame by his management and skill, and is supplemented by his admirable report on the present state of the Salpêtrière and Bicêtre, analysed already by us in our number for April, 1863.

M. Girard's observations are presented in the form of numerous tables, accompanied by brief notes and general comments. The tables present a wonderful array of statistical facts, collected and arranged with the greatest care and accuracy, and would prove of singular utility if studied in connection and compared with similar tables compiled from the medical history of our British asylums. We shall, however, restrict ourselves to noting the principal deductions arrived at by the author concerning most of the chief questions arising in the etiology, history, and pathology of insanity.

His first tables are constructed to show the movements—the admissions, discharges, deaths, and residue—in each year, from 1841 to 1857 inclusive. On 31st December, 1840, there were 161 inmates in the asylum, and in the course of the following 17 years 1345 patients, viz., 702 males and 643 females, were admitted, 478 died, 331 were cured, 169 discharged improved, and 158 sent out from various causes. Hence, on the 1st of January, 1858, the residue had increased to 370.

Upon analysing the tables the fact comes out that the number of indigent insane males present in the asylum has continued almost unchanged, whilst that of the females of the same class has increased from 64 to 100, or nearly two fifths, and this notwithstanding that the number of the latter admitted has been less than that of the former. The explanation of this occurrence is furnished by the circumstance of the mortality of the males being much the higher, so

that of 787 men 268 have died, whilst of 719 women 210 only have died, or 1 in 2·90 of the former sex, and 1 in 3·40 of the latter.

Another result seen is, that the relative proportion of pensioners to indigent cases has considerably augmented, viz., from 20 to 92. This affords a subject of congratulation to M. Girard, as indicative of the prudence of the communes contributing to the asylum, in limiting gratuitous admission to cases which are dangerous and susceptible of cure or of improvement, and to such inoffensive incurables as cannot, from their poverty, be maintained as pensioners by their families. To practise this limitation is, says the writer, to strengthen and maintain the bonds of family and of society, an inference he proceeds to illustrate.

Deducting 159 patients belonging to the department of the Seine, the admissions into the Auxerre asylum have averaged 69·76 annually, consisting of 38 cases of indigent patients, of 29 pensioners, and of rather more than 2 temporarily received (*passagers*).

Of 1506 patients treated in the asylum, 502 suffered with mania, 364 with melancholia, 192 with simple dementia, 103 with paralytic dementia, 101 with epileptic mania, 98 with monomania, 28 with epileptic dementia, 19 with epileptic idiocy, and 99 were idiots.

With reference to sex, mania occurred equally in the two sexes, as nearly did monomania also. Idiocy was present in 52 men and in 47 women; simple dementia in 104 males, and in only 88 females; epileptic mania in 60 of the former, and 41 of the latter sex; and epileptic dementia in 20 and 8 respectively. The greatest contrast, however, prevailed with respect to paralytic dementia, which existed in 80 men, and in only 23 women. Indeed, this malady existed in one ninth of all the male lunatics admitted. On the other hand, melancholia was more rife among females, in the proportion of 206 to 158.

The following tables presented are interesting, as exhibiting the influence of proximity of an asylum on the numbers admitted from various localities, a circumstance some years ago noticed by the English Lunacy Commissioners. The conclusion is, that though the indigent insane are by the regulations in force transferred to the asylum of the department to which they belong, yet the proportion so sent is in direct relation to the facilities offered for their removal; the more distant the communes and villages, and the more difficult the journey to the asylum, so much the fewer are the patients sent, regard being had, at the same time, to the populations concerned.

Another fact we find confirmed is, that the number of admissions is in direct proportion to the density of a population. This some would explain by the greater degree of civilisation of urban than of rural populations, an interpretation which can only be admitted when civilisation is treated as synonymous with an agglomeration of people necessarily subjected to the influence of excitement and of

passions called forth by the operations of trade, by interest in public affairs, and by mutual intercourse, and to injurious hygienic conditions entailed by town life. But the fact is in a great measure explicable from the more active and extended public beneficence of towns, from the circumstance that the same class of mentally disordered persons is more dangerous and obnoxious in towns than in the country; that the relations between the public authorities are more close and operative, and that thereby the transfer of a lunatic to the asylum is facilitated, an event further favoured by the ready means of communication enjoyed by towns.

Readmissions on account of relapse have occurred in the proportion of one fifth of the whole number admitted, and have been more numerous among the indigent patients than among the pensioners.

The relative proportion to their population of patients sent from the several cantons in the department is very striking, on account of its great variation. Thus in that of Auxerre the admissions have equalled 1 to 2187 of its inhabitants, whilst in that of Serignes they were only 1 to 21,604, and in that of Cerisiers, 1 to 20,572 inhabitants. M. Girard cannot explain this great difference; but, thinking that the nature and products of the soil might have something to do with it, he has prepared a table, from which it appears that in alluvial soils the ratio of admissions to population has been the highest (1 in 4671), and that where lias forms the subsoil the proportion is lowest (1 in 17,496). In our opinion this table of the geological characters of the several divisions of the department proves very little; the more material considerations concerned are, on which subsoil is the densest population found, and on which stands the town most conveniently situated with regard to access to the asylum. Another element in the inquiry, as suggested by the author, would be relative to the existence of families in certain localities, among whom insanity is hereditary and transmitted.

On the etiology of insanity very elaborate tables are set forth. With respect to the inquiry as to the influence of the several occupations, the relative number of each occupation admitted to the whole number of persons of that occupation in the general population, is rightly taken into account. In the table so prepared workers in metal exhibit the highest ratio (1 in 242 of those so occupied), and next to them soldiers and sailors (1 in 708). To account for workers in metal being so frequently the victims of insanity, M. Girard has recourse to the idea of Parent-Duchâtelet, that metals exercise a poisonous and destructive influence on the animal economy, increased by the usual habits of intemperance indulged in by those who work in them. There may possibly be some truth in this hypothesis, but in calculating the proportion of patients furnished by any trade, the smallness of the number concerned plays a very prominent part in the result arrived at. Thus, for example, if there were only 20 persons

engaged in the same trade, and in the course of 17 years 4 of them were admitted into a lunatic asylum, we could not accept this as indicative of the normal ratio in which insanity prevailed in that trade. The value of the result would differ materially from that accruing from the fact detailed, that of 87,737 farm labourers 130 became victims of insanity within the same period of time (17 years). The smaller the number of individuals entering into the computation, the greater will be the error in the relative proportion calculated from it, especially in questions of vital statistics, where so many influences are at work, and should be rightly appreciated and allowed for.

Lawyers occupy the next position in the descending scale of proclivity to mental disorder after soldiers and sailors, and after them come workers in wood and those engaged in building. Then follow professors, scientific and literary men, and ecclesiastics; dealers in food and drinks, shopmen, manufacturers, merchants, and bankers. Next stand the members of the medical profession and pharmaciens, and below these range master-workmen, agricultural labourers, and farmers; but to no one occupation does any particular form of insanity appear to be especially attached.

In estimating the influence of age on the production of insanity, M. Girard very justly indicates the proportion of the population of the department living at the different ages of those admitted into the asylum; and, having these data, he finds that among 1227 lunatics, 632 men and 595 women, insanity occurred most frequently between the 40th and 45th year, and next in order between the 30th and 35th year; the next periods after these in order are, 25 to 30, 35 to 40, 45 to 50, 20 to 25, 60 to 70, 50 to 55, 80 and upwards, 60 to 65, 70 to 75, 75 to 80, 12 to 20, 55 to 60, and lastly 12 and under. By losing sight of this necessary element in the calculation, viz., the relative number of individuals of the same ages existing in the general population from which those admitted are derived, and looking only at the crude number of admissions, the conclusion would be that most instances of insanity occurred between the 25th and 30th year, inasmuch as the number entering the asylum at that age was the largest.

Referring to a longer epoch in life, the table teaches us that insanity is most prevalent between the 20th and 50th years; that is during the period when the greatest mental activity is demanded, and the passions and emotions are in full exercise.

The table to exhibit the prevailing variety of mental disorder at different ages, shows that mania and melancholia occur especially between 25 and 30; monomania between 40 and 45; simple dementia between 70 and 80; and paralytic dementia between 70 and 75. Taking, however, the crude number afflicted with this last-named malady, without regard to other considerations, its victims between 40 and 45 are nearly double those between 70 and 75.

The table presenting the relations subsisting between insanity and the civil condition of those suffering from it, confirms previous conclusions that the unmarried suffer more than the married and widowed. Thus, the first-named furnished 1 admission to every 2169 inhabitants, whilst the widowed produced 1 to every 4572, and the married only 1 to every 7049. Children under puberty were as 1 to 19,744. Married insane men were more numerous than married women so afflicted.

The influence of a higher social position and property is, with regard to the production of insanity, unfavorable. It is calculated that only one fourth of the population of France is in the possession of sufficient means for comfort or enjoyment, and yet that fourth part furnishes the largest relative proportion of lunatics. Esquirol also noted this preponderance of insanity among the wealthier classes.

It is an equally curious circumstance that education is also associated with a predominance of mental disorder; a result, however, due rather to the manner and purpose to which it is applied than to education considered as simply an accomplishment or acquisition.

In estimating the influence of the seasons on the production of insanity, various contingent conditions must be borne in mind, such as convenience and the readiness and facilities for removal to an asylum. The proclivity appears to coincide with the natural sequence of the seasons,—spring, summer, autumn and winter. May produced most cases, and after it in order, June, July, September, April, October, March, December, January, February and November. June, May and December developed most mania; December, April and November most monomania; and May, June, April, July and August most melancholia.

The tables showing the effects of barometric pressure and of thermometric degrees upon admissions, though prepared at a great expenditure of trouble, are inconclusive in regard to any particular feature. Of the equally painstaking tables setting forth the prevailing crops produced in different districts, the direction of the winds, and the effects of the elevation of localities, we cannot assign to the conclusions any great value; the co-ordinate, more potent, modifying circumstances being so numerous and so difficult of exclusion in a valuation of those less tangible influences.

The relation between the form of delirium and the natural character of patients has been much discussed, and in Fodéré's opinion the former represents nothing more than an exaggerated state of the latter. On the contrary, Esquirol and others regarded perversion of the character to be correlative with mental disorder. On this point M. Girard has made 419 observations, the correctness of which he vouches for, whence it appears that mania is equally common with the gay and the morose, that monomania falls to the lot of the gay, and melancholia to that of those disposed to sadness, and lastly that

dementia, both simple and paralytic, happens alike with both descriptions of character. The general deduction therefore is, that the form of insanity manifested consists at one time in an exaggeration, and at another in a perversion of the natural character, and is determined by the changes which take place in the nervous system.

The influence of temperaments is next discussed, and the inferences drawn are, that the sanguine and nervo-sanguine predispose particularly to mania, and in a lesser degree to monomania, to melancholia and to simple and paralytic dementia; that the lymphatic and lymphatico-sanguine coincide with idiocy; that the lymphatic and nervo-lymphatic create, in a certain measure, a predisposition to melancholia, and that the bilious and bilio-nervous operate in the same direction.

M. Girard honestly admits that these conclusions require to be taken with many allowances; still there is no doubt a certain harmony between the native character and the temperament (two conditions indeed not readily distinguishable) of individuals and the form of the delirium their diseased minds take on.

Of 1506 patients admitted, hallucinations were found in nearly one third; hearing being the sense most frequently their seat, then vision, touch, taste and smell, in the order enumerated. Hallucinations of hearing occurred in nearly one half the cases of mania, in one third those of monomania, in one half of those of melancholia, and in one seventh those of dementia, simple and paralytic. The like occurred in two instances out of 100 where idiocy and mania were combined; in 12 of 13 cases of epilepsy with mania, and in 12 of 28 in which this malady was united with dementia. With respect to epileptic delirium, M. Girard rightly remarks that its characters are such as frequently to render it impossible to obtain an answer from its victims, and to substantiate the existence of hallucinations which may fairly be presumed to be present even in an intense degree; and not only is this so, but also the paroxysm of epileptic mania is itself short; these probable examples of hallucination consequently do not figure in the table.

Illusions were not noted in the same order of frequency as hallucinations; the senses being affected in the following relative sequence:— taste, smell, sight, hearing and touch. Irresistible impulses occur in the subjoined order of frequency, viz., in idiocy, monomania, melancholia, mania, in simple and paralytic dementia, and in epileptic mania.

Among 182 females admitted between the ages of 12 and 55, and in whom menstruation was proceeding, this function was regular in 84.

The majority of recoveries took place in the course of the first year of attack, and principally between the sixth and the ninth

months. Thus, of 331 admitted in the period of 17 years, 264 occurred during the first year, 39 during the second, 9 during the third, 10 during the fourth, and only 9 in all subsequent years.

A similar rule obtains with regard to deaths, which are most numerous in the first year after admission, and progressively decrease as the cases become chronic. For instance, of the 478 deaths in the 17 years, 266 occurred in the first year after admission, and chiefly in the course of the first three months of that year. They are, moreover, tolerably frequent in the second and third year, and afterwards sensibly decline in number. Hence many lunatics attain a good old age. Of 478 patients at Auxerre, 98 were above 60 years old; and of all the forms of insanity, mania seems most prone to prolong itself, excepting idiocy, which extends throughout life. Dementia comes next after mania, then monomania, and certain very rare cases of epilepsy complicated with dementia, afterwards melancholia, and last of all paralytic dementia. Excluding general paralysis and epilepsy, insanity appears a more lasting disease among women than men. This greater longevity of insane females, coupled with the lesser ratio of recoveries among them, explains their predominance in the population of the asylum.

The duration of insanity is so much the less, the nearer to puberty the malady shows itself; in other words, its duration is in direct ratio with the age at which it makes its appearance.

The recoveries in 17 years amounted to 331 of 1506 patients admitted, being 1 in 4·50; the admissions including chronic, and, in other respects, incurable cases. But, by deducting from the 1506 admissions, 99 idiots, 148 epileptics, and 295 cases of simple and paralytic dementia, the proportion of cures is elevated to 1 in 3·20.

The influence of the seasons on recoveries appears so far indicated that it may be asserted that the end of autumn is favorable to the cure of mania and melancholia.

Among the causes of death in the several forms of mental disorder, softening of the brain occupies the foremost place. Of 603 causes, often multiple, noted in 478 deaths, this softening happened in 110; next in order was marasmus or nervous exhaustion (in 88); then cerebral or meningeal apoplexy and cerebral congestion (in 63); then convulsions and epileptic seizures (in 58); afterwards enteritis, colitis or diarrhœa (in 45); next encephalitis, meningitis or hydrocephalus (in 29), and phthisis in the same rank (in 29); then cholera (in 27); gangrene (in 21); pleurisy and pneumonia (in 16); typhoid fever (in 15); organic diseases of the heart (in 12), and so forth in decreasing numbers.

The author remarks on the occurrence of cerebral softening in every form of insanity—after this has existed a longer or shorter time—instead of being, as often presumed, the special lesion of

paralytic dementia; and he states that his experience proves that insanity may prevail under the most varied forms, but especially as mania and dementia, and terminate by softening, without affording at its commencement any certain signs of such a termination.

Seclusion is practised at Auxerre, as M. Girard writes, only with patients left at liberty, but with whom life in common with the other inmates in the asylum is impossible. For the purposes of seclusion, five single rooms are provided for patients of each sex, each room possessing its own court or garden in its rear, overlooking the country, and opening in front upon a corridor in which the experiment of mingling their inmates together may at any time be essayed. No restraint is put upon the patients, and to each one an attendant is assigned. The group of single rooms for each sex constitutes, so to speak, a small establishment separate and detached from the other sections of the asylum, and furnished with its baths and its own warming apparatus. The purpose of this arrangement is to remove the excited patient from the observation, noise and contact of other like inmates, and to bring him into relation only with a quiet, intelligent and kind attendant devoted to his service.

The amount of seclusion thus carried out has been equivalent to the constant occupation, in a population of 400, of about five single rooms.

Passing by some tables we come to the important chapter on the pathological anatomy of insanity. The first group of morbid conditions noticed are diseases of the heart, among which hypertrophy was noticed 16 times in 45 cases of mania, or in more than a third of them. He would attribute this circumstance to the disturbance and modifications of the circulation determined by the maniacal state, and which by frequent recurrence finally induce organic changes in the central organ of circulation. To the operation of a similar agency—the effects of emotion, he would refer also the frequency of the same cardiac lesion in melancholia, in which he found it occur 8 times in 21 cases.

He has, however, in the next place to record the existence of hypertrophy in 8 of 32 cases of simple dementia,—a condition in which (except as a sequel of mania or of melancholia, and expressive of their past influence), the operation of mental excitement and emotion cannot be predicated. On the other hand, he encountered only one instance of hypertrophy of the heart in 6 cases of monomania, whilst 7 examples of cardiac lesion were found in 27 autopsies of patients dead from paralytic dementia. Further, in epileptic mania the occurrence of hypertrophy is in a still higher ratio than in simple mania, being 8 times in 20 cases, whilst in idiocy it sinks to 3 instances in 12.

This frequency of cardiac disease in mental disorders must be regarded as a well established fact, but the hypothesis M. Girard

would advance to explain it, is, in our opinion, certainly deficient.

Among the several concomitant lesions of insanity, phthisis holds a foremost place. M. Girard finds it more rife in melancholia than in any other form of mental disorder; for example, it was present in 6 of 21 cases of melancholia, and only in 10 of the 160 remaining cases of all other forms of insanity.

Coming now to alterations of the cranium and its contents, we learn that in 50 autopsies of mania, in 25 of which the cranium was attentively examined, the bones were found thin and eburnated in 3 cases; thickened and eburnated in 5; simply thinner than normal in 7, and thicker in 3; with simple eburnation in 1; deformed in a marked degree in 2, and, lastly, normal in appearance in 4. It was also found to happen that the cranium is thin and eburnated in chronic cases of considerable age; and that thickening and eburnation are also coincident with chronic mental disorder. A simple decrease of thickness occurs where there is shrinking of the brain and of its sulci.

In 4 of 6 cases of monomania thickening with eburnation was met with. In 14 autopsies out of 22 sufferers from melancholia, the cranium was normal in 7; thin with eburnation in 2; thin only in 1; eburnated only in 1; thickened and eburnated in 1; thickened simply in 1, and deformed in 1. Similar increased or decreased states of thickness are still more common among the victims of dementia, and little less so among epileptics.

Alterations in the membranes of the brain are even more frequent than in the cranial bones. Of 45 autopsies after mania, the dura mater was found adherent to the cranium in 7 instances; the membranes injected in 27; thickened in 15; reduced in thickness in 6, and fibrous, cartilaginous, or ossified at points in 3. Intra-arachnoid effusion occurred in 14, in 1 of which it was milky, and in another purulent. The membranes adhered to the cerebral substance in 14. An increased thickening in general coincides with long-lasting insanity; and in a less degree the same conclusion holds true where the membranes are reduced in thickness.

It would carry us beyond the scope of our task to proceed further with an analysis of what is in fact an analysis of the copious tables exhibiting the post-mortem changes observed in M. Girard's cases; we will therefore conclude by a brief comment he makes upon the subject in general. At the outset of our reflections we are struck, says M. Girard, with the fact that all the morbid states of the brain, although most varied at their origin, may lead to the same pathological results as seen after death. Yet we cannot admit the conclusion this would suggest, that there are no special alterations in the whole course and termination of mental disorder.

The able report on the condition of the insane in the great

Parisian lunatic hospitals, the Bicêtre and Salpêtrière, occupies the remainder of the book under notice. As before stated, this report was fully analysed in the last volume of this Journal.

Annales Medico-Psychologiques.—After a long interval the last four numbers of this well-known journal have been forwarded to us, and now demand notice; this, however, must be briefer than we could wish, on account of the accumulation of other foreign psychological works and periodicals.

The number for May, 1863, contains the following "original memoirs":—Cérise, on Animism in Physiology and in Psychology; H. Bonnet, Retrospective Review of Mental Science; Laurent, on the Physiognomy of the Insane; Dagonet, Letter addressed to the Préfet of the Seine; Brierre de Boismont, on Institutions for the Insane in Italy.

The paper by M. Laurent, assistant-physician of the Asylum of Quatre-Mares, Rouen, is the continuation of a memoir commenced in the March number, and of which we gave a sketch in this Journal for July, 1863. His present purpose is to establish the relations existing between the modifications of the physiognomy and the several forms of mental disorder. These forms he treats of under the headings of "simple madness," "mixed madness," and "complicated madness." In the first category are included mania, melancholia, monomania, and dementia; in the second, the mixed forms, are comprised similar recognised varieties of mental disturbance, associated, however, with neuroses, *e.g.*, with epilepsy, hysteria, hypochondria, catalepsy, &c., whereby they acquire a special character, and undergo a modification in their course and psychical symptomatology; lastly, in the third, that of complicated insanity, the mental disorder is modified by the presence of paralysis, in the form of general paralysis, as a special pathological entity, or by consecutive paralysis, or by cerebral lesions, such as hæmorrhage, or by toxæmic agents, such as alcohol. The variations the physiognomy may undergo in these several forms are exceedingly numerous, though pretty constant in some of them, and hence they always constitute an important part in the descriptions of the accepted varieties of insanity. They are most carefully studied and portrayed in M. Laurent's memoir, to which we would refer the reader, since a satisfactory abstract of it could not be furnished within much narrower limits than it occupies in the author's own description.

The object of M. Dagonet's letter to the Préfet of the Seine is to suggest to that high functionary the desirability of a *concours* to determine on the erection and organisation of the proposed new asylums for the department over which he presides. The writer takes as a basis of the conditions of the *concours*, the report made by M. Girard de Cailleux, according to which the number of lunatics in the department, in March, 1860, was 4056, consisting of 1635 males

and 2421 females. This inequality in the number of the two sexes, therefore, constitutes the first point to be borne in mind in any contemplated project. Again, of the whole number there were 800 afflicted with general paralysis; 400 idiots and imbeciles; 270 epileptic insane, and 2586 with simple insanity in its several forms. M. Dagonet would therefore suggest the erection of two special hospitals at a distance from Paris, the one for the 800 paralytics, of whom two thirds are males; the other also for 800, comprising idiots and epileptics, and therefore subdivided into two perfectly distinct sections, the larger of which would be allotted to the former class of patients, as being the more numerous. The remaining 2600 lunatics, of whom two thirds are females, M. Dagonet would accommodate in four separate asylums, two for those of the male, each to hold about 500, and two for those of the female sex, each to contain about 900 inmates. He would also include in his programme of the *concours* the scheme of a clinical hospital in the vicinity of Paris and its medical schools, and in connection with it, in Paris, a central office for the admission of patients; indeed, these two institutions were previously proposed by the late commission and have been accepted by the authorities. This central office, he thinks with M. Renaudin, might be used as a small depôt and asylum for some 70 cases, constantly renewed, and might have a chief physician attached to it as professor of psychiatry, together with an assistant to act as superintendent, and several *internes* to record the cases and their treatment. By this arrangement he would desire to facilitate observation and instruction in mental disorder, calculating that in the course of a year, 700 patients would pass under notice, exhibiting the malady in every form, and particularly in its early and curable condition, when the value of medical treatment can be fairly tried and estimated.

Italian Asylums.—M. Brierre de Boismont, who wrote an account of Italian asylums in 1830, has lately revisited Italy, and now presents a few short notes on their present condition. He remarks that progress is perceptible, but to a much less extent than in other European countries, and that a satisfactory asylum, constructed on modern principles, is wanting. The great defects of the existing asylums are their urban sites and limited area, and the deficient provision for the occupation and amusement of their inmates.

The three other numbers of the 'Annales Medico-Psychologiques' now in hand contain the following original memoirs, some of which will require notice on a future occasion. For July—Dumesnil on the essential diagnostic sign between the mental disturbance peculiar to an attack of insanity, and that which precedes the outbreak of typhoid fever; a medico-legal report by Dagonet, on a man who murdered his wife; a second by Baume, on a criminal assault committed by an imbecile; a notice of the agricultural colony of St. Luke, con-

nected with the Pau Asylum, by Auzouy; notes on the asylums of Russia, by Paul Herzog; and a notice of the works of Aubanel, by Thore. For September, we have an introductory lecture on Comparative Psychology, by Chauvet; a paper by Brierre de Boismont, on the general and partial responsibility of the insane, and a medico-legal report on a man accused of having murdered his wife. For November, Billod has a paper on Amaurosis and the inequality of the pupils in progressive general paralysis; and there are also a medico-legal report by L'Homme, and a notice of the "medico-agricultural asylum" of Leyme.

Besides these original contributions the journal contains the usual supply of extracts from foreign journals, and reviews and notices of the meetings of the Medico-Psychological Society of Paris. In two numbers M. Dumesnil has presented his readers with an analysis of the contents of the 'Journal of Mental Science,' and in noticing Dr. Mundy's paper on the Cottage System, has found room for some smart criticism.

Archivio Italiano per le Malattie Nervose, e più particolaramente per le Alienazioni Mentali; Diretto dai Dottori Andrea Verga, Cesare Castiglioni e Serafino Biffi. Milan, 1864.—Under this title of "Italian Archives of Nervous Maladies, and especially of Mental Derangement," we have to welcome the first number of the first Italian journal, separately published as such, specially devoted to psychological medicine. It is edited by three well-known physicians, Dr. Verga, director of the Great General Hospital of Milan; Dr. Castiglioni, medical superintendent of the Asylum of Senavra, at Milan; and Dr. Biffi, medical director of the private asylum of St. Celsus, near Milan. Under the management of these three able physicians we may anticipate a successful and useful career for this new periodical, and we trust it may, by means of original productions from the ablest and most scientific physicians of Italy, and by the information gathered in its pages from the contemporaneous psychological literature of other lands, give an impetus to the study of psychiatry, and especially to the improved treatment of the insane, so that Italy may in these matters be led to emulate, and ere long equal the progress attained in most other European states.

The contents of this first number are:—a preface, by Dr. Verga; two original memoirs, one "on phrenopathy considered pathologically," by Dr. Carlshivi, the other a chemico-physiological dissertation on the presence and properties of the sulpho-cyanide of potassium in the saliva, and on its relations to the poison of hydrophobia, &c., by Dr. P. Lussana; several reviews and analytical notices of other journals and works on nervous and mental disorders, and lastly, some general notes and news in reference to asylums and their officers.

Dr. Verga informs us, in his preface, that the new periodical is in

fact the continuation of the "Psychiatric Appendix of the 'Medical Gazette' of Lombardy," first promoted by Gualandi, in 1848; yet that whilst embracing the same subjects, it appears in an improved and enlarged form, and at more frequent intervals, so as to more adequately represent and serve the department of medicine it treats, in united and regenerated Italy. Its appearance as a separate publication was also called for by the asylum physicians who attended the psychiatric section of the Scientific Congress at Siena, and the editors desire to make it the medium of communication for the superintendents of asylums in every part of Italy, and the organ of the association established among them. Encouraged by the success of the 'Appendix,' and by the ready and valuable co-operation accorded to that production, Dr. Verga anticipates and bespeaks a higher degree of success and utility for this improved issue, particularly as it addresses itself to all Italy, and solicits support from a now united people. It is with a spirit-stirring pride that he alludes to the deliverance from oppression of his country, and of its consolidation into a free and united kingdom; nor can he close his preface without a reference to Rome and Venice, declaring, on behalf of his professional colleagues, that they have not lost sight of Rome and Venetia, but are ready to lay down the pen and take up the carbine when occasion demands, an occasion they ardently long for.

The notice of the original articles and other contents we must postpone to another time.

"*On the treatment of Delirium Tremens and Mania with Tincture of Digitalis.*" By W. McCrea, M.B. London, &c.—We presented an analysis of the first portion of this interesting and practical paper in the October (1863) number, and promised to continue the abstract when the next portion was published. This second part we have lately received, as it appeared in the 'Australasian Medical and Surgical Review,' published at Melbourne, under the editorship of Mr. James Keene. The subject of the use of digitalis in delirium tremens and mania has now assumed great practical importance, several physicians having lately written upon it, among whom we may refer to our editor, Dr. Robertson, who has detailed his experience in our last number (January, 1864).

Dr. McCrea reported in his first paper 40 cases in which he had administered tincture of digitalis in half-ounce doses. In one case, Donald G— ('Journal of Mental Science,' No. xlvii, October, 1863, p. 388), it was stated that an ounce dose was given every four hours; this was, as Dr. McCrea now informs his readers in a note, a typographical error in the Australian Journal, for in no case had the dose exceeded half-an-ounce. In the second part of his paper he recounts the history of five other cases, four of them delirium tremens, and one of mania, in which the drug was given in that dose. The first

case, that of a man æt. 35, the delirium was complicated with epilepsy, and death took place eight days after treatment was begun. Arachnitis, softening and shrinking of the left lobe of the cerebellum, and shrinking and induration of the spinal cord, together with drunkard's liver, were found on examination. The other cases rapidly improved and recovered, and present no special points for notice.

Dr. McCrea concludes his paper by some general remarks. Fifty-seven cases of delirium tremens were treated with half-ounce doses of tincture of digitalis, the doses varying in number from one to ten. The result was beneficial in 22 cases, or 40 per cent., and a good effect produced in 4 other cases; making 47 per cent. of the whole number. In 23 cases, or about 40 per cent. of the total number, it is doubtful whether the medicine had any beneficial effect on the disease. "Among the doubtful cases I include all those where the patient had only one dose of digitalis. In almost every case an emetic was first given, and was generally followed by purgative medicine; this treatment alone, in an equal number of cases treated before and since the digitalis mode, was sufficient to effect a cure. In these cases, under both modes of treatment, the disease was not severe; and I think it is very probable that the sound sleep and immediate recovery which followed the single dose of digitalis would have occurred had the digitalis not been given. It is certain that it did occur in an equal number of similar cases in which digitalis was not given. In the remainder of the doubtful cases, the digitalis was followed by sleep one night, whilst on the previous or following night no such effect was produced, though no apparent cause for the difference existed. Even when sleep followed, the effect on the disease was temporary, and the cure could not be said to be effected by it, other medicines, tending to reduce congestion of the liver and give tone to the digestive organs, having been administered in the intervals."

"In 8 cases, or 14 per cent. of the whole, the digitalis exerted no beneficial influence whatever. The number of doses in these cases ranged from two to eight respectively. I could not say that any bad effect resulted from its employment, but no sleep followed its exhibition, no effect was produced on the circulation, and it did not modify the disease in any way."

"I watched the cases narrowly, in order to ascertain whether there was anything in the constitutions of the patients, the state of the circulation, the duration of the disease, or the character of the symptoms, which would afford some indication as to the cases in which the medicine was likely to be efficacious or otherwise. In three of the cases, where the pulse fell considerably below the normal rate, the digitalis was undoubtedly beneficial; beyond this there was no indication. . . . . The result of my observations on the effect of digitalis in the treatment of delirium

tremens is, on the whole, unfavorable to it. I do not think there is any danger attending its use, and some of the cases were unquestionably benefited by it; but, like many other new remedies, it has been over-estimated."

"In the treatment of *mania* by half-ounce doses of tincture of digitalis, the result was much more satisfactory. Of 20 cases treated in this way, 13, or 65 per cent., showed decided benefit. In one of these cases as many as twelve doses in fifteen days, were given; the medicine, in almost every dose, controlling the mania. In one case some benefit was derived, but not so decided in character. In 3 cases, or 15 per cent., the effect of the medicine was doubtful; in one of these two doses were given, and in two others, six doses each. In 3 cases it was administered in four, six and seven doses respectively, without any benefit whatever; one of these was cured afterwards by cold affusion to the head, and two others were sent to the asylum."

"The result of all these cases of mania convinces me that digitalis, in half-ounce doses, is a valuable remedy in controlling maniacal violence and procuring sleep."

II. *English Psychological Literature.*

We are again reluctantly compelled, by the pressure on our limited space, to defer till our next publication the Report on "English Psychological Literature," which is prepared, and which is several times referred to in our present notice of publications received. The number of interesting original contributions which it is our good fortune to publish in this number, lessen the space at our disposal for the Quarterly Report on the progress of Psychological Medicine, and have compelled alike the omission of half a sheet of Dr. Arlidge's Report on Foreign Psychological Literature, as also of the Report on English Pyschology and of the Excerpta from Asylum Reports for 1864.

III.—*Medico-Legal Cases.*

1.—*The Sequel of the Townley Case.*

(See 'Journal of Mental Science,' January, 1864. 'Quarterly Report on the Progress of Psychological Medicine.' III. 'Medico-Legal Cases.')

In the last number of the 'Journal of Mental Science' (January 1st, 1864), we related the history of this murder, and gave in full the medical evidence submitted at the trial, together with the very able

summing up of the judge, Mr. Baron Martin. We quoted also an article by a writer in the 'Saturday Review,' in illustration of our sense of the disparaging influence on medical science of the position of counsel for the defence so often of late assumed by our so-called experts in lunacy, and by none more flagrantly than by Dr. Forbes Winslow on Townley's trial. Having learnt from a private source that the case, as it related to the prisoner's mental state, had been referred by the Home Office to the Commissioners in Lunacy, and was then (December 23rd) under consideration, we reserved any expression of our opinion on the sanity of the prisoner, being unwilling to volunteer statements and opinions which might possibly have lessened his chance of escape from the ignominious death then impending over him. The decision on this point we felt to be the duty solely of the Home Secretary, and of such advisers as he might be pleased to call to his aid, and we did not, therefore, then express our definite opinion of Townley's sanity.

The subsequent history from December 25th to January 30th is related in a pamphlet,* which on that day we published; and a copy of which was sent by book-post to each member of this association, for the purpose of binding with this Journal. We there made some observations, which it is unnecessary here to repeat, on the report of the Commissioners in Lunacy to Sir George Grey, and on the subsequent successful efforts of Townley's solicitor to evade the law. At that date (January 30th) Townley was in Bethlehem Hospital; there was great public dissatisfaction at the way in which a criminal had been withdrawn from legal punishment; an earnest desire was expressed on many sides, that some definite conclusion as to what insanity shall mean may be come to; and all were agreed upon the necessity of abolishing a law, by which the power of reprieving any criminal was placed in the hands of two justices of the peace and two medical men, who might be moved by interest or inspired by a crotchet.

The case being thus apparently settled, and Townley finally consigned to Bethlehem as a criminal lunatic, by an order issued two days after the date of the Commissioners' Report (December 30th), we felt ourselves free to discuss the question of his presumed insanity, which we did at some length in the third section of the pamphlet referred to, and we showed, by an analysis of the different forms of partial insanity, how impossible it was with a just appreciation of scientific knowledge, to refer Townley's case to any one of them.

Dr. Hitchman's *Interviews with Townley,* which we publish in this number (Part I, original articles), confirm in detail the opinions

* 'Insanity and Crime: a Medico-Legal Commentary on the Case of George Victor Townley,' by the Editors of the 'Journal of Mental Science.' London, John Churchill and Sons, 1864.

we expressed as to Townley's sanity, and as to the value to be set on Dr. Forbes Winslow's scientific evidence.

On the 1st of February Sir George Grey, who in the interval had been engaged in a desultory correspondence* with the chairman of the Derby Quarter Sessions (Mr. Evans), and the chairman of the visiting justices of the gaol (Mr. Mundy)—each step in which involved the whole matter in more hopeless confusion—wrote to these gentlemen, informing them that, with the concurrence of the Lord Chancellor, he had requested Drs. Hood, Bucknill, Meyer, and Helps to examine into Townley's state of mind, and to report to him their opinion thereon, and he transmitted a copy of that report,† adding that it appeared to him "to be conclusive as to Townley's being of sound mind." He concluded by informing

* These letters are printed in the Parliamentary paper, No. 37, "copy of correspondence with the Secretary of State for the Home Department, and of orders or warrants issued by him relating to the case of George Victor Townley."

† "BETHLEHEM HOSPITAL; *January 28th.*

"We, the undersigned, having been requested by Secretary Sir George Grey to examine into the state of mind of George Victor Townley, a prisoner under sentence of death in Bethlehem Hospital, and to report our opinion as to whether he is of unsound mind, report as follows:—

"We have carefully considered the copies of papers supplied to us, and on the 26th and 27th days of this month we have had two lengthened interviews with the prisoner, and the conclusion at which we have unanimously arrived is that George Victor Townley is of sound mind.

"The demeanour of the prisoner during each interview was calm and self-possessed, with the exception that at the commencement of the second interview he displayed and expressed annoyance at the repeated examinations to which he was being subjected. Neither in mode of speech nor in look and conduct was there any sign of insanity observable in him.

"His prompt apprehension of the purport of our questions, and the manner in which he replied to them, indicated the possession of good intellectual capacity.

"The opinions which he avows that men, as the creatures of circumstance, are not justly responsible for their actions, are opinions at which he appears to have arrived by ordinary processes of reasoning.

"That he knows that he is responsible for the commission of crime is made clear by his own words used to us,—'I expected to be hanged because I killed her, and am not such a fool as not to know that the law hangs for murder. I did not think of it at the time, or I should not have done it.'

"We think that his statement that he killed Miss Goodwin to repossess himself of her as his property was an afterthought, adopted to justify his crime. He acknowledged to us that he had come to this opinion after the deed was done.

"The supposition that he killed Miss Goodwin under the influence of the opinion that in so doing he was repossessing himself of her as his property is inconsistent with his own repeated statement to us that, without forethought of any kind, he killed her under the influence of sudden impulse.

"He explained to us that by killing Miss Goodwin to repossess himself of her as his property, he simply meant that he took her out of the hands of his enemies, and placed her in a position where she would wait, and where he would rejoin her when he died.

"The prisoner endeavoured to represent the catastrophe to us as due to the influence of sudden impulse, but the details which we elicited from him show that

them that, "taking all the circumstances of the case into consideration, her Majesty's Government are of opinion, that it would not be right that the capital sentence should now be carried into effect, but that it ought to be commuted to penal servitude for life. This course has therefore been taken." No one we think can question either the wisdom or humanity of this, Sir George Grey's final determination. Mr. Evans, in acknowledging the communication, added the expression of his great satisfaction with its contents. Townley was on the 2nd of February removed to Pentonville Prison, and Sir George Grey subsequently assured the House of Commons that he really would be kept in penal servitude for life, all tickets of leave to the contrary.

The report which thus justly consigned the murderer to life-long penal servitude, was drawn up by the late Editor of this Journal (Dr. Bucknill), at the request of the three physicians associated with him in the inquiry, after they had together on the 26th and 27th of January examined Townley at Bethlehem, and arrived unanimously at one opinion as to his state of mind.

This report gave the most general satisfaction to the public. The perusal of the document shows how skilfully every element in the case was sifted and analysed, and how the medical diagnosis was systhetically constructed thereon. It will remain a standard and guide for future medical reports in cases of alleged criminal lunacy.

The perplexing difficulties in every stage of the inquiry which yielded only when a commission of physicians skilled in the theory

he used threats of murder for some time before he struck the first blow. We think that his clear memory of the events attending the crime, and also the attempts which he has made to misrepresent the state of his mind and memory at the time of these events, are evidence of his sanity.

"We are of opinion that he does not entertain any delusion on the subject of a conspiracy against him, but that he uses the term conspiracy to express the real opposition which he has met with from the members of Miss Goodwin's family to his engagement with her, and also to express the feeling that they are hostile to him.

"We have considered the evidence of hereditary predisposition to insanity given in the papers supplied to us, and our opinion of the prisoner's state of mind has not been altered thereby.

"We examined the apothecary and also the chief attendant of Bethlehem as to the conduct of Townley since he has been in detention at the hospital—both of them have had him under daily and special observation—and they assure us that neither in conduct, manner, or conversation had they been able to observe in him any of the peculiarities which they are in the habit of remarking among the insane.

"W. CHARLES HOOD, M.D., Visitor of Chancery Lunatics.
"JOHN CHARLES BUCKNILL, M.D., Visitor of Chancery Lunatics.
"JOHN MEYER, M.D., Medical Superintendent of the Criminal Lunatic Asylum.
"W. HELPS, M.D., Medical Superintendent of the Royal Bethlehem Hospital."

and treatment of insanity were called to replace *ex parte* witnesses, and the statements of others interested in frustrating the ends of justice, may perhaps even convince the Lord Chancellor of the superior value of the conclusions of men who have studied the subject of insanity to the "moral conclusions" of judges and juries, and at any rate will establish a precedent which we hope will be followed for the future. Moreover the success of this medical commission practically confirms the suggestion which we made in our commentary on the Townley case for the amendment of the practice of the law courts in cases of criminal lunacy.

"A change (it is there said), in the existing method of obtaining scientific evidence is plainly most necessary; nothing can exceed the awkwardness and uncertainty of the present plan of proceeding in England. 'An array of medical men,' as Dr. Bucknill observes, 'are marshalled by the attorneys on each side according to their preconceived opinions of the case. These medical witnesses may usually be divided into two classes—those who know something of the prisoner and nothing of insanity, and those who know something about insanity and nothing of the prisoner. They generally succeed in neutralizing each other's evidence, and in bringing the medical profession into contempt, at least among lawyers.' Only by abolishing a system which puts a premium on unscrupulous advocacy—for it invites those who are more eager for notoriety than careful for truth—which practically excludes the tender conscience from giving scientific testimony in many cases, and which subjects medical science to extreme degradation, can the benefit of any change in the present law be reaped. *Scandals must occur as heretofore, if no steps are taken to secure impartial scientific evidence.* The remedy is an obvious one; it is to make the medical witnesses in matters of science, witnesses not for the prosecution or the defence, but witnesses called by the Court itself. Then would their evidence be freed from all suspicion of advocacy, and gain the authority in which it is now wanting. In France, when a criminal is suspected to be insane, the Court appoints a commission of medical men, or selects one man experienced in mental diseases to examine into the case, and to report upon it; the whole life of the prisoner and the present symptoms are investigated, and the questions put and the answers to them are recorded for the information of the Court. 'The French system, which places the scientific *expert* before the Court in an independent and impartial position, and affords him an ample opportunity to form a decided and trustworthy opinion, appears to be in every way worthy of imitation.'* Such an alteration would not be any novelty in England; for in difficult questions of collisions on the sea and of salvage, where special knowledge is required, the Masters of the Trinity Company are called in to assist the Admiralty Court. And surely a shipwreck or a collision at sea is a fact much more within the knowledge of ordinary men than the diagnosis of cerebral disease where lunacy exists. By the adoption of some such plan, the Court would secure impartial and trustworthy evidence, on which it could act as might seem to it good, and the poor man would obtain that equality with the rich before the law which it is the boast of England to give him, but which he practically has not at present when insanity is pleaded."

In comparing Dr. Bucknill's report (January 28) with the report made by three of the Commissioners in Lunacy (Mr. Campbell, Mr. Wilkes,

* "Unsoundness of Mind in Relation to Criminal Acts." An Essay by J. C. Bucknill, M.D. Second Edition. Longmans.

and Mr. Forster), on the 28th of December it appears that these authorities concur in stating that Dr. Winslow's evidence of the existence of a delusion (the famous conspiracy of six with the chief conspirator at the head), and which so influenced Mr. Baron Martin's steps subsequent to the trial, was founded on error and faulty diagnosis, and that no trace of delusion existed at all. They are further agreed that, applying the law as laid down by Mr. Baron Martin to this case, Townley was justly convicted. They differ, however, as to the extent of his sanity. Dr. Bucknill and his colleagues unanimously pronounce him of sound mind; the Commissioners are disposed to consider him as morally insane "in view (as they report) of the extravagant opinions deliberately professed by him, of his extraordinarily perverted moral sense, and of the hereditary taint alleged and apparently proved to have existed." In our commentary on Townley's case—printed before the publication of Dr. Bucknill's report—we took the view he does of Townley's sanity, and rejected the theory of his moral insanity, saying:—

"We must allow that the theory of moral insanity cannot be applied to excuse Townley's crime; it will not only not explain every circumstance in the case, but it is positively incompatible with certain circumstances. Will not, however, the theory of moral depravity suffice to explain his crime, his perverse utterances and ridiculous philosophy? Is it not possible that a vain, self-indulgent, and ill-regulated mind might, by a course of French novels and gratified passions, be brought to such a pitiable condition as he exhibited? Selfish enough to commit such a crime, such a mind would surely be insensible to remorse, for the only regret which it could feel would be from a disappointment of self. Self-centred in all his feelings and thoughts, his love for another is a pure self-gratification; and if the being whom he has, as it were, thus appropriated to himself in his selfish passion, rejects him for another, it is an unpardonable injury to his personality—it is to rob him of his most dear possession, and if he cannot have that he will have revenge. Self-sufficient in the excess of his vanity, he recognises the right of no one to sit in judgment upon him; he is a free agent, and if he does not find it agreeable to conform to the world, the world must conform to him. But the world is stronger than he is, and being placed by the indulgence of his passions in a position of exceeding humiliation, his self-feeling finds gratification in the defiant expression of a childish and perverse obstinacy. Such exhibition is a last solace to his vanity, as his philosophy exhibits the vanity of his intellect. No doubt there is moral perversion in such a pitiable display, as there is moral weakness in such a character; but the moral perversion is that of the naughty child which the birch-rod marvellously improves. While there are all the positive signs of moral depravity, the evidence of moral insanity is singularly deficient; and it is impossible to refer such a case to insanity if any distinction between disease and vice is to be maintained. There is wanting all proof of disease rendering the individual unaccountable; and if the doctrine of moral insanity is to gain acceptance, disease must always be proved, not by making assumption support assumption, but by logical appreciation of symptoms."

Yet in the existence of the hereditary taint we recognised (as did the Commissioners) the means of retreat for Dr. Winslow, in

his utter discomfiture on the delusion theory, had he known how to avail himself of it. "It is a pity for the sake of his science that this psychologist had not, instead of rejecting the moral perversion, and appealing to intellectual disorder,* rejected the intellectual delusions, and rested the plea of madness on moral deficiency. Then, though the plea might, and no doubt would have been without avail in the court where Townley was tried, it would, perhaps, have rested on a substratum of truth, such as the legal tribunals of the world cannot take notice of: for who shall affirm that Townley's character did not feel in some measure the effect of the hereditary taint?—who can apportion the amount of his responsibility?† But this principle must ever prevail in science and in law, that, when moral insanity is suspected and pleaded, there cannot rightly be any ground for acquittal on that plea, if the criminal act, as a symptom, cannot be logically connected by a train of other symptoms—such as change of habits, feelings, and character—with disease as its cause."

2. *Remarks on the case M'Intosh* v. *Smith and Lowe*: by JOHN B. TUKE, M.D., Edin., Assistant Physician to the Royal Edinburgh Asylum, Morningside.

[We are compelled, by want of space, to omit the history as drawn up by Dr. Tuke of this groundless action for false imprisonment, raised by Mr. M'Intosh against our associates Drs. Smith and Lowe, the proprietors of Saughton Hall Asylum, near Edinburgh,

* *Dr. Winslow's Theory of Townley's Insanity.*—"Having brought forward the different forms of partial insanity, and shown how impossible it is, with a just appreciation of scientific knowledge, to refer Townley's case to any one of them, the question naturally arises, What form of insanity, then, did Dr. Winslow attribute it to? That is just the question which it is impossible to answer. Townley's insanity, as described by that psychologist, was a medley, a scientific patchwork, ingeniously constructed, boldly devised, striking in appearance, but really a scientific incoherency—a mixture of incompatibles. 'General derangement and diseased intellect,' with the ability to pass off a true belief as a delusion, 'not a sane opinion on a moral point,' 'vitiation of moral sense,' 'inability to appreciate the absurdity of the idea' that by killing Miss Goodwin he would regain possession of her, and the coherent reasoning of a necessarian—these together constitute an extreme form of insanity of some kind, perhaps a new and at present obscure form of disease, which future ages will describe as 'intelligent imbecility.' How it was that Dr. Hitchman and the governor of the gaol could doubt the existence of insanity in one so very mad passes understanding. One does not know whether to wonder more at the obtuseness of these gentlemen, who could not detect madness where Dr. Winslow discovered it in such extreme degree, or at the marvellous perception of Dr. Winslow, who could discover such extremity of insanity where these gentlemen could detect none."—*Insanity and Crime: a Medico-legal Commentary, &c., &c.*

† "We would not overlook the fact that, in the future, insanity may possibly be developed in this man of low moral powers and alleged hereditary taint now subjected to all the horrors of remorse in the solitariness of penal servitude."

where Mr. M'Intosh had been placed under treatment for a well-marked attack of acute mania following indulgence in drink. We append Dr. Tuke's sensible comments on the case.]

It is doubtful if any of the actions at law, occurring within the last few years, in which the question of lunacy has been raised, or in which professional men who have made that subject their especial study have been concerned, are so thoroughly productive of matter for serious consideration and reflection to the faculty and the general public as that of M'Intosh *v.* Smith and Lowe. To the profession it must raise the gravest doubts as to how far a man is justified to himself and family in laying himself open to actions in the mere discharge of a duty necessary to the public safety without due protection from the public itself—actions which may, as in the present instance, entail expense and anxiety for a period of twelve years—as to what symptoms it will be safe to take as criteria of insanity if the most marked and pathognomonic are to be twisted into amiable and high-minded eccentricities; and as to how far the conscientious carrying out of the provisions of the Lunacy Act afford protection to the proprietors of lunatic asylums. True, the occurrences which gave rise to these actions took place before the passing of the present act, but the forms required then were almost identical with the regulations for certificates under the existing system.

When we take into consideration the peculiarly well marked symptoms of acute mania presented in this case, the wild excited conduct, the breaking and destruction of everything which came in the patient's road, the filthy language and obscene and revolting acts which, as the learned judge remarked, "are only exhibited when reason has given way," is it not a significant fact that three out of twelve unprejudiced jurymen refused to recognise this as a case requiring seclusion and restraint? Whether carried away by the masterly address of the counsel for the plaintiff, or fearful that the extravagance of the drunkard should at any future period be mistaken for the ravings of the maniac, certain it is that one fourth of the jury held out obstinately for the sanity of the prisoner—another lesson as to the danger of entrusting such questions to men unacquainted with the subject.

To the general public this suit ought to give rise to the most anxious deliberation as to what extent it is perilling its own safety and comfort by the permission of such a series of actions. If the public calls upon the medical profession to fulfil the painful duty of expressing opinion on the sanity of a fellow-citizen, without which opinion the regulations for the general safety cannot be carried out, it is surely but fair that the protection from the consequences of a verdict afforded to the magistracy, who have to arbitrate between the public and the same dangerous classes, should be likewise extended

to that profession which alone is able to judge of the necessity for interfering with the liberty of that unhappy class dangerous from insanity. Under the present system men of high standing in the profession will, and many now actually do, refuse to sign certificates of insanity—the Royal College of Physicians of Edinburgh have met and passed a series of resolutions on the subject; and if this state of things continues, one of two things must result—either that medical men will refrain from all action in cases of lunacy, or that this important duty will devolve upon those few members of the profession who descend to the level of advertising quacks, and whom necessity compels not to refuse a guinea.

If from the fear of frivolous but costly actions the medical man who possesses public confidence refuses to take the steps necessary for public good and safety, the public has but itself to blame if it loses the advantages and security derivable from the certification of those practitioners whose mere professional position and reputation ought to serve as a guarantee against any attempt to wrongfully infringe the liberty of the subject.

And if such be the tendency with regard to the certifier, how much more likely is it to have an influence on those men to whose care and protection the lunatic is consigned. Is it likely to attract to the study of psychological medicine men of high intellect and refinement, such as those who, for the last fifty years, have been struggling for the amelioration of the condition of the insane? Is it not more likely to produce (far be it from me to say it *will* do so) a class of men known in the vulgar slang of sensation novels as "Madhouse keepers?"

PART IV.—NOTES AND NEWS.

The 'Social Science Review' on "Insanity and Crime."

All medical men consider themselves qualified by the simple virtue of their profession to deal summarily with any question of insanity; and the public, admitting the pretension, look upon any medical opinion as representing the science of the matter. When a letter, therefore, appeared in the 'Times,' of December 25th, from Dr. C. Black, arguing that Townley had committed a murder under a sudden and irresistible insane impulse, no one was surprised that the opinion was accepted as the scientific view of the psychologists, and refuted as such in a leading article of the same journal. The truth on that occasion was that most psychologists were aggrieved and annoyed by the inaccurate statements and unwarranted assumptions of that letter: to those who had a practical knowledge of insanity it was plain that, however mad Townley might be, he was not the victim of impulsive insanity. In its January number, the 'Social Science Review' rashly added to the mischief. So exultant was this somewhat impulsive journal, that another had not been added to what it called "the disgraceful murders of the scaffold," that it found this injudicious letter to be excellent beyond praise. "Nothing could be more temperate, nothing more true, nothing more logical. No man of sound scientific knowledge would have undertaken to answer it." We think that no man of sound scientific knowledge would have undertaken to write it. However, opinions differ; and the 'Social Science Review' is entitled to its own. It did so happen that the 'Times' was flooded with refutations which, in accordance with its wise policy, it did not admit; for there is nothing which the 'Times' likes so well as a weak letter on a popular subject, which gives it the opportunity for a triumphant *ex cathedrâ* refutation of a theory which is not popular. On that occasion, accordingly, the psychologists were crucified; and much they regretted the cruel help which had been inflicted upon them. But let that pass: what we may legitimately think is, that a journal which had committed itself so decidedly and extremely at that early stage of the affair, was not the best qualified to judge with candour the further development of Townley's case. And although no friends of capital punishment, we may, perhaps, further think that it argues singular one-sidedness and something more than one-sidedness, to characterise as 'an inhuman deed' and a 'disgraceful murder' a form of punishment which some of our best thinkers still uphold as just and expedient. Sure we are that such a violent style does no good, and testifies to strong feeling rather than correct judgment in a writer. Those who see most deeply, and look most widely, are those who write most calmly; and the best cultivated of those who read are offended—and rightly so—by dogmatical intemperance of language. How can an act be *inhuman* which the great majority of mankind think it a duty to do? Is it overstepping the bounds of modesty to point out to the 'Social Science Review'—what the great apostle of social science laboured so much to inculcate—that a penal code is the natural product of the social state, and warranted by the social condition? Is it necessary to say that great evils will undoubtedly spring from the establishment of a mild penal code before the social condition is sufficiently developed to justify it? It may be time to

abolish the punishment of death in this country, and it may not; but the question is certainly one for doubt and temperate discussion. In one of the Italian states capital punishment was abolished, in conformity with the wish of a dying duchess, but assassinations increased so greatly that it was necessary to re-establish it.

It is because we have the greatest respect for the labours of the accomplished physician who now edits the 'Social Science Review,' and because we feel a certain admiration for the outspoken sincerity with which he gives his opinion on every occasion, that we are willing to say a few words with regard to a review, which appears in the March number of that journal, of a pamphlet on 'Insanity and Crime.' The authors of the pamphlet gladly acknowledge the courteous and complimentary manner in which the 'Social Science Review,' while compelled to differ from their views, has received their efforts.

The Review has unfortunately taken the barren form of a mere defence of Dr. Winslow from attacks which the authors had no notion that they had made upon that gentleman. It was certainly impossible for them to discuss the medico-legal relations of Townley's case without commenting on the evidence upon which the plea of insanity was based; and if Dr. Winslow's friends insist upon construing a damaging analysis of scientific evidence into an onslaught on the person who has given it, the authors are sorry, but resigned. Their real aim, as clearly set forth by them, was threefold; first, to prove to the public that forms of insanity not recognised by the law, but, nevertheless, rendering those who suffered from them irresponsible, do exist; secondly, to show that a line between disease and crime may and ought to be drawn sufficiently distinct to prevent the confounding of depravity with insanity—the analysis of Townley's case being used to exemplify how that might be done; and, thirdly, to suggest amendments in the law and in the mode of receiving scientific evidence. The result has been that the lawyers, while approving other parts of the essay, have objected to the law being meddled with; the 'Social Science Review,' while approving the strictures on the law, has complained that any fault should have been found with Dr. Winslow; and others have even imputed it as a fault that all crime has not been considered to be insanity, and that a tirade against capital punishment has not been introduced. The comfort of the authors under these circumstances, is that if the different reviews were placed side by side they would neutralize one another.

Writing with inconsiderate haste, or stung by some irritating fancy, the 'Social Science' Reviewer has fallen headlong into a great "mare's-nest," and exhibits himself in a rather piteous plight. He has found that the authors of the pamphlet, though capable of "a measure of syllogistic argument," have started with false premises, and announces with some parade that "through them they fall." They have set up three kinds of insanity—intellectual, moral, and impulsive, it appears; and have then gone to work to show that Townley's case did not belong to any of these forms. But the argument, says the Reviewer, is fallacious, because insanity is gradational and cannot be divided into genera or species. One might, perhaps, wonder that any one should, even in his haste, believe that men writing of their own speciality would be guilty of so clumsy a contrivance and so palpable a blunder as that which the Reviewer thinks he has exposed. What, however, if it should be—as, indeed, all who know the elements of mental science know it is—that a division into cognition, feeling, and volition, is exhaustive of the mind? And if the authors, wishing to be systematic, thought well to prove first that Townley's intellect was sound; secondly, that in his moral qualities or affective life there was no evidence of disease; and, thirdly, that there was no evidence of disease interfering with the due exercise of

volition,—will the editor of the 'Social Science Review' inform them what mind there was left to be mad? When you have taken away a man's intellect, and his emotions, and his will, it would be interesting to learn what mental faculty he was still in possession of. It is truly a very dangerous thing to be energetic. The moral of this "mare's-nest" is one which the best Reviews all recognise, namely, that articles on special subjects should always be entrusted to men who have specially studied the subject. It is unfortunately a much harder matter for any one to learn his limitation than it is to let an untutored fancy sweep vaguely through the universe.

Even if the authors of 'Insanity and Crime' had been guilty of setting up their own nine-pins, and then knocking them down again, as the Reviewer says, they still had not failed—which he forgets to say—to point out that Dr. Winslow's theory was a scientific incoherency. Whatever the 'Social Science Review' may think, there is so much definite knowledge of insanity as will enable a moderately skilful person to recognise a patchwork theory of incompatibilities when he examines it. And the fact that the commentary on Townley's case was in the press before the report of the second commission, by which it has been so fully justified, made its appearance, may show that all is not merely vague guess-work in matters of insanity. We should very much like to have from those who still believe in Townley's insanity—if there be any such—a definite statement of the facts upon which they found their opinion, such a statement as they would have to give in writing out a certificate of lunacy.

The second point of failure which the critic has detected is, that the authors have concluded, as he says, unwarrantably, that there was no delusion on the 10th of November, 1863, when Dr. Winslow examined Townley, because there was none on the 28th of January, 1864. The authors have not done anything of the kind; they spoke distinctly enough of the first commission *which reported on the 28th of December*, and not of the second commission *which had not reported* at the time when they wrote. Moreover, Dr. Winslow did not discover the so-called delusion as to a conspiracy at his first interview in November, but at his second inteview with the prisoner on the 10th of December, the *day before the trial*. These are strange mistakes for a Reviewer to make, if they are accidental. But there is yet another: Dr. Winslow never examined Townley at all on the 10th of November, but on the 18th. It matters not much, however, whether the interval between the discovery of the supposed delusion and the exposure of its real character was a few days or a few months; the supposed delusion, as it was described, contained every element of suspicion, and we do not wonder that Dr. Hitchman did not detect it. The 'Social Science Review' may consider it "a novelty which is remarkable only for one development," for any one to suspect Dr. Winslow of making a mistake; but if the editor of that journal will refer to the trial of James Atkinson which took place at York, in December, 1858, he will be, perhaps, surprised at what the 'expert,' who goes with the object of finding insanity, unconsciously biassed as he necessarily is, may actually discover. Atkinson had cut his sweetheart's throat, because she was going to give him up. "I have had this on my mind," he said after the deed, "for three weeks; and I told her I would murder her if she would not have me." The defence of imbecility was set up, and Dr. Winslow, who had examined him as expert, gave evidence that "he answered with difficulty questions which a child of five or six years of age would have readily understood;" that "he did not know whether the Queen was a woman or a man;" that "he did not know he was in York Castle, or whether York Castle was in Yorkshire or in London;" that "he did not know who our Saviour was;" and that "he did not know whether hell was in Yorkshire or London." In fact, "this

was a case respecting which he (Dr. Winslow) had not the slightest doubt, and he never saw a case clearer to his mind." Although such testimony of imbecility was given, however, the prisoner's father "had named him as one of his executors in his will, made two years ago." Some letters, too, which were written by the prisoner while in prison awaiting trial, and which may be found in the 'Journal of Mental Science' of April, 1859, reveal a very different sort of mental incapacity from that which was testified to. Although the prisoner "did not know he was in York Castle," he heads one of these letters *York Castle*, Nov. 17, 1858; although "he did not know whether the Queen was a woman or a man," he had regular intercourse with the girl whom he murdered; although "he did not know who our Saviour was," he writes, "I hope you will forgive me, as the Lord says we must forgive one another;" and again, "The Lord can save to the uttermost. I hope she has fallen asleep in Jesus." And although he could scarcely answer questions which a child of five or six years of age would have understood, he writes, "It is a thousand pities that I did not value our souls' eternal welfare before it happened. The more I think about it the worse it is." Again, "I had it in my heart to put myself away, but my heart failed me after I cut her;" and again, "I feel that I shall deserve all that I shall get in this world." The prisoner was acquitted on the ground of insanity; and the following extract, copied in the 'Times,' Dec. 28th, 1858, from the 'Leeds Mercury,' tells the rest of the story. "After his acquittal, the prisoner coolly walked from the bar into the dock, where he was engaged for nearly two hours intently reading a book. Since his trial he has put off the supposed *imbecility* which he displayed before the medical witnesses, and conducted himself with as much rationality, intelligence, and acuteness, as any prisoner in custody." And if the editor of the 'Social Science Review' would trace the subsequent history of James Atkinson, he would hear nothing of imbecility or insanity, but would hear of a selfish, cunning, and bad man. When, therefore, he says that the authors of 'Insanity and Crime' should have avoided any unfavorable comments upon the medical evidence in Townley's case, because the public may get a low opinion of mental science from such strictures, we reply that it would be very much better that the public should not believe in the existence of any mental science at all than that such evidence as Dr. Winslow gave in the cases of Atkinson and Townley should be thought to represent it. As a matter of fact, it is such cases that have destroyed the value of medical evidence in insanity, and have prevented the establishment of a more just law with regard to insanity.

The third and worst fault in the opinion of their critic is, that the authors have guarded themselves from saying that Townley may not possibly become mad in prison. This candour he finds "beyond endurance;" and adds "Do convicts of 'low moral powers' usually go insane during penal servitude? We know of no facts to give support to that hypothesis." We must simply reply—for we can afford no more space—that if the editor of the 'Social Science Review' does not know that the effect of prison discipline has been, and is, to produce insanity, he ought to have known a fact so notorious in every civilized country, and which is of so much importance in real social science.

Only a regard for the great scientific attainments of its editor has induced us to undertake the unprofitable task of replying to criticism; and we do not think it necessary, as it certainly would not be interesting or instructive, to notice any other of the reviews which the pamphlet on 'Insanity and Crime' has called forth.

Sir George Grey's Amended Act.

"The announcement by Sir George Grey that it was 'the intention of her Majesty's Government to propose an amendment' of the Insane Prisoners Act, gave universal satisfaction, as affording a hope that we might thereby gain some compensation for the lamentable miscarriage of justice in the Townley case. Probably, some simple-minded lovers of 'the true and just' hoped for even more than this. They may have reasoned—'the whole law relating to criminal insanity is felt by all to be in a most unsatisfactory state; there are no great and engrossing subjects of domestic policy to absorb the time and energies of Government and Parliament; while the consideration of criminal insanity, in some degree, will be forced upon them by this Act: surely, then, we may look for some large and statesmanlike measure of legislation on the subject.' Well, the Home Office has been in labour on the matter; and what has it brought forth? We cannot make use of the well-known classical quotation on the occasion; for the entire absence of any grandeur or loftiness of conception in the present 'superior clerk' of that department of the Government would render that degree of comparison between parent and bantling ludicrous; but if the throes of parturition are in any measure proportioned to the product, the friends and admirers of Sir George Grey may, at any rate, feel assured that his health and strength have not undergone any severe strain. The proposed legislation is confined to the amendment of Act 3 and 4 Vict., cap. 54; and what does the amendment amount to? The certificate of insanity is to be signed 'by two or more of the visiting justices,' instead of 'by any two justices,' and 'by two physicians or surgeons selected by them,' instead of "by any two physicians or surgeons;' and on the receipt of such certificate, the Secretary of State 'may, if he think fit,' direct further inquiry into the case before directing the removal of the prisoner, while the present Act only provides that 'it shall be lawful' for him to order such removal at once. The amended Act is to apply to England alone, so that there will be 'one law in operation in England, another in Scotland, and another in Ireland.' It seems a very sorry piece of patchwork legislation; but it was foolish to hope for more. We must suppose that Sir George Grey approved of the present Act, or it would have been amended long ere this; and as legislation on the matter has only been forced from him by popular indignation, it is natural that he should do as little as possible, and should make the amended Act as like as possible to the present one. Still, the amendments are improvements; and we are taught that we ought to be thankful for even the smallest mercies, though it is scarcely to his civil governors that an Englishman looks for such teaching. How the amended law is to be set in action does not appear on the face of it. Sir George Grey says, 'by those who have to act;' but the phrase, 'if any person . . . . . shall appear to be insane,' is precisely the same in both Acts, and we know that in Townley's case the Act was set in motion by his own solicitor. That the justices shall be 'two or more of the visiting justices,' may be an improvement on the 'any two justices,' but certainly a very infinitesimal one, for the visiting justices do not appear to be appointed on account of any other fitness than the propinquity of residence to the gaol. That the required 'two physicians and surgeons' should be selected by the visiting justices, instead of by the friends or solicitor of the prisoner, is a decided change for the better; though it cannot be said that any assurance is thereby given that these gentlemen should be selected on account of their possessing any experience of insanity, or any special skill in the diagnosis of mental disease,

or in unravelling complex and difficult points of evidence; nor is any safeguard given against their being men ruled by special theories of insanity or moral depravity. We do not learn what is to be the form of the certificate. The present Act simply states that 'it shall be duly certified by such justices and such physicians and surgeons that such person is insane;' but as it is required that ordinary certificates of lunacy shall state the symptoms on which the diagnosis had been formed, we must suppose that the words 'duly certified' mean that the certificate shall be framed like the ordinary legal certificate of insanity; it would be an injustice to Sir George Grey to imagine that it need be only 'a deliberate and recorded opinion,' without containing the grounds on which that opinion had been arrived at. We allow, then, that Sir George Grey's Amendment Act will be better than the Act 3 and 4 Vict.: but, at the same time, we think that this mode of determining as to the sanity or insanity of a condemned criminal is inadequate and wrong. It will, we believe, be generally felt that it is not fit or just that such an inquiry should be committed to a private tribunal composed of two or more justices, and two medical men of their selection. Publicity is the very genius of English justice, and it is imperative that it should be afforded as far as possible under all circumstances. Questions of insanity are, perhaps, not always best tried by ordinary juries; and in the case of a prisoner condemned to death, and after conviction reputed insane, what is called the true English mode of trial by judge and jury would probably be too slow and cumbersome a means of arriving at the truth. The examination ought, we think, to be entrusted to a commission appointed by Government; and their report should be made public, whatever their decision may be. And, we believe further, that the commission ought to consist of medical men eminent for their experience and knowledge of insanity—the very subject, that is, about which the inquiry has to be made. The opinions expressed in the House of Commons during the debates on Sir George Grey's bill on the unfitness of medical practitioners to deal with this question, would be amusing, were not the matter one of such vital importance. Some members would permit of a mixed commission, composed of medical men and lawyers, while others would not admit medical men at all; and the latest and most pregnant proofs of the soundness of these opinions are the reports of the two commissions in Townley's case;—the first from a mixed commission, having been a hesitating compromise, which left the matter pretty much where it was before; while the second, composed of medical men only, was so clear, logical, decided, and scientific, that it satisfied every one, and removed all the doubt and confusion which had gathered round the case. As to the machinery by which Government should be moved to appoint a commission, we are inclined to think that a statement from the governor and surgeon of the gaol, that such and such a convict had become insane, would meet all requirements. It is greatly to be regretted that Government has not seen fit to take the opportunity of amending the law generally as regards criminal insanity, and of making it more consonant with the knowledge, science, and humanity of the age; and we cannot but hope that Sir Fitzroy Kelly, or some equally competent private member of Parliament, may bring in a bill to supply the neglect of her Majesty's ministers.

"We cannot now discuss the question of how medical science may be best employed to elicit the truth in cases where insanity may be pleaded; but we would direct our readers' attention to an able and temperate pamphlet on 'Insanity and Crime,' lately put forth by the editors of the 'Journal of Mental Science,' in which they will find some very judicious and admirable remarks on the subject."—*Medical Times and Gazette*, February 27.

The Medical Profession and Certificates of Lunacy.

At an extraordinary meeting of the Royal College of Physicians of Edinburgh, held on February 19th, 1864, the following resolutions were moved, seconded, and unanimously agreed to:

"1. That the Royal College of Physicians of Edinburgh recognises it to be its duty, in accordance with its original charter (1681), to promote medical science, and also to protect the interests of the medical profession and of the public; and that, accordingly, the college has endeavoured, on various occasions, to establish a sound relation between the profession and the public in the matter of certificates in lunacy.

"2. That the duty of signing certificates in lunacy is one at all times painful and disagreeable, and one peculiarly liable to bring the medical man discharging it into collision with the patient or his friends; and therefore one of which, were it practicable, the college feels satisfied the profession would gladly be relieved.

"3. That the duty of signing certificates in lunacy appears, nevertheless, to the college indispensable as a part of medical practice; and that both the public interest and the welfare of the insane themselves require that it shall be performed as freely as is consistent with proper securities against abuse.

"4. That the peculiarity of the position of medical men in signing such certificates is, that they are thereby brought in contact with persons who are not in full possession of their senses, and who, even after their discharge from an asylum, frequently retain a prejudiced or revengeful feeling against those by whom they were placed under treatment.

"5. That the Royal College of Physicians approves of every reasonable security being given to patients and their friends in regard to confinement in asylums, and therefore was in favour of Section XXXVIII of the Lunacy Act (Vict. 20 and 21, cap. 71), which provides that, 'If any person shall grant any such certificate or statement as aforesaid without having seen and carefully examined the person to whom it relates, at the time and in the manner specified in such certificate, with a view to ascertain the condition of such person to the best of his knowledge and power, he shall be guilty of an offence, and shall for every such offence be liable in a penalty not exceeding £50; and if any person shall wilfully and falsely grant any such certificate, to the effect of any person being a lunatic, the person so granting such certificate shall be guilty of an offence, and for every such offence be liable in a penalty not exceeding £300, or to be liable to imprisonment for any period not exceeding twelve months.' Prosecutions for these offences would be undertaken by a public prosecutor, who may be supposed to act without prejudice in the matter.

"6. That the Royal College of Physicians has repeatedly endeavoured, during the progress of recent legislation in lunacy, to secure the introduction into bills before Parliament of clauses extending to medical men some protection, unless in cases where they have signed certificates in lunacy without 'probable cause.'

"7. That the Royal College of Physicians is still of opinion that the legislature, which imposes by statute on medical men the duty of signing certificates in lunacy, is bound to give them some protection in honestly endeavouring to discharge that duty. The college therefore instructs the council to spare no efforts to secure the introduction of a clause affording some protection, into any measure which may be brought before Parliament during the present session."—*Edinburgh Medical Journal*, March, 1864.

*Mr. Charles Reade's 'Hard Cash.'**

"This work is an exposure of what the author considers the abuses of the law, in so far as it deals with private lunatic asylums, though, as the story belongs to the date of 1847, it may be supposed that some of Mr. Reade's satire is now inapplicable. He, however, is prepared with whole hosts of cases — extracts from blue-books and law reports — to show the literal accuracy of all his statements, and he calls his tale 'a matter-of-fact romance.' The fiction, therefore, with which we have now to do is of a composite order, and cannot be measured wholly by the standards of fiction. What Mr. Reade can do in the region of pure fiction is best seen in his first volume, before he gets entangled in the intricacies of lunatic law. His first volume is delightful. There are descriptions of Oxford life, and sea life, and little scenes of lovemaking, which are as enticing as anything of the sort we know. The picture of a boat-race on the Thames is perfect. These chapters could not be written but by a man of true genius; nevertheless, they are here and there defaced with a mannerism which a man of Mr. Reade's education ought to despise. It is the merest affectation to express a whisper in print by the use of very small type. Another affectation is the use of broken sentences, in which the author chiefly indulges at the commencement of his work, before he has whipped himself up to his proper pace. These mannerisms are all the more unpleasant, because in a man of Mr. Reade's power they are quite needless. He can write with such clearness, and he has so much to say, that he can afford to be simple, and to dispense with false adornments. One of the most pleasant things in his writing is that it seems to come from a full mind. He carefully studies and reads up for his subjects, and takes a pride in cramming his pages with matter. He may be right or wrong, but there is no thinness in his style. He may be rough and rude at times, but he has always mass and weight. Over and above this, he has a clear perception of character, and can paint it well. Sometimes he is apt to caricature, but generally his personages are lifelike. He is excellent in criticism; he is very good in the description of some pathetic scene; his chief fault arises out of too strict an adherence to fact—too sure a reliance on the artistic value of fact.

"What does Mr. Reade mean by calling his tale a 'matter-of-fact romance?' No novel is worth reading which is not founded on fact, and which does not look like fact. But it is a peculiarity of facts that often they do not look like facts; hence the hackneyed phrase that they are stranger than fiction. It is thus a point of the greatest difficulty to discern what are the facts which can be used as fiction, and what are the facts which it would be necessary to reject. Poor Mr. Thackeray's friends teased him a little for the melodramatic conclusion of his last novel, in which a lost will was suddenly extracted from the sword-case of an old broken-down chariot. He had so little sympathy with what was melodramatic, sought so systematically a mode of treating incidents which would be free from surprises, that he always took this bantering in good part, and he defended himself by saying—'It is no story, it is a fact,' and by describing how it occurred to a family in the north of England. Now, this is the very point at issue in the present case. On the title-page of his novel, and in a letter at the end of it, Mr Reade boasts of his facts; but good facts may be bad art. The author wishes to produce a certain practical effect, and he resorts to fiction as the most impressive

* 'Hard Cash; a Matter-of-fact Romance.' By Charles Reade. 3 vols. London: S. Low and Son.

means of gaining his end. But he ought to see that if this be his view, he ought to use fact with moderation. Eccentric fact makes improbable fiction, and improbable fiction is not impressive. That Mr. Reade has written an exciting story is undeniable, and that he will lead people to inquire into the truth of his views is also likely enough; but he would probably produce a still more powerful effect if he treated fiction as fiction, and reserved his facts for a more sober and direct appeal to the public. Among these facts, which had better have been reserved, let us refer to the character and the opinions of Dr. Sampson. Dr. Sampson is the very extraordinary portrait of a London physician, a Scotchman, who has fought single-handed with the medical faculty, and has promulgated, under the name of chronothermalism, a theory of disease. Dr. Sampson speaks a strong Scotch dialect, denounces the medical profession in no mincing terms, and has written against them, both in prose and verse. He is perfectly well known; it is impossible to mistake the author of the theory of chronothermalism. The doctor is a very clever man, a man of character, whom any writer of fiction would like to study for one of the personages of his tale. Mr. Reade has taken him, and given him a very prominent place in 'Hard Cash.' He has shown him in all his kindliness of heart, all his shrewdness, all his pugnacity, all his extravagance, all his curious English. How far it was right, or in good taste socially, for Mr. Reade to draw such a portrait, which, were it only by the name of chronothermalism, would be instantly recognised, we do not stay to inquire; we condemn the introduction of such a portrait as an artistic error. Dr. Sampson's theories may be right or wrong, but it serves no good end to make a novel the means of sustaining a medical polemic. We have heard of religious novels and political novels, in which creeds and parties are satirised or commended, and we know not that fictions of this order have ever gained much esteem; but here is a medical novel of the same type, and are we to suppose that what is of doubtful success in politics and religion is to be of assured success in medicine? That in the views which Mr. Reade espouses there may be much truth we doubt not. Every profession has its quackery, and in the medical profession, which is a scientific one, quackery must be more discernible, by reason of its antagonism to science, than in any other. Be it so; but we are convinced that a novel is not the place in which one can best expose quack medicine. Mr. Reade, let us in justice add, has a great authority on his side. Molière covered the physicians of his day with ridicule.

"Mr. Reade concentrates his attack upon doctors generally into an attack upon the mad doctors, and into an exposure of the facility with which a man can, through their means, be entrapped into a lunatic asylum, and of the difficulty of getting out. Here, again, Mr. Reade has facts to go upon, and we are ready to believe that cruel wrongs are sometimes committed by the incarceration as lunatics of persons who are perfectly sane. In the law reports of our own columns it would not be difficult to point to instances of this kind. It was not long since we had to report the case of 'Hall v. Semple.' But Mr. Reade, while professing to adhere to matter of fact, cannot help generalising, and leads the reader insensibly to conclusions which, if he were stating his case in another form, he would not be likely to suggest. Getting hold of a few facts, and putting these into the form of fiction, he so works up a story, that the incautious reader is apt to imagine mad doctors to be scientific scoundrels, lunatic asylums to be a refined sort of Tophet, and the commissioners in lunacy and visiting justices to be a flock of sheep. This is the untruthful exaggeration of fact jumbled with fiction; an untruthfulness of which Mr. Reade could not be guilty if he were to state his accusations broadly in general terms; no matter on how many facts it may be founded, there is in every fiction an implication which Mr. Reade has not

taken into account, when he stated his facts against the private lunatic asylums in the form of fable; he has in this respect overshot his mark, and runs a risk of having views which, if soberly stated in another form, might command assent, stoutly resisted and thrust aside as the hallucinations of an eccentric genius. Our private asylums are not perfect, and the methods of admission into them require to be revised. The destruction of a man's liberty is a serious thing, and especially when this can be effected in private, at the instance of a single member of his family. No safeguards can be too stringent to prevent the commission of wrong under the sanctions of the law. If Mr. Reade will state his case as it ought to be stated, and will point out the remedies, the public will gladly listen to him, and his eloquent pleading will go far to the bringing of redress: but a novel is a suspicious mode of agitation, and, though it may excite some inquiry, is not likely to effect any reform.

"We should be sorry if, because we object to Mr. Reade's novel as a mode of argument, we were supposed to condemn it as a means of entertainment. On the contrary, it is one of the most interesting of the series that has appeared in 'All the Year Round.' Mr. Reade is a man of rare power, and, though he is too fond of taking airings on his hobby, he makes his hobby canter very gaily before us."—*The Times*, January 2nd, 1864.

The Lunatic Asylums of Sydney, New South Wales.

(The Sydney 'Morning Herald,' November 29th, 1862; the Sydney 'Weekly Empire,' November 21st, 1862.)

At the meeting of the New South Wales Parliament on the 28th of November, 1862, a long discussion on the condition of the two Metropolitan Asylums at Tarban Creek and Parramatta, took place. One of the members, Mr. Holroyd, observed "that he had, for many years past, made the investigation of cases of insanity, and a proper treatment of the insane, subjects of very particular study, and desired to say that in the prosecution of that study he had made it his business to visit several of the institutions for the care and management of lunatics in different parts of Europe. He had several times visited the asylums at Tarban Creek and at Parramatta for this reason and—without intending to cast any personal imputations upon the medical gentlemen under whose management those institutions were—he must, nevertheless, take leave to say that he had been altogether surprised and shocked at the entire want of classification of the insane in those institutions, and indeed at the general management of the lunatics there confined. He had visited many of the institutions of the kind in the course of his life, but with one solitary exception, he had never seen any worse managed than these two asylums at the time that he visited them, about two years ago. The exception to which he alluded was the case of the madhouse at Cairo, in connection with the Government of Mahomet Ali Pacha in Egypt, to which he would make some further reference presently. He had found that at these two asylums no management or classification of any kind existed, and he firmly believed that in no town in Europe could a similar establishment be found in which the treatment of the insane was of a more unscientific and unsatisfactory character. He had known ladies of high position, against whom there was nothing whatever but their unhappy mental affliction placed—for it was a perversion of language to say "classed"—with scores of women who had been prostitutes of the lowest description. Such afflicted persons, without any regard to their habits and previous condition, were all thrust into the same yards as those occupied by degraded creatures,

to whom they must naturally, and on every consideration, feel an instinctive and insurmountable repugnance. Such treatment alone would be likely to aggravate their malady. The inmates were all confined and subject to the same general treatment, without amusement, or comfort, or classification of any kind, with nothing whatever to distract them from the melancholy condition in which they were, or to lead them, if possible, to a calmer, happier state of mind.

"It was within his knowledge that in cases of supposed insanity the mode in which the afflicted persons were treated was often marked with undue haste and severity—to give it no worse name. He knew of a lady who was arrested in the open street by a warrant, like a common felon, and was through the intervention of her attorney, in the course of an hour afterwards, discharged from custody. She was known to him (Mr. Holroyd) as being occasionally subject to certain hallucinations which she had described to him, and of which she was herself not unaware. On her discharge from custody this lady—who had some property of her own, about two hundred a year—took a cottage and lived for some time in retirement. She was subsequently, at the instance of her husband, as late as nine o'clock of a Sunday evening, again, and not, he believed, without violence, arrested, hurried off to Tarban Creek Asylum, and there had since been left for more than five years. The husband of this lady was a person occupying an influential position as a mercantile man in this city, and the lady was the mother of two sons, one in the Government service, and the other studying the profession to which he (Mr. Holroyd) belonged. He was glad to hear that it was intended to have an inquiry into the present state of the lunatic asylums of this colony, and into the question, generally, early next session. The present Lunacy Act was a disgrace to the colony, and a blot upon the statute-book. It was quite possible that when any person was apprehended under that Act there might be such an unusual degree of excitement as might be likely to mislead the medical man—especially if the supposed lunatic was seen by him for the first time. It was high time that the law was altered in many respects, and that the management of these institutions was conducted in a more satisfactory manner, and upon more humane and scientific principles.

"At the asylum of Cairo, under the Egyptian Government, he had found the unhappy lunatics confined like wild beasts in separate cells, naked and in chains; he had reported that horrible state of things to the Egyptian Government through Dr. Bowring, and had had the satisfaction of knowing that there had been a considerable alteration for the better in consequence. That was the only asylum he had seen worse managed than those of this colony. He looked with sorrow and pain at the way in which lunatics were treated at Tarban Creek and at Parramatta. He said this, not wishing to cast any imputation upon either of the medical gentlemen who had charge of those institutions, but desiring that the necessary changes should be made. He had known both of those gentlemen for some years, and one of them was at college at the same time as himself. He believed Dr. Greenup to be a very humane man, and he had no reason to entertain any less favourable opinion of Dr. Campbell. Still, he felt bound to state what was his opinion of the present system pursued at these two asylums. He had witnessed horrible scenes in the yards between the lunatics, especially the females, who were usually more susceptible of violent impulses than the opposite sex."

Another member, Mr. Dalgleish, said that "a man named Bovis, discharged as cured from the Tarban Creek Asylum, had called upon him and had informed him that the lunatics were there treated with an unjustifiable severity. This man had given him a fearful description of the treatment which the lunatics received at that institution, as to which he

(Mr. Dalgleish) did not profess to offer any very positive opinion. He stated that on one particular day of the week—Friday morning, he thought—the patients were roused up out of their beds before daybreak, stripped all of them naked in one room, and washed by the keepers—any poor creature that made the slightest resistance being beaten, knocked down, and kicked into submission. When one of the lunatics died, no decency was observed, but the corpse was carried naked from the place in which the death had occurred, in the presence of the inmates, having a most exciting effect on their minds. The man stated that although the commission had declared him to be perfectly cured, it was some time before he could obtain a release from the asylum; also that when he was released he was sent out without a cover on his head or a place of shelter to go to, and without a morsel of food to eat. What was to be expected from a man placed in such a position? Was he to steal to obtain a livelihood? He had given the name of the man, in order that the matter might be fully considered. He had seen the certificate which stated that the man was perfectly cured. The man had, in relating these circumstances, drawn a comparison between Parramatta and Tarban Creek, and stated that at Tarban Creek every attention was paid to the inmates, although there was a great want of room and accommodation, and although patients who were raving were often placed in the same place with those who were nearly sane. But with regard to the asylum at Parramatta, as the man described it, suicide would be preferable to going there again. He believed that all that the man said was true, and that he was not in the slightest degree touched with insanity when he made the statement."

The Roman Bath as a Curative Agent.

"In the 'Fifth Annual Report of the Sussex County Lunatic Asylum,' just issued, Dr. Lockhart Robertson publishes some important remarks on the Roman Bath as a curative agent. He relates a case in which a patient was admitted with symptoms of mania, complicated with dropcy and albuminuria of the most severe character. The patient was in a desperate state, menaced with dementia and paralysis, and apparently dying from the extent of kidney-disease. Dr. Robertson states that the bath saved the patient's life and restored him to reason. Dr. Robertson observes that the therapeutic uses of the bath have yet to be studied. He believes them to be very great. Of its curative power in the early stages of phthisis he has had several examples, and he can confirm all that Dr. Leared reports of its action in the early stages of that disease. He (Dr. Robertson) longs to see the bath fairly tried in zymotic diseases. He believes, if used at sufficiently high temperatures (170°—200°), the results will astonish us all. If anything ever can cure hydrophobia it will be the Roman bath at 200°, continued for many hours. He has published previously some cases of melancholia, with refusal of food, successfully treated with the Roman bath, and has since then regularly used it in his practice at Hayward's-heath. We believe that the Roman bath employed as a curative agent will lessen, and in some instances successfully arrest disease. Details of confirmed secondary syphilis treated by the Roman bath with mercurial fumigation at Messrs. Pollard's establishment at Brompton have been sent us, in which it is stated that the eruptions subsided, and the general symptoms were ameliorated, after the use of a few baths. Mr. Henry Lee, we learn, has found this mode of treatment beneficial in many instances."—*The Lancet*, March 19th.

Mr. Nunn on the Study of Psychological Medicine.

"There is one branch of medicine to which I will venture to take this opportunity of directing your serious attention, which you cannot study in a general hospital—I allude to psychological medicine—the study of mental disease. It is almost humiliating to think how this branch of the healing art has been neglected. It cannot in future prove to be a rare occurrence for you to be called upon to deal with insane patients, when it is taken into account that there are in England and Wales between thirty and forty thousand pauper lunatics, and, perhaps, between six and eight thousand other insane persons. The chances of cure for such so afflicted in a great measure depends on the obtaining early treatment; a serious responsibility, therefore, rests on those under whose observation they first fall."—*The Inaugural Lecture delivered at the Middlesex Hospital*, October 1st, 1863.

The Cornwall Lunacy Case.

"The trial of Samuel Porter, of Flushing, near Falmouth, for maltreating and wilfully neglecting his brother, Robert Porter, a lunatic under his charge, was concluded on Thursday, March 17th, before Mr. Baron Martin, at Bodmin. The case, it will be recollected, created a great sensation a few months ago. It is sufficient to say that all the allegations as to the horrible condition of filth and neglect in which the lunatic existed when discovered by Dr. Byrne were entirely proved by the evidence of the Commissioners and himself. The jury found the defendant guilty of neglect, but added the following extraordinary and disgraceful clause to their verdict:—'That they recommended him to mercy, on the ground that they did not think he was aware of the law.' Sentence was postponed till the opinion of the Court of Appeal shall be known on a point of law raised by the defendant's counsel. It was urged by his counsel that the statute under which the indictment was drawn referred only to persons keeping asylums or taking in lunatics for hire; and a case was cited which was allowed by the judge to have some bearing on the question, in which it was decided that a husband could not be considered to have 'care and charge of a lunatic wife within the meaning of the statute, as such a charge was only of a domestic nature.' If this be valid law, the very fact of the relationship of the prisoner to the poor wretch—a circumstance which, if anything can do so, enhances tenfold his barbarity—places him out of the reach of retribution. Such a miscarriage of justice is not unlikely, for the man has been discharged on his recognisances to appear in case the Court of Appeal decide against him."—*Medical Times*, March 26th.

Publications received.

'Topics of the Day, Medical, Social, and Scientific.' By J. A. Hingeston, President of the Brighton and Sussex Medical and Chirurgical Society. London, Churchill and Sons; pp. 400.

See Part II, *Reviews.*

'Principles and Methods of Medical Observation and Research, with copious Nosologies and Indexes of Fevers, and of Constitutional, Cutaneous, Nervous, and Mental Diseases.' By Thomas Laycock, M.D., Professor of

the Practice of Medicine and Clinical Medicine, and Lecturer on Medical Psychology and Mental Diseases, in the University of Edinburgh. Edinburgh, Maclachlan and Co.; pp. 403.

See Part III, *Quarterly Report on the Progress of Psychological Medicine.* II, *English Psychological Literature.*

'A Practical Treatise upon Eczema, including its Lichenous, Impetiginous, and Pruriginous Varieties.' By T. M'Call Anderson, M.D., F.F.P.S., Physician to the Dispensary for Skin Diseases, Glasgow. London, Churchill and Sons; pp. 134.

'Notes of Researches on the Intimate Structure of the Brain. Third Series.' By L. L. Clarke, F.R.S. (From 'Proceedings of the Royal Society,' vol. xii, No. 57.)

See Part III, *Quarterly Report on the Progress of Psychological Medicine.* II, *English Psychological Literature.*

'Notes on Hospitals.' By Florence Nightingale. Third edition, enlarged, and for the most part re-written. London, Longman and Co., 1863; pp. 187.

Will be fully reviewed in the 'Journal of Mental Science' for July.

'The Calabar Bean.' By Thomas Fraser, M.D. (Reprint from the 'Edinburgh Monthly Journal.')

'Commentaires Médico-Administratives sur le service des Aliénés.' Par L. F. E. Renaudin. Paris, 1863; pp. 344.

'The Insane in Private Dwellings.' By Arthur Mitchell, A.M., M.D. Aberd., Deputy Commissioner in Lunacy for Scotland. Edinburgh, 1864; pp. 97.

See Part III, *Quarterly Report on the Progress of Psychological Medicine.* II, *English Psychological Literature.*

'A new method of treating Disease through the agency of the Nervous System, by means of Cold and Heat.' By John Chapman, M.D. London, Trübner and Co.; pp. 74.

See Part III, *Quarterly Report on the Progress of Psychological Medicine.* II. *English Psychological Literature.*

'The Science and Practice of Medicine.' By William Aitken, M.D. 2 vols., second edition. London, Griffin and Co.; pp. 727 and 1095.

This is a most careful and complete handbook of the art of medicine, including in the term the laws of health and medical geography. In every department of medicine the author records faithfully the results of the most recent investigations. It is a work worthy of a place on the work-table of every practitioner of medicine; it is, moreover, beautifully printed on toned yellow paper, which is so pleasant to the eye in candle-light.

'The Inaugural Lecture delivered at the Middlesex Hospital Medical College.' By Thomas William Nunn, F.R.C.S. London, 1863.

See Part IV, *Notes and News.*

'Etudes pratiques sur les Maladies Nerveuses et Mentales, accompagnées de Tableaux Statistiques suivies du Rapport à M. le Sénateur Préfet de la Seine sur les aliénés traités dans les Asiles de Bicêtre et de la Salpêtrière.' Par le Dr. H. Girard de Cailleux. Paris, 1863.

See Part III, *Quarterly Report on the Progress of Psychological Medicine.* I, *Foreign Psychological Literature.*

'La Folie devant les Tribunaux.' Par le Dr. Legrand du Saulle, Médecin-expert près le Tribunal Civil de la Seine. Paris, 1864 ; pp. 624.

To be reviewed in the July number of the 'Journal of Mental Science.'

'George Victor Townley. Copy of Correspondence with the Secretary of State for the Home Department, and of Orders and Warrants issued by him relating to the case of *George Victor Townley*.' Ordered by the House of Commons to be printed, 11th February, 1864.

'On Fatty Degeneration in Insanity.' By Kenneth M'Leod, M.D. Edin. ('Transactions of Northumberland and Durham Medical Society.')

See Part III, *Quarterly Report on the Progress of Psychological Medicine.* II, *English Psychological Literature.*

'Temptation: its Nature, Instruments, Effects, and Safeguards; considered in a Series of Three Lenten Sermons.' By the Rev. Arthur Baker, M.A. Mozley, London, 1864.

"From the writer, who since the publication of these sermons has read with much interest, and with general (though exceptional) acceptance, the essay on 'Insanity and Crime,' by the Editors of the 'Journal of Mental Science.'"

County Asylum Reports, 1864.

The following Annual Reports for 1863 have been received.

1. The nineteenth Report of the Committee of Visitors of the County Lunatic Asylum at Hanwell. January Quarter Sessions, 1864.
2. The thirteenth Annual Report of the Committee of Visitors of the County Lunatic Asylum at Colney Hatch. January Quarter Sessions, 1864.
3. The Annual Report of Dr. Parsey, M.D. Lond., Medical Superintendent of the Warwick County Lunatic Asylum, to the Committee of Visitors. January 8, 1864.
4. Fifth Annual Report of the Sussex County Lunatic Asylum (Hayward's Heath). January Quarter Sessions, 1864.
5. Eleventh Annual Report of the Killarney District Lunatic Asylum for the year 1863. Dublin, 1864.
6. Twenty-sixth Annual Report of the Suffolk Lunatic Asylum. December, 1863.
7. Tenth Annual Report of the County and City of Worcester Lunatic Asylum. Worcester, 1863.
8. Sixth Annual Report of the Medical Superintendent of the Provincial Hospital for the Insane, Halifax, Nova Scotia. Halifax, U.S., 1864.
9. Report of the Clonmel District Lunatic Asylum for the year ending 31st December, 1863, presented to the Board by Dr. Flynn, 1864.
10. Second Report of the Committee of the Society for the Education of Imbecile Youth in Scotland. Edinburgh, 1863.
11. Report of the Oxford Asylum at Littlemore, January Sessions, 1864.
12. Second Report of the Farnham House Private Lunatic Asylum, near Dublin. Dublin, 1864.
13. Thirty-seventh Annual Report of the Committee of Management of the Warneford Asylum near Oxford. Oxford, 1864.
14. Reports of the Trustees and Superintendent of the Boston Hospital for the Insane. January, 1864. Providence, U.S.

Appointments.

W. O'Neill, M.D. Aberdeen, has been elected Physician to the Lincoln Lunatic Hospital, *vice* D. Chawner, M.D., deceased.

Octavius Jepson, M.D. St. And., Medical Superintendent of St. Luke's Hospital, has been appointed Medical Superintendent of the City of London Lunatic Asylum, at Stone, near Dartford, Kent.

James Ellis, M.R.C.S., Assistant Medical Officer at Hanwell, has been appointed Medical Superintendent of St. Luke's Hospital.

Dr. Sankey has taken the provincial licensed house at Sandywell Park, Cheltenham, so long conducted by Dr. Hitch, formerly Medical Superintendent of the Gloucester Lunatic Asylum and the first Secretary of this Association, and who has now retired from the active practice of the profession. The Medical Superintendentship of the female department at Hanwell is consequently vacant.

Hargood, Frederick H., M.R.C.S. Eng., has been appointed Medical Superintendent of the Royal Lunatic Hospital, Liverpool.

Annual Meeting, 1864.

The Annual Meeting of the Association of Medical Officers of Asylums and Hospitals for the Insane will be held in London in July, under the Presidency of Dr. Monro, M.D. Oxon., F.R.C.P., Visiting Physician to St. Luke's Hospital. Notices, Communications, &c., for the Annual Meeting, to be made to the Honorary Secretary of the Association, Dr. Harrington Tuke, 37, *Albemarle Street, W.*

Notice to Correspondents.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Hayward's Heath, Sussex; or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents, Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York. Booksellers' parcels from abroad bring our exchange Journals with such irregularity, that we must request the Editors of the *Zeitschrift für Psychiatrie,* of the *Correspondenz Blatt* (and Archiv für Psychiatrie), of the *Irren Freund,* of the *Annales Médico-Psychologiques,* of the *Archives Cliniques*, of the *Journal de Médecine Mentale,* and of the *Archivio Italiano per le Malattie Nervose e per le Alienazioni Mentali,* to regularly transmit our exchange copies by *BOOK POST.* The copies of *The Journal of Mental Science* will in future be regularly sent *by Book-post* to our foreign Correspondents and Honorary Members,

and we shall be glad to be informed of any irregularity in the receipt of the 'Journal of Mental Science.'

The *American Journal of Insanity* is regularly received, as also our exchange copies of the *British and Foreign Medico-Chirurgical Review*, the *Dublin Quarterly Journal*, the *British Medical Journal*, the *Medical Circular*, the *Social Science Review*, the *Medical Mirror*, and the *Edinburgh Monthly Journal*.

Our Foreign exchange Journals have all reached us this quarter, with the exception of the *Zeitschrift für Psychiatrie*. We shall esteem it a favour if Dr. Laehr will transmit the January number by *BOOK-POST*. The *Archiv für Psychiatrie* has not been received for a year past. Mr. Harmann, Leipzig, would forward these numbers to us.

We have to thank M. Legrand du Saulle for his letter, February 12.

The numbers of the *Scotsman*, the *Edinburgh Courant*, the *Sydney Herald*, N.S.W., the *Worcestershire Chronicle*, the *Belfast News Letter* newspapers, and of the *Union Médicale*, received with thanks.

Copies of the article issued as a pamphlet by the Editors in February, "INSANITY AND CRIME; A MEDICO-LEGAL COMMENTARY ON THE CASE OF GEORGE VICTOR TOWNLEY," can be had by Members of the Association, on application to Dr. Robertson.

Erratum.—In the last number (January), at p. 613, line 18, for *Jake* read Tuke.

THE JOURNAL OF MENTAL SCIENCE.

No. 50. JULY, 1864. Vol. X.

PART I.—ORIGINAL ARTICLES.

The Classification of the Sciences.

So extensive is the field of human knowledge, so many and wide apart are the spots at which ground has been broken, and so evident is the necessity for men to be special in their studies if they would be thoroughly masters of their subjects, that there is no little danger lest workers in one department may be unappreciated by, if not actually unknown to, those who are employed in another part. Any one who will give his attention to the matter may observe examples of lines of investigation, which have really close relations, and the results of which might be of mutual aid, running side by side, like parallel lines, without meeting. Accordingly, M. Comte was of opinion that there was needed a new order of scientific men, whose function it should be to bring together and co-ordinate the results of the different workers; and it is plain that such an organisation must be effected somehow. But great mischief would of a certainty result from men specially undertaking this work: unless they are thoroughly and practically grounded in some science, unless they have plodded in patient and tedious investigation, they are almost sure to go astray into vain and seductive speculations, which are never definite enough to be useful, are often enticing enough to be mischievous. If a valuable idea is perchance hit upon, it is potential rather than real, as a statue is potential in a block of marble, though it has yet to be hewn out; it is so shrouded in theoretical haze, and so much wanting in exactness, that it is of no value until the patient work of the practical men has defined it, put it in its proper place, and so to speak guaranteed its worth. Even Goethe, exceptionally powerful as his mind was, and much as he worked, owed his scientific troubles and his scientific errors to a

want of practical knowledge. Those who have not had a scientific training must lack the scientific imagination.

Then again, such men would be apt to be continually discovering what was very well known; the idea being new to them, they think it must be absolutely new, and all the while it is familiar as a household word in the science. No better example of this disposition could be given than is afforded by Mr. Lewes, who has on several occasions blown the trumpet of discovery over a very elementary scientific notion, which was new to no one but himself. Not only has it not been a new idea in such case, but it has actually been more correctly interpreted and valued long ago than it now is by its new patron who has just awakened to its existence; for another fault of men like Mr. Lewes is that, being deficient in that exact knowledge which a practical scientific education can alone give, they overestimate the idea, do not appreciate modifying considerations, and make false by exaggeration what had some truth in it at first. Nothing is easier than to make discoveries in a science with which one has but a superficial acquaintance; nothing is more difficult than to make discoveries in a science when the knowledge of it is profound and practical. Divorce a scientific thinker from actual observation, and he is only a little less bad than the scholastic writers who, altogether divorced from nature, spun endless webs out of their own minds.

For the foregoing reasons it is questionable whether a sufficiently competent special order of men will ever be available for the coordination of the results of the different sciences—this highest task of the scientific intellect. It will be necessary to rely upon the coming of a special man, one who, excellently endowed by nature and thoroughly well trained, shall rise up by a natural necessity from his special department, and do the work of organization. The work in truth demands such special and uncommon gifts, and such a complete systematic scientific training, that a class of men equal to it can never be depended upon: one must rest in hope that whenever the material is sufficiently prepared the required man will appear. But of all men deliver us from those who make a profession of being universal—who will write you, with equal assurance, a sermon, a novel, a drama, or a scientific essay.

At the present time it behoves science to be especially on its guard against those who are metaphysically minded. "O physics," said Newton, "beware of metaphysics!" The danger is not now from an open adversary, but from a concealed enemy, which, having made its way into the camp under a disguise, watches its opportunity to be traitor. Metaphysics is a very subtle serpent, which has been severely scotched, but not killed; and knowing right well that an open appearance would be instant death, it creeps, with the cunning of its kind, into hidden crevices, and works its mischievous work in

secret. It would be no injustice to say that all that is valuable in recent metaphysics, all that really constitutes a progress, is not merely an unacknowledged but a disguised appropriation from the physiologist: it steals the physiologist's facts, drags them into its den, gives them new names, and then dares him to recognise or reclaim them. Reclaim them! Heaven forbid! They will bring their own retribution by turning the metaphysician out of house ultimately; but meanwhile he would do well to keep to his own ground: it is not to be tolerated that he invade the territory of true science, and establish his noxious business there. Metaphysics in its relation to science is not unlike a race of feeble natives in contact with the strong race of a vigorous and thriving colony, before which they must perish: feeble, like the degenerate native, it takes refuge in cunning, retreats to the bush, and for a time supports itself by stealing; but rendered bold by long impunity, or driven on by a fatal necessity, it makes a too impudent assault, and rushes upon its unavoidable end.

It is natural to expect that whilst this process of extinction is going on, as it seems to be going on at present, there should be marks of its different stages in current literature; for writers are the products of their centuries, and reflect the tendencies of their age. Sir W. Hamilton was himself scarcely a pure metaphysician, his chief merit lying in that in which he was not metaphysical; and since his death it has been hardly possible to meet with a metaphysician of any sort. Perhaps Mr. Mansel represents as perfect a specimen as can be found, and he is, so to speak, no more than a 'Religious Tract Society' edition of Sir W. Hamilton. While Mr. Mansel thus marks the extreme of backwardness, the present clinging to the past and unwilling to let it go, Mr. Bain, on the other hand, may be taken as the representative of progress; his elaborate and careful works on psychology must have rendered it a very hard matter for any one, however ignorant of physiology, again to write metaphysically about the mind. Intermediate between these two is Mr. Herbert Spencer, who has acquired a high position as a philosophical writer, but who yet bears about with him the badge of a metaphysical bondage. It was to him, however, that we wished to come, and have been labouring through the foregoing observations to come.

But what, it may be asked, have such discursive reflections to do with Mr. Spencer? Just this: that there appears to be some danger lest the value of so good and thoughtful a writer should be lessened, and his power be uselessly dissipated, by reason of a manifest disposition which he has to stumble into those bogs that have been indicated. Probably there is not in all literature another instance of so much being made of one idea as Mr. Spencer has made of Von Baer's idea of progress from the general to the special

in development; he has taken it up and hunted it with such a remarkable perseverance and ingenuity through every department of life, particular and general, that his results are sometimes fanciful. Then again, he has lately wandered into biological speculations which, though ingenious enough, have no sufficient basis in facts, and seem, indeed, to betoken an inadequate knowledge of what really has been done in the way of positive investigation. Lastly, he has offended by the exhibition of a metaphysical tendency which damages the savour of his science, and will greatly impede his usefulness, if it does not completely wreck him. He has this great merit, however, that he is not superficial; and, accordingly, he is instructive where he does not produce assent, not unfrequently stimulating the reader's mind to the severe examination of his reasons for dissent, and to the consequent formation of exact ideas. No apology, then, is needed for bringing specially to the notice of the readers of the 'Journal of Mental Science' a writer whom every one may read with the greatest profit, and, we may add, without reading whom one can scarcely be properly furnished for the scientific study of mind.*

Mr. Spencer's position as a thinker is fairly represented in his work on the 'Principles of Psychology,' published some years ago. In the first part of the book, a metaphysical notion that "a belief which is proved by the inconceivableness of its negation to invariably exist, is true," completely runs away with him into regions of infinite vanity; but of this test we need say no more here than that, in the stern grasp of Mr. J. S. Mill, it collapses, as a child's cleverly blown soap-bubble might be supposed to collapse in the hand of a giant. For the bubble was a cleverly blown one; and, in truth, it is the marvellous expenditure of ingenuity on such a vanity which is calculated to implant a distrust of Mr. Spencer as a thinker. The second part of the 'Principles' contains a valuable contribution to philosophical literature; and it is only a matter of surprise that any one who wrote that should have written the first part. Throughout all his other writings, however, a similar antagonism is traceable; and in the appendix to a recent essay it has broken out into an exposition of his differences from and agreements with M. Comte; the result of which must be, we fear, to produce a conviction that Mr. Spencer has an insufficient knowledge of Comte's writings.

In an essay on the 'Genesis of Science,' published in 1854, Mr. Spencer endeavoured to show that the sciences cannot rightly be arranged in any serial order, logical or historical. This was in opposition to M. Comte, who arranged them in succession thus:—

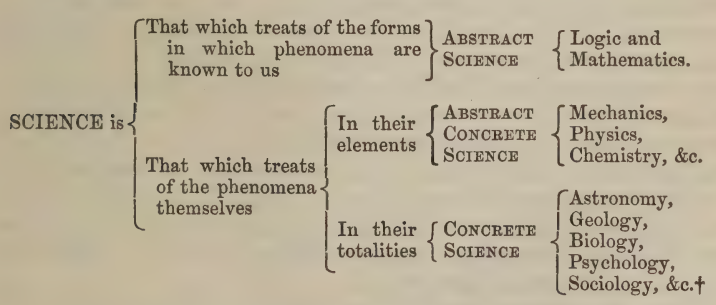
* The opportunity is favorable, as Mr. Spencer proposes to issue in periodical parts a series of works comprising — 1. First Principles. 2. The Principles of Biology. 3. The Principles of Psychology. 4. The Principles of Sociology. 5. The Principles of Morality.

Mathematics, astronomy, physics, chemistry, physiology, and sociology; such arrangement being, said M. Comte, "the only one which logically conformed to the natural and invariable hierarchy of phenomena." In an essay on the 'Classification of the Sciences,'* just published, Mr. Spencer points out how their relations may be, as he thinks, rightly expressed.

The broadest natural division among the Sciences is between those which "deal with the abstract relations under which phenomena are presented to us, and those which deal with the phenomena themselves." What are the sciences which deal with abstract relations? Those which deal exclusively with space and time, namely, mathematics and logics. "Space is the abstract of all relations of co-existence. Time is the abstract of all relations of sequence." Logic and mathematics, then, as dealing entirely with relations of co-existence and sequence, form a class of sciences widely unlike the rest.

The sciences which deal with existences themselves admit of a less profound sub-division. They fall into two classes according as we study (1) the component modes of force of each phenomenon, or (2) the entire phenomenon as a product of the several simultaneously acting forces or co-operative factors. "The truths reached through the first kind of inquiry, though concrete inasmuch as they have actual existences for their subject-matters, are abstract inasmuch as they refer to the modes of existence apart from one another; while the truths reached by the second kind of inquiry are properly concrete, inasmuch as they formulate the facts in their combined order, as they occur in nature."

Accordingly the sciences will stand thus:—



* 'The Classification of the Sciences: to which are added Reasons for Dissenting from the Philosophy of M. Comte,' by Herbert Spencer. Williams and Norgate, 1864.

† This table only represents the main division, although it must suffice for our purposes here: in three other tables, Mr. Spencer follows out the different subdivisions of each division, but the criticism of them in detail would be an unprofitable and interminable business.

It is obviously a first necessity, before proceeding further, to have a clear idea of what is meant by the term *abstract*. M. Comte divides science into abstract and concrete, but instead of considering some sciences as altogether abstract, and others as wholly concrete, he looks upon each science as having an abstract part and a concrete part, thus confusing, as Mr. Spencer thinks, the words *abstract* and *general*, which should, he says, have different meanings. Abstract means *detachment from* the particular; it is concerned with the essential nature apart from the phenomena; it is "rarely, if ever, realised in perception;" it is *drawn from* actual experiences, but never presented to us in any of them; it "formulates a truth which certain phenomena all involve, though it is actually seen in none of them." Such is Mr. Spencer's notion of the meaning of *abstract*, and it is plain from his words that he is not quite sure whether an abstract truth is sometimes realised in the perception or not. At one time he says it is "*rarely, if ever*," so realised; at another time he says it is *never* presented in our actual experiences. Making a note of that by the way, we pass on to his definition of a *general* truth. General truth means *manifestation* in the particular; it is concerned with the frequency of recurrence of the phenomena; "it may be realised in all the cases of which it is asserted;" "it *sums up* a number of our actual experiences;" it "colligates a number of particular truths." Let us make an observation here, which may, perhaps, seem hypercritical, but which is of importance when the question is about the definite meaning of words. When Mr. Spencer says that a general truth "*may* be realised in all the cases of which it is asserted," he leaves us to suppose that sometimes it may not; so when he was speaking of *abstract* truth, he admitted a possibility that it might sometimes, though *rarely*, be realised in the perception. Well, then, if an abstract truth *may* be so realised, and if a general truth sometimes *may* not, what, dealing only with his own words, becomes of the distinction which Mr. Spencer wishes to be drawn? Is it not tolerably evident that he is himself somewhat uncertain about his fundamental distinction? And yet it is the foundation fact of his classification, that on which he rests his assertion that the abstract sciences form a class "widely unlike" the rest, that from which he assaults M. Comte, and disputes the opinion that the three classes of sciences are distinguishable by differences only in their degrees of generality.

When Mr. Spencer speaks of an abstract truth signifying the "essential nature of some phenomenon, apart from the phenomena which disguise it," he has plainly enough in his mind a *subjective* generality. This essential nature, or, to adopt Coleridge's words, "this inmost principle of the possibility of the thing," is simply equivalent to the *idea* of the thing, if the word idea be used in its Platonic sense. This idea, form, or essence, is in truth the highest

general conception which we can form of the thing; and the term abstract applied to such an idea is really synonymous with general. But Mr. Spencer, who accuses Comte of confounding abstract and general, should certainly have known better than to say that the abstract, in its true sense, signifies the essential nature of the phenomenon. In its true sense, it does nothing of the kind: if rightly used according to its well-defined scholastic meaning, and as it is always used by Mr. J. S. Mill, an *abstract name is a name which denotes the attribute of a thing*. *Man* is a general name of many things; *humanity* is the name of an attribute of them. *White* is a name of a thing or things; *whiteness* is the abstract name of an attribute or quality. Far, then, from putting the word to its right use, Mr. Spencer has been guilty of a wanton misappropriation of it to truths for which the name *general* was available and proper—a misuse which, since the time of Locke, has unfortunately been common.

Supposing, however, that the word abstract had the meaning which Mr. Spencer wrongly attributes to it, his distinction between it and general is still worth nothing at all. You do not always have what every one will admit to be a general truth palpably realised in the particular: the scientific conception of a salt in chemistry, for example, how will you find that realised in the perception? Goethe's fundamental idea of a plant, or the comparative anatomist's idea of a type—where will you find these exactly realised in the particular? In botanical science, a class contains some properties which are common to all the objects included, but it contains also others which are not possessed by all the objects. Part of the character of the Rosaceæ, for example, is that they have alternate *stipulate* leaves, and that the *albumen* is obliterated; but in one of the genera of the family the stipulæ are absent; and the albumen is present in another. On the other hand, you have the abstract, as Mr. Spencer attempts to define it,—in so far as it is a reality and not an inanity or imbecility of the mind,—realised in the particular, if you will take the same trouble to look for it, and to follow the processes which have been gone through in the formation of it, which you have to do in the case of the general conception. Whenever the generalisation is concerning the more fundamental relations of the thing, a certain mental exertion, and commonly enough a special mental culture, will be necessary to realise its signification, to perceive its *connotation*. Every general idea or conception is an *abstraction*, or is *abstract*, from the individual thing: what Mr. Spencer has actually done is to convert the word denoting the process by which a general conception is formed—namely, *the abstraction*—into an entity specific and transcendant, thereupon making the entity stand for certain arbitrarily selected generalisations. Consenting to misuse the word abstract as Mr. Spencer misuses it,

one must still logically say that the abstract only involves more activity on the part of the subject than the general; that it is, as it were, a sublimation of the less general: the abstract is certainly not *drawn from* the particular in the sense in which beer may be supposed to be drawn from a barrel, or a dog to be dragged away from a rabbit which it is worrying; but it is drawn from it as the flower which crowns development might be said to be drawn from the plant. General conceptions differ according to the degree in which they have been mentally fashioned and elaborated; and it is impossible for any one who does not come with a perfectly arbitrary foregone determination, to decide whether a truth shall be called general or abstract, that is, when the latter word is not used in its ancient and true meaning, but is misapplied as Mr. Spencer misapplies it.

The word general is, however, sometimes used in a different sense, to designate what may be called an *objective* generality. It is said, for example, that connective tissue exists generally throughout the body, or is more general than any particular organ into which it enters as an essential constituent. But that is to speak ambiguously, or rather to make great confusion by ranging under the same name ideas which have nothing in common: when you speak of the organ, you are dealing with the whole of the object, tacitly making a comparison with other like objects, and, by embracing in a general conception the properties which they have in common, *abstracting* the essential idea of the organ; but when you speak of the general existence of connective tissue, you are doing nothing of the sort; you are not defining its essential nature by comparison and abstraction, but merely stating a fact as to its existence. Instead of embracing in a conception its common properties, you are bringing the idea of the tissue into comparison or contrast with the idea of a body or organism in which it exists as a constituent. The element or tissue is more general than the organ, in the same sense as letters are more general than a particular word which they form, because they enter into many more words. This objective generality is plainly a different sort of generality from that which is signified by a general idea. But, apart from that generality, the physiologist has also a general conception of the essential nature, so to speak, of connective tissue as a constituent of the body, just as he has a general conception of the nature of a gland apart from any particular gland. In its simplest form, a gland is a mere pushing inwards of the mucous membrane; but the cavity gets more complicated, secondary recesses are formed in it, the neck is narrowed, lengthened, and becomes a duct; and so the complication goes on step by step, until you get the most complex gland. Suggest to a physiologist the word gland, and at once this general idea of a typical gland, which is exactly realised in no gland, arises in his mind; it is the essential idea of a gland

obtained by generalisation from a multitude of observations. The mathematician's so-called abstract idea of a circle or a triangle is no more than that; and all the superior certainty of geometry as a science is simply due to its ideal data being taken for realities, whilst the corresponding data of any physical science are recognised as hypotheses. In like manner, if the words connective tissue be suggested to a physiologist, he has at once a general conception of a particularly constituted tissue acting as the general framework of the elements of the organism—a fundamental idea of it widely different from that which any one who is not a physiologist can have, though he may know that connective tissue exists generally throughout the body. In such case the generality is subjective, not objective; abstract, not concrete, because it is *drawn from* the particular observation by comparison and abstraction.* Mr. Spencer seems to have entirely lost sight of the higher nature of a general truth when he made his distinction between the abstract and the general—a distinction which, as it is put by himself, seems to be obscure, uncertain, and ill-grounded, and must tend to render confusion worse confounded. What he has done is, first, entirely to misappropriate the word abstract; secondly, to draw an ill-defined and unfounded distinction between abstract (as thus wrongly used) and general; and thirdly, to fall into great confusion about subjective and objective generality. But if this criticism be true, Mr. Spencer's proposed classification at once falls to pieces. To us there seems no question that it does; but it will be well to set forth his notions in greater detail.

Abstract science deals with "relations apart from related things;" it "treats of the ideal or unoccupied forms of relations;" it is "cut off in imagination" from the actual, is "*wholly ideal*," may be defined as the laws of the forms. Let us take logic, as forming one division of the abstract science, for illustration and test of the value of such definition. Logic has been called the science of sciences, because it sits in judgment, as it were, upon evidence; and to its rules right inference and reasoning must always conform. As abstract science is wholly ideal and concerned with the laws of form, logic must be the 'Science of the formal Laws of Thought.' That was, in fact, what the school which Sir W. Hamilton represented conceived it to be. It is not our business to dispute whether it is a right definition of logic or not; but it is plain that Mr. Spencer's abstract science has proceeded from that fountain head. Accepting logic as the science of the formal laws of thought, it is a directly

* M. Littré, in his 'Auguste Comte et la Philosophie Positive,' has pointed this out to Mr. Spencer, who, however, has failed entirely to see the drift of M. Littré's observations. That is likely enough to happen to a man who, instead of receiving ideas from facts, is occupied in imposing his ideas upon the facts.

obvious assertion to make, that the laws of thought are the subject of psychology, and therefore logic, as a science, must be a part of psychology. And yet you make logic, as a part of abstract science, "widely unlike" psychology! But when you have done that, when you have taken logic into the ideal region, you are driven, when you come to deal with the concrete science of psychology, to do what? Why, positively to make a division of the concrete science into abstract, general or universal, call it what you will, and into non-universal, particular, or concrete. How the results of this general or universal psychology as a concrete science are to be distinguished from the science of the formal laws of thought, must pass the understanding of any one but a metaphysician who does not feel it necessary to have distinct ideas. The real ground for the untenable distinction is the assumption that the word abstract shall mean something widely different from, essentially beyond, the general, to wit, something which *is* and yet *is* not; transcends all human experience, and yet somehow comes into human experience; is a generalisation from observation, and yet is essentially different from a generalisation. Between sciences which deal with relations apart from realities, and sciences which deal with realities, the distinction, says Mr. Spencer, "is the widest possible; since being, in some or all of its attributes, is common to all sciences of the second class, and excluded from all sciences of the first." As if it were possible to one who tries to have definite ideas beneath words, to conceive of *thought* otherwise than as *being!* Most writers who have studied the matter now admit, too, that, whatever be the nature of mind, all its manifestations are the dynamical expressions of actual organised results, which are themselves built up from the relations between the individual and external nature. So much for "abstract science" when tried by an experimental test.

Abstract concrete sciences treat of the relations among realities, not as usually manifest, but as manifest in their different modes when they are artificially separated; they are "partially *ideal*," for they are ideal relatively to the concrete—"have for object *analytical interpretation*," "the laws of combination of matter and motion, not as actually displayed, but as they would be displayed in the absence of interference"; they may be defined as the "laws of the *factors*." The *concrete sciences*, on the other hand, deal with the heterogenous combination of forces that constitute actual phenomena; they aim, not to separate and generalise apart the components of all phenomena, "but to explain each phenomenon as a product of these components;" they are *real*, "*synthetical interpretation*" is their object, and they may be defined as the "laws of *products*." To any one who has a practical knowledge of the "abstract-concrete science" of chemistry and the "concrete science" of physiology, these observations must, we fear, appear simply

astounding; but it would carry us much too far to set forth what we conceive to be the manifest errors and inconsistencies of them. Take one example, that of chemistry, as a test: so far from its aim being merely analytical interpretation, a most important part of organic chemistry is the formation of organic products.* In 1828, Wöhler artificially produced urea, and in 1831 formic acid, the first term of the fatty acids; in 1845, Kolbe produced, artificially, acetic acid, as derivatives of which are obtained acetone, marsh gas, ethylene, methyl, &c. Since then the production of the compound ammonias has proved that the natural alkaloids, quinine, morphia, strychnia, will one day be obtained; the production of glycerides from glycerine and fatty acids renders it probable that the natural fats will soon be obtained; and the chemists are confident that sugar and albumen will not elude them long. While chemistry is not purely analytical, physiology is very far from being synthetical. The physiology of nervous element is almost entirely in the hands of the chemists, and of those who, like Du Bois Raymond, Matteuci, Pflüger, Helmholtz, and Arnold von Bezold, are investigating the electrical relations of nerve. The researches of Graham into the "colloidal" condition of matter have almost broken down the barrier between the organic and the inorganic; and are of themselves sufficient to show the untenableness of Mr. Spencer's division of science into abstract-concrete and concrete. We are sorry to say so, but it appears to us that Mr. Spencer has but a superficial acquaintance with the sciences of chemistry and physiology; and that he seems far more disposed to go astray in the tempting path of speculation than to apply himself to the tedious and uninviting work of learning what has been done in science.

We make the observation with less diffidence because, in Mr. Spencer's exposition of his reasons for dissenting from M. Comte, there is exhibited a misinterpretation or misunderstanding of Comte's philosophy, which is surprising and almost incredible in a critic. If he has drawn his knowledge of a great part of Comte from that most miserable outline of the positive philosophy which Mr. Lewes produced, as a note in the appendix would seem to indicate, the errors may be intelligible, but none the less they are inexcusable. One might have thought that the first thing to do, before

* It appears from a note, that Professor Frankland pointed this out to Mr. Spencer; but, will any one be surprised to learn, without effect? How could Mr. Spencer give up such a big theory, because a fact or two were against it? An exception, do you say! Nonsense: only an *apparent* exception which in reality confirms the theory. We must acquiesce; for it is vain to argue with any one who will arbitrarily give to words whatever meaning he thinks fit. Note only the interesting fact that an author writing upon the classification of the sciences needed to have such an elementary truth pointed out to him! If that was necessary, it is no wonder that he did not appreciate the fact when it was pointed out to him.

criticising an author, was to read him. Not having Comte's works at hand, we cannot take each of the passages which he has quoted with the purpose of contrasting them with his own opinions, and point out, as might easily be done, in one case after another, how he has failed to appreciate the spirit of M. Comte's writings, how he has misinterpreted some passages, and how unfairly he has represented others. All this, too, with no other aim seemingly but to minister to his own glorification by showing how he differs from the great French philosopher! One most flagrant specimen, however, we give.

The following passage is quoted by Mr. Spencer as expressing one of the cardinal doctrines of M. Comte:—

"Ce n'est pas aux lecteurs de cet ouvrage que je croirai jamais devoir prouver que les idées gouvernent et bouleversent le monde, ou, en d'autres termes, que tout le mécanisme social repose finalement sur des opinions. Ils savent surtout que la grande crise politique et morale des sociétés actuelles tiennent, en dernière analyse, à l'anarchie intellectuelle."

By the side of this passage Mr. Spencer puts a statement of his own opinions, which is to the effect that ideas do not govern and overthrow the world, but that the world is governed or overthrown by feelings. That is his tale; and now, with a full sense of responsibility, a deliberate remark shall be made, and it is this: that if there is one doctrine more distinctly and more persistently taught than another throughout the 'Positive Philosophy,' it is that feeling or the affective life, and not intellect, is the real motive force of human action. It is a wrong, a wicked wrong, on Mr. Spencer's part to put forward the mutilated passage which he has quoted, as embodying the doctrine of M. Comte, whose actual opinions on that matter are very much what he represents his own to be. Certainly it argues a strange piece of fortune or a very convenient method of observation to have contrived to get hold of such a fragment, when, without trouble, fifty passages might have been got which directly contradicted it. Here is one which happens to be available:—

"Mind must tend more and more to the supreme direction of affairs; but it can never attain it, owing to the imperfection of our organism, in which the *intellectual life is the feeblest part; and thus it appears that the real office of mind is deliberative;* that is, to modify the material preponderance, and not to *impart its habitual impulsion.*"* This passage is a faint reflection of what is taught throughout the 'Positive Philosophy' with greater emphasis and greater distinctness; and it is inconceivable how any one acquainted with M. Comte's writings should ever have thought otherwise. But Mr. Spencer appears not to see M. Comte's philosophy, nor scientific results, nor

* 'Positive Philosophy,' vol. ii, p. 240, H. Martineau's translation.

ıything else, except as they are distorted through the medium of is preconceived ideas.

The essay on the 'Classification of the Sciences' is the most unatisfactory production Mr. Spencer has yet given to the world; at ne best it is an ambitious failure which serves only to exhibit its uthor in a less favorable light than he has hitherto appeared in, nd to suggest grave distrust of his soundness as a thinker. To the xtremest jot and tittle it justifies the observations made at the beinning of this notice. One cannot but designate as unphilosophical n essay which exhibits confusion and error of thought on matters hich a single chapter of Mr. J. S. Mill might have cleared up; it s certainly unscientific, for its foundations are laid where science has o concern; and it must strike many people as startling, if not as omething more than startling, for it presents the singular spectacle f a writer deeming it to add to his credit to be ignorant of the state f knowledge on the subject of which he writes. The classification is ot a classification arrived at from a consideration of the facts of cience; it is a classification made by the violent superinduction of bsolete metaphysical ideas on facts, and, in our opinion, has no etter chance of enduring than darkness has when the sun rises. ong after it has sunk into a nameless oblivion the classification hich it presumes to criticise and is intended to supersede will be a ubject of discussion. Taking it on its own ground, there is a otable deficiency observable in it: to complete its retrogressive haracter and to fill up the measure of its iniquity, there is needed he addition of one more division—that of "Ontology." H. M.

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ome Remarks on the Ulster Revival, so named, of 1859. By Henry Mac Cormac, M.D. Edin.

"For God has not given us the spirit of fear, but of power and love and a *sound* ınind."—2 Tim. i, 7.

An eye-witness of this remarkable phenomenon, the Ulster Revival f 1859, I should wish to dilate, yet a little, upon it, ere the period or doing so passes entirely away. The agitation which it engendered till lingers somewhat. And as like causes produce like effects, nore revivals may perhaps be anticipated, when the seeds so prousely scattered shall experience with time the requisite developnent.

The revival movement, with all its striking anomalous accomaniments, was confined to members of the Reformed, and more es-

pecially the Presbyterian and Methodist churches. The participants shared alike the nervous contagion, and gave way, some more and some less, to the delirious extravagance, the faintings, the shriekings, the hair-tearings, the dumbness, the hysteria, and the tears, in fine, the preoccupation of the senses and the intellect, which characterised the revival outburst and progress. Many of those affected, were otherwise persons of considerable intelligence, yet this, giving way as they blindly did to their feelings and emotions, failed to preserve them from a great and signal delusion. The multitude, indeed, the ὁι πολλοι, too often unaware of the common elements of religion and morality, believed that their physical sufferings* during "conversion" were in some sort to atone for sin, and reconcile them to God. In effect, they considered the revival a material influence, taken like some attack of smallpox or scarlet fever, which was to work them untold good. Of the real nature of religion, good deeds, good thoughts, good feelings, and a good faith, as Dr. Salmon well defines it, they had and they have the slenderest conceptions imaginable.

The movement began, as such things generally begin, amongst the very humblest. When it had reached certain dimensions, a portion of the clergy took it up. Some indeed wavered, others temporised, while a few, in truth more than a few, opposed vigorously. A Presbyterian physician told me that a minister of his persuasion confessed to him that he had given in his adhesion to revivalism simply in order not to be left quite alone by his truant flock. When, however, the moral epidemy declined, it was heard of among the comparatively elevated and right-minded no more. Religious truth and fellowship with God, indeed, might reach the lowliest soul. Yet, ignorance, if not vice, is surely a poor preparative for divinest usefulness and moral worth.

People, as the phrase went, were "struck down," indoors and out of doors, at their work, and during hours of recreation, variously, in truth, and with different degrees of violence, according to their temperament, position, and antecedents. But by far the greater number and severer outbreaks ensued when the poor souls, in assembled multitudes, were "exercised," driven hither and thither, without safe guidance or control, at the beck and bidding of some wayward impulsive fanatic heated and unreasoning as themselves.

When the popular action ceased, the revival itself came to a close. The peculiar excitation of the emotions and senses no longer ensuing, the hysteric spasms, the turnings, the twistings, and the cries, in fine the long array of excito-motory and nervous action, as produced or at least modified by the revival, disappeared likewise. The various teachers and preachers who, when the revival was at its

* Dr. Salmon's 'Sermon,' Dublin, 1859, p. 22.

neight, had so assiduously fanned and fostered it, for the most part neld their peace. The world would soon come to an end were like doings only of daily occurrence. Fortunately, it is not of the nature of such excitement to prove lasting. The revival in Ulster was more or less the counterpart of those outbursts of the religious affections, gone mad, which, lighted up and furthered by fanatics, knaves, and fools, as well as many times upheld by most pious, sincere, and earnest, though mistaken persons, have been so often witnessed throughout the old and new worlds. "Thus it was that the dances of St. Vitus and St. John, extended from city to city, and from land to land. Spreading sympathetically, the nervous infection gave rise to the same, or similar physical or moral results in each several individual attacked."*

Yet, the revival movement, however in many respects baseless, and extravagant, was founded on convictions which, at some period or another, had passed to the vulgar from the educated or *quasi* educated classes themselves. It was grounded on the belief that the Deity interferes, directly and immediately, in modifying and promoting, other than by His daily law and order (that law and order which subsist everywhere and always), our various moral and religious convictions. Yet, these, like all our intellectual and moral states, are linked with changeless and unchangeable law, God's law as implanted in our inner psychical being, comprising indeed our own efforts, the immediate influence of our fellows, and more or less the laws and operations of the outer sensible world. For the moral, like the material law, is never interfered with or suspended.† And it is only by conforming to it, as thus, coupled with efficient, persistent, early training, and ceaseless self-culture, that goodness and intelligence, the very love of God and man, are to be instilled. But the revivalist professes to believe, does indeed believe, that this so desirable estate may be had as it were on the instant, without any precursory moral or intellectual training, and with whatever antecedents.

"The bodily state," observes Mr. Nelson, was regarded as an outward visible manifestation of God's presence, "the Holy Spirit, by which the attention of a careless world was arrested and directed towards the important work of personal salvation."‡ "A dishonest but vain attempt was made to separate the revival from the prostrations." "The visibilities constituted the revival." "The revival was something visible." "A minister maintained in the pulpit and sent to the press his deliberate conviction that the affections of the

* 'On Moral Epidemies,' by W. MacCormac, M.D.

† "Par Kepler, Galileo, par Descartes, et Newton, s'etablit, triomphalement le dogme raisonnable, la foi *à l'immutabilité des lois de la nature.* Le miracle n'ose plus paraître, ou quand il l'ose, il est sifflé. Pour parler mieux encore, les fantasques miracles du caprice ayant disparu, apparaît le grand miracle universel et d'autant plus divin qu'il est plus regulier." (Michelet, 'La Sorcière,' p. 309.)

‡ Nelson's 'Year of Delusion,' p. 45, et seq.

body were the outward signs of the Holy Ghost's presence." "A girl, deaf, speechless, just roused from trance or stupor, wrote to say that she had seen balls of fire as if from heaven." "The grand characteristic of superstition," he continues, "is that it aims neither at enlightening the understanding nor awakening the heart. It seeks only the blind submission of its votaries, without professing to supply them with motives adequate to rouse into rational action their emotional nature. By declaring war on man's intellectual and moral constitution, superstition supplies to infidelity its most trenchant weapons."

Mr. Nelson is himself a Presbyterian minister, and cites the very words of Presbyterian revivalists. His work, besides, is full of details, and forms an important addition to the works of Archdeacon Stopford, and the Reverend Drs. Salmon, Hincks, Reichel, Mr. MacIlwaine, and other clerical and non-clerical opponents of revivalism. The revival advocates, themselves, sooner or later sensible of error and misconception, and ashamed in the long run of the gross impostures perpetrated by the inferior and less sincere actors, trimmed, shifted ground, modified some statements and withdrew others, and so aided, doubtless without intending it, to shake the entire revival travesty, and eventually to promote its downfall.* For the most part the clergy of the Presbyterian church are now silent enough on the subject of the revival, to which indeed they ought never to have lent the sanction of their countenance and support.

"There are three or four persons in this locality who have not got the better of their conviction, and are raving maniacs yet. I cannot look at them without shuddering. *They seem to answer the description given in the New Testament of those possessed of devils.*"† "I saw," observes the author of a remarkable tract, remarkable at least in respect of its title, since suppressed,‡ "four strong men unable to restrain a lad of eighteen." "A careless cursing creature, and *one greatly opposed to the revival,* was seized in her own kitchen. *Her appearance was most satanic.* The medical man sent for fled at the sight! Her cries were terrific. She declared that Satan and all the devils in hell were around her." Such statements not only manifest the utterest ignorance of the physiology of body and mind, but also a lamentable pandering to, if not participation in, revolting forms of popular superstition.

"Swooning, insensibility, trances, and visions, prophecies, and stigmata," says Mr. Nelson, "were all received as signs of the Spirit. Girls, who could not read, pointed out with closed eyes successive texts which, being joined together, formed beautiful discourses. Mr. Brownlow North commanded in Belfast Satan to

* Gibson's 'Year of Grace,' 2nd ed.
† Cited in the 'Year of Delusion,' pp. 51, 225.
‡ 'Our Friends in Hell.'

come out of an aged person! A minister took the hand of a seemingly insensible girl, and made her rise and walk. Another minister informed his auditory that coming to preach to them, he had thrice been roused from slumber by knockings at his door, and the wailings of damned souls! A third related to an awestruck crowd, that he had seen the word 'Lord,' impressed upon the tongue of a pious young person incapable of fraud." Lastly, to complete the catalogue, "Mr. Richard Weaver, a blacksmith preacher, told his hearers that his own brother was in hell."*

Mr. Nelson contrasts, appositely enough, the convulsionaries of Ballymena, Belfast, and Lisburn, with those at the tomb of the Deacon Paris at the cemetery of St. Medardus, and those who were affected with the preaching madness at West Gothland, in Sweden. Yet, men of education, moral-minded, intelligent, leaders in the reformed churches, amazing to relate, treated the Ulster Revival of 1859, as if it had been a revealing from heaven, instead of, as it really was, a religious travesty. And so likewise did, or affected to do, a certain section of the press, that press whose office it should have been to rouse the people from, not to plunge them deeper into, the slough of delusion. Yes, those there were who could turn to money-account their advocacy of the supposititious miracles of the revival.

It would, indeed, be difficult to impart an adequate idea of this singular outburst. An eyewitness, even, could hardly form a perfect notion of it. For how could any eyewitness be in a hundred, say a thousand places at once, or how could he maintain his attention alive amid the incessant strain, day and night, that should be made upon it? The swelling-tide of fanaticism raged, tossed, and broke in masses of seething folly and extravagance on the eternal landmarks of reason and truth. And, yet, was there commingled with the general craze many a fervent utterance of sincerest though most insensate piety.

Multitudes believed in the revival, while others there were who, knowing better, yet tolerated, connived at, went along with it. Bearded men, staid matrons, the cultivated and the intelligent, alike, were often led, and always dictated to, by the ignorant, the inexperienced, the youthful, and the inept. It was not held as any drawback, indeed quite the reverse, that persons of irregular, if not vicious lives, should set themselves up as teachers and expositors of the everlasting verities of God. Everywhere there was a perfect ferment of lecturing, psalm-singing, prayer-meeting and expounding. Devout labels, too, words of warning and incrimination, pasted on wood or cardboard, were hung out here and there, and as they shook and rattled in the wind, reminded passers by of certain similar mechanical expedients which Huc and other travellers had encoun-

* 'Year of Delusion,' pp. 51, 225.

tered in Thibet. Men stood in the middle of thoroughfares, on the sea-quays, or where four roads met, and in stentorian accents proclaimed, as they conceived, the path to heaven. Some of these with voices pitched in alt, and the exaggerated recitative which one meets with in certain pulpit declaimers, would thus hold forth for hours, occasionally too in the hearing of the sick, the sorrowing, and the weary, who could in nowise evade their importunity. And yet, amid the tumult and the hubbub, there might perchance be heard, as I once thus fortuned to hear, I know not whether from revivalists or others, strains from pure and saintly voices that, being listened to, upbore the soul to heaven.

Had it only been all as thus, but it was far otherwise. Multitudes were affected with hysterical pains and spasms, often very violent, very real, and with all the queer preposterous variety which hysteria, of all maladies, presents. They cried out, they raved, they ranted, they shouted, they twisted, they rolled on the ground, they wept, they gesticulated, they distorted their features, they were dumb. Thus, or otherwise, for the aspects of the moral malady were indeed Protean, women so affected were held to be downstruck, and, like the Pythonesses of old, to labour under an effluence divine.

They were seized, as has been said, variously: the girl in the spinning mill, the nurse among the children, the cook in the kitchen, the seamstress midst her hems, the weaver at her loom. For the burthen of the affliction fell as ever, heaviest, though far from entirely, on the more impressionable sex. It was mostly, however, in gatherings, whether in ordinary houses of worship, or otherwise, summoned for the express propagation and furtherance of the unreal revival revealings, and very real revival convulsions, that the outbreaks more usually ensued. Monster meetings, too, were convened, where amateur vied with regular performers, in awakening and exciting the zeal of the neophytes, and in lashing up to the pitch of phrensy the general enthusiasm. Young and old, boys and girls, men and women, with shrieks and groans, and twistings and writhings, poor suffering creatures, here and there gave utterance to their new found, yet most apocryphal convictions and misled emotions. Mock revivalists, likewise, of both sexes, counterfeited with improvements and alterations of their own, such as marks and stigmata, and holy but ill-spelled legends stamped *quasi* miraculously on their flesh, the weird phenomena, half voluntary, half real, which the regularly initiated, the ordinary Corybantes, were wont to display. Even among the educated, some few, to their very serious loss and peril, were led astray. While not a few, siding with the hound while they ran with the hare, put on a decorous semblance of conformity in respect of things which they did not and could not believe, and about which they did not care. Many, too, grown rampant with insolence and fanaticism, insulted in their ignorance

every one, no matter how competent or respect-worthy, who ventured, however mildly, to gainsay their wild conceits.

Attracted by this new avatar, numbers came from distant parts, some to wonder and adore, others to compare and criticise, and many to gaze at something to them so very amusing and so very new. Few that witnessed the spectacle could forget the living streams that entered and left the Belfast Botanic Gardens on the occasion of the monster summer meeting held there at the time. Every aspect of phrenzied religious emotion might be seen, recalling the mad excesses of Wales, Scotland, the United States, and the Middle Ages generally. The recurrence of such scenes in our own time, proves the still defective culture of the masses, and the almost utter ignorance of every class as to the all-important fact that law governs the manifestations of the feelings and emotions, with as perfect and unwavering certainty as it does the combinations of the elements or the courses of the stars, and that our God and Father, having established this law, interferes not to modify and derange its action in one case any more than in the other. For everywhere are miracle and law and order, law without break or interruption, unaltered and inalterable law.

Quite little girls, intoxicated with excitement and emotion, else bereft of rational self-guidance and self-direction, might be seen with lacklustre or gleaming eyes, according to the period of their malady, sustained by their elders, some with heads hanging aside and slavering at mouth. Hysteric women, too, were there, semi-conscious, passive, or tossing about their spasm-fraught limbs and frames impotent of self-restraint. Men, in every posture, shouted and declaimed, lying, standing, in groups, or alone. While troops of persons of both sexes, hand-in-hand, or arm-in-arm, gesticulating, chaunting, ejaculating, passed along.

Other feelings, other excitements, too, as might be expected, ensued at times under cover of devotion, and some became mothers ere they were wives. It was so in Wales, in America, and in Scotland. Matters too were related, which cannot here be reproduced. In the semi-trances of religious hysteria, women too often lose or have impaired their natural instinctive sense of self-conservancy, "their emotional feelings escaping from the control which God provides in the reason, will, and conscience,"* and thus are the prey to impulses, from the supremacy of which in saner moments they would have shrank. A rector of the Established Church informed me of processions in the town wherein he lived, young men and women praying, singing, and kissing each other, as they went. Different clergymen likewise told me of cases of insanity coming under their immediate observation, but otherwise unpublished. I witnessed several such myself. The grovelling and utter prostration, the

* 'Lecture' by the Archdeacon of Meath.

entire misconception of man's highest hopes and truest destiny, as subsisting in religious insanity, must be seen to be believed. "What if some were deranged, how many were deranged by the failure of the Western Bank of Scotland?"* writes a revival-promoting Presbyterian clergyman. What, indeed! Does one evil, then, justify another evil? The Scottish Bank and the Irish Revival, both one and the other, simply illustrate, one the ill results of badly conducted finance, the other the disastrous consequences of substituting fanaticism for true religion.

Among other examples in Belfast was that of a teacher of elocution, a man of easy placid temperament, one whom I had known for years. Borne away by the torrent, his excellent health of body and mind alike gave way, and at length he perished. A gentle, innocent creature, too, one whom her good brother, ere his disastrous mission to Damascus, had commended to my general medical care, was seized, "struck down," indeed, in a revival meeting-house. She had, in truth, been unwell as to her mind before, but had perfectly recovered. I never beheld a more frantic creature. Both shoe and stocking were flung off, and ere my arrival she had literally kicked every one out of the house. When at length I saw her, I found her dancing on the summit of a boundary wall, which she had climbed with the agility of a cat. There was not a sacred name or formula, in her rantings and ravings, that she did not in turn recite, every now and then, even in her perilous position and amid her frantic springs, clapping her hands above her head and hoarsely shouting, "Hurrah for the revivals, hurrah for the revivals." Taken suitable care of, her excessive maniacal excitement calmed down, and she regained, and I trust will long retain, her wonted calmness and lucidity.

How intelligent men, pastors, teachers, and others, could lend their sanction to the wild delirious outbreak which bore the designation of the Ulster Revival of 1859, was a source of wonder to many. I can only explain it on the principle of surprise. They were *surprised* into it. They conceived, it may be, that there might be a basis of truth in revivalism somewhere, and if so, that it was a duty to support it. Had they, the participants, as the Archdeacon of Meath has observed,† possessed but an elementary knowledge of physiological science, had they reflected for a moment on the laws of our psychical being, surely they would have seen that the great wise God could not, would not, confine his benefactions to a portion merely of our race. The true nature of the revival phrensy was indeed fully shown in the circumstance of its being confined to one or two denominations only. Unitarian or Roman Catholic revivalists there were none. A very similar hubbub, though to a far less ex-

* Salmon's 'Sermon,' Appendix.

† 'Lecture at the Adelaide Hospital.'

tent, to be sure, ensued when in 1826—7, the Missionaries, so-called, visited Paris, and when the Redemptorist Fathers in Ireland, and the Jesuits in Spain,* instituted their religious exercises.

The revivalist differed from ordinary hysterical seizures only by the greater general derangement, and the fantastic religious element, which combined to give them birth. It was, in truth, at once a singular and touching spectacle to see the poor spinning and weaving girls victims to the revival travesty, as they lay on their truckle beds, in some airless inner chamber, surrounded by their awe-struck friends and relatives, visited by their clergy, amateur teachers and preachers. Some of them, labouring under physical aphonia, were, or at least seemed to be, unable to speak. Others, however, read to themselves from some "good book," conversed, or sang. It was perfectly useless to attempt to reason with either friend or relative, much more with those affected. It was God's great work, they said, what was there for men to do? In the case of the dumb hysteria of revivalism, ensuing after their screams and cries and muscular tossings had ceased, the young women, for to such it was confined, would sometimes remain silent for days and even weeks. I visited one who had been in this state for a fortnight. Some, while in it, lapsed into a sort of stupor; while others ate, slept, read, and even wrote down the day and hour—*a prediction always fulfilled*—when they might be expected to regain their utterance.

A quite remarkable and curious spectacle was that of little boys and girls, otherwise wholly incult, ranting their stock phrases of warning, conviction and rebuke, just like others, no wiser if older than themselves. There was, in fact, so to speak, a perfect tempest of psalm-singing, *quasi* religious exercises, and ejaculations, indoors and out of doors, almost without pause or remission. People seemed never to tire. It was, as often happens, a thorough substitution of the means, and such means, for the end. At Morzine, in Upper Savoy, so recently as 1861, strange to say, something very similar ensued, only that there the ignorant inhabitants looked upon the poor victims, mostly young girls, too, as possessed of devils, that is to say a demon, so named, and a human soul housed in one and the same body. That Irish Revivalists, or at least some of them, had more than a leaning to the same preposterous and revolting figment, will be pretty apparent from the statements already made. All the Savoyard clergy, however, and, with one exception, the Savoyard doctors, opposed the current phrensy. It was not so, unhappily, in Belfast. The sufferers at Morzine turned, writhed, twisted, cried out aloud, and went into trances, indeed, just as their sisters did here. At Morzine, also, they had been, they said, to Paradise, and the Virgin was their companion. Here, too, delators went about denouncing and calumniating the incredulous. As at

* Meyrick's 'Working of the Church in Spain.'

Belfast, all opposition, indeed, was treated as impious and sceptical, as if it were not ever a duty to be sceptical in regard of error and misconception. The scenes recalled, it is said, very much those that had ensued among the nuns of St. Croix, during the days preceding the memorable trial and condemnation of Urbain Grandier at Loudon.* The able historian of the outbreak, Dr. Constans, narrates a number of very singular particulars,† and shows, clearly enough, adequate motives being supplied, that the victims were quite able to restrain themselves. But, he pithily adds, that it was a moral malady that had to be dealt with, an education to be resumed. At Belfast, as throughout Ulster, wherever, at least, the revival phrensy raged, far from encouraging the sufferers to restrain themselves they were urged by those who, surely, ought to have known better to precipitate themselves yet more blindly into delusion and disease. Here too, then, it was an education to be gone over again, a moral malady to be subdued.

Seeing that no check was placed to the current phrensy, but, on the contrary, that every available incentive was furnished to run riot in it, it is not surprising that the mental functions and physical organs, alike, were at the mercy of the religious or *quasi* religious aberration of the moment. A portion of the laity, clergy and medical men, much to their credit, did what they could to stem the reigning fanaticism. But, after all, it was like trying to dam a torrent with the foot, or to put out a conflagration with a pail. So long as the mad excitement lasted, these effects were without avail. As for the participant clergy and laity, they plunged headlong into the roaring, driving flood, and were borne away with it. The former of these made out lists, they compared notes, and exulted, severally, in the numbers of their excited flock. A well-known practitioner in these new Eleusinian mysteries, used, I was told, to walk up and down his pews and urge the members of his fold, as he clapped them on the shoulders, to give free vent to their emotions. I sometimes passed the house at night all ablaze with gas, reeking with heat, and echoing the wild accents of the worshippers. A respectable householder, who lived opposite, assured me that he had sometimes known as many as twenty persons carried out, ere midnight, in the course of a single evening, to recover, as best they might, from their faintings and exhaustion in the open air. Untiring efforts, indeed, whenever it seemed likely to flicker or fade, were made to fan the revival flame, by improvised meetings, tracts and open-air exhortations, at once by the participating clergy, and, usurping clerical functions, innumerable lay practitioners. Every wall was placarded, and in many places inscriptions were hung out in large letters, at once as a terror to scoffers and an incentive

* Michelet, 'La Sorcière,' p. 367.

† 'Une Epidèmie d'Hystero Demonopathie,' Paris, 1862, 2nd ed.

to faithful revivalists. Day and night crowds, young and old, and of both sexes, met to sing, to exclaim aloud, to moan, to sob, to weep, to groan, to pray, and every now and then to fall down in hysteric convulsions, as the current of the morbid psychical poison or the mistaken fantasy of the directors and actors in the spiritual orgy might dictate. Occasionally, too, some half frantic enthusiast would place himself within ear-shot of your doors, and, there, with emphatic shouts and cries, intone his dreary phrensies by the hour.

The great evil of all this was its moral untruthfulness, its complete ignoring of the psychical law, *the law of mind,* its too frequent severance from all practical usefulness and real piety. There was, indeed, every aspect of terror fraught emotion, terrors not inspired of God, but begotten by human ignorance and grovelling apprehension. But the emotions and feelings, although a most vitally integral portion of our moral being, and of the last importance to associate with truth, do not, it cannot too often be repeated, guarantee truth or preserve from falsehood. Drunkards or other evil-doers were often for the time, it is true, reclaimed; but the improvement, not being founded on early training or rational conviction, all too soon vanished. How could it be otherwise, when both the teachers and the taught severed religion from morality, identified or strove to identify it with a transitory and perishable excitement, crazy or inhuman formulas, vile terrors, insane miracles, and the impairment or destruction, by trances and convulsions, of the healthy functions of the living organism? The revival was termed a visitation of God. It was indeed a visitation, but a visitation of spasms and moral weakness, and folly and madness and decay, unavoidable sequence of the violation of God's most real and Divine law. The Ulster Revival has left deeply and densely strewn, seeds of many a future crop of insanity, hysteria, convulsion, and folly, whenever it shall please the fanatic of the future, whether male or female, lay or clerical, at Belfast, or in Ahoghill, the birthplace of the revival, to galvanize them into renewed life and activity.

It would, indeed, be desirable to have a real revival in Belfast and in Ulster entire. Of all charity and good intelligence we might well have more. Social abominations are there, rankling vices, saddening crime. Yes, we need a revival, but one founded on reason, and truth, and love; one induced by universal culture, the training of all the faculties, the culture of every power. Our young working people are not adequately clothed, or nourished, recreated, or instructed. Poor children are tasked long hours in factories, or, when too young for that, sent out too often to prowl about the streets for the easier sustentation of improvident, lazy, and frequently vicious and idle parents. It is perfectly delusive to suppose that there can be any efficient renewal—moral or religious—apart from a thorough and sustained development of the heart and soul, the creation and main-

tenance of wholesome, sober, cleanly habits of body and mind. The true revival is not the work of a day, the parade of baseless formulas, but a life of love and effort, conformable to God's most precious and unalterable law, followed, let us not doubt, by an endless career of love and effort and development in the life to come.

How, indeed, are hysteric convulsions and spasmodic howlings, with vitiated senses and sudden perversions of the feelings and intelligence, to propitiate Divine favour or further the temporal and eternal interests of man? For what is spiritual safety, what salvation, other than living active goodness and intelligence, the unaffected untiring love of God and of our kind? No nostrum, then, or short-cut, no instant violent mutation bespoken by hysterical convulsionaries, propagated with real or simulated zeal, in short, a morbid psychical infection, spreading, like the epidemic manias of the Middle Ages and yet later times, from person to person, and from town to town, ever did or can or will, while earth and man endure, induce a real change of soul or turning of the heart to heaven.

G. Combe and his Writings. A Lecture delivered at Bristol. By J. G. Davey, M.D.

It is now many years since I stumbled, by the merest accident, on this very important question:

> "Hath nature's soul,
> That formed this world so beautiful, that spread
> Earth's lap with plenty, and life's smaller chord
> Strung to unchanging unison, that gave
> The happy birds their dwelling in the grove,
> That yielded to the wanderers of the deep
> The lovely silence of the unfathomed main,
> And filled the meanest worm that crawls in dust
> With spirit, thought, and love; *on man alone*
> Partial in causeless malice, wantonly
> *Heaped ruin, vice, and slavery;* his soul
> Blasted with withering curses: placed afar
> The meteor happiness, that shuns his grasp?"

You will doubtless feel with me that this *is* a weighty question, one which concerns, and deeply too, each one of us present.

If we will be at the trouble to contemplate carefully and without prejudice the past history of mankind, from the earliest periods of antiquity to even the very recent treaty between this country and Japan, can we withhold our assent to the appropriateness of the foregoing question of the poet? *I think not.* Some there may be

whom I address who have, up to this time, been unaccustomed to look very attentively or critically into the facts of history; who have not yet felt either the necessity, or keen interest which can alone prompt any one of us, to dive below the mere surface view of things, and so realise the first causes of human conduct, the first impulses to man's thought and action. If there be any such persons present I would entreat them, as they love the truth, to be content no longer with shadows, but to look well for the substance. When they do this, the *ruin, vice, and slavery,* which are named in the foregoing quotation from a great poet (Shelley), will appear but too manifest. Look to the history of any European country—to the histories of France, Austria, and Spain, for example. Is it possible to do so without thinking of the crimes and licentiousness connected with the reign of Louis XVI.; of the vices which begot the Revolution, and of its horrors; and, more especially, of the conduct of the first Napoleon? Can we do so and avoid allusion to the persecutions of the noble Swiss, the injustice heaped on Hungary and Poland, or to the cruelties practised on the South American natives, viz., the Mexicans and Chilians? Dwell, for ever so short a time, on the histories of the Mahomedan and Hindoo empires in the East, on those of ancient Greece and Rome, or on the antecedents of Turkey. Call to mind the unceasing cavils, unholy wars, and personal cruelties which disfigure all histories. Bear in mind the vices which belonged to the feudal times, and the innumerable defects of our own social and political relations which followed on their defection; to say nothing of those of this present time. However painful it may be to many of us to do this, yet may we look at home for a demonstration of the low, and wretched, and vicious condition in which man lived in times gone by, and those times not far distant. Need I mention the period of the Heptarchy in England, when each of the seven kings claiming the divided sovereignty of this fair land, lived rather the lives of brigands and highway robbers than anything else. Is there one among us who can well bear to dwell on the wars and bloodshed, and personal and national crimes, which make up the sum of the histories of England and Scotland and Ireland? I trust not. However, these several histories, you must bear in mind, are not very much else than a record of the countless bad acts of so many men, of so many kings and nobles, of so many priests and charlatans. Such as these devoted their leisure to the constitution of our laws; they did what, to a great extent, our modern and advanced legislators are engaged to undo. Such kings and nobles, such priests and charlatans, created *the good old times* of which we not unfrequently hear. They it was who, ignorant of the demands of an all-sufficing nature and of our responsibilities to the moral laws as from God; who, uninformed of man's motives to thought and action, and unaware of the

qualities of both his head and his heart; they it was who, in the words of an author to be named presently, "knowing not the *constitution of man considered in relation to external objects,*" sought therefore to govern the masses in a manner consonant with their individual profit and convenience, and harmonizing rather with their own likes and dislikes than with those pure and catholic principles of progress and amelioration which have, by degrees, grown into existence, and are now found taking such firm hold of the thoughts and desires of so many.

It would give me much pleasure to believe that I am quite anticipated by many here when I add that to the late *Mr. George Combe* we are very specially indebted for the promulgation of the best and soundest views on 'The Constitution of Man, considered in relation to External Objects;' that to him we owe our obligations for an exposition of those moral principles, *i. e.* laws, which are not less binding on nations than on individual men and women; and that to his (Combe's) writings we can look for instruction concerning those important "duties of man" so inseparable from him in the social and political aspects of his being. Our forefathers, it is most true, enjoyed not such teaching; but living, as they did, under the guidance of the lower feelings and their brute passions, realised the social and political defects and vices to which allusion is here made; and hence, probably, it was feared that "nature's soul" had "on man alone heaped ruin, vice, and slavery;" and hence, also, it may be assumed, Shelley's very beautiful and eloquent query with which this lecture commences.

I purpose this evening to put before you the philosophical opinions of George Combe, to be found both in 'The Constitution of Man' and in his 'Moral Philosophy;' and from these publications it is necessary, therefore, to quote more or less freely. It will be well, however, to preface my exposition of our author's views with a few remarks of a personal or biographical character.

The late Mr. G. Combe was born in Edinburgh in 1788. One of a large family (seventeen), he was, at an early age, noticed for his intelligence. When in his nineteenth year he became articled to a lawyer, and in his twenty-fourth year commenced practice as a writer to the signet, as solicitors are termed in Edinburgh. We are told that "to the duties of his profession he devoted his energies for upwards of five and twenty years, and amassed, it is understood, a competent, though not a very considerable, fortune." His mind, always of a philosophical tendency, was early impressed with the teachings of Gall and Spurzheim. The latter visited Edinburgh, and numbered George Combe among his most ardent and truth-seeking admirers. Phrenology was George Combe's starting point in science. To Spurzheim he was indebted for his first noble impulse forwards in the great cause of truth and humanity. The mind

first and the body afterwards engaged his attention; though not a medical man he became, ere long, a sound and able physiologist. The investigation of the functions of the living organism, in their entirety and wonderful perfectibility, was to him a labour of deep love; he became impressed—as who would not?—with not only their mutual co-operation, and dependence the one on the other, but with their indissoluble *relation to external objects*. Thus it was, he was led to appreciate so fully "the justice and the beneficence of the Great Creator," and not the less to perceive how and in what way the happiness of mankind and the well-doing of nations result from the obedience to those natural laws to which both man and the world external to him are subject. The first publication of 'The Constitution of Man' by George Combe, in 1828, constitutes an important era in matters of science. It is said that its appearance created a sensation unparalleled by any philosophical work ever published in the language. "It excited great praise and greater blame;" but having attracted the attention of a Mr. Henderson, that gentleman bequeathed a considerable sum to be spent in publishing cheap editions of it in Great Britain and America, and in translating it into foreign languages. It is on record that 90,500 copies of 'The Constitution of Man, considered in relation to External Objects,' have been printed and sold in Great Britain, besides large sales in the United States.

As may be expected, the pursuits of science and the practice of the law, or, in other words, the contemplation of the glorious works of the Creator, and the study of the legal inventions of our not overwise or too scrupulous forefathers proved, ere long, incompatable. Mr. Combe's great and untiring energies were destined to become absorbed in the former to the exclusion of the latter; he became, well known, as a philosophical and social reformer, but forgotten as a lawyer. Had not this great change in his pursuits taken place, his biographer could hardly have declared Mr. Combe to be "a philosopher in the noblest sense of the word, a benefactor as well as an instructor of his fellow-men." Nor could he have ventured to declare that "it was his gift, his calling, his duty, and his highest pleasure to show the justice and the beneficence of the Great Creator, who made the eye for sight, the ear for hearing, and the brain for the manifestation of intelligence and will; and to prove to a world which had too much neglected, or utterly ignored the fact, that the laws of bodily are those of mental health; and that, in one sense, it is as truly irreligious, and as contrary to the Divine laws by which the world is governed, to live in habitual uncleanliness of person or abode, and to breathe polluted air, as it is to steal, or bear false witness against one's neighbour."

The fact, just now stated, that 90,500 copies of the 'Constitution of Man' have been sold to a reading public, speaks much in its

favour. Can we doubt that the contents of this volume have, in some way, struck a responsive chord in the hearts of many of us? For my own part, I feel that the late Mr. G. Combe not only wrote a great and important book, but that he proved, in the great demand for the same, that there is in the breast of man a larger abundance of good than has been hitherto anticipated. He has made it appear that there exists in mankind an innate and instinctive preference for what is truthful and holy, to the exclusion of what is merely specious; and that the hitherto dormant and more deeply-seated, and purer emotions and the loftier capacities of our kind, must one day, and under more and more favourable circumstances, come well to the surface; and that when the matured seed shall be strewn broad cast over the soil, duly and faithfully prepared, and adapted for its reception—then may we look for a glorious and abundant harvest—and that *then* may we expect no longer to look on the pages of history and find out little else than *ruin, vice, and slavery;* but little else than "unceasing cavils," "unholy wars," and "personal cruelties;" but little else than "the countless bad acts of so many kings and nobles, of so many priests and charlatans;" far otherwise.

With the modesty so characteristic of a superior mind, Mr. Combe tells us in the preface to the 'Constitution of Man' that the only novelty in his book respects the relations which acknowledged truths hold to each other. *Physical laws*, of nature, he says, "affecting our physical condition, as well as regulating the whole material system of the universe, are universally acknowledged to exist, and constitute the elements of natural philosophy and chemical science; physiologists, medical practitioners, and all who take medical aid, admit the existence of *organic laws;* and the sciences of government, legislation, education, indeed our whole train of conduct through life, proceed upon the admission of *laws in morals.* Accordingly, the laws of nature have formed an interesting subject of inquiry to philosophers of all ages; but, so far as I am aware, no author has hitherto attempted to point out, in a systematic form, the relations between those laws and the constitution of man; which must nevertheless be done, before our knowledge of them can be beneficially applied." Now, inasmuch as Mr. Combe's purpose is essentially *practical*, he insists on it that *a theory of mind* forms an essential element in the execution of the plan of his book; because, as he writes "without it no comparison can be instituted between the natural constitution of man and external objects." The "theory of mind" accepted by Mr. Combe is that of Gall and Spurzheim—viz., *phrenology;* and there can be no doubt of the propriety of this selection. Certainly, as Mr. Combe remarks, there *are* individuals who object to all mental philosophy as useless, and argue that as mathematics, chemistry, and botany, have become great sciences,

without the least reference to the faculties by means of which they are cultivated, so morals, religion, legislation, and political economy have existed, have been improved, and may continue to advance, with equal success, without any help from a "theory of mind." Such objectors, however, should consider that lines, circles, and triangles—earth's alkalies and acids—and also corollas, stamens, pistils, and stigmas, are objects which exist independently of the mind, and may be investigated by the application of the mental powers, in ignorance of the constitution of the faculties themselves, just as we practice archery without studying the anatomy of the hand; whereas the objects of moral and political philosophy are the qualities and actions of the mind itself. These objects have no existence independently of mind; and they can no more be systematically or scientifically understood without the knowledge of mental philosophy, than optics can be cultivated as a science in ignorance of the structure and modes of action of the eye.

It is assumed, as a starting point in the argument, that such is the constitution of human nature, and such are its relations to external objects, that the Divine government of the world is to be directly inferred therefrom; and that this government recognises, in an especial manner, the independent existence and operation of the natural laws of creation. In the words of Mr. G. Combe, "the natural laws may be divided into three great and intellectual classes, viz., physical, organic, and moral; and the peculiarity of the new doctrine is, its inculcating that *these operate independently of each other;* that each requires obedience to itself; that each, in its own specific way, rewards obedience and punishes disobedience; and that human beings are happy in proportion to the extent to which they place themselves in accordance with *all* of these Divine institutions." For example, the most pious and benevolent missionaries sailing to civilise and Christianise the heathen, may, if they embark in an unsound ship, be drowned by disobeying a physical law, without their destruction being averted by their morality. "On the other hand," he proceeds, "If the greatest monsters of iniquity were embarked in a staunch and strong ship, and managed it well, they might, and, on the general principles of the government of the world they would, escape drowning in circumstances exactly similar to those which would send the missionaries to the bottom. There appears something inscrutable in these results, if only the *moral qualities* of the men be contemplated; but if the principle be adopted that ships float in virtue of a purely physical law—and that the physical and moral laws operate indepently, each in its own sphere—the consequences appear in a totally different light.

"In like manner, the *organic* laws operate independently; and hence, one individual who has inherited a fine bodily constitution

from his parents, and observes the rules of temperance and exercise, will enjoy robust health, although he may cheat, lie, blaspheme, and destroy his fellow-men; while another, if he have inherited a feeble constitution, and disregard the laws of diet and exercise, will suffer pain and sickness, although he may be a paragon of every Christian virtue. These results are frequently observed to occur in the world; and on such occasions the darkness and inscrutable perplexity of the ways of Providencc are generally moralised upon, or a future life is called in as the scene in which these crooked paths are to be rendered straight. But if my views be correct, the Divine wisdom and goodness are abundantly conspicuous in these events, for by this distinct operation of the organic and moral laws order is preserved in creation, and, as will afterwards be shown, the means of discipline and improvement are afforded to all the human faculties.

"The *moral and intellectual* laws also have an independent operation. The man who cultivates his intellect, and habitually obeys the precepts of Christianity, will enjoy within himself a fountain of *moral and intellectual happiness*, which is the appropriate reward of that obedience. By these means he will be rendered more capable of studying, comprehending, and obeying, the physical and organic laws, of placing himself in harmony with the whole order of creation, and of attaining the highest degree of perfection, and reaping the highest degree of happiness, of which human nature in this world is susceptible. In short, whenever we apply the principle of the *independent operation* of the natural laws, the apparent confusion of the moral government of the world disappears."

Having sketched in the first chapter the natural laws, in so far as they are revealed to "man's faculties;" having proposed to himself the following questions, viz.:—1st. *What exists?* 2ndly. *What is the purpose or design of what exists?* And 3rdly. *Why was what exists designed for such uses as it evidently subverses;* and having demonstrated that whilst the perceptive faculties of man are adequate to the first proposition, and his reflective faculties to the second, he adds these words, viz., "it may well be doubted if he has powers suited to the third;" and doubting this much, Mr. Combe declines its discussion. The second chapter treats in Section one of *man as a physical being;* it points out the means by which the Creator has placed man in harmony with the physical laws of the universe. It demonstrates how it is that the bones, muscles, and nerves, constructed on the most perfect principles, enable him to preserve his equilibrium, and to adapt his movements to the law of gravitation, &c. In order that man may be found in harmony with the physical laws, he has been provided with intellectual faculties, calculated to perceive their existence, their modes of operation, the relations between them and himself, and the beneficial consequences of observing

these relations, and the painful results of neglecting the same. Mr. Combe illustrates at once the responsibility of man to the physical laws of matter and the importance of a right exercise of his intellectual powers, as a means of appreciating his responsibility, in the following sentence: "When a person falls over a precipice and is maimed or killed, when a ship springs a leak and sinks, or when a reservoir of water breaks down its banks and ravages a valley, the evils, no doubt, proceed from the operation of this law; but we ought to inquire whether they could or could not have been prevented by a due exercise of the physical and mental powers bestowed by the Creator on man to enable him to avoid the injurious effects of gravitation. By pursuing this course we shall arrive at sound conclusions concerning the adaptation of the human body and mind to the physical laws of the creation."

Sec. 2 *treats of man as an organised being;* and as such subject to the organic laws. By an organised being, is meant one which derives its existence from a previously existing organised being, one which subsists on food, which grows, attains maturity, decays, and dies. The organic laws are, according to Mr. G. Combe, of three kinds, he thus explains them:

"The *first* law, then, that must be obeyed, to render an organised being perfect in its kind, is, that the germ from which it springs shall be complete in all its parts, and sound in its whole constitution. If we sow an acorn in which some vital part has been destroyed altogether, the seedling plant, and the full-grown oak, if it ever attain to maturity, will be deficient in the lineaments which are wanting in the embryo roots; if we sow an acorn entire in its parts, but only half ripened, or damaged in its whole texture by damp or other causes, the seedling oak will be feeble, and will probably die early. A similar law holds in regard to man. A *second* organic law is that the organised being, the moment it is ushered into life, and so long as it continues to live, must be supplied with food, light, air, and every other physical element requisite for its support, in due quantity, and of the kind best suited to its particular constitution. Obedience to this law is rewarded with a vigorous and healthy development of its powers; and, in animals, with a pleasing consciousness of existence, and aptitude for the performance of their natural functions; disobedience is punished with feebleness, stinted growth, general imperfection, or early death. A single fact will illustrate this observation. At the meeting of the British Association, held in Edinburgh in 1834, there was read an Abstract, by Dr. Joseph Clarke, of a Registry kept in the Lying-in Hospital of Great Britain Street, Dublin, from the year 1758 to the end of 1833, from which it appeared that, in 1781, when the hospital was imperfectly ventilated, every sixth child died within nine days after birth of convulsive disease, and that, after

means of thorough ventilation had been adopted, the mortality of infants, within the same time, in five succeeding years, was reduced to nearly one in twenty. A *third* organic law, applicable to man, is, that he duly exercise his organs, this condition being an indispensable prerequisite of health. The reward of obedience to this law, is the enjoyment in the very act of exercising the functions, pleasing consciousness of existence, and the acquisition of numberless gratifications and advantages, of which labour, or the exercise of our powers, is the procuring means: disobedience is punished with derangement and sluggishness of the functions, with general uneasiness or positive pain, and with the denial of gratification to numerous faculties."

Sec. 3 considers man in his psychological relations, *i. e.*, as an animal, moral, and intellectual being. Now, as Mr. Combe very properly remarks, in treating of this diversion of his subject, it is, of all things, indispensable to start on right premises. If we would discover the adaptation of the mental parts of man's nature to his external circumstances, we must first know what *are* his various animal, moral and intellectual powers themselves—and to know this much there is but *one* course open to us, viz., to adopt the teachings of Gall and Sperzheim. Mr. Combe, you are well aware, proved himself to be the most able and successful disciple of these great men.

Proceeding with the course of the argument adopted by Mr. G. Combe we come next to the consideration of the *sources of human happiness*. If I have the misfortune to address those whose time hangs heavily on their hands; who have not enough to do, or who are too indolent to seek occupation, or too indifferent in their natures to get up an interest in local matters, or in science or general politics, &c., it is wholly unnecessary for me to say that all such of you are, as a matter of course, far from happy. The idle, or unoccupied must be, more or less, miserable; they are in much the same state of *ennui* and discontent as the infatuated Rasselas in his happy valley, so called; or as the listless occupants of Thompson's famous 'Castle of Indolence.' "*Life demands action,*" says the poet, and if this were untrue man would not be found created in such a manner as to invite and encourage exercise of the mental and bodily powers. Life not only demands, but will have, action of some one or other kind. How many gaily and fashionably dressed young men do we meet everywhere, who, without any useful or honourable calling, fill up their time at the toilet-table, and at the billiard and card tables? How numerous are those of Saxon blood and energies, who, with capacities of the best kind, and with hearts of the right sort, devote both their talents and even their affections to fancy dogs and horses. Is it not a real pity, a national grievance, that even *one* of the

wealthy classes, *i. e.*, of the upper ten thousand, should so far fail in his high and important calling. However, the number of the Carlisles, the Broughams, the Russells, the Stanleys, and the Shaftesburys, is, let us hope and believe, on the increase. If either one of the good and great men whom I have named were asked to tell us his experience, in so far as the *sources of human happiness* are concerned he would reply, *in work, in steady but unceasing occupation.*

Are you anatomists? Consider, then, the bones, muscles, and nerves, the digestive and respiratory organs, &c., they are given us for use. Consider the external senses and the internal faculties, these also are given us for use. Each and all of these when exercised in conformity with their nature, furnish the most pleasing sensations, directly or indirectly; and their combined operation in man constitute life, and national existence.

Need I tell you there is generated in every single thing which has life, in man and beast and each creeping thing, in every fragment of the vegetable world, a certain amount of what is called *nerve force;* this must be got rid of, must be expended in some way, either by the body or mind, by the muscles or the brain, in a word, by or through an especial organic apparatus. The supply and the expenditure of this "nerve force," generated in such abundance in the living organism, requires to be equalised. If the supply exceed the expenditure disease is set up in this organ or in that, in the brain or in the stomach, and so on. A kind of morbid sensibility, under these circumstances, is established, which involves, at length, both mind and body. Nature is anxious, as it were, for the restoration of the party afflicted, and she does her best to cut off all further supplies of "nerve force;" and thus it is the appetite fails and the stomach is incompetent to the due performance of its functions. Should the individual continue without a sufficient stimulus to exertion, should the bodily powers and the mental faculties remain habitually inactive, what a lack of human happiness is here!

Let us look at this picture from another point of view. That man who is well and usefully employed day by day, who expends the nerve-force generated within him as he ought to do; who takes a sufficiency of exercise, and dedicates a certain number of hours each day to the exercise of his nervous and muscular systems; whose knowing and reflecting faculties are provided with their necessary normal excitants, and whose sympathies are kept alive by social intercourse with his fellow-man; that man, I say, is in the very best position to realise *happiness.* The exercise of mind and body, which the daily routine of such a man involves is, in itself, a high source of enjoyment. His firm and elastic step assures you that the contraction of each muscle gives him a real pleasure; his

bright eye and happy expression of countenance tell you of a mind well disciplined and in harmony with surrounding objects. His whole physique is the type of health and happiness. In activity of mind and body he obeys the organic laws as they obtain in man and animals, and he is happy; happy, not only in the mode of expenditure of his "nerve-force," but in its renewal, *i. e.*, the mode of its supply; for he eats well and sleeps well. Such are among his rewards for time well spent, for days well occupied. "It is delightful," writes Mr. Combe, "to repair exhausted nervous and muscular energy by wholesome aliment, and the digestive organs have been so constituted as to afford us frequent opportunities of enjoying the pleasures of eating." But there are no pleasures of eating for him who is indolent—a fact from which it is argued that labour is the birthright of man; further, "the body has been created destitute of covering, yet standing in need of protection from the elements of heaven; and nature has been so constituted that raiment can be easily provided by moderate exercise of the mental and corporeal organs." That the sources of human happiness must be looked for in the full activity of our various powers of mind and body is undeniable. Ask the painter or musician, the astronomer or statesman, the physiologist, the geologist or the poet, from what source he draws the grand luxuries of life. Ask our present Prime Minister, or Mr. Bright; ask Dr. Brown-Séquard, or Professor Owen; ask Dr. Lyell, ask Alexander Smith, or the Poet Laureate (Tennyson) to enumerate his happiest hours, his brightest periods of existence. Can you doubt what each and all of these great men, now living, would tell you? Not one but would acknowledge that his happiness has been, and is, in the exercise of his calling. This is a great fact, and speaks favorably of the truth of Mr. Combe's opinions, as set forth with so much beauty, and force, and completeness in his voluminous writings.

A comparison has been made between the instincts of the lower animals, and the mental acquirements of man, and it has been concluded that the advantages are on the side of the former, because in them knowledge may be said to be intuitive, and what is more perfect from the first; whilst in ourselves it is the result of hard experience and of a long course of education. However, you will perceive that the relations to the external world of the lower animals and ourselves is by no means alike or parallel; and what is more, man is so evidently a responsible being that any such comparison becomes really odious. Mr. Combe has treated of this "comparison" in these words, viz.:

"Supposing the human faculties to have received their present constitution, two arrangements for their gratification may be fancied: first, infusing into the intellectual powers, at birth, *intuitive knowledge* of every object which they are fitted ever to comprehend; and

directing every propensity and sentiment by an infallible instinct to its best mode and degree of gratification; or, secondly, constituting the intellectual faculties only as *capacities* for gaining knowledge by exercise and application, and surrounding them with objects bearing such relations towards them, that, when these objects and relations are observed and attended to, high gratification shall be obtained, and, when they are unobserved and neglected, the result shall be uneasiness and pain; giving at the same time to each propensity and sentiment a wide field of action, comprehending both use and abuse, and leaving the intellect to direct each to its proper objects, and to regulate its degrees of indulgence. And the question occurs, Which of these modes would be more conducive to enjoyment? The general opinion will be in favour of the first; but the second appears to me to be preferable. If the first meal we had eaten had for ever prevented the recurrence of hunger, it is obvious that all the pleasures of satisfying a healthy appetite would then have been at an end; so that this apparent bounty would have greatly abridged our enjoyment. In like manner, if (our faculties being constituted as at present) unerring desire had been impressed on the propensities and sentiments, and intuitive knowledge had been communicated to the understanding, so that, when an hour old, we should have been, morally, as wise and virtuous, and, intellectually, as thoroughly instructed as we could ever become, all provision for the sustained activity of our faculties would have been done away with. When wealth is acquired the miser's pleasure in it is diminished. He grasps after *more* with increasing avidity. He is supposed irrational in doing so; but he obeys the instinct of his nature. What he possesses no longer satisfies acquisitiveness. The miser's pleasure arises from the *active state* of this faculty, and only the pursuit and obtaining of *new treasures* can *maintain that state*. The same law is exemplified in the case of love of approbation. The enjoyment which it affords depends on its *active state;* and hence the necessity for *new incense,* and for *mounting higher* in the scale of ambition, is constantly felt by its victims. Napoleon, in exile, said, 'Let us live upon the past;' but he found this impossible; his predominant desires originated in love of approbation and self-esteem, and the past did not stimulate them, or maintain them in constant activity. In like manner, no musician, artist, poet, or philosopher, would reckon himself happy, however extensive his attainments, if informed, 'Now you must stop and live upon the past;' and the reason is still the same; the pursuit of new acquirements, and the discovery of new fields of investigation, excite and maintain the faculties in activity; and activity is enjoyment."

It will probably occur to the minds of some who hear me that these new *acquirements* and *new fields of investigation* must come to

an end; must, after the lapse of time, cease to be. The idea is specious, nothing more. As well may he insist on it that our emotions and affections in time yet to come will lack their natural stimuli. Rely on it that the intellectual not less than the moral faculties will be ever maintained in activity; neither will languish for want of opportunity. This world is not yet old, or rather, according to geologists, it has to run a much longer course than it has yet done; and as to man, he can be regarded at this time as but a comparative stranger to it—with his maturity, *i. e.* his perfectibility, very far in the future.

Mr. Combe is quite right in saying that "At present man is obviously only in the beginning of his career. Although," he continues, "a knowledge of external nature, and of himself, is indispensable to his advancement to his true station as a rational being, yet four hundred years have not elapsed since the arts of printing and engraving were invented, without which knowledge could not be disseminated through the mass of mankind; and, up to the present hour, the art of reading is by no means general over the world—so that even now the *means* of calling man's rational nature into activity, although discovered, are but very imperfectly applied. It is only five or six centuries since the mariner's compass was known in Europe, without which even philosophers could not ascertain the most common facts regarding the size, form, and productions of the earth. It is but three hundred and forty-three years since one-half of the habitable globe, America, became known to the other half; and considerable portions of it are still unknown even to the best informed inquirers. It is little more than two hundred years since the circulation of the blood was discovered; previously to which it was impossible even for physicians to form any correct idea of the uses of many of man's corporeal organs, and of their relations to external nature. Haller, who flourished in the early part and middle of the last century, may be regarded as the founder of human physiology as a science of observation. It is only between forty and fifty years since the true functions of the brain and nervous system were discovered; before which we possessed no adequate means of becoming acquainted with our mental constitution and its adaptation to external circumstances and beings. It is no more than sixty-one years since the study of chemistry, or of the constituent elements of the globe, was put into a philosophical condition by Dr. Priestley's discovery of oxygen; and hydrogen was discovered so lately as 1766, or sixty-nine years ago. Before that time people in general were comparatively ignorant of the qualities and relations of the most important material agents with which they were surrounded. At present this knowledge is still in its infancy, as will appear from an enumeration of the dates of several other important discoveries. Electricity was discovered in 1728, galvanism in 1794, gas-light

about 1798, and steamboats, steam-looms, and the safety-lamp, in our own day.

"It is only of late years that the study of geology has been seriously begun; without which we could not know the past changes in the physical structure of the globe—a matter of much importance as an element in judging of our present position in the world's progress. This science also is still in its infancy. An inconceivable extent of territory remains to be explored, from the examination of which the most interesting and instructive conclusions will probably present themselves. In astronomy, too, the discoveries of the two Herschels promise to throw additional light on the early history of the globe.

"The mechanical sciences are at this moment in full play, putting forth vigorous shoots, and giving the strongest indications of youth, and none of decay.

"The sciences of morals and of government are still in many respects in a crude condition.

"In consequence, therefore, of his profound ignorance, man, in all ages, has been directed in his pursuits by the mere impulse of his strongest propensities, formerly to war and conquest, and now to accumulating wealth; without having framed his habits and institutions in conformity with correct and enlightened views of his own nature, and its real interests and wants. Up to the present day the mass of the people in every nation have remained essentially ignorant, the tools of interested leaders, or the creatures of their own blind impulses, unfavorably situated for the development of their rational nature; and they, constituting the great majority, necessarily influence the condition of the rest. But at last the arts and sciences seem to be tending towards abridging human labour, so as to force leisure on the mass of the people; while the elements of useful knowledge are so rapidly increasing, the capacity of the operatives for instruction is so generally recognised, and the means of communicating it are so powerful and abundant, that a new era may fairly be considered as having commenced.

"From the want of a practical philosophy of human nature, multitudes of amiable and talented individuals are at present anxious only for preservation of the attainments which society possesses, and dread retrogression in the future. If the views now expounded be correct, this race of moralists and politicians will in time become extinct, because, progression being the law of our nature, the proper education of the people will render the desire for improvement universal."

The consideration of the sources of human misery will very naturally follow that of the sources of human happiness. The many calamities of life, whether of a personal or national character, are plainly enough referable to an infringement of the laws of nature.

These calamities are due, if not to an infringement of the physical laws, to either a non-observance or neglect of the organic laws or of the moral law. Now it is quite impossible to do the commonest justice to this question of the sources of human misery in a single lecture; you will therefore bear with me if I touch lightly on this division of my subject. The evils resulting from infringement of the physical laws are a matter of every day demonstration.

When we compare the means of protection from harm, under the physical laws, possessed by the lower animals, with those proper to man, we may be disposed to conclude that the monkey, goat, and some birds, &c., are the better off. Their admirable adaptation to the laws of gravitation, whereby they are guaranteed from the consequences of their infringement is self-evident. However, let it not be supposed that man is less the object of a Creator's care and beneficence. His means of protection are different, but when understood and applied they will, doubtless, be found not less complete. Man's seeming disadvantages of *physique* are well compensated by certain mental faculties, viz., those of constructiveness and reflection. With their aid he bends the very elements to his will, and whilst he avoids the evils resulting from infringement of the physical laws, he realises to the full, as is well known to you, the glorious consequences of obedience to them.

The organic laws are so much and so commonly infringed that the miseries resulting are ever present to us. If this were not the case your medical friends and neighbours in Bristol and its neighbourhood would not be so plentiful as we find them. Obey the organic laws as you should, and so preserve your health, and so avoid disease and doctors. Health *is*, without doubt, within the capabilities of the human race. Provided any one of us had a fair start in life, *i. e.*, provided any person here sprung from a normal germ, one complete in all its parts, and sound in its whole constitution; assuming also that from the first moment of his or her existence, and as long as life is continued, he or she is supplied with food, light, and air, and every other aliment necessary for the support of life, and further that he or she shall duly exercise the several functions of this complex organism of ours; provided all this, I say, then is *health* in great part an inevitable sequence. Unhappily there are very few of us who enjoy this fair start I have imagined, and very few of us for whom the provisions just named abound; we must then accept the fact as we find it, and make the best of it. The subject of physiology, as applied to health and education (physical and mental), is one of the first importance. To understand it fully and practically, we must become anatomists and physiologists; that is to say, we must know the organic constitution of our body. Before we can become acquainted with its relations to external objects, we must learn the existence and qualities of

these objects, as unfolded by chemistry, natural history, aud natural philosophy. Nor is this all—we must compare these same external objects with the constitution of the human body. Such are the preliminaries necessary to the due observance of the organic laws. Such are the preliminaries imposed on us if we would avoid the calamities or miseries consequent on the infringement of the organic laws.

Mr. Combe has these words, viz. :—"If, then, we sedulously inquire, in each particular instance, into the *cause* of the sickness, pain, and premature death, or the derangement of the corporeal frame in youth and middle life, which we see so common around us; and endeavour to discover whether it originated in obedience to the physical and organic laws, or sprang from infringement of them, we shall be able to form some estimate as to how far bodily suffering is justly attributable to imperfections of nature, and how far to our own ignorance and neglect of Divine institutions.

"The foregoing principles, being of much practical importance, may, with propriety, be elucidated by a few actual cases. Two or three centuries ago, various cities in Europe were depopulated by the plague, and, in particular, London was visited by an awful mortality from this cause, in the reign of Charles II. Most people of that age attributed the scourge to the inscrutable decrees of Providence, and some to the magnitude of the nation's moral iniquities. According to the views now presented, it must have arisen from infringement of the *organic laws,* and have been intended to enforce stricter obedience to them in future. There was nothing inscrutable in its causes or objects. These, when clearly analysed, appear to have had no direct reference to the moral condition of the people; I say *direct* reference to the moral condition of the people—because it would be easy to show that the physical, the organic, and all the other natural laws, are connected indirectly, and constituted in harmony, with the moral law; and that infringement of the latter often leads to disobedience of other laws, and brings a double punishment on the offender. The facts recorded in history exactly correspond with the theory now propounded. The following is a picture of the condition of the cities of Western Europe in the 15th Century :—'The floors of the houses being commonly of clay, and strewed with rushes or straw, it is loathsome to think of the filth collected in the hovels of the common people, and sometimes in the lodgings even of the superior ranks, from spilled milk, beer, grease, fragments of bread, flesh, bones, spittle, excrements of cats, dogs, &c. To this Erasmus, in a letter 432, c. 1815, ascribes the plague, the sweating sickness, &c., in London, which in this respect resembled Paris and other towns of any magnitude in those times.'—Ranken's 'History of France,' vol. v, p. 416. The streets of London were excessively narrow, the habits of the people dirty, their food

inferior, and no adequate provision was made for introducing a plentiful supply of water, or removing the filth unavoidably produced by a dense population. The great fire in that city, which happened soon after the pestilence, afforded an opportunity of remedying, in some degree, the narrowness of the streets; and habits of increasing cleanliness abated the filth: these changes brought the people to a closer obedience to the organic laws, and no plague has since returned. Again, till very lately, thousands of children died yearly of the smallpox; but, in our day, vaccine inoculation saves ninety-nine out of a hundred, who, under the old system, would have died."

Already is it a matter of demonstration that the average duration of human life is increasing year by year throughout England and Wales. Now this is due, in some measure, to the advance of medical science; but principally to improved habits of life among the masses of the people. That we hear more at this time than we ever did of draining, ventilation, education, temperance, &c., is most true, and that the attention of the various classes of people is being yet more and more directed to the subject of hygiéne is certain. The laws which subserve health and disease claim the best and most earnest attention of the Legislature. Our national greatness, Britain's supremacy, is indissolubly dependent on the rapid increase of our numbers; on our largely increasing population. This fact it is which will be found to tell so well for the advancement of a sound civilisation. If the past be any criterion of the future, if the population of Great Britain *has* doubled itself in a little more than fifty years, then may we expect that before our successors shall enter on the 21st century, or, which is the same thing, within the next 150 years, these sea-girt isles will be the residence of something *over* a hundred millions of souls. Our national strength will have increased with our numbers; and we shall then be in a position to take the *very* first position—the lead—among nations; and therefore to dictate to our continental neighbours the arts of peace and progress, the principles of religion and of morals. I doubt not it is the high and glorious destiny of the Saxon to pilot the other races of mankind through the broad ways of science to the fertile plains of civilisation. Already has the good work commenced; and the proof of this lies in the appointment of *officers of health* in our large towns, and in the large share of attention given everywhere to sanitary matters, *i.e., to the organic laws.*

In the last book of Mr. G. Combe's, entitled "The Relation between Science and Religion," we learn that "the records of mortality, when arranged according to the different classes of society, and different localities of the same country," demonstrate the dependence of both health and life or the converse, disease and death, on the habits of a people, *i. e.*, on ventilation, drainage, air, exercise, diet, and so on.

The following results are presented by a report of the mortality in Edinburgh and Leith for the year 1846:

"The mean age at death of the 1st class, composed of gentry and professional men, was 43½ years.

"The mean age at death of the 2nd class, composed of merchants, master tradespeople, clerks, &c., was 36½ years.

"The mean age at death of the 3rd class, composed of artizans, labourers, servants, &c., was 27½ years."

In reference to the foregoing facts, Mr. Combe makes the following very just remarks, viz., "It is a reasonable inference that, inasmuch as God is no respecter of artificial rank, that the differences in these proportions were the result of the individuals in the first and second classes having fulfilled more perfectly than those in the third, the conditions on which He proffers to continue with them His boon of life."

We come now to the consideration of the 'Calamities arising from the Infringement of the Moral Law.' The personal histories of individuals—the antecedents of any single person in this room—if gone into with care and discrimination, would abundantly prove how certainly "*guilt*," of every shade, "the avenging fiend follows close behind, to punish those who err." If our lawgivers recognised the principle insisted on, they would legislate with greater discrimination than they now do, knowing as they then would that nations, like individuals, are strictly responsible for acts both of omission and commission.

A survey of the moral and religious codes of different nations, and of the moral and religious opinions of different philosophers, will strike every reflecting mind with undoubted evidences of their great and remarkable diversities. Now, without the aid of phrenology, these differences appear more or less insurmountable; however, the doctrines of Gall and Spurgheim, by demonstrating the differences of combination of the several primitive faculties of the mind, enable us to account for all varieties of sentiment and for every diversity of moral and religious opinion. "The code of morality," observes Mr. G. Combe, "framed by a legislator in whom the animal propensities were strong and the moral sentiments weak, would be very different from one instituted by another lawgiver in whom this combination was reversed. In like manner, a system of religion, founded by an individual in whom destructiveness, wonder, and cautiousness were very large, and veneration, benevolence, and conscientiousness deficient, would present views of the Supreme Being widely dissimilar to those which would be promulgated by a person in whom the last three faculties and intellect decidedly predominated. Phrenology shows that the particular code of morality and religion *which is most completely in harmony with the whole faculties of the individual*, will necessarily appear to him to be the best *while he refers only to the*

dictates of his individual mind as the standard of right and wrong. But if we are able to show that the *whole scheme of external creation is arranged in harmony with certain principles, in preference to others,* so that enjoyment flows upon the individual from without when his conduct is in conformity with them, and that evil overtakes him when he departs from them, we shall then obviously prove that the former is the morality and religion established by the Creator, and that individual men, who support different codes, must necessarily be deluded by imperfections in their own minds. That constitution of mind, also, may be pronounced to be the best which harmonises most completely with the morality and religion established by the Creator's arrangements. In this view, *morality becomes a science,* and departures from its dictates may be demonstrated as practical follies, injurious to the real interest and happiness of the individual, just as errors in logic are capable of refutation to the satisfaction of the understanding."

It is very much to be feared that the *practical follies* named by Mr. Combe are of too universal an application. There is mighty little honesty in this world. Mankind lives, as a general rule, in open defiance of the moral law, realising to the full the "incoherent state of society," named by Fourier. The *eye to business* is seldom or ever closed; men of every religious creed, of whatever political opinions or calling, seem, as a too general rule, ever awake to the consideration of pounds, shillings, and pence. Let each person present ask himself what his own experience amounts to. How seldom is it that we are brought into contact with really superior people. How unceasingly are we required to be on our guard lest we become the dupes of artful, selfish, and designing men. Nothing is more true than that we live on each other; the opposing interests of man, as things are at present constituted, would seem to allow of no alternative. It is indeed difficult to see one's way out of this chaos of selfishness; but assuming the existence of a government of the world, in harmony only with an unfailing supremacy of the moral sentiments and the intellect, surely such a *chaos of selfishness* must, one day, come to an end. It is, indeed, lamentable to reflect on certain events belonging to the last few years; on the abuses of the banking system, on the vices of the railway mania, and on our Crimean defects, &c. However, these blots on our national escutcheon have developed their own dark features; and their discovery has led to a better order of things. As it has been and is, both with individuals and with banking companies, with railway monopolists, and with political officials, ever too careful of their own *Dowb's,* so has it ever been with the various classes of society regarded in their social relations. The poor and not less the rich, with some glorious exceptions, have to this time lived, and continue so to do, in the gratification, more especially, of their lower feelings, *i. e.* their self-

esteem and their acquisitiveness—the one struggling not a little against the other, for it may be more labour or more pay. Our very relaxations or amusements partake of a kind of selfishness; *e. g.*, the poor man plays at skittles, and the rich man devotes his leisure to cards and horse-racing, and all for money. The "bubbles" of this day have a similar origin to those of *Mississippi* celebrity; the object of each bubble is *money, money,* or, which is the same thing, the extravagant gratification of certain of the primitive faculties of the human mind—of self-esteem and acquisitiveness, more especially. The following words are from the pen of Mr. George Combe, viz.:—"The inhabitants of Britain generally are devoted to the acquisition of wealth, of power and distinction, or of animal pleasure: in other words, the great object of the labouring classes is to live and gratify the inferior propensities; of the mercantile and manufacturing population, to gratify acquisitiveness and self-esteem; of the more intelligent class of gentlemen, to gratify self-esteem and love of approbation, by attaining political, literary, or philosophical eminence; and of another portion, to gratify love of approbation by supremacy in fashion; and these gratifications are sought by means not in accordance with the dictates of the higher sentiments, but by the joint aid of the intellect and animal powers. If the supremacy of the moral sentiments and intellect be the natural law, then, as often observed, every circumstance connected with human life must be in harmony with it: that is to say, *first,* after rational restraint on population and proper use made of machinery, such moderate labour as will leave ample time for the systematic exercise of the higher powers will suffice to provide for human wants; and, *secondly,* if this exercise be neglected, and the time which ought to be dedicated to it be employed in labour to gratify the propensities, direct evil will ensue; and this, accordingly, appears to me to be really the result."

A considerable portion of the 'Constitution of Man,' and of the 'Moral Philosophy' of Mr. Combe, is devoted to the consideration of the legitimate uses of mechanical inventions, regarded as partial substitutes for manual labour. If all the wants of life, "every imaginable necessary and luxury," can be obtained by means of machinery and the aids derived from science, with the addition of but a moderate share of personal or manual labour, then is there good reason why men should rest satisfied at this point, and devote a portion of their time daily to education, to moral and intellectual advancement. I need hardly remind you that excessive bodily toil is altogether incompatible with educational pursuits. The body having exhausted the *nerve-force* before spoken of in this lecture, there can be none left for the mind. Now, "labour," in the words of Mr. Combe, "if pursued till it provides abundance, but not superfluity, would meet with a certain and just reward, and would also

yield a vast increase of happiness; for no joy equals that which springs from the moral sentiments and intellect excited by the contemplation, pursuit, and observance of the Creator's laws. Farther, morality would be improved; for men, being happy, would become less vicious; and, lastly, there would be improvement in the organic, moral, and intellectual capabilities of the race; for the active moral and intellectual organs of the parents would tend to increase the volume of these in their offspring, so that each generation would start not only with greater stores of acquired knowledge than those which its predecessors possessed, but with higher natural capabilities of turning them to account."

Both the manufacturer and the labourer have, in times gone by, most seriously infringed both the organic and moral laws; and, what is more, both have incurred the penalties or calamities of such infringement. The manufacturer and his labourer have alike misunderstood the legitimate uses of mechanical inventions; the first was led with their aid to overstock the market with his goods, to seek the gratification of his acquisitiveness at the expense of his neighbour, and so he got himself into difficulties; the second looked on each machine as a source of ruin to himself and starvation to his children, and no wonder, therefore, that he prayed for their discontinuance. Both the manufacturer and the labourer ignored the proper use of the *spinning jenny*, for example sake, and to gratify their mistaken but selfish passions, they, each in a particular manner, suffered the consequences thereof. When the manufacturer and the artisan shall perceive that the dedication of their whole lives to the service of the selfish propensities must necessarily terminate in punishment; then, but not before, will they perceive the right uses of machinery, as applied to the arts. The first has yet to learn that life has other and more ennobling hopes and aspirations than those connected with making money; and the second has to be taught that his lot admits of great amelioration; that he has claims to a higher position than his present; and that he is destined to profit much by the exercise of his intellectual and moral faculties, to this time but disproportionately gratified. The annexed remarks of Mr. Combe are so much to the point that I cannot forbear their quotation. He says:

"Ordinary observers appear to conceive a man's chief end, in Britain at least, to be to manufacture hardware, broadcloth, and cotton goods, for the use of the whole world, and to store up wealth. They forget that the same impulse which inspires the British with so much ardour in manufacturing will, sooner or later, inspire other nations also; and that, if all Europe shall follow our example, and employ efficient machinery and a large proportion of their population in our branches of industry, which they are fast doing, the four quarters of the globe will at length be deluged with manu-

factured goods, only part of which will be required. When this state of things shall arrive—and in proportion as knowledge and civilisation are diffused, it will approach—men will be compelled by dire necessity to abridge their toil, because excessive labour will not be remunerated. The admirable inventions which are the boast and glory of civilised men, are believed by many persons to be at this moment adding to the misery and degradation of the people. Power-looms, steam-carriages, and steam-ships, it is asserted, have all hitherto operated directly in increasing the hours of exertion, and abridging the reward of the labourer! Can we believe that God has bestowed on us the gift of an almost creative power, solely to increase the wretchedness of the many, and minister to the luxury of the few? Impossible! The ultimate effect of mechanical inventions on human society appears to be not yet divined. I hail them as the grand instruments of civilisation, by giving leisure to the great mass of the people to cultivate and enjoy their moral, intellectual, and religious powers."

There can be no doubt that Mr. G. Combe is quite right in his estimate of the aim and objects of *mechanical inventions*. What a glorious future does the "leisure" here mentioned promise to us. What a glorious opportunity does it recognise of permanently ameliorating the condition of man, regarded as an intellectual, moral, and religious being. But if we would ever realise the climax of so much good—a climax hedged around at this time by so many prejudices and difficulties—we must not fail to look well after and appreciate the many "consequences of the present system of departing from the moral law, on the middle orders of the community, as well as on the lower." It has been remarked that "Uncertain gains, continual fluctuations in fortune, the absence of all reliance in their pursuits on moral and intellectual principles, a gambling spirit, an insatiable appetite for wealth, alternate extravagant joys of excessive prosperity and bitter miseries of disappointed ambition—render the lives of manufacturers and merchants, to too great an extent, scenes of mere vanity and vexation of spirit." As the *chief occupations* of the British nation, manufactures and commerce are disowned by reason; for, as now conducted, they imply the permanent degradation of the great mass of the people. "They already constitute England's weakness," says Mr. Combe, "and, unless they shall be regulated by sounder views than those which at present prevail, they will involve their population in unspeakable misery. The oscillations of fortune, which almost the whole of the middle ranks of Britain experience, in consequence of the alternate depression and elevation of commerce and manufactures, are attended with extensive and severe individual suffering. Deep, though often silent, agonies pierce the heart, when ruin is seen stealing by slow but certain steps on a young and helpless

family; the mental struggle often undermines the parent's health, and conducts him prematurely to the grave. No death can be imagined more painful than that which arises from a broken spirit, robbed of its treasures, disappointed in its ambition, and conscious of failure in the whole scheme of life. The best affections of the soul are lacerated and agonised at the prospect of leaving their dearest objects to struggle, without provision, in a cold and selfish world. Thousands of the middle ranks in Britain unfortunately experience these miseries in every passing year. Nothing is more essential to human happiness than fixed principles of action, on which we can rely for our present safety and future welfare; and the Creator's laws, when seen and followed, afford this support and delight to our faculties in the highest degree. It is one, not the least, of the punishments that overtake the middle classes for neglect of these laws, that they do not, as a permanent condition of mind, feel secure and internally at peace with themselves. In days of prosperity, they continue to fear adversity. They live in a constant struggle with fortune; and when the excitement of business has subsided, vacuity and craving are felt within. These proceed from the moral and intellectual faculties calling aloud for exercise; but, through ignorance of human nature, either pure idleness, gossiping conversation, fashionable amusements, or intoxicating liquors, are resorted to, and with these a vain attempt is made to fill up the void of life. I know that this class ardently desires a change that would remove the miseries here described, and will zealously co-operate in diffusing knowledge, by means of which alone it can be introduced.

"The punishment which overtakes the higher classes is equally obvious. If they do not engage in some active pursuit, so as to give scope to their energies, they suffer the evils of *ennui*, morbid irritability, and excessive relaxation of the functions of mind and body; which carry in their train more suffering than even that which is entailed on the operatives by excessive labour. If they pursue ambition in the senate or in the field, in literature or philosophy, their real success is in exact proportion to the approach which they make to observance of the supremacy of the moral sentiments and intellect. Sully, Franklin, and Washington, may be contrasted with Sheridan and Buonaparte, as illustrations. Sheridan and Napoleon did not systematically pursue objects sanctioned by the higher sentiments and intellect as the end of their exertions; and no person, who is a judge of human emotions, can read the history of their lives, and consider what must have passed within their minds, without coming to the conclusion that, even in their most brilliant moments of external prosperity, the canker was gnawing within, and that there was no moral relish of the present, or reliance on the future, but a mingled tumult of inferior pro-

pensities and intellect, carrying with it an habitual feeling of unsatisfied desires."

Now it is by no means difficult to prove, that, as it is with individuals, so it is with nations. The question is one of mere numbers; both individuals and nations are bound by indissoluble links to the moral law. The conduct and actions of both, it is ordained, shall recognise its principles. Whenever this union is attempted to be dissevered, or whenever the relationship insisted on, would be put on one side, then do the corresponding miseries, or calamities, most certainly develop themselves. Let us see how far this assertion is borne out by history. The American war is referred to by Mr. Combe as an instance both of the Divine government of the world, and as affording a demonstration of a well-marked national calamity, the consequence of an infringement of the moral law. Great Britain had run into debt. The cost of the wars, in which she was engaged during the greater part of the last century, was something more than she could well afford. She borrowed, within the space of sixty-five years, close on 834 millions of pounds; besides raising other moneys by taxes amounting to 1189 millions, making altogether a total expenditure, for the purposes of war, of 2023 millions of pounds sterling. Where to find more money was the question of the day. It occurred to some sapient lawgiver to make, what were then our colonial possessions across the Atlantic, and are now the United States of America, help us over the difficulties. Certain taxes were imposed, and one very unpopular one on *tea*. These taxes were, at first, thought rather hard to bear; they set people grumbling, as taxes do to this day on *this* side of the Atlantic waters. More taxes followed, and this grumbling grew louder and deeper. Remonstrance was in vain; the parent country would not be dictated to by its colonial bantling, but insisted on having its own way. An agitation was commenced, meetings were convened, and resolutions were carried, and our brothers on the great continent away west were unanimous; they adopted but one opinion, and resolved on but one line of conduct; and this was explained by one word—*resistance*. There is a time when the son throws off the control and guidance of the father, and there is a time when colonies become independent of the parent country; that time had come to America. The conduct of Britain roused the animal resentment of British America; the self-esteem and the acquisitiveness of both countries were brought into contact. "Britain," in the words of Mr. Combe, "to support a dominion in direct hostility to the principles which regulate the moral government of the world, in the expectation of becoming rich and powerful by success in that enterprise; the Americans, to assert the supremacy of the higher sentiments, and to become free and independent. According to the principles which I am now unfold-

ing, the greatest misfortune that could have befallen Britain would have been success, and the greatest advantage, failure in her attempt; and the result is now acknowledged to be in exact accordance with this view. If Britain had subdued the colonies in the American war, every one must see to what an extent her self-esteem, acquisitiveness, and destructiveness, would have been let loose upon them. This, in the first place, would have roused the animal faculties of the conquered party, and led them to give her all the annoyance in their power; and the expense of the fleets and armies requisite to repress this spirit, would have far counterbalanced all the profits she could have wrung out of the colonists by extortion and oppression. In the second place, the very exercise of these animal faculties by herself, in opposition to the moral sentiments, would have rendered her government at home an exact parallel of that of the carter in his own family. The same malevolent principles would have overflowed on her own subjects: the Government would have felt uneasy, and the people rebellious, discontented, and unhappy; and the moral law would have been amply vindicated by the suffering which would have everywhere abounded. The consequences of her failure have been the reverse. America has sprung up into a great and moral nation, and actually contributes ten times more to the wealth of Britain, standing as she now does in her natural relation to this country, than she ever could have done as a discontented and oppressed colony. This advantage is reaped without any loss, anxiety, or expense; it flows from the Divine institutions, and both nations profit by and rejoice under it. The moral and intellectual rivalry of America, instead of prolonging the ascendancy of the propensities in Britain, tends strongly to excite the moral sentiments in her people and Government; and every day that we live, we are reaping the benefits of this improvement in wiser institutions, deliverance from endless abuses, and a higher and purer spirit pervading every department of the administration of the country. Britain, however, did not escape the penalty of her attempt at the infringement of the moral laws. The pages of her history during the American war are dark with suffering and gloom; and at this day we groan under the debt and difficulties then partly incurred."

Let me refer you to Carlyle's 'History of the French Revolution,' and to the acts of the first Napoleon; these are pregnant with illustrations of an almost unceasing infringement of the moral law, and its consequent calamities. If the principles advocated in this lecture be sound, Britain would have done well, being fully prepared for an emergency, and quite competent to resist any actual aggression, to wait patiently the issue of French infatuation and grossness, as manifested in the early part of this century, and have left to the Ruler of the Universe the fulfilment of His laws *and* the

punishment of our allies. But the reader of history need never be in want of illustrations of the present argument; thus, by mere accident, some few days since, I took up a book entitled 'British India, its Races and its History,' by Mr. Ludlow. If the author's facts and reasoning are worth anything—and it strikes me they are very valuable—they go to prove that the late East India Company originated the slave trade—the identical trade—towards the abolition of which this country contributed the large sum of twenty millions sterling; the first example, as Mr. Combe calls it, of a nation appropriating a considerable sum of money for the advancement of pure benevolence and justice. The late East India Company then led this country into a very considerable expense; but we have paid the debt, and that after the most praiseworthy and honorable fashion. Our acknowledgments, however, such as they are, are due to the Honorable Company. The words of Mr. Ludlow are these: "The cotton plant was imported from India into the United States. It could never have been cultivated there but for the enormous freights which the short-sighted cupidity of the East India Company laid upon Indian exports in the last century. Its cultivation could never have developed itself there on its present national scale, but through our manifold misgovernment of India by that body to which we have farmed her from time to time; through the land-tax which has sapped the agriculture of the country to its vitals; through the neglect of roads, means of water communication, irrigation, and all those other public works by which the abstraction of capital from the subject can be in part supplied. Yes," proceeds Mr. Ludlow, "it is an ugly fact, but one which we cannot overlook without hypocrisy, that the two mainstays of slavery and the slave trade—the cotton cultivation of the United States, the cultivation of the sugar cane in Cuba and Brazil—could not have grown into existence, still less have subsisted with success, but for English misrule of India." You are, of course, aware that "the cotton plant, and the sugar cane, are both indigenous to the East Indies." Further on Mr. Ludlow observes, "We have well nigh annihilated the cotton manufacture of India. Dacca is, in a great measure, desolate; its most delicate muslins almost things of the past. We imposed prohibitory duties on the import of Indian manufactures into this country. We imported our own at nominal duties into India. The slave-grown cotton of America, steam woven into Manchester cheap and nasties, displaced, on their native soil, the far more durable and more costly products of the free Indian loom; whilst these were debarred from their natural market at the hands of the more wealthy and tasteful classes of the mother country."

Upon the evidence, then, of Mr. Ludlow, it is evident that the late East India Company were not only guilty of very serious infringements of the moral law, but that they realised to the full the

consequences, *i.e.* the calamities of their disobedience. The late East India Company, acting under the guidance of their lower or selfish feelings, *i. e.* their self-esteem and acquisitiveness, sought through long years to enrich themselves at the expense of their fellow-man; with what success we are now much better able to understand than at any former period. The East India Company is now no more, but numbered with the things of a past date.

In a famous speech of Mr. Bright's, delivered at Birmingham not very long since, are these words, viz.:

"May I ask you, then, to believe, as I do most devoutly believe, that the moral law was not written for men alone in their individual character, but that it was written as well for nations, and for nations great as this of which we are citizens. If nations reject and deride that moral law there is a penalty which will inevitably follow. It may not come at once, it may not come in our lifetime; but, rely upon it, the great Italian is not a poet only, but a prophet, when he says—

> "'The sword of Heaven is not in haste to smite,
> Nor yet doth linger.'"

To conclude. It will be inferred from the foregoing remarks that the character of man is not so much made by him as for him; that his individuality here is a sequence, more especially, of acts which co-existed with even his embryotic life; and not less an effect of acts and circumstances in his early years, over which he could have neither control nor preference. It becomes us, then, to look alike with compassion and sympathy on all, whether of this or of any other clime, who fall short of either the physical or moral standard; on the lame, both those of body and of mind: knowing, as we so well do, that

> "In Faith and Hope, the world *will* disagree,
> But all mankind's concern *is* CHARITY;
> All must be false that thwart this one great end;
> And all of God, that bless mankind, or mend."
>
> *Pope.*

On Unlearning.

"O well for him whose will is strong!
He suffers, but he will not suffer long;
He suffers, but he cannot suffer wrong."

Tennyson.

"Πολλὰ τὰ δεινά, κ' οὐδὲν ἀν—
θρώπου δεινότερον πέλει.
* * *
καὶ φθέγμα, καὶ ἀνεμόεν
φρόνημα, καὶ ἀστυνόμους
ὀργὰς ἐδιδάξατο."

Sophocles.

From the earliest period of his history down to the present day man has ever been an object of eager study to himself. Nevertheless it is questionable whether he has yet succeeded in satisfying himself what he really is. "Everything by turns, and nothing long," seems to be the conclusion to which one may most safely come after consideration of the numerous definitions which man has at different times seriously given of himself. He has likened himself to most things on earth, and to not a few under the earth. He has, as it were, dissolved himself, tested, precipitated, dried, and weighed himself; he has frequently lost himself, gone in search of himself, traced himself back to an homunculus, and forward to his final disappearance in a general dissolution of his constituent particles. But after making all these and many other experiments upon himself, whether he is the godlike son of Heaven, or an idealised monkey, he has not yet decided.

Undoubtedly the knowledge of whence man came, or of the mode of his first appearance on this earth, would throw some light on what he is. In the absence of this positive knowledge, however, we must continue to advance by slow steps to the full exposition of the relations of human life. The oracle of old proclaimed it as the highest wisdom to "know thyself." No one questions the excellency of the advice, and, though not knowing how to adopt it, is not backward in urging its acceptance on others. It is as difficult for a man to know himself abstractedly, that is, purely objectively, as it is from a point *within* a sphere to project that sphere. How can a man take a walk round himself, and look at himself on all sides, and handle himself as he would a metal or a crystal? He cannot sever himself from personality. But, given this personality as the constant quantity in man, it is within his power to discover what more than this he is, to examine the various affections of his personality and the manner of

their production. By the power of a carefully trained imagination he may place himself on a stage on which he can, as it were, objectively contemplate the internal states of mind, as in a mirror he contemplates the external features of his countenance. Nothing is more natural, nothing more easy, than to fall into a passion on the occasion of some offence to the personality; but he who by a wise cultivation has acquired the power of regarding his mental states as objective, immediately recognises the absurdity of a passionate ebullition. In the drama wherein he plays, and which is being acted, as it were, before his mind's eye, he sees what a ridiculous figure he cuts when in a fury, and how useless, if not injurious, is the angry waste of force. He may thus philosophise on his feelings, his ideas, and his actions, albeit he is connected with them by his personality. When suffering again some bodily pain which depresses his spirits, giving rise to a feeling of melancholy, he may, whilst experiencing these uneasy mental and bodily sensations, recognise clearly the relationship of the one to the other; and although he cannot divest himself of, or will away, the connection between the sensations and his personality, he can, supposing action of any kind to be possible, will to do with an effort that which he would perhaps have almost unconsciously done with no effort at all, had he been without his bodily ailment. When this can be done, will is said to be supreme; and man is called free.

It will not be denied that self-knowledge and self-culture depend mainly on the will; and that the will is gradually built up in conformity with, and acts at all times in obedience to, law; that it is a faculty which may be notably strengthened by exercise, and pitiably weakened by neglect. Few, however, act up to their belief in this fact; many do not even know it to be a fact. But whether men know or do not know, whether they believe or disbelieve, the laws of nature are just the same. The law of gravitation was as real and inevitable before Sir Isaac Newton's day as it is now. The law by which water finds its own level was as certain when the citizens of Rome, in ignorance of its operation, built at an enormous expense aqueducts over plains, across vallies, and alongside mountains to carry water to its own level, as it is now when the citizens of London apply it at little cost to supply their daily wants. Man discovers laws; he does not invent them. And not less actual or less constant in their operation than the physical laws are those laws which govern man's mental organization, although the many are totally ignorant of them, and the few know them so imperfectly. Nevertheless to be ignorant of them is as expensive to us in every-day life as their ignorance of the law of fluids was to the Romans. Even in what are called the small concerns of life man is not permitted unbridled license to self-determine his actions or his thoughts, ignoring at will the past and capriciously pre-ordaining the future;

his past is the antecedent of which his future is the inevitable consequent. In his greatest achievements he never soars above the all-powerful influence of law, and in the most trivial action of mechanical life he never sinks below that influence: in all life there is no casualty; in everything is causality. As the law which keeps the planets in their course preserves the spherical form of a drop of water; so the law which governs the ambitious soul of him who aspires to conquer empires and subdue nations is manifest in the mental operations of the hero of a dozen fights in the village school-yard. To the truth of this reason readily assents; but it is not easily made an article of practical faith. Man is too apt to confound knowledge with practice. He will talk you philosophy for hours, and give you demonstrations in mental anatomy so plain, that you can perceive the mode of generation and growth of thought. He will explain to you how the presence of bile disturbs the harmonious arrangement of the molecules of your brain, and will, by arguments cogent and elaborate, incite you so to fashion your will as to be able to call up force to frustrate the otherwise inevitable consequences of this confusion. But no sooner does the "atra bilia" introduce discord amongst the peaceful denizens of his skull, than it is made manifest in such words and deeds as prove that when he calls upon his will to help him, "either it is talking, or it is pursuing, or it is in a journey, or peradventure it sleepeth, and must be awaked."

Again, a philosopher in his writings often conveys the impression that he must be a perfect man in life: by no possibility can he be placed at a disadvantage. No occurrence of human origin can happen which he does not at once recognise to be simple and natural: he accepts the inevitable with resignation: he "defies augury" because he feels destiny: it is all one to him, whatever happens. This is the philosopher in his study; but in the street, in the market-place, in society, he bears no mark to distinguish him from his fellows. Like Œdipus, he can solve the Sphinx's riddle, but the riddle of his own life remains inextricable. He does not live his philosophy. He leaves it behind him on his library table, or sends it to the printer. And when it goes forth to the public in the shape of a book with his name on the title page, the world discovers a philosopher where perhaps it least expected to find one.

This obvious contradiction is to a great extent traceable to the fact that man does not understand the laws of his being when he first becomes subject to them. He does not walk upon the stage of life to play his part thereon with all his faculties developed, and with a mind stored with a knowledge of the laws of nature. In his first appearance he sprawls upon the boards a little naked helpless "nothing." And when in the course of time he does attain to some knowledge of physical, moral, intellectual, and spiritual truth—the truth of nature—he has paid a price for it. His mind has been

fashioned for him in early days; and when he would furnish it with ideas in accordance with his more advanced stage of development, he finds it already in the strong possession of early implanted ideas that have grown with his growth and become stronger with his strength. For the "faculties" of the mind do not, Pallas-like, spring forth at once in full development; but they are structures gradually built up by years of tedious formation. The conscious acquisitions of education become incorporated as unconscious additions to the powers of the mind; in reality, therefore, each so-called faculty is not a simple creation, but an infinitely complex formation, the character of which is in great part determined by the character of the education. Thus, then, there is an unconscious life which it is impossible to shake off, and which often in its manifestations takes us by surprise, as well as a conscious life which we voluntarily direct: like warp and woof, the unconscious and the conscious together constitute the web of life. What marvel, then, that there are contradictions not a few, and inconsistencies beyond belief, in the life of a man who aims at self-culture, more even than in that of the man who has never been incited to ask himself for a reason for the hope that is in him and the fear that so frequently hovers over him. There is much to learn and much to unlearn, and the latter is more difficult than the former.

Our mental nature is to a great extent determined by the ideas which have been put into our minds from our earliest infancy up to maturity. The opinions then in fashion we adopted; the articles of faith then binding we assented to; the standard of thought then set up we never ventured beyond; the interpretation of life and nature then given we accepted. As children and youths we are recipients of ideas and opinions, and when we become men we cannot always put away childish things. Hence there are often, as it were, two principles at work in man, drawing him in different directions; and life is for the most part the expression and exhibition of the conflict between these two principles. The individual is continually struggling to become that which he thinks he ought to be, in opposition to a development which is the natural sequence of that which he has been. Conscious and unconscious nature very frequently do not harmonise, and the actions of man being of necessity the results of one or other of these, there must be in the lives of all except two sects of men flat contradictions. The two consistent classes are, first, those many in whom their first received notions are powerful as instincts, and secondly, those few who are altogether emancipated from them. In the first class is included the majority of mankind whose chrysalis-like being is close enveloped in ideas of the established fashion to which they succeeded by inheritance, and in opinions which they entertain according to precedent. Between this large aggregate of homogeneous atoms and the few, composing

the second class, who have reached the climax of an emancipated evolution, there are necessarily many gradations of development from the individual whose mental system has experienced the first tremulous agitation of a doubt to him who has partially succeeded in establishing harmonious relations between himself and external nature.

From the first step in self-culture—the first question put but not answered, the first unutterable fear, the first indescribable longing,—to the deliberate sifting of a man's practical faith and intellectual convictions by himself, his mind traverses a marvellously varied path. Many of the stages of this journey have been dramatically embodied in literature, but there are still many sequestered nooks and hidden paths which have not yet been represented, so that a man can look upon them as old familiar places. The main road has been traced, and some of the more prominent parts of it have been clearly delineated, but the accurate reproduction of all the varied scenes and minute incidents of that pilgrimage is still wanting; and the psychological world expects in hope another Shakespeare or another Goethe to give an explanation of all the dim mysterious feelings which man experiences from his first consciousness onwards through life, obscure utterances as yet uninterpretable, from the secret depths of a nature which, nevertheless, speaks in such responsive thrills of a deeper, a more fundamental harmony with external nature than has yet been dreamt of in philosophy.

It has been sometimes said that man doeth well to cherish his delusions, but it may be more correctly said that it is well for that man who does not discern his delusion. It is difficult to describe the painful nature of the shock which the mind sustains when first it perceives the sandy foundations on which it has securely rested, unexpectedly shifting away. If suddenly an individual feels that what he cherished as intelligent convictions are but dreaming sentiments, and faces an universe estranged from him, is it marvellous if he becomes possessed of lunatic fancies? A sense of utter desolation overwhelms him; from the whole world bound together by sympathetic ties he alone is a castaway. When the immeasurable universe around him has an aspect of void immensity wherein he can find no rest for the sole of his foot, is there no temptation for that man to give way under the weight of his destiny and to rush anywhere —anywhere out of the world? And if one in whom, owing to a blessed inheritance, self-recovering power is great, waits through nights of fear and days of hope until the germ of a newer and more satisfying communion with the universe comes to perfection, are there not many who fail and whose failures bear witness to the truth that "to be weak is to be miserable?" The shock in the one case arouses into activity dormant force, and raises the individual to a higher stage of development; in the other case paralyses active force, and leaves the

individual a victim to laws which inevitably and yet mercifully extinguish within him the light of Heaven, and consign him to the blackest darkness.

But amongst those with whom nature deals in a milder fashion than with her choicest spirits, and to whom fate, if it apportions no laurels, decrees no mighty tasks, there are many grades of development according to their capacities. One man goes on under the influence of his early acquired ideas, without question of any kind, to the end of his days. Supposing him to be an earnest man, he lives his unconsciously acquired philosophy so consistently that one might easily fancy him to be our great grandfather still in the flesh. His ideas are antediluvian, and he has never unlearned a single one: he is, as it were, a petrifaction of the past. Another man goes on to a late period of life before he begins to look for himself at the facts of the universe, and to take observations from his own stand-point. Then, as may be expected, the domination of acquired ideas and modes of thought over his mind is exceedingly strong, and the difficulty of emancipating himself is very great. Hence arise an unsettled state of mind and an inconsistency of conduct. Incoherency of thought and a want of logical action result from the irregular and unequal influence which his past habits and present views have over his mind: he is, as it were, a mental shuttlecock tossed to and fro from that which has been to that which is. He cannot consciously go on in that which he has unconsciously learnt, yet he cannot rid himself of the influence which his previous mental education has over him. He drifts with the tide as it ebbs and flows. He dares not venture out into the open sea, for as yet he has no compass to steer by.

Again, there is the individual who has schooled himself by persevering self-experimentation, so as to have almost divested himself of the power of feeling. Envy, hatred, malice, and all uncharitableness, are the same to him as love, sympathy, benevolence, and charity. The phenomena of life he looks upon as upon the figures of a picture. Murders, rapines, and suicides, are to him simply objective occurrences with which he concerns himself in the same frame of mind in which he would solve an algebraical problem. He hopes for no joy, and fears no sorrow. His fellow-creatures sink into abject poverty, or smart under the rod of affliction, but no tear moistens his eye. Things unavoidable must be left to take unbewailed their way. They enjoy the favours of fortune, and taste happiness, but no smile of sympathetic gladness lights up his face. In everything he sees only the work of Nature during time; and it is not his business to interfere with that for which he is nowise responsible. The deeds of man are all alike natural facts, whatever be their qualities, and as such he tranquilly observes them, discovering in them processes of evolution, and recognising in their

differences the accidents of individuality. Finding it to be much easier to break than to bend, he has destroyed his feelings, and imagines that he has subjugated them to his will; or it may be said with more correctness that, by repressing any outward manifestation of feeling on objects external to himself, he has proportionably increased the intensity and activity of pure self-feeling and selfishness. Failing to perceive the beauty of character which well regulated feelings confer upon their happy possessor, and ignoring their utility as handmaids of the intellect, he is indeed emancipated from the emotional self, but the chains of the intellectual self hang heavy upon him. Proud of his freedom, although he is frost-bound in ice, he inwardly rejoices that he is not in a state of perpetual thaw as some men are.

Another, again, as soon as he arrives at bodily maturity, when the individual first becomes capable of consciously influencing his own mental development, begins to form himself anew. As in the external relations of life an individual may have been directed, or persuaded, or forced into some calling to which he feels such an uncontrollable antipathy, that he leaves it and adopts another, contrary, perhaps, to the wishes of his friends and also to the maxims of worldly prudence; so in the internal relations of a man's state of mind to his personality, his mental possessions may be inadequate to satisfy, if not wholly repugnant to, his instinctive feeling of, his blind longing for, what is right and true for him. He feels that he must be born again, and straightway commences by the efforts of conscious will to mould his mentality anew. He does not passively permit the irregular influx, or succumb to the multiform influence, of new ideas that enter his mind and abide there, some for a day. some for months, and some for years, like the heterogeneous assembly of unconnected and alien individuals casually brought together in an hotel. He does not fill his mind with the thoughts and ideas of other men, undigested and unassimilated, an unarranged and useless collection of curiosities, which he can neither enjoy himself nor display for the benefit of others. He is not even content with storing his mind with other men's thoughts, even though he arranged them in such order as to be able to lay his hand on each as it is wanted, as is the case with some whose minds are, as Sir James Macintosh's mind was said to be, like closets hung round with other men's coats and hats, any of which they put on as occasion requires. He shuns, as he would poison, the wedding of his personality now to this idea and now to that. He is not on one day the enthusiastic disciple of one master, and on another day of another; knowing that to renounce the service of self, in order to go into unquestioning bondage to the mind of another, is not freedom, but a change of livery. He knows that, as he sees with his own eyes, and hears with his own ears, and not

with another's, so he ought to exercise his own mental faculties, and with his own mental vision look at the universe and what is extraordinary in it, and with his own ears listen to what the voice of nature says to him. She may have a story as old as the stars to tell him, which his ears alone may hear; she may have paintings as ancient as life to show him which his eyes alone can gaze upon. Nature is infinite in variety, inexhaustible in instruction: it is to the blind only that all colours are alike; to the deaf all sounds are indifferent.

But how few are they who deem any self-culture necessary! To all but a very small minority of mankind it seems to be an utter impossibility to conceive that the opinions which they hold, and the system in which they live as respectable units, may not be final and all-sufficient. The world hates originality, or marked individuality of character, precisely because it hates to have its faith disputed and its comfortable indolence disturbed. And yet all reformers, all the world's benefactors, have been men who would not let it rest, but persistently laboured to make its soul disquieted within it. It is in nowise a right assumption, then, to begin with, that because whatever is, is right, therefore it will be right for it to remain as it is; on the contrary, a much truer proposition is that whatever is, is not fixed, but *becomes*. In whatever circumstances of life a man may be placed, he will find obsolete customs which may well be abolished, much esteemed errors which may well be assaulted, newly budding truths which may be encouraged, noble aspirations which may be realised. Each one, therefore, who would rightly do his duty to himself, to his neighbour, and to nature—who will not be a mere *social automaton*—has a great and severe task in unlearning prejudices, in assimilating truths, in a deliberate self-formation with which he can make no indolent compromise, and in which, if he would succeed, he must not be weary of discipline. He is compelled to begin his task by liberating himself, more or less, from the thraldom of a tyrannical past; often by making a clearance in his field of knowledge, so as to reconstruct from the foundation his system of ideas. Nearly all his present mental profession is a confused medley of ideas, opinions, and prejudices, which, so far from being of value to him, is a hindrance to his having clear insight into anything. His dim vision misrepresents to him the forms and aspects of things, and he sees spectres and shadows, and too often hideous fantasies, which make him fearful of nature—just as an imaginative child, whom its nurse has horribly amused with ghost stories, sees ghosts in everything, and is afraid where there is no cause for fear. And even if there has been fortunate guidance from early youth, so that there is an unusual liberality and breadth of mind, and a disposition to receive and examine, still there is much to unlearn before there can be a

sufficiently clear space wherein to lay, broad and deep, the basis of the intellectual fabric; for "the highest understandings are apt to associate their ideas according to the order in which they have been received," and not according to any real affinity betwixt the ideas themselves. The order amongst ideas should be conformable to the order of nature, which it certainly is not whilst man has so unduly exalted an idea of himself, so unjustly low an idea of nature.

Above all things it is necessary that a man do not strive to alienate himself from nature. The highest and most finished culture must bring him back at last to a like intimate congenial relation with external nature, to that which he unconsciously occupied as a child, when he knew not that he was differentiated from it. Who is there who has not strange memories of an inexplicable joy possessing him when, a child alone in the presence of nature, his little heart has throbbed in mysterious unison with the great kindly heart of nature? He, an unconscious part of nature—unaware that he was an *ego*—instinctively felt at home with her as a child with its mother. These mysterious and unintelligible feelings of his childhood are evidences of potentiality within him, which may or may not be hereafter actualised. But the gradually developing understanding, exploring here and there, measuring this and weighing that, subsequently taught him to see in nature only a huge, ingenious, dead mechanism, which he could not love, and with which he could have no sympathy. Then under the impulse of the changed feelings which took the place of his trustful love, he wishes to make nature his slave, and in the pride of his little knowledge boasts of his power. For this estrangement of himself from nature he seeks consolation in the magnifying of his idea of self to such an extent as shall raise it high above his idea of nature. Thence he comes to look upon that which, as a child, he felt carried him in her living arms, as an instrument to be made subservient to him, and to seriously believe, and with gravity assert, that for this his idol self, and this above all things, suns, moons, stars, and worlds are made. Can a mind thick shrouded in the dark folds of this idolatry, and brooding in solitary vanity, generate other than false and distempered ideas concerning itself and the universe? From such radical disorder cannot be born healthy conceptions. But the individual who cultivates an objective development in which the first step is renunciation of self, and without which there can be no progression, necessarily acquires ideas quite opposed to these. The purport and definition of life acceptable to and believed in by the general mass of mind, which is either not capable of or not inclined to deep, sincere inquiry, and in which, from inheritance and education, the worship of self prevails, is not only something with

which he cannot be altogether satisfied, but is something with which he is greatly dissatisfied—is an erroneous conception, the belief of ignorance. To him there is a far closer affinity, a far more intimate fellowship, a deeper communion with his surroundings, than was ever conveyed in the lessons which the prophets of the popular intellectual faith teach. Increasing intelligence, based upon a right view of self, multiplies in man the avenues of sympathy with things external to him, and gradually removes the hostile mask from off the face of nature, to reveal her fulfilling, in the completeness of her excellency, the high behests of Providence; and in the fulfilment of that mission he consciously or unconsciously assists. Nature is no longer dreaded by him, whether she displays herself in storms, or tempests, or earthquakes. These, her grander necessities, exist, not for the mere purpose of limiting his individual existence, and certainly not in order to make his individual life timorous and superstitious. Nature is not always thinking of a man. There is a little space provided for him, and a little time allotted him in which to do his little work; and if he, in his self-formation, obeys her laws, it is well for him and for those that come after him; but if, in the pride of self, he try to thwart or, in his cunning, think to cheat nature, or, in his ignorance, despise her, there are avenging laws which, ceasing not day or night, will not fail to retaliate.

The higher the mental conceptions are raised above the level of the individual the less liable are they to be affected by the individual's fortunes; the less they are trammelled by the individual's feelings, the more universal and all-embracing they become. The more man comprehends of universal nature, the less significant does self become and all the things that pertain to it. And as the individual, rising out of blinding subjective mists, finds satisfaction in the clear, objective contemplation of his life as a part of nature, so is he less disturbed by the apparently contradicting and inconsistent character of the daily incidents of which that life is composed. And it is one of the results of complete self-culture and consciously directed development that, in addition to the serenity with which the individual can endure the petty evils of every-day life, yea, can even make these "little foxes that spoil the grapes," minister to his amusement, he becomes, by the evolution of his highest powers, a consciously harmonious part of nature, and is in the intelligent enjoyment of that happiness of which he had a foretaste in the mysterious melody of his unconscious child-communion with nature. For it hath been well said that "the higher powers in us are, for the present, muses, which refresh us on our toilsome course with sweet remembrances." [Novalis.] In which sentence he who can gather up the threads of his existence may find much truth.

The sensibility of his moral nature is also heightened. In the constant operation of laws he finds a certainty that eternity is stamped on every action of his life. Every exercise of his force acts upon the universe, and assists to form the future. His evil and good actions run their course, increasing or diminishing the evil or the good that is in the world. He does himself reap some; he never can reap all the consequences of his deeds. By the development of his moral nature his knowledge of evil embraces all its consequences even to their remotest ramifications, and although he should assuredly escape the full penalty of his evil deed, yet he knows that it will in time be exacted of humanity even to the last farthing. He transcends time and space; and that which is certain in the future becomes as it were actual in the present. Moral truth becomes his natural element.

And yet there can be no doubt that a development of this kind incapacitates an individual for much of the sensuous enjoyment of life, as it also exempts him from many of life's sorrows. To him who looks upon himself as an individualised portion of nature, having life in his turn, inheriting it, and leaving it for an inheritance, there appears no longer a bright mirage gleaming over life, but the leaden gloom which hangs over death is also removed. If hope no longer gilds the future, memory ceases to shudder over the past. Strong in the conscious recognition of natural law, in the operation of which he is but an event, borne up by the "everlasting arms," he possesses his soul in patience, and neither regrets a painful past nor anxiously anticipates an uncertain future.

Having experimental proof of his own development, he believes in the corresponding development of humanity. Generations pass away and races die out; still man progresses. Myriads of types are created, myriads of combinations of different qualities produced whereby man may be advanced one step onwards. He does not look for the immediate results of collective life in himself or in his day. He has sufficient knowledge to justify unbounded faith that the day will dawn, although "as yet, struggles the twelfth hour of the night," and in that faith he does with all his might his appointed task. The whole race is but as one man; all are members of one body. Each has a function to perform, a lifework to build up which has its due place in completing the growth of the whole. It is said to take three generations to make a gentleman, to refine and polish the coarseness and rudeness of uneducated mind; but it takes generation after generation to alter permanently the thought of a nation—ages to alter the thought of a world to a small extent. But although time is everything to the individual who has so much to do and then to disappear, ten thousand years are but as one day in the gradual development of nature from that first movement on the face of the waters to the vibration of nerve force through the

human brain. By how much an individual developes in harmony with law by so much does he raise the standard of thought of his own age, and by so much does he advance humanity. Life is then to every one a most serious matter: when the individual considers that he has a hand in moulding the destiny of humanity, that when he incurs bodily or mental weakness his degeneration is actual loss to the whole family of man, that he has bartered superior force for inferior force, and humanity has lost by the transaction, he is supplied with an exceedingly powerful motive for learning the laws of nature, and for unlearning all that he may know or may even love that is in opposition to them. And to do this in a greater or less degree is possible to every individual, no matter what little inner circle, mill-horse like, he daily treads to supply the wants of his physical nature.

W. M.

CLINICAL CASES.

Cases of Tabes dorsalis (grey degeneration of the posterior columns) and Paralysis universalis progressiva. *By* Dr. C. Westphal, Lecturer on Psychology in the University, and Physician to the "Lunatic Wards," of the Charité, Berlin.

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I have now for several years, during the careful investigation of the history of those suffering from general paralysis, noticed that either the patients themselves, if they are still moderately intelligent, or their relations, frequently mention rheumatic affections sometimes as the cause of the disease and its antecedents, sometimes as important accompanying symptoms, or they are, perhaps, merely mentioned incidentally. These so-called rheumatic affections have their situation most commonly in the lower extremities, the arms being but seldom affected. They are generally described as transient and stinging pains, irregular in their commencement and duration. By further investigation it appears that such antecedent symptoms can be discovered in only a certain number of the cases, of whose proportion to the others nothing can be positively affirmed; for, owing to the very different conditions of those admitted to the asylum of a large town, an exact history is, in a great number of the diseased, wholly wanting. The fact always appeared striking, and I believed that for the present it must be allowed to remain undecided, whether indeed these rheumatic symptoms ought to be considered as etiological (Calmeil's Douaniers with the bivouacked soldiers of the empire, may be remembered*), or accounted for as eccentric cerebral phenomena. Commonly the disease in its already developed form is presented to the alienist physician, and he has seldom himself the opportunity to investigate the causes, and to observe the early symptoms. It is, therefore, difficult to arrive at correct conclusions. A patient, admitted in January, 1858, to the lunatic wards of the Charité, offered for the first time a sure footing for the explanation of the phenomena. This patient had several years

* Calmeil, 'De la Paralysie considérée chez les Aliénés,' Paris, 1826, pp. 375.

before an attack of manie des grandeurs, for which he was admitted into the ward. While still in perfect mental health, he complained of fleeting, stinging pains in the lower extremities, together with incontinence of urine, then occasional squinting was observed, and at last, after several faints, the delirium des grandeurs, appeared shortly before his admission. In this case I remarked, first, that the patient, whose gait, as may be learned from his subsequent history was already evidently partially paralysed (paretisch), staggered *with shut eyes*, so that he fell, while with open eyes he was able still to stand firm. I hereupon examined the paralytic insane with regard to their behaviour with shut eyes, and found that all with the usual form of paralytic disease—if they are not yet too feeble—*do not stagger* even with shut eyes. I found this last condition in only a certain number of cases, and in all these was the peculiarity that fleeting pains existed long before the appearance of the disease. The forementioned case of 1858 came to post-mortem examination in the beginning of the winter of 1861, and it presented a distinct gray *degeneration of the posterior columns of the spinal cord* in nearly its whole extent, while there was no evidence of disease in the brain substance proper. If, then, the exceptional staggering with shut eyes, and the whole particulars of the disease, had been referred to an affection of the spinal cord, and the fleeting pains in the lower extremity considered as eccentric spinal phenomena, the result of the post-mortem examination would have confirmed this opinion. After my attention was once turned to this point I found subsequently several similar cases. At present I will only give three of these in which the history is most complete. The others, although they essentially help to *confirm* the foregoing opinions, are not appropriate, partly on account of the removal of the patient from the asylum, partly because a complete history, or post-mortem examination, was wanting to serve as a proof.

Case 1. J. Z—, æt. 45, formerly a store-keeper, later superintendent of a house of correction, admitted into the lunatic wards of La Charité on the 5th of January, 1858. He has of late been much addicted to the use of alcoholic liquors, by which he is very easily affected. For several years he has suffered from hæmorrhoids, and *fleeting, stinging pains in the lower extremities.* About four and a half years ago he suddenly began to squint. This symptom soon afterwards disappeared, and he, two years ago, for the first time complained of weakness of sight. To this was added headache, uncertainty of gait, occasional feeling of giddiness, and incontinence of urine. Four weeks before his admission he was seized with a well-marked attack of giddiness, so that he fell to the ground, exclaiming, "What will become of me!" A second similar attack followed soon thereafter. Shortly before Christmas his disposition changed, he exhibited great irritability, violence, and such an abnormal elevation of the sexual passion, that he could only with difficulty be kept from his wife, who was near her confinement, and towards whom he was at other times strikingly careless and indifferent. About Christmas he was seized with a daily increasing *manie des grandeurs,*

esteeming himself a very talented, fortunate man, occupying himself almost incessantly with the grandest arrangements for the christening of his child, to which he wished to invite all bankers, princes, and nobility, appearing remarkably serene, chattering constantly, and often declaring that he had so many thoughts, and that in consequence he felt the circumference of his head expand, and did not know how he could imagine all.

His appearance on admission was that of a tall, lank, weakly person, and, excepting a large double scrotal hernia and some prominent and occasionally bleeding piles, nothing abnormal could be discovered in the internal organs. In both inguinal regions were two large scars, resulting from incised buboes. The countenance was rather long and narrow; the expression pleasant, serene, and joyous. The right pupil was fixed, and nearly double the size of the left, which reacted pretty well; there was slight ptosis of the left eyelid. The tongue, on protrusion, did not deviate from the middle line, but vibrated slightly in single muscle-bundles. On standing, the legs trembled a little; with shut eyes the patient staggered, and finally fell. On proceeding a little distance the feet were rapidly and hastily placed before one another, and on walking towards anything he deviated from the course, and seized the nearest object. The test of sensibility was resultless, owing to the patient's exalted psychical condition.

In no way could we succeed in interrupting his cheerful chattering, even for a moment, and to induce him to give an account of himself, his relations, &c. In an extravagant, often cynical manner, he moved in a world of happy illusions; spoke of himself as the greatest statesman, the first of musicians, reckoned himself the possessor of many waggons laden with gold, and talked incoherently of the splendid feast at the baptism of his child, of adventurous journeys, of his approaching marriage with the Princess Victoria, and revelled in the prospect of the lordly enjoyment which his happy situation prepared for him. His speech was somewhat slow, slightly pathetic, the voice elevated; no particular hesitation was observable in the pronunciation of words, but he occasionally hesitated in conversation, because he frequently could only after some reflection collect and express his thoughts. An epileptiform attack was observed by the attendant some days after his admission. In other respects the symptoms of the disease remained the same during the residence of the patient in the Charité, viz., those of the most exquisite *manie des grandeurs.*

He always possessed a happy, calm disposition, was uncleanly in his habits, had weakness of the extremities, and rapidly fell off, notwithstanding his good appetite and generous diet. His sleep was always troubled and reduced to a minimum. The stools, which were frequent, and passed unconsciously, were generally thin and copious. During the most part of the time he showed a propensity to strip, to accumulate, to wilfully tearing and biting his clothes and bedclothes, which he, though his arms were bound, pulled from the bed with his teeth and slowly mangled. It was often necessary to keep him seated, or to let him lie in bed for a considerable part of the time, and thus prevent him from falling, the resulting slight bed-sores quickly disappearing on his again going about. He was put under slight restraint during the greater part of the time, as he practised all kinds of mischief, and annoyed the other patients. In this condition he was, on the 26th August, 1859, transferred to the hospital of the workhouse as incurable. There he died, from increasing imbecility, in the beginning of the winter of 1861.

The post-mortem examination gave the following results:

The skull-cap presented no other change than ossification of the sagittal and lambdoidal sutures. The dura mater on both its outer and inner surface was normal, the pia mater was œdematous, but clear, and easily

separable from the brain substance. The ventricles, which were much dilated, contained a quantity of serous fluid; the ependyma was somewhat thickened. The white substance showed a slight degree of venous hyperæmia, the gray substance was rather pale. The consistence of the brain (in the rest of which nothing abnormal was found) was good, the central part only being somewhat soft. The pia of the cord was neither adherent to it nor to the dura mater. The posterior columns of the cord had a gray, transparent, soft, markedly different condition from the surrounding parts. This continued throughout the whole length of the cord, there being no essential difference in the upper and under parts. The medulla oblongata was normal.

The heart was normal, the aorta, to a great extent, atheromatous. The lungs were efficient, in several points darker and thicker, but still the vesicles contained air. The liver, spleen, and kidneys, presented nothing worthy of note. The urinary bladder was very large.

Case 2.—L. Köppen, painter,* æt. 29, was, in July, 1853, for the first time admitted into the then existing "Wolffsche innere Klinik" of La Charité. I extract the following account of him from the case-book.

The patient, who is strongly built and well nourished, noticed the commencement of his present ailment about six weeks ago, soon after having been exposed to damp and to a draught in an empty room of an unfinished building, where he was painting window-blinds. To sexual and other excesses he had never been addicted; for nine months has been married. As a boy, he suffered from an attack of lead colic; with this exception, has always been healthy.

Six weeks ago he, for the first time, experienced a numb feeling in the toes and soles of the feet, which gradually extended upwards. The left limb was, however, earlier affected, and in a more considerable degree than the right. For three or four weeks the patient has felt the sensation as if a band were bound round the lower border of the thorax. His gait has become unsteady, the sexual passion diminished, passing of urine difficult, and bowels constipated. For perhaps two weeks he has felt a sensation of pricking and numbness, first in the ring, then in the little finger of the left hand. The *status præsens*, on admission, was as follows:—Patient not much emaciated; the sensibility of the lower extremities is everywhere partly diminished, partly "perverted." In the region of the loins a numb feeling exists; muscular action is as yet little affected. In walking, the patient steps first on his heels, and requires support to prevent him from falling; *with closed eyes the gait is much more insecure.* There is no marked pain in any single vertebra of the spinal column. The diuresis is tolerably copious; urine clear, with a mucous cloud. Bowels do not act without medicine.

The diagnosis was left doubtful between *arachnitis spinalis exsudativa rheumatica*, and *myelomacia*. An active course of treatment, by means of local bloodletting, counter-irritation, vapour bath, and mercury to salivation, did not improve his condition. A furuncular eruption on the back and upper extremities had likewise no effect upon the course of the disease. He often complained of formication in the lower extremities and inguinal and lumbar regions. He was dismissed in an unaltered state after a month's treatment.

In the year 1862—nine years later—he was again received into the Charité. He had during this time lived with his wife, who bore him no children. He was obliged to give up his business on account of his inability to walk, and employed himself in assisting his wife to prepare artificial flowers; but even in this he was able to do little. The paralysis

* The patient, except when a boy, had had nothing to do with lead.

of the lower extremities, which continued during the whole of this time, was such that the patient could only walk by dragging his limbs along. In the dark, according to the testimony of his wife, progression was still more difficult for him. A circumscribed portion of skin above the right knee was especially painful; this he often persistently rubbed. The skin of his head was, besides, very sensitive to touch. Up to this time he had not exhibited the least mental change, but had always appeared to be a prudent and reasonable man. About five weeks before his admission, he was seized one morning before awaking with what, from the description, appears to have been an epileptiform attack, consisting of convulsions, especially of the muscles of the left arm and the muscles of respiration. This attack passed over without any further marked symptoms. Since then he had, however, become more irritable and vehement, and especially on one occasion, when he fell into a violent passion about an affair of little importance. Contrary to his usual habits, he became absorbed in reading books, was changed in his disposition, fell into a gradually increasing state of excitement, and was, on the 1st of August, 1862, received into the delirium ward of the inner division. Here well-pronounced manie des grandeurs, with a high degree of maniacal excitement, showed itself, and he was accordingly transferred to the lunatic wards. The state of the patient, which rendered immediate isolation necessary, prevented for the time a thorough examination. The patient was emaciated to such an extent that the countenance assumed a truly hideous aspect. The cheeks were deeply sunken, and the contour of the bones of the face was sharply defined. The left pupil was more dilated than the right. The muscles of the face, as well as those of the arms, were in constant motion, while the patient accompanied his ceaseless jabbering with the liveliest mimicry and constant rapid gesticulation. He sat on the form in his cell, with his head and upper part of his body bent forward, or lay on the floor with his back reclining against the wall. His legs appeared, from the first, unable to bear the weight of his body in standing or walking, but he could, with the aid of his arms on the wall, raise himself up. In walking or standing, he required to be well supported from under the shoulders.

He exhibited the liveliest flow of ideas in his incoherent, nonsensical talking, and at times spoke disconnectedly of enormous riches, thereby showing symptoms of manie des grandeurs. The characteristic hesitation in the pronunciation of words was not noticed here, and the difficulty of understanding his speech arose merely from the rapidity and precipitate manner in which the words followed each other. At the same time there existed, as determined by the temperature at the rectum, great fever, diminishing in the morning, and tremors at every voluntary movement.

After three days the patient became more composed, and while lying in bed could be more minutely examined. The bladder was found so distended that it nearly reached to the epigastrium. By means of the catheter there was drawn off about one and a half quart of pale-yellow, almost clear urine, of neutral reaction, sp. gr. 1012, and containing neither albumen nor sugar. The tongue was pale and furred, appetite bad, thirst considerable. The bowels, which till now had been constipated, were loose, and the stools were passed unconsciously. A constant dribbling of the urine also ensued after the bladder had been distended to a certain extent. In the lower as well as to a certain degree in the upper extremities, sensibility and the faculty of perceiving tactile impressions, were diminished. The patient could not feel a slight touch with the finger at all; when pricked with a needle, he felt as if a blunt instrument had touched him. Still he could, with tolerable accuracy, refer the sensation to the proper spot, and what was remarkable was that he referred a slight prick with a needle on the left fore

leg and foot to the corresponding spot on the right limb, and only stronger pricks were felt in the proper point.

In bed the patient could move his legs to a certain degree. The introduction of the catheter was easy, and only sometimes painful. The sphincter ani externus and internus were so lax that the thermometer could easily be introduced six inches into the rectum. No other affection of the internal organs could be discovered.

After a prolonged sleep, the patient became so tranquil and comparatively intelligent that he could give some information regarding himself. It appeared that he had suffered for many years from rending pains in the legs, and also, at the same time, experienced an oppressive feeling of constriction about the epigastrium; he had never had headache. Details could not be obtained, as he frequently jumped from one point of inquiry to another without finishing any one. He was almost always in an extraordinary good humour. The liveliness of his mimicry and gesticulations diminished; the fever continued with almost undiminished intensity; the quantity of urine gradually became less, grew cloudy, and presented—especially that last drawn off by the catheter—a white, flocky appearance. Hæmaturia was never observed.

The patient (whose bed-sores upon the loins became gradually more discoloured and extensive) on account of renewed excitement, had again to be isolated, whereupon the symptoms observed on his admission again showed themselves. On the 15th, somewhat suddenly, the agony of death commenced, and at noon on the following day he died. The autopsy of Dr. von Rieklinghausen, made on the day after death, gave the following results:

The spinal cord is, throughout its whole extent, very soft; along it gray stripes are found running downwards corresponding to the posterior columns. On transverse section, the posterior columns are seen to be replaced by a gray, transparent, gelatinous substance; the change is most evident in the upper part of the cord, where the columns seem to be entirely composed of this tissue. In the thoracic portion they seem to be composed of a similar very transparent, but somewhat whitish tissue. This appears full of cracks when water is poured upon it, and from the cut surface a fluid, mixed with numerous white granules, is poured out. In the lower portion of the cord the part surrounding the fissura longitud. poster. possesses also a white colour. Nowhere does the affection pass beyond the posterior horns.

The skull-cap is tolerably large, broad, regular; vitreous table much thickened; grooves of the vessels very deep; spongy substance abundant. The sac of the dura mater contains reddish fluid; dura slightly congested, and adherent to the pia in many places, especially in the upper part; the pia also possesses a strong red colour. On the base the dura is unchanged; the pia is of a deep-gray hue (putridity). Otherwise the pia presents nothing abnormal, and is easily separable from the brain-substance. The middle parts of the brain are very much softened, and the consistence generally of the whole brain is much below the standard, and very pale, especially the gray substance. The fourth ventricle is much dilated; the striæ acusticæ very small; the gray degeneration of the posterior columns of the spinal cord extends, in the medulla oblongata, more towards the periphery; on the floor of the fourth ventricle, near the corpora restiformia, superficial gray laminæ are recognisable, which appear more to belong to the ependyma. On the outer surface of the medulla oblongata, especially towards the posterior parts, are several gelatinous transparent spots.

The skin of the neck, thorax, and abdomen, is of a green colour. The right pleural cavity contains dark-red fluid; the left contains about three ouarters of a quart of a grayish-red, thickish fluid, and numerous fibrous

deposits. The heart is large, tolerably compact, contains a large quantity of blood; valves are normal; the inner surface is œdematous from imbibition.

The left lung is superiorly markedly œdematous, uniformly flabby and moist, its pleura congested. At one point is the commencement of gangrene, and under that flaccid gray, hepatized spots, besides individual lobules in a state of red hepatization. The lower lobes of the right lung are also covered with thick fibrinous deposits. On the surface are several deep red spots, but these present no traces of pneumonia.

There is green discoloration of the mucous membrane of the trachea and larynx. The great abdominal glands are already in a pretty advanced stage of putrefaction, in other respects normal. The bladder, which is small, contains grayish-red fluid, with a flaky sediment; the inner surface of the bladder is strongly tubercular, and presents numerous flaky spots, with pale centres; the wall is nowhere defective.

Case 3.—M—, æt. 54 years, a magistrate's clerk (formerly post-conductor), was received into the lunatic wards of the Charité on the 28th July, 1863. Is a well and powerfully built man, with a considerable amount of subcutaneous fat, and well-developed muscles. States that up to fifteen years ago, he, with the exception of the usual children's diseases, had never been seriously ill, although, while in military service, he had to undergo much fatigue, and was exposed to many pernicious influences. He has been married for twenty-five years, and is the father of healthy grown-up children.

About the year 1848, when the patient was in the postal service, and used to make long journeys in the mail trains (before this he travelled as post-conductor), he began to be occasionally troubled with peculiar rending pains in the lower extremities. The attacks came on without any visible external cause; the pain was felt always in the calf of the leg, left or right, and the one side could not be said to be more frequently affected than the other. The pain was not continuous, but fleeting and shooting; not beginning lightly, and gradually increasing in intensity, but sudden and violent. During a period of from forty-eight to seventy-two hours such attacks followed at short intervals, the one attack following close on the back of the other. The function of the extremities suffered thereby very materially; the gait of the patient was like that of a drunken man, and occasionally his legs suddenly bent under him, without, however, his falling. His wife states that he often stumbled in the dark. Walking did not increase the pain; on the contrary, the patient rather obtained relief from violent exercise; the heat in bed rendered it almost unbearable. In 1848 the patient met with a fall, causing, as it appears, subluxation of the left ankle, which, after three weeks' treatment, left considerable swelling and slowly decreasing weakness of the joint. Now there exists merely slight disturbance of function, the extension appearing somewhat limited, and the foot directed a little outwards. It would be impossible for the patient to run, without the greatest exertion.

The attacks of the above-mentioned pains returned at sometimes shorter, sometimes longer, intervals. The latter lasted, in the most favorable instances, at furthest, from fourteen to twenty days. Although the patient supposed they depended in some degree on the state of the atmosphere, yet he did not deny that such attacks were wont also to occur in the most favorable weather. In course of time the seat of pain changed, while the intensity slowly and steadily increased. The pain left the calf to attack the knee, then the thigh, and at last it was centred in the hip (patient points behind the great trochanter to the place of exit of the plexus ischiadicus), but it always appeared that one or the other limb was attacked, without marked preference to one side. Sometimes a troublesome feeling of itching was felt in the toes and heel, and always in only the one or other foot. Patient has never experienced trouble-

some sensations in the trunk—further than slight pain in the small of the back after continued exertion. With regard to the upper extremities, it may be mentioned that the patient, five or six years ago, occasionally was troubled with dragging pains in the fingers and back of the hand. These can, however, scarcely be considered as pains; they, indeed, rendered the act of writing disagreeable, but did not prevent its performance.

The remedies which the patient employed for the relief of his "rheumatism" were chiefly popular plasters and the like, but their use was, according to his own evidence, followed by no apparent results. In 1841, before the commencement of the so-called rheumatism, a functional disturbance of the bladder was first observed; since that time he has noticed that during sleep, or between sleeping and waking, involuntary passing of urine has occurred. Such occurrences, however, gradually became more frequent, as also the necessity of making water during the day, so that at last the patient, when he went abroad, had to wear a kind of portable urinal. For the last six months he has complained of headache, of the sensation of a salt taste at the back of the mouth, and sometimes of the feeling as if a hair were situated there. He often complains of "stitches" in the precordial region, and frequently has a feeling as if something held him firmly round the body.

His mental faculties have never been materially affected; he has had slight presbyopia, and a slight degree of dulness of hearing, especially of the right side. The venereal passion appeared at first, in the earlier period of the disease, to have disappeared, but at last, some weeks before his admission, it had increased to a morbid extent. The respiratory and circulatory systems have always been normal. Appetite always good; bowels generally constipated, and had frequently to be relieved by laxatives.

A month or six weeks before his admission, the patient exhibited a complete change of character. He began freely to drink spirits, and to give vent to his sexual desires. The object of his passion was his servant maid, whom he had hitherto treated with utter indifference, and had regarded as being rather repulsive than otherwise. On this subject he was deaf to all the expostulations of his wife; he made foolish and large purchases, which did not at all correspond to his means, &c. &c. While taking a ride, he galloped to various dancing saloons and beer-shops, and created the greatest excitement by these and other aimless freaks. On the day before his admission it became quite evident that he was insane.

In the hospital he exhibited a high degree of mental excitement; his disposition was extremely cheerful, and there appeared a characteristic manie des grandeurs, together with the liveliest flow of ideas. At the same time he made repeated attempts to escape, and threatened his persecutors, viz., those who had brought him here without cause, &c. This behaviour, which much resembled a certain degree of drunkenness, continued for several days after his admittance. The patient demanded, energetically, to be released, expressing himself in the most reproachful terms against the presumptuous authors of his confinement, boasted extravagantly about his doings while he was a soldier, and related willingly, and with a shamelessness quite foreign to his character, his ongoings with his servant maid. He disclosed—evidently without the slightest knowledge of disease—his projects for self-enrichment. His design was to purchase a house in some street in Berlin, to insure it in a hundred different offices, and then to set it on fire, in order to draw the premiums. This project he considered very ingenious, and expected to gain by it about two millions of thalers. With this sum he would equip a regiment of soldiers, and present it to the king, in the hope of obtaining a royal present in return. He would also establish a large wine business, and do many other similar things, by which he always brought prominently forward his own superior and pre-eminent bodily and mental capacities. His extrava-

gance often led him to strike and injure his fellow-patients, and it was quite impossible to convince him that such treatment was not quite harmless to them. On examination, his gait was seen to be unsteady, slovenly, and like that of a drunken man. *With shut eyes the patient cannot stand without violently staggering.* The irregularities in his gait increase with the rapidity of the movements, and it is especially difficult for him to turn round. States that for the last twelve months he has walked quite as unsteadily, and that he frequently stumbles. After a week's treatment in the asylum the patient became so quiet that he was removed to the convalescent ward.

The last examination, undertaken after the return of consciousness (and when the patient was in a perfectly composed state), gave as a result, in addition to the already mentioned functional disturbance, analgesia of the lower extremities to a certain extent, which decreased in a centripetal direction. When slightly pricked with a needle, he felt as if a blunt instrument had come in contact with his skin, or as if he had been touched with the finger; and it could be pretty deeply inserted without any expression of pain being called forth. The patient mentioned, and pointed at once, to the part touched. When many pricks were given in succession, he told both the number and position. When two pricks, of as far as possible like intensity, were given simultaneously on different points of the skin, he felt generally as if only one had been given, and pointed to the one nearest the rump. In the long direction of the limb the needles could be placed from 8—10″, and in the transverse 2—3″ from each other, without his having the sensation of two places being touched. The nearer the thigh, the closer could the needles be together, and the more distinctly is the pain felt. After a very deep prick pain was felt for a considerable time, and this after-feeling gave, occasionally, false indications. He said, amongst other things (with shut eyes), that he felt as if he were being pricked with a needle, sometimes here, sometimes there, while no needle was introduced; or that his toes were being held fast by the fingers, while he was not otherwise touched than with the needle. No dulness of perception was noticeable. Reflex movements could only be effected from the sole of the foot. There is scarcely any paralysis of the hands perceptible, and its movements, so far as individual fingers are concerned, are almost normal; writing is performed steadily and in straight lines. While in the asylum the patient was troubled several times a day with pseudo-rheumatic pains, which sometimes attacked both extremities at the same time; the other symptoms of the extremities and bladder continue unchanged.

With regard to the psychical condition, it may be mentioned that he soon became quiet, but still held by, and took pains to elaborate, his senseless projects. After three months' treatment, he—by desire of his relations—was obliged to leave the asylum. Although he apparently regretted the folly of his former conduct, it could be plainly seen by his manner, his confessions, and his expression of countenance, that he by no means considered his former conduct to be really the result of disease.

If we consider the array of symptoms presented to us in the foregoing cases before the outbreak of the psychical lesion, their similarity with those of the disease tabes dorsalis, first described by Romberg, is very evident. In the case of the first patient there were long-existing fleeting pains in the lower extremities, incontinence of urine, also squinting, uncertainty of gait, staggering and falling with shut eyes. The second patient (nine years before the outbreak of the psychical lesion) first experienced a numb feeling

in the toes and soles of the feet, had the feeling of a band round the thorax, uncertainty of gait, especially with shut eyes, and incontinence of urine; then he was seized with the same fleeting pains in the legs, and had for nine years other unmistakable symptoms of disease of the spinal marrow. In the third case the early symptoms, especially the incontinence, can be traced still further back; here also we have rheumatoid pains in the lower extremities, pains in the lumbar region, a feeling as if something held him firmly round the body, uncertainty of gait, and staggering with shut eyes. In the second and third cases there was also a slight affection of the upper extremities.

If we consider the whole three cases as examples of chronic disease of the spinal cord, our opinion is confirmed by the autopsy in two of them, which proves without doubt the existence of a circumscribed gray degeneration of the posterior columns of the spinal cord. From the perfectly analogous symptoms observed in the third case we can, with great probability, conclude that a similar pathological change had taken place.

After the affection of the spinal marrow had lasted for some time, tolerably acute psychical symptoms followed in all the three cases*—they were those of mental excitement and manie des grandeurs. In the first patient there was great weakness of intelligence, which for one and a half year before his death gradually increased. The second patient died of pneumonia and general debility shortly after the outbreak of the psychical lesion, and the third patient was dismissed from the asylum with still good intelligence, though not free from delusive notions.

Judging from the progress of the disease in these cases, it appears evident that there exists an intimate relation between the spinal affection and the later-appearing psychical phenomena. As is known, manie des grandeurs, with alienation, appears closely related to the so-called general progressive paralysis of the insane, so that, in fact, where the characteristic delirium has broken out, the paralytic imbecility is, almost with certainty, sooner or later to be expected, if it has not already shown itself before, or simultaneously with, the outbreak of the delirium of greatness. That stray cases of manie des grandeurs do occur, neither accompanied nor followed by paresis, proves nothing against the great generality of the fact. Besides, many errors of observation are to be taken into consideration by the critic of these cases, especially that of too short time of observation, and that often very deceiving remission of the disease. It has been attempted to refer the paralytic phenomena to various anatomical causes, amongst which chronic meningitis and its consequences (thickening of the pia, adherence of the same to the gray matter, thickening of

* Hereditary predisposition to mental disease could not be discovered in any of these cases.

the ependyma, œdema, hydrocephalus, &c.) takes the chief place. Rokitansky has lately declared his belief that in all cases of paralytic imbecility there is a change in the cellular tissue of the cortical substance of the brain. The cellular tissue becomes, in the first place, replaced by a tenacious granular fluid, then fibrous elements are to be distinguished, a gradual stoppage of nutrition and destruction of the nervous element ensues, and, at last, colloid and amyloid corpuscles are formed. This growth of the cellular tissue, according to Rokitansky, is essentially the same transformation which takes place in the later stages of the so-called tabes dorsalis. The gray degeneration of the spinal cord is, therefore, nothing more than a widely developed growth of the cellular tissue.

I have unfortunately not been able to confirm this idea of Rokitansky, of which, amongst others, Herr Demme* has convinced himself, from certain observations upon the cerebra of those who have died of general paralysis. Unfortunately, however, this gentleman does not mention the method by which to obtain certain results from fresh preparations; but whoever has made such investigations knows how many capricious interpretations, and how much that is questionable, are here presented, and the labours of Herr Demme have not tended in the least to settle these. If, therefore, physicians at the present time talk of this change being the foundation of paralytic imbecility as a settled question, they, by coming to a too hasty conclusion, do more harm to science than if they openly confessed the uncertainty of our knowledge, and were thereby urged on to new investigations. I will not anticipate Dr. Leyden, by speaking of the results obtained by a minute examination of the spinal cord in gray degeneration. He has undertaken the investigation of the cords of the first and second patient, and will shortly publish the results of his researches.†

Notwithstanding that the first patient had lived for three years in a state of imbecility, had squinting, irregularity of the pupils, attacks of loss of consciousness, sometimes with convulsions, all indicating nothing else than a deep affection of the brain, yet in the post-mortem examination there was no evident disease of its substance noticeable. The pia was neither opaque nor thickened, and was at no point adherent to the gray substance. A slight degree of hydrocephalus was all that was observable.

In the case of the second patient there was also no observable disease of the brain substance; the internal softening, along with the putrid gray colour of the pia, &c., must evidently, be

* H. Demme, 'Beitrage zur Pathologischen-Anatomie des Tetanus und einiger andern Krankheiten des Nervensystems.' Leipzig und Heidelberg, 1859.

† 'Die graue Degeneration der hintern Rückenmarks-Stränge,' von Dr. E. Leyden. Berlin, Aug. Hirschwald.

regarded as a post-mortem appearance. Evidences of gray degeneration could be traced with certainty only as far as the medulla oblongata, and the adhesions of the dura to the pia resulted from slight chronic inflammation.

If in this case a deep disease of the brain substance can hardly be expected, owing to the early death of the patient after the outbreak of the psychical disturbance, still it is remarkable that in the case of the first patient, who lived for several years in a state of imbecility, there was found neither thickening of the membranes nor adherence of the pia to the gray substance. And yet one cannot help, if he compares the course of the disease, allowing a connection between the spinal affection and that of the brain. What is the nature of the change in the brain? Do the first still invisible changes exist of an affection similar to the degeneration of the cord, and in what parts have these their seat? All this must for the present remain undecided. All that can be said is that the process is indeed a very chronic one.

From the clinical observation of the cases arises now the question, are we entitled to bring this under the category of general paralysis of the insane, or are the symptoms so different that this peculiar progressive paralysis cannot be classed with it? A whole series of symptoms decidedly correspond in every way with those of general paralysis. Attacks of giddiness and of loss of consciousness, partly with convulsions, irregularity of the pupils, and great emaciation, are presented in the first two cases. In all there is paresis of the lower extremities, showing itself particularly in defective walking (while lying, the limbs can be raised without difficulty), paralysis of the bladder, and characteristic manie des grandeurs, with maniacal excitement; one case ended in confirmed dementia. Scarcely any physician would hesitate to call these symptoms those of general paralysis, if he did not specially mark the forementioned symptoms of the spinal affection. In fact, one falls into some difficulty as to how an affection is to be classified, which on the one hand resembles the cerebral symptoms of general paralysis, and on the other deviates from it in being connected with disease of the spinal marrow; and it strikes one very forcibly how deficient our knowledge of general paralysis still is, clinically as well as pathologically. One symptom, so characteristic amongst the paralytic appearances in general paralysis, was wanting in all the three cases, viz., the affection of the tongue, which in this disease, as is known, takes the form of hindrance of articulation of words. The absence of this disturbance of the power of articulation could not of itself be regarded as sufficient to differentiate the disease from general paralysis, while there are doubtless so-called paralytics in whom there already exists a paralysis of the lower extremities without hindrance in speech being perceptible. The symptoms observed in the depart-

ment of sensibility would also be quite as valueless as a ground of decided difference, as these are also considerably modified in a great number of the cases of the common form of paralysis.

A characteristic mark of difference between general progressive paralysis and these described cases lies in this, that *these patients were unable, with shut eyes, to stand or walk without staggering.* I have also examined many paralytics with regard to this symptom—all stood or walked with their eyes shut quite as easily, or as difficultly, as with their eyes open; even those in whom standing is barely possible, and whom one must constantly watch lest they fall, show not the slightest increase of insecurity, and conduct themselves just as they do when their eyes are open. Here, therefore, is plainly the means to distinguish cases with disease of the spinal cord from others.

The course of the disease also appears to be totally different, especially in this, that in those cases with disease of the spinal cord paralytic symptoms in the bladder appear very early, years before the outbreak of the psychical symptoms, while in simple progressive paralysis it generally appears in an advanced stage of the disease. So it was, at all events, in these three cases. The paralytic appearance, also, of the lower extremities preceded the mental affection for an incomparably longer space of time than is generally the case in general paralysis, where, on the contrary, such a course especially is seldom observed.

It will yet require a series of further observations to establish more certainly the differences as to course and symptoms. The question, also, will be of special importance, whether, in simple progressive paralysis, fleeting stinging pains of the lower extremities, as in the case of disease of the spinal marrow, occasionally precede the apparent outbreak of the disease. This, on the ground of several observations, I have been induced to believe. I have certainly observed these pains in the *course* of general paralysis; they make their appearance not unfrequently as precursors of the so-called epileptiform attacks after, or simultaneously with, a comparatively sudden attack of confusion, which represents, as it were, an epileptiform attack. Moreover, all patients agree in this, that they experience an increase of the pains when warm in bed. How these pains, which make their appearance in the course of simple progressive paralysis, are to be considered—whether as eccentric, neuralgic, &c.—I must, owing to the want of confirmed facts, allow to remain undecided, and reserve myself for further communications upon the subject.

The following are the essentials of the result of my observations:

1. There is an affection (gray degeneration) of the posterior columns of the spinal cord, which is followed, in a later stage of its course, by mental disease.

2. The form of this mental disease presents, as well through the nature of the delirium as also through the accompanying paralytic symptoms and intercurrent attacks of loss of consciousness, partly with convulsions, a certain similarity to the so-called general progressive paralysis of the insane; in common with which it has also (as seen in two cases) great emaciation.

3. While, however, in the mental disease with disease of the spinal marrow the patients stagger and fall down in walking and standing with shut eyes, this does not take place in the so-called progressive paralysis. At the same time it is characterised, lastly, by the absence of disturbance in the articulatory power of the tongue.

4. The paralytic appearances in the bladder and extremities in the cases with disease of the spinal cord, deviating from the usual course in progressive paralysis, precede for a long time the mental affection. Whether the early appearing, peculiar pains of the lower extremity also occasionally precede the ordinary progressive paralysis, cannot yet with certainty be determined; but, at all events, similar appearances occur in its course, especially before the outbreak of epileptiform attacks.

5. Disease of the brain substance itself, analogous to the gray degeneration of the spinal cord, was not perceptible. The nature of the succeeding cerebral disease is unknown; it seems, however, to be accompanied by hydrocephalus internus.

Illustrations of Phthisical Insanity. By T. S. Clouston, M.D. Edin., Medical Superintendent of the Cumberland and Westmoreland Lunatic Asylum.

In a paper which appeared in this Journal for April 1863, on "Tuberculosis and Insanity," I described a form of insanity which had appeared to me to be sufficiently distinctive in its symptoms to rank as an order in any classification of insanity that was based on causes, and sufficiently often associated with tubercular deposition to warrant its being called "Phthisical." "Phthisical *Mania*," the name I ventured to give it, may have been an unfortunate one, in that it appeared to make it merely a form of the division *Mania*, whereas I meant it to describe a form of insanity as distinct as *Mania* itself. "Phthisical Insanity" would have been a more appropriate term, and by that name I shall speak of it in the remarks which follow.

As an appendix to that paper, I had proposed to give a few typical cases out of those that had come under my own observation,

illustrating phthisical insanity; but the limits of the space at my disposal prevented me from doing so at that time. But I have since then found so many illustrations of the truth of all I said about phthisical insanity, that I think the histories of a few cases, along with a short commentary on each, may help to confirm the truth of my former conclusions, and to direct the attention of the profession to the subject.

To my description of "phthisical insanity," as given at p. 36 in the number of the Journal referred to, I have now nothing to add, nor have I any reason to correct or alter in any way the account of the disease as there laid down. It is difficult to recapitulate shortly the chief symptoms of phthisical insanity; but suspicion, irritability, want of fixity of mental condition, want of regular periodicity, unsociableness, disinclination to exert the mind and body rather than inability to do so, want of tone and energy in the system, rather weak bodily health, and the absence of any acute symptoms, may be said to be the most common characteristics.

In answer to those who say that they have not found any such special form of insanity connected with tuberculosis, I can only say that their experience has been different from mine and from that of others who have abundantly confirmed mine in this matter; and in answer to those who say that even if such cases of insanity do exist very commonly where phthisis is present, yet they are ordinary cases of insanity which take this form from the general weakness of the system induced by the tubercular deposition—to this I can only answer that such cases of insanity assume that form from their commencement, and often long before tubercles can be detected. Others of my critics have said that in those cases, neither disease can be said to be specially dependent on the other, as both are the result of the tubercular diathesis, and it is merely accidental that one disease is developed before the other. No doubt both diseases may be manifestations of hereditary defect; but it would seem to be more accurate to say that the defects of constitution that predispose to insanity and tuberculosis are perfectly distinct, but so far allied that among the tubercular or those in the pretubercular stage, insanity is very apt to make its appearance. We know so little what the tubercular diathesis or the tendency to insanity means, that it would merely be useless speculation to discuss whether they are identical or allied, or to take up our time in saying much about them. All we can do at present is to note the statistics of the two diseases, to observe how they influence each other, and try to form conclusions therefrom. The following cases may assist in showing how they influence each other when they occur together:

Case 1.—M. M—, æt. 43. The history of this case was not known very accurately, but this seems to have been the first attack of insanity, and it

had not existed more than a few months. She resided in London, and came to Edinburgh to seek her son, who had been dead some time. This she had known before she became insane. No hereditary predisposition was known. She had been wandering about and troublesome, but not violent.

On admission, she was apathetic, and when roused, suspicious-looking, not answering questions correctly or even intelligently; but showing her insanity much more by her peculiar expression of face, and her conduct when spoken to, than by her conversation. Hair dark, complexion dark. She seems to have been always of a melancholic temperament. She was thin and weak, but appeared before becoming insane to have enjoyed good bodily health on the whole.

After being some time in the asylum her mental state was the following:

"She has many delusions, which she only shows at times, and is not very consistent in her expression of them. She fancies that she is pregnant, that the fœtus is extra-uterine, and that she will require to be operated upon. She is very suspicious, and especially of her food, sometimes starving herself in case of being poisoned. She also, at times, seems to imagine that she has much property that is being kept away from her. She is very idle, cannot by any means be persuaded or compelled to employ herself. At times, without any cause, she becomes abusive to those about her and much excited. She remains thin and pale, but takes her food well, and has shown no symptoms of suffering from any disease. She is unsociable, takes no interest in her friends, does not want to get away from the asylum, or, at least, expresses no wish to do so. She gets excited for short periods of a few hours at times, and during these attacks of excitement all her symptoms are much worse."

And in the course of two years her state was the following:

"She is now much thinner and weaker than she was, but no symptoms of any disease have manifested themselves, and she refuses to have any examination made of her chest. She is more taciturn and less seldom abusive, except when she is spoken to or interfered with. She never speaks to any one except to ask for anything she wants, resents being interfered with in any way, and treats all about her as if they were her enemies. When asked about her health she frequently becomes abusive, and seems to think some insult or harm is meant her. She is never pleasant by any possibility, and never thankful for any attention shown her. She distinguishes by no signs those who are kind to her from those with whom she has nothing to do. At long intervals now she becomes excited, abusive to some one who has given no cause for such conduct, and she gives no cause for such abuse."

She remained mentally as described, but in bodily health became weaker, lost flesh, and did not take her food so well, but no cough nor spit appeared till two months before her death, which occurred after she had been in the asylum five years. For two or three years before death she had been thin, pale, weak, capricious in her appetite, inclined to keep her bed, and evidently labouring under organic disease. She resisted an examination of her chest so very strongly that it was never made. There was never any diarrhœa, but all the other symptoms of phthisis were present in great severity for two months before death.

Post-mortem examination.—The brain was atrophied, anæmic, and œdematous. The white substance composing and surrounding the fornix and septum lucidum was almost diffluent. The left lung was everywhere infiltrated with masses of tubercle, each tubercular spot soft in the centre. The cavities so formed were many of them very old evidently. The upper lobe of the right lung was in this condition also. The mesenteric glands were enlarged and tubercular. The mucous membrane of the cæcum and ascending colon was ulcerated, thickened, and red.

Commentary on such a case is almost superfluous after what I have said in my former paper about phthisical insanity. A woman has a family, and lives till she is forty-three. She then becomes insane, never having very acute symptoms, but *suspicion, irritability,* with causeless, unaccountable exacerbations, and a *want of interest in anything,* being the chief symptoms. She is thin and in weak bodily health when she becomes insane, and although getting good food and fresh air, never gets stronger. She gets weaker, and paler, and thinner gradually, until she is exhausted and very weak; and then a severe cough and spit comes on two months before she dies. Can any one doubt that in this case the insanity was almost contemporaneous in its appearance with the development of tuberculosis?—that the ordinary symptoms of the latter disease were obscured by the state of the brain?—and that it was the tuberculosis, and not the insanity, that kept the patient thin and weak bodily? And do not the mental symptoms resemble in some degree those of an exhausted man whose brain has been starved of a sufficient supply of nourishment by a disabled stomach, an exhausting discharge, or unsound lungs? I have selected this case, where *no* examination of the chest was at any time made, in order that the similarity in all points between such unexamined cases and others which were examined, and the date of the deposition of the tubercle in them determined, may appear. The majority of such cases are apt to go on without any examination of the chest for a long time; but if their subsequent symptoms agree in all points with those of the cases where tubercle was early discovered in the lungs, surely it is no unwarrantable inference that if the tubercle had been looked for earlier in those cases it would have been found. The state of the lungs in this case showed conclusively that they had been the seat of tubercular deposit for a long time, for years at least, before the ordinary symptoms of phthisis appeared.

Case 2.—H. S—, æt. 20, a map-colourer, of ordinary education, cheerful disposition, steady and industrious habits. She had been subject to "fainting fits," but otherwise had been in good health. She had been engaged to be married to a respectable young man, but shortly before the commencement of her illness—or rather, perhaps, at the commencement of her illness—she began to entertain fears that he was not a Christian, and she came to the conclusion that in those circumstances it was her duty to postpone her marriage. She then became melancholy, took a gloomy view of everything, and proposed going as a missionary to the Indians. She then began to fancy her food was poisoned, became irritable and dangerous to her relations when in a passion. She was sleepless and her appetite was diminished, and she was sent to the asylum.

On admission, she was excited, her eyes were very bright, her countenance animated and expressive; she talked freely; she did not express much surprise or astonishment at finding herself in an asylum. She evidently, though apparently pretty rational, did not appreciate her position. She had

dark hair, beautiful dark eyes, and delicate, refined features. Phthisical symptoms and physical signs were well marked.

At first she became very melancholy at her catamenial periods, but under the influences of fresh air, good food, and quiet, she became apparently well and was removed from the asylum. Her phthisical symptoms abated also. But in a very short time she was brought back to the asylum with all her symptoms aggravated. She was more suspicious, and more incoherent when excited. She was very listless and weak, suffered from cough, night sweats, expectoration, and pain, when free from excitement. But when she became excited she got out of bed, dressed herself, walked about the ward, never coughed, never spat, talked almost constantly, imagined herself a person of importance, or hinted her suspicions in a vague way to those about her. Her pulse was quicker when excited, however, than when free from excitement. Those attacks came on irregularly till, in six months, she died. Her appetite was better during her excitement, but she did not sleep then. When free from excitement she sometimes was quite rational but listless, and was so before she died. Both lungs were completely disorganized.

This was a very characteristic case of *acute* phthisical insanity. The suspicion, listlessness, and disinclination to exert the mind or body when free from excitement, the latency of all the lung symptoms when she was excited, the obvious advance of the disease during the excitement as well as during the quiet periods, but the insensibility of the cerebral excito-motor centre at the former times to the irritation of the disease of the lungs, were all very characteristic of such cases. They are more common in the young; the slower, more demented cases are more frequent among those further advanced in age.

Case 3.—J. R—, æt. 31, a joiner. Father had been insane. Had led a dissipated life at times. Had always made his living at his trade. Was married, and had a family. The first symptoms of insanity were noticed more than a year ago, and he was then sent to an asylum, but having apparently quite recovered, he was discharged. He was never quite well after this, however. He was unsettled, would not work at his trade with any one master for more than a few weeks at a time. He accused his wife of poisoning him, of conspiring against him, and of getting her relations also to plot against his life. His having been in an asylum at all he attributed entirely to their desire to get rid of him for their own purposes.

On admission into the asylum, he was quiet, reserved, and suspicious in look and manner, without showing much suspicion in his words generally. He was a man in average health, with a fair complexion, dark-brown hair, and a more than usually intelligent face. He was very reticent about his delusions.

For some time after admission he wrought in the joiners' shop, but then began to fancy that his working there kept him in the asylum, and refused to work any longer. He became more unreserved in his expressions of dislike and suspicion of his wife and her relations. He might often be seen to exchange his own dish for that of his next neighbour at meals, when he could do so without attracting much attention. He looked as if he "knew all about it" when asked about this proceeding, but could give no explanation of it. He evidently had strong prejudices against the head male attendant, and shook his head and laughed, and said, "You know very well," when asked why he disliked this man. At one time he became so well that his discharge from the asylum was contemplated.

He had not been in the asylum six months till he had slight hæmoptysis, and when his chest was examined thereafter the presence of tubercular disease was indicated by dulness on percussion, and crepitation on auscultation at the apices of both lungs. He said, however, that he had often, before he came into the asylum, spat blood. Shortly afterwards his state was the following:—

"He now works in the joiner's shop only when he is almost obliged to do so. He often requires to be told that he will be carried out if he will not walk. He is not asked to work hard, and is only asked to work at all for his own sake, because when he is employed in any way he is much happier and more content than when quite idle. He sometimes abuses the head attendant in most unmeasured language. He imagines he is the heir to large estates, and is kept here a prisoner by his wife's relations to exclude him from his inheritance. No amount of persuasion will convince him that this is not the case. He is suspicious of almost every one round him; he tries to exchange the portion put before him at every meal for that of some one else. He is at times very irritable, and gets much excited. He took cod-liver oil for some days, but then imagined it was poisoned, and refused to take it on any account. He is constantly asking for changes of diet, and when he gets them he remains as dissatisfied as before. He is still pretty strong, and is in good condition; but complains when at work of shortness of breath. It is not for this that he refuses to work, however; he imagines that it will be the means of keeping him longer here. His most common question to the reporter every day is, "When will this have an end?" referring to the conspiracy which he imagines is being formed against him. At times he is entirely reticent, merely shaking his head significantly when asked how he is—"Oh, you know well enough, why ask me?"

A year after admission he was attacked with a cough, and spit, and his difficulty of breathing became increased and he was no longer asked to do any work. He got much worse mentally immediately after he was allowed to be quite idle. He could never be induced to take any kind of medicine for more than a day or two, and the extra diet and stimulants ordered for him were almost forced down his throat. His lung disease was evidently advancing rapidly. He became worse every week, while his suspicions and irritability became the cause of more and more misery to him. He gasped reproaches against the medical officer as he sat coughing and breathless, for giving him the medicines intended to relieve him. Everything that was done for him he imagined to be for a sinister purpose, every one who was kind to him he suspected of being an enemy, and all the symptoms of his disease he believed to be caused by his food or medicine. All his symptoms were as severe, when they once had fairly commenced, as in ordinary cases of phthisis among the sane.

To the last he retained his suspicions unchanged. He died within eighteen months from the time of his admission. He was much exhausted, but not quite emaciated when he died.

Post-mortem examination.—The brain was on the whole almost normal, except that the arachnoid was very milky, and the pia mater infiltrated with opaque serum, while the lining membranes of the ventricles were thickened and, in the anterior part of the lateral ventricles, covered with small granulations.

The lungs were both almost entirely infiltrated with tubercle. This tubercle was very hard, however, except in some softened spots. It was intermixed with the fibrous pneumonic lung, and, as was seen from the appearance of some of the vomicæ, as well as the consolidated fibrous lung, had been deposited there for a long time. The cavities and the densest parts of the tubercular deposit in both lungs were at the bases. There was

no ulceration of the cæcum or colon. The mucous membrane of the stomach and duodenum was of a very dark colour and very soft.

This is a good example of those cases of pure monomania of suspicion, almost all of whom, according to my statistics, die of tuberculosis. The insanity was strongly hereditary. In this case some of the exciting causes of phthisis had been present. He had led a fast, irregular life. The suspicions about his being an heir, and about being kept in the asylum by a *conspiracy* against him, are very characteristic of such cases. So, too, was the usual reticence about those delusions, the actions and expression, rather than the words, indicating suspicion, with the violent outbursts at times, when all the pent-up thoughts would find expression, and the want of self-control of the insane man be exhibited. And in this case, too, there was the usual aggravation of the mental symptoms, when the bodily disease was being developed more than usually rapidly; and lastly, the most painful symptom of all, the utter want of sympathy with any one about him, the suspicion of every one and everything, the inability to see or understand kindness of any kind, and the suspicions being most directed against the relatives. In such cases the functions of the brain are less impaired than in any other form of insanity with tuberculosis, and hence the latency of the symptoms of phthisis is least marked, if indeed there is latency in those cases at all.

Case 4.—J— M—, æt. 25, domestic servant, with no hereditary predisposition to insanity. Had for many months laboured under consumption. Had never been insane; was in a weak, exhausted condition when she first showed signs of mental aberration. In a few days she became violently excited, sleepless at night, utterly incoherent in conversation, and destructive to windows, furniture, and linen. She was in a very fevered state during all this time. In the infirmary, where she had been sent before arrangements could be made for her admission into the asylum, she became more quiet and rational. On admission she was confused, weak, and slightly incoherent in conversation. She had some delusions about her treatment in the infirmary, and her mind was especially disordered on religious matters.

A good diet, wine, fresh air, change of scene, and quiet, seemed to have a very beneficial effect on the mental disorder, and also to improve her bodily health for the first month after admission. At the end of that time there only remained an inactivity and apathy of mind, a capriciousness in her likings and dislikings, and a slight tendency to be morbidly suspicious. She spat much purulent matter, but coughed little, thus indicating the diminished sensibility of the excito-motor nervous centres so universal in the insane. She gradually sank, from the advance of the lung disease, her mental apathy becoming greater as she got weaker, but she had no return of the maniacal symptoms, nor any other form of marked mental derangement.

On a post-mortem examination the lungs were found to be tubercular throughout, but the deposit was in two very different states. In the upper lobes it was infiltrated, and disorganized into cavities; in the lower lobes it was in the form of miliary tubercle, with the intervening lung tissue

crepitant. At some places those miliary deposits were so abundant that they ran into each other, and formed a solid mass. The mesenteric glands were large and tubercular, and the cæcum and Peyer's patches ulcerated.

In this case I think the insanity had been developed at the time those miliary tubercles were deposited. They were evidently much more recently deposited than the tubercle in the upper lobes. The deposits and the disorganization of the tubercle in the upper lobes had been gradual and steady, but at a particular time the tendency to tuberculization had evidently become very much greater, increasing the fever, and upsetting the healthy action of the already ill-nourished brain.

I have selected these four cases as representing the four most common forms of phthisical insanity. The first two are the most typical, the one being a chronic and the other a more acute form; the last two represent forms of phthisical insanity, connecting it with insanity from other causes. The first connects it with ordinary cases of monomania, and the last with ordinary cases of acute mania. In J— R—'s case the functions of the brain generally, were least interfered with by the tuberculosis; in J— M—'s case they were most interfered with, but the disturbance was of short duration, and much more allied to the disturbance of the cerebral functions in the delirium of fevers and inflammation than any other form of insanity.

I have lately had two cases in which disease of the cartilages of the knee and ankle-joints respectively has taken the place of the lung disease, or rather has been engrafted on it. The deposit of tubercle in the chest was stopped in both cases, and the vicarious affection of the joints and bones seemed rather to improve the mental state in both cases.

Case 5.—J— M—, æt. 48. Had been insane for six months. This was his third attack. Had been incoherent in conversation, violent in conduct, and jealous of his wife.

On admission he laboured under many delusions, but these were stated somewhat incoherently. He fancied the house belonged to him; said he was God; thought Queen Victoria had robbed him. He was a spare man, of about the middle height, with dark hair and a dark complexion.

For the first year and a half of his residence in the asylum he was at times excited, violent, and dangerous, and at times quiet and useful. He evidently deemed himself as holding some office in the institution, and was very careful of the furniture and attentive to the sick patients. He remained very incoherent in long conversations, mistaking the identity of many people around him, and yet in casual, ordinary remarks, did not show any incoherence. He remained in good bodily health apparently, taking his food well, looking very well, and showing no symptoms of any bodily disease whatever.

About a year and a half after admission his left knee-joint became the seat of what appeared to be at first ordinary synovitis. But, in time, abscesses formed round the knee-joint, not at first communicating with it, and rather obscuring the chief seat of disease. The small joint between the head of the fibula and the tibia was the first place where ulceration of

the cartilage began, judging from the pain and swelling, and the formation of an abscess around it. The disease was very chronic, and often showed temporary signs of amendment, which, along with the fear that an operation would not prolong his life for any very long time, prevented the leg from being taken off. From the time of the commencement of the disease of the joint, the patient had been cachectic in his appearance, and had been taking cod-liver oil, quinine, iron, wine, and extra diet. He died ten months after the commencement of the local disease. During all the time the latter existed he was more rational, mentally, than he had been before in the asylum, though far from being perfectly well in that respect.

After death his right lung was found very tubercular in its upper lobe, the tubercle having evidently been deposited for a long time; it had been slowly ulcerating, and breaking down at some parts. The cartilages of the knee-joint affected had disappeared, and the ligaments almost entirely ulcerated away, the ends of the three bones being rough, exposed, and bare. The marked disease of the ligaments accounted for a very strong tendency to dislocation of the tibia backwards posterior to the condyles of the femur.

Case 6.—J— W—, æt. 23; has been insane for about six months; parents in poor circumstances. Had two sisters, who died of consumption; was himself a weakly child, and had been pronounced by the doctor in attendance on him in childhood likely to die from the same disease. In appearance, form, and complexion, he was like the two consumptive members of the family, and unlike the others. He had been in somewhat delicate health during his adolescence, but had shown no positive signs of disease of any kind. His insanity commenced gradually; he became melancholy, listless, and absent-minded; he then became restless at nights, peculiar in his temper, and irritable; especially he was so at times, the periods of exacerbation being irregular and quite unaccountable. He quarrelled with his father and struck him in one of his periods of excitement, and this was the cause of his being sent to the county gaol, and thence to the asylum. No hereditary predisposition to insanity in the family.

On admission he was mentally composed, absent-minded, and restless; he made faces, and put himself into curious attitudes; he answered questions half a minute after they were asked, and then hurriedly, as if he was thinking of something else. He seemed in good bodily health, though thin, and very pale. He had a fair complexion, and light hair, and was very tall and overgrown-looking.

He remained in much the same state as on admission for some time; he was obstinate and destructive, and could not be got to employ himself. He then became worse, going about undressing himself, fighting, swearing, and refusing to do anything he was told, while he gave the impression to the attendants that this was entirely through obstinacy and wilful ill-behaviour. He remained for several months better and worse, in that way. When fairly roused and his attention fixed, he could answer intelligently questions put to him even when in his worst states; and when he swore, and used abusive language, he did so in a *rational* way, if I may be permitted to use the word as describing the impression his manner would have made on a non-professional person seeing him in this state. All this time his state of bodily health depended apparently on his mental condition, but I believe the reverse was the case, and that when he got thin and weak-looking, he became worse mentally. When, by means of a liberal allowance of stimulants, cod-liver oil, and extra diet, he recovered in some degree his bodily strength, his mental symptoms showed signs of improvement. Phthisis was suspected, but beyond prolonged expiration at the apices of the lungs, there were no physical signs of tubercular deposition.

After being seven months in the asylum he refused his food for three weeks, assigning no reason, looking composed and absent-minded, resisting much when fed, and losing flesh rapidly, notwithstanding his having an abundant quantity of strong beef-tea, custard, and wine, administered to him. He appeared to suspect poison. At this time the physical signs of tubercular deposition became evident, but there was no cough or spit, and no complaint on his part. After refusing food for nearly a month he began to take it again with much difficulty, and required much pressure. A fortnight after he began to take his food his right ankle began to become red, and painful, and weak. He was confined to bed, but the inflammation of the ankle-joint increased. His mental symptoms became much better as his ankle got worse. The joint became weak and a little swollen, and he began to answer questions more quickly and rationally. The joint became quite unable to support his weight, got weaker, more red, and gave signs of there being pus outside of it. At the same time he assumed a more sane expression of face, and appeared to get almost well, mentally. The crepitation and other signs of *active* tubercular deposition in the lungs also ceased; his appetite increased until it became enormous, while he actually gained in flesh and strength, notwithstanding the discharge of pus from the ankle. It was now evident the cartilages of the joint were much affected, for the bones grated on each other when the joint was moved. An abscess then formed over the shoulder-joint, and discharged a large quantity of matter, but it could not be ascertained whether it communicated with the shoulder-joint. The parts about it are very much thickened and swollen. In this state the patient remains at present.

These two cases, if we admit that in them the tubercular deposition in the lungs and the disease of the joints were equally the result of the same diathesis—and few surgeons would deny it—if we admit this, they would show that—

1st. Tuberculosis, as disease of the joints, may be connected with insanity, and may occur in the peculiar form of insanity I have called "phthisical" (J— W—'s case), taking the place of the lung disease.

2nd. Active disease of the joints occurring in tubercular subjects may not only cause a remission of the symptoms of phthisis, but may also cause a remission of the symptoms of insanity.

Cases of Primary Carcinoma of the Brain: with Observations. By John W. Ogle, M.D. Oxon., F.R.C.P.; Assistant-Physician and Lecturer on Medical Pathology, St. George's Hospital.

The consideration of the two interesting cases* of "Primary Cancerous Tumours of the Brain," related by Dr. Mackenzie Bacon in the April number of this Journal,† having led me to inquire whether the results of our experience at St. George's Hospital of

* One of which occurred in the Norfolk Asylum, and the other in the St. Maria Nuova Hospital, in Florence.

† P. 74.

late years coincided with that gentleman's as regards the comparative frequency of such cases, I propose to adduce a short series of cases of the like nature. Dr. Bacon remarks that "in the ordinary way cancerous deposits within the cranium are *secondary* to disease elsewhere." I was aware that in our Hospital practice we had had a few instances in which cancerous intra-cranial tumours were *not* secondary to disease (of the same kind, of course) elsewhere; but I was not prepared to find that such cases had been so little exceptional as indeed, I find they have been.* I have notes of as many as twenty-five intra-cranial tumours,† which, from their intimate structure, and the history of the cases, may very fairly, I think, be classed in the category of cancerous growths. (From these I exclude such as are of a fibrous or fibro-plastic nature, and others which, judging from their histological composition, may properly be ranked among those of an uncertain kind.) Out of this number of intra-cranial cancerous tumours there are no less than thirteen in which the morbid growth was found within the brain alone of all the organs of the body. This proportion is, as it seems to me, not a little remarkable, but it is one which, considering the number of cases that I have in my power to select from (rare, on the whole, as intra-cranial cancerous growths are), may be looked upon as not improbably approximating very considerably to that which would be found to obtain in other large public medical institutions.

I will at once proceed to give the particulars of the cases seriatim.

CASE 1.—*Pains in the head—Remarkable slowness of pulse—Coma—Death—Encephaloïd carcinoma in the middle lobe of the brain, on the right side, containing extravasated blood.*

History.—Margaret L—, aged 28, had been ill with head-ache and so-termed indigestion for seven weeks.

Symptoms on admission.—Pain in head, chiefly at the vertex; much drowsiness complained of, even during her meals; pulse slow and weak; bowels constipated. On the 23rd there was constant torpor, from which, however, she was readily roused; the pain in the head was considerable; the pupils of the eyes contracted and sluggish; pulse 48 *per minute.* The tongue subsequently became dry and brown; the evacuations became passed involuntarily; coma supervened, and she died on the 26th.

Post-mortem examination.—Cranium.—Cerebral sinuses gorged; absence of fluid beneath the arachnoïd; cerebral membranes at vertex of brain healthy. In the middle lobe of the brain on the *right* side was an encephaloïd carcinomatous tumour (of the size of a large barn-door-fowl's egg). This was on a level with the upper surface of the corpus striatum, and extended in a downward direction to the inferior surface of the brain, which around the

* I am naturally only here concerned with such cases as have died and been examined, post-mortem, within our walls, as all others must (by reason of the difficulty during life, of diagnosing intra-cranial tumours of any kind, and *à priori*, of diagnosing cancerous growths) be excluded from present consideration.

† Tumours of the spinal cord, and their membranes, have not been considered in this enumeration.

tumour was *softened* and of a bright yellow colour. The growth, however, was separated from the adjacent brain substance by a thin layer of areolar tissue, which thus formed a line of demarcation between them. Covering the growth, the cerebral arachnoïd membrane had become attached to the corresponding part of the parietal arachnoïd, so that all these membranes were, at this place, firmly adherent to each other. The ventricles of the brain contained a quantity of quite clear fluid, and the right one was pushed considerably to the left side by the growth. On section of the encephaloïd growth it proved to be very soft in consistency, and in one portion to contain a quantity of extravasated blood. Other parts of the brain were natural.

Thorax.—The lungs were highly congested. *Abdomen.*—Organs natural.*

Note.—The line of areolar tissue around the morbid growth is in this case to be specially observed, as probably indicating that it originated from the pia mater and subarachnoïd tissues.

Case 2.—*Paraplegic symptoms—Loss of memory—Difficulty in speech—Dysphagia—Death—Large fungoïd growth in the left cerebral hemisphere—Brain around softened.*

History.—Mary A. F—, aged 50, admitted January 8, 1845, having for one and a half years been the subject of partial loss of power and numbness in the lower limbs, as also of defective memory, and of a sense of stupidity. These symptoms had increased until two months before admission, when she became so perfectly forgetful that she could not conduct her ordinary affairs or duties of life. She had also required to be fed by others. Six months before admission she had lost all power over her legs, and she subsequently had lost all powers of speech, and had been affected with difficulty in swallowing.

Symptoms on admission.—She was speechless; pulse small and weak; pupils of both eyes very contracted and sluggish; was unable to walk, but could draw the knees up in bed; the upper limbs generally strongly flexed, but could move them when she pleased; bed sores existed; the pupils were very contracted. Ordered leeches to the temples, also wine and camphor. She considerably regained powers of speech, but was very obstinate. The pupils became less contracted and less fixed. In all respects she improved until the 24th, when her breathing became oppressed, and she gradually sank and died on the 28th.

Post-mortem examination.—Cranium.—Bones of the skull natural; cerebral membranes healthy; no excess of sub-arachnoïd fluid; sulci between the convolutions diminished, and the lateral ventricles distended with limpid fluid. The greater part of the anterior lobe of the *left* cerebral hemisphere was occupied by a large fungoïd growth, dark-coloured and vascular at its circumference, but of an opaque yellow colour in its central parts, this latter colour extending in streaks towards the periphery. The growth was of equal firmness throughout; the surrounding brain-substance was softened, and much altered.

Thorax.—Old pleural adhesions existed, and the lungs were emphysematous and partly hepatized.†

Case 3.—*Apoplectic seizure following great "forgetfulness"—Partial hemiplegia, on the left side—Coma—Death—Fungoïd carcinomatous growth in the right cerebral hemisphere.*

History.—Robert W—, aged 50, was admitted March 4, 1846. After having been in what was described as "a strange forgetful state" for

* See 'Hospital Post-mortem Book,' 1844, No. 210.

† Ibid., 1845, p. 32.

some time, he had had an apoplectic attack five weeks before admission, followed by paralysis of motion on the left side of the body. Since then he had become unconscious.

Symptoms on admission.—He was perfectly unconscious, and the left arm and leg were quite powerless, but there was no facial paralysis. Evacuations were passed involuntarily. Tongue protruded straight; pupils of both eyes sluggish and somewhat contracted; bowels confined; tongue moist and furred. There was no positive indication of pain, but the right hand was constantly lifted to the back and right side of the head. Sores on the back existed. Ordered to have leeches applied to the right temple, and a blister to the neck: as also a turpentine injection. The bed-sores became quickly worse; he refused food, his tongue became dry and brown, and he sank and died March 15th.

Post-mortem examination.—Cranium.—Bones of the skull were thick and solid; cerebral convolutions flattened; at the central part of the upper surface of the *right* cerebral hemisphere (which was broader than its fellow) was a spot darker than the rest, which proved to be the upper surface of a fungoïd carcinomatous growth (of the size of a pullet's egg). The surrounding brain-tissue was very softened and of a creamy colour; the right ventricle was pushed decidedly to the left side, owing to the growth, and contained no fluid; there was a slight amount of fluid in the left ventricle.

Thorax.—The lungs were somewhat emphysematous and congested.

Other organs of the body were healthy.*

Case 4.—*Pain in the head—Partial hemiplegia of the left side—Semi-coma—Death—Fungoïd growth in the right cerebral hemisphere—Surrounding brain softened.*

History.—Anne E—, aged 52, admitted in January, 1846, with intense pain in the head, chiefly on the *right* side, of some months' standing. She become worse before admission, at which time she had symptoms looked upon as indications of some serious brain disease, and partial hemiplegia of the left side. She was cupped, leeched, and blistered at the back of the neck, and all this without any decided relief to the pain. Slight numbness, however, of the *left* side still remained, and the mouth was still drawn to the right. She continued to have much pain, and was re-admitted May 13th with much the same symptoms as on the previous occasion two weeks before, her pain and paralytic symptoms having become worse. She had been bled and salivated. Purgatives, leeches, and cold lotion to the head were prescribed, and, as the gums were much affected by the mercury, an alum gargle was ordered. The eyes became greatly injected, and the memory somewhat affected. She became very low, requiring stimulants; and semi-comatose. She died May 25.

Post-mortem examination.—Cranium.—Cerebral convolutions flattened. A soft fungoïd tumour, of the size of a barn-door-fowl's egg, was found in the central part of the *right* cerebral hemisphere, nearer to the upper than the under surface. It was circumscribed, but the neighbouring part of the brain was much softened, and of a bright yellow colour; at the lower part of the tumour recently extravasated blood existed, breaking up the brain. The right lateral ventricle was pushed onwards towards the left one by the tumour, and was quite empty; the right ventricle only contained a small amount of fluid.

Thorax.—Pleural adhesion existed on both sides; lungs healthy; root of aorta atheromatous; blood in heart fluid; its cavities dilated.

Abdomen.—Organs congested.†

* See 'Hospital Post-mortem Book,' 1846, p. 65.

† Ibid., 1846, p. 20.

Case 5.—*Pain in head—Partial loss of vision—Giddiness—Convulsive movement of, and afterwards loss of power in, the limbs, especially on the right side—Convulsions—Coma—Death—Encephaloïd Cancerous Tumour of the left optic thalamus.*

History.—The patient, George W—, aged 24, was admitted May 29, 1850; a stout, well-looking man, who had, however, been living poorly for some time. Five weeks before admission he was attacked with severe pain across the forehead and in the face; at the same time his sight began to fail, and these symptoms had increased much ever since.

Symptoms on admission.—Could not see across the road; expression of face vacant; eyes rather prominent; pupils regular in outline and dilated, but equal in size. Complained of pain over the temple, "tottering," and "giddiness." Pulse weak, irritable; bowels costive. Was purged, and cupped to 6 oz. over the temples. Afterwards he thought he could see a little better, and the cupping was repeated, and calomel and antimony were given thrice a day. Under this, slight salivation took place; the pupils became more dilated; he lost flesh. On the 21st his mind was slightly wandering, and his description of his feelings very obscure. The pupils became still more dilated; the pulse quickened (100 per min.); salivation recovered from. On the 24th constant convulsive twitchings of the limbs were experienced. The neck was blistered. Subsequently he became incoherent. The cupping was renewed, and also the calomel; but great difficulty in walking came on, and the sphincters became paralysed Later still he became unable also to feed himself, owing to partial loss of power in the arms, the *right* side of the body apparently retaining rather less power than the opposite one. Drowsiness succeeded, and decidedly more diminished power on the *right* side. He could still see slightly, but the pupils had become *contracted;* the pulse 140. He became convulsed and comatose, and died September 3rd.

Post-mortem examination.—Cranium.—Cerebral convolutions very flattened; lateral ventricles distended by clear fluid; left optic thalamus occupied by an oblong-shaped vascular encephaloïd tumour, of about the size of a small apple. This projected into the left lateral ventricle, and reached in a downward direction almost, but not quite, to the base of the brain. On the outer side it had pushed the tænia semicircularis and corpus striatum outwards and forwards; and on the inner side had displaced the fornix and septum of the ventricles, and compressed the right optic thalamus. Posteriorly it had separated the pillars of the crus cerebri of the left side. In other respects the brain presented nothing worthy of note.

Thorax.—The lungs were congested. Other organs appeared natural, and nothing of a carcinomatous nature was otherwise found in the body.*

Case 6.—*Numbness and tingling of the left arm—Pain in the head—Double vision—Numbness of right leg—Convulsive "fit"—Coma—Death—Carcinomatous tumour in the right cerebral hemisphere.*

History.—Felix S—, aged 42, was admitted June 7, 1855, eight or nine months previously having had numbness and tingling of the left arm, and subsequently pain at the front part of the head, most commonly awakening him at night. There had been no paralysis or declension of memory, but at times "indistinctness of vision," and sometimes "double vision."

Symptoms on admission.—Was very nervous and excited in manner; tongue foul; pulse quick; bowels confined.

Cupping on the neck, and calomel twice a day prescribed. The pain con-

* See 'Hospital Post-mortem Book,' 1850, p. 157.

tinued after the cupping was repeated. Three or four days later much giddiness, even to prevent his standing upright, was experienced, and a numbness of the *right* leg and arm. Double vision was constant. Blisters to the neck and ice to the scalp, and subsequently leeches, were prescribed. The pain in the head and also the double vision quite disappeared, and altogether he felt much better in all ways; but later on his symptoms returned. On the 6th of July he had a "fit," attended by much convulsive movement, and this left him comatose, with stertorous breathing. He died the same day.

Post-mortem examination.—Cranium.—Vessels of cerebral membranes very congested. The surface of the brain was very dry, and the convolutions flattened. The brain-tissue was firm. *The left lateral ventricle was decidedly larger than the right:* both contained much clear fluid. The right ventricle was pushed more to the median line by an oval, elongated tumour, of the size of a goose's egg, which occupied the centre part of the *right* cerebral hemisphere at the outer part of the corpus striatum and optic thalamus, but did not implicate them. On making a section of this tumour longitudinally at the outer part of the corpus striatum, its circumferential part was found to be of a reddish-gray colour. The tumour of a soft consistence, and about one third of an inch in thickness, having an undulated surface, and very vascular. The central part was softer, of a yellowish white hue, and appeared to have been of the same nature as the outer part, but "degenerated."

Microscopical examination.—The peripheral part was seen to be composed of small circular and oval-shaped nuclei, filled with granular contents (no nucleated cells were visible); also a few spindle-shaped nucleated fibres. The central part consisted of amorphous glandular matter, with a few nuclei only.*

CASE 7.—*Complete hemiplegia of the left side—Partial loss of power in the limbs on the right side—Ptosis of the right upper eyelid—Coma—Carcinomatous growth in the right cerebral hemisphere.*

History.—Mary W—, aged 61, was admitted April 13, 1862, having, four months previously, suddenly fallen down and broken her arm, owing, it was thought, to loss of power in the legs. It was stated that on this occasion she had not lost consciousness, nor had anything like a "fit." Two months later she again fell down, and then she lost all power in the limbs of the *left* side of the body, and was unable to retain either the urine or alvine evacuations.

Symptoms on admission.—The manner and speech were very slow. *Complete* loss of power of the *left* arm and leg, as also of sensibility of the skin on that side, existed. To a considerable degree also, there was loss of power in the limbs on the *right* side, and great drooping of the right upper eyelid, with congestion of the right eye. The pupils of both eyes were greatly, but equally dilated. She was purged and blistered, and three days afterwards she spoke much more clearly and steadily. On the 1st of May she became quite unconscious, and so continued until she died, May 3rd.

Post-mortem examination.—Cranium.—Cerebral convolutions very flattened on both sides. The left lateral ventricle contained a large amount of serous fluid; the right one was empty. In the posterior lobe of the *right* cerebral hemisphere was a spherical carcinomatous growth (of the size of a small orange), reducing almost the entire lobe to a cavity with softened walls of a thickness varying from 1 to 1½ inches in thickness. On section the growth proved to be coarse in texture, of a light fawn colour, and vascular in one part only.

* See 'Hospital Post-mortem Book,' 1855, No. 172.

Microscopical examination.—It was found to consist almost entirely of large nucleated cells.

The arteries at the base of the brain were very atheromatous.

Thorax and abdomen.—Organs, natural.*

CASE 8.—*Epileptic seizure—Partial hemiplegia on the left side—Intense head-ache—Death—Carcinomatous growth in the centre of the right cerebral hemisphere.*

History.—John E—, a gardener, aged 55, admitted August 10, 1859, had always been temperate, and enjoyed good health, until about April, when head-ache and twitchings of the right side of the face, and of the left leg and arm came on; on July 2, he became quite unconscious (biting his tongue in the fall) for an hour, but did not struggle. After the "fit" he found that muscular growth of the left arm and leg were diminished, and he had severe pain in the left side of the head. His manner was noticeable as being altered. He, nevertheless, went to work in two days. He was obliged shortly after to leave off his work; blistering the neck and behind the ears was resorted to. He had been also cupped; but all without relief.

Symptoms on admission.—Corpulent, with a drowsy and absent manner, but not incoherent. The face was slightly drawn to the *left* side, and the tongue protruded towards the same side. There was some loss of power, but little or none of sensation in the left side. Muscle of left arm and leg not contracted. Intense pain in the head, chiefly about the *right* temple. Urine free from albumen. Tongue white and coated. Small red line on the gums' edges. Cardiac sounds natural. Ordered salines with nit. potass., and colocynth and calomel aperients. Later on the patient, in addition to the head-ache, had a sensation as of the head being too heavy for him, and the pulse became quickened. On the 29th of August he was found insensible, having had a "fit," attended by foaming at the mouth. The pulse was irregular as well as quick. The conjunctivæ were very vascular, the pupils of the eyes fixed, and the right pupil larger than left. Dysphagia came on, and he sank and died the same day.

Post-mortem examination.—Cranium.—Ventricles full of serum, and their septum pushed to the left side by a tumour situated in the centre of the *right* cerebral hemisphere, and broken down. The growth extended in a downward direction, almost to the base of the brain, being only covered at that part by a thin layer of brain-tissue. The brain-structure immediately around was somewhat consolidated. The other parts of the brain were natural.

Microscopical examination.—The structure was almost entirely composed of small nuclei.

Thorax.—Slight pleural adhesions existed. Lungs and heart healthy.

Other organs of body also natural.†

CASE 9.—*Peculiar pain in the right knee and hip—Symptoms somewhat like "fever"—Convulsive seizure—Death—Carcinomatous tumour in the middle horn of the left lateral ventricle of the brain.*

History.—Henry W—, a carpenter, aged 24, admitted November 21, 1860, with pain in the right knee and hip, which he had had for six weeks, preventing his walking. For a week also he had had rigors. Nothing wrong was seen in connection with the joints affected. Suddenly, three days after admission, he fell into a condition resembling the insensibility of fever. He only partially understood what was said; his speech was "thick," and his mind wandered. The skin was hot and free from moisture, and the tongue coated and dry.

* See 'Hospital Post-mortem Book,' 1862, p. 121.

† Ibid., 1859, No. 202.

Pulse 152 per minute. The abdomen somewhat tender. A blister was applied to the neck, and calomel given twice a day, with aperients. The voice became very inarticulate. No pain complained of except in the hips. On the 28th he had some kind of a "fit," with slight convulsions, became quite comatose and died.

Post-mortem examination.—Cranium.—Lateral ventricles contained much fluid, and the septum lucidum was softened. In the middle horn of the *left* lateral ventricle (apparently connected with the hippocampus major), was a tumour of the size of a hazel nut.

Microscopical examination.—The growth was composed of numbers of capillary vessels, along with granulated small bodies, very like white corpuscles, of the blood, and vast numbers of smaller nuclear bodies.

Thorax.—Scrofulous deposits existed in the lungs.

Abdomen.—Similar deposits in the kidneys and prostate.

The hip-joint was examined and found healthy.*

Case 10.—*Giddiness and faintness—Pain in the head—Vomiting—Loss of speech—Convulsive attacks—Death—Carcinomatous growth in the floor of the left lateral ventricle.*

History.—John C—, aged 50, admitted September 2, 1863, was a shoemaker of temperate habits, but a great smoker, who for two months had been subject to giddiness and faintness. These symptoms would sometimes occur several times a day; but there had been nothing like spasm or convulsions. Latterly, he had been getting much weaker, and very "odd" in his manner, and for three weeks pain in the head had been severe, and for one week there had beeen vomiting.

Symptoms on admission.—Very little information could be elicited from the patient himself. He said he had great pain at the vertex of the head, which appeared to be hotter than it should be. His memory was so bad that he could not say how long he had been ill, and could not state his own age. The state of the skin was cool; the pulse 68, and oppressed. The heart's sounds were feebler. Both pupils acted naturally. Tongue furred and brown down the centre. Gait very feeble and uncertain. Ordered Inf. Rosæ, with sulphuric acid, chloric ether, wine, and beef-tea. Great relief was obtained from senna aperients, both to the pain and the vomiting, but the pulse became feebler. He relapsed, and a few days later he had lost all power of standing. Brandy and small doses of opium were given. The *right* pupil became larger than the left one. In spite of iodide of potassium and diuretics he became worse, ceasing to speak at all when addressed. Evacuations became passed involuntarily. Nutritive injections had to be given. On the 23rd he made a loud inhuman maniacal noise, and this occurred a second time, accompanied by spasmodic contraction of the arms and legs. He died half an hour afterwards.

Post-mortem examination.—Cranium.—Dura mater was more vascular than lateral; cerebral convolutions flattened. Lateral ventricles empty, but septum lucidum broken down. The floor (the outer parts mainly) of the left lateral ventricle was occupied by a reddish-coloured growth (one inch in thickness, between three and four inches in length, and two inches in width), by which the optic thalamus and corpus striatum were thrust to the right. It extended in an outward direction to within a quarter of an inch of the side of the brain; and in a downward direction, to very near its base; and lay chiefly in the middle lobe, but reached also into the anterior and posterior lobes. On section it proved to be vascular, and to have a coarse, but loose and spongy texture. In some places it was separated from the surrounding tissue by an abrupt demarcation, where separation easily took place; in others it

* See 'Hospital Post-mortem Book,' 1860, p. 312.

was gradually blended with the brain, so that its limit was with difficulty seen.

Microscopical examination.—The growth was composed of nucleated cells of almost every possible shape, including caudate and fibrillated, lying in a mesh-work of blood-vessels.

No other part of the body was examined.*

Observations.—On reviewing, in detail, the more important symptoms presented by these cases, a few of them appear sufficiently noticeable to demand an especial enumeration, and to furnish material for establishing comparison between the various cases.

First of all, it will be seen that *pain in the head* was a very frequent and prominent feature. Out of the ten cases, this symptom is positively declared to have occurred in six, viz., in Cases 1, 4, 5, 6, 8, and 10. In another case, viz. No. 3, it was most likely present, as the patient was very constantly applying the hand to the head; whilst in Case No. 2 it is impossible to say that it did *not* exist, inasmuch as the patient was "speechless," and unable to express his feelings. No mention of this symptom is made in Case No. 7, and only in Case No. 9 is it expressly asserted that pain in the head was absent.

In the above cases the pain in the head was not of a transient nature, but more or less fixed and constant.

Then, again, as respects the occurrence of *convulsive* or spasmodic action. Thus it is stated to have existed, at some period or other before death, in Cases No. 2, 5, 6, 8, 9, and 10; observing in Case No. 2 more of a continuous character, whilst in others it was more of an epileptiform and clonic nature.

As regards symptoms of a *paralytic* character (I only refer to paralysis of motion), it appears that hemiplegia, more or less complete, occurred in four cases, viz., in Nos. 3, 4, 6, and 8. In Cases 5 and 7 there was paralysis of *all the limbs*, though more noticeably so on the left side in one and on the right side in the other. In Case No. 1 no one-sided paralytic symptom was noted, though the disease was confined to one side of the brain, as in other cases. Case No. 2 is an instance of the occurrence of paraplegia; but as the spinal cord was not examined, the coëxistence of this affection with tumour of the brain (an occurrence alluded to in Dr. Bacon's paper as having been remarked by Esquirol and Durand-Fardel) is, of course, deprived of that great interest which would attach to it had the spinal cord been actually proved to have been free from disease. In one case only (No. 7) was any ptosis or paralysis of the eyelids noticed, and in this case the conjunctiva of one eye was much congested. This congestion of the conjunctivæ was also noticed in Cases No. 8 and 4. Case No. 9 affords an interesting example of acute pain being *referred to* parts *at a*

* See 'Hospital Post-mortem Book,' 1863, p. 229.

distance, which were in consequence thought to be diseased, but which proved after death to be in a natural state. It is perhaps singular that such referring of pain to peripheric regions should not have been a matter of complaint in more of these cases. From what we know of the symptomatology of diseases of the spinal cord, might not this have been anticipated?* Considering also how much the pulse is affected in certain cases of disease of the brain, is it not worthy of remark that Case No. 1 is the only one in which *slowness of the pulse* was specially adverted to? Then, again, "giddiness" is only mentioned in three cases, *i. e.* in Nos. 5, 6, and 10; and *forgetfulness* or *loss of memory* in only four, *i. e.* in Nos. 2, 3, 4, and 10: of these cases, in No. 2 the anterior lobe of the *left* cerebral hemisphere was the part diseased: in No. 3 the upper and central part of the *right* hemisphere: in No. 4 the central part of the *right* hemisphere: and in No. 10 the middle of the base of the *left* cerebral hemisphere. Vision was said to be interfered with in only two cases, viz. in Nos. 5 and 6; in one of these, viz. No. 5, one optic thalamus was the seat of disease, whilst the other was much interfered with by the growth; and in the other, No. 6, the middle of the *right* hemisphere was the affected part, the optic thalamus being nowise implicated. *Coma* or semi-coma was sooner or later common to Cases No. 1, 3, 4, 5, 6, and 7. *Dysphagia* was only noticed in two cases (Nos. 2 and 8), and difficulty or impossibility of *articulation* only specially noted in two cases (Nos. 2 and 7); in the first of these two cases it was the anterior lobe of the *left* side of the brain which was affected, and in the latter the posterior lobe of the *right* cerebral hemisphere. *Vomiting* was only remarked as existing in a single case, viz., No. 10. As respects the condition of the *pupils,* in three cases they were in both eyes "contracted," viz., in Cases 1, 2, and 3; in one (No. 7) they were dilated; in one (No. 5) they were dilated at first, and subsequently became contracted; whilst in two (viz., Nos. 8 and 10) the right pupil was reported as being larger than the left. Finally, as regards general symptoms, those in Case No. 9, which resembled very much the symptoms of continued "fever," were unusual, and somewhat inexplicable.

Respective of the portions of the brain affected by these growths, it will be seen that in one case (*i. e.* No. 10) the part forming the base of the left lateral ventricle was the seat of the disease; in No. 5 it was the left optic thalamus; and in No. 9 it was the so-called hippocampus major in the middle or descending horn of the left lateral ventricle. In the remaining seven cases the morbid growths were located in the more exposed parts of the organ; and of these,

* I allude here, of course, to the spasms, cramps, pains, and morbid sensations which so often exist in the muscles of the legs and arms, and sometimes the back, in disease of the structure of the cord.

in six cases the right cerebral hemisphere, and in one case the left, was affected. Thus, out of the whole number of cases, without discriminating further the exact part affected, it was in six cases that the *right*, and in five that the *left*, side of the brain was the seat of the morbid growth.

In five cases only was any *softening* of the brain around the growth specially commented upon, viz., in Cases 1, 2, 3, 4, and 7. (This is exclusive of softening of the fornix or septum lucidum.) In Case 9 the brain around was *consolidated*.

As regards the SEXES of those affected, it will be seen that the preponderance was in favour of the males—six of the cases being males, and only four females.

In conclusion, I would observe on the exemption from anything like *arachnitis* in connection with the various growths; in no case was any such complication attendant. *Neither was there during life anything of the nature of mental imbecility, or any symptom of the various phases or forms of insanity.*

APPENDIX.

The following are introduced as instances of the same class of cases as the above; but inasmuch as the symptoms during life have not in detail been placed on record, I have thought well, whilst recording them in connection with the other cases, to give them a place by themselves, as not affording data, excepting as to post-mortem appearances, for comparison with the rest.

CASE 11.—*Hemiplegia on the right side—Carcinomatous tumour passing on the right side of the medulla oblongata—Effects of old extravasation of blood in the left optic thalamus and corpus striatum.*

History.—Hannah R—, aged 56, admitted into the hospital March 22, 1841, owing to an extensive burn, of which she died April 7. It was reported that nine years previously she had lost the use of the *right* side of the body, the mouth being drawn to the left side.

Post-mortem examination.—Abdomen.—Viscera healthy.

Thorax.—Viscera healthy, excepting that there was a small aneurysm, nearly filled with fibrine, of the arch of the aorta.

Cranium.—The optic thalamus and corpus striatum on the *left* side were, on section, of a brownish-red colour, having the appearance as if blood had been effused into those structures at some time, and subsequently absorbed. Moreover, pressing upon the upper part of the medulla oblongata on the *right* side was a round tumour (of the size of a hazel-nut), which, from its position, evidently pressed also upon the portio dura on the right side. On section, this tumour proved to be of an encephaloïd carcinomatous nature. The other parts of the brain were healthy.*

* See 'Hospital Post-mortem Book,' 1841, p. 66.

Case 12.—*Paralysis of the optic nerves—Carcinomatous tumour in the posterior lobe of the left cerebral hemisphere—Pressure on the optic tracts by a very peculiar protrusion of brain-substance.*

History.—David R—, aged 27, admitted September 7, 1843. There are no details of this case beyond the fact mentioned that the only paralytic symptom during life was paralysis "of the optic nerves."

Post-mortem examination.—Abdomen.—Liver congested in patches. Other organs natural.

Thorax.—Lungs congested; otherwise organs natural.

Cranium.—Dura mater adherent to the left side of brain at two points, one anteriorly to a slight degree only, the other to a greater degree over the posterior lobe of the brain. Cerebral convolutions generally flattened. The lateral ventricles were very distended with fluid, so much so that the fluid appeared to have pushed or bulged out the "anterior horn" on both sides, and so to have caused a protrusion of cerebral matter at the base of the brain immediately on the outer side of the "optic tracts," giving the appearance of a small tumour of cerebral matter compressing the optic tract. The posterior lobe of the *left* cerebral hemisphere was very much firmer and larger than natural, having pushed the corresponding lobe of the cerebellum forward, and displaced the parts of the left lateral ventricle towards the right side. On cutting into this part of the brain an oval tumour (of the size of a large hen's egg) was seen occupying its centre. The tumour was hard and firm, and contained a number of cysts. The cerebellum was healthy.*

Case 13.—*Phthisis—Carcinomatous tumour connected with the cerebral membranes imbedded in the anterior cerebral lobes—Softening of the right corpus striatum—Scrofulous tumour in the centre of the pons Varolii.*

History.—Henry H—, aged 37, admitted September 7, 1842, with phthisis. He died December 1, extensive bed-sores having formed.†

Post-mortem examination.—Thorax.—Scrofulous deposits and vomicæ in both lungs found; also pleural and partial pericardial adhesions.

Abdomen.—Liver granular; kidneys congested; calcareous deposits in the mesenteric glands.

Cranium.—Veins of brain very full of blood; the brain itself was highly congested. The anterior part of the *right* corpus striatum was of a grumous consistency, quite diffluent; the left corpus striatum was natural. At the under surface of the anterior lobes, and partly imbedded in their substance, was a tumour (of the size of a walnut) situated immediately behind the crista galli; the parietal arachnoïd covering the part being unaffected. When divided, the tumour was quite firm and *vascular*, and in some parts of it blood had been extravasated. It was surrounded by a vascular cyst, partially adherent to the pia mater and visceral arachnoid, and its connections with the brain were readily destroyed. In the centre of the pons Varolii was another tumour, of the size of a large hazel-nut, which, when cut into, resembled the common scrofulous tubercle. This was surrounded by a vascular membrane, but no vessels could be traced into its substance. Other parts of brain natural.‡

P.S.—In this case we must look upon one of the intra-cranial tumours (that in the pons Varolii) as of a strumous nature; the other (the vascular one) claiming to be considered as, most likely at least, carcinomatous.

* See 'Hospital Post-mortem Book,' 1843, p. 49.

† Unfortunately there is no description of the details of this case in our records, so that it cannot be said whether paralytic or other symptoms existed.

‡ See 'Hospital Post-mortem Book,' 1843, p. 83.

CASE 14.—*Encephaloïd carcinomatous deposit in the middle of the right cerebral hemisphere.*

Martha P—, aged 57, admitted November 15, 1843. Unfortunately no details of the case are on record. She died December 10.

Post-mortem examination.—Cranium.—Membranes so adherent to the brain that they were with difficulty separated; cerebral convolutions much flattened. In the middle and posterior parts of the white substance of the *right* cerebral hemisphere was an extensive deposit of encephaloïd carcinomatous material, of the size of a small orange, sufficiently well defined in some parts, but in others gradually assuming the appearance of the surrounding cerebral substance. Section of the tumour showed a light yellow substance, covered by a glairy, transparent fluid, discoloured in various situations by extravasations of blood, which varied in size from that of an ordinary "shot" to that of a bean. The right lateral ventricle was distended by limpid fluid.

Thorax and Abdomen.—Organs congested; otherwise natural.

CASE 15.—*Encephaloïd carcinoma of the right lobe of the cerebellum.*

History.—The patient, Captain W—, had served, a year and a half before death, in the Burmese war, in good health. It was stated that his mother and a sister had died with "tumours" in the brain, but nothing further of his history is known.

Post-mortem examination.—Cranium.—The right lobe of the cerebellum contained a mass of carcinomatous substance (encephaloïd variety), projecting into a cyst in its interior. When recent, the tumour was of a very dark colour, and one portion of it was visible on the exterior of the cerebellum. The cyst, which contained about two ounces of yellowish transparent fluid, projected also, so as to be partly seen through the cerebellar membranes, and was divided into two cavities by a thin layer of the cerebellar hemisphere. The cortical part of the cerebrum was more than usually vascular, and the ventricles were distended, and contained about half a pint of clear fluid. No other portion of the body presented a similar deposit.*

Microscopical examination.—The tumour, when examined many years after its preparation, was found to consist of much granular matter, the *débris*, as it were, of cell structure, and of a great amount of cell growth. The cells were, mostly, of an indistinct character, containing granular matter, rendered clear by the addition of acetic acid, but not exhibiting nuclei. A few round cells, containing yellow granular matter, and of a very large size, were also seen.

* See 'Hospital Pathological Catalogue,' series viii, No. 43.

PART II.—REVIEWS.

Stimulants and Narcotics: their Mutual Relations. With Special Researches on the Action of Alcohol, Æther, and Chloroform, on the Vital Organism. By Francis E. Anstie, M.D., M.R.C.P., Assistant-Physician to the Westminster Hospital, &c.—Macmillan and Co., London and Cambridge. 1864, pp. 489.

It is not often that the practitioner in medicine, whose mind has not suffered an arrest of development at its student stage, can look back with any other feeling than one of unmitigated wonder at the sort of instruction which was ruthlessly lectured at him. But in that vast and horrible waste, the memory whereof is almost as oppressive as a dream of being at school again, one subject must stand pre-eminent for its dreary desolation: the thought of it produces a choking feeling in ripe manhood, and one shivers at the retrospect, as the fugitive slave shivers when he vividly recalls his hairbreadth escape from a capture worse than death. How any "mortal mixture of earth's mould," having a hippocampus minor and cerebral lobes that presumably covered his cerebellum, could stand with serene front before a number of young men presumably not idiots, and utter such vain and meaningless stuff as a lecturer on Materia Medica would sometimes utter about Stimulants, Anti-spasmodics, Narcotics, Diuretics, and all the other *ics*—not less perplexing and worthless than the *isms*,—how any one could do that, and not sink with shame into his own shoes, might seem quite inexplicable were it not sufficiently plain that a great many men are quite content with big-sounding words, never examine whether they have any meaning or not, and certainly do not feel it necessary to have exact ideas. There has been one truly great "professor," to whom we are introduced in *Faust;* and he, not being his own dupe, has exposed the system of the craft. The advice of Mephistopheles to the student who consults him is instructive:

> "Im ganzen—haltet euch an Worte
> Dann geht ihr durch die sichre Pforte
> Zum Tempel der Gewissheit ein.
>
> *Schüler.*—Doch ein Begriff muss bei dem Worte seyn.

Meph.—Schon gut! Nur muss man sich nicht allzuängstlich quälen;
Denn eben wo Begriffe fehlen,
Da stellt ein Wort zur rechten Zeit sich ein, &c."*

How is it that schoolmasters and lecturers scarce ever seem to reflect that their pupils will grow up and critically think upon what they were taught? Or if they do, how can they coolly stand there with such a semblance of sapience, and talk such pompous puerilities? The practice of instructing others, of talking ex-cathedrâ without fear of contradiction, is always dangerous, and sometimes ruinous to the man; it engenders a cramped and self-sufficient habit of thought, which is apt ultimately to become part of the nature, not otherwise than as is engendered in judges a habit of making bad jokes because their listeners are always prepared to laugh. The vacant gravity of some of these secondary automatic dogmatists, as they may be called, provokes the idea of a seriously-minded owl, and their stilted dignity is unavoidably suggestive—to use a simile of Rabelais—of the strut of an old crow in a gutter. A great service at any rate, which could be rendered to medicine, might possibly be the abolition of the many medical schools which now exist in London, by uniting them into one good school supplied with a few competent lecturers, whose business it should be not merely to talk, but to think of their subjects.

If that excellent reform were carried out, the author of this book on 'Narcotics and Stimulants' might justly claim a post; for he has certainly done something to remove the reproach which attaches to writers and lecturers on Therapeutics. Dr. Anstie has set himself to work to clear away the confusion which rests upon the operation of the so-called Narcotics and Stimulants, to distinguish the degrees and kind of their effects, and thus to give exactness of meaning to the words. In this laudable enterprise he has sent the souls of many rats and rabbits to Hades: luckily a few terriers and cats have been sent that way also, so that old Charon will not be overrun with vermin, but may, when the season for ferrying shades over his dirty river is slack, have a little sporting relaxation. For if, as Homer tells us, Orion occupies, not his time, but his eternity, in chasing the souls of stags over the plains of Hell, why should not Charon, much-enduring, hard-worked immortal as he must be, have now and then the recreation of a rat-hunt? The departure, however, of the immortal part of the animal, "which is altogether mysterious,"

* "To sum up all—To words stick fast,
Then the safe gate you'll surely pass,
To reach the fane of certainty at last.

Student.—But in the words there must some meaning be.

Mephistopheles.—Good! only one need not fret oneself too anxiously,
For exactly where ideas fail
A word comes opportunely in, &c.

and before which "human observation and reason are impotent," was in no case an inconvenience to Dr. Anstie; nay, it must have been rather an advantage to him to get rid of what might have been such an important disturbing agent in his investigations, and which was nowise amenable to human science. In view of the many perilous experiments which he appears to have made on himself, Dr. Anstie is further to be congratulated that he did not wake up from one of them in the "undiscovered country," or that he is not now "imprisoned in the viewless wind," and "blown about the desert dust," or "sealed within the iron hill." The result, however, of his numerous experiments and much-needed investigations is a valuable contribution to knowledge, which ought to be the commencement of a different sort of teaching from that hitherto in fashion. But will those who need its instruction most, read the book? That is very doubtful; for the pity of it is that men who have begun to teach do not think it necessary any longer to learn at all, or only learn what squares with some preconceived theory. Thus it ever happens that truth revealed in one generation has no chance of due acceptance until a new generation has risen up to call it blessed. Carl Vogt, in his recently published *Vorlesungen über den Menschen*, tells a story which aptly illustrates the obstructiveness of age. His early teacher, Wilbrand of Giessen, was in the habit, it appears, of protesting, till the day of his death, against the doctrine of the circulation of the blood. In his examination of candidates for their degrees, he used accordingly to put this question—"Which is superior, Mr. Candidate, the mental or the bodily eye?" Woe to him who replied, "The bodily eye!"—he was forthwith plucked. Prudent men, therefore, would answer, "The spiritual eye, sir." Whereupon he spake thus: "Good: so must mental vision surpass bodily; and if you say you have seen the circulation of the blood under the microscope with your bodily eye, I reply that I have seen the impossibility of circulation with my mental eye; so then I am right, and you are wrong." Whether Dr. Anstie's book, however, is sufficiently read or not, it must remain honorable to him and to medical science; it has the rather uncommon merit of being written, not for the purpose of an advertisement in the *Times*, but because its author had really something to say as the result of his own investigations.

The book begins with a learned chapter containing a historical account of the doctrine of stimulus from the earliest medical times, in which is exhibited the injurious influence of metaphysical conceptions in producing erroneous interpretations of disease. In fact, the course of events here has been what it has been in all sciences, and, more or less plainly, in the different branches of a science; the theological spirit first gave way to the metaphysical spirit, and the metaphysical spirit is scarce yet extinct. Since Comte's time we

have been prepared to expect that development in the history of any branch of knowledge; and it is instructive to observe that Dr. Anstie himself affords an unwitting illustration of it. "The assumption," he says, "that particular mental states can be induced or removed by the production of what we choose to consider analogous corporeal processes, is unfounded and mischievous." If we realised "the true character of mind—changeless, eternal, unconfined in space or time," we should not see in medical works such improper language as "stimulating the mental powers," and "reducing mental excitement," the constant use of which "must doubtless be injurious to the physician's judgment." Though we may envy Dr. Anstie that supernatural insight which enables him to make any proposition with regard to that which is changeless, eternal, unconfined in space or time, we must still own a difficulty in understanding how with such views man can be made an object of positive science at all. If the mind cannot be investigated by human science, while it is impossible to eliminate its ever-present influence in human action, then the medical psychologist may at once bury his wand, like Prospero, and retire from business. For the future he may amuse himself, as Dr. Anstie does, by pronouncing changeless something which exists in ever-changing nature, by discovering that which has individual existence in a world that is itself but an atom in the universe, to be unconfined in space or time, or by reducing to propositions any other such imbecilities of the understanding.

Possessed with this imperfect conception of the scope of positive science, Dr. Anstie has, it seems to us, more than once failed in his historical chapter to appreciate the fundamental relations of the doctrines which he criticises. The necessities of space must limit us to one example. He thinks it permissible to lament the peculiar bias of Hunter's mind, or his want of early education, because, amongst other unsatisfactory things, Hunter "even goes so far as to endow the body, quite independently of the action of the mind, with a sort of *memory*." We are of those who think that therein Hunter was quite right, and proved himself in advance of the majority of physiologists even of the present day. The spinal cord notably has its memory whereby is built up from the residua of impressions its secondary automatic faculty; the sensory nervous centres have their memory whereby that complex formation which a cultivated sensation is, takes place; the supreme nervous cells of the hemispherical ganglia have their memory whereby the organization of ideas and of their association is effected; and even the humblest organic element has its memory so that the scar on the child's finger is not effaced, but grows as the body grows. What is necessary in studying Hunter is, not to be led away by the terms which he may use in order to make himself understood—such, for example, as "living principle," "sensitive principle," but to consider attentively what were the

realities which he wished to denote by them. If that be done, it will certainly be found that Hunter always had a definite meaning; and it will most likely be found also that his ideas are positively in advance of existing knowledge. Nature is not so prolific of men of genius that she can afford, when she does produce one, to make him the organ of meaningless ideas: the ideas of a man of genius *must* have the profoundest meaning, only it will be necessary for the common sort of mortals to get a century distant from him before they can appreciate them, just as it is necessary to get some distance away from a mountain before we can tell how high it is. So far from Hunter's notion of the *memory* of the body being unsatisfactory, it is exactly on the fundamental fact which he thus expressed, that the progressive adaptation of the organism to the specialities of external nature, whereby individual development and development through the ages take place, does actually rest.

It is very remarkable how strangely the world, untaught and seemingly unteachable by experience, behaves with regard to its great men. The generation in which they live most likely values them only for that in which they are not great, for that deficiency whereby alone a genius is in connection with his age; a succeeding generation criticises them, lamenting this or lamenting that—sparrows criticising the eagle's flight, Voltaires or Addisons pronouncing judgments on Shakspeare, whom they can comprehend just as well as a washing-tub can comprehend the ocean; another age, having developed nearer to the level of the genius, finds out that after all he was a great man, and henceforth it is a lucky thing if he is not made a saint and worshipped. An interesting chapter in Victor Hugo's recent book on Shakspeare—which is about everything almost but Shakspeare—contains certain curious criticisms which have been passed upon him at different times. He has been called a "plagiarist," "a crow dressed in borrowed feathers," "extravagant," "absurd," "gross and barbarous," "unintelligible," "vulgar," "ignorant;" and it has been said of him that "he invented nothing," that he had "neither tragical nor comical talent," that "he pandered to the mob," and that "*Hamlet*" was "the work of a drunken savage which would not be endured by the vilest populace of France or Italy."* An author still living thus starts,—"The authors of the second order and the inferior poets, such as Shakspeare," &c. Shall we then be angry with such critics? By no means; their criticism shows the measure of their littleness and may even be deemed creditable to them as proving that they have at least tried to read him, which it is certain that nine out of ten of those who profess loud admiration for him have not. There

* That was M. Voltaire. Whereupon Victor Hugo aptly says:—"Sauvage ivre, soit. Il est sauvage comme la forêt vierge; il est ivre comme la haute mer."

is some reason to think that such is the case also as regards Hunter: it is the fashion certainly to praise him, but is the fashion also to study him? Though Hunterian orations have been given one knows not for how many years, and though the name of the man is as familiar in medical mouths as a household word, it has long been a conviction with us that medical science has no just conception of Hunter's work, position, and import. As for the criticisms upon him, they may pass as the idle wind; it will require a Hunter justly to criticise Hunter, as it will require a Shakspeare justly to criticise Shakspeare; but the usual laudatory appreciation of him is so general in its character, so unreal, so superficial, so wanting in comprehensiveness of view and in depth of insight, that one unavoidably suspects it to be a mere fashionable mode of speech. Be that as it may, however, it is certain that the only philosophical estimate of John Hunter has come, not from a man of science, but from the learned author of the 'History of Civilization.' Like the "base Judæan who threw away a pearl richer than all his tribe," those who work at physiological investigations are neglecting a most valuable treasure of ideas. Science, as it advances, really comes back to Hunter. Paget's 'Pathology,' or at any rate, the first volume of it, is potential, where it is not actual, in his works; the recently broached doctrines with regard to the coagulation of the blood rather extend and develope Hunter's views than contradict them; and there is not the slightest doubt in our mind that there is a great deal more wisdom potential in his writings than science has yet definitely attained to; there are pregnant sentences in them on which instructive essays might be written.

Notwithstanding, then, the great learning in Dr. Anstie's historical chapter, a deeper and truer grasp of the import of the different doctrines criticised by him might perhaps have given to the history a unity—the organic consistency of a process of development through the ages which it scarcely now possesses. In the introduction to Henle's 'Handbuch der Rationellen Pathologie' is an admirable account of the development of medical doctrines, which might well serve as a philosophical pattern. One great advantage, however, of Dr. Anstie's summary is, that it brings together all the recent important researches into questions of vitality, and exhibits in a clear and concise way the bearing of them on the direction of future thought.

The second chapter is devoted to criticism of the doctrine of stimulus at present in vogue; the phenomena of stimulation being considered, first, as regards mind; second, sensation (is sensation not mental?); third, muscular motion; fourth, secretion; fifth, circulation; sixth, nutrition. The aim of the criticism is to point out that excessive organic action of any kind, such as is commonly described as an effect of stimulation, does not indicate vital increase, but vital degeneration; the effect of a *true stimulus* being to reduce such excess

of action. Pain, spasm, delirium, &c., are consequences of the *narcotic* operation of the drug.

The early phenomena of alcoholic intoxication are commonly deemed to mark excitement; but, on analysing the symptoms, Dr. Anstie says it will be found that the emotions and appetites—between which "and the reason and will, a natural opposition exists"—are in action; while the intellect, on the contrary, is directly enfeebled. The violent outbreak of the passions is due, "not to any stimulation of them, but to the removal of the check ordinarily imposed by reason and will." The action of opium, or of hashish, he explains in a similar way, by supposing that the apparent exaltation of certain faculties is due to a depression of some other parts of the brain. The phrase "mental stimulation" should not, then, be indiscriminately applied to denote the effect of these substances.

Pain, again, is not, as "usually assumed," an indication of exalted function of the sensory nerves, but a consequence of depression of vitality. It may be that pathologists have made such an assumption, for it would be rash to set bounds to their extravagance; but it is quite certain that Spinoza long ago enunciated more correct views with regard to its import, and that such are to be familiarly met with in German text-books. Pain is the outcry of suffering nervous element. Dr. Anstie quotes Sir W. Hamilton upon this matter; and certainly there can be no objection to such a quotation, if the value of it be not over estimated. It happens that in this matter, as in many others, Sir W. Hamilton has appropriated the definite positive truths of others, and has put them in language which makes them only half true. That was his habit, and it was very serviceable to the world; for although he might often put back—*quoad* their advanced position—the truths which he appreciated, yet by making them metaphysical, he helped on metaphysics as a science in a gentle way towards suicide, and its votaries accordingly towards truth. The revelation of a new and important truth demands a mediator between it and the people—one whom they will approach and listen to; and Sir W. Hamilton was the mediator between positive mental science in the van and pure metaphysics in the rear. One may generally take it for granted that anything valuable which he says with such grace has been said elsewhere in a completer form.

Excessive or irregular muscular contraction is not due to the influence of stimuli exalting the nerve-force; one of the most ordinary effects of stimuli is to check convulsive muscular movements. Chloroform, for example, in those small doses in which it can only be rightly called stimulant, arrests the convulsions of epilepsy, Dr. Anstie finds, and even for a time, those of strychnia; and nothing is so effectual as alcohol, in small doses, in arresting the convulsions of teething. There can be no doubt that this view of the import of

spasmodic movement is quite right. Convulsions do not indicate strength, and if medical men were not quite so prone to confine themselves to professional literature, they must have been driven before this to adopt more correct views upon these morbid manifestations. Is it not Carlyle who somewhere says—though the sentence sounds marvellously like one of Goethe's—"A man in convulsions is not strong, though six men cannot hold him."

With regard to increased secretion, increased rapidity of the heart's action, and increased nutritive action, like considerations apply. The increase of secretion, produced by some medicines, is usually a passive flow of fluid containing *some* of the normal elements of the secretion, the result being due to the paralysing influence of the drug upon the nervous apparatus of secretion. Debilitating influences are notably those which increase the rapidity of the pulse; and a too great frequency of the heart's action *always implies debility*, more especially when coupled with diminution in force, or irregularity in rhythm. The question as to the import of an excessive nutrition must be postponed to the establishment of some definite conception of the nature of "life."

In the third chapter, which is devoted to a reconstruction on a sounder basis of the doctrine of stimulus, Dr. Anstie begins accordingly with some preliminary considerations with regard to 'life.' Arguing against the existence of a special vital principle, he very valiantly slays the thrice-slain—with as little compunction as Falstaff sends another stab into the fallen Hotspur. With admiring acquiescence, and the expression of wonder at the foresight of this great man, he adopts Coleridge's definition of life as the 'Principle of Individuation.' Though we would yield to no one in admiration of Coleridge's talents, it is only right to say that his doctrine on this point was one of the most deliberate plagiarisms which, among some very bold ones, even he ever committed: the whole theory is notoriously Schelling's. In this remark a weak point of Dr. Anstie's book is indicated; there is not apparent in it a just appreciation of German thought, which is, and has long been on this matter of life as upon other matters, far in advance of English superficialness. Avoiding, then, any discussion or detailed criticism of any one's views of "life," and the more so as the subject has already been treated at length elsewhere,* it will be best to give Dr. Anstie's views of the genuine effects of a stimulus.

The use of the word stimulus to express *excessive* action of any kind is improper; and when a stimulus "does improve vital power, it does so by restoring, in a natural manner, the natural condition of things." It is not true that any depressive reaction, or recoil, occurs after true stimulation any more than after taking food; when depressive reaction follows, it is due to the stimulus having been given in too

* In an article on "The Theory of Vitality," 'Brit. For. Rev.,' Oct., 1863.

large doses so as to produce a *narcotic* effect. The *genuine* effects of stimuli are the relief of pain, the removal of spasm, the reduction of undue frequency of the circulation, the reduction of excessive secretion, the removal of delirium or maniacal excitement, and the local increase of nutrition where it is deficient. At the head of the list of stimuli then must be placed food. Neuralgia is often best relieved by food; and Dr. Anstie has produced rapid relief in the severe agony of peritonitis, by the gradual injection of a pint of rich soup into the rectum. "Food is *the* stimulus *par excellence* for the brain which frequent narcotism has reduced to the state in which delirium occurs, as I need hardly say it is in the treatment of acute mania and for the wild violence of patients who are suffering from general paralysis of the insane. In all these cases the action of food may be supplemented, or partially replaced, by stimulant doses of alcohol, ammonia, &c., but *true narcotics are injurious.*"

Next in importance to food as a stimulus he puts opium in *small doses;* believing that it averts a threatened destruction of tissue, and consequently relieves pain. The action of five grains of carbonate of ammonia he finds to be, as nearly as possible, identical in general result with a grain dose of opium. Alcohol, taken in moderate quantity, is unquestionably *food:* "persons have supported themselves almost solely on alcohol and inconsiderable quantities of water for years." The effect of moderate doses of coca (the Peruvian narcotic stimulant) is an influence upon nutrition almost undistinguishable from that of ordinary food; it undoubtedly enables men to do severe labour upon an extremely small allowance of common food. Cod-liver-oil, quinine, steel, and bromide of potassium, are the most effective remedies for the convulsions of epilepsy, because they tend to restore nutrition to a healthy state.

As the result of an elaborate disquisition, which our brief abstract by no means does justice to, the author makes the following recommendations:

1. "That the use of the word 'stimulant' be restricted to agents which *by their direct action* tend to *rectify some deficient or too redundant natural action or tendency.*"

2. "That agents which produce excessive and morbid action of any kind in the organism, be refused the name of stimulants, even though smaller doses of them may act in a truly stimulant manner."

3. "That the word 'over-stimulation' be entirely rejected from use, as unphilosophical and a contradiction in terms."

Although most people will be ready to agree with Dr. Anstie as to the physiological signification of what is commonly called "stimulation" or "over-stimulation," yet a difficulty will arise as to the propriety of classing the effects of such agents as opium, carbonate of ammonia and strychnia, when given in small doses, with those of ordinary food and cod-liver oil. It may be admitted that

physiological chemistry is not yet in a position to give us reliable grounds for a better classification; but the progress of knowledge always is towards an increased specialisation, and it may be doubted whether it is not rather a regress to embrace under the same term, without further differentiation, the effects of a small dose of strychnia and a mutton-chop. If a dose of opium or of coca prevents destruction of tissue, as Dr. Anstie supposes, and enables a man to do without food for a time, there is in that very fact a reason for distinguishing its action from that of food.

The fourth chapter is occupied with the consideration of narcosis. In the present state of knowledge no better definition of narcotics can be given than that of "*deadening agents, which diminish the activity of the nervous system.*" The notion that to produce sleep is a part of the business of narcotics must be dismissed. The *coma* which is a result of narcotism is not sleep. Here it is that the definition of "life" as a process of individuation becomes useful: the nervous system, in its internuncial capacity, maintains the connection between the different parts of the organism, so that unity of action results from a diversity of agents; and to this purpose the nervous system is well adapted by its homogeneity of structure, whereby the slightest change at one of its terminal branches, or at any part of its track, is immediately continued to any distance. Narcosis, then, is "no less than the severance of the copula of life—a severance partial or complete, according as it cuts through some mere solitary border-path, or the busy cross-roads of the ways of life; that is, according as it touches some outlying nerve only, or poisons the great centres through which they all communicate"—in fact, as it paralyses more or less completely the nervous system. The symptoms which precede death by opium-poisoning afford a good example of narcosis, if it be borne in mind that the effect of opium on the lower animals, on infants, and even on some adults, is to produce convulsions. Whatever unwillingness there may be to describe tetanic convulsions as "narcotic" effects, it is certain that they are part of the same morbid influence, acting in the same direction as that which has produced the coma or paralysis. "The whole process is one of extinction of life of the various parts of the nervous system successively, and is fundamentally different from that operation of small doses of opium in relieving nervous depression which was noticed in the chapters on stimulus."

It will be seen that Dr. Anstie thus places convulsion, spasm, and paralysis, substantially upon an equal footing, as results of the destruction by some devitalising agent of the communications of some part of the nervous system. "*Rigor mortis* represents the complete destruction of all the bonds of individuation, or 'life;' it is the state in which the purely physical qualities of muscle come into play, while as yet putrefaction has not altered the relations of

its molecules." Accordingly strychnia is a true narcotic; the tetanic spasms which it produces may be constantly produced in the frog by the aqueous extract of opium. Call to mind what was previously said as to the physiological signification of convulsions, mental excitement, pain, disturbances of secretion and circulation, and it will be evident that the effect of a narcotic is to produce the degeneration which they imply; when a so-called stimulant is producing excessive or morbid action of any kind in the organism it is acting as a narcotic, and the so-called "over-stimulation" is the beginning of death. It is almost a pity that Dr. Anstie did not appropriate a new name for this effect, instead of applying to it the word narcosis; for when a word has got a special limited signification, as it has, the thoughts of a great many people are fettered by the word, and it is impossible for them to extend its meaning. Besides, the term might not improperly have been left to denote, as it does in common acceptation, a tolerably well-defined group of symptoms produced by certain narcotics: we are unable to explain why different narcotics cause such different effects on mind, motion, secretion, and so on, but it is plain that they do so; and, therefore, whatever be the generic term, there will be needed special terms to denote these different effects or degrees of the degeneration of life.

With the broad results of Dr. Anstie's investigations and reflections we heartily concur; they will give an impulse to those better views of "life" which are now fast gaining ground everywhere. It is to be hoped that they will do something towards abolishing that murderous system of depletion in disease, which has unquestionably helped many mortals to their everlasting rest. Mankind seem to struggle out of one delusion only to tumble into another; they have ceased to believe in alchemy, but they still believe too much in the apothecary's drench. To one who observes with reflective mind the course of nature in its department of human evolution, it must be interesting, however, to note what excellent use is made of one error or delusion for upsetting another. Homœopathy is certainly absurd enough as a system, but it has the merit of having done not a little towards abolishing a meddlesome and mischievous medical treatment; and now men of science like Dr. Anstie are, by their valuable investigations, unfolding to us the principles of the better practice, and thereby laying the sure foundations of progress. The latter half of the book under review is occupied with special researches into æther—narcosis, chloroform-narcosis, and alcohol-narcosis, of which it must suffice here to say, that whosoever wishes to have the best account of the operation of these substances, must study the numerous experiments recorded, and the conclusions drawn from them. Perhaps it is not unnecessary to add, as the book is a medical one, that the method is logical, and the style that of a cultivated writer.

Of the printing of the book, and the way in which it is brought out, it is impossible to speak too highly; but it may appear superfluous to say that, when it has been said that the publishers are Macmillan and Co.

H. M.

Des asiles d'Aliénés en Espagne. Recherches Historiques et Médicales. Par le Dr. Desmaisons. Paris, J. B. Baillière, 1859, pp. 176.

Spain, so far as its medical institutions are concerned, is to most Englishmen a *terra incognita*; for since the long bygone time of its Moorish occupation, and the palmy days of the University of Salamanca in the 16th Century, those institutions have exhibited little vitality, and have contributed next to nothing to the advancement of medical knowledge. It is, however, gratifying to learn that at the present day there is some shaking among the dry bones of extinct medical science, and that with the revival of political influence Spain, it is hoped, may be resuscitated in its intellectual life.

The book before us shows the social activity of Spain of old, and the recognition of the wants of the insane from the period when the Moors were masters of most of the country; and it further shows how the humane views of a Mohammedan race, and the developments of a fervent charity among some Christian men, in those middle ages, in favour of lunatics, have succumbed to the narrow bigotry, and the overweening love of power, of the ecclesiastics of the Spanish church of a later period. The author of this treatise, Dr. Desmaisons, is the medical director of the Asylum of Castel-d'Andorte, near Bordeaux, and he tells us that the cause of his visit to the Spanish asylums was the appearance of an advertisement, issued by the Government of Spain, inviting architects of all countries to a *concours* for the construction of an asylum for the province of Madrid. The competitors were furnished with a programme minutely setting forth all the particulars to be attended to in the plan of the projected asylum, from which it might be seen that the Spanish authorities had studied the construction of asylums in other parts of Europe, and were really desirous to have the one at Madrid as perfect as possible.

Having displayed this elaborate programme, Dr. Desmaisons proceeds to inquire what information is in existence relative to the asylums and the state of the insane in the Peninsula. He quotes a Spanish physician, the late Dr. Villargoitia, as stating, in 1850,

that the condition of the insane was then daily growing worse in his native land; but, from the action since taken by the Government in promoting a suitable asylum for Madrid, and from the results of an investigation into the defective state of the Asylum of Leganés, in 1854, he augurs well for the future well-being of the insane. So far as concerns the scattered notices of Spanish asylums by French writers on insanity, these are full of egregious errors. Pinel, writing from information from others, spoke highly in praise of the Asylum of Saragossa, in the reputed character and humane management of which he found a working example of the system of treating the insane he so powerfully advocated. This reference by Pinel to the Saragossa Asylum has constituted the stock-piece of information about Spanish institutions retailed by subsequent writers on insanity, without any personal knowledge or inquiry whether the representations were correct, and still applied to that establishment. Had such search been made, the glories of the Saragossa, at least as an existing asylum, would have melted away in cloud-land, along with many other beauteous myths. Dr. Desmaisons has sought everywhere for more detailed information respecting the condition and management of that famous asylum than the brief paragraph in Pinel's work affords, but finds none. He, indeed, discovers in Bourgoing's 'Tableau d'Espagne Moderne,' 1797, a flattering reference to the cleanliness and order prevailing in the institution, and, by implication, to the employment of its inmates, but that is all. Nevertheless, he does not question the accuracy of Pinel's information, though the fact is, that this vaunted asylum was utterly destroyed by fire, during the siege of the city by the French, in August, 1808, and all its records lost. This sad event took place, therefore, a year before Pinel published the second edition of his great work, and ten years prior to the devout wish of Fodéré, that the asylum might survive in prosperity for many future years!

Not but that there is still a Saragossa Asylum to inherit the invocations upon its predecessor, although it cannot be said to deserve any of a gratifying character. Indeed, M. Desmaisons' account of it prompts the desire that it may soon follow the old one, as a thing of the past, but, unlike it, that its memory may perish with it. "The numerous imperfections of this establishment," writes the author, "depend, on the one hand, on the limited resources of a province impoverished by war; and, on the other, upon the ignorance of even the elementary principles of asylum construction. The unfitness of the structure has formed the subject of an able report, in 1843, by one of its late directors, Dr. Antonio Vieta. At the date of Dr. Desmaisons' visit the direction had been placed in non-medical hands, and the medical supervision rested with three of the physicians of the General Hospital. And to make matters worse, these physicians were restricted in their duties simply to the details of medical prac-

tice, and interdicted, by rule, from even making suggestions of improvements in its arrangements and management.

The section of the pensioners, or private patients who pay for their maintenance, is a veritable gaol, wanting in attendants to go out with its inmates, and destitute of a garden or court for their exercise. The entire asylum is within the boundaries of the General Hospital, of which it constitutes a division. The only aperture for light in the cells occupied by patients in a state of excitement, or supposed to be dangerous, is a grating near the bottom of the door; whilst to carry off the excretions of the unhappy prisoners a channel, into which water is turned, runs through the centre of these cells.

Within this house of horrors one redeeming trait was found by Dr. Desmaisons. The attendants were called "padre," or "fathers," a term he regarded as exercising a happy influence on the minds of the patients. In the female department, likewise, the attendants were called mothers, and are members of an order of nursing sisters not under religious vows.

But what will appear more strange, is the fact of the large proportion of cures in this place, which the junta or committee attribute to the happy influence and powerful intercession of "Our Lady of Grace," under whose protection the establishment is placed. "Faith has assuredly an immense power," is the commentary of the author on these facts. For our part we should prefer to see faith and works go together, and attention to the dictates of humanity and science in league with the powerful intercession of the invoked saint.

Religious dogmas and feeling have in all ages overruled the course and conclusions of science in Spain, and nowhere is this circumstance more evident than in Saragossa. There is a strange and absurd custom kept up, of sending a number of lunatics from the hospital to take part in pompous religious processions; "an indecent commingling of sacred and profane things," writes M. Laborde ('Itinéraire Descriptif de l'Espagne,' 1809), "calculated rather to provoke a smile or pity than to contribute to edification," especially when the accessories are considered, viz., the parti-coloured green and brown dress of the unfortunate lunatics, who carry each a bouquet of flowers, and are preceded in their march by a drum and a green and brown banner. M. Desmaisons, who has æsthetic tastes, finds, on inquiry, that this harlequin dress is symbolic of patience under adversity—a most excellent virtue, but better when found in the heart than paraded on the coverings of the body in symbolic colours of whatever sort. Another custom of the past in this singular, broken-down old town of Saragossa, is the privilege possessed by the lunatics of begging of the citizens for tobacco and other indulgences, in the grotesque garb in which their out-door appearance is allowed. Often the attendants assume the dress, and do a little begging on their own account. And really, so far as the patients

are concerned, this otherwise most objectionable custom has this advantage—that of rescuing them from perpetual incarceration in a gloomy prison-house, cut off from recreation and amusements, and unoccupied with work of any sort.

We will now turn to the author's remarks on the other public asylums of Spain. The oldest of them is that of Valencia, which was founded in 1409; but very soon the example of providing for lunatics there set was followed in other provinces of Spain; by Saragossa in 1425, by Seville and Valladolid in 1436, and by Toledo in 1483; the moving spring in their establishment being an ardent charity operating in the breasts of a few devout men, among whom Juan Gilaberto Joffre, a member of the order of Mercy, is memorable.

The dates at which these asylums were instituted indicate that Spain took the initiative in Christendom in thus specially providing for the insane. But even in this sphere of charity the Spaniards were copyists of the Mohammedans, who founded and endowed such establishments within a very few years after their faith had made its way in Egypt and elsewhere. At this day the Moristan at Cairo, with all its defects and in its half-ruinous condition, bears evidence to the philanthropy of one of the earliest Caliphs, who not only provided maintenance for its lunatic inmates, but also sought to render their existence more tolerable by having a daily concert of music in the large and ornamental hall of his asylum.

The Asylum of Valencia appears not to have been visited by Dr. Desmaisons, who refers to a history of it by Dr. J. von Minutoli. This physician signifies that this establishment is far from satisfactory; it is situated in the town, and in connection with the General Hospital; hence it has no space to afford out-door occupation, or sufficient scope for exercise of the patients, who, therefore, drag on their existence in listlessness and indolence.

The Asylum of Valladolid was founded by a private citizen in 1436, who ordered by will its exclusive use for insane persons, excepting those suffering from senile dementia. The original endowment being insufficient to meet the demands upon the resources of the institution, collections formerly were ordered, from time to time, by the Spanish kings; but of late years this precarious source of income has been replaced at Valladolid, as elsewhere in the country, by a charge upon the provincial budget, met by an assessment upon the districts from which lunatics are sent. Dr. Desmaisons also notes it as peculiar to the asylum in question, that each commune pays four reals per day for each of its lunatics in the asylum, except when these exceed a certain number, when the daily charge is diminished. This plan, he observes, holds out an inducement to the districts to send those who are mentally disordered; whereas in French and other asylums the equal charge for each additional patient sent operates as a cause for postponing their removal to them.

In 1840 the direction of the asylum was entrusted to one of the canons of the cathedral and professor of divinity in the University, who, with clearer views of the wants of the insane than most of his fellow-ecclesiastics, reported on the inadequacy and unfitness of the existing building, at that time containing only 28 patients, and situated in the centre of the city. The result of the report was the purchase of a large mansion and grounds in the immediate neighbourhood, outside the town, to which the insane were transferred, after certain alterations were completed, in 1849. In 1852 the original population had increased twofold, and should the increase go on (as in all probability it will), the present building and garden space belonging to it will be too small. This deficiency of space will be particularly felt with respect to the means of employing the patients, of the utility of which the managers of this establishment have a correct appreciation. A portion of land and a house at some distance from the chief institution, constitute an annexe, where three or four convalescents are constantly employed, and where, during the vintage, some thirty are sent, who, after being allowed to have their fill of grapes during the first day, are found more active and economical labourers than hired ones.

The Valladolid Asylum, having formerly been only a private residence, is defective in its means of classification and in its arrangements. Its regulation by a non-medical director is very objectionable, although the worthy canon now at its head has made insanity a study, and to improve his knowledge of management has visited asylums both in France and England.

The condition of the insane in Madrid was most deplorable. There were some special wards in the general Hospital of St. Isidoro, but these were insufficient for the number admitted, some of whom were therefore distributed in the general wards, and a larger number confined in the underground rooms or vaults of the building. In these wretched abodes a great proportion were confined in their beds. In short the whole of the poor lunatics of the hospital had (as is always seen to be the case where the insane are treated in general hospitals) their interests and well-being sacrificed to the other sick inmates of the establishment. There appears to have been no special organization of the section for the lunatics, and no medical attendance, except what the physicians of the hospital, who took charge of the section in turn, could afford, over and above their ordinary round of duties. It was high time, therefore, to rescue the lunatics from their miserable plight, and to save the Spanish capital from the charge of barbarism towards them, and it was with this object the Municipal Junta purchased, in 1851, a country house of the Duke of Medina Cæli, situated at Leganes, in the environs of Madrid, which was opened for the reception of some of the lunatic inmates of the general hospital in the year following. However, in 1859, this

partial attempt to remedy a great and a widely extending evil was found a failure, and a statement was drawn up and presented to her Catholic Majesty, setting forth the structural defects, the very limited internal arrangements, the want of water, &c., which led to the promulgation of the royal decree for the erection of a new asylum for Madrid, referred to at the commencement of this notice.

The direction of the Leganes Asylum is in the hands of a non-medical man, who, as at Valladolid, also exercises the functions of steward. The medical charge is entrusted to the cantonal physician, who receives £40 a year to visit the asylum, as a supplementary stipend for the superimposed work.

At Toledo is the long established asylum of "el Nuncio," so-called from having been endowed by the Apostolic Nuncio, F. Ortiz, in 1483. The present building was erected in 1793. It is a quadrilateral building, situated at one side of the town in immediate contiguity with the old Moorish wall, but surrounded on three sides by streets. From its position on the side of a hill, and its elevation, it commands on the one aspect a fine panorama of the surrounding country; and architecturally it is a handsome building, of which the citizens are proud. The central court is surrounded by arcades and there is a fine chapel for the inmates; but alas! the internal accommodation and arrangements for them are not on a par with the external architectural display. The cells are small and dark, having no opening into them beside the doors. In short, such are its defects that to approximate its arrangements to those of an asylum as understood at the present day, it would need to be entirely remodelled internally. It has no garden ground or space for exercise around it, and its position within the city walls is an insuperable obstacle to its obtaining any. It is capable of accommodating 200 patients, but its population had dwindled down in 1862 to thirty men and fifteen women. It is placed under the general management of a committee, one member of which is appointed visitor, whilst its immediate government is committed to a medical director, required by rule to reside in the building, though allowed to practice at large. The regulations for its administration are spoken of in terms of praise by Dr. Desmaisons.

These sketches of asylums and of the manner in which the insane are treated in Spain, indicate how far behind the rest of Europe the people of that country are in all that relates to psychological knowledge and practice. From the brief notes of the author of what is passing at Barcelona, more enlightened views appear to have taken root in that city, under the auspices particularly of Dr. Molist. The progress there made, as Dr. Desmaisons informs us, in the administration of the asylum is as liberal and fruitful in good results as the state of things is elsewhere in Spain retrograde and damaging to the true interests of the insane. The Catalonians propose to erect a new model asylum, but in the meantime have not ceased to improve the

existing one of Santa Cruz. They have placed at its head, with full powers, the able physician whose name is above mentioned, and by whose exertions a complete transformation has been effected in its internal arrangements and management. In 1855, this asylum contained 232 inmates, of whom 109 were men and ninety-three women. At the same period the hospice, the Casa di Caridad, or house of charity, contained 286 quiet idiots and demented patients, whilst in a private asylum there were thirty-five patients, viz., twenty men and fifteen women. This is the largest insane population noted by the author in any one province visited. And he points it out as a curious fact that a progressive increase of patients has taken place in the Barcelona Asylum during the course of the ameliorations introduced into it, whilst in Saragossa and other retrograde institutions the number of inmates has declined.

So far as the imperfect statistics obtainable can show, there was a general decrease in the number of the insane admitted into the several Spanish asylums in the period from 1786 to 1817, but of late years again an increase has taken place. In 1847, Dr. Pedro M. Rubio estimated the whole number of lunatics in Spain, at 6851, or one to every 1667 inhabitants. Of these 6851, 1626 were detained in asylums, whilst the rest were resident with their friends. Of the whole number, 4060 were males, and 2791 females. In the course of Dr. Desmaisons' inquiries, a larger proportion than Dr. Rubio estimated was found in the public asylums, and there is no doubt whatever that upon the construction of suitable asylums in the several provinces of the kingdom, an enormous accession to the number of recognised lunatics would forthwith manifest itself. It is the custom in all parts of Spain to place the insane, when not retained at home, for a certain period after their attack in the lunatic ward of a general hospital or of an hospice, and to defer their removal to an asylum until the prospects of cure appear well nigh passed. This disastrous custom is further aggravated by the prejudices of the mass of people against asylums and by their unwillingness to have their friends removed to a distant institution. Many years therefore will, it is to be feared, elapse before the unhappy lunatics in Spain will receive the full benefit of the improvements in treatment carried out in other countries of Europe.

There are several other matters incidental to the state of lunacy and of the provision for the insane in Spain, treated by Dr. Desmaisons, which are of much interest. His literary researches into the past history of the principal asylums of that country will be read with pleasure; indeed they have led him also to speculate on the causes that first prompted their erection, and on the initiative taken by Spanish subjects in establishing similar institutions in Italy, among which the asylum of Rome may be cited as a remarkable example.

The book from which we have culled the foregoing annotations on matters so little known in this country, is agreeably written and abounds in sensible remarks on the treatment of the insane. There is indeed one chapter in it of which no notice has been taken, not because it is deficient in useful suggestions, but on account of its subject being alien to that for which we especially introduced the treatise to the notice of our readers; we mean the last chapter, which is occupied with the author's views of asylum construction, and with the plan proposed by him to meet the requirements of the official programme for the intended asylum for Madrid.

J. T. A.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

I.—*Foreign Psychological Literature.*

By J. T. Arlidge, A.B. and M.B. Lond., M.R.C.P. Lond., &c.

Journal de Médecine Mentale.—The numbers of this journal for October and November, 1863, contain some notices of cases of cerebral disease in which the speech had been lost. To signify this state of speechlessness, the term "*aphemia*" has been coined, and the hypothesis started by M. Auburtin and others, is that this condition is always associated with a lesion of some sort of the anterior lobes of the brain. In his examination of this hypothesis, M. Auburtin analyses recorded cases of lesions so situated, and finds them in favour of it. Instances, few in number, but contrariwise, are explained away, but the curious fact remains that in all the cases referred to, one only excepted, the lesion existed on the left side, and again, that in one example quoted where the disease was on the right side of the anterior lobe of the cerebrum, the speech and mind were unaffected. The particular portion most remarked upon as the seat of morbid change in aphemia is the third frontal convolution. In the November number following an interesting case in illustration of the hypothesis in question is detailed by M. A. Foville. It was that of a woman suffering from chronic mania, who had a sudden attack of hemiplegia of the right side with complete loss of speech, from occlusion of an artery, and in whom extensive disease was found after death in the right hemisphere, particularly in the vicinity of the fissure of Sylvius, and also extended to the third frontal convolution. Three other illustrative cases follow by MM. Cassimir Pinel, Bourneville, and Delasiauve. In M. Pinel's record it is not stated on which side the lesion was found, but in that of M. Bourneville it was on the left, whilst in that of M. Delasiauve, it was, as a sort of exception, met with in the right hemisphere.

In the September number of this journal, Dr. Semelaigne commenced some literary essays on the opinions and practice of the ancients in insanity, from the time of Hippocrates, which have been since continued, and will be found interesting to the student of the history of medicine. The same writer

has followed up his remarks on "the Differential Characters of Pathological Error," commenced in the June number. They are of a psychological and general character, and do not admit of analysis. The same may be said of M. Delasiauve's able essay on partial delirium, read at the meeting of the Medical Congress held at Rouen, in October last, and printed in the number of the 'Journal de Médecine Mentale' for that same month.

Dr. Berthier discusses, in the December number, the manifold advantages of employment to the intellectual, moral, and physical condition of the insane, under all forms of their malady. He justly denounces uniformity or sameness of employment as irrational: "Variety (he writes) is the balm of sadness, and monotony is, in the case of females, often mischievous." It seems unnecessary to remark that sedentary occupations must be varied by walks out of doors. This is the teaching of common sense, and yet, like many other similar lessons, it does not receive the consideration it demands in not a few asylums. There is a disposition to form patients into gangs of labourers or artizans, and to extort regular monotonous work from them day by day, with little relaxation. Thus it is a practice in some institutions to collect female patients as laundresses, and exclusively occupy them at the work almost all the week, and to make matters worse, these hard-working people are in some places kept apart from other inmates; the nature of the employment in which they are engaged being substituted for the character of the disease they suffer from as the basis of their classification in the establishment.

As M. Berthier rightly observes, employment is a means of treatment of great value, when placed exclusively in the hands of the physician, who should make use of it in promoting the cure, and as auxiliary to medical agents. He advocates the right of the patients to a share in the profits of their labour, and fixes the mean of this share at one-sixth of the net earnings of an individual. Where the gain from labour is comparatively large, he would reserve one-half for the patient, to be given to him at the time of his discharge. Patients discharged, who have not been profitably occupied might receive the portion earned by others who have died in the asylum. This scheme of dividing the profits of labour performed by patients between them and the institution, would greatly derange the system pursued in this country, although when it is considered that the workmen are *patients*, placed in an asylum on account of a disease, and for the purpose of having that disease treated, and further that no compulsion can legally be exercised, the plan must be considered equitable.

In the same part of the 'Journal de Médecine Mentale' is a notice of the deplorable state of the prison of la Roquette, in Paris, in which young criminals are confined on the 'solitary system' in cells. In 1859, the Minister of the Interior reported the imprisonment of 9893 persons under age, of whom 1304, were in the department of the Seine. The majority were uninstructed altogether, and 205 only had decent parentage. The remainder were illegitimate, orphans or foundlings, mostly born amongst the worst classes of society, and almost all scrofulous or rachitic, and it might be added, unsound in cerebral organization. The cellular system was adopted for children in 1830, and M. Darin reports the transfer of 33 of the boys to the Bicêtre, sufferers from insanity or from epilepsy, and in broken down bodily health, and he draws a comparison between the unhappy inmates of La Roquette, and the same class of criminal children in the country penitentiaries where this cellular system is not in use, and where employment and exercise are secured for them. Another argument in favour of the latter institution is, that instead of the recommittals after discharge equalling 33 per cent., as at La Roquette, they are only 11 per cent.

The members of the Medico-Psychological Society of Paris maintained an animated discussion of the subject of the partial responsibility of the insane at the several meetings, commencing in March, and continued until the end of July last year. This discussion is largely reported both by M. Delasiauve in his journal, and also by the editors of the 'Annales Médico-Psychologiques.' This much debated subject was examined in the January number of this journal, in a notice of an excellent essay by M. Briérre de Boismont.

Dr. Berthier continues his series of papers on the management of asylums, and in the February number of the 'Journal de Médecine Mentale,' enters on the subject of the purposes of cells or single rooms as means of treatment. He objects to M. Renaudin's general denunciation of such rooms, and then falls foul of English practice with respect to them, having picked up the notion from reading that seclusion in single rooms is the panacea in this country against all the turmoil and irregularities of the insane, and the substitute for mechanical and manual coercion. It is so lamentable that these foreign asylum superintendents should persevere with these oft-refuted objections against non-restraint, and not inspect for themselves English institutions with a view of acquiring a personal acquaintance with what is actually the practice in them.

Annales Médico-Psychologiques.—The July, September, and November (1863), divisions of this excellent journal are in our hands. The original articles are, "On a Special Diagnostic Sign between an attack of 'Essential' Insanity, and the delirium accompanying or even preceding Typhoid Fever," by M. Dumesnil; "First Lecture of a course of Comparative Psychology," by Professor Chauvet; "On Amaurosis and inequality of the Pupils in Progressive General Paralysis," by M. Billod; "On the Medico-agricultural Colony of Leyme," by M. Bonnefous; "On the General Responsibility of the Insane, and on their Partial Responsibility," by M. Briérre de Boismont; "On the Colony of St. Luc," by M. Auzouy and "On the Asylums of Russia," by M. Herzog. Besides these there are a notice of the works of Aubanel, by M. Thore, and several medico-legal reports. The essay by M. Dumesnil, though particularly devoted to the diagnosis of mental disorder in typhoid fever from "essential" insanity, contains references to other forms of sympathetic and symptomatic insanity, and particularly to that variety dependent on intestinal irritation, or on a subacute form of enteritis. Several cases of this sympathetic mental disorder are given both to show that the prognosis is in such generally favorable, and to illustrate the fact of the occasional manifestation of the intestinal malady subsequently to the mental. This circumstance he explains by supposing that the abdominal lesion is overlooked, the attention being preoccupied with the cerebral disturbance, and by arguing that "the critical phenomena, in a large number of cases of mental disorder, are really nothing else than the termination of a visceral malady of some sort that has commenced in an indistinct manner, and been slow in its progress; that in ordinary enteritis the precursory symptoms and intellectual disturbance, when this latter occurs, are at times of rather long duration, whilst with respect to follicular enteritis the contrary holds true."

The character of the mental disturbance is not constant when due to intestinal lesion, but the form of insanity assumed, does not affect the prognosis, as Dr. Loiseau supposed. The delirium accompanying or preceding typhoid fever is commonly of a maniacal though occasionally of a melancholic type attended with illusions and hallucinations, and its character as a sympathetic condition is usually sufficiently clear. Its being mistaken for an attack of "essential" insanity is most likely to happen when hallucinations and illusions are present, and the febrile and visceral phenomena

are latent. Such mistakes are, it appears, not unfrequent in the French asylums, a certain number of patients being admitted every year, in whom the delirium is only a complication of typhoid fever. The proportion would be larger, were it not that whilst the necessary preliminary steps to admission are being taken the delirium subsides, or its true nature is apprehended. Yet not only is the transfer of a typhoid patient to an asylum prejudicial, but the misapprehension of the actual disease is productive of mischief by delaying the proper treatment of fever. To obviate such errors M. Dumesnil asserts that in typhoid fever albumen will mostly be found in the urine, its quantity being in direct proportion with the gravity of the disease, whilst in acute mania and in meningitis, this deposit is not met with.

The colony of St. Luke in connection with the asylum of Pau was commenced by Dr. Auzouy, the superintendent of the asylum, in 1860, at a farm of 20 hectares (about 60 acres), in the immediate vicinity of the town. The need of such means of out-door employment was particularly great, inasmuch as the asylum, containing nearly 400 patients, is situated within the town of Pau, and occupies a very limited area. The number of patients transferred to the farm was at first only five 5, but in 1862 was increased to 22. But besides these constant residents a detachment, as large as possible, is sent to the farm every morning from the asylum, returning at night. This detachment includes both males and females, the latter being employed in weeding and in gathering fruit and other products of the soil. Moreover, those who cannot work are taken for a walk or drive to the estate, as a means of diversion to their minds and a source of interest, and although it is unenclosed by any fence or wall capable of opposing the attempt, escapes have been very few.

M. Auzouy bears gratifying testimony to the excellent results of this plan to the entire institution; the stronger inmates of the town asylum are eager to be sent to the farm to work, whilst to those labouring under severer mental disorder and particularly those suffering depression, this annexe operates most advantageously by diverting and arousing them, and lessening the feeling of seclusion and restraint, which chafes the minds of so many upon their first admission. Its "therapeutical advantages" are equally apparent; during the two years this agricultural colony has been in operation, almost every one of those discharged cured has been a labourer there, and "the number of solid and durable recoveries has been sensibly augmented."

These happy results would of themselves well repay the cost of this addition to the Pau asylum, but the superintendent is enabled to show that the scheme is also a source of profit. At the close of the first year, indeed (as might be expected, where a fresh organization was to be carried out, and various preliminary expenses incurred), there was a balance against the farm of some 7000 francs; however, the accounts at the end of the second year showed on the contrary a net profit of 3450 francs, and this, notwithstanding the large item of 2000 francs paid as rent for the farm. For it may be stated that the resources of the asylum did not admit of the purchase of the estate at once, but it was taken on a lease for six years, with the option of purchase at the end of the term at a prearranged price.

M. Auzouy follows up his description of the annexe of the Pau Asylum by an excellent chapter on the different modes of colonization for the Insane. He accepts the conclusion of the commission appointed to examine and report upon the system at Gheel, that this plan is not desirable, and he then points out the advantages and disadvantages of an annexe separated by some distance from an asylum, as in the instance of his own establishment. Among the latter the principal one is the want of the same directing and supervising agency in the annexe at all times, as in the parent institution; a deficiency not to be supplied by a subordinate officer. Another objection is that,

though patients frequently like the change from one place to another, and some tire of a continued rural abode and employment, yet the transfer to and fro is attended with trouble and inconvenience, especially in bad weather. The plan, therefore, M. Auzouy regards as the best, is the immediate connection between the farm and the asylum, not indeed, a coalescence of the two, but the maintenance of the former as an establishment *extra muros;* and he is now taking steps to carry out this plan by the erection of a new asylum close to the farm, to replace the objectionable town institution. Moreover, with the view of providing for certain pensioners (the private patients almost invariably found in foreign asylums) for whom the common life of an institution is undesirable, he proposes to build some cottages on the estate for separate residences.

It would be a happy thing for the inmates of our London Hospital of St. Luke, if M. Auzouy's example were followed, and a farm at a moderate distance from the metropolis obtained, where certain of their number might be employed, and enjoy a purer and more life-giving atmosphere than they can do in the existing confined limits of the hospital, surrounded as this is with a dense population. Even if the funds of this London Hospital for the Insane are insufficient to bear the expenses of removal and rebuilding, and even if, as some assert, there are advantages accruing from its urban situation, the acquisition of a farm is surely practicable, and the employment of the patients, if not positively profitable, as it is in most instances, would be an immense boon to them physically, mentally, and morally,—a sufficient result surely for an institution which occupies the position of a public charity.

The Asylums of Russia.—A brief account of these asylums, almost unknown to English physicians, is given by M. P. Herzog, and is well worth notice in these pages.

In all the principal provincial towns of Russia there are public hospitals which include sections for the insane, but the principal special asylums are found at St. Petersburg and Moscow. The St. Petersburg asylum is some two or three miles from the city, on the Peterkoff road. It was founded in 1832, and contained, in 1862, 400 patients, of whom 160 were women and 140 men. It is about to be enlarged, so as to accommodate 100 more inmates. It is under the control of the Imperial Council, presided over by Prince Peter of Oldenburg. One of the members of this Council is appointed chief director, whilst the medical service is under the inspection of the Inspector-General of the hospitals of St. Petersburg. The immediate superintendence is lodged in the hands of a chief physician and of a manager. The former has three assistants, besides two internes, and the latter two; the one acting as steward, the other in enforcing the regulations (le service de la police). The patients are divided into six sections, under the surveillance of three attendants, with two assistants each, whilst there are ten other servants in each section to wait upon the patients and to keep the apartments clean, and two to superintend employment. The annual charge of the asylum reaches 392,000 francs.

Besides this large special establishment there are at St. Petersburg sections for lunatics in three of the public general hospitals, including the clinical hospital of the Academy of Medicine, and further, three private asylums.

At Moscow the asylum accommodates 200 insane of the two sexes, and is under the direction of a chief physician, with two assistants and an interne. There are also a small institution (asile de police) for 100 lunatics, and a private asylum.

There is, moreover, a public asylum for 150 patients, in course of construction at Kasan, the plan for which has been produced by a commission of asylum physicians and architects, formed under the auspices of the

Director of the Medical Department of the Interior. The physician who has been appointed as the superintendent was commissioned to visit the asylums of other countries, and to introduce whatever improvements in internal arrangements and organization he observed for the benefit of this new institution.

At Riga are a small public hospital for 25 male and 25 female lunatics, and a private asylum. At Dorpat and Vilno public asylums are in progress of construction; the one at the former city is to be used for giving clinical instruction in lunacy. In Finland are two receptacles for the insane; a maison-de-santé at Helsingfors, and an asylum for incurables.

The mental disorder of Pellagra, in its relation to medical jurisprudence, forms the subject of an excellent article by Dr. Legrand du Saulle, in the 'Gazette des Hôpitaux,' of which an abstract is given in the 'Annales Médico-Psychologiques.' The following are the conclusions arrived at:

1. Among the victims of pellagra whose minds are disordered, the delirium frequently undergoes a transformation in type, but the impulse to homicide and suicide persists, and therefore serves the purposes of diagnosis. 2. The psychical disorder precedes, in some instances, the alterations of nutrition and the cutaneous phenomena, and this circumstance, especially if the pellagra be sporadic, is liable to lead the medical jurist into errors which only long-continued observation can obviate. 3. The insanity of pellagra, when clearly pronounced, absolves the patient from criminal responsibility for his acts, and also vitiates his civil proceedings, his contracts, gifts, and the disposal of property by will.

The subject of pellagra, its etiology, symptomatology, diagnosis and treatment, has been selected for a prize of considerable amount by the Academy of Sciences.

The introductory lecture on 'Comparative Psychology,' by M. Chauvet, will be read with interest, as also will the excellent essay by M. Briérre de Boismont, *on the general responsibility of the insane*, the contents of which are in the main similar to those of the brochure on the 'Legal Responsibility of the Insane,' analysed by us in the previous number of this journal.

On Amaurosis and inequality of the pupils in progressive general paralysis, is the topic of a clinical essay by M. Billod in the November number of the 'Annales Médico-Psychologiques, by which he hopes to supply a deficiency in the history of that disease as generally pourtrayed. Among 400 cases of general paralysis which have come under his observation, in the course of twenty years, he has only thrice seen weakness of vision advance to total blindness, and hence it would appear that amaurosis is a rare consequence of that malady. Nevertheless, the inequality of the pupils, observed in at least one-third of the cases of general paralysis, would seem to indicate an alteration of the retina behind the dilated pupil and impaired vision. However, M. Billod tells us that this dilatation frequently exists without any alteration of vision in paralytics, although indissolubly associated with such an alteration in true amaurosis. To explain this apparent enigma he appeals to the physiology of the eye, and shows that the iris, not being sensitive to light, is solely acted upon in a reflex manner from the impression of light upon the retina being conveyed to it by the third nerve. Experiment proves that irritation of the optic nerve produces the same effects upon the iris as light does when it falls upon the retina, and that, if by section of the third nerve communication with the encephalon is interrupted, the pupil is motionless under the influence of light upon the retina, as well as under the effects of direct irritation of the optic nerve. Hence in amaurosis the immobility of the

iris is a consequence of paralysis of the retina, whereas in general paralysis, where, notwithstanding the integrity of the retina, there is dilatation of one or of both pupils, this dilatation is owing to some lesion directly affecting the third nerve, either by paralysing it or else, as where there is inequality of the pupils, by over-exciting it on one side the brain. This latter interpretation is sanctioned by the fact that the dilated pupil in cases of paralysis is not usually at the same time immovable.

In those instances of general paralysis where there is more or less complete blindness along with inequality of the pupils, it must be concluded that, besides a lesion affecting the motor power of the third nerve, there is also one involving the retina or the optic nerve. So that in such cases the immobility of the iris is dependent on two causes,—the one indirect, a consequence of an alteration of the retina or optic nerve, inducing paralysis; the other direct, operating immediately upon the oculi-motor nerve in its distribution to the iris.

The congestive state of the brain, which constitutes one of the essential pathological characters of general paralysis, can produce amaurosis only indirectly by its destructive effects upon the cerebral structure in general, and by its extension to the optic nerve, of which it seems, from the autopsies of paralytics, to produce atrophy, and therefore an asthenic form of amaurosis.

Where inequality of the pupils precedes amaurotic blindness, the loss of sight is commonly complete. In one of M. Billod's cases unequal expansion of the pupils preceded the loss of sight, and lasted for some time after entire blindness, and was finally replaced by unequal contraction. By producing dilatation by means of belladonna, it was seen that the action of the motor nerves of the iris was still unequal on the two sides, notwithstanding the destruction of sight. Both in this example likewise and in one other—both cited at large by M. Billod, the progress of the amaurosis was very slow. At times obscurity of vision is noticed at the outset of paralysis; at others it appears in the later phases of the disease; whilst in others again it has been known to precede the development of the paralytic symptoms.

The principal anatomical lesion discovered in the two cases of general paralysis he specially examined, was an alteration in structure of the optic nerves and commissure, and of the optic tract, in conjunction with the changes commonly observed in that malady. In both instances also the convolutions were small, as M. Parchappe also remarked in his case No. 248, a circumstance which M. Billod accepts as indicative of general atrophy of the brain, of which the atrophy of the optic nerves represents one degree. The pathological changes are minutely detailed in the two cases referred to in illustration of this paper, and in two parallel ones recorded by M. Parchappe.

Asylum of Leyme.—Besides a medico-legal report, the remaining original article of the November number consists of a detailed history and description of the *Asylum of Leyme*, in the department of the Lot, by Dr. Bonnefous, the Assistant-Physician of the establishment. It is in the form of a letter to M. Jules Falret, the reporter to the Paris Medico-Psychological Society on the system of Gheel, but it is too long for a lengthened notice in the present number of the journal. The chief characteristic of the asylum would seem to be the greater licence allowed its inmates abroad in the fields and in the neighbouring village, which its isolated position renders more feasible than would be the case with most asylums. Seclusion in a single room is resorted to as the severest means of repression where confinement within the building fails; but in some instances the camisole is used, the patient being at the same time allowed exercise abroad, under surveillance. No means of repression, however, are allowed to be exercised except by the medical men. There is no compulsion to labour, but it is left entirely to

the will of the patient to employ himself or not, and to continue or remit work. When he prefers it he can wander at large in the vicinity of the asylum buildings, servants of the institution being located at various distances around it for the purposes of supervision. Escapes are rare. During the twenty-eight years it has been established only four unfortunate events have transpired, viz., the pregnancy of one female from the unfaithfulness of an attendant, two suicides, and the burning of a building-shed. The first occurrence was soon after the opening of the asylum, and the last-named took place eight years ago. The licence allowed in respect to employment extends also to food; the patients have no allotted measured portion, but partake of whatever is provided, and are unlimited as to quantity, excepting, indeed, those for whom a particular dietary is ordered on medical grounds, who are separated from the rest at table, and the idiotic and demented who require a limit to be imposed upon their appetite. With respect to clothing, the rule is to have a uniform dress, and is only departed from in exceptional cases.

Patients who are removed from other asylums to this one at Leyme, and reported as unmanageable or dangerous, are found, under the influence of almost perfect freedom and of the absence of restraint, to be no longer so, but to become quiet members of the general society of the place. The truth appears to be that the insane become quieter and more manageable the greater the freedom given to them, and the more they are intermingled with other people. At Leyme the insane and the sane live together as members of one family, having a common interest in the well-being of the establishment. Unlike Gheel, the liberty in this asylum allowed to a patient can at once be curtailed under the direction and supervision of the medical staff, and no such brutalities as have been brought to light in the former place in the detached cottages, can take place in the latter, where an active surveillance is carried on.

Throughout his letter Dr. Bonnefous refers to the conclusions arrived at by M. Jules Falret respecting Gheel, and contrasts his own institution with that famous colony, pointing wherein they resemble and wherein they differ, discovering in the differences prevailing evidences of the superiority attaching to the former. This communication will therefore be read by much interest at the present time, when the system of village colonies for the insane occupies so much attention.

In this same number for November is an abstract of the proceedings of the last meeting of our English Association of Medical Officers of Asylums, which is to be continued in the next number of the 'Annales,' and may therefore call for comment hereafter. The notice is written by Dr. Dumesnil, who is well qualified to write it, by having some personal acquaintance with English asylums, and being therefore less likely to stumble on that "rock of offence," the system of non-restraint as understood and carried out in this country.

II. *English Psychological Literature.*

Professor Laycock on the Classification of Mental Diseases.

Professor Laycock has recently published* an elaborate classification of mental diseases and defects, as part of his general classifications of disease. It is in our judgment too elaborate for practical purposes, though interesting to work out as a problem in mental science, and for this latter object we record it in this journal.

Professor Laycock begins by stating that insanity, or *the insaniæ or idiopathic vesaniæ*, as he terms the disease, is distinguished from other vesaniæ, as well as from all other diseases, by the fact that the mental disorder, disease, or defect, renders the patient incapable of judging or acting fitly for himself, his family, or society. He is both individually and socially disabled in mind. This disability, which forms so leading a part of the phenomena of the insaniæ as to require special notice in any classification, is manifested in very different degrees of completeness according to the extent, causes, and intensity of the encephalic disease or defect out of which it arises. Hence no definition of insanity as a disablement, rigidly applicable to all cases, or even applicable to the same case in successive stages, is possible. We may, however, (continues Dr. Laycock,) class the insaniæ in a few leading groups. 1. When an individual, either from excessive exaltation of the instincts and propensities congenitally, or consecutively to disease, or from palsy of the inhibiting structures, has no proper perception of consequences or none of the antagonistic feelings and faculties, and thus is incapable of self-control and moral sense, and commits crimes or practises vices, he manifests immoral (not "moral") and criminal imbecility. 2. His knowing faculties may be unaffected, and he desires to restrain his morbidly vicious and criminal propensities, but cannot. This is impulsive insanity; it is termed "uncontrollable impulse," when the orectic acts are suddenly committed, and the disease is in truth a sort of mental epilepsy. 3. His instinctive desires and his acts may be both morbid, but his higher sentiments and faculties may be unaffected, and yet too weak to control his acts. This is what has been termed *folie lucide*, and moral insanity; it would be more correctly designated immoral or vicious. 4. Every thought or particular processes or trains of thought, may be morbid, and accompanied by that encephalic change which causes mental pleasure or pain, as in melancholia. This is *emotional* or *pathetic* insanity. 5. There may be neither morbid feeling, nor morbid desires, nor motor impulses, but hallucinations and delusions as to things and events, and which guide the patient's conduct. These are simply erroneous ideas, due to encephalic disease or disorder of encephalic function, of which he cannot detect the error, because memory is palsied, and there is either no reminiscence of his past experience, or no power of comparison of the present with the past, so that his delusions may be corrected, and true knowledge attained. This is termed NOTIONAL INSANITY. 6. Notional insanity may differ as it is partial or general. If general, then, all notions are constantly varying and incoherent, and the actions purposeless or irrational. The person thus affected is said to be out

* 'The Principles and Methods of Medical Observation and Research,' by Thomas Laycock, M.D., &c. &c., 2nd edit. With copious nosologies and indexes of Fevers, and of constitutional, cutaneous, nervous, and mental Diseases. Edinburgh, 1864, pp. 403.

of his mind. This is ECPHRONIA (Mason Good), and includes mania, or "universal insania," and delirium. 7. But, if partial, there are "fixed" ideas or notions—not always occupying the mind—but recurring always in the same order, and uncorrected by reminiscence or comparison with the present. The changes in particular portions of the ideagenic tissue affected are out of relation to those in all other portions—are self-included, as it were; and thus that exact co-ordinate action in thought and will of all parts of the encephalon which constitutes mental soundness may be abolished as to a class or classes of actions, leaving others unaffected. These are known as "MONOMANIAS." 8. Fixed ideas may take possession of the man and influence the conduct, although these may have originated in no disorder or disease, properly so called, but caused simply, like illusions from strong impressions on the senses, by over-excitement of that portion of encephalic tissue, due to excessive or long-continued mental activity about the same class of ideas. This state I have termed ENTHYMIA. The subjects of it are known as enthusiasts, fanatics, and the like. These and other morbid mental states recur periodically, there being intervals of mental health, or alternate with each other, or pass into each other. Thus the enthymia of the fanatic is apt to pass into mania, and this into dementia, so that the enthymic condition is but the first stage of the affection, the end of which is abolition of the mental faculties. Not uncommonly the disease is arrested at some one of its stages, and becomes a permanent imbecility, eccentricity, or chronic mania, requiring, however, its own name, like all other stages, and which is MORIA."

The following summary is given by Dr. Laycock of the rules which he would have observed in the naming and classifying mental diseases and defects:—"1. To include all modifications of the consciousness which are generally classed as mental under the term. 2. To consider them as all alike dependent on changes in which the whole of the organ involved—the encephalon—participates, but with a predominant manifestation of change of function as to a particular portion or portions of the organ. 3. To differentiate these manifestations of predominant morbid states by the same rules and according to the same methods (the psychological) as are adopted generally for the differentiation of predominant healthy states. 4. To distinguish the various states pathologically according to their origin, course, and causes. 5. To mark out such as are symptomatic only, or do not disable the individual personally or socially as to his will and judgment, from those which do. 6. To correlate in a nosological arrangement the psychological and pathological facts through the physiological or biological, and to this end trace up the differentation of the encephalon and of its functions as the organ of consciousness, through the correlative evolutions in lower organisms and in lower stages of development, according to the principles and method I have already laid down and in part worked out.* In this way the practical ends which should be secured in all classifications, will, in my humble judgment, be best attained both as to healthy and morbid mind."

Professor Laycock's Classification of Mental Diseases and Defects.

NOSOLOGIES AND INDEXES OF MENTAL DISEASES AND DEFECTS (VESANIÆ).

I. Psychological Nosology and Index of the Vesaniæ.

The Vesaniæ are encephalic nervous diseases, characterised by mental disorder, disease, or defect.

1. SYMPTOMATIC V. Mental disorders and defects associated with other diseases, as symptoms.

* See 'Principles of a Scientific Psychology,' 'Mental Physiology,' and 'Mental Organology,' in my 'Mind and Brain; or the Correlations of Consciousness and Organization,' vol. ii.

8. Transitional V. Mental disorders which constitute the transitional stages to mental diseases and defects.

3. Idiopathic V. Mental diseases and defects which disable the person as to his self-control and his conduct, individually and socially. Are of two kinds, Insanity and Fatuity.

A. Insanity (*insania, insanitas*). Disabling mental disease consecutive to ordinary mental health, not necessarily continuous or permanent, nor dependent on irremovable encephalic lesion. The forms may be classed as they are psychological (according to symptoms), or pathological (according to causes and course).

1. *Psychological varieties of Insanity.*

I. Orectic Insanity.—Morbid appetites, instincts, and propensities predominantly manifested. 1. *Harmless,* in regard to the individual and society. 2. *Vicious* and *criminal. a. Impulsive* and *uncontrollable*—mental epilepsy; *b. Continuous,* immoral insanity, criminal lunacy, "moral" insanity; (*a*) *Selfish,* or *pleasure-seeking* (Edonic); (*b*) *Unprescient,* or imbecile.

II. Thymic Insanity.—Morbid feelings and sentiments predominant. 1. *Enthymic,* Notions and feelings manifested, as fixed antipathies, prejudicies, and strong convictions not necessarily delusive, but with morbid selfness. 2. *Enthymic,* Delusive and exaggerated notions and morbid selfness, with feelings of satisfaction or happiness. 3. *Lypethymic* (λυπη, grief), Delusive or exaggerated anxiety, fears, regrets, and apprehensions (Lypemania, melancholia, tristimania, Phrenalgia). 4. *Athymic,* Morbid apathy of feeling and sentiment. 5. *Phrenic,* Morbid selfnes and delusive egoistic ideas, with defective intellect, but no predominant changes as to pleasure or pain (*Moria,* Egoistic insanity, *Monomania*)

III. Phrenic Insanity.—Derangement or defect of the intellect and understanding. 1. *Ecphronia,* "Out of his mind," total derangement. *a.* Morbid dreaming, *Paroneiria; b. Delirium* (Symptomatic Ecphronia); *c. Mania,* Total derangement of the faculties, with excessive volitional activity; (*a*) *Orectic* Mania, with the appetites and propensities predominantly morbid: (*b*) *Thymic,* with predominantly morbid feelings and sentiments; i. *Euphorial,* or joyous; ii. *Phrenalgic,* or undappy; (*c*) *Delusional,* with hallucinations and delusions predominant. *d. Notional Insanity,* Delusive ideas, usually fixed, but without excessive volitional excitement (Tranquil Mania). *e. Enthymic Ecphronia,* Transitional to mania, and with more or less volitional activity. *f. Insipiency, Moria,* More or less defect of the understanding consecutive to mania. *g.* Sudden Ecphronia, *Phrenoplexy,* Sudden total derangement or abolition of the faculties.

B. Fatuity (*Fatuitas, desipientia, Moria*).—Disabling want of understanding, or weakness of mind, not succeeding to an ordinary state of mental health, continuous and due to encephalic defects of structure, nutrition, or development.

I. Congenital Fatuity.—Encephalic defects, arising either during embryonic and intra-uterine life, or before the close of the first dentition. 1. *Complete,* or Idiocy, manifested by an entire want of the observing and thinking faculties; 2. *Incomplete,* or *Imbecility, Congenital Moria,* One or more of the knowing and observing faculties active; 3. *Morphous,* With defective development of the organs of the observing and knowing faculties, the cranium, and limbs; 4. *Theroid,* with a manifestation of brute-like characters of body and mind; 5. *Complicated,* with spasmodic and paralytic diseases and defects.

II. Consecutive Fatuity (*Moria, Insipientia*).—Total deprivation of mental power, or weakness of mind consecutive to insanity and other encephalic diseases. 1. Total privation of understanding, *Amentia, Dementia; a.* Juvenile; *b.* Senile (Dotage); 2. Weakness of mind, *Moria*, consecutive *Imbecility*.

III. Insane Fatuity.—*Fatuous Insanity*.—Insanity occurring in the fatuous and weak-minded; chiefly orectic and emotional.

2. *Etiological and pathological varieties of Insanity.*

I. As to course or order of symptoms.

1. *Acute*, terminating within forty days; 2. *Chronic*, continuous for months or years: 3 *Paroxysmal* or *transient*, occurring suddenly, and terminating completely within four days; 4. *Recurrent*, attacks of insanity with intervals of health, (lunacy); 5. *Alternating*, chronic insanity, with alternating variations in the symptoms; 6. *Transitional*, insanity in which one psychological form is the transitional stage to another; 7. *Consecutive*, when one form follows another; 8. *Complicated*, when one or more encephalic neuroses constitute a part of the morbid states.

II. As to remote and predisposing causes.

1. General causes. *a. Heredity. b. Age* (stage of development), and nutrient activity (differs in the sexes); (*a*) *Infantile*, to end of first dentition; (*b*) *Juvenile*, to end of second dentition; (*c*) *Adolescent*, to commencing puberty; (*d*) *Pubescent*, to end of third dentition (wisdom teeth); (*e*) *Adult*; (*f*) *Climacteric*; (*g*) *Senile*. *c.* Habits and regimen. (*a*) *Enthymic*, from impressive and exhausting thought, feeling, and emotion; (*b*) *Orectic*, from vicious propensities; i. *Dietetic* (alcohol, narcotics, bitters); ii. *Erotic*, excessive amatory excitement and pleasure; iii. *Onanistic* (including all depraved sexual excitement).

2. Pathological causes common to other morbid states, or dependent on them. *a. Pyrectic. b. Diathetic;* (*a*) Strumous and Tubercular; (*b*). Gouty; (*c*) Rheumatic; (*d*) Atheroma (of encephalic vessels); (*e*) Syphilitic. *c. Blood-diseases;* (*a*) Retained excreta; (*b*) Toxæmia; (*c*) Cachexiæ (pellagra, etc.) *d. Diseases of the Nervous System;* (*a*) *Traumatic* (including insolation, concussion, etc.); (*b*) *Vasomotor Neuroses;* i. Hysteria; ii. Epilepsies: iii. Congestive seizures; iv. Cerebral palsies; v. Spinal Neuroses; vi. Nerve-diseases. *e. Peripheral influences of the Viscera* through their nerve-centres; (*a*) *Cutaneous;* (*b*) *Pneumo-gastric*; i. Lungs; ii. Heart; iii. Stomach and Duode; num; iv. Liver and Spleen; (*c*) *Intestinal*, Colon and Rectum; (*d*) *Genital*, as to sex; i. In males—Orchidial and Prostatic; ii. In females—*a.* Ovarian; *b.* Utero-ovarian; *c.* Uterine; *d.* Puerperal (utero-gestation, parturition, lactation).

II. Physiological or Biological Nosology and Index of the Vesaniæ.

Class I. Orexiæ.—Orexies, Orectic Vesaniæ, characterised by functional disorder, disease, or defect of the encephalic centres subservient to the instincts, animal desires, and propensities, and instinctive sentiments.

Class II. Thymiæ.—Thymias, Thymical Vesaniæ, chiefly insaniæ, manifested by disorder, disease, or defect of the encephalic centres subservient to the feelings, emotions, passions, and sentiments.

Class III. Phrenesiæ.—Phrenesies, Phrenic, Vesaniæ, chiefly insaniæ, manifested by disorder, disease, or defect of the encephalic centres subservient to the knowing and representative (or sematic) faculties.

Notes of Researches on the Intimate Structure of the Brain.—Third Series. *By* J. Lockhart Clarke, F.R.S.

('Proceedings of the Royal Society,' vol. xii, 1863.)

As the result of his investigations, Mr. Clarke states that most of the convolutions of the human brain consist of no less than *eight* distinct and concentric layers, this laminated structure being most marked at the end of the posterior lobe.

In vertical sections of convolutions taken from the end of posterior lobe, the first or superficial layer is a thin stratum of fine and closely packed fibres, intimately connected externally with the pia mater—with which they may be torn away—and internally continuous with fibres radiating from the gray substance.

The second layer which is pale and several times thicker than the first, consists, first, of fibres running parallel with the surface both around the convolution and longitudinally; secondly, of fibres radiating across them from gray substance beneath; and thirdly, of a small number of scattered nuclei, round, oval, fusiform or angular.

The third layer which is gray and twice or four times as thick as the one above it, is densely crowded with cells of small size but of different shapes, together with nuclei. The cells are more or less pyriform, pyramidal, triangular, round and oval, or fusiform. They mostly lie with their ends towards the surface, but in the deeper parts of the layer their position is irregular, and some lie with their longer axis parallel to the surface, and in connection with a multitude of fibres which run in the same direction *along* the layer. Each cell contains a large granular nucleus which often nearly fills it. Two, three, or more processes spring from the broader ends of the pyramidal cells, and run partly towards central white substance, and partly in the plane of the layer to be continuous with nerve fibre.

The fourth layer, which is much paler, is crossed by narrow, long and vertical groups of small cells and nuclei like those of third layer. The groups are separated by bundles of fibres radiating from the white substance. This layer gradually passes into the one below it.

The fifth layer consists of the same kind of vertical and radiating groups of small cells and nuclei; but the groups are broader, more regular, and with the bundles of fibres present a more distinctly fan-like arrangement.

The sixth layer is again paler, but contains cells and nuclei which are arranged only in a faintly radiating manner.

The seventh layer, which is reddish gray, contains the same kind of cells and nuclei, but in much greater numbers, and mixed with others of *rather larger* size. Here and there only is there an appearance of radiation. Beneath, it blends with the central white layer, into which its cells are scattered for some distance. Nerve fibres run *along* the planes both of this and the preceding layer.

The eighth layer is the central white stem or axis of the convolution. It contains some scattered cells and nuclei extending from the layer above. The cells are placed with their long axes at right angles to the curved surface of the convolution, "and in the direction, therefore, of the fibres radiating from the central white stem, with which some at least are continuous."

As the bundles of fibres from the central white stem pass between the vertical groups of cells, some of them become continuous with the processes of the cells, and others turn round to become *horizontal*. While the *bundles* are thus reduced in size, their *fibres* become finer as they approach the sur-

face, "in consequence, *apparently*, of branches which they give off to be connected with cells in their course." In the outer gray layer they form a close network, with which the nuclei and cells are in connection. Some of them, however, pass through the layer, and, in company with processes from some of the cells, traverse the next outer and white layer, in which part of them turn round the circumference of the convolution—part run longitudinally—others *appear* to form loops—while the rest continue their vertical course and, reaching the surface, become continuous with the thin stratuml of fibres which forms the first layer of the convolution.

Another system of fibres, springing from each side of the base of the stem-*curve inward* and form a beautiful arch over its summit, where they decussate, and partly constitute the *innermost* layer. Mr. Clarke names these the *arciform* fibre; they run in different planes, transversely, obliquely, and longitudinally; and "they are always interspersed with numerous cells, with processes of which they are continuous." They "establish an infinite number of communications in all directions between different parts of each convolution, between different convolutions, and between these and the central white substance."

Mr. Clarke has found some modifications in the structure of different convolutions. Thus those at the end of the posterior lobe are not only marked by the greater distinctness of their laminæ, but they contain a great number of cells of a *much larger* kind—peculiar pyramidal cells with quadrangular bases, which give off four or more processes, some of which become continuous with the fibres radiating from the central stem while others are continuous with the *arciform* fibres. The opposite end of the cell tapers into a straight process "which runs directly towards the surface of the convolution, and may be traced to a surprising distance, giving off minute branches in its course, and becoming lost in the surrounding network."

"The cells of the convolutions in man certainly differ in some respects from those of the larger mammalia—from those, for instance, of the ox, sheep, and cat."

Remarks on Criminal Responsibility in relation to Insanity. By John A. Symonds, M.D., F.R.C.P.

(Read before the Bath and Bristol Branch of the British Medical Association, held at Clifton, on February 18th, 1864; and reprinted from the 'British Medical Journal,' February 27th, 1864.)

It is almost needless to say that Dr. Symond's essay is worthy of perusal. Any contribution to practical medicine bearing his honoured name would necessarily command our attention.

Dr. Symond's paper was written, he says, just after the trial and conviction of Townley and before the various discussions had appeared in journals and newspapers.

Dr. Symonds observes that among medical writers and medical witnesses in courts of law, there have been great differences of opinion as to what constitutes a man irresponsible for a criminal act, and he arranges these differences under three heads:

1. There are those who think it must be proved, that the person under consideration was the subject of a delusion, aninsane belief, the result of a morbidly erroneous action of the comparing faculty, and that this delusion originated the act for which the person is brought to trial.

2. There are those who would not limit irresponsibility to so narrow an

issue. They say, that there may be no evidence of any particular delusion; but that the man before he committed the act manifested so much disorder in his feelings, disposition, character, and general conduct that he ought to be held irresponsible.

3. A third class hold that, if a man were one of whom it might be said that he was in any way insane, whether in judgment, or in feeling, or in propensities, no matter whether or not there be any evidence of connection between the act and the special form of mental derangement, still the mere proof of diseased mind ought to excuse the person from the legal consequences of his act, even though there might be evidence of an adequate motive for the act; the theory in this view being that, when it is once admitted that a man's mind is in any way unsound, no one can deny that this unsoundness may have extended to the feelings, motives, judgment, power of self-control, etc., so as to put the act out of the category of crime. In other words, the holders of this view do not require that, in order to exempt from responsibility, the delusion, or the known morbid state of the emotions and moral sentiments, should have been mixed up with the crime.

Dr. Symonds raises the following question as affecting the responsibility of the partially insane.

"Let us ask another question. *Why was the criminal at large? Why was he in the enjoyment of the privileges of society, if he were not answerable to the law which protects those privileges?* This question points out to our minds a test that may be a help to us as medical witnesses, whatever may be the value of it to the public, or to the deliberations of a court. If we are considering whether a prisoner is responsible or not for his act, let us ask ourselves whether the facts testifying to his unsoundness of mind were such as would have justified us in certifying him as a person fit to be confined. And if we can satisfy ourselves that we should not have judged him to be a person who could be entrusted with his liberty, we may safely pronounce him irresponsible for his actions. But if we must have left him at large, then he must be treated as a free agent, and one who was not disabled by mental disorder from knowing that his act was wrong.

"I think my fellow-members will give due consideration to this suggestion. And were it brought before the attention of the public as likely to be carried into practice, it might probably have an indirectly beneficial operation on those unfortunate persons about whom is the question. Were the partially insane to know that so long as they have liberty they are answerable to the law, I believe that this knowledge would lead them to that self-restraint which is the object of deterrent penalties. And as to the public, they would take more heed of those individuals who, by reason of their unsoundness of mind, are dangerous possessors of liberty. The test would not only diminish the odium or obloquy which at present is so often attached to those who place such persons under control, but it would impel the friends of such persons to the performance of a duty from which it is often natural to shrink. But here comes a difficulty which must be familiar to all who have had to deal with these debateable cases. There is no friend or relation willing to incur the responsibility and the expense of consigning the case to an asylum. What is to be done? This difficulty points to a great public want, which will, I trust, be some day supplied. I mean the appointment of public medico-legal functionaries, whose business it shall be to investigate and take the responsibility of determining upon, and providing for, the seclusion of the cases alluded to. I think it would eventually appear that it is better, nay, that it is fiscally and economically preferable to deposit a brain-sick man in a hospital for the insane, where he may be *cured* as well as kept out of the way of harm to himself or others, than to allow him to remain at large till he has committed some crime

which will cause him in one case to be maintained at the public expense as a convict or prisoner for life, or in another to be executed as a doubtful criminal."

Dr. Symonds thus concludes his Essay:—

"In conclusion, and to gather up the more important practical points of this paper. It will be our duty to inquire in any case: 1. As to delusions, whether they were of so gross a nature as in themselves to argue a diseased state of the understanding; or whether, though of an insulated nature, and not involving the whole mind, they had a direct bearing on the crime; or whether they were mixed up with morbid emotions and sentiments. 2. As to cases without manifest delusions, whether the state of the emotions and moral feelings was so perverted, either with reference to the ordinary standard, or with reference to what was the patients's former temper and character, as to indicate a morbid condition, that condition telling in particular on the power of self-control. In distinguishing such cases, it will be a help to view the inordinate emotion in relation to the object which excited it—as in the common cases of revenge, hate, jealousy, and cupidity; and to consider the proportion between the passion and its provocation. 3. As to the impulsive forms of mania, these ought not to be admitted but on the strongest evidence. But luckily, in such cases, the evidence is usually very convincing; or, if not so to the merely legal mind, it is conclusive to those who have any practical acquaintance with the great variety of the forms which mental disorder can assume."

The Number and Ratio of Lunatics and Idiots throughout the World.

(From the 'Census of Ireland for the Year 1861,' presented to both Houses of Parliament by command of Her Majesty. Dublin, 1863.)

Countries.	Census Period.	Time when Census was taken.		Population.			Lunatic.				Idiotic.			
		Years	Months.	Males.	Females.	Total.	Males.	Fem.	Total.	Ratio to Population.	Males.	Females	Total.	Ratio to Population.
Ireland	Every 10 yrs.	1861	April 7	2,837,370	2,961,597	5,798,967	3,500	3,565	7,065	1 in 821	3341	3192	7,033	1 in 825
England and Wales	,, ,, ,,	,,	ditto.	9,776,259	10,289,965	20,066,224	11,249	13,096	24,345	,, 824	—	—	—	—
Newfoundland	,, ,, ,,	1857	May 22	64,268	58,370	122,638	50	38	88	,, 1394	55	33	88	,, 1394
Nova Scotia	,, ,, ,,	1861	March 30	165,580	165,273	330,857	166	174	340	,, 973	178	139	317	,, 1044
Pr. Edward Island	,, 7 ,,	,,	May & June	40,880	39,977	80,857	—	—	148	,, 546	—	—	—	—
States of America	,, 10 ,,	1860	June 1	16,086,059	15,359,021	31,445,080	—	—	23,999	,, 1310	—	—	18,865	,, 1667
France	,, 5 ,,	1856	Apr. to June	17,857,439	18,155,230	36,012,669	—	—	35,031	,, 1028	—	—	25,259	,, 1426
Savoy	,, 4 ,,	1861	Apr. & May	269,628	272,907	542,535	143	167	310	,, 1750	1100	917	2,017	,, 269
Belgium	,, 10 ,,	1856	Dec. 31	2,271,783	2,257,777	4,529,560	2,019	1,998	4,017	,, 1128	1370	850	2,220	,, 2040
Holland	,, ,, ,,	1859	ditto	1,628,927	1,680,042	3,308,969	1,038	1,101	2,139	,, 1547	—	—	—	—
Hanover	,, 3 ,,	1861	December	943,559	944,489	1,888,048	1,591	1,493	3,084	,, 612	—	—	—	—
Prussia	,, ,, ,,	1858	Dec. 1	8,837,012	8,902,901	17,739,913	—	—	—	—	—	—	—	—
Saxony	,, ,, ,,	1861	Dec. 3	1,088,933	1,136,307	2,225,240	—	—	1,559	,, 1427	—	—	4,540	,, 490
Bavaria	,, ,, ,,	,,	December	2,314,528	2,375,309	4,689,837	2,576	2,323	4,899	,, 957	—	—	—	—
Wurtemberg	,, ,, ,,	1861	Dec. 3	830,192	890,516	1,720,708	690	648	1,338	,, 1286	1283	1382	2,665	,, 646
Hesse-Darmstadt	,, ,, ,,	,,	ditto	424,202	432,705	856,907	—	—	—	—	—	—	—	—
Oldenburgh	,, — ,,	1855	ditto	143,467	143,696	287,163	446	568	954	,, 301	—	—	—	—
Denmark	,, 5 ,,	1860	Feb. 1	1,296,829	1,308,195	2,605,024	2,543	2,592	5,135	,, 507	—	—	—	—
Sweden	,, ,, ,,	1855	Dec. 31	1,765,114	1,875,897	3,641,011	1,898	1,995	3,893	,, 935	—	—	—	—
Norway	,, 10 ,,	,,	ditto	729,905	760,142	1,490,047	619	710	1,329	,, 1121	1823	1919	3,742	,, 398
Piedmont	,, ,, ,,	1858	ditto	2,524,812	2,517,041	5,041,853	—	—	1,750	,, 2881	—	—	—	—
				71,896,750	72,527,357	144,424,107	28,528	30,408	121423	1 in 1036	9650	8432	66,746	1 in 1261

Remarks on the Number of Lunatics and Idiots in Ireland.

"For Ireland the proportion of lunatics is, according to the present census returns, one in every 821 of the population, while, by the calculations made in 1851, it was only one in 1291; but, as already stated, we believe the returns for that period were somewhat deficient. Compared with other countries in Europe and America, we learn, on referring to the above table, that Ireland occupies, together with Nova Scotia, Sweden, and Bavaria, a medium proportion between the high rate of lunacy in Oldenburg, Prince Edward Island, and Denmark, the average of which countries is one in 477 of the population, and the proportion of those of Piedmont, Savoy, Holland, and Saxony, where the average ratio is one in every 1931. In Prussia and Hesse-Darmstadt there are no statistical returns of lunacy, but in the nineteen other countries, from which we have procured the information respecting lunatics afforded by that table,—with a total population of no less than 125,827,287, and embracing as great a variety of climate, geographical extent, ethnological character of race, diversity of occupation and social and moral condition, as it is at the present day possible to obtain,—we find that the number of the insane was 121,423, or one in every 1036 of the people of these countries that afforded returns of this class; and that the sexes were in the ratio of 100 males to 106·59 females.

"The table shows a return for Ireland of 7033 idiots, or 2127 more than was presented in 1851: the sexes on the present occasion being in the ratio of 100 males to 83·10 females. Of the total number, 5675 idiots, 3213 males and 2462 females were either wanderers, mendicants, or under the care of their friends. In 1851 there were 3562 idiots or imbeciles at large, so that there is an increased return of as many as 2113 of this afflicted class of the community compared with our former report. In asylums there were only 403 idiots on the 7th April, 1861; in prisons but 21, and in workhouses 934, instead of 1129, the amount afforded in 1851.

"The proportion of idiots to the population at large is, according to the present Census, one in 825, or almost identical with that of lunatics; but, in examining the distribution of this class, we observe some remarkable differences, especially in the cities of Kilkenny, Cork, and Limerick, where, while the proportion of lunacy is high, that of idiocy is very low.

"Of the twenty-one countries of which the vital statistics are given in the above table, only ten have afforded returns of idiocy; in these, with a population of 84,218,301, the proportion of idiots to the population is one in every 1262, and ranges from one in 269 in Savoy, to one in 2040 in Belgium."—*Ibid.*

On Fatty Degeneration in Insanity. By Kenneth M'Leod, M.D. Edin.; Assistant Medical Officer of the Durham Lunatic Asylum.

('Transactions of Northumberland and Durham Medical Society.')

Dr. Kenneth M'Leod commenced his paper by an exordium on the theories of vitality and nutrition expounded by his teacher, Professor Laycock, and proceeds to introduce his subject with the following propositions:

"I. The most recent and correct conception of nutrition consists in the notion of the definite units of which the body is composed—each according to endowment and relations, selecting and abstracting material requisite for its teleorganic changes ('deriving from the vessels nearest them, in accordance with their several special requirements, certain quantities of material,' Virchow). This view is strongly set out by Professor Virchow, reiterated throughout his work on cellular pathology, and specially treated of in Lectures IV and V.

"II. Certain relations and adaptations, and consequently certain forces, are necessary in order that these changes may occur properly, being always changes to a special end, according to structure and adapted relation.

"III. Some of these relations are mere relations of simple and definite contiguity, and when these are interrupted and the unit isolated, its proper changes cease, it dies quoad the organism, and becomes adapted to new conditions and amenable to the operation of new forces.

"IV. Other relations are established by means of the nervous system, which communicates to each unit and organ the force necessary to the proper teleorganic change in harmonious relation. When this is denied or abolished, the vitality of the unit is equally impaired, modified, or abolished. This proposition has been established by innumerable experiments.

"V. The integrity and healthy action of the higher portions of the nervous system is necessary, not only for the accomplishment of those ends to which its constitution and changes seem specially adapted and constructed, but also to the proper action and nutrition of all those unities which it unifies, embraces, harmonizes, and co-ordinates. When, therefore, the structure and functions of these centres, in accomplishing the adaptive designs of the organism, are healthy and unimpaired, the structure and functions of the included or subordinate units will be also healthy, and *vice versa*.

"This proposition I enunciate with confidence, and can admit of no modification or reservation. It contains the essence of the pathological doctrines which I advocate, and the proper place and function of that department of medicine which I cultivate.

"I may here also deprecate the futility and prejudice to practical science of considering the function of the brain to be any other than a teleorganic change of material, or a change to end according to the laws of life and existence; mental manifestations to be other than a consequence of these changes, or of attributing any thing which we cannot easily explain otherwise to an immaterial principle, or 'the mind,' assumed as a hypothesis for the occasion, and entitled to no other use than a convenient formula for expression."

Dr. M'Leod then asks the question, Does functional derangement or structural disease of the hemispherical ganglia influence the nutrition of the body, how and to what extent? In reply he refers to a table (not given) of the post-mortem appearances in 78 cases of various forms of insanity, and with reference to the particular subject of this paper observes:

"*The fatty degeneration*, to some degree or extent, I found in every case examined, involving the organs in the following succession: liver most frequently, kidney next, then heart, muscular system, brain, and lungs. I should not certainly have anticipated such a result, but it is no less certain than important and striking, that in *every case* this degeneration did, to a greater or lesser extent, in one or several organs or tissues exist. Of its degrees I have found every grade, and in the case of each organ I have attached in my table a number, one to ten, to signify that. The higher numbers are decidedly in the majority, in some cases many organs were involved in a very high degree, in others one was more especially affected;

while in most cases it co-existed with some other form of degeneration, and in a few constituted the only pathological change. Such being the extent and degree to which this terrible disintegrating process prevailed, a few considerations as to its character will not be misplaced.

"I. As to *causation*, its occurrence is generally attributed to impaired vitality of a part, which is really next to saying nothing; but this at any rate is true, that when a particular unit, cell, or fibre, or organ does not, from whatever special cause, perform its proper function, and in doing so undergo its proper change, then it is prone to assume this degeneration or necrobiotic change, to become in reality dead to the organism, when its active operation is not required. When, therefore, its adapted relation to the organ is interfered with or abolished, then it degenerates. This statement is imperatively supported by the fact that when units or organs are no longer required to fulfil the designs of the organism they become fatty. The thymus gland is a notable instance, and the uterus after parturition another beautiful example. In pathology instances abound.

"Unused muscles in cases of anchylosis, and unexercised muscles in cases of paralysis, degenerate. In inflammation, cancer, and tubercle, a proliferation of cells takes place, and as they get more and more out of relation with the organism, fatty degeneration and disintegration ensues. The same is true of morbid growths. When, therefore, the co-ordinating nerve centres are deranged and diseased, and each unit of the body is thus out of adapted relation with the rest, and fails to receive its proper stimulus to adapted activity, is it extraordinary that, as Virchow phrases it, it should become a prey to chemical forces, and the subject of abnormal and degenerate change?

"II. As to its pathological nature and significance it is—

"1. Of simpler chemical constitution than any of the tissues it substitutes—a degradation in the scale of complexity.

"2. It is of simpler morphological character—a drop in capsule.

"3. It reduces complex and different tissues to this simple and similar form, abolishing structural distinctions and peculiarities, impairing and destroying function, and forming a stepping-stone to thorough abolition of both. It is perhaps the most typical and disastrous of the necrobiotic processes.

"4. It is essentially a disease of units—a histolysis of histological elements, and its true character can only be gained from a careful examination of microscopic elements in their various relations.

"5. Being a pathological process exactly similar to some physiological processes, it illustrates forcibly the great law in pathology, that morbid processes are really so only in respect of the relation they hold to the organism, so that one process which in certain relations is normal is in others abnormal and a disease.

"III. As to its results, they are very easily stated—death of the organism; first partial, then general.

"I think I have sufficiently demonstrated the fact that in insanity one great truth, perhaps the great and practical truth, is the tendency to imperfect nutrition and degeneration as an invariable concomitant and necessary consequence. The importance of using every endeavour to promote by hygienic, dietetic, and medicinal means, the nutrition of the body, becomes very apparent and imperative. I assert this most emphatically, because means prejudicial thereto—blistering, depletion, purging, starving, mercurials, antimonials, &c.—are still too often employed, and with the worst possible effect. It is a fact of daily experience besides, that the free and judicious exhibition of stimulants and nutrients are the principal agents in bringing about the recovery of the insane.

"We sometimes admit thin, pallid wretches, with large blister marks on

nape of neck, leech bites on temple, red line on gums, whom we have to ply with wine, beef tea, and cod liver oil and iron, and we invariably find that as the flush of health again mantles the cheek, cerebral action becomes more healthy, and sanity returns. Of course other medicinal and moral means are employed: drugs, such as hydrocyanic acid, to restrain the excessive and deranged brain-action, and moral means, to induce conduct and thought more in adaptation with circumstances; but the most efficient and powerful remedial agent is undoubtedly—NUTRITION."

On the Home Treatment of the Earlier Stages of Insanity. By GEORGE ROBINSON, M.D., F.R.C.P.

('The Lancet,' January 30.)

"IN considering, writes Dr. Robinson, the *general management* of insane persons treated at home it is desirable to keep in view two great principles —that the authority of the medical practitioner is here limited to *recommendations* as to the measures to be adopted for the patient's welfare and security, those measures having the full sanction and formal consent of the relatives; and that the great object of all special arrangements is to assimilate as far as practicable, in essential points, the conditions of an ordinary dwelling to those present in a modern institution for the reception of the insane. Of course there are many curative resources in a large asylum which cannot be extemporised or imitated in a private house; but the tendency of late years to invest the former with the cheerfulness and home comforts of the latter diminishes, in some degrees the difficulty of the task. And the same general therapeutic principles, the neglect of which has hitherto been the great opprobrium of all attempts at the home treatment of insanity, are, of course, equally applicable everywhere.

In the treatment of the earlier stages of insanity, therefore, as in purely bodily disease, attention to the hygienic conditions present, and to all those varied circumstances which influence the tenacity of life and the general comfort and well-being of the patient, is of at least equal importance with the medical agencies employed. I shall, therefore, very briefly notice, *seriatim* some of the more important of those therapeutic adjuncts.

The choice and arrangements of the *apartments* used by the patient deserve special attention, otherwise much of the benefit of medical treatment may be lost. As a general rule, it is desirable to have at least two rooms devoted to this particular purpose, and both should be selected with the view of ensuring, as far as possible, cheerfulness, quiet, warmth, and above all, perfect *ventilation.* The vitiated state of the secretions connected with the impaired bodily health always present in these cases, and the frequent tendency of insane persons to disregard all considerations of personal cleanliness, render this latter point one of paramount importance. The regulation of the *temperature* must also be attended to. In acute mania excessive heat is objectionable, and thus we often observe during the height of summer an unusual liability to cerebral excitement in persons of unsound mind. Whereas in melancholia the circulation is languid and the extremities are cold, so that greater warmth is required, and the heat of the rooms should be not much below 70°. In puerperal mania, a moderate temperature, and, if of recent occurrence, the avoidance of currents of cold air, or coldness of the feet, are the chief points to be observed in this respect.

The furniture should be as simple as is consistent with comfort; all loose dangerous articles and valuable ornaments being removed, large easy

chairs being substituted for common ones, which are more easily used as weapons, and all facilities for suicide by suspension being carefully guarded against. The windows should open, but only to a limited extent, so as not to allow the patient to pass through them. In some cases where there has been great violence of conduct, and the attendants are not to be entirely depended on, the lower part of the window may be partially boarded over, or have a shutter drawn across it, to prevent the patient from thrusting the hands through the glass. I have known dangerous cuts produced in this way; and, as the bodily health in such cases is often bad, erysipelas and pyæmia are apt to follow. In the bedroom, curtains should be avoided, and a low iron bedstead is to be preferred. The bed and pillows are best made of horse-hair; but where the patient's habits are dirty, a large mattress filled with straw or other cheap material, which can be changed every day, is most suitable. In certain cases, as of extreme debility, maniacal excitement, or intensely suicidal tendency, a padded room may be extemporised by covering the floor with common straw mattresses, and, if requisite, placing others against the lower part of the walls. In a room so arranged, the patient, instead of being strapped down in bed, which is sometimes practised to an extent dangerous to life, may be allowed the free use of his limbs, and will then often become comparatively calm."

On the Action of the Bromide of Potassium in inducing Sleep.

By Henry Behrend, L.R.C.P.E.

('The Lancet,' May 28.)

"Dr. Garrod," (writes Mr. Behrend), "in his recent lectures on the British Pharmacopœia, has mentioned that the bromide of potassium, when administered in large doses, produces drowsiness. I do not know whether the profession at large is aware of this fact, but as I have never previously seen any record of it (being indebted for my first information on the subject to the statements of Dr. Brown-Séquard), and as I have during the past twelvemonth had ample practical experience of its use, the following cases are submitted to demonstrate the value of the remedy in the treatment of insomnia and restlessness, accompanied by and dependent on nervous excitement and irritability. If its employment upon a larger scale should confirm the results at which I have arrived (and of which Dr. Brown-Séquard has repeatedly assured me) its importance cannot well be over-rated; as it is better borne than opium or any of its preparations, is free from the unpleasant effects—such as headache, constipation, &c.—produced by that drug, and the system does not so rapidly become accustomed to it as to require its administration in constantly increasing doses."

Mr. Behrend relates two cases of nervous sleeplessness, in which he successfully prescribed the bromide of potassium in doses of twenty-five grains three times a day before meals.

"Other instances," he adds, "might be adduced of a similar character, but the above will serve as a type of the cases in which the administration of the bromide of potassium appears likely to be most useful—those, namely, in which the nervous element preponderates; and it is in these that, for the most part, opium and its preparations fail to produce any good result, and are not well borne by the system, frequently even adding to the excitement and irritability under which the patient labours. There can be no doubt, moreover, that cases of this ty pe are unfortunately on the increase, since the highly artificial mode of life of the present day, especially in large cities,

perpetually stimulates the nervous energy to the highest possible degree; so that even in the strongest constitutions the mental equilibrium is but too often shaken, and the weaker ones yield speedily to the excessive demands made upon them. The dose of the bromide recommended may appear large, but it is in all cases easily tolerated, and produces neither disagreeable nor toxical effects: the appetite is not interfered with, the alvine evacuations are regular and copious, and irritability of the bladder—a frequent accompaniment of restless nights—is greatly relieved. The only unpleasant result I have witnessed has been slight and temporary headache; and Dr. Brown-Séquard has informed me that he has given it with perfect safety for several successive weeks in drachm doses. Of the temporary paralysis, and weakening of sexual desire and power, which are said to follow upon the administration of large doses of the bromide of potassium, I have seen nothing. I should wish to try this remedy in the treatment of the restlessness of delirium tremens, but have not had the opportunity since I have become acquainted with its action upon the nervous system."

A Case of Ganglionic Epilepsy cured by Belladonna. By J. S. Ramskill, M.D., Physician to the Hospital for Epilepsy and Paralysis.

('Medical Times and Gazette,' May 28.)

Dr. Ramskill, in a course of clinical lectures on epilepsy, now publishing in the 'Medical Times,' gives the following illustration of the curative effects of Belladonna in the ordinary form of ganglionic epilepsy.

"Amongst the out-patients to-day was one (J. H.) whom you have seen; and we suppose him cured. His history is as follows:—

J. H., æt. 19, apprentice to carpenter; had fits five years. Had no fits in childhood; has five brothers. All the family healthy; no history of syphilis. First fit occurred after a hard day's work, having gone without dinner; it lasted half an hour, was followed by stupor of two hours' duration. A second fit happened in ten days, after a feeling of exhaustion produced by lifting timber. Afterwards, the attacks came at variable intervals, the longest being three weeks apart. They never happen in bed; usually in the after part of the day; convulsion equal; no scream; does not bite his tongue. Has no petit mal. Memory defective, especially latterly; attention good; answers questions with some anxiety and effort. Well nourished as to bulk; fair and tall; says he is physically strong. Pupils large. Has always cold feet and hands. He denies the practice of masturbation. Says he knows when a fit is about him by a sinking feeling in the belly, and his back feels weak; is always more or less flatulent, but most so before a fit; he feels a great want and a desire to eat, but cannot eat much. He shivers once or twice, then falls without further warning. A spoonful of brandy without water will often prevent the fit, then he has always loud eructation of wind. Bowels not relieved for three days together, and often not then without the aid of medicine.

"July 3.—Ordered extract of belladonna, gr. $\frac{1}{4}$; cod-liver oil, ℥j., with four drops of phosporized oil of the Prussian Pharmacopœia three times daily. To have a hot pediluvium every night; and a hot shower-bath, followed immediately by a free sprinkling of cold water, every morning. To apply a strong liniment of turpentine to the epigastric region about the time of the fits.

"10th.—The report is:—One fit of slighter character; all other symp-

toms better. To continue the same treatment, but increase the belladonna to ⅓rd of a grain.

"23rd—No fit. Flatulence very troublesome at times; it is not so confined to the upper part of the abdomen. Better after meals. Bowels relaxed. To continue the same treatment.

"On January 7th he reported having had another fit; he had been well until that time, and he attributes this attack to having left off medicine for three weeks, and to excessive eating and drinking at Christmas time. We continued the same treatment, and from that period to the present (July 10) he has remained well. The flatulence, sinking, and all other symptoms have entirely disappeared, and he looks in perfect health."

Remarks.—"I call this class of cases (continues Dr. Ramskill) Ganglionic Epilepsy, and I believe the symptoms complained of arise from a disturbed condition of the solar plexus and the ganglionic system of the abdomen generally. It may be from a failure of action, or from a disturbed or intermittent action of the solar plexus and its dependent neighbouring ganglia. I believe the morbid action starting in the ganglion system propagates itself, by way of the sphlanchic nerves, to the cerebro-spinal centre, and a fit follows. But what I wish most particularly to enforce just now is, that this disorder of the ganglionic system is a disease *per se*, often existing alone, and antecedent to any epileptic attack; in fact, that the epilepsy is an accident which issues from, and follows, it, and so is fundamentally different from epilepsy arising from disease in the cerebro-spinal centre, or from a distinct cause of irritation situate in any other part of the body. This ganglionic affection is as much related to hysteria, tetanus, catalepsy, and perhaps, intermittent fever and cholera, as to epilepsy; and when I meet with such a case I think it wise to ignore the convulsive attacks for a time, if they be infrequent, or look upon them only as an index of our progress in restoring power to the great centre. I should ignore the attacks altogether were it not for the fact, that each attack may, by causing congested blood-vessels, by effusions, by mechanically weakening delicate brain-structure, predispose to other attacks, or by dilating the minute and weakened vessels on the medulla oblongata, cause permanent mischief. On interrogating such patients, you will generally find a history of overwork, of underfeeding, of mental anxiety, of grief; amongst the female sex of exhausting discharges, as menorrhagia, of many miscarriages, of numerous children, of prolonged lactation. Indeed, many cases arising from the last cause which we meet with in general hospitals, possess every symptom that epileptics exhibit, even to the clonic convulsive action of the muscles, minus only the general convulsion and loss of consciousness. The ganglionic system, we have shown, presides over the circulation in the brain; it enters largely into the composition of its substance, and is abundantly distributed to all the viscera in the body. But its great centre is in the abdomen, and failure of power in the central ganglion here, must be followed by failure in some degree, everywhere. What particular nosological disease follows must depend on predisposition, hereditary influence, or special debility of particular centres or parts of body. Conversely, too, disease of the cerebro-spinal centre, or of brain proper, must influence the ganglionic system, although in a very much smaller degree, and in a more limited area; for, in the one case we have an affection of the great ganglionic plexuses in the abdomen, in the other only a local mischief, since a large amount of cerebral disease is hardly consistent with life. I look upon the solar and neighbouring plexuses, and the ganglia down the spine, as not only generators, but reservoirs of power. A blow on the epigastrium kills by paralysing the solar plexus: prolonged and unaccustomed exertion takes away all appetite, by exhausting the centre, as many of you must have experienced after walking all day on a first

of September. Violent emotion causes fainting, acting in the same way by paralysing the great centre; fright gives rise to a very large percentage of our epileptics; but the fright does not act so immediately, causing the fit; the ganglia are only disordered functionally at first; sometimes days or weeks of uneasiness in the epigastrium, sinking, and mental uneasiness precede the convulsion. Chorea, also, acknowledges fright as its chief cause. Neither is the effect of fear shown in at once producing chorea. A disturbance of nutrition precedes it, and the regulation of nutrition is the great function of the ganglionic system. Given, then, a case of ganglionic epilepsy, our chief and first business is to restore power to the great nervous centre. How this was accomplished in the patient J. H., is mentioned in the short history of his case."

PART IV.—NOTES AND NEWS.

The Charity Commissioners and Bethlehem Hospital.

(See 'Journal of Mental Science,' January, 1864.)

"On the 9th of April, Mr. F. O. Martin, one of the Inspectors of Charities, resumed his inquiry into Bethlehem Hospital in the Court Room of Bridewell, New Bridge Street. Amongst those present were the Right Hon. the Earl of Shaftesbury, Mr. Alderman Copeland, M.P., Mr. Gaskell (Commissioner in Lunacy), Mr. Johnson, Mr. Baggallay (Treasurer of St. Thomas's Hospital), Deputy Obbard, Dr. Webster, Dr. Hood, Dr. Wood, and others. The special object of this day's investigation was to ascertain the desirability or otherwise of removing the hospital, and erecting one elsewhere in the country. This question had arisen from the fact that the Lunacy Commissioners, acting upon a report of Dr. Conolly, had strongly urged upon the governors the necessity for removing, upon the ground that the locality was unhealthy, that the quantity of ground was insufficient, and that the construction and arrangement of the building were unsuitable to the purposes of the institution. Sir George Grey had also written a letter to the governors recommending the removal.

The Inspector, in opening the proceedings, said he had no charge to bring against the governors, and the only question for them to consider was, whether with the means in their hands they could not extend the benefits of the charity. The Lunacy Commissioners were of opinion that the hospital should be removed to a more healthy locality in the country; but upon that question there was some difference of opinion. He had recently visited the new county asylum at Brentwood, which pleased him much. There was an entire absence of anything like a prison appearance or restraint, and he believed that the governors could build an hospital after that style to accommodate their requirements for about £60,000, including every requisite.

Mr. Alderman Copeland had had some experience in these matters, and he found that £60,000 would fall very far short of the sum necessary to erect such a building. He observed further that the Commissioners in Lunacy,

having recommended to Sir George Grey that the hospital should be removed from its present site to the country for the purpose of making room for St. Thomas's Hospital, the governors were prepared with evidence in favour of the present site.

The Treasurer (Mr. Johnson) also said that the question of removal had arisen in consequence of St. Thomas's Hospital asking for the Bill, they having been been removed for railway purposes. The governors of Bethlehem Hospital replied that St. Thomas's should have the site provided that they erected a new Bethlehem on an eligible situation, and in every way equal to the present. The governors of St. Thomas's answered, "No; let the matter go by arbitration," which the governors of Bethlehem Hospital declined.

Mr. Lawrence, who was for many years officially connected with Bethlehem Hospital, put in a very long statement, in which he replies to all the objections made by the Lunacy Commissioners, whose object, he declared, was to take down one of the handsomest and best constructed hospitals in London, and a structure that was perfectly fitted for all the purposes of the institution. The present site of Bethlehem was perfectly suited in healthiness either for a lunatic or general hospital; the grounds were very extensive, and the arrangements all that could be desired. Many distinguished foreign physicians admitted that it was the best institution of the kind, and in several respects superior to those in other countries.

Dr. Webster, on the contrary, strongly advocated the removal of Bethlehem to some suburban rural situation, and said that now, in consequence of much additional evidence which he had since obtained, his opinions on this point had become even more confirmed than when the subject was previously discussed by governors. Indeed, on no question was the whole profession more unanimous; and he could say confidently that, throughout Europe, continental governments, medical authorities, and municipal bodies were all but unanimously favorable to placing lunatic asylums in country districts, away from towns, and not among crowded populations. From St. Petersburg to Gibraltar, and from Hungary to Britain, such convictions seemed universal, and were being actively carried into operation. Amongst numerous recent instances, he said, the French Legislature had voted ten million francs—£400,000—to construct new asylums near Paris, instead of the Salpêtrière; while the Italian Government intended to replace the Sindavra Asylum at Milan by a more modern establishment. Again, the old hospital at Glasgow had been removed to Gant-Navel—one of the finest of rural localities; and the most ancient chartered asylum in Scotland—namely, that of Montrose—was now at Sunnyside, a few miles in the country. Dr. Webster next referred to the continually decreasing number of admissions into Bethlehem during recent years. Thus in the five years ending December 1847, 1592 curable patients were received, and 1420, up to December, 1852. In the next five years they fell to 982; while at the end of December, 1862, the total had decreased to 888, or about half the number received only twenty years before. Besides this feature, the proportion of cures lately reported at Bethlehem ranged only a little beyond fifty per cent., in contradistinction to the seventy-two per hundred admissions as then stated by the Inspector of Charities to have been effected at Brentwood, the patients in both establishments being all classed as "curables." This marked discrepancy in the ratio of recoveries, and the late diminished number of admissions at Bethlehem, however remarkable, had not been explained. After various other observations, Dr. Webster concluded by saying he yet hoped that Bethlehem would be removed to the country, more especially seeing the London Corporation had just built a new asylum near Dartford for the insane poor of the city, which was a good example to imitate.

Dr. Hood, who had had ten years' experience in connection with the hospital, and *Dr. Wood*, of St. Luke's, and formerly of Bethlehem, both spoke warmly in favour of the present site; some of the chief arguments used by these physicians being, the great convenience afforded to relatives visiting the insane residents; its easy access for patients, who could, besides, more readily promenade the metropolitan streets when approaching convalescence, or when such amusement was deemed advisable; and lastly, the acknowledged salubrity of the present hospital.

Lord Shaftesbury next expressed his continued adhesion to the same decided opinions he had enunciated in the House of Lords last year respecting the important advantages of constructing a new Bethlehem Hospital in a rural site near London, and in which were comprised various improvements adverted to on that occasion.

Afterwards *Mr. Gaskell* gave some statistics as to the percentage of cases in town and country asylums, and he especially mentioned that in English country hospitals analogous to Bethlehem, the ratio of cures there reported during late years was larger than at the metropolitan institution in question. He also spoke in favour of moving Bethlehem to a rural situation, and believed, amongst other benefits often derived from breathing pure air and residing in the country, the inmates' bodily health being thereby more likely to improve, their mental malady would hence become simultaneously ameliorated. Mr. Gaskell likewise entirely concurred in Dr. Webster's remarks regarding foreign governments, as also other authorities, preferring rural sites for building lunatic institutions, and added that in England the same system is now being adopted; as, for example, at Cheadle, to which locality the Manchester Asylum has been removed, and near Gloucester a similar proceeding would be soon followed.

After a lengthened conversation on other topics bearing upon the question at issue, and in reference to resident pupils,

Mr. Martin asked whether it was possible to have an institution in the country in connection with Bethlehem Hospital?

To this question, *Mr. Johnson*, the treasurer, replied that they had already done so to a small extent by sending inmates to the seaside; and a recent report stated that during the summer months eight patients visited the coast for some weeks, in company with their nurses and attendants, which produced a marked improvement in their physical health.

Some additional remarks, both in favour of the present site and of the removal of the hospital, having been made, a vote of thanks was passed to the chairman, and the meeting adjourned *sine die*, unless another conference should be deemed requisite to obtain further information.—'The Lancet,' April 16.

[*Our opinion on the question of the removal of Bethlehem Hospital was fully stated and discussed at the last annual meeting of this Association* (*see* Journal of Mental Science, *October*, 1863). *We have nothing to add and nothing to retract from that opinion. This Association unanimously endorsed the same, passing, it will be remembered, the following resolution*:—"THAT THE MEMBERS OF THE ASSOCIATION HAVE REGARDED WITH ESPECIAL INTEREST THE QUESTION OF THE REMOVAL OF BETHLEHEM HOSPITAL TO A SITE MORE ADAPTED TO THE PRESENT STATE OF PSYCHOLOGICAL AND SANITARY SCIENCE, AND AFFORDING ENLARGED MEANS OF RELIEF TO THE INSANE OF THE MIDDLE AND EDUCATED CLASSES IN IMPOVERISHED CIRCUMSTANCES, AND THAT THEY DESIRE TO EXPRESS THEIR CONCURRENCE IN THE REPRESENTATIONS ALREADY MADE TO THE GOVERNORS OF THAT IMPORTANT INSTITUTION BY THE COMMISSIONERS IN LUNACY."

The Editor of the 'British Medical Journal thus meets the arguments here brought forward in favour of a town site for a lunatic asylum:—"*Mr. Lawrence*

(*he writes*) *argued that the interference of Sir George Grey was repugnant to the governors of Bethlehem; that the present site was open and well suited for a lunatic asylum* or a hospital. *Dr. Hood concurred, and asked, how could the patients be taken ten or twenty miles into the country? Dr. Wood said that the building was handsome, and the hospital healthy, and the grounds sufficiently large. There is, we take it, no need for us to refute such statements as these. They really amount to absolutely nothing; and, in fact, indicate pretty clearly the weakness of the cause in whose defence they are adduced. The only really valid argument which can be suggested in defence of Bethlehem Hospital remaining where it is, is simply the fact of its existence there—a money question. It does, we confess, surprise us to find gentlemen deeply conversant with lunacy bold enough to affirm that lunatics confined, immured between high walls, with no rural occupations, with none of the happy employments of life which are open to them in the country, are in as good a position as they might be. They seem to have argued as if the mental and bodily occupation of these wretched creatures were a thing of no account. The site is healthy; what more can you desire? How are the lunatics to be got to a hospital ten miles from London? asked Dr. Hood. And said Dr. Wood, the patients at Bethlehem have more space per head than have the patients at Hanwell with their twenty-eight acres and a farm of seventy-seven acres; therefore, the patients are better off and happier at Bethlehem, immured within its lugubrious walls, than they are whilst merrily planting cabbages at Hanwell!*"]

Dr. Richardson's Report on the Stafford County Lunatic Asylum, and on the Coton Hill Lunatic Hospital.

(From the "Medical History of England," by Dr. B. W, Richardson. 'Medical Times and Gazette,' March 12, 1864.)

"Whatever other disadvantages Stafford may labour under, there are very few towns that have so admirably conducted an asylum. The County Lunatic Asylum, situated about a quarter of a mile from the town itself, affords accommodation for 500 inmates. It is a noble building, and is as perfect in its internal arrangements as in its external appearance. Through the kindness of Dr. Bower, the superintendent-in-chief, I was enabled to make a careful inspection of every part of the asylum, and was supplied with numerous particulars of great interest to the profession at large.

Ventilation—Haden's System.

Not to dwell on the arrangements of the various wards, I may begin by referring to the system of ventilation. This is artificial, and is framed on the plan known as "Haden's." The air is forced in from the lower part of the building by means of steam, and steam is allowed to mix with the air on its entrance. Thus charged with moisture, the air is conveyed through iron shafts to all parts of the building, and enters into the wards and rooms at the *upper part* near to the ceiling. It escapes by a series of openings into shafts of similar size and construction at the *lower part* of the wards or rooms, and is drawn into a common shaft, situated at the upper portion of the building, by means of a fire shaft, so as to ensure for it a constant current and exit. The system works well, and I note the fact specially because it is almost the only plan of artificial ventilation which can be seen in *effective* action. In principle this ventilation is analogous to that known in Paris as "Duvoir's method." The differences are two in number. In Duvoir's

plan, instead of the fire shaft in the upper part of the building, there is an immense cistern of hot water, which causes sufficient radiation of heat to produce draught, and at the same time affords a current of hot water, which, passing downwards through pipes, gives warmth to the various apartments. Warming is in this way combined with ventilation, a combination that is not attempted in Haden's system, the warmth of the establishment being provided for by the open fire-grate. Again, by Duvoir's plan the air is not admitted with steam, while in Haden's plan steam enters with the air. I was anxious to learn whether any of those evils common to the German method of driving heated air through iron pipes, and to the method of heating with iron stoves, were presented; I allude to the mischiefs arising from extreme dryness of the air and from the diffusion of minute particles of iron. On inquiry, I found that these evils were not present, and certainly it would be impossible to imagine in any room a purer and less objectionable atmosphere than that in the wards of the Stafford County Asylum. I think we may safely conclude that the English system is the best, and perhaps we may attribute its success to the admission of water vapour with the air, and to the fact that warming is effected by the open fire-grate. The object of letting in the air at the upper part of the rooms and of letting it escape at the lower, is to allow the current of air, in passing, to sweep away with it all offensive matters, and to keep pure that portion of air in which the patient is placed.

Baths.

There is an improvement in the Stafford County Asylum in the construction of baths. These are made of cast-iron instead of wood, tin, or earthenware. They are painted on their inner surfaces, and are not only very clean, but exceedingly durable. They are extremely economical in the long run, and for large establishments are preferable to the other kinds of bath. The Profession is indebted to Dr. Bower for this improvement.

Beds and Bedsteads.

The *beds* are of horse-hair, and there is a method for changing the webbing which is gaining favour in other asylums, and which might advantageously be introduced into hospitals generally. The webbing, of strong cloth, is not permanently attached to the bedstead, but can be removed altogether, whenever it is dirty or saturated with fluids, and replaced in a few minutes. The webbing is tightened up to any convenient tension by means of screws, which are worked from the outer edge of the bedstead on each side.

Decorative Art.

The asylum is like a palace in respect to its decorations. Real palaces may be immensely more costly, but could hardly be more artistic. Every available space is occupied by some artistic production that is at once pleasing or instructive. Pictures line every wall, flowers are in abundance, and, in some of the larger corridors, doves and other birds and animals are allowed to live in large handsome cages. The mouldings, also, of the walls, the colouring, and the cornices are simple and yet very pretty. In a word, for cleanliness, purity of air, and embellishment, nothing is left to be wished for; and if the inmates who are thus nourished through the senses are not, as Wordsworth puts it—

> "healed and harmonised
> By the benignant touch of love and beauty,"

their malady is confirmed indeed. The governors of the Stafford County

Hospital should step across to the Stafford County Asylum; they might gain a whole forehead of wrinkles for their trouble.

The Asylum Farm—Value of Sewage.

Those of our brethren—and there are not a few of them—who blend the pursuit of agriculture with the art of physic should see the small farm that is connected with the asylum, and which is farmed on model and economical principles by Dr. Bower. The farm, worked to a great extent by the inmates, yields valuable contributions to the house, and they have been greatly increased of late by the utilisation of the sewage. The sewage of the gaol is now also collected in the asylum tank, and is applied, with that from the asylum itself, to the farm. The excretes from 1400 persons are thus utilised. The whole is first received into an immense tank, and is diluted in 1800 parts of water. Thus diluted, it is applied in limited dressings over the land, which, by the way, is all pasture land. Two tons of grass per acre is the produce—an increase double what the land would be worth for grass, if the sewage were not utilised as it is. Dr. Bower is of opinion—and his practical and careful experience is of much value in this matter—that the dilution of the sewage, and the employment of it in moderate quantities, are all-important as means of success. In this point of view his observations tend strongly in favour of the correctness of Mr. Ellis's method for the employment of the sewage of London.

Practice of the Asylum.

In the practice of the asylum non-restraint is now carried out so fully that even seclusion and the use of the padded room are ignored. No patient has been shut up for two years past. The cases admitted are numerous in type; but unusually large numbers of sufferers from insanity and general paralysis are present. Acute mania affords the greatest number of cases; ordinary mania the next largest, and dementia the next still. Instances of puerperal mania are much more frequent than would at first be supposed; no less than fifteen females having been admitted for this complaint in the year 1862 alone. The connection of disease of the body previous to the development of mental disorder is broadly marked. Thus in the year 1862 not more than twenty-eight patients, out of two hundred and twenty-six admitted into the house, were pronounced, on entry, as in "good health and condition." Thirty-one were sufferers from epilepsy, twenty-seven from paralysis, thirty-one from disease of brain, ten from puerperal disease, seven from pulmonary consumption, and fifty-four from general exhaustion. It would be important in all cases to note, as a further addition to Dr. Bower's able examinations of cases on entry, the precise condition of the urine, with special reference to the questions of the elimination of phosphates and of sugar.

The numbers of recoveries that take place are considerable; in the year 1862 they amounted to 62·75 per cent. on the admissions for that year. The mortality is comparatively small. In the year named above, although the infirmaries were filled during the summer months with cases of paralysis and other affections of the brain, the mortality was but 8·19 per cent. on the total number under treatment. Paralysis was the cause of death in more than a fourth of the cases that terminated fatally, while about a fifteenth died from old age—senile decay. The reason for this low mortality is found in the freedom of the establishment from endemic and epidemic disorders. In point of fact, there are no such indices of what can be achieved by perfect sanitary regulations as the great lunatic asylums of

England, and I was much amused once at hearing this fact referred to by an inmate of an asylum. Visiting the asylum at Lincoln a few years ago, I met there a patient who had once been a member of the medical profession, and who, full of talk and nonsense, said now and then a very good thing. Amongst other arguments—for, like one of the heroes of 'Midshipman Easy,' he delighted in the opportunity of undertaking to argue out every point—he insisted on the immense advantages of being insane. "George the Third was a fool, Sir, till he was mad; never had a moment's happiness or peace, Sir, till he was mad. Neither had I. Now, I'm a gentleman, and these folks who work here all run after me, and wait on me, while I look on and think how jolly it is to see what fools they are. I always say they are mad, and I am sane; and I'm right—ain't I, now, eh?" Then, turning to the asylum (for this conversation took place in the grounds), he assumed a profound medical air, cocked up his chin, pursed his mouth, and added, "Then, your cholera, and your smallpox, and fever; we've none of them in our house—they are for the fools outside. Why don't you go mad, and get away from them, and make other people work for you, and be jolly and come here—eh?"

The causes of insanity are carefully investigated at the Stafford Asylum. As each case is entered on the books a rigid inquiry is made as to cause. Alas! for Stafford county, it is not better than its neighbours. Intemperance, poverty and privation, and hereditary predisposition springing from these, are the great producers of its insane population. Year by year the same tale is told. Below we have the return of causes for 1860—an average return:—

Cause of Disorder.

	Males.	*Females.*	*Total.*
Anxiety and grief	3	16	19
Intemperance	42	10	52
Congenital defect	3	3	6
Hereditary predisposition	23	33	56
Poverty and privation	8	12	20
Disease of brain	11	1	12
Blindness, with diseased brain	1	1	2
Scrofula	—	3	3
Other bodily disease	6	16	22
Puerperal disease	—	15	15
Old age	3	3	6
Profligacy and intemperance	—	3	3
Epilepsy	10	7	17
Fright	—	1	1
Injury to spine	1	—	1
Injury to head	1	—	1
Cause not ascertained	8	6	14
	120	130	250

Cases of Singular Interest.

Asylum practice not uncommonly yields cases of peculiar interest, even in surgery. Dr. Bower was good enough to place before me several remarkable illustrations, of which I may note two or three. In one of these cases the patient, a female, æt. 43, retired one morning to a water-closet, after having secreted about her dress a pair of scissors, and before she could be prevented had time deliberately to make an opening into her own

abdomen, draw out some inches of the small intestine, cut the portion drawn out clean off, and throw it away. When Dr. Bower arrived he found two open ends of bowel protruding, and he endeavoured to bring them together by sewing their ends while in apposition. This direct object did not succeed; the open ends of the bowel became adherent to the wound in the walls of the abdomen, and an artificial anus was formed in the median line, midway between the umbilicus and pubes, through which the evacuations of the bowels were discharged. To the surprise of all, this woman recovered without a bad symptom, and some time afterwards she was discharged from the asylum cured of her insanity. Later in her life she was actually one day sent from her native place to the asylum either in charge of, or to fetch home, another patient. At that time she remained in bodily and mental health, suffering no further inconvenience than that from wearing a support, and of having to discharge the contents of the bowels through the artificial opening.

A patient was shown to me on the male side who had lost two fingers—the first and second of his hand—down to the second phalanges. The loss was occasioned, not by an accident, but positively from his having himself bitten the fingers off and eaten them. The operation appears to have been done almost unconsciously, and to have given rise to no pain. The wounds closed well, and the stumps are as perfect as if the amptutations had been conducted on the most improved surgical method.

A third case was that of a man who suffered from sloughing of the scrotum to such an extent that both testicles were exposed, and were for some weeks clearly dissected out, as it were, and pendant. The patient having improved in general health, the sloughing was arrested, reparation set in, and gradually the testes became invested in new tissue, until, at last, they were surrounded by what seemed like a new scrotum. It would have been difficult to discover, when the cure was completed, that new structure had been formed—the scrotum was so natural.

Principles of Treatment.

There is, as I have said, no seclusion nor coercion in the Stafford Asylum. Gentle work, and amusements of various kinds, such as music, dancing, exhibitions, cricket, football, &c., are the means adopted for passing the time. At this moment there is in course of construction a spacious recreation hall, in which the patients will all dine together.

The diet is liberal; I think, however, it is a mistake to weigh it out—a mistake in economy and in feeling.

In the medicinal treatment of the insane, particularly during periods of maniacal excitement, Dr. Bower uses full doses of digitalis with great advantage. This remedy is of special value when there is disease and excitability of the heart. In these cases the digitalis acts like a charm; it produces calm without leading to sopor; it exerts no bad effects on the digestive functions, and it leaves no serious depression behind. Thus, it is far preferable to narcotics in cases for which it is suitable. The cannabis indica has been employed extensively as an anodyne, and occasionally its action is good, but it sometimes fails. On the whole, when opium is not administrable, the cannabis is less certain than hyoscyamus, which, when given boldly, is invaluable in the treatment of mental disease. As an opiate, a watery solution of opium is used in preference to the other forms of the drug.

Dr. Mark Noble Bower is the Resident Medical Officer and Superintendent, and Dr. Robert A. Davis is the Assistant Medical Officer.

THE COTON HILL INSTITUTION FOR THE INSANE.

Near to Stafford is another institution for the insane, called the Coton Hill Institution. This asylum is for the reception of two classes of insane patients, viz.—1st, patients in more or less affluent circumstances who shall contribute, according to the accommodation required, such weekly sum as may be agreed upon; and 2nd, patients in limited circumstances, though not paupers, who shall be received at such reduced rates of payment as the Committee, upon a consideration of their circumstances, may in each case determine; the deficiency being made up out of the surplus moneys received from the patients of the first class beyond their actual cost, assisted by annual subscriptions, donations, and legacies. For every two guineas subscribed annually, subscribers are entitled, during payment, to recommend, subject to the powers reserved to the House Committee, one patient within the year for admission into the second class; donors have the same privilege during life for every twenty guineas.

The medical officers attached to this institution are—a Visiting Physician, who receives a stipend of 100 guineas a year, and a Resident Superintendent. The former office—now, I believe, vacant—has been held until recently by Dr. Wollaston, a relative of the great physicist of that name; the latter is held by Dr. Hewson."

A Voice from Derby to Bedlam.

"With the ostensible object of deprecating the language employed, and the *animus* assumed to be felt, by the authors of a recent pamphlet on the Townley case, the author of 'A Voice from Derby' reopens the question as to the guilt or innocence of the murderer of Miss Goodwin, with the evident intention of vindicating the evidence as to his insanity given at his trial by Dr. Forbes Winslow. The able report to the Home Secretary, which finally decided the fate of Townley, so carefully drawn up by Dr. Bucknill, and endorsed by Dr. Hood, Dr. Meyer, and Dr. Helps, had, as we thought, set at rest for ever the question of Townley's sanity. The convict himself felt the searching force of the examination to which he was last subjected, and anticipated its result. 'They think me sane,' said Townley, as the commissioner left his cell; 'still, it is very hard if they hang me now.' Although there is nothing new in the pleas brought forward by the author of 'A Voice from Derby,' the question as to the insanity of Townley is treated with considerable ability; the manageable facts being dexterously handled, and awkward and damaging ones judiciously left unnoticed. Thus we are referred to the *opinion* of the counsel for the prosecution, that there was no evidence of any premeditation on the part of the prisoner; but the fact of Townley's having three knives upon his person—one a large clasp-knife, newly bought, the instrument with which the murder was committed—is not explained. We cannot say that the 'Voice from Derby' is distinguished by either temper or moderation; and we regret to find in it an attack upon an estimable provincial physician, whose talent and character should have protected him from such language. We cannot see anything in the conduct referred to that justified such language; and certainly the reproach cast upon that gentleman, that he has never been concerned in any of the great lunacy trials, is far from being any disgrace to him. He has at least escaped the imputation that so many have incurred; viz., of merging the medical witness in the paid advocate. The 'Voice' takes great pains to vindicate

the motives as well as the views of Dr. Winslow. But this was surely unnecessary. All that can, in our opinion, be said in the matter, is, that Dr. Winslow made a mistake in diagnosis, as others have done before him, and will do to the end of time."—*British Medical Journal, June* 4.

Professor Laycock on the Medico-legal relations of Insanity, with reference to the Townley case.

"On a former occasion I called attention to the case of Mr. Windham, and showed how faulty the English system of jurisprudence was in cases like his, inasmuch as it made no proper distinction between mental diseases and deficiencies. The question put to the jury was whether Mr. Windham was insane—a highly theoretical question in itself, but wholly inapplicable to his case, inasmuch as the true question was whether he was competent or not to manage his large property. The result of the trial was plain enough from the first. He was found to be not insane, and was left to his own discretion, or rather indiscretion, to do with his property as he pleased, and which he appears to have wholly squandered since the trial. Now, if the true issue had been put to the jury, founded on the scientific distinction between mental diseases and defects, Mr. Windham would have been protected, just as a minor in law is protected, from the evil consequences of his youthful defects in judgments. At the same time I called attention to the case of Clark, a lunatic, who was condemned at Newcastle to be hung, but whose sentence was commuted to penal servitude for life, owing to the most obvious defects in the English principles of jurisprudence in regard to the responsibility of the insane. A similar case has very recently attracted public attention. George Victor Townley was tried at Derby on 11th December last for the murder of a young lady who had been engaged to marry him, but had discarded him for another. He was found guilty, and sentenced to be hung; but the judge (as in Clark's case) immediately communicated to Sir George Grey his doubts whether the sentence should be carried into execution. Two points arose in this case—first, whether Townley was insane at the time he committed the murder? secondly, whether he was insane at the time he was condemned? Dr. Forbes Winslow gave his opinion in the affirmative as to both these questions, and this view was confirmed by other competent observers. Mr. Gisborne, surgeon to the prison; Mr. Harwood, a medical practitioner; four Derbyshire magistrates; and three Commissioners in Lunacy, accustomed to investigate such cases, all concurred in opinion that he was at least not of sound mind when condemned. Execution of sentence was therefore deferred, and the patient was sent to Bethlehem Hospital for the Insane, or Bedlam, as it is popularly termed. Here, however, he was subjected to other examinations by four eminent and experienced practitioners in insanity—namely, Drs. Hood and Bucknill, Chancery Visitors in Lunacy; Dr. Meyer, Medical Superintendent of the Criminal Lunatics' Hospital at Broadmoor; and Dr. Helps, resident physician to Bethlehem Hospital. They also carefully examined the official documents bearing on the case, and arrived unanimously at the conclusion that George Victor Townley was of sound mind. Like Clark, he was then sent to penal servitude for life. It is not surprising that these contradictory opinions expressed in the highest quarters, medically speaking, have caused both controversy and serious reflection. If men so eminently qualified differ, how can less experienced practioners be expected to sign certificates of lunacy which shall not be open to doubt? And how will they fare in courts of law? That much may be said on both sides is proved by the discussions for or against

Townley, as patient or criminal, which have taken place in both medical and non-medical circles. Drs. Robertson and Maudsley, for example, the editors of the 'Journal of Mental Science,' and with ample experience of mental diseases, take up excellent ground on one side; while 'A Voice from Derby to Bedlam,' ably and warmly advocates the other. Why is there this discrepancy? And if such high medical authorities cannot decide, who can? In these remarks I fully concede that to expect unanimity upon all questions of the class to which insanity belongs is futile; a certain amount of difference of opinion will surely arise under any circumstances. Consider how the highest legal authorities in successive discussions in different courts of appeal have been almost equally divided as to the interpretation of the law in the case of the ship Alexandra, and I think we may fairly judge leniently the like differences of medical opinions manifested in even such a case as that of Townley. . . . . .

"It is not a larger experience, however, but a better knowledge of principles that is mainly needed to this end. In the case of Townley the best experience was made available to the public service, yet on one side or the other it was surely wrong. Now, it is always the principles of a science which guide observation and correct experience, and it is therefore the principles of medical psychology which would guide us in this as well as other instances; for our science differs fundamentally from mental philosophy or metaphysics in this, that it seeks to determine what are the morbid changes in the structure and functions of the brain which lead to mental disorder and disease, and how they are caused. It deals practically with the organ, and not with abstract notions as to mind, which never have been, and never can be made available to the practical ends of a science of mind. If Townley was, or is, or has been insane, he had or has disorder or defect of brain-function of a nature and induced by causes which medical psychology expounds, or ought to expound. Now, there cannot be a doubt that he was so constituted naturally as to be easily influenced by those causes which excite disordered action of the brain. He had an hereditary predisposition to insanity. If this was excited into activity in him, it was by 'a disappointment in love,' for the whole history of his case shows that his brain and nervous system did experience a shock when the object of his passion discarded him for another. Now, medical psychology inquires into the origin of the instinct, passion, or sentiment of love of the sexes, and determines how by its healthy or morbid action on the brain it develops or disorders the faculties and propensities. The strength of the passion is too well known, morally, to require comment; but how it arises physiologically, so as to change the whole man or woman as if by enchantment, and how it acts in causing disorder and disease of the brain, so as to lead to suicide, homicide, theft, cunning, malice, and inconceivable follies in life and conduct, rending in pieces the whole mental framework by its action on and through the bodily organs and organization, are within the sphere of medical psychology, as a science, exclusively; and perhaps that which treats of the physiology and pathology of this passion is the most wonderful part of the science. If I might venture an opinion on the facts of Townley's case, as elucidated by such principles, I should incline to say he was insane. Those facts, are, however, somewhat defective in number and details, for science teaches us how and what to observe, as well as how to deduce from observation. Herein, indeed, would be the great gain to the profession and the public if medical psychology were taught in all our medical schools."—*Professor Laycock's Introductory lecture to his course of Medical Psychology. May* 4.

Remarks on the Townley case. By Dr. Symonds.

"In a recent case (Townley's) the prisoner was held responsible because he knew the consequences of his act, and he was actuated by evil passion, and he premeditated the crime. But a question might be raised whether he knew that he was doing wrong, seeing that he held the notion that an engagement made the lady his property, and that he might dispose of her as he liked. Though I should have joined in the verdict of 'guilty' on the whole evidence, I confess that there is a difficulty in distinguishing what one might call a strange, eccentric individual belief or crotchet from what another would call call an insane belief in this case. But, seeing that the object of punishment is prevention, it would be dangerous to admit that a young lady's life might be left to the mercy of a lover's crotchets.

"In Townley's case, his particular notion did affect his view of the quality of his act in a pre-eminent degree, but it was combined with violent personal feeling. And the delusion, if so to be called rather than an eccentric notion, was not enough to prove a diseased state of mind. [Since the above was written it has been made highly probable by the investigation of this case by the Special Commission, that the alleged notion was an after-thought set up in vindication of the crime. See a very able medico-legal commentary on Townley's case, entitled 'Insanity and Crime,' by the editors of the 'Journal of Mental Science.'"]—*Remarks on Clinical Responsibility in relation to Insanity.*

Dr. Forbes Winslow's evidence in the Townley case.

"In fairness to Dr. Winslow and his views, a point should not be passed over, which alone bears any resemblance to what is properly termed a delusion on the part of the prisoner. He said, on the occasion of the second visit, that ever since some period previous to the day of the murder, six conspirators had been plotting against him with a view to destroy him, and that if he were set at liberty, he would have to leave the country to escape their plots. 'He became much excited, and assumed a wild, maniacal aspect,' of the genuineness of which Dr. Winslow was perfectly satisfied. Now, either the acuteness of the physician was misled and the whole statement was a sham on the part of the prisoner, who might have after all had a shrewd suspicion in his mind of the nature and object of the stranger's visit, or the statement was made, as Dr. Winslow thought, in good faith. In the latter case it would be interesting to know whether the physician thoroughly tested the nature and strength of this so-called delusion—whether he endeavoured to ascertain from the prisoner who these conspirators were, what formed their grounds of enmity to him, and why he supposed that enmity to have begun so soon and to be likely to continue so long. It is far from impossible that Townley may have referred to friends of Miss Goodwin, whom he may have had good reason to suspect of always opposing and thwarting his wishes. But in any case, when it is a delusion that has unhinged the mind of a man, and which forms the mainspring of his insanity, there can be no difficulty in arriving at a satisfactory conclusion as to its existence and strength. For any one may set up a delusion at a moment's notice—fancy himself the Emperor of China or the Wandering Jew—but it is easy for the veriest tyro in diagnosis to discover in a few minutes whether it be real or assumed. When the spring of it is once touched, the whole diseased mind works on this and nothing else; whereas if it be a sham, the ablest actor is unable to counterfeit the action of a real monomaniac. But it does not seem to have suggested itself to Dr. Winslow or to Townley's counsel

to show that this notion of a conspiracy against him had warped and perverted the prisoner's whole mind and being. As it stands therefore in evidence, we are at a loss to recognise in these assertions on his part a pervading delusion such as might have rendered him mad. Generally, Dr. Winslow may be thought to have proved too much; in this case certainly he proved too little. But with the exception of this point—on which the defence, for reasons undoubtedly best known to Mr. Leach himself and those whom he instructed, does not appear to have greatly insisted—the conclusions of Dr. Forbes Winslow, when compared with the observations on which he bases them, have not unjustly given rise to the most unmingled astonishment. If this man Townley was mad in the sense that he was not responsible for his act, what crime of the kind will in future be incapable of defence? It would be only too easy to reduce the argument *ad absurdum*, and to show that many a petty larceny might be defended on the same grounds as those advanced on this murderer's behalf. Is there not many a poor rogue who walks past a baker's shop with a firm conviction that he has as good a right to the loaves within as the bloated purchasers who happen to be in fortuitous possession of the requisite penny? Is it *madness* if he carries out his theory into practice, and purloins the loaf which he thinks to be his right? Or take a more cognate subject—that of adultery. How many heroes of French novels declare, page after page, that they have a right, a divine right, to their Louise, or Laure, or Annette, married generally to some one else? Are they mad when, in novels or real life, they asserts these rights? In favour of all such theorizers, when they take to practice, society refuses to allow such a plea to prevail, and punishes wrongdoers 'with a perverted moral sense,' without classing their cases, like Dr. Forbes Winslow, under the conveniently comprehensive head of 'general derangement.' The conclusion we would draw from Dr. Forbes Winslow's evidence is not that which some papers have ventured to extract from it, viz., that he wilfully gave an *ex parte* opinion because he was paid to do so. Such a conclusion would be an inexpressibly gross insult, not only to the physician in question, but to the whole of his profession. Evidence given in this way would be worse perjury than that of the thieves' acquaintances who are always ready to prove an *alibi*. Accusations of this kind are most improperly, most unjustly, brought against a gentleman who has given no cause for them, and against a profession which may have been with reason ridiculed for overvaluing, but has never been openly charged with prostituting, its *arcana*. *On the other hand, it is not to be denied that Dr. Forbes Winslow must be the very first thought of any moderately acute solicitor, whose object it is to prove a man mad for the purpose of saving his life, or in a different kind of case, for handing over his property to his affectionate relatives.* With the fullest conviction of our sanity, we should dread—or hopefully look forward to, as the case might be—an hour's interview with this great flaw-finder; for either in our moral or in our mental constitution he would discover some screw loose, and by gently moving it backwards and forwards, would naturally find it looser and looser. And if excitement should hurry us into incorrectness of reasoning, what would be our chance of passing unscathed out of the ordeal? *Ira furor brevis est*, says the Latin grammar; moral obstinacy and perversity is madness, all but adds Dr. Winslow. *Cogito, ergo sum*, aver certain philosophers; *Sum, ergo insanio*, is the corollary which a large portion of the human race will have to add for itself, if a dogged adherence to false and wicked laws of human life and society is to be taken as a test of insanity. It is scarcely our business to speculate as to the origin of these comprehensive theories in the mind of the distinguished physician in question; but it may not be irreverent to go as far as to assume, that when a man is constantly examining cases of real or supposed insanity, a period

arrives when his own judgment is in a certain manner affected by the continual practice which he has to undergo. Heredotus informs us, that among the Egyptians it was customary for medical practitioners to devote themselves exclusively to the treatment of one particular part of the human body and its woes. Is it not probable that, in the course of his experience, the stomach doctor would begin to look upon all men as affected in his chosen region, and the aurist to come to the conclusion that all men were, in one way or the other, partly or 'generally' deaf? In the same way Dr. Winslow is fast arriving at a very literal application of the phrase, 'A mad world, my masters.' Constant ministering to diseased minds appears to be superinducing with him a belief that most minds, if there be but an opportunity of probing them, will turn out unsound. He is by no means the first physician devoted to this branch of medical inquiry in whom a tendency of this nature has manifested itself; but it must be confessed that it has rarely been carried to a greater and more bewildering height.

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"The evidence of Drs. Winslow and Gisborne was that on which it was sought to procure Townley's acquittal. The attempt failed; but enough had been said to make the presiding judge doubt whether farther inquiry as to the prisoner's actual state of mind might not be desirable, and to fill the active friends of the prisoner and his able adviser with good hopes, if they set in action the forgotten machinery of a private magisterial and medical inquiry. Thus the murderer's life was saved, at the expense of a public scandal and bitter discontent among large classes of the population. One of the lessons to be learnt from the whole is, the necessity of carefully watching the growth of scientific theories, which apparently rest on no sufficient basis. If Dr. Forbes Winslow's theories are correct, it may be that they should be acted upon in despite of the dangerous consequences which must thence accrue to society at large. If they are unfounded (and few but poor Dr Gisborne have as yet been found to show a determined disposition to 'err with' the 'Plato' of lunacy), it becomes the duty of all who can meet him on even ground and with equal arms, to prove them such to the final satisfaction of the public, and to the unanswerable refutation of the champion of moral monomaniacs."—*The Glasgow Medical Journal, April*, 1864.

Homicide in Asylums.

During the current quarter two cases have been reported of homicide in asylums. The first case is that of Daniel Hobbs, who, on the 5th of May, killed another patient, John Swinney Phillips at Colney Hatch, by striking him on the head with a piece of gas-pipe which he had pulled down in the water-closet. According to Dr. Sheppard's evidence they were both suffering from the mania of general paralysis. This case was fully investigated before Dr. Lankester and a coroner's jury, and attracted much notice from the press.

The second case occurred at Hanwell, and was brought to trial at the Central Criminal Court on the 8th June. J. P. Knight who had been a patient at Hanwell since the 22nd Oct., and was admitted (according to Dr. Beyley's evidence) in a state of chronic mania with delusions, was indicted for the manslaughter of another lunatic in Hanwell. They slept in a five-bedded dormitory, and in the middle of the night, Knight removed the deceased from one bed to another, and then jumped upon, and suffocated him. The jury immediately returned a verdict that he was in-

sane, and Mr. Justice Crampton ordered that he be detained in custody during Her Majesty's pleasure. The press gave no attention to this case.

To any one familiar with the details of a large asylum it can only be a cause of mingled wonder and thankfulness that such accidents are not of daily occurrence. With reference to the latter case it is to be observed that the increasing introduction of large dormitories, while conducive to economy alike in construction and management and often valuable in the treatment of dirty habits, nevertheless adds materially to the risk of such accidents. One night attendant for 200 patients, which is the average allowance, cannot of course be held responsible for the safety of every patient. Experience, however, teaches us to our comfort that the average of such acts of violence is singularly small. Still, as in the case of suicides they do occur, and no precautions will entirely prevent their recurrence.

Insane Colonies in France.

"We have heard much of the advantages and disadvantages of the insane colonies so long established at Gheel; and it seems that the French Government has resolved to introduce the system. The Council General of the Rhone has recently, with the approval of the Minister of the Interior, voted the funds necessary for placing out among families one hundred indigent insane persons whose mental condition does not necessitate their sequestration in an asylum. Upon the recommendation of the chief physician, the indigent insane, recognised as incurable and inoffensive, are to be removed from the Antiquaille asylum, at present overcrowded with patients, and placed out. 'Without doubt,' observes M. Garnier, in the 'Union Médicale,' 'this example will become promptly contagious; and this will be much to be commended, providing that there be constituted a medical and administrative inspection of these patients as in the case of foundlings. Unable to restore their moral health to these poor creatures, we can at least provide for their physical well-being by this family regimen, life in the open air and varied labours, which are more likely to conduce to it than the residence in an asylum. For the safety of the families concerned and the success of the experiment, care must be taken that the persons selected are both incurable and harmless.'"—*Medical Times and Gazette, May* 28.

Proposed Supplementary Asylum in the County of Gloucester.

"The Visitors of the Gloucester County Lunatic asylum having taken into consideration the questions submitted to them by the last Court of Quarter Sessions, and having called to their assistance Dr. Williams, the Consulting-Physician and late Superintendent, and Mr. Toller, the Superintendent of the asylum, report—

"'That the County asylum is not capable of accommodating more than thirty male patients beyond its present inmates, and that the female side is full; than no large addition could be made to the present building without entailing great evils and inconveniences not counterbalanced by any adequate economical advantages, since new kitchens, laundry, and other offices would in such case, be required, with the necessity of purchasing many acres of land in a most expensive locality.

"'That the additional accommodation required should therefore be sought for in the establishment of a separate institution, either as supplementary to the present asylum; or as a distinct second County Lunatic asylum; and it appears desirable that such should not be constructed for less than 200 patients, with the means of increase.

"'That upon the question of the economical and other advantages to be looked for in the establishment of an auxiliary institution adapted for the reception of chronic and harmless patients only, the visitors thought it advisable to ascertain (by inquiries sent round) the opinion of the Superintendents of the different County asylums in England before making any recommendation upon the subject. From the information thus obtained, it appears to be the general feeling of those authorities that no scale of diet or mode of living lower than that which prevails in the ordinary County Asylums could be properly applied in the chronic and harmless cases referred to; and since every diet table must be sanctioned by the Lunacy Commissioners before adoption, it is not probable that any saving could be calculated upon under this head. It is in the economy of construction and management of an institution for the chronic and harmless only that saving is to be anticipated, but the prevailing opinion is that much might be saved under these heads. On such grounds the visitors would have been disposed to recommend the establishment of an institution of this description as supplemental to the present County Asylum, which, when relieved from the accumulation of chronic cases, ought to be sufficient to meet the requirements of all first admissions for many years to come. They believe, however, that before any decision is arrived at as to the precise character of the new institution, some further inquiries should be made. They consider that the situation to be selected should, under any circumstances, be such as to afford easy communication with the County Asylum, either by road or railway.

"'As long as the inmates of the asylum went on increasing as they had been of late, they would, if necessary, have to provide on the average for thirty additional lunatics every year. The number in the asylum in the year 1857 was 407, and in 1863 595. The Visiting Justices were not entirely satisfied that chronic lunatics required as much food as was required in recent and curable cases. But all the Superintendents of County Asylums, though differing in many other points, were opposed to this view, and in all probability the Commissioners would not, therefore, sanction any lowering of the diet. The proper course now to be taken was for the Deputy Clerk of the Peace to publish a notice that at the next Quarter Sessions a proposition would be made for the appointment of a Committee of Justices to consider the whole subject of additional accommodation for pauper lunatics.'"—*The Lancet, April* 9.

Prosecution for keeping an Unlicensed Lunatic Asylum.

Mrs. Sophia Leander, of Zion House, Turnham Green, appeared on her recognizance to answer a charge of misdemeanour for having received into her house two or more lunatics, the said house not being a licensed asylum or duly registered to receive lunatics under the provisions of the 8th and 9th Victoria, cap. 100, sec. 44.

Mr. Montague Smith, Q.C., and Mr. Giffard were counsel for the prosecution; Mr. Serjeant Ballantine and Mr. Robinson for the defence.

The prosecution was at the instance of the Commissioners of Lunacy,

who were appointed by Act of Parliament to superintend lunatic asylums and houses where lunatics are kept. About 1855 the defendant opened Zion House for the reception of women of diseased intellect. The institution was supported partly by voluntary contributions and partly by those of the friends of the inmates. At first it was conducted by a committee of ladies, but ultimately the whole management devolved upon Mrs. Leander, the defendant. The attention of the Commissioners was called to the establishment as early as 1857, and various visits were made to it by two of their body. They were at length of opinion that from the paucity of its resources the house could not be conducted as it ought to be. The law enacted that no person should be allowed to have more than one lunatic in his house, and if any one received two or more lunatics, unless the house was an asylum and registered, or unless it was duly licensed, he should be deemed guilty of a misdemeanour. Many persons having been received into Zion House, and the defendant not being able to comply with the requirements of the Act, the Commissioners felt it their duty to institute the present proceedings. They had no wish to injure the defendant, but it was necessary to put houses of this kind under the supervision which the Legislature required for the safety and protection of the unfortunate persons who were received into them.

Dr. Thomas Beach Christie, of Pembroke House, Hackney, stated that on April 19, he went to Zion House with Mr. Lutwidge, one of the Lunacy Commissioners, and saw Mrs. Leander. He found about eighty persons in the house, and examined several of them. Among others were Julia Robinson, Sarah Medwin, Susan Gladman, Elizabeth Stuart, and Maria Burgess, the whole of whom he found decidedly of unsound mind. On cross-examination by *Mr. Serjeant Ballantine* he said Mrs. Robinson was subject to delusions, which he considered to be unsoundness of mind. The distinction was difficult to be drawn between weakness of intellect and unsoundness of mind, but he was not aware of any case where a person not able to take care of himself had been refused admission to a lunatic asylum. Susan Gladman's case was that of a total loss of memory. She could not tell whether she had been in the asylum for years, months, or days. Burgess was a confirmed idiot, and totally incapable of understanding anything. Stuart was labouring under chronic mania, with excitement. On re-examination, the witness said that Robinson's physiognomy indicated that she was insane, and he had not the slightest doubt that she was of unsound mind. With regard to Gladman, loss of memory arose from a diseased mind. He saw other inmates whom he did not know, and their state was that of idiots.

By the Judge: There was no definite line between a low state of intellect and idiocy,—where the one ended and the other began.

Mr. Thomas Martin, chief clerk in the office of the Commissioners in Lunacy, proved that Zion House had neither been registered nor licensed.

This was the case for the prosecution.

Mr. Serjeant Ballantine then addressed the jury on behalf of the defendant. The case, although one of great importance, nevertheless lay in a very narrow compass. He could not complain of the mode in which the prosecution had been conducted towards the defendant, who, whether she had violated the law or not, beyond all question had been actuated by no selfish or improper motive. She had been the active instrument of what he believed to have been intended to be a very valuable charity, and had endeavoured with all her characteristic energy to

serve the unfortunate inmates of her establishment. The question, however, was, had she or had she not violated the law? Because, if she had, whatever her motives or her object might have been, she was amenable to justice. He agreed that it was the duty of the Commissioners in Lunacy to take care that no asylum should be improperly conducted, and to protect those who were unable to protect themselves; but there was a class of people very different from those regarded as lunatics or idiots, who required equal care. There was a vast number of persons whose intellects were dull, whose powers of appreciation were small, and whose memory was very considerably weakened—especially those who had suffered from the terrible calamity of epilepsy—who, without being insane or lunatic, were almost or entirely incapable of taking care of themselves. For these an asylum was wanted different from that which was suited to persons of unsound mind. The wealthy had no difficulty in finding asylums of that kind for relations who were unfortunately afflicted. There were advertisements in the 'Times' daily of such asylums from one end of the country to the other; but nothing of the kind existed for the poor; for them there was no refuge but the workhouse, and it was for the poor that the institution in question had been established and carried on for many years. The evidence, he submitted, was most unsatisfactory. For the purpose of placing a person in a lunatic asylum the certificate of two medical men was imperatively required, and the world knew what fancies and theories medical men had upon the subject of insanity: but here was a case in which the Commissioners rested the whole prosecution upon the testimony of a single man. The learned serjeant urged upon the jury that the defendant had acted upon the honest belief that she was quite justified in the course she was pursuing, and that under all the circumstances she was entitled to a verdict of acquittal.

Mr. Baron Bramwell, in summing up the evidence, observed that the defendant was indicted, not for doing anything which was wrong in itself, or which, for aught the jury knew, might not be praiseworthy in its way, but for disobedience to an existing law. They must be satisfied that the cases which had been mentioned by Dr. Christie were cases of insanity which brought the defendant under the operation of the law. For his part, although medical men were often heard in courts of justice to define insanity and lunacy, he thought ordinary men of the world were just as well qualified to form an opinion on those matters as they.

The jury, after a short consultation, returned a verdict of "Guilty."

Mr. M. Smith, Q.C., said, as the object of the prosecution was to close the asylum, he would not call on the Court for any sentence if that point could be attained.

Mr. Baron Bramwell said the best way would be to hold the defendant in her own recognizances to appear at a future day if necessary, and then arrangements might be made in the meantime for the removal of the present inmates of Zion House.

The suggestion of the learned Judge was adopted, and the defendant left the Court.—*Central Criminal Court, June* 8.

The Flushing Lunacy Case.

"It is satisfactory to perceive that the Court of Criminal appeal has refused to confirm the objections raised by Mr. H. T. Cole, the counsel for the defence in the case of Samuel Porter, found guilty at

Bodmin of the abuse and ill-treatment of his lunatic brother. In our previous comments we had anticipated the decision of the judges, and pointed out the difference between cases in which an obligation was imposed by law to support an afflicted wife or child, and the voluntary assumption of such a responsibility by any person to whom such claim did not extend. This view was that on which the learned judges based their decision. It will be in the recollection of our readers that the indictment was framed under the 16th and 17th Vict., c. 96, s. 9. It was contended that the case of Porter was not within the statute, which applied only to persons keeping asylums or taking in lunatics for hire. The case of the Queen *v.* Rundell was quoted, which was that of a man taking charge of his lunatic wife, where it was decided that the husband was not responsible, as the charge was only of a domestic nature. The Lord Chief Baron said, 'the Court was unanimously of opinion that the case came within the statute—that the defendant had the charge of his lunatic brother.' Mr. Baron Martin said 'he was clearly of opinion that the statute applied to this case. He could hardly have supposed that such a state of things could have existed in this country, but he had heard on good authority that there were cases where lunatics had been kept chained up for years.' The Court confirmed the conviction without calling on the opposite side. This is so far satisfactory. It is well to know that in the construction of Acts of Parliament technicalities will not avail for the purpose of evading the law where the spirit has been so essentially violated. We augur from this case the most beneficial results. There can be no doubt that Mr. Baron Martin's information is not without foundation, and that even now there are many cases which would not admit of close scrutiny. It is well that it be published to the world, that on behalf of those afflicted with mental disease the law will be ever vigilant and prompt to punish practices that are not only a gross cruelty towards the afflicted but a flagrant outrage on humanity."—*The Lancet, April* 30.

Publications received, 1864.

(*Continued from the 'Journal of Mental Science,' April,* 1864.)

'Stimulants and Narcotics: their Mutual Relations, with Special Researches on the Action of Alcohol, Æther, and Chloroform on the Vital Organism.' By Francis E. Anstie, M.D., M.R.C.P., Assistant-Physician in Westminster Hospital; Lecturer on Materia Medica and Therapeutics to the School; and formerly Lecturer on Toxicology. Macmillan and Co., London and Cambridge.

See Part II, *Reviews.*

'The Senses and the Intellect.' By Alexander Bain, M.A., Professor of Logic in the University of Aberdeen. Second edition. London, Longmans, 1864, pp. 640.

Will be reviewed in an early number.

'The Census of Ireland for the Year 1861.' Part III. Vital Statistics, Presented to both Houses of Parliament by command of Her Majesty. Dublin, 1863; pp. 167.

See Part III, *Quarterly Report on the Progress of Psychological Medicine.*

'The Classification of the Sciences; to which are added Reasons for Dissenting from the Philosophy of M. Comte.' By Herbert Spencer. London, Williams and Norgate, 1864, pp. 48.

See Part I, *Original Articles. The Classification of the Sciences.*

'A voice from Derby to Bedlam.' London, 1864, pp. 71 (pamphlet).

This anonymous attempt to cover Dr. Forbes Winslow's discomfiture in the Townley case is meant also for a reply to our 'Commentary.' It is an effort of forensic skill of the Old Bailey type, consisting mainly of personalities directed against the Editors of this Journal, for venturing to differ in their judgment on the case from the opinions of "the Great Psychologist!" The writer also assails with his abuse our associate, Dr. Hitchman, and expresses his wonder that, in the 'Commentary,' we should have spoken of Dr. Hitchman as an "eminent psychologist and conscientious man," asking, also, "What are his (Dr. Hitchman's) contributions to the literature and science of psychology?" Dr. Forbes Winslow, of whom this writer appears to entertain a curiously exaggerated admiration, could have informed him of the value he attached to Dr. Hitchman's contributions to the early numbers of the 'Journal of Psychological Medicine,' and how, at the annual meeting of this association, in* 1855, *he seconded Dr. Hitchman's nomination as President, in preference to so distinguished a physician as Sir Charles Hastings. Even were Dr. F. Winslow so vainly weak as to have inspired the attack on ourselves in this pamphlet, because on a difficult case we were bold enough to differ from his opinion, and ventured to criticise the scientific value of his evidence, we feel sure that he could never have been guilty, even under the chagrin of his late failure, of giving approval—however indirect—to this attempt to damage Dr. Hitchman's character and well-earned reputation. The anonymous writer of this pamphlet may surely claim the sole glory of this effort to disparage the good name of a gentleman placed far above the reach of his small malice.*

'Remarks on Criminal Responsibility in relation to Insanity.' By John A Symonds, M.D., F.R.C.P. (reprinted from the 'British Medical Journal,' February 27th, 1864).

See Part III, *Quarterly Report on the Progress of Psychological Medicine.*

'Modern Scepticism in Medicine.' Introductory Address delivered at the Opening of the Winter Session in St. Mary's Hospital Medical School. By W. O. Markham, M.D., F.R.C.P. (pamphlet).

An able address, and characterised by the freedom of thought and speech of its talented writer.

'The Roman or Turkish Bath; together with Barège, Medicated, Galvanic, and Hydropathic Baths.' By James Lawrie, M.D. Edinburgh, Maclachlan and Stewart, 1864, pp. 294.

Not a satisfactory production. Dr. Lawrie's chief aim appears to be to advertise himself and his baths near Edinburgh. The local papers would have been a more fitting and decent advertising medium than a book wearing the garb of science.

'Kleiner Katechismus über die Nothwendigkeit und Möglichkeit einer radikalen Reform des Irrenwesens.' Vom Verfasser der Gheeler Frage. London, 1864; pp. 38.

An English translation of this catechism will be found as an appendix to this number of the 'Journal of Mental Science.'

* 'Insanity and Crime: a Medico-legal Commentary on the case of George Victor Townley.' By the Editors of the 'Journal of Mental Science.' Churchill and Sons, 1864, pp. 48.

'Intorno ad alcuni prospetti Statistici del Manicomio di Alessandria. Considerazioni del Medico-capo. G. L. Ponza, Dottore in Medicina. Alessandria, 1863, pp. 133.

'On the Structure and Formation of the so-called Apolar, Unipolar, and Bipolar Nerve-cells of the Frog.' By Lionel S. Beale, F.R.S., M.B. Lond.

(From the Transactions of the Royal Society.)

'De la formation du type dans les variétés dégénérées; ou nouveaux eléments d'Anthropologie Morbide pour faire suite à la théorie des dégenérescences dans l'espèce Humaine.' Par M. le Dr. Morel, Médecin en Chef de l'Asile de St. Yon (Rouen), Lauréat de l'Institut. *Premier Fascicule.* Paris, 1864.

Dr. Morel renews here his researches—already so appreciated by this association—into the interesting question of the degeneration of the race. We shall return to this subject on an early occasion.

'Du Goitre et du Crétinisme; Etiologie, Prophylexie, Traitement, Programme Médico-administratif.' Par M. le Dr. Morel. Paris, 1864; pp. 80.

'Sixth Annual Report of the General Board of Commissioners in Lunacy for Scotland.' Presented to both Houses of Parliament by command of Her Majesty. Edinburgh, 1864; pp. 246.

This valued annual report will be noticed in our October number.

County Asylum Reports, 1864.

(*Continued from the April number of the 'Journal of Mental Science.'*)

15. The Thirteenth Annual Report of the Committee of Visitors of the Birmingham Lunatic Asylum, presented to the Council at the Adjourned Quarterly Meeting. 16th February, 1864.

16. The fifteenth Annual Report of the United Committee of Visitors of Leicestershire and Rutland Lunatic Asylums. January, 1864.

17. General Reports of the Royal Hospitals of Bridewell and Bethlehem, and of King Edward's Schools, for the year ending 31st December, 1863.

18. The Eighth Annual Report of the United Lunatic Asylum for the county and borough of Nottingham, and fifty-third of the original institution, formerly the General Lunatic Asylum. January, 1864.

19. Eighteenth Annual Report of the Devon Asylum. Epiphany session, 1864.

20. Second Annual Report of Cumberland and Westmorland, for the year 1863.

21. Report of the Committee of Visitors of the County Lunatic Asylum, Hants, at the Epiphany Sessions, 1864.

22. Thirteenth Annual Report of the Wilts County Asylum, Devizes, for the Insane Poor, for the year 1863.

23. The Forty-fifth Annual Report of the Committee of Visitors of the County Lunatic Asylum, Stafford, presented to the Court of Quarter Sessions. January 4th, 1864.

24. Butler's Hospital for the Insane. Report presented to the Corporation at their Annual Meeting. January 27th, 1864.

25. Report of the County Lunatic Asylum, Prestwich, presented to the adjourned Annual Sessions. December 31, 1863.

26. Rainhill County Lunatic Asylum Report, presented to the Court, Adjourned Annual Sessions. December 31, 1863.

27. Eleventh Annual Report, Buckingham County Pauper Lunatic Asylum. Epiphany Sessions, 1864.

28. Kent County Lunatic Asylum, Barming Heath, Maidstone, 31st year, Seventh Annual Report, presented to the Committee of Visitors. 22nd January, 1864; to the Court of General Sessions, April, 1864.

29. Report of the Cheshire Lunatic Asylum. April Quarter Sessions, 1864.

30. Richmond District Lunatic Asylum. Dublin Report for the year ending December, 1863.

31. Fifteenth Annual Report of the North Wales Counties Asylum, Denbigh, for the year 1863.

32. Report of the Committee of Visitors for the City and County of Bristol, presented to the Town Council. January 1st, 1864.

33. Northampton General Lunatic Asylum. Report from January 1st. 1863, to December 31st, 1863.

34. Eleventh Annual Report of the Joint Lunatic Asylum at Abergavenny, for the Counties of Monmouth, Hereford, Brecon, and Radnor and City of Hereford, for the year 1863.

35. Armagh District Lunatic Asylum, Report for the year ending 31st December, 1863.

36. Nineteenth Annual Report of the Salop and Montgomery Counties Lunatic Asylum. Sessions, County of Salop, and Sessions, County of Montgomery. January, 1864.

37. Sixteenth Annual Report of the Somerset County Lunatic Asylum, for the year 1863.

38. St. Luke's Hospital Reports for the year 1863.

39. Essex Lunatic Asylum, Brentwood, Reports and Documents, printed by Order of the Court of Quarter Sessions, 5th January, 1864.

40. Eleventh Annual Report of the Lincolnshire County Lunatic Asylum, Bracebridge, for the year ending December, 1863.

41. Fiftieth Annual Report of Glasgow Royal Asylum of Lunatics, submitted in terms of their Charter, and General Meeting of Contributors. 14 January, 1864.

42. Fourth Annual Report of Lorgrien Asylum to the Governor of the State Ohio, for the year 1863.

43. Annual Report of the Committee of Visitors of the Surrey Lunatic Asylum, for the year 1864.

44. Annual Report of the Bombay Lunatic Asylum at Colaba, for the year 1863.

Appointments.

J. Adam, M.D. St. And., has been elected Assistant Medical Officer to the Female Department of the Middlesex Lunatic Asylum, Colney Hatch, *vice* G. R. Irvine, M.D., appointed Assistant Medical Officer to the Rainhill Lunatic Asylum, near Liverpool.

Caleb Williams, M.D. Aberd., has been elected Consulting Physician to the York Lunatic Hospital.

J. Hawkes, M.D. St. And., Assistant Medical Officer of the Fisherton House Asylum, Salisbury, has been appointed Assistant Medical Officer to the Female Department of the Middlesex Lunatic Asylum, Hanwell, *vice* J. Ellis, M.R.C.S.E., appointed Resident Medical Superintendent of St. Luke's Hospital, Old-street-road.

J. M. Lindsay, M.D. St. And., Assistant Medical Officer of the Cambridge Lunatic Asylum, has been appointed Resident Medical Superintendent of the Female Department of the Middlesex Lunatic Asylum at Hanwell, *vice* W. H. O. Sankey, M.D. Lond., resigned.

J. Crichton Browne, M.D. Edin., has been appointed Assistant Medical Officer to the Lunatic Asylum, Hatton, Warwickshire, *vice* W. F. W. Bowen, M.R.C.S.E., deceased.

G. R. Irvine, M.D. St. And., late Assistant Medical Officer at Colney Hatch, has been appointed Assistant Medical Officer of the County Asylum, Rainhill, Liverpool.

G. W. Mackenzie, M.R.C.S.E., Assistant Medical Officer at the London Hospital, has been appointed Assistant Medical Officer at the Fisherton Asylum, Salisbury, *vice* J. Hawkes, M.D. St. And., appointed Assistant Medical Officer at the Middlesex County Lunatic Asylum, Hanwell.

H. N. Watts, M.D., has been elected Assistant Medical Officer to the Nottingham County and Borough Lunatic Asylum, Sneinton, *vice* T. R. Pearson, L.R.C.P.Ed., appointed Assistant Medical Officer to the Colney Hatch Lunatic Asylum.

The Royal Imperial Society of Physicians of Vienna.

"Zu Correspondirenden Mitgliedern (der K. K. Gesellschaft der Aerzte) wurden gewählt; im Auslande: Herr Dr. W. A. F. Brown, General Commissionär in Lunacy für Schottland; Herr Dr. William Farr, Chef des medstatistischen Bureau's zu London; Herr Dr. C. A. Lokhardt Robertson, Direktor der Grafschafts-Irrenanstalt zu Hayward's Heath bei Brighton; Herr Dr. David Skae, Director der Irrenanstalt Morningside zu Edinburgh; Herr Dr. Ed. Heinrich Sieveking Docent über Materia Medica am St. Mary's Hospital zu London; Herr Dr. Joseph Toynbee, Docent der Ohren-heilkunde im St. Mary's Hospital zu London—Zum Ehrenmitgliede: Herr Dr. John Conolly Consultations-arzt mehrerer Irrenanstalten in London."—*Wiener Medizinische Wochenschrift, April* 9.

Notice to Correspondents.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Hayward's Heath, Sussex; or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents, Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York. Booksellers' parcels from abroad bring our exchange Journals with such irregularity, that we must request the Editors of the *Zeitschrift für Psychiatrie*, of the *Correspondenz Blatt* (and Archiv für Psychiatrie), of the *Irren Freund*, of the *Annales Médico-Psychologiques*, of the *Journal de Médecine Mentale*, and of the *Archivio Italiano per le Malattie Nervose e per le Alienazioni Mentali*, to continue to transmit our exchange copies by *BOOK POST*. The copies of *The Journal of Mental Science* will in future be regularly sent *by Book-post* to

our foreign Correspondents and Honorary Members, and we shall be glad to be informed of any irregularity in the receipt of the 'Journal of Mental Science.'

The *Irren Freund* has not been received for the last few months. We beg to call Dr. Brosius' attention to this omission.

The following *EXCHANGE JOURNALS* have been regularly received since our last publication:—The *Annales Medico-Psychologiques* (January, March, and May); the *American Journal of Insanity* (April); the *Zeitschrift für Psychiatrie* for 1863; the *Correspondenz Blatt* (April, May, June); *Archiv für Psychiatrie* (Band VI); *Journal de Médecine Mentale* (February, March, April, May); the *Social Science Review* (April, May, June); the *Archivio Italiano, &c.* (No. 3, May); the *Edinburgh Medical Journal* (April, May, June); the *Medical Mirror* (April, May, June); the *Dublin Quarterly Journal* (May); the *British and Foreign Medico-Chirurgical Review* (April); the *Glasgow Medical Journal* (April).

The *British Medical Journal* and the *Medical Circular*, weekly.

We gladly add to our exchange list Dr. Beale's *Archives of Medicine*, and the new German 'Year-book,' published by the Vienna Medical Society, *Medizinische Jahrbücher; Zeitschrift der K. K. Gesellschaft der Aerzte in Wien Redigirt Von C. Braun, A. Duchek, und L. Schlager*. We have received the first part for 1864 of the *Medizinische Jahrbücher*, and also No. XIV of Dr. Beale's *Archives of Medicine*.

The review of Miss Nightingale's *Notes on Hospitals* (third edition) is deferred to our next number (October), owing to the continued press of matter. The same cause obliges us to withhold till then our review of Dr. Arthur Mitchell's valuable essay on "*The Insane in Private Dwellings.*"

Dr. G. L. Ponza, Alessandria.—Your letter of the 6th May and enclosures have been received. The honorary membership of this association is not open to candidates, but is conferred at the annual meetings on those whom the association deems worthy of the honour.

Dr. William Waugh Leeper.—The Retreat, Armagh.—The verses are declined with thanks. They might be found acceptable by the editors of *The Morningside Mirror*, or of *The York Star*.

The Sydney Lunatic Asylum.—We have received *The Sydney Herald* (August 23rd) containing a long parliamentary paper on the present state of the Tarban Lunatic Asylum, in the shape of a report to the Legislative Assembly, by Dr. F. Campbell, the medical superintendent. We regret our inability, from want of space, to reprint this document.

The Jamaica Asylum.—We have received *The Jamaica Tribune*, containing a letter by the Chairman of the Board of Visitors (Mr. Bowerbank) in defence of Dr. Allen's management of that institution.

Professor Laycock.—The *Edinburgh Evening Courant*, with the trial of George Bryce, received with thanks.

Obituary.

Richard Forde Foote, M.D.—"We are pained to record the death of Richard Forde Foote, M.D., a member of the Association of Medical Officers of Asylums and Hospitals for the Insane, after a very brief illness, and in the mid-way of life. Dr. Foote was a graduate of St. Andrew's. During the great epidemic of cholera in 1848-49, as one of the special physicians appointed by the General Board of Health, he rendered good service to the public in the serious outbreaks of the disease at Mevagissy, in Cornwall, and Merthyr Tydvil, in South Wales. Subsequently, when medical superintendent of the Norfolk County Asylum, he was the means of bringing about much needed reforms in the management of that institution. In the spring of 1855 the British Government, at the request of the Sublime Porte, sent a small staff of surgeons to the aid of the British army under the command of Omar Pasha. Dr. Foote was a member of this staff. He served at Eupatoria, Varna, and in Mingrelia, and received the Queen's as well as the Sultan's Crimean medal. At the close of the Crimean war Dr. Foote married, and took up his residence at Constantinople, where he practised as a physician until the past winter. In the course of 1863 he suffered from long and serious indisposition, and while still an invalid one of his legs was accidentally fractured in two or three places. Before he had recovered from this injury, Mrs. Foote was seized with scarlet fever, then epidemic in Constantinople, and she died after a few days' illness. Shattered in health and broken down in spirits by this accumulation of ills, Dr. Foote returned to England. Benefited by the change, he appeared to be rapidly gaining strength; but it is highly probable that his previous indisposition had permanently damaged both the lungs and the kidneys. On the 12th inst., after several hours' unusual physical exertion, Dr. Foote was suddenly seized with severe dyspnœa, acute pain in the right hypogastrium, and alarming prostration. The dyspnœa and prostration were never relieved, and he died on the 17th inst. An examination of the body was not made. Dr. Foote had reached his 37th year. He was a man of great and untiring energy. During his residence in Constantinople he contributed a series of articles on the state of medical practice, and on the treatment of diarrhœa, dysentery, intermittent fever, and scurvy, in Turkey, to the 'Dublin Quarterly Journal of Medical Science,' also various articles to the 'Journal of Mental Science,' and other journals. In 1860 he established an English quarterly review, printed in Pera, and entitled 'The Levant Review of Literature and Science.' This journal was edited by Dr. Foote up to the period of his leaving Constantinople, and it contains many articles from his pen. He founded also in Constantinople the Local Association for the Promotion of Social Science, in connection with the National Association for the Promotion of Social Science. The most noteworthy labours of the Local Association, of which Dr. Foote was the general secretary, were those directed to the relief of shipping from the vexatious quarantine regulations which are in force in Turkish ports. The latest effort of Dr. Foote's pen is a highly interesting report from the Constantinople Association, which appears in the recently published volume of 'Transactions' of the National Association for the Promotion of Social Science."—*The Lancet, June* 25.

APPENDIX TO No. 50 (NEW SERIES, No. 14) OF THE 'JOURNAL OF MENTAL SCIENCE.'

We reprint here, by permission of the author—a member of this Association—the English version of a Catechism on the 'Reform of our Practice in the Treatment of Insanity,' now simultaneously publishing in German, French, Italian and English.

The author has given notice of his intention to move a series of resolutions, having reference to the subject-matter of this Essay, at the approaching ANNUAL MEETING *of the* ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE.

LONDON, *June 30th.*

A CATECHISM

ON THE

NECESSITY AND POSSIBILITY

OF A

RADICAL REFORM

IN THE TREATMENT OF

INSANITY.

BY

THE AUTHOR OF THE "GHEEL QUESTION."

LONDON:
PRINTED BY J. E. ADLARD,
BARTHOLOMEW CLOSE.

1864.

THE READER IS REQUESTED TO NOTE § XXV OF THESE PAGES, SHOULD HE BE TEMPTED TO MAKE A CRITICAL EXAMINATION OF THIS PAPER.

LONDON: *March*, 1864.

A CATECHISM

ON THE

RADICAL REFORM IN THE TREATMENT OF INSANITY.

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§ I. *Is a reform in the treatment of Insanity at present necessary?*

It is most necessary, and urgently required; because—

1. The asylums for the insane now-a-days are, for the most part, as imperfectly organized as they are administered unfitly.

2. They are greatly deficient in number, considering the large increase of that class of patients.

3. By erecting new asylums, the Government or the community are burdened with ever-increasing taxes; and yet such institutions would perhaps not suffice for a decennium, when fresh supplies would again be required.

4. Because, under the present system, curable patients are not, according to the postulates of science, cured in a satisfactory number, nor do incurable patients meet with that pleasant lot to which they are entitled according to the principles of humanity.

5. Because the indiscriminate sequestration of the insane, one and all, both legal and medical, to which we cling at present, is one of the grossest violations of the rights of individual liberty. We must do away with it; and this so much the more as—

6. Sequestration of the insane may, for at least three fourths of them, be considered neither medico-legally necessary nor therapeutically beneficial.

7. Because, by the fall of the barbarous law and of the inhuman routine of indiscriminate sequestration, all means of restraint which are still flourishing in nearly all institutions on the Continent, must, *ipso facto*, break down. Such is already the case in the United Kingdom of England, Scotland, and Ireland, where, for these twenty

years, the so-called "non-restraint system," for a population of more than 50,000 insane, has become not only a medical practice, but also a Government law.

8. Because it is an incontestable principle in national economy that any kind of institutions for humanitary purposes should, *if possible,* maintain themselves by their own means and labour; and where this is impossible, the expenditures and taxes borne by either Government or community should in the best manner return again to the same, but not to the advantage of particular individuals, such as contractors, architects, builders, butchers, brewers, bakers, and other purveyors.

9. Because by the new reform an end might be put to the practice of speculating on the misfortune of others, viz., to private institutions whose superintendents are not specialists in phrenopathy: such is already the case in Holland.

10. Because by the reform a new law for the insane would become necessary, the present one being deficient and imperfect in all countries.

11. Because by the practice of such a law the clinical instruction in the cure of insanity, and examinations in the same at the Universities, will become obligatory, the social and scientific position of specialists in phrenopathy become regulated, and their number increased according to the pressing necessity.

12. Because the control and inspection over asylums, which has been hitherto most deficient, stands in need of a radical reform.

In reference to some of these points we will only repeat a few words which we published in the 'Mental Science Journal,' October number, 1861:—"It is painful to us to be obliged to confess that, now almost at the close of the nineteenth century, the asylums for the insane and their organization are still in a very unsatisfactory condition, and that the number of such as are at all suitable make but a very limited exception." Besides,

1. Is not the systematic, unconditional, and indiscriminate sequestration of all the insane—which is still held as an established principle—a barbarous routine, which must be done away with, and this so much the more, as the proposed change has been proved to be scientifically and practically both possible and necessary? !

Shall not, then, from Belgium's 'Bethlehem Ephrata,' the little town of Campine—Gheel—ere long, that system proceed which will be the deliverer of all the insane? ! Or shall more than half of the 500,000 insane of Europe remain for ever incarcerated and captive in so useless and wicked a manner? !

2. Shall and must not, for such insane as need a continued sequestration, the system of "non-restraint" become a general rule? Or does not England show the most striking proofs that this system is the only practical one for therapeutic and disciplinary purposes?

Shall, then, the practical proof which England gives us on this point, and which the celebrated John Conolly defended so brilliantly in theory and verified so completely in practice, pass us indifferently? Cannot the aspect of thousands of desponding patients tied in chairs and strait-jackets, or by various apparatus fettered to their beds in dark cells,—cannot this sad aspect of our fellow-creatures entrusted to our care and treatment, move us to do away altogether with the system of "restraint" and coercion? ! And what is it that prevents the greater number of our adversaries from acknowledging the necessity and practicability of application of this reform?

Let us state it in distinct words. The power of custom, routine, indolence, comfort, ignorance of these new systems, aversion to a trial and a study of the same, and perhaps often only the want of an opportunity for such studies.

Shall we not also accuse the representatives of this barbarous routine, of fear, egotism, and ill-will?

Indolence and ignorance prevent Government from legally prohibiting the existing practice. With the public at large, whatever be their rank, we find it to be indifference, egotism, and an entire misunderstanding or ignorance of the existing state of things, which render them apathetic.

Accordingly there remains only for the defence of these principles a small number of men who sacrifice their time, money, and position, and who may consider themselves fortunate if they are not on that account themselves declared insane and sequestrated, confined in strait-waistcoats or in the padded room.

3. Who shall venture to accuse us of exaggeration, or even of an untruth, if we maintain, on the ground of our own experience, that—

(*a*) Of the 1000 asylums for the insane, which we perhaps could name in Europe, *scarcely half of them* could be considered as answering their purpose; and this only by not opposing too strongly the old system?

(*b*) Is it not a fact that the greater portion of the insane population of Europe is not placed in proper asylums built for that purpose, but often live in unsuitable divisions of hospitals or workhouses; nay, even in prisons and houses of correction?

(*c*) What else are the so-called model institutions of modern times—if we judge them honestly—but prisons, citadel-like barracks, grand hotels, or manufactories, and which the public erroneously think to be the *ne plus ultra* of modern perfection and progress?

(*d*) Who will deny that there is a great insufficiency in the number of such asylums throughout Europe, for which, with regard to Clause *b*, the best proof is given by the continued raising of new buildings and the enlargement of the old?

(*e*) Are not the private asylums for the insane, *for the greater part,* undertakings of non-professional persons and speculations—*turpis lucri causa*—which, as a rule, pay a suitable house-surgeon for the sake only of appearance? Such institutions are in fact nothing else than bad and expensive hôtels-garnis, or boarding-houses!

(*f*) A general complaint is made everywhere that the status of "alienists," especially in the larger institutions, is inadequate to their duties. But what can be said of the fact that, according to our calculation, there is in Europe, on an average, *only one physician to every* 300 *insane?*

(*g*) The miserable salary which is given to such specialists throughout Europe (excepting perhaps in England), the slighting of the work of their self-sacrificing vocation on the part of the Government, the contempt of their colleagues who are engaged in other branches of the profession;—all these are irrefutable facts, to which there are but few exceptions.

(*h*) It is likewise known that the number of attendants is generally much too small, and that their characters and qualifications leave much to be desired. Their salaries and future provision are likewise lamentably insufficient. Institutions for training and teaching such attendants seem as yet out of our reach!

(*i*) But with regard to the administrative arrangement of the asylums for the insane, to which generally so much praise is given, we can but simply say, "*that there are few asylums in Europe which deserve unmixed commendation.*"

Or do we not still find many institutions the site and structure of which are unsuitable, and not fit for, or opposed to, their purpose? Some where the gardens or grounds are small or flat (if they are not wanting altogether), where the staircases and passages are gloomy, low, narrow, dark, and uncomfortable; nay, often without any light at all, and where the rooms are most like prison-cells?

Corridors and large sitting-rooms are used as dormitories. Decorations are often altogether wanting; comfort is in most institutions —even in private ones—likewise deficient. There is much pretence and show, but no reality. The same is the case with their diversions and amusements, which take place very rarely, and are mostly illusory. A ball which is given once a year, or a concert to which ministers and members of Parliament are invited, *figures at once with pomp in medical and other journals,* and is nothing but ostentation. We will make here an exception of those asylums where such amusements take place very frequently, and are intended for the enjoyment and diversion of the patients; but they are few in number, and withal must we in such cases trust more to one's own eyes than to description. Billiard-rooms and music-halls are mostly found empty, and the

apparatus or instruments of the same are "out of order;" the books and papers lying about are old, and the various games are incomplete. The library (if there is one) remains mostly locked, and without being taken advantage of.

Both quantity and quality of food are often tolerably satisfactory in comparison with the amount paid for board; still oftener the food is very insufficient, and the bill of fare badly selected in a dietetic point of view. Monotony is a rule. At noon they often receive too little food, and in the evening too much. All extras are great exceptions. The bread is usually too heavy; in many places beer and wine are never given, and in other cases we find them inferior in quality.

Furthermore, we find the greatest inconveniences to be: want of light and air, bad ventilation, badly planned and useless drains, and neglected water-closets; cold or badly-heated bedrooms, which is the case almost everywhere, nay, even in the heart of winter; want of blinds to shade the rooms and corridors; too short and badly-covered beds; a much-neglected night-watch, or in most cases none at all; a regular night-watch in the buildings themselves and outside is of rare occurrence.

Diversion therapeutics, for the occupation and distraction of the patients, are seldom thought of, or (as is the case in most institutions) neglected altogether.

We must have recourse here to simple statistics, which teach us that about *one per cent. of such of the insane as are able to work are employed.* Baths of any kind, even such as are absolutely necessary for cleanliness, are entirely wanting in most of the asylums in Europe, or, if there be any, they are usually defective and impracticable, and, worst of all, not even used; the same is the case with the douche. Rarest of all are the steam-baths.

The hour for going to bed is in many institutions absurdly early; in winter sometimes between four and five o'clock, and in summer between five and six in the afternoon. Guarded lights in bedrooms are things generally unknown. A certain amount of cleanliness and order are common everywhere, but this is no merit, but rather a natural duty.

The attendants are usually indifferent, and too few in number. That the number of physicians and medical attendance is deficient, we have already stated. Visits of any kind, out of the institution or in-doors, must be considered as a rare occurrence.

The instruction for the insane, on which we lay no positive value, but which we likewise look upon as a diversion method, exists, generally speaking, in but a few institutions, and even then imperfectly. The statutes and house regulations are mostly defective, or often a dead letter only. The medical and anatomico-pathological studies and resources are also very much neglected.

Shall we add to all this the terrible, afflicting sight of the insane as they lie crowded together in wards, and depict in detail the state of depression and exaltation which, in many instances, are thus provoked by day and by night? Or shall we speak of those 150,000 insane in Europe, who are a dreadful sacrifice to the "restraint" system, and who languish their lifetime in cells, tied with strait-jackets or other apparatus to their bannal-chair, till death releases them from these tortures?!

We should like to draw still further the hypocritical mask from off the face of many a governor of such asylums, and show their selfish comfort, or point out the feigned ardour and false solicitude of the head of many a family; but what would be the use of all these endeavours? Because,

4. It is proved that (with perhaps the exception of Holland) the European law concerning the insane is generally defective and insufficient; nay, we may say that in many countries such a law does not even exist, and that the thought of compiling one is quite recent; and hence it also happens that—

5. Scarcely anything has been done in Europe towards clinical instruction in mental diseases, and that most universities, so to speak, take a pride in possessing no chair for the study of psychology.

Are not these last two questions the sad truths which we hear complained of everywhere, and which have been hitherto remedied in but a few places?

A characteristic mark in our time is the cold indifference to the lot of the insane. If we search for the cause of this we shall find that the greater part of the educated public are not only ignorant of the present condition of those poor fellow-creatures, but that they are also quite indifferent about them.

"In official reports and descriptions of asylums for the insane, or in psychological meetings and societies, opinions are, of course, not expressed so candidly as we give them publicity in these pages. Our remarks are nevertheless *proved facts, for the justification of which it would be unwise to provoke us.*" All this, surely, calls loud enough for the urgent necessity of a reform!

§ II. *In what consists the project of the reform?*

1. To raise the so-called colonisation or family system to a law. Hence—

2. In forming a new law for the insane, which shall do away with *indiscriminate sequestration* as a principle, and shall declare *sequestration* to exist for such of the insane only as—

(*a*) Are dangerous either to themselves or to society;

(*b*) With whom medico-therapeutic purposes justify sequestration.

3. Which shall legally prohibit the use of all measures of coercion and restraint, except in such cases where medico-therapeutic reasons require the application of them.

4. In a legal prohibition of all private asylums or establishments for the treatment and cure of the insane, held by non-professional men, *i. e.*, by such men as are not graduated physicians, having made mental science their special study: including likewise the "family treatment" for single patients (cottage treatment), unless a legal regulation enforcing the supervision and control of an alienist shall be made a condition for such a privilege.

5. In the introduction of obligatory instruction in mental science at our universities, and of a legal regulation for examinations in this branch of medicine.

6. In entirely reforming the administration of the asylums for the insane, according to the principles of the *so-called colonisation or family system.*

§ III. *Does this colonisation or family system already exist anywhere?*

Yes! At Gheel, in Belgian Campine. Gheel is eight miles from Antwerp, and twelve miles from Brussels. For more than 500 years the insane have been treated there according to that system.

§ IV. *Where else?*

Nowhere, except at Gheel.

In France, about twelve miles from Paris, at Clermont (Oise), there has existed for the last ten years a colony for the insane, called "*Fitz-James;*" but the main principle of the reform, *i. e.*, the family treatment, is excluded there.

§ V. *And nowhere else in a similar manner?*

Indifferent trials were made in a similar manner—

(*a*) In Scotland, with the worst success, because misunderstood and badly executed.

(*b*) In England, in the county of Devonshire, two miles from Exeter, at Exminster, which has been conducted with the best success during the past eight years by Dr. Bucknill; but on a small scale only. This system was, however, set aside as soon as Dr. Bucknill was promoted to the office of chancery visitor.

(*c*) In Hanover, in "Neusandhurst," near Aurich (Ostfriesland), where for the last forty years two peasant families practise a family treatment similar to our reform.

(*d*) In the Austrian empire, on the island of "Cepel" (in Hungary), about four English miles from Pesth, where a kind of family treatment has existed for these many years.

(*e*) In various other countries, but in single instances, and in such different and imperfect conditions, that the trial could scarcely be said to approach—even in a small degree—our system of reform.

At Hayward's Heath, in Sussex, England, for instance, Dr. Robertson tried this system upon patients whom he took from the county asylum, and placed in two houses near, belonging to the servants of the institution, and met with the best result.

§ VI. *What is to be understood by the colonisation of the insane, or by the family system?*

By colonisation of the insane—an expression which, strictly speaking, is incorrect, but which has been adopted and is understood by all those versed in these matters—we mean that system which in principle excludes *as a rule* the living in asylums, *ad hoc*, and which *only recognises* it as an *exception;* but substitutes for it "*the family treatment,*" under the superintendence and care of an alienist. Dr. Bulckens, chief physician of Gheel, does therefore rightly call this system no longer the "colonisation," but the "family-system for the treatment of the insane."

The following is a very brief sketch of the "colonisation," according to the opinions of its most zealous advocates. Let it be imagined—

1. That a purchase be made of a large quantity of land, the topographic, telluric, and social condition of which—with regard to site, climate, air, light, water, country, and people—shall answer to all such necessities as science approves of for good asylums.

2. That in the centre of *this colony* an *hospital* (central asylum) shall be built, which, being complete in every respect, shall be separated into two divisions; the first for fresh and acute cases, the second for the treatment of chronic patients. In this latter division only such patients would be treated who must be *absolutely sequestrated* for the sake of their own protection and preservation, or for their being dangerous to society, or, finally, for scientific purposes. These same principles shall hold good—in a similar manner—for the first division, with regard to therapeutic purposes and diagnostic examinations. Add to this the following arrangement:—

3. Let various farms and cottages be raised on this plot of land, which shall be arranged according to the acknowledged necessities; cottages found to be unsuitable must be rebuilt.

4. In these cottages all patients, either acute or chronic, but who

do not need sequestration, shall be properly nursed, fed, and treated by the inmates of these homes, should they be fit persons, or by such as could be gradually initiated for such a treatment. If not, then by placing in these cottages the families, or married attendants of the asylums for the insane.

5. To each of these cottages and families shall be allotted a certain portion of land, pasture, cattle, &c., which—with due regard to their particular necessities—they shall husband, and for which they shall pay a rent to the estate. The house proprietor, on the other hand, would receive pecuniary compensation for his patients, according to the plan or mode of division laid down.

6. No house shall contain more than four patients. The separation of the sexes is often necessary, though not always absolutely so.

Gheel furnishes proofs of this.

7. As all necessary materials for this "*patronal asylum*" or *colony* would be produced in the same, it would be necessary to have due regard to dividing the insane in these cottages according to their capacity or former occupation. They would, for instance, always receive attendants of the same trade—shoemakers, tailors, carpenters, bakers, brewers, &c.

8. The Government or the community must be the purchaser and proprietor of the estate, but the chief physician is the temporal ruler or governor; he is the immediate warden, manager, and steward, or director of the estate. Every officer of the administration and of the farms shall be his subordinate, and every steward and farmer depend on him alone.

9. The responsibility of the chief physician is specially limited to one authority only—either to that of the ministry or of the community which founded the colony.

10. The number of assistant-physicians shall be in proportion to the size of the estate and the number of the patients. At any rate, the number of physicians should be considerably increased above their present proportion, which has been proved to be most insufficient.

11. The duties of the administration, as well as that of the assistant-physicians and other attendants, must be laid down by special regulations.

12. It follows, as a matter of course, that various modifications of the projects will be necessary, according to the country population and other exceptional circumstances.

§ VII. *By what can it be proved that this proposition, as laid down in theory, is not only practically reasonable and less expensive than the present system, but that it adduces even great advantages?*

By the main examples which at present exist; viz.:

(*a*) Gheel, and
(*b*) Fitz-James.

§ VIII. *Are these examples to be patterns or models of the reform, and is this latter to be framed after them?*

Examples are, as a general rule, neither patterns nor models, but only "*practical sketches*," from which we learn to imitate what is good, and set aside what is bad: such is also the case in these instances.

To frame the reform entirely after their pattern would be improper, as local, social, and individual reasons might be incompatible with it.

§ IX. *With what success does Gheel exist, and what are its advantages in comparison with other asylums?*

Gheel meets with the best of success; for,

(*a*) On a surface of about nine German miles, and in a town with 4000 inhabitants and 618 houses, and in a district which counts 14 villages, with an aggregate population of nearly 12,000 souls, there are lodged among the families—free and without any striking inspection—from between 800 to 1000 insane.

(*b*) This costs the government not a single farthing, because the various communities of the kingdom send their insane there, where they are treated and provided for at half the costs of a public asylum.

(*c*) Although the law permits *incurables only* to be sent to Gheel, yet, according to official reports, eighteen out of every 100 of these *so-called incurables* are cured.

From this it may easily be seen that "family treatment" and liberty have a most salutary effect on the insane, and that such a system is at the same time the cheapest and most advantageous to both families and communities.

§ X. *With what success does Fitz-James exist?*

Messrs. Labitte Brothers, who founded Fitz-James some fifteen years ago, have grown rich by this institution, though without committing the slightest abuse. The numbers discharged as cured exceed at Fitz-James by much that of other public and private asylums. Incurable patients live there much happier, healthier, and more comfortable than in the generality of institutions for that class of sufferers.

§ XI. *Has it not been tried to imitate Gheel and Fitz-James, and with what success?*

Nowhere besides those places mentioned, where it met with little success.

§ XII. *Why?*

Because this reform appears for the present so great a leap in science and humanity, as once upon a time steam appeared, and now aerostatics seem to be.

§ XIII. *Is this idea therefore impracticable or utopian?*

Not at all, it is just the contrary; for it contains principles which are imposed on us by science, sound understanding, experience, and necessity, and which, no doubt, will be realized some future time by that very necessity.

§ XIV. *Is this principle applicable to the rich as well as the poor?*

To both equally well; the rich, of course, can find very easily such family treatment for their relations away from their own family.

But for the poor, the government or the community must provide by means of this colonization-system, which, accordingly, is to be made a law.

§ XV. *Is this system applicable to all countries and provinces?*

To all countries, yes; but not in all provinces and counties, as we have already seen clearly in § vi.

§ XVI. *Is this system applicable to all the insane without distinction?*

No; for in the same § vi 2, we speak of a central asylum which shall contain those of the insane patients for whom the colonisation system would be inapplicable.

§ XVII. *Is this system to be extended to Cretins as well as insane children?*

Certainly not to these two classes.

The latter must have separate asylums. Cretins must be provided for and treated in quite a different manner from that laid down in this reform, and cretinismus itself utterly destroyed.

§ XVIII. *Who then are the opponents to this reform, and what reasons do they adduce as bearing against its main points?*

The opponents of this reform are:

(*a*) All such who know the present system only, and either never heard of the reform or have but a very imperfect notion of it. But in the medical world their name is "Legion."

(*b*) All proprietors of private asylums for the insane, who by the proposed new law in § ii, consider themselves as ruined at once. But still, besides these personal (subjective) opponents, there are also many objective ones, such as—

(*c*) The routine;

(*d*) Indolence;

(*e*) The indifference of the majority of the public to the present lot of the insane.

(*f*) The spirit of our time, which is bent upon quite different reforms, and which looks upon the question as completely solved.

(*g*) Ignorance of the miserable condition of matters at present regarding insanity, of the real state of which both Government and the educated public are not aware.

But against the reform itself its opponents struggle by applying the following tactics:

1. They avoid in a most careful manner to dispute and discuss the principles of the reform; nay, they reject such discussions at once —a proof of which we had quite recently in England (1862).

2. But, in return, they attack the only existing insufficient examples, viz., Gheel especially, and then Fitz-James.

3. These examples, with all their imperfections, are abused in an incredible manner. All facts *contra* are multiplied, and those that speak for them are either denied or represented in a wrong light, &c. And thereby they wish,

4. To prove the impossibility of making a trial of the reform on the ground of such examples; nay, of even discussing the point, it being utterly utopian!

5. Surely, they say, "the present condition of the asylums for the insane is the real reform and the only possible progress."

6. They deny, with a striking audacity, all facts which cry aloud against the existing systems, and in the same manner those which can be brought in support of the projected reform.

7. And, last of all, they lose themselves, as is always the case in these kind of controversies, in personal quarrels and "subjectivismus." For, as they deny the necessity of a reform and even contest the possibility and practicability of it, they naturally come to the desperate means of becoming personal, and this so much the more as they usually profess their love for progress.

§ XIX. *How does this controversy stand at present?*

Apparently very unfavorably for the advocates of the reform.

1. The psychologists in England avoided (1862) entering into the debate for the reasons set down in the foregoing paragraph.

2. The French alienists, after a most superficial report by one of their fellow-practitioners, declared in 1861 both the Gheel question and principle to be impracticable.

3. The psychiatrists in Germany gave up the windy discussions on colonization in 1861. There arose, however, throughout Europe and America,

1. Proposals for the colonization.
2. A reform of the present system is sifted in various points.
3. Practical trials of it are made on a small scale.
4. Gheel and Fitz-James are visited much more than they were formerly, and there is so much writing, speaking, and discussion about it, that,
5. This question is now raised to the principal topic of administrative psychiatry.

§ XX. *Have such projects already been made to various Governments?*

No, and sad enough too, for it is certain that, regardless of the *dura necessitas*, the good result of such a reform could only be

established as a law either by the categorical decree of an enlightened prince or minister, or by a practical community.

§ XXI. *But why are no such colonies founded by private undertaking; and why none in Belgium, where we have Gheel, and in France, where Fitz-James is flourishing?*

Because by private persons the system is still yet very little understood, otherwise the success of Fitz-James ought to excite their cupidity; in fact, for those reasons given in paragraphs XVIII and XX.

Because in Belgium, "Bureaucracy" has ever taken a dislike to Gheel, and from sheer ignorance, indolence and egotism seems to question the possibility of establishing a similar colony to Gheel elsewhere. To the population of Belgium Gheel serves continually as "a ludibrium" for idle wit. Fitz-James, in which the family system is not practised, is generally, but very wrongly, looked upon as an imposture.

§ XXII. *Have no means been proposed to reconcile the present system with the reform; and what success did they meet with?*

Yes, in various ways, but without success, because this reform does not suffer any abridgement, for it would be no useful reform then, but merely a miserable intermediate thing composed of good and bad. Thus they proposed—

(*a*) In Germany, the so-called "Relatively connected Hospitals for the cure and treatment of the Insane."

(*b*) In France, the "Ferme Asyle," *i. e.*, an asylum in connection with a farmyard.

(*c*) In England, single detached small buildings, a project which is called the "block system."

But in all these projects they are reluctant in accepting the propositions of the radical reform, and consequently making a rule of,

1. Abolishing "*indiscriminate sequestration*" of the insane.
2. Exclusion of the use of all means of coercion.
3. Individual liberty and freedom for the insane to move about at leisure; with due consideration to those restrictions laid down in §§ i and ii.
4. The proper use of the produce of labour of the insane according to the principles of national economy, as also the costs of their maintenance and treatment for the good of the community, and not for enriching a few individuals.

5. The family treatment and personal contact with reasonable persons.

All the half measures we have before spoken of do therefore in no way aim at the task which the reform proposes, viz.:—

I. To restore the curable patient quickly and agreeably.
II. To prepare to the incurable the most pleasing and comfortable lot possible.
III. To take away from the Government or community the taxes and burdens for the treatment and management of the insane, and to keep the pauper patients by means of their own labour.

§ XXIII. *Have Gheel and Fitz-James been visited much; and how can we get the best detailed information on this matter?*

According to official dates, Gheel has been visited till now by about 70 alienist physicians and a few philanthropists in a space of about just as many years.

Fitz-James has been visited by about fifteen professional gentlemen, but this only recently.

The little that has been written on Gheel appeared in pamphlets or medical publications.

On Fitz-James, Dr. G. Labitte published in 1861 a small pamphlet (Baillière, Paris). Nothing else of any import has been published on this colony.

But we meet almost daily with papers and essays treating on this subject in the various medical journals and other publications.

One of the most zealous advocates of this reform, J. Mundy, M.D., of Moravia, has collected more than 12 vols. roy. 8vo. on Gheel literature up to this date.

This same physician has visited Gheel and Fitz-James several times, and was established for some months at Gheel for the special study of this question. Dr. J. Mundy, after having visited many asylums of the greater part of Europe, is now occupied with a systematic treatise on the reform which is to comprise the new system, both from a theoretical and practical point of view.

Non-professional gentlemen or such physicians as have not made psychiatry their special study will get the best information on the "colonization" system in a work written by the celebrated French political economist, Jules Duval—'Gheel, une Colonie d'Aliénés,' &c.—published by Guillaumin, Paris, 1860.

In that work the reader will also find a good part of the literature on this question.

§ XXIV. *Who are the most zealous advocates of this reform, and who its best known adversaries?*

In the true sense of the word, there are but few zealous advocates of this reform; we will give their names in alphabetical order.

1. Dr. Bulckens, chief physician at Gheel, Belgium.
2. Dr. Droste, counsellor to the Board of Health, Osnabrück, Hanover.
3. Jules Duval, one of the editors of the "Journal des Débats" and "L'Économiste," Paris.
4. Dr. Moreau (from Tours), one of the chief physicians to the Imperial Asylum, Salpêtrière, Paris.
5. Dr. J. Mundy, from Moravia.
6. Professor J. Parigot, M.D., formerly chief physician at Gheel, now in New York.

Likewise as partisans—although in most different degrees—we may add:

1. Dr. Auzouy, Pau.
2. Dr. Belloc, Alençon.
3. Dr. Ser. Biffi, Milan.
4. Dr. Bonnefous, Leyme.
5. Dr. W. Browne, Edinburgh.
6. Dr. Brun-Séchaud, Limoges.
7. Dr. Bucknill, London.
8. Dr. Cornaz, Neufchatel.
9. Sir James Coxe, M.D., Edinburgh.
10. Dr. Damerow, at Halle, on the Saale.
11. Dr. F. Joel, Lausanne.
12. Dr. Griesinger, Zurich.
13. Dr. Gustavus Labitte, Fitz-James.
14. Dr. Lauder Lindsay, Perth.
15. Dr. Maudsley, London.
16. Dr. A. Mitchell, Edinburgh.
17. Dr. Morel, Rouen.
18. Dr. Robertson, Hayward's Heath.
19. Dr. Roller, Illenau.
20. Dr. Sibbald, Lochgilphead.
21. Dr. Schlager, Vienna.
22. Dr. Webster, London.

Among those who distinguished themselves by their opposition we find —

1. Dr. Jules Falret, Paris; partner of a well-known private asylum.
2. Dr. Flemming, Schwerin, Mecklenburg.
3. Dr. Dumesnil, Rouen.
4. Dr. Theob. Güntz, chief physician to a private asylum at Thonberg, near Leipzig.
5. Dr. Willers Jessen, Kiel, in Holstein, assistant-physician to a private asylum.
6. Dr. Parchappe, Paris.
7. Dr. Renaudin, Maréville, France.
8. Dr. Henry Stevens, London.
9. Dr. Harrington Tuke, proprietor of the private asylum "Manor House," Chiswick, near London.

§ XXV. *Has the reform been sufficiently sifted in this essay so as to withstand all controversy?*

Decidedly not!—How were it possible to thoroughly sift in so few pages a subject of such a magnitude? Nay, these are but a few striking words thrown out in a rhapsody which, if they deserve notice, may induce the reader to further investigation, and the author to a more elaborate paper, viz., the publication of a "Catechism on the Family-system or so-called Colonization of the Insane."

These pages have been exclusively written to satisfy the pressing requests of those partisans and opponents who wished to become acquainted with the "Reform question" *in nuce*.

For the same reason this catechism was published simultaneously in the German, French, English, and Italian languages.

Conclusion.

However little we can expect from the future to see such a reform even partly realised; however much private interests, the power of routine, ignorance, indolence, &c., may stand in the way; and lastly also, the spirit of our time is not tending in that direction,— yet it is an obvious fact that the crying necessity for bringing about this reform will become imperative.

Meanwhile the author of these pages must console himself with the words of the celebrated Roman: "Arbores serit diligens agricola quarum fructus nunquam aspiciet!"

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PART I.—ORIGINAL ARTICLES.

The Moral Treatment of the Insane; a Lecture by W. A. F. Browne, Commissioner in Lunacy for Scotland.

(*Read before Professor Laycock's Class of Medical Psychology, at their visit to the Crichton Institution, Dumfries, July* 9, 1864, *and published at their request.*)

Your teacher has asked me to address you. I have complied with this request, chiefly from my respect to him, partly in order to realise the sort of sensational antithesis of lecturing to one of the largest classes ever assembled, in the same room where the first complete course of lectures on Mental Disease was delivered in this country, now nearly twenty years ago, to perhaps the smallest class ever addressed.

I have selected the subject of Moral Treatment, first, because it will less than any other interrupt that continuity of instruction which is so important in a course like that of Dr. Laycock; and, secondly, because it is seemly and appropriate under the shelter of an institution where the means which shall engage our attention have been most carefully and successfully elaborated.

The first step in our progress is to recall what was the condition of the insane when Moral Treatment, as now interpreted, was not.

The asylum was gloomy, placed out of sight and mind; in some low, confined situation; without windows to the front, or with these, and every chink, barred and grated,—a perfect jail. As you entered the creak of bolts and the clank of chains were scarcely distinguishable amid the wild chorus of shrieks and sobs which issued from every apartment. The passages were narrow, dark, damp, exhaled an offensive smell, were never lighted after sunset, and were provided

with a door at every two or three yards. Your conductor was stern and surly; he carried fit accompaniments—a whip and a bunch of keys. The first room you examined might measure 12 by 7, with a window, placed near the ceiling, which did not open, and without a fireplace, or means for artificial heating, and without furniture. Ten females, perhaps, with no other covering than a rag round the waist, were chained to the wall; loathsome and hideous, yet when addressed evidently retaining some of the intelligence and much of the feeling which in other days may have ennobled their nature. In shame or sorrow one of them might utter a cry. A blow, which brought the blood from the temple, the tear from the eye, and which often ended in death; or an additional chain, a gag, an indecent or contemptuous expression, produced silence. And if you asked where these creatures slept you were perhaps led to a kennel, eight feet square, with an unglazed airhole eight inches in diameter. Here five might be crowded or *piled* together,—the violent with the timid, the delicate with those of debased habits. Here they were strapped down to their beds, lashed, muffled, and forgotten from Saturday night till Monday morning. In such a situation my friend, Sir A. Halliday, saw a rat devouring the extremities of a maniac, lying naked upon some straw, in the agonies of death. The floor was covered, the walls bedaubed, with filth and excrement; no bedding but wet and decayed straw was allowed, and the lair of the wild beast is more homelike.—Each of the sombre colours of this picture is a fact, witnessed by myself or by those who have acted with me.

This brutality was the shadow of fear; but it sought its justification in a sort of barbarous moral treatment. Cruelty, and chainings, and drownings, and rigid confinement, were resorted to, not so much because the guardians were inhumane or unsympathising, but to quench the spirit, to frighten men into their senses, to subdue and train, to overcome and tame the passions. That such effects might follow need not be questioned. The manacled, half-starved, half-suffocated victim might rise from the ordeal a wiser, as well as a sadder man! But generally the spirit must have been broken, extinguished; the senses scattered and mystified by multiplied delusions, and, the iron entering into the soul, must have urged the passions to the wildest fury and ferocity; and subordination must have often merged into apathy or indifference, or the dull, drivelling tameness of dementia. We shall say little more of what is worthy of being called *Immoral Treatment*. There are now, fortunately, fewer such savage natures to overmaster. Whatever may be decided as to the change in the type of pneumonia and sthenic diseases generally, there cannot be a doubt that mania furibunda has almost disappeared within the last forty years; that the mania attended by violence is of much less frequent occurrence; and that all forms of insanity present a different and a milder type. This consideration must be taken into account in

estimating the *effects* of the new system, and the facilities for its employment. Such a change in the character of diseased mentalisation may partly be attributable to the amelioration in human manners, to our gradual withdrawal from the dominion of sordid, selfish, coarse, and violent tendencies; but why should it not be due to a modification in our original temperament, to the training of the nervous system by education; and why not to the more judicious management of the human mind under disease?

The liberation and emancipation of the lunatics in Bicêtre, some of whom had been chained in darkness for forty years, by Pinel, is one of the most harrowing and picturesque chapters in the history of art. This bloodless triumph of a savage and sanguinary period led, half a century afterwards, to convictions that mechanical restraint, of all kinds, was cruel, or pernicious, or unnecessary, or might be dispensed with. Practically, as a remedy or a protection, it was abolished and abandoned, and, except where required for surgical or similar purposes, is never resorted to. Its abuses were so frightful that its use may well be spared.

The total failure, moreover, of this heroic and sanguinary method entailed a reaction. General scepticism, or medical nullifidianism, established the do-nothing school. Benevolence and sympathy suggested and developed, and, in my opinion, unfortunately enhanced the employment of moral means, either to the exclusion or to the undue disparagement of physical means, of cure and alleviation. I confess to have aided at one time in this revolution; which cannot be regarded in any better light than as treason to the principles of our profession.

We know it as a physiological truth that we cannot reach the mind even when employing purely *psychical* means, when bringing mind to act upon mind, except through material organs. It may be that even moral means exercise *their* influence by stimulating or producing changes in organisation! It is *certain* that all we know of mental disease is as a symptom, an *expression,* of morbid changes in our bodies; and that the most palpable efficacy of our art is when, by mitigating or arresting these changes, as in fever, jaundice, amenorrhœa,—whatever may be their relation to healthy mentalization,—sanity and serenity follow.

Finally, if therapeutical agents are cast aside or degraded from their legitimate rank, it will become the duty of the physician to give place to the divine or moralist, whose chosen mission it is to minister to the mind diseased; and of the heads of an establishment like this to depute their authority to the well-educated man of the world, who could, I feel assured, conduct an asylum fiscally, and as an intellectual boarding-house, a great deal better than any of us.

What is to be understood and taught of Moral Treatment are *not* the comforts, and indulgences, and embellishments by which the

insane are now surrounded, but the reasons upon which these are provided, the objects in view; and that they are not, necessarily, general arrangements for *all* cases, but *special* adaptations for particular conditions and stages, which the skilful superintendent grants, withholds, modifies, as he sees expedient. Museums, for instance, are collected and scientifically arranged. They are fitted for the educated, the curious, to supply materials for thought; but it would be greater madness than what you profess to cure, to prescribe them for the maniac, the erotic, the general paralytic! Botanic gardens have been formed and classified; but no one would commit them to the care of the common gardener, or to the plough of the agriculturist. But the maniac may be exercised, and his energies toned down by cricket, or curling, or even in following a pack of hounds; the erotic, as well as the refined and nature-loving, may find health and subsidence of morbid appetite in the fresh air, and among the flowers in special gardens; of which, it is encouraging to notice, fifty have been recently allotted to the pauper lunatics in Colney Hatch. The general paralytic, again, may obtain the enjoyment which he cannot otherwise reach, and that euthanasia which it is almost humanity to cherish, in carriage drives, swinging, or even in sailing.

There is a fallacy even in conceiving that Moral Treatment consists in being kind and humane to the insane. It is this, and a great deal more than all this. To place a melancholic in an hospital, to watch and ward, to feed and physic him, and to see that he is gently and forbearingly used, and to do nothing more, is to neglect him, and miserably to mistake the mission which you have undertaken. You may pour in iron to supply rich and stimulating blood, phosphorus to repair the waste of nervous tissue, stimulants to call forth agreeable sensations, and cannabis indica to embody these sensations into happy and hilarious visions; but unless you send through the eyes and ears multitudes of pleasing impressions,—unless you unceasingly dispel doubt and despair by words of wisdom and consolation,—unless you create a vicarious pain or a vicarious interest,—unless you make a sense of duty react upon selfish sorrow,—unless you call forth some dormant or neglected habit or taste, or initiate a pursuit or a study by imitation or compulsion,—you do much, but you do less than what you are competent to do, and than what is required.

The cumulative growth of that which we call a system of Moral Treatment has been slow and gradual. Every advance was timid and tentative. There are vestiges of the Conservative or iron age still around us, and are, perhaps, shakling our judgment and humanity. I cannot forget that so exclusive and mysterious were these abodes, that the first time I entered, or could enter, an asylum in this country, was to take possession as a superintendent; that on

propounding, with fear and trembling, the simplest and most innocent innovations,—such as that the airing-yards should be planted with shrubs, that Divine service should be performed upon Sunday, —I saw expressive looks, and shrank from significant whispers, that the doctor was as wild and visionary as his charges; nor that, on the first lighting the Montrose Asylum with gas in 1836, a crowd assembled at the gate to witness and perhaps to enjoy the conflagration, which was expected inevitably to follow so daring and desperate an experiment!

But confidence grew with success; and when it was discovered that the insane were tractable, teachable, closely assimilated to the sane, where their surroundings were the *same*;—the decorations and ornamentation, which form so essential an element in moral treatment as applications of the influence of beauty in softening and refining coarse and harsh natures, but which should *not* be mistaken *for* moral treatment;—have been pushed to an extreme, even a preposterous extent; ornamentation may be said to have run mad. There was an asylum at Bruges which I used to designate the Picture Asylum; there is another, and for pauper lunatics, which might, with similar justice, be styled the Old Curiosity Shop. There are many errors here. The hospitals for the non-affluent classes, however spacious and comfortable, should *not* be palatial; they should resemble, at many points, the homes from which their inmates have been withdrawn, because they love and have been accustomed to the very homeliness of these dwellings. They should be beautified, but in a manner which the inmates can understand and appreciate; their refinements and elegances should not interfere with comfort, ease, or freedom, nor be calculated to create tastes and preferences which cannot be gratified elsewhere; they should teach and elevate, but their lessons should speak of early habits, former pursuits, natural proclivities, rather than of the glitter and gaudiness of tinsel luxury. The pets and sights and sounds of happier days, and birds and flowers, are more health-giving and hope-inspiring to the unsophisticated heart than gorgeous vestibules, black-oak furniture, or copies of Raphael's cartoons.

Moral treatment may be defined—every mode by which the mind is influenced through the mind itself; in contradistinction to medical treatment, in which the mind is acted upon remotely by material agents, and *through* the body. Such a definition is obviously confined to attempts where the agent as well as the effect is moral, and where the relation is established *through* the *senses*, as when David harped to Saul, as when the poet Lloyd was cured of melancholia by seeing a play. But for practical purposes it must include many processes where the cause is materialistic and only the effect moral. The pain produced by whipping in conventual asylums, which was intended to prevent the recurrence of certain offensive or extravagant

acts; the resuscitation of attention and activity by the shock of the shower-bath, or the withdrawal of concentrativeness from moral and imaginary suffering to and by the real irritation produced by a blister, are naturally arranged under this category. But a still wider generalisation must be adopted in order to comprehend all the complex appliances and efforts which may possess a double character, which clarify the imagination while they clear out the bowels, and which range from the rudiments of education to the highest forms of cultivation, and which demand the co-operation of all arts, sciences, trades, and domestic arrangements. It must be confessed that while there are grand principles upon which this accessary mode of cure is based, every trivial detail, every daily occurrence, every change of dress, diet, season, may be converted into a moral agent and a remedy. These great principles are briefly—

I. The recognition that the human mind must be acted upon, as well as the organs with which it is connected; that it possesses intellectual, emotive, and instinctive faculties; that these exist in different degrees of development, according to the configuration of the body and education; and that everything done *to*, and *for*, and *around* the insane must be in relation to these. Officers are still to be found in charge of the insane who have not so much as heard whether there be a human mind or no.

II. A philosophical analysis of the individual mind, of its history, condition, and capabilities, so that the physician may know, and be able to act upon and mould, the moral nature of each patient committed to his care. You have the high privilege of undergoing a preparation for carrying out such analysis under the instruction of one who combines the rare, almost the unique, qualifications of being a profound metaphysician and a practical physician.

III. The adaptation of all surrounding circumstances to the general laws by which mental health and serenity are preserved and promoted.

IV. The adaptation of certain circumstances to the special condition of each of those under treatment.

V. To employ the sane faculties in rousing, restoring, or regulating those which are hebete, or diseased, or disordered.

VI. To employ sane or partially healthy minds in guiding, governing, invigorating, instructing such as are more grievously afflicted.

VII. To occupy, distract, amuse; or to preclude subjective contemplation, such as abstraction, remorse, reverie, by external impressions.

VIII. To extirpate pernicious and perilous habits of thought or actions by engrafting new and numerous predilections, by creating new pursuits, wants, hopes.

IX. To build up the unformed or ruined mind by training, education, discipline, religious and intellectual influences. In many

senses an asylum should be a grand moral school and reformatory, as well as an hospital. For although the blight of alienation falls upon the purest and highest spirit, the blight falls heaviest and most poisonously upon those of imperfect character, of ungoverned passions, and degraded propensities.

The application of these principles might be forcibly brought out by contrasts: where all was darkness, suspicion, vigilance, and locks and bars, there are doors with common handles, plate glass, a park without walls, and parole; where you saw fourteen octogenarians in a row, strapped hand and foot, in the American *chaise de force*, who could scarcely articulate their mumbled petition for snuff, there is now no restraint; where no book was allowed to enter, there is now a library of three or four thousand volumes. Or the same object might be accomplished by demonstrating the mixture of such considerations with every detail of management. Upon the last occasion that I listened to Professor Laycock; he described some of the mechanical means by which the dangers of suicidal or symptomatic abstinence are overcome. But even compulsory alimentation has its moral side. The impulse may be paramount to all external influences; and if the mind of the patient be open to reason, persuasion, religious warning, these should be employed; if the repugnance depend upon loss of appetite, previous habit, or even capricious preference, the kinds of food should be varied, be luxurious or piquant, or served up in some attractive form; the place in which it is taken may be changed; the servants who administer, the associates who participate, may be changed. If the recusant be a male, let the meal be offered by the matron; if a female, let the medical man be the servitor. Let the abstainer be present while another is fed. Should poison be suspected let the food be tasted, or conveyed in a form or shape which is insusceptible of vitiation. A patient subsisted for a time upon cocoa-nuts, another confined himself to eggs, a third took nothing except the milk which he saw drawn from the cow. There are still opportunities for applying ethics as well as æsthetics in the matter of night vases and ablution.

These propositions, which it will be readily understood are far from exhaustive, may be more happily and effectively discussed while adverting to a few of the more prominent means by which the resources of such an Institution as this are brought to bear upon the moral qualities of its inmates.

You might, at first, conceive that if mere salubrity and drainage were secured, the choice of the site of an asylum might be left to the architect. This is the error of a prehistoric age. I hold that the choice should be the business of the physician. I believe firmly, moreover, in what the pious poet said, "God made the country, man made the town;" and in this country it seems to have been his object to make the towns as ugly, as dirty, and as insalubrious as

possible. I hold in equal faith and reverence that there is a love for and a delight in the beauties of external nature implanted in every heart, so intense as occasionally to assume the aspect of nostalgia, and so undecaying that few minds are so blind or dead as to be unaffected by it. "And that is Gala water surely, Buckolm, Torwoodlie!" were almost the last words of that waning intelligence that once was Walter Scott—"How beautiful!" cried the maniac as the blue sky met his gaze on emerging from the oubliette of Bicêtre, where he had grovelled forty years.

But a commanding elevation, from which the captive may recognise the scenes associated with health and vigour, and retain a connection with the distant external world, is not enough; and in addition to what is pleasing and cheerful, there must be a stipulation for what is irregular and varied in surface. Robert Hall attributed his second attack of derangement to the flat monotony around his residence in Cambridgeshire. Silvio Pellico derived relief from gazing at a fly or projection on the wall of his dungeon; and the never-changing objects, the sharp regularity of outline, must assist the routine life in producing the insanity of convicts in penitentiaries. Nor must the structure and internal arrangements of the house be left in ignorant hands. It must not be a prison surrounded by airing yards, which have been well described as four walls with a strip of green at the bottom, and a strip or blue at the top. Among the moral objects to be secured are centralisation, classification, the avoidance of central courts, cross sights, &c., but, above all, that the arrangement should, as much as possible, resemble a private dwelling; that special provisions, iron windows and fireguards, should be limited to departments where protective and restrictive measures are employed; but that other portions should present a normal and home-like aspect, should show solicitude for the comfort and happiness of the occupants, and should contain objects associated with rational deportment and pursuits, and suggestive of agreeable and hopeful feelings. It is certain that in England, where greater space is allowed, there is less breakage of glass than in this country, where, however, we have the *perfervidum ingenium Scotorum* to contend with, as well as contracted day accommodation, and, consequently, crowding. But, in both countries, the loss by destruction of furniture, &c., is altogether insignificant when compared with the benefits derived by the amiable and curable, which form a large portion of such communities, from the banishment of bolts and bars and other insignia of slavery and distrust. Conceive the augmented terrors of a timid and suspicious lunatic on being locked into a dark, solitary, furnitureless cell as the commencement of mental treatment. A temporary Quarantine may be improvised in every establishment, but in few is there sufficient accommodation to admit of the creation of a ward for reception, observation, and probation. If a being of tender

and sensitive disposition, or retaining the higher qualities of the character, or in the stage of incubation, be cast into the maelstrom of a refractory ward, or, indeed, into the society of those in a similar state, the effect must be disastrous. There are many who know that they are insane, but in virtue of an intense or a diseased cunning, are able to conceal, even under the cold scrutiny of the world, their infirmity: there is a larger number who are terror-stricken by the anticipation of impending mental ruin. Charles Lamb travelled with a strait-jacket in his portmanteau. Dr. Buckland, once at the head of a section of the scientific men in Britain, saw this frightful fate looming in the distance; made his will; appointing his medical men; attendants; place of seclusion or burial; contemplated, like Charles V, in a moral sense, his own death and entombment. To immure a man in this condition, even among tranquil dements, would precipitate fury or despair. But every lunatic has a right to be examined, adjudicated, and his real qualities tested and ascertained, before he is assigned a status and rank in an hospital; and this can only be properly done apart from the crowd with which he is to be amalgamated, and under circumstances which may display the *best* as well as the *worst* features of his malady. There are such *Salles d'observation* in French asylums. So perfect is the reliance on the honour and trustworthiness of large masses of the insane, and so decidedly preferable is human supervision and vigilance to mechanical restraints and contrivances, that airing-yards, which were first laid down as flower-gardens, and then greatly diminished in number, have, in many instances, been discontinued, and even boundary walls and *ha ha's* appear doomed to share the same fate. The magnificent district asylum at Inverness has no wall nor fence around grounds 175 acres in extent. It has been contended, and with some truth, that a park wall or paling is not, in itself, a deformity, and that the abandonment of such an arrangement may condemn many of the insane to greater confinement and restraint than what is compensated for by the aspect of perfect freedom. But, supposing these venerable buttresses are allowed to stand, there are various provisions which enable the inmates to reach the outer world, and even to mingle with their fellow-men. When Sir W. Ellis conveyed a demented cripple, in a Bath chair, into the lanes around Hanwell, he was checkmated by the intimation that such a procedure shocked the delicate feelings of the pensive public. I once disturbed the devotion of a respectable congregation by sending a selected group to worship Him, whom I, in my simplicity, imagined was the God of the blind, the maimed, and the broken-hearted, &c., and not of a particular class. Moreover, parties of workers, whom I ventured to send out, were received as hordes of marauders, shades of moss-troopers, come to ravage the land. You live in more enlightened times. The emancipation of the lunatic has come as well as of the serf! Large parties of the insane daily take

exercise in the country around every asylum, find amusement in the concert rooms and theatres of crowded cities. I have detected them copying pictures in the Louvre. Groups occupy sea-side and summer lodgings, scattered through the country. Dr. Wing, of Northampton, transports twenty or thirty of his charges every season to Wales, and with benefit. Individuals have made tours to Ireland, the Lakes, the Exhibition, and daily from this spot four or five carriages and an omnibus afford drives; and, twice a week during many months of the year, convey larger numbers of excursionists to greater distances. These may seem holiday recreations and suited for the drones of the hive. There is a graver and more important business going on in such communities. Before the value of occupation was recognised as a mode of expending surplus and, as it were, accumulated nervous force, of diverting the mind from itself towards muscular action and external objects, and of exercising certain powers and acquirements usefully and profitably, the miseries of seclusion and solitude must have been frightfully aggravated by involuntary idleness, by the prohibition of every object in which the mind could feel interest, except that self-torture which no means were taken to prohibit or prevent. The revulsion of opinion has been so great, that work, even physical toil, in the open air, is elevated by many into a panacea; and it is amusing to notice the English commissioners suggesting another weekly half-holiday for the industrious of Colney Hatch. But Guislain was right; there *are* many cases in which *rest* is a remedy, &c.; in which muscular action or the volitions upon which muscular action depends, serve as a stimulus to the nervous system, aggravate excitement and disturb the whole economy.

It is said that to the cupidity of a Scotch farmer is due the discovery that mania may be calmed and cured by labour, and that the augmented energies of a paroxysm may be utilised in digging ditches, or ploughing the "stubborn glebe." You heard at last lecture of the young lady who, like the wife of Lord Derby's navvy, irrationally and vehemently pulled hair and then scrubbed herself into complacency and common sense. The farmer cultivated his farm and gathered his crops by the aid of these slaves or patients. While a preference is given to gardening and agriculture, all household services, all trades, handicrafts, are performed by patients, either as a means of restoration, *or amelioration;* for it should be clearly understood that although the main object of all moral as well as of all medical treatment is to restore reason, the most frequent and, perhaps, considering the number of chronic cases, the most important object, is to repair, reconsolidate, and raise the *incurable* as high in the scale of intelligence as possible. Certain asylums have acquired a reputation for their weavers, ribbon, and lace makers; others for intrepidity in entrusting madmen with shoemaker's bowie knives, with scythes, axes, and other lethal weapons;

and it is interesting that, although murders have been committed in asylums by those so intrusted, the deed has never been accomplished by the dreaded instrument. The employment of males, however, in raising vegetables and grain, in excavations, constructing embankments, reclaiming land, constitute the most approved applications of this agent. In Hanwell, during 1856, of 507 men, 250 were employed; 114 in open air, 52 in galleries, &c.; of 657 women, 388 were employed, 20 in the open air, 160 in galleries, 186 in needlework. In Colney Hatch, during the same year, of 546 men, 246 were employed, 69 in the open air, 80 in galleries; as upholsterers 3, as carpenters 11. Of 748 women, 503 were employed, in galleries 125, in laundry 72. In an establishment, Morningside, where occupation is *a* characteristic, upwards of £1000 profit resulted from the work of patients in one year; and in another, the county asylum of the North and East Riding of Yorkshire, in 1849, where occupation is *the* characteristic of the system of treatment pursued, where "every feasible endeavour consistent with the cure, bodily health, comfort and happiness of the patients were resorted to, more than 130 patients were employed, being six sevenths of the whole number of males." The pecuniary gain here is subsidiary, but it is important. The grand results are the vigorous, physical health, the sound sleep, the agreeable *sensations*, the mental quiet; and the *future* suggested; but unless the labourer can see that his industry is useful and productive, and, above all, unless he possess an interest in the products, his exertions are listless and indifferent, and unaccompanied by that earnestness and hope which are so conducive to sanity. It has, accordingly, been customary to grant rewards and privileges in the form of tobacco and better food to the workmen, &c.; but an infinitely better plan would be to pay wages, however small, which might accumulate and be available on discharge, or to the family of the patient. The necessity for such a provision is shown by the creation of the Adelaide Fund at Hanwell and the benevolent fund of Surrey Asylum.—Conceive an extensive farm with a vast grange, or mansion, in the centre. Conceive the premises cultivated in the most approved fashion, drained, drilled, divided, but not enclosed, studded with stables, barns, piggeries, dairies. Conceive that the barrack is inhabited by a large body of labourers, gardeners, cowkeepers, hedgers, reapers, &c., that these go out at certain appointed hours, under agricultural experts, who regulate and stimulate their exertions, keep them engaged, prevent their elopement, and see that they return regularly for meals, rest, &c. Conceive that the internal economy corresponds to that of a monastery or boarding-house, that there is greater solicitude for the health and comfort, and correct behaviour of the inmates, than exists under ordinary circumstances. Conceive that the industrious class are occupied for a shorter time and in less onerous tasks than free labourers, that the labour of one

is equal to that of three sane individuals. Conceive that they possess a fractional interest in the fruits of their labour, which is awarded to them either in extra luxuries, in a dole to their distant families, or is accumulated and paid to them when they return home; while the larger portion of the gains revert to the funds of the establishment, or to the pocket of the proprietor; and you have obtained a glimpse of the fair side of the Asile Medico Agricole de Lyme, Lot; of Clermont, and of the colonies which are now attached to many French asylums. In some parts of Britain similar experiments have been made. The York East Riding may be designated a *farm* asylum; and Englishton, near Inverness—where many acres of muir have been reclaimed, where a group of houses and huts, situate on pleasant slopes and amid gardens, overlooking the Beaully Firth, accommodate some thirty or forty husbandmen, who with no other bonds, nor walls, nor restrictions than the will of the governor, have made a large corner of desert to blossom like the rose—has fairly won for itself the position of a *cottage* asylum.

It may have been economy which suggested the association of the insane in large numbers, and for various purposes; but more valuable truths are worked out in doing so. All men of imperfect as well as of mature intelligence, when not under excitement, exercise greater self-control and self-denial, and deport themselves better in society than in solitude and privacy. They act in relation to one another. Multitude becomes a power and is respected. If the body of which they are members be actuated by a common purpose, be moved by recognised leaders, and regulated by certain ordinances, the probabilities that order, and tranquillity, and propriety will be preserved, are increased. The insane, accordingly, are brought together in worship although, as in primitive ages, the sexes are still separated; in amusement, in exercise, in occupation, at meals, the only limit to the numbers assembled being the size of the apartment, or the object in view. In one asylum we find that 320 males and 410 females dine together. The military element has been added; parties have been instructed in the goose step—may be encountered with bands at their head imitating "the measured tread of marching men;" and my official dignity was somewhat put out lately by being asked to review a body of volunteers!

If an asylum be viewed in the light of a boarding-house for a particular class, the distribution of the patients must be regulated by the amount of board paid; but if it be used as an hospital—and this may always be the case in asylums for paupers where no distinction of rank or wealth can act as a barrier to other principles of classification—the inmates naturally group themselves together into societies. The separation of the sexes is a preliminary step; but this rule yields during meals, dances, excursions, and upon a variety of occasions, when the influence of sex may effect purposes where higher

influences fail. Male abstainers should never be compulsorily fed until a female has tried the efficacy of her powers of persuasion. Promiscuous dancing has repeatedly promoted physical, as well as physiological changes, and general but wisely regulated intercourse tends to humanise and to mollify the asperities of both sexes. Dr. Hitch substituted female for male attendants, or in addition to them, in the wards for males, without danger or detriment. This plan has been adopted in Worcester Asylum, &c. The danger or the fear of nymphomania was at one time so great that all asylums were built so as to prevent men and women from seeing each other; a course calculated to create the evil which it was intended to correct. Now, under due discrimination, ladies and gentlemen may inhabit adjoining apartments, may meet, and even visit each other with the same unconcern and ordinary courtesy which obtain beyond the walls.

The insane are generally divided into the tranquil and industrious, or convalescent; the excitable, and refractory, and degraded. There are, of course, minor groups, such as the sick, the infirm, the epileptic, for which especial arrangements are made. Such distinctions are generally temporary as well as arbitrary. The quiet and docile may become violent and intractable, or the violent may become calm and rational. Peculiarities and obnoxious qualities may become developed, which overbalance the quietude of demeanour, and may necessitate degradation and extradition. Modern experience has demonstrated that great benefit accrues even to the excitable class by the abolition of the pandemonia called refractory wards, which were a mere concentration of all the elements of strife and disorder, and where one wild and foul passion fed and provoked another; and by drafting the inmates among the masses of comparatively rational patients, where the majesty of authority is acknowledged, and where the decencies and proprieties of life are maintained and supported by the patients *themselves*. Here they are absorbed and fused in the masses; their tendencies are tamed or moderated by the surrounding calm and order; they are influenced by example, they are won by affection or friendship, or mere forbearance. It is not so certain, however, that the presence of such excitable dispositions may not act injuriously, or annoyingly, upon the class with which they are amalgamated. Such advances should be made cautiously and tentatively; not as a *tour de force;* not as a demonstration how far a bold operator may go; but with consideration, as countenanced by a partially tried law of our nature. Any demonstration, however, against structural provision for such a class would be as rash as the foundation of asylums upon what were called non-restraint *principles*, where a hereditary bond was imposed upon superintendents, that restraints should never be resorted to in the house committed to their charge! There is, however, a modification of the extreme view, which has been success-

fully tested. The general refractory class is broken up into smaller sections, the foci of agitation or conspiracy are separated, and the fragments consorted in different rooms and galleries ; but apart from the general population. Such a recommendation can apply only to a large establishment. In the female department of an asylum of this class, where the experiment has been in operation for years, not only does comparative order prevail, but the destructive propensity is dormant in the midst of mirrors, prints, turtle-doves, &c.

Such accidents give, to a limited extent, a fluctuating character to the different sodalities in an asylum ; but from the large number of chronic cases which accumulate, there is a permanent and stationary basis or stock which is of great utility in manipulating the details of classification. It forms a sort of conservative body, whose tendency is, upon the whole, to support constituted authorities and regular government. Promotion to it is a coveted honour ; expulsion from it is a disgrace. It receives and drills recruits and convalescents. It is a depository of the customs and traditions of the place. It is the great resource and nursery for amusements, lectures, schools, monster meetings, pic-nics, matches at bowls, and cricket. In the original formation of such associations the amount of education and refinement should never be forgotten. The insane may lose reason and retain acquirements and accomplishments. They may be men of profound erudition and gross delusions. They may be highly polished, or utterly illiterate. Now it may occasionally be a stroke of moral art or skill to commit the ignorant to the learned as a pupil, or a block to hew out ; or to provide the occupation of teaching ; or to repress the arrogance of pedantry by the common sense or modesty of common place ; but, in general, it is prudent to bring together those who are nearly upon an equality as to knowledge, however varied the direction of their studies may have been. Such a common tie unites, it promotes intercourse and congeniality ; it may afford reciprocal assistance, and should differences of opinion and controversies or jealousies arise, the antagonism thus produced is not foreign to the normal and healthy condition of the parties. I have known the belief in hallucinations shaken by witnessing the palpable incongruity of such thoughts in another, and by the arguments and expositions of a man declaring himself to be the living God. I have listened to a lecture by a maniacal clergyman to his fellow-patients, who dwelt with unction and zeal upon Bacon's sources of error in reasoning. "A keen and unanswerable stroke of pleasantry," says Pinel, "seemed best adapted to correct the whim that he had been guillotined, but the executioner being allowed to replace his head, unfortunately put that of another victim in its place. Another convalescent, of a gay and facetious humour, instructed in the part he was to play in this comedy, adroitly turned the conversation to the subject of the miracle of St.

Denis. The mechanician strongly maintained the possibility of the fact, and sought to confirm it by an application of his own case. The other set up a loud laugh, and replied in a tone of the keenest ridicule, 'Madman as thou art, how could St. Denis kiss his own head? was it with his heels?' He retired chagrined, applied closely to his trade, and never after mentioned his borrowed head."

Every psychologist must have experienced the greater difficulty in dealing with and destroying the errors and extravagances of an educated than of a simple and uninstructed mind. With the former it is often a contest of evils, a subtle controversy, in which truth and reason may be discomfited; with the other, the physician is a superior being, from whom even doubtful propositions are received without hesitation. But, at the same time, the power of the cultivated mind and refined sentiment, even when partially chilled and deadened by disease, in assisting to carry out the moral economies of an asylum, has been found so great as to have suggested the association of sane minds with the insane for the purpose of affording suitable companionship, of leading back, but insensibly and without the pretence of treatment or guidance, towards reason and right feeling, and of carrying a healthy and earth-smelling atmosphere into the tainted and transcendental regions of a madhouse. A body of female volunteers was formed in connection with the York Retreat for this purpose. Attempts of the same kind were made at Montrose and elsewhere, but never upon a scale commensurate with the anticipated benefit.

Besides these efforts to act upon large numbers possessing some quality, or it may be some defect in common, the great labour and cunning of classification remains behind. You are called upon to separate certain incompatible natures, to eliminate the obnoxious, to seclude the marpeace. Isolation has been dispensed with altogether in Lincoln, Stafford, &c.; it should be rarely resorted to, only on the failure of other modes of establishing harmony, and chiefly to calm, protect, or otherwise benefit the individual; in fact, should be a prescription, not a matter of police; but it may become incumbent in order to remove obstacles to more extensive classification. It is sound policy to entrust the weak to the strong; the violent or malicious may be safely confided to the acquisitive, or vain, or religious monomaniac. The affectionate and happy may be associated with the desponding and despairing, and the helpless idiot may become the adopted child of some mother whose only delusion is mourning over the fate of infants that she never bore.

It might appear a natural rule to assemble together individuals presenting the same forms of disease—maniacs with maniacs, melancholics with melancholics. Such a plan would afford facilities for the scientific observation and medical treatment of disease, but experience has proved that such a course concentrates and intensifies

morbid feeling; that the suicidal tendency, for example, suggests and multiplies itself; and that a sounder and safer ground of assortment is similarity of taste, occupation, and disposition. Such minute considerations do not in general, unfortunately, determine the arrangements. They are counteracted by the nature of the building, the capability of the attendants, and the impossibility of individualising treatment. But even architectural arrangements have latterly tended towards the separation of insane populations into smaller and more manageable societies. The erection of asylums in distinct blocks will necessitate this measure, whether intended to facilitate it or not, and may prove a most effective instrument in the hands of a superintendent in improving the condition of his patients. The cottage system, or where a number of small houses are clustered round a central asylum, is still more favorable to subdivision and to grouping, in accordance with known dispositions and habits; and were the utopia of a village colony realised, an opportunity might be afforded for a more rational classification than what is pursued in the great prototype, Gheel, where the docile, tranquil, and industrious reside in the town, the more excited in suburban villages, and the agitated and turbulent are placed in the most remote hamlets. The necessity for treating patients in groups is an evil springing from the diversity of work, rather than the overwork of the physician. He is busied in needle-and-pin economy, in pie-crust philosophy, and cannot grasp the moral bearings of his duties. Not a century ago all the patients in St. Luke's were bled on certain days, and all were purged upon certain other days. In the vast asylums now extant—Colney Hatch now contains 1889 patients—all transactions, moral as well as economic, must be done wholesale. All practical men concur in the opinion that asylums containing more than 300 inmates become mere lock-up houses. The physician, is a mere custodier, fails to embrace the nature and history of the malady, and the character and peculiarities of the patients; depends for information upon others; and is content with such general measures and prescriptions as appear to realise the sophism of the greatest amount of good to the greatest number. But even where houses are constructed for this malleable and workable number, there may be evil in congregating large groups in the process of classification. I have heard a boast that one attendant managed fifty charges. The probabilities are they managed him, or that they had capacity to manage themselves, or were not managed at all. No family, however judiciously selected, should exceed fifteen in number. They can all know each other; they may be thoroughly known by the guardian; and if they occupy the same dormitory, and he sleep beside them as he should do, moral treatment, discipline, suasion, and friendly offices, may be carried into the night. Night-watching is another phasis of this never-ceasing vigilance and ministration. It is not merely that the condi-

tion is ascertained, that the restless, and unhappy, and superstitious are soothed, that comfort, and cleanliness, and even crotchets are cared for, but training of various kinds is prosecuted. Authority silences the noctiloquent, supervision frustrates the suicidal, and constant attention corrects the habits of the dirty and degraded. A bitter controversy recently raged in England as to whether there was gain or loss in awakening and raising the latter class, in order to prevent the evacuations being passed in bed. In my estimation the most interesting point involved was, whether it was possible by reiterated teaching to recall the dement, and dormant, and perverse to habits of decency and propriety, or to impart new, perhaps automatic habits. I have known the proportion of dirty patients stand as high as 40 per cent. This included different subgenera: those who delighted in debasement, those whose lethargy, or comatose sleep, suspended the will to attend to the calls of nature, those who never felt these calls, and those who had lost control over the sphincters. Perhaps the proportion ranges between 5 and 10 per cent. But even in large asylums it is found that there are sometimes what may be called literally a clean bill of health; and in visiting one the other day, I found that among 250 sleepers there had been only four wet beds, seven of each sex having been raised by the nightwatch. Such an achievement is not merely a transplantation of nursery tactics, it is a moral triumph founded upon the influence of a repetition of muscular acts in creating a mental habit.

But the supervision and companionship of which we have spoken are carried out by subordinates. Attendants are the main instruments by which this grand and delicate machinery is moved. Upon their qualities, in great measure, depends the success of the most subtle expedients and the simplest provisions of the scheme. As in all men, their predominating character is, so far, determined by the manner in which they are treated and trusted. Esquirol's experience was summed up, in the commencement of a clinical lecture—"First cure your attendant, and when you have succeeded, you may proceed to treat your patients."

A great improvement has taken place in the status and ability of this class of officers within the past forty years. The difficulty, however, in procuring suitable candidates is still enormous; and until it be overcome by offering higher wages, retiring allowances, &c., moral treatment must, in many of its bearings, be a mockery and a snare. It is absurd to offer the consolations of religion, to recommend calmness and self-command, to an unfortunate *recusant* whose ribs and sternum have been crushed and broken through loss of temper or the mistaken design to master unruliness; it is useless to surround a patient with objects of *vertu*, to soothe by music, to engage in languages, a sensitive man whose servant and master—for such is the anomalous position of an attendant—treats him with insult and

contempt, abridges his indulgences, and makes him feel that misfortune has positively reduced him to an inferior caste. Dr. Fox's plan was to catch the most simple, unsophisticated bumpkin, grown on the wilds of Dartmoor, and lick him into shape, and the shape that he wanted. His experience was that the raw material of well-disposed country lads was readily moulded into a dutiful, respectful, and kind guardian, who could learn ultimately to act as a companion and as a servant, as a master and a nurse. The English Commissioners have instituted a register which records the services and qualifications of persons entitled to employment. Rewards and prizes for length of servitude and other merits have been instituted. They have been promoted to higher situations and greater responsibility. A psychologist of good standing at one time limited his selection to self-educated men, members of Mechanics' Institutes, and of logical cast of thought. But in this experiment his subordinates turned out students and philosophers, in place of sensible servants; they devoted themselves to treatises on the human mind; they speculated on the nature of the cases, and argued as to the course pursued; while the rules were neglected, the rooms unswept, the patients riotous and degraded. He subsequently essayed temperance, then communion with the Church, and ultimately service in the army, as guarantees for a certain amount of self-control and regularity of conduct, with varying success. At present most physicians disregard more recondite qualifications, and are content with good temper, presence of mind, and sobriety, which are invaluable, but do not stand the evil effects, the tear and wear, of constant contact with the insane.

Esquirol appointed cured patients as nurses. He believed that they would be trained, and softened, and elevated by suffering. But even where restoration is complete, there often remain a callousness and indifference, or a sense of wrong, which frustrated the scheme. They were not sure of their position; they dreaded the contempt of those whom they formerly resembled; their original disposition, out of which their insanity may have sprung, came into operation; they were hard, harsh, exacting, petty tyrants, and suspicious. The same observation has been repeatedly made since.

It is surely not Utopian to expect that, ere long, a training and clinical school may be formed for this class of superintendents, and already has an example been given by the delivery of a series of lectures for their especial behoof and instruction.

Formerly all lunatics were confided to monastic institutions, but were there mingled with "fools, imbeciles, libertines, drunkards, extravagant," somewhat after the manner of the House of Refuge in Edinburgh. So recently as 1845, large asylums in France were exclusively under the care of nuns, and in Belgium the practice now prevails. Out of this has originated the employment of religious

as trained assistants, under the direction of the physician or governor—a practice which Guislam characterised as "a beautiful aspect of Catholicism." The corps of nurses in certain of the London hospitals, and above all the Anglican sisterhoods, are approximations to this arrangement; and, to whatever extent modified by the spirit of our institutions, it is most desirable that a staff somewhat resembling the Sisters of Charity, drawn from the educated classes, actuated by a religious motive, if not by a vow or by some pure and lofty object, could be enlisted in a cause where the highest attributes of the Christian character, the best sympathies of our nature, would find exercise and reward.

It is somewhat interesting that,—at the very time when the necessities of vast armies in the Crimea unequivocally developed as principles what had long lurked in the human heart as hopes and aspirations, that a higher motive than gain is required to secure suitable nurses for the sick and the wounded, and that the educated and even the refined mind is a more useful instrument amid dangers and disease and difficulty than ignorant obedience,—there was made in a remote province the first attempt to educate the attendants upon the insane, to expose and explain the nature of their duties, and to raise them at once to a due appreciation of their responsibility, and to a capacity to discharge the duties imposed. A course of lectures was delivered in which mental disease was viewed in various aspects, in which the relations of the insane to the community, to their friends, and to their custodiers, were traced; in which treatment, so far as it depends upon external impressions, the influence of sound minds, of love, and fear, and imitation, was discussed; and in which it was attempted to impart attraction by illustration and narrative, and to convey instruction by examples drawn from actual cases. The grand objects were first to impress the understanding and to rouse the affections by the demonstration that mental aberration was a malady, a misfortune, a misery, which was to be relieved; which it was so far within the power of every kind word and consoling look to mitigate; and that it was not a brutal passion that was to be opposed, a perversity that was to be resisted or resented, or a strife that was to be prosecuted until victory was obtained. I have seen a nun at Nantes rush between two infuriated male lunatics, apparently in a death struggle. They flew asunder before that venerated functionary, the one sulkily, the other fell on his knees!

Secondly, to distinguish the various forms under which alienation might be presented; what was to be apprehended or hoped in each; what was to be guarded against, and what might be accomplished by a judicious selection and adaptation of the means of alleviation. To illustrate the tact acquired by thorough knowledge of character, and the adroit use made of even mental defects by attendants in averting evil, Pinel may be quoted—

"Three maniacs, who all believed themselves to be sovereigns, and each of whom assumed the title of Louis XVI, were one day disputing their respective rights to the regal office and its prerogatives, with more warmth than appeared consistent with their mutual safety. Apprehensive of consequences, the governor went up to one of them, and took him a little aside: 'How happens it,' said he, addressing him with gravity, 'that you should think of disputing with such fellows as those, who are evidently out of their minds? we all know, well enough, that your Majesty alone is Louis XVI.' Flattered by this attention and homage, this gentleman withdrew, looking at his rival disputants, as he retired, with ineffable disdain. The same artifice succeeded with a second, who left the other in undisputed possession of his honours. In a few minutes no vestiges of the quarrel remained."

And, thirdly, to show that every individual with whom the insane come into contact might and must be instrumental in increasing or diminishing happiness, in building up or in destroying the fabric of mind, and in guiding those to or from light and knowledge who may literally be said to have eyes and see not, ears and hear not; and that this influence is proportioned to the intelligence and humanity of the agent, to his sense of the high and holy mission entrusted to him. Such was the estimate of a late matron in the Asylum of Frankfort-on-the-Main of the sacredness of her trust and of its absorbing nature, that she literally never deserted her duties, nor left the house, during forty years. It is quite possible that much was said which met no response nor assent; which was unsuited to the previous training of the auditors; but it is certain that interest of some kind was awakened and sustained. The class consisted of the officers, the attendants, some of the patients who belonged to the medical profession, and, occasionally, a visitor. The attendance, although perfectly voluntary, was numerous, attentive, and grateful, and it is believed that although these inquiries and suggestions may have fallen infinitely short of the objects contemplated, they elevated the tone of those engaged, formed a pleasing communion between the different members of the staff, and have left many recollections of intellectual enjoyment.

It was proposed to extend to patients the advantages supposed to have been derived from lectures to officers. On previous occasions the object of such efforts was not so much to *pluck* from the mind its rooted sorrow, as to *lead* it *from* the contemplation of that sorrow; to introduce new, and pleasing, and tranquillising matters for contemplation; to substitute external observation for self analysis, and to bring discussions on art, or science, or literature, within the compass of amusement. That such attempts were and will continue to be instrumental in conveying happiness and healing to the wounded mind, under the guise of instruction, and of temporarily

engaging the attention where they neither instruct nor elevate, cannot be doubted. They constitute great discoveries in moral medicine, but the course now under consideration had a higher range and more systematic object. The endeavour was to combine information and amusement with the exposition of delusion and hallucination. It thus happened that, in listening to an explanation of the physiology of the external senses, the causes of fallacy to which they were exposed from the derangement of the organs, or from external circumstances; and of the various intentional deceptions, illusions, and impostures which are recorded, and are matter for every-day observation,—individuals might hear a refutation of their own erroneous convictions, a lucid dissipation of their fears, an exorcism of their familiar spirits; and that an explanation of the real nature of the mirage, or of the giant of the Brocken, and of the whisper of the Memnon, or of the gallery of St. Paul's, might lessen the power of the visions and voices which assail the audience. This plan consisted in one of the medical officers answering popularly the question How do we see? demonstrating the organs of the sense, the laws by which images reach the retina, impressions on the mind; in another, devoting his attention to the things we see, their forms, hues, and most striking qualities, the modes in which their minute structure may be seen, and the instruments by which vision is aided; and that a third directed attention to the atmosphere, through which and by which these colours and forms reach the eye, embracing various atmospherical and astronomical phenomena. Such an undertaking must fail in accomplishing all that is desirable, for it is certain that hallucinations depend upon physical causes which no demonstration can remove; but it may have succeeded in raising the general tone, and enlarging the scope of reflection, and placed the mind in a better condition to bear, if it cannot cast out, its errors.

The similarity between the education of the young and undeveloped mind, and the restoration or reconstruction of the infirm and diseased mind, and the tendency which intellectual training has to impart strength, and order, and precision to the faculties, has led to the introduction of education as an element of moral treatment. The substitution of some safe and useful occupation, which might at once amuse and instruct, for the frivolous games, or the idle, and it may be incoherent conversation in which vacant hours are spent, was an additional inducement to make such an attempt; for, while the inexpediency of long sustained attention in any, but especially in the enfeebled mind, is obvious, as being, in truth, an effort to interrupt concentration by concentration, and while amusements of all kinds are, in suitable circumstances, recommended, the same, or probably more favorable results will accrue from any engagement, provided the mind enter upon it willingly, be diverted from sorrowful or painful impressions during its continuance, and experience

satisfaction from the trains of thought suggested. All these objects are as easily accomplished in overcoming the difficulties of the multiplication table, or in reading the history of the giraffe, as in the fluctuating fortunes of catch honours. A school for lunatics is a striking and instructive scene. But if considered as a part of moral discipline, as a mean by which the diseased intellect is weaned from its errors, by which delusions are to be displaced by real, practical, and useful knowledge—useful when the pupil re-enters upon the active duties of life; and if the quiet, busied, and cheerful demeanour of these groups during instruction be contrasted with the monotony, and misery, and violence which formerly characterised, and is still by many enlightened persons supposed to characterise the insane, the triumph of humanity will appear complete, and the hopes of the philosophical enthusiast actually realised.

Massieu, an imbecile, deaf-mute, a wild man of the woods, was roused to intelligence by scholastic training, became enlightened, an utterer of moral aphorisms current in every European language, but of which the origin and author are alike forgotten. To the question, "What is time?" his answer,—"A line that has two ends, a path which begins with the cradle and ends with the tomb;" and to that of "What is eternity?" "A day without yesterday, or to-morrow; a line that has no end," are well known. When asked, "What is God?" he replied—"The necessary Being; the Sun of eternity, the Mechanist of Nature, the Eye of justice, the Watchmaker of the universe, the Soul of the universe." And when Sir James Mackintosh followed these by the inquiry, "Does God reason?" the lucid reply is said to have been at once elicited—"Man reasons because he deliberates, he decides: God is omniscient, He knows all things; He never doubts, therefore He never reasons." But his saying that "gratitude is the memory of the heart," is better known than these epitomes of human wisdom.

Reading, writing, and arithmetic are now regularly taught to large numbers in the majority of asylums. In schools for those of weak mind, tuition occupies perhaps an undue place in the course pursued. But the higher branches of education and the shortcomings of the educated classes are not overlooked.

The educational list of one asylum (C. I., 1858) contains the following particulars:

Music, instrumental	8	pupils
,, vocal	6	,,
,, tonic sol-fa class	25	,,
German	6	,,
Latin	2	,,
French	4	,,
Drawing	8	,,
Dancing	30	,,

But supplementary to this there is going on, in every community, where moral treatment is carried out, a process of re-education and self-culture, a reconstruction of the mind upon a narrower and less secure basis, an adaptation of acquired and morbid tastes, habits, and opinions to new and painful circumstances, and to the development of those faculties which have survived the general wreck of mind. I have known at one time a gentleman prescribed study as a remedy, who acquired, with but little assistance, a tolerable knowledge of the French language; a man deeply skilled in eastern tongues, but deplorably ignorant of his own, study grammar and familiarise himself with composition; a third, in gratification at once of generous feelings and former tastes, teach another inmate German; the editor of a newspaper busily engaged in manufacturing paragraphs; a veteran soldier divide his time between music and mathematics, and prefer to dwell on a sonata to showing how fields were won; a philologist would be found engaged in a critical analysis of a sentence in Sallust or Tacitus; an engineer busied in plans and projects prospective of a new railway millennium. Controversies upon Schiller were waged in one room, while the tales of Souvestre are translated in another; a theologian varied his studies of the French divines by reading the works of Bacon in folio. A physician was busied in Dutch, that he might exchange thoughts with Van der Kolk.

The advantages attached to such impressions do not exclude those influences which raise man above present evil and place him in relation with the Source of all Good. Worship is regularly, in many places, daily performed according to the Established Church or the church of the majority. Members of other communions are permitted to visit their own places of worship accompanied by officers. There are in certain institutions provision for securing the services of chaplains of all prevailing sects; in fact, the timidity which formerly excluded the insane from such ordinances has passed away, the error that they were incapable of comprehending or joining in worship has been demonstrated; and in these assemblies children and maniacs are seen to bend the spirit and the knee side by side. In them it is impossible to distinguish the sane from the insane, the guardian from his charge, and all ideas are banished from the mind of a spectator, except those of universal brotherhood and of that peace which passeth all understanding. It may be that there is a sense of supplication where there is no power of precise and articulate prayer; and it may be that, independently of and even in opposition to external manifestations, there is an "inner life hidden with God:" but it is certain that reverence and attention prevail, that the tranquillity is greater than under other circumstances, and that the acknowledged effects are contentment and calm.

The employment of music in improving or ameliorating the lot

of the insane has been occasionally alluded to in history, in the Egyptian myth and in the chanted exorcisms and the canticles of the mediæval church. But, almost legitimately, or appropriately, it was the good fortune of an Italian to remind men of modern and colder type of the connection. Philip V of Spain was plunged in melancholia and apathy, and was, as may without lese majesty be inferred, a "dirty dement." Farinelli, 160 years ago, a master of song, had scarcely given forth a few of his marvellous notes in his presence, when he raised his head, exhibited exquisite pleasure, and recovered his reason. On demanding what recompense would satisfy his saviour, Farinelli said, as a physician has often to say, "Shave, and wash, and dress yourself."

The physician, or system, with one remedy, whether it be digitalis, the Turkish bath, or opium, is as much open to suspicion as the man of one idea. Aversa had the unfortunate, but unmerited reputation of curing madness of all sorts by music alone. And there was the pleasing picture presented of the insane swinging in hammocks, gazing on cloudless skies, inhaling the fragrance of orange flowers, to the sound of the lute, sackbut, dulcimer, &c. An observer visited this temple of the muses in 1829, with the suspicion that the concerts were cooked, and that the whole arrangement was a sham which would collapse on close examination. He was undeceived, partly by encountering similar adjuvants in the Senavra of Milan, and, long subsequently, upon a more extensive scale, and with a more perfect organisation, at Quatre Mars under Dumesnil. Here the actual performers, drawn from the workmen class, amounted to thirty, although 150 had been subjected to a certain degree of instruction. All had been taught to *read* music; and the orchestra, after a grand march, performed boleros, waltzes, polkas, &c., in a masterly and marvellous manner. We are familiar with all this; classes, concerts, bands, &c., form one of the embellishments of every asylum, and with effects which can be best appreciated by those who are themselves sensible of the powers of music to soothe, enliven, rouse, or melt. The worst dement should never be despaired of while music is untried. There is or may be a hidden life within him which may be reached by harmony. He may be recalled from the profound abyss of mental darkness to glimmerings of life, if not to full sunshine. Watch an assemblage of lunatics while national or cheerful airs are played; and it becomes palpable that though dead to all else, they are alive to sweet and familiar sounds. A lady after hearing Scotch music retired to bed degraded, mute, fatuous; she arose next morning and remained permanently of right and rational mind, quietly remarking to the physician, that "The banks and braes o' bonny Doon had awakened her." This must not be received either as a miracle, or without doubt as a sequence: it is given simply as an illustration.

An attempt was made about the beginning of this century by Esquirol to introduce theatrical amusements at Charenton as a means of enjoyment, if not of cure, in the treatment of the insane. The French have a passion for the drama, and a vast number of the educated classes have been amateur performers; and the experiment was confidently expected to succeed. The name of the piece has not come down to us; but among other things it represented the deposition of a king by his subjects. It failed from a somewhat singular circumstance; for although performed almost within the shadow of the first French revolution, the audience, composed chiefly of patients, regarded the rebellious act as real and unjustifiable; rushed upon the stage with tumultuous indignation, vindicated legitimacy, and restored the ill-treated monarch. The experiment was repeated in 1842 in Salpêtrière, with better success, when Molière's Tartuffe was represented before a large audience. Plays have, it is understood, been acted in the asylum at Copenhagen, but with what results is not known. It is believed, however, that the first bold step of this kind was made in this room in 1842. Convalescents and monomaniacs had repeatedly attended public theatres; but that hundreds of patients, of all classes, should, with perfect propriety of deportment, and with keen appreciation of the merits and mirth of the performance, witness the representation of farces, vaudevilles, comedies, by members of their own community, by those participating in their own infirmities, is assuredly a noble conquest over the sorrows and intractableness of disease—a miracle if we reflect upon the past, an augury of success if we look to the future. Yet the achievement should be regarded less as a boast or proof of what may be accomplished with the most stubborn and rebellious materials: of how far the insane mind may be carried towards health, how closely it may be made to imitate the manifestations of the sound and strong,—than as a means of calling forth neglected energies, of diffusing bustle, and expectation, and enjoyment where all is generally dead and dull and dark; of creating sources of happiness on the very limits, but not beyond the pale of surveillance, apart and distinct from the position of those concerned, and in themselves so fraught with ideas and feelings incompatible with melancholy or moroseness, and so suggestive of pleasing recollections and associations. The benefits are not, however, confined to the exhibition, nor especially to the actors, whose previous training, exercise of memory, self-possession during impersonation and success, must prove curative; but includes the healthy tone which pervades the establishment during the whole of the theatrical season. The collection and preparation of a wardrobe, the erection and decoration of a stage, the speculations as to the effect, the rehearsals, the composition of prologues and addresses, the green-room supper, the *début* and retirement of companions, all contribute to

unite the different inmates in a common purpose, and to furnish matter for thought and conversation very widely removed from that which generally obtains among them. The attempt is no longer an experiment. An ordeal of twenty years in the great institutions of Morningside, Derby, Montrose, &c., entitle it to be regarded as a discovery in moral science, which must be accepted and acted upon. Under the head of Amusements, although having a higher aim, fall to be enumerated—Dances; Fancy Balls; Pic Nics; Scientific Excursions; Boating; Curling; Games; Gymnastics; &c.

As another mode of employing dormant or valueless energies, of contributing to the amusement of the rest of the population, and of demonstrating how closely the insane mind may, in its operations, approach the standard of health, as well as how widely it may depart from it, periodicals are produced in asylums, which are edited, composed, corrected, printed, exclusively by inmates. I read regularly 'York Stars,' 'Utica Opals,' 'Morningside Mirrors,' 'Perth Excelsiors,' and 'New Moons.' They serve as vehicles for the free and undisguised feelings of the writers, whether erroneous or not; they are compounds of the grotesque and the beautiful; they are collections of the impressions of healthy and the new creations of disordered imaginations, of mental portraits, and of all that relate to the present condition and prospects of its contributors, and of the class to which they belong. It is matter for regret that these "curiosities of literature" so rarely afford glimpses into the secret chaos, and incongruities, and rebellious thoughts of the bosom of the writers, or of the ruins of those impaired minds which live upon former acquisitions, reproduce conclusions, facts, or feelings peculiar to their original character and nature, and present the striking and almost inexplicable spectacle of two currents of reasoning flowing in the same channel, utterly irreconcilable and immiscible,—the one perhaps marked by profound acumen or exquisite beauty, the other by grotesque extravagance and egregious absurdity; but that they have in some way realised the purpose of their projectors is to be inferred from the duration of the series. The 'New Moon' was commenced in 1844. More pretentious works, chiefly poetic, have been published at Hanwell, here, and at Morningside. In the latter asylum there is flourishing a Literary Society, where essays are read, debates and conversations encouraged, under the presidency and guidance of one of the medical officers, with very happy effect.

The power or government by which such communities are ruled should be monarchical. The details, as well as the principles, should emanate from one central will; while much must be left to the spontaneous good sense and good feeling of subordinates; these subordinates should be chosen, their views and acts should be influenced, their whole bearing determined, by the supreme official. What may be described as constitutional checks to the exercise of

this power are to be found in the code of laws prescribed by the governors, by inspectors appointed by the country, by public and professional opinion, and above all by the condition, tastes, and character of those committed to his charge. There is, however, still a difference of opinion as to whether this rule should be confided to the hands of a medical man or not. In Ireland laymen were recently employed. It is argued medicine is of little use, or, if of use, is not used. When you find, from the registers of ten asylums containing about 2000 inmates, that not more than 300 of these are under medical treatment for mental disease; and that in one asylum containing 1900 inmates only 200 are under medical treatment and extra diet,—that is, the Beefsteak and Porter system,—several suppositions present themselves. Either we have to do with an intractable malady, or that these institutions are especially burdened or crowded with chronic cases, or that the medical officers place little reliance upon therapeutical means. I am, however, disposed to adopt a more favorable and encouraging construction, and to regard the field for the operation of moral treatment as wide, the means ample, and the opinions of the medical officers as attaching great importance to mental therapeutics. It must at once be admitted that he who, entrusted with the responsibility described, conceives that the duties of a physician end with the routine visit, with pulse exploration and pill prescribing, even with the supervision of a wise and suitable course of medication, is in distressing ignorance of what is required and exacted in such a position. His call is to a mission, not to a practice. He must live *with* and *for* the insane; he must enter into their pursuits, pleasures, even their thoughts; he must cherish a direct relation and intercommunion with the minds of those who, according to their natures, love him, fear him, depend upon him; he must compensate for the poverty and inertness of his remedies, by the liberality of his sympathy, love, and self-sacrifice.

But to whom, rather than the well-educated physician, is such a sacred and momentous trust to be consigned? Coleridge has said, with great acumen, that "in the treatment of nervous disease he is the best physician who is the most ingenious inspirer of hope." There must exist a benevolence, kindness, which shall be so deep and expansive as to feel sympathy for the lunatic, not merely because he *is* an alien to his kind, because he is visited with the heaviest and hardest affliction which humanity can bear and live; but will feel interest in those *unreal*, and artificial, and self-created miseries with which the spirit is oppressed, and which will be as solicitous to alleviate suffering where it is absurd, and where it is the result of perversity of temper, as where it flows from misfortune. There must be that benevolence which will, at an immeasurable distance, imitate the mercy of Him who, in curing the broken

and bewildered spirit of Demonomania, "took him by the hand and lifted him up." But this gentleness must be controlled, graduated. It may sink into a barren sympathy, or, more fatally for the welfare of the patient, it may be active in soothing momentary pangs at the sacrifice of permanent peace; it may indulge vicious propensities; it may give way to unreasonable demands; it may, rather than inflict uneasiness, foster those very delusions and irritability which are at the root of the disease. The purely benevolent physician can never be a good practitioner. There must be mingled with such a sentiment that highly refined sense of justice which guides even kindness in its ministrations, and which holds the balance as scrupulously in deciding on the moral rights and interests, as on the civil rights of our fellow-citizens. While the "*subjugative stare*" of Dr. Willis is no longer available, there must be that moral and physical courage which confer, in the trying situations in which the curator of the insane is occasionally placed, calmness, and decision, and promptness in the midst of danger, and in dealing with the most furious and unlistening madness; which imbue the whole character with that controlling influence which governs the turbulent while it appears to guide, and commands the most ferocious and wild by the sternness, and at the same time by the serenity of its orders, by the absence alike of timidity and anger. Dr. Fox, a bold man, though a timid innovator, stood on the roof of his house at Brislington with a maniac, "What," with a glare and suitable action, "should prevent me from casting you down?" said the patient. "Quite easy to do it," was the calm reply. "But I bet a guinea I'll throw you up here from the gravel." "Done," was the eager reply, and they both (from very different motives) rushed down stairs.—The intellectual qualifications for such a trust are high and varied. They must comprehend a familiarity with a true and practical philosophy of the human mind, in order that its diseases may be understood and uprooted; as general an acquaintance as is practicable with the usages and workings of society, with the habits, the pursuits, and the opinions and prejudices of different classes, with literature and science, so far as they may contribute to the instruction, happiness, or amusement of these classes; with everything, in short, which is or can be rendered influential in what may be called *adult education*, in the management or modification of character, in order that as great a number of moral means of cure, of restraining, persuading, engaging, teaching the weakened and disordered mind, may be created as possible; and, finally, as liberal a professional education as long preliminary study and equally long practical observation can accomplish, in order that the causes of alienation, the physiological condition by which its duration and intensity may be increased or diminished, and the operation of medicines and external agents in removing or

modifying either the one or the other may be thoroughly mastered.

A man so prepared uses the instruments which we have enumerated, and many others, as he does the articles in the pharmacopœia. He does not merely provide a well-ventilated and elegantly furnished dwelling, amusement, employment, but he will daily apply them or withdraw them as need arises. Lists are made out of those who are to join in lectures or excursions, of those who are debarred enjoyments: particular books, studies, trains of thought, are prescribed: a reproof is delivered to one, a commendation to another patient; and the prescription book should contain moral precepts and penalties almost in equal proportion to pills and potions.

No observation made on the present occasion should countenance the suspicion that I doubt or undervalue the efficacy of drugs and physical remedies, in relieving or removing mental disease, or rather in bringing about that condition which is incompatible with disease. I certainly do not believe that with the black bile you can purge the moral pain called melancholia, by means of hellebore; or that a sleeping draught positively brings back reason; and I have arrived at an age when the weapons used by medical men are much less numerous than the diseases which they have to combat. But my conviction is that there is no class of disease more amenable to medicine, under certain circumstances, than that under consideration. I do not advance one remedy as specific; but I have seen marvellous effects from cod-liver oil in general paralysis, dementia, idiocy, and other forms of derangement occurring in the strumous diathesis; from iron and the metals in anæmic melancholia; from bromide of potass in erotic mania and melancholia; from iodide of potass in epileptic, and above all, in traumatic epileptic mania; from opium in mania; and from bimeconate of morphia in melancholia, depending upon alteration of nervous tissue, and accompanied with neuralgia; and so on. But again, any physician trusting to these agents alone will signally fail; and from the same cause any physician disregarding these agents, and trusting exclusively to humane ministrations, amusements, and occupations, must likewise fail, and deserves to fail.

The Present State and Future Prospects of Psychological Medicine; an Address by M. Le Dr. Morel, Médecin en Chef de l'Asile des Aliénés de St. Yon, Rouen, &c. &c. &c.

(*Read at the Annual Meeting of the Association of Medical Officers of Asylums and Hospitals for the Insane, held at the Royal College of Physicians, July 14th*, 1864.)

Considering the present state of Psychological Medicine, there are certainly few of us who may not be well satisfied. No one would have believed fifty years ago that in our day so many magnificent establishments should have been created throughout Europe. The legal position of these unfortunate persons has been secured; the abolition of the strait-jacket in English asylums has been accomplished;—results long before attempted by Pinel, Esquirol, Daguin, Tuke, Langerman, and by other reformers in mental science.

We may thus mark the actual progress of the science, without wounding the reputation of our illustrious progenitors, and without diminishing the merits of our contemporaries.

If the former could return among us, they would not only see themselves reproduced in the person of your Conolly, whom I have the honour to call my friend, but they would also recognise themselves in others unnecessary for me to mention, who have equally exalted our profession not only in Europe, but in the different parts of the world.

We can say, without vanity and with satisfaction, that medical science has furnished, during the last half century, a vast number of practitioners, illustrious for their medical, psychological, and administrative acquirements, and especially for their devotion to science for its own sake. If, then, the progress we have made is so wonderful, is it necessary for us to occupy ourselves with the future prospects of psychological medicine? Have we not a right to assume that mental science will arrive at the last point of perfection quietly and surely, without fresh exertions? There are those who imagine so, but I cannot quite share in this contentment. For this you will allow me to make some short observations on this subject.

We are wont to say that there is no sky so serene in whose horizon may not be discovered, at one time or another, some cloud, some dark spot, portending tempest; and so, on the horizon of mental science, I perceive some darkness gathering. The first black cloud which I thus observe menaces the actual organisation of asylums under the name of a reform to be effected in these establish-

ments. Those magnificent and expensive institutions for the insane, the idiotic, and the imbecile, and even for those designated, more or less properly, criminal lunatics,—are they no longer answering to their designed purposes? Is there anything better to do for the future? The reformers have no difficulty in replying to such a question. They declare that, notwithstanding the enormous expense which has been incurred, the asylums are overcrowded; that it would be better for the majority of the insane that they should be treated in the country, out of doors; that many even would be better managed, if not in their own, at least in families who would take care of them. This system, whose chief advocate, my friend Baron Mundy, is now present, has been called "Family or Home Treatment." It is, perhaps, more radical in its tendency than the system known as the colonisation of the insane, which, however, already includes a considerable number of adherents, and which appears to me a stepping-stone to the family or home system. Both systems are undoubtedly influenced by scientific and economic considerations of no little importance.

These considerations are too well known to you to need a longer discussion. I shall, therefore, content myself by recognising the earnest desire of many among us to arrive at an order of things which embraces not only a greater liberty of action on the part of the insane, but at the same time a more effectual realisation of domestic life, that moral element of which the majority are still deprived. Would it not, then, be true to say that intra-mural confinement more or less continuous, and even sometimes constant, is not compatible with the instincts of humanity? This I am disposed to believe. Some of us will express their thoughts in respect to it with timidity, others with boldness.

A French physician, to whom I mentioned the non-restraint system as the last improvement introduced into English asylums, said, "Don't talk to me of the abolition of the strait-jacket, as long as the insane are shut up in asylums. The wall which surrounds the asylum is of itself a large and universal strait-jacket of stones, representing the worst form of restraint and coercion. What I want," continued my friend, "are farm-asylums, which, by their simple construction, would recall to their inhabitants the country life to which the majority have been accustomed, at least in their childhood. Life in the country is undoubtedly the chief sedative of the morbidly excited nervous system."

It is certainly not to-day I have time enough to discuss the real value of the colonisation system and of family treatment. Let us only take care not to exaggerate the unfortunate condition of the insane. Without doubt such feelings of commiseration are most commendable, but we must not forget that we have to do with inferior beings in a state of degradation, and insensible to the archi-

tectural luxury of their dwellings. For such reasons it would surely be better to substitute natural splendours, the charms of the fields, fruits, and flowers, and the sweet comfort of family life. This also is not a new idea. The treatment of the insane by country life has entered into our scientific habits of thought and action to such a degree that an asylum which is not surrounded by open fields in a lovely country is considered a badly conditioned asylum. Nevertheless, in our disposition to deprecate monumental asylums, let us not be carried to the opposite extreme. Colonisation, in my opinion, cannot be applied indifferently to all the insane; no more can this be the case with the family treatment, as I often understood from Dr. Mundy himself. We shall always find some insane dangerous, by the nature of their disease. Absolute liberty for all cannot be declared without danger to society in general, and to families in particular. Granted the insane are unfortunate beings; more unfortunate still are the families who have insane under the same roof. Again,—and I will insist on this point for an instant,—science too has its wants, and cannot progress unless medical men have opportunities for self-improvement by means of clinical study. It is, therefore, necessary that in the neighbourhood of great centres of population there shall be asylums where clinical studies can be performed.

I hold myself to be a physician imbued with progressive ideas, and hence I give a willing ear to the system of colonisation. Nor do I reject the family treatment; but in the name of the science whose rights must be saved in present and future time, I think there exists a system which ought to overrule all systems. I mean the Clinical system. Should I be called to the medical superintendence of a colony for the insane, I would not like to become a simple farmer or steward, but my wish would be to remain a student of medical science.

The second black cloud which is to be seen on the horizon represents the reaction against the so-called mad doctors.

This reaction is more than a small dark cloud; it is a sky charged with electricity, which has already burst over the heads of many among us. Of that reaction I would say some words; the more so that, as we are acting in the name of humanity, the injustice is the greater. In France,—and perhaps it is the same in England,—the public, in a great number of cases, are prone to see injustice in the fact of lunatic detentions. The increasing number of sequestered lunatics in asylums is beginning to alarm the sane population, and public opinion is disgusted as if we were the authors of that state of things. But what can we do to hinder the consequences of human passions, social irregularities, hereditary predisposition, misery, and other causes which, finally produce, through well-known nervous disturbances, different varieties of insanity?

People are always ready to believe that injustice and even ignorance on the part of physicians determine the seclusion of the insane; and when I speak of ignorance I refer to the principal objection raised by the world in general. Because we admit the difficulty in drawing the line between sanity and insanity, the men who are not physicians suspect the real power, and I may say utility, of our science.

But what has mental science to do with these lines of demarcation? This question is equally absurd as the other, which constantly insists on a right definition of what soundness of mind is, and what insanity is. It is sufficient to recognise an insane person by the nature of his acts, and by some characteristic signs which are peculiar to such and such morbid variety of insanity. Unfortunately, this truth has not yet been accepted by all specialists; the cause being the want of psychological education. When shall we abandon this sterile path, and do as naturalists do who are not satisfied with distinguishing flowers by their colours, but by their specific characters? Let us try to do the same in respect to mental science, and we shall cease to hear more of these insidious, and by and by calumnious, objections.

You will adhere to this much more by recalling what a well-known French paper has now published. This journal *(La Presse)* has compared the legal power given to the physicians with the powers of the *Lettres de Cachet* under the old monarchy. It is easy to suppose that our detractors are very much pleased with such comparisons. Let me recall also another fact. When the lunacy law in 1838 was discussed in the French Parliament, a celebrated speaker said, "It is to be feared that, in place of having one Bastille, such as was destroyed in '89, we are now creating a multitude of Bastilles."

Finally, it would be useless to mention to you the fact that many of our colleagues have been persecuted and condemned for alleged illegal detention of the insane, and for lunacy certificates. The public spirit also on this side of the Channel teaches us what we have to look to.

Complaint is made of the increasing intervention of psychologists in legal and educational questions. Allow me to show you the injustice of these complaints. In fact, it is easy to understand that the influence and interference of medical experts, and their authority before the judges and jurists, must increase in the same degree as the severity of penalty in the criminal law becomes milder. So, also, in proportion as the laws of hereditary insanity in particular, and hereditary diseases in general, will be better understood, the help of psychological physicians will be more required in different cases.

Be certain that if we go firmly in the path of science, and if at our Universities a larger share of time would be given to the study of the origin and development of nervous diseases in their relation with medical jurisprudence, our position will not be assailed, nor

our real motives be longer suspected. With the progress of our science we ought to become the true legislators and educators of the future.

To-day, Gentlemen, I have only ventured to express a hope. Next century, perhaps, will enjoy the verification of my words.

[*This address was read by M. Morel, in English, at the Association Meeting. His presence among us, as the representative of French Medical Science, was itself a promise of that progress in the future of Psychology to which, at the conclusion of his address, M. Morel alludes.*—Eds.]

Suggestions for a Cottage Asylum. (*With Plans.*) By E. Toller, M.R.C.S. Medical Superintendent of the Gloucester Lunatic Asylum.

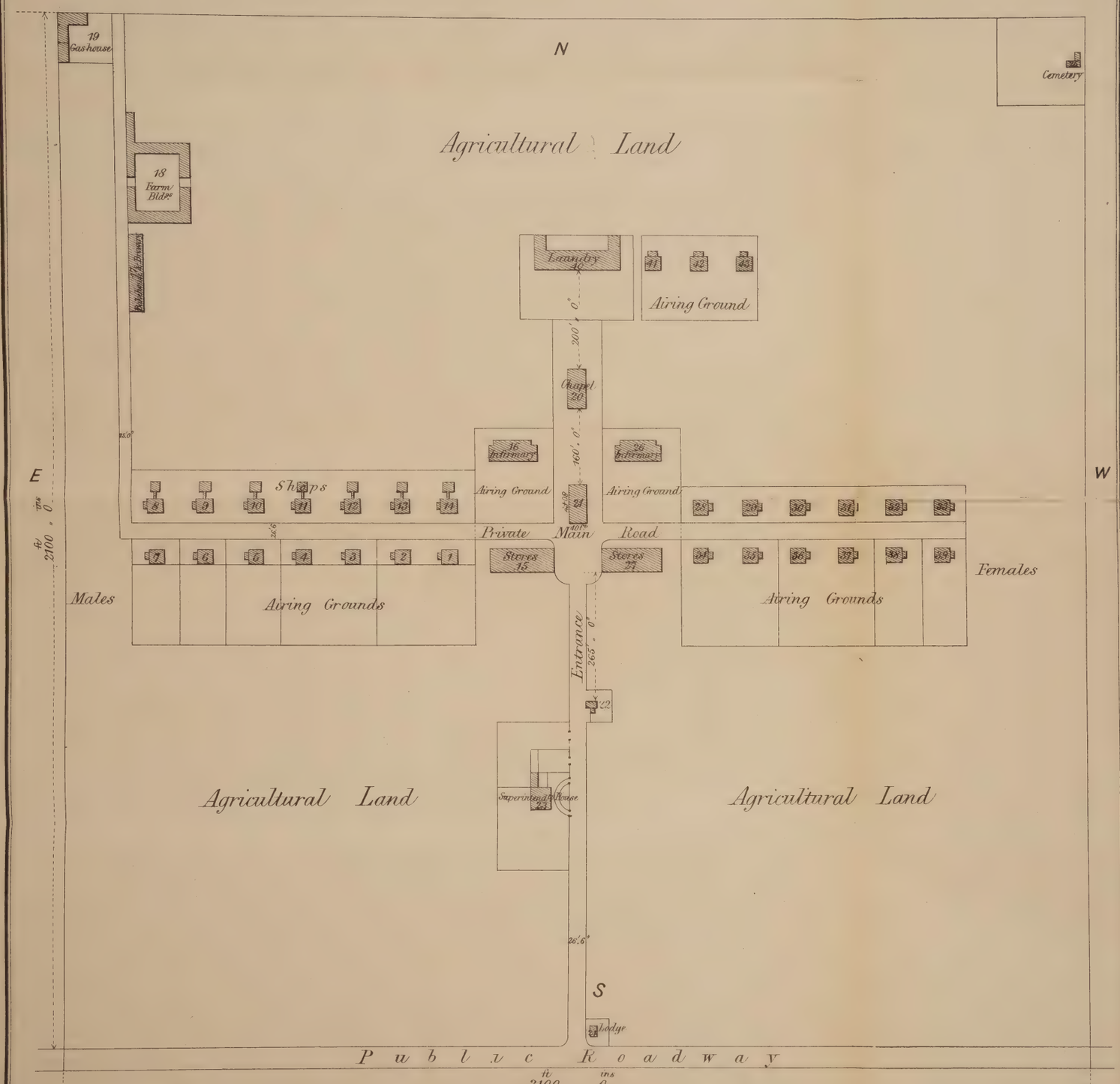
(*Read before the Annual Meeting of the Association of Medical Officers of Asylums, and Hospitals for the Insane, held at the Royal College of Physicians, July* 14*th*, 1864.)

My attention to the cottage system for the accommodation of chronic lunatics was revived soon after my appointment to the Gloucester County Asylum, by my finding that institution in a crowded condition; and although it possessed one cottage which answered well, there were no means of increased accommodation. The visiting magistrates of the asylum personally inspected the different workhouses belonging to the several unions in the county, and reported that they were not in a fit condition to receive harmless and chronic cases. Upon this, I addressed several questions to my brother superintendents, in order that I might have their opinions as to the best means to be provided for receiving the increased numbers that annually come to the portals of the county asylum for admission. I felt considerable diffidence in giving my opinion in favour of any innovation which had for its object the important plan of an altered system for the provision and treatment of any of the insane poor, or the so-called "chronic and harmless" lunatics. I have since then given the subject considerable thought and attention, the result of which has been to convince me that the cottage plan for asylums is the best means for the provision and treatment of the insane, as well as for relieving the present overcrowded condition of some of the county lunatic asylums. Previous to laying my plans and observations before the members of the association, I would take this the earliest opportunity that has arisen of acknowledging the kind and ready way in which so many

DESIGN FOR A PUBLIC LUNATIC ASYLUM FOR 525 PATIENTS

On the Cottage Plan upon 100 Acres of Land.

PLAN I. GENERAL PLAN.



REFERENCE.

Central Buildings.

20 Chapel.
21 Rooms for Committee — Medical
" Assistant and Visitors &c. with
" Recreation Room over the same.
22 Porter's Lodge
23 Superintendent's residence.
24 Lodge.
25 Cemetery and Post-mortem House.
26 Infirmary
27 Stores
28 Patients according to classification
29 Ditto " " "
30 Ditto " " "
31 Ditto " " "
32 Ditto " " "
33 Ditto " " "
34 Epileptic

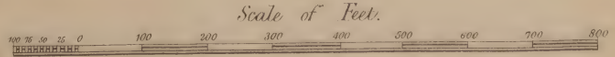
Males.

No. 1 Cottage for Gardeners.
2 Agricultural Labourers.
3 Ditto
4 Ditto
5 Epileptic
6 Ditto
7 Ditto
8 Carpenter
9 Bricklayer
10 Painter.
11 Shoe-maker.
12 Tailor.
13 Upholsterer.
14 —
15 Stores and Stewards Office.
16 Infirmary.
17 Bakehouse & Brewhouse.
18 Farm Buildings.
19 Gas-works & Engineer's House.

Females.

35 Epileptic.
36 Ditto.
37 Ditto.
38 Patients according to Classification.
39 Ditto " " "
40 Laundry with Bath-house above.
41 Cottages for Laundry Patients.
42 Ditto " " "
43 Ditto " " "

Scale of Feet.

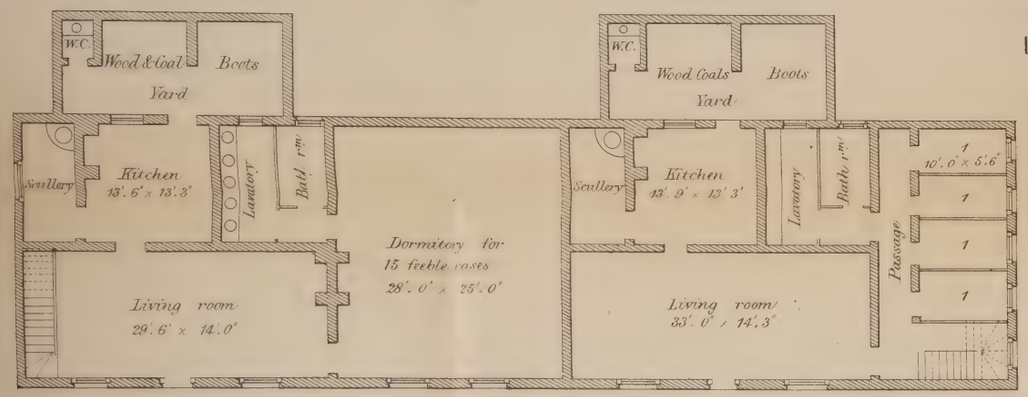


W. West, Lith. Hatton Garden, London.

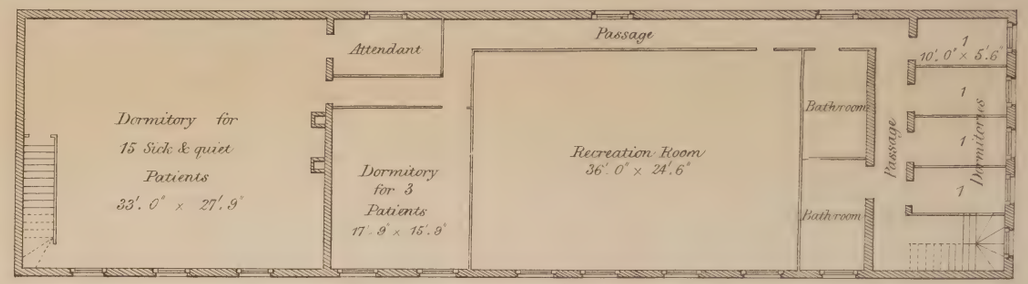
Mr Toller's Cottage Asylum.

Plan II. Detail of Buildings.

Infirmary.

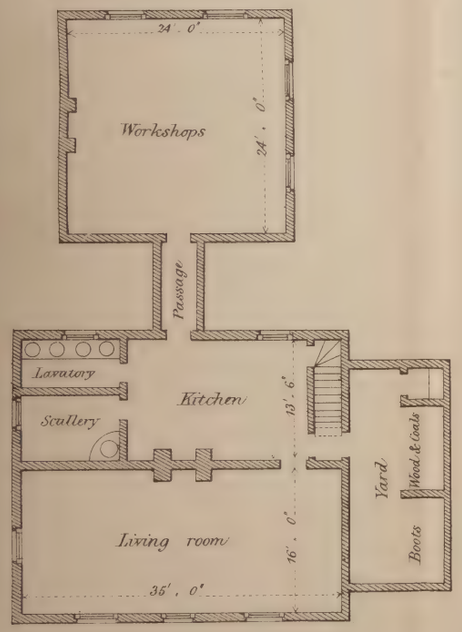


Ground Plan.

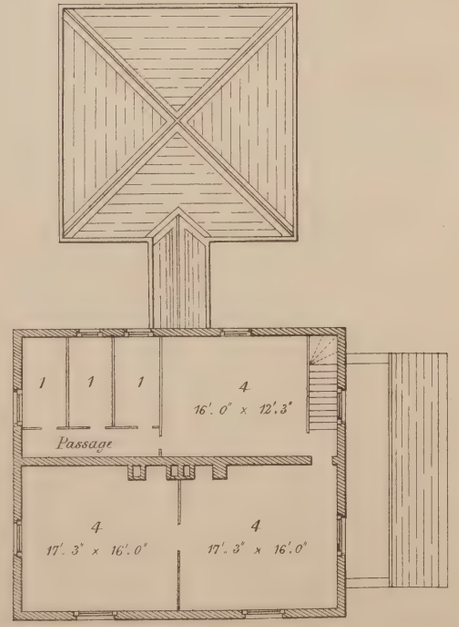


First Floor Plan.

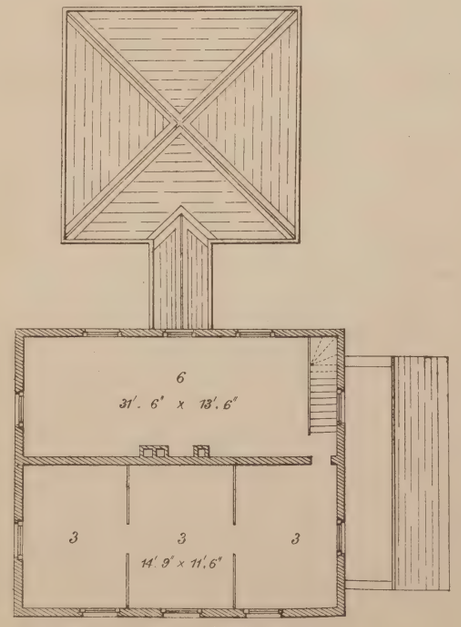
Cottages.



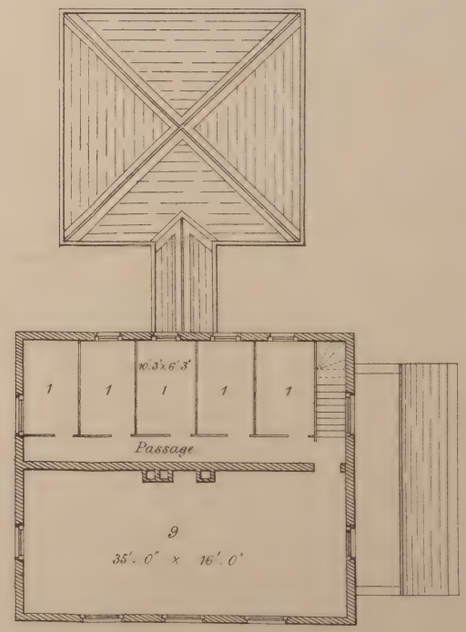
Ground Plan.



First Floor Plan (for Tradesmen)



First Floor Plan (for Quiet & Harmless)



First Floor Plan (for Epileptic)

Scale of Feet

10 5 0 10 20 30 40 50 60 70 80 90 100

W. West, lith. Hanover Garden, London.

of the members replied to the questions which I sent to them in reference to this subject.

It is evidently proved that the unions are unable and totally unfit for the purpose of receiving lunatics, and I am of opinion that as long as increased success continues to attend the working of asylums that to those institutions we ought still to look as being the proper refuges for the destitute insane. Committees of asylums are alarmed at the overwhelming numbers for which they are called upon to provide, and it becomes superintendents to suggest to them the proper remedy; and this I believe will be found in the adoption of the cottage plan. By this we can with greater ease provide for continual increased accommodation, and likewise maintain the chronic and harmless cases at a somewhat less cost than at present without detriment to their mental and physical health, while at the same time they continue to receive all the other benefits which are provided for in the regulations of the county asylum. My object will be now to state to you my reasons that justify me in favouring the plan of a number of detached cottages, each of which shall contain fifteen patients to form the asylum, and as a substitution for the enormously large buildings now being erected throughout different parts of the kingdom.

Four great points in asylum management which the superintendent is most interested in are moral influence, classification, the health and comfort of the patients, and economy of management.

The subject of the evil of congregating large numbers in one building, has been so firmly and humanely discussed at these meetings, that I feel I cannot do better than refer you to Dr. Conolly's address in the 'Journal of Mental Science,' and which was read to the members of this association at the annual meeting in 1858. In this, the evils of overcrowding are most truthfully exposed. Where there are small numbers together in a cottage, the influence of good example, whether set by an attendant or a patient, has more effect than where there are large numbers, also the facility for preventing evil habits and tendencies is greater. There are in large asylums a considerable number of patients who, by their education or good moral feelings, may be said to act as silent monitors. I have been carefully through the list of my 600 patients, and have enumerated 102 such patients, or one sixth of the entire number. As a rule, one attendant will have more control over fifteen patients in one cottage than four will over four times that number in a large ward. I believe the more the patients are separated, and limited numbers have each their special and constant attendant, the better will be the conduct of those patients. The attendant's responsibility for a due amount of zeal and activity is also secured.

Owing to special circumstances, the chief of which was the overcrowding of the patients' day-rooms in one of my female wards, I

took away the attendants' private sitting-room, which adjoined the day-room, and fitted it up as an extra day-room for the patients belonging to the same ward. This I found to work remarkably well, especially as regards industry, the amount of which quickly became more than doubled; I have carried out the same plan in three other wards. As another instance of moral influence, I may mention that in one of my smallest wards in the place of an attendant being constantly present I have substituted one of the female patients who acts as monitor, without creating either the least jealousy, disorder, or irregularity in the comforts in this ward. An attendant is present to serve the dinner. On the male side, I have a patient who acts as a garden lodge porter, and who is entrusted with the key of the gate, and this during the absence of the attendant; and at a cottage containing twelve patients, one of them has acted in the same capacity since its opening four years since. Several patients who at the large building could not in any way be induced to employ themselves, have, when removed to the cottages, quickly made themselves useful, and as speedily showed marked signs of improvement both mentally and physically. Within the last few weeks I have had four well marked cases of such improvement. I may state that I find this plan answers equally well with both chronic and acute cases.

I think that those patients who at the time of admission and for some time after, now feel unsettled at the pain of leaving their homes would be much less so when received into cottages, where there is less feeling of restraint, and a greater resemblance to their usual mode of life.

Lastly, upon this subject, I fear there is nothing but the cottage system that will break down the prejudice against asylums that still exists in the minds of the public.

With regard to classification, it is well known that the whole success of managing an asylum depends upon constant care in the proper association of the patients, whether the numbers be small or large. Certainly, the success of the plan I am now advocating depends entirely upon this. The plan which I lay before you is for an asylum containing 525 patients for both sexes, this being the largest number I consider a superintendent can give the necessary attention to, but should there be need for greater accommodation, I would still proceed upon the cottage arrangement. Supposing each cottage to hold fifteen patients, there would be required thirty-five cottages to be erected upon the estate. For the males three ought to be constructed for epileptics, three for those engaged in agricultural pursuits, seven for the different trades, and one school; the cottages for trades to have the corresponding shop attached to each. The three remaining cottages out of the seventeen appropriated to males are to be attached and to constitute the infirmary.

Each of the cottages, except those of the infirmary and the epileptic, to have one attendant. When I had not a sufficient number of patients of one trade to fill a cottage, I should place those patients who, by example, might be induced to learn the trade or apply themselves in other ways. Of such cases, I have in the Gloucester asylum eighty-one males and eighty-seven females. Several of the males I have been able with great success to employ at trades quite new to them. Further, the mischievous, cunning, and discontented, when located in cottages, would be unable to thwart the superintendent and his attendants in their endeavour to promote industry in the asylum. By the cottage method allowing greater liberty, the patients would obtain a greater degree of self-reliance, which is so essential, especially to those who are about being discharged cured to their own homes. The classification in the female department would be similar to that in the male. Three of the cottages would be occupied by epileptics, three for those engaged at the laundry and situated in its immediate vicinity, and the remainder for various domestic employments. The infirmary would also be the same.

The amusements and other means of recreation would be much better carried out, each cottage possessing its own particular articles of interest and amusement, with, likewise, a suitable supply of books to each. It would be found that fifteen could be much better amused by one attendant than forty-five or sixty, by three or four attendants respectively.

The hour for going to bed could be better arranged. Those in several of the cottages could remain up until a later hour, without that difficulty which is now found in giving this privilege to those who complain of being compelled to remain so many hours locked up in their bedrooms. The disturbances during sleep would also be much less.

Casualties, both as regards destructiveness and violence to patients, would be much less numerous. During the time of my holding the appointment of assistant medical officer in the Colney Hatch Asylum I made notes of 189 minor casualties which occurred to 500 women, during a period of twelve months; 74 of these I considered were due to excitement, unavoidably caused by congregating such large numbers in one ward. As an example of showing the benefit of putting an excitable patient among small numbers, I have recently transferred a most quarrelsome person to one of my cottages, with three other inmates, and the good moral effect upon him has been very marked.

The third division of my paper relates to the health of the inmates, which I believe would be much improved. Out of twelve male patients living in one of the two cottages in Gloucester, and whose average age is fifty-three years—with the exception of one,

who suffers from asthma,—there has only been another who required medicine during the last twelve months, and that only for a few days.

The ventilation would be natural, and the drainage better. The objectionable plan of carrying portions of the main drain under some parts of the building would be an evil easily avoided in the cottage system.

The spread of epidemic and contagious diseases would be more speedily checked by the plan of detached buildings. Four most severe attacks of this nature have been prevalent in large asylums, within my own knowledge and experience, during the last four years.

I now come to my last though not least important part of my paper, viz., the saving of expense which I have calculated would take place in erecting an asylum for the insane upon the cottage plan over all others.

All that I consider we require, is a cottage that possesses the requisite conditions for healthiness and comfort. There has been, and I fear there is still, a misplaced philanthropy on the part of those who would construct many of our county asylums. The external decorations, the very expensive appliances to render replete the means for warming bedrooms, and scientific methods of ventilation, and these for a class most of whom have been inured to hard daily labour, and whose dwelling has been the humble cot of the peasant. All that is necessary is comprised in making the cottage in its structure, internal arrangements, &c., thoroughly homely. In a cottage, the furniture required being lighter would be more inexpensive than that usually required for large wards. The airing courts necessary for the patients would be less numerous than that in large asylums, as the majority of the patients would be able to take exercise upon the land inclosed within the estate.

There would be a great decrease in the consumption of gas. In the Gloucester Asylum, to give the necessary amount of light to the day-rooms, galleries, dormitories, and passages, we employ 366 burners, whereas in the twenty-nine cottages and two infirmaries 136 would be found ample, allowing two for each living-room, one for the kitchen, and one for the dormitory. In this way a saving of about £150 would be effected every year.

We should save yearly £135 by not requiring an expensive method, such as is usually adopted, for supplying hot air and hot water to the different compartments.

By doing away with the large main kitchen, which would not be required in the cottage plan, we at once save at least £300 a-year. The cooking would be attended to at each cottage by a suitable patient.*

* Among the male patients at the Gloucester Asylum, I have 54 daily employed in domestic work, and out of this number I could select more than the proportion required for the necessary amount of cooking for the male division. Of course there would be found no difficulty with respect to the females.

We should also save as regards the attendants. By this arrangement they would be engaged as artisans, and would each be employed at his own trade, thereby saving the expense of different servants acting separately as artisans and attendants, at an annual saving of about £250.

Then as regards the closets. The plan of these (in the airing grounds) at the Gloucester Asylum is that of mixing ashes with the soil, moving it daily, and utilising it upon the farm, thereby saving the expense of one of the ordinary water-closets, and gaining much by the manure. I estimate that from 550 persons there would be obtained 33½ tons yearly of this, one of the best manures. It will be seen, in the Plan, that the closet is placed outside the cottage, and it could be used upon this principle.

The last point connected with this subject of economy is the suggestion of a scale of diet which, I think, might be conveniently adopted for a limited number of patients, at a trifling less cost than that now in use in most county asylums. In every county asylum there is a limited number of cases that do not require the high diet of the Institution, but which require such diet as, when compared with that provided in Unions, may be considered luxurious. The class referred to is that which some superintendents and committees have had in contemplation to transfer to the Unions. Patients having such diet, could be conveniently classed together under the roof of a single cottage or more. By this means any ill feeling will be prevented that would otherwise exist if patients in the same ward were receiving two kinds of diet. I have carefully calculated the quantities which I consider might be given as a proper ordinary diet for this class of patients, and such scale would be at a reduced cost of about two shillings per week. In the Gloucester Asylum I could at the present time select 31 male and 44 female patients, whose physical and mental health would not, I think, be impaired by employing such an altered scale of diet.

Description of the Ground Plan.

This is intended to explain the arrangement of an asylum for 525 patients with the necessary offices, &c., to be built upon an estate of 100 acres of land. It is roughly drawn up, and only intended to illustrate the principle. I have not time, nor is it my intention here to go into minute details of architectural design and construction. The principle of the cottage system is not yet sufficiently appreciated in England. The one great reason for supposing that there is greater economy in constructing large buildings than a number of small houses, deters from resorting to the latter plan. I hope that this error will no longer exist. It must

be remembered that there is a distinction between the plan now laid before you, and that which has been adopted at Gheel and elsewhere, where the patients are located in cottages tenanted by labourers who receive payment for the number of patients delivered to their care. The cottage I recommend is to contain fifteen patients. An objection may be raised that this number would require a house rather than a cottage. But I do not think the term cottage misapplied.

For information as to the particular styles of architecture that have been employed in constructing cottages for the poor, I may refer you to 'The Dwellings of the Labouring Classes,' by Henry Roberts, F.S.A., and other works which are enumerated in the 'English Cyclopædia,' article "Cottage."

The plan consists of twenty-nine detached cottages, two male and female infirmaries, each holding forty-five patients; two houses for male and female stores: a building comprising the committee room, superintendent's office, assistant superintendent's rooms, visiting and reception rooms, all adjoining on the ground floor, and over these is the entertainment room which measures eighty feet by forty feet. The chapel is between the laundry and central building just alluded to. The laundry and wash-house occupy an open space at a distance away from the buildings; the situation is isolated, well ventilated, exposed for drying, and in case of fire there would not be that danger of the flames extending as when the laundry forms part of the main building. Over the laundry I would propose to place a bath-room containing twelve single baths. Means for bathing the sick and feeble would be provided for in the infirmaries. The farm buildings, gas-house, cemetery, brew-house, and bake-house will all be seen in their respective situations. The brew-house and bakehouse being distinct from the main buildings, would afford another means of safety against the ravages of a fire. I have only made one public entrance to the estate, as this I think to be much the better plan. The superintendent's house I have placed in a central and commanding situation. The freedom and comfort of a detached house for the superintendent is well known by those who have experienced the contrast between occupying that, and rooms in the main building. I believe some years since the Commissioners in Lunacy objected to the superintendent's house being detached from the asylum, but I do not think they would do so now. The law of lunacy, as regards asylum management, is comparatively new, and doubtless will require much amending as reform advances.

I think the situation in which I have placed the cottages would answer well, and the private main-road passing between them would be found very convenient in many ways, and give the whole a homely and village like appearance. Trees could be planted each side of the road and flower or kitchen gardens, or grass plots could be planted

between the cottages, thus adding to the pleasing effect, increased means for home labour, and domestic economy. The measurement of the different rooms in the cottages is given on the plan of "Detail of Buildings." There are three different arrangements of the sleeping compartments. Those for epileptics containing five single rooms, the tradesmen's three, and for the quiet and harmless there are four dormitories without any single rooms. The plan for the infirmaries requires especial observation. Being intended for forty-five patients I have made the area exactly three times the size of one cottage; the ground floor is in three divisions, 1st, a living room and kitchen for feeble cases (not bed liers); 2nd, a living room and kitchen for the acute cases, with five single sleeping rooms added; between these two divisions is a dormitory for the feeble cases just alluded to, and who are unable to walk up stairs. The floor over this block is arranged for—1st, the sick and infirm in bed; and this is exactly over the living-room and kitchen for the feeble cases; the remainder of this floor is for a recreation room, bath-room, and five more single rooms for the acute cases. It will be seen on the plan that all the rooms on the ground and first floor, directly or indirectly communicate, thus economising the amount of attendance. I am much indebted to my friend and assistant, Mr. Wilton, for several suggestions in making the plan of the infirmary.

Through the kindness of my friend, Mr. Medland, the architect for the county of Gloucester, I am able to give you the annexed rough estimate of the cost of an asylum upon the plan I have laid before you.

County Lunatic Asylum for 525 *Patients.*

Twenty-nine cottages (including gas and water fittings) at £550	£15,950
Seven workshops (adjoining the cottages), £100	700
Superintendent's house, &c.	2000
Two infirmary buildings	2300
Two store do.	2000
Offices, and recreation room over	2000
Chapel	800
Laundry buildings, with baths	2500
Bakehouse and brewery	1000
Farm buildings	2000
Gas house and engineer	1000
Post-mortem house and reception-room	300
Two lodges	400
Roads, drains, airing grounds, and boundary walls	5600
Total	£38,550

The cost of the land has to be added.

On the Legal Doctrines of the Responsibility of the Insane and its Consequences. By Thomas Laycock, M.D., Professor of the Practice of Medicine and of Clinical Medicine, and Lecturer on Medical Psychology and Mental Diseases, in the University of Edinburgh.

(*A Lecture delivered to his class, July* 28, 1864.)

I do not know that a more useful question can occupy this our last hour of meeting together than that of the legal responsibility of the insane, and how it affects us in our relations to our patients, more especially in regard to moral treatment. Our visits to Millholm have enabled us to judge of the value of that method, as carried out in the largest private asylum in Scotland. At the Crichton Institution, where we were so kindly entertained by Dr. Gilchrist and the directors, at our late visit, we witnessed its highest present development, and learn, moreover, of what it is further capable. Dr. Browne was the first to introduce the method into Scotland, when appointed to be the medical superintendent of the Crichton Institution, at a time when the lunatic was treated worse than a felon. With the sanction of the Board of Lunacy he most kindly consented to accompany us on our visit, and to give us a discourse on the moral treatment of the insane.

It is worthy of mention that, twenty-three years ago, Dr. Browne delivered a course of thirty lectures on mental diseases and mental hygiene, in the same room, to an audience of two; at our visit it was crowded. I believe forty-eight students have voluntarily studied mental diseases in Edinburgh during the summer; thirty-two of these were enrolled members of this class. Great as is the difference, it should have been greater if the importance of the subject be considered.

Now there was one point that Dr. Browne more particularly dwelt upon, as to which his views had my entire concurrence; he objected to the enormous and costly institutions which have gradually grown up for the reception of the insane, since a more humane treatment prolonged their lives, and increased their numbers; and more particularly showed that the proper improvement in this direction was to establish quiet suitable homes for the infirm in mind, rather than places of detention. I cannot doubt that throughout Europe thousands of persons are now shut up for life in these large establishments who might be advantageously and happily placed in private families and cottage homes, and that the due treatment of the insane is thereby made more difficult and imperfect. Doubtless

there are numerous obstacles of an administrative kind to such a reform, but the chief hindrance will be found in the relations of the insane to the law and the administration of justice. It is generally believed that insanity and irresponsibility go together, but that is not the law; it holds all lunatics responsible. Any lunatic murderer, whether in or out of an asylum, may be found guilty and hung. It is true none has ever been hung for murder committed while a patient in an asylum, and hardly one suicide in a thousand is found to be *felo de se*, but these are exceptional cases, and arise out of expediency, and not justice. But let us suppose the insane treated in cottage or other homes. According to the legal dictum in criminal cases, a person to be considered irresponsibly insane, must be so deprived of understanding that he has no knowledge of right and wrong. Now, the great majority of the inmates of asylums not only have this knowledge, but the entire government of an asylum is founded thereon, and is, indeed, the only foundation of moral treatment. The majority, therefore, are legally responsible, and, consequently, if any of the insane treated in cottage homes were to commit theft, or homicide, or other crime of violence, they would be held legally responsible, and the law might find it expedient to punish them, and their position would be one of danger. Practically, George Bryce, lately executed for murder, was an imbecile taken care of at home, for as such he was employed as a carter, and kept and clothed by his father, and paid no wages, as is and would be the case with the class I refer to. He did work which thousands now in asylums are capable of. But the Lord Justice-General, in his charge to the jury, founded on this capability, that he was to be held responsible for his actions; and the Solicitor-General strongly pressed that he was a responsible member of society on the same grounds. What the courts would do with the insane generally, under like conditions, we cannot tell. There was a lunatic from Alloa, brought, just after Bryce, before the High Court, for the cruel murder of an innocent boy, who had maintained his family for three years previously, and had no supernatural hallucinations, only a crazy temper and delusion about church government, and yet he was found to be so insane, that he was not even put on his trial. There was no substantial difference, medically, between his case and that of Bryce. Bryce was certainly the more imbecile in intellect, and the less competent to transact business. In fact, he never feigned insanity, never instructed as to his defence, and was quite incompetent to do so. Expediency might, therefore, lead the courts to decide just as harshly against our insane patients if placed in cottage homes; for justice, gentlemen, is often of necessity administered expediently. It would shock our common humanity if justice ordered the murderous inmate of an asylum for execution, or visited the penalties of *felo de se* upon the corpse of the hapless suicide;

but the free homicidal lunatic like Bryce, not less insane than either, sometimes suffers the extreme penalty, because justice finds it expedient to satisfy public vengeance, or set forth the terrors of the criminal law. I do not mean to question the wisdom of this expediency, nor do I deny the doctrine that the insane are responsible. All that I wish to point out is, that if the insane are to have that modified freedom, as useful members of Society, of which thousands now shut up for life in asylums, at great cost to the country, are capable, the legal doctrine as to responsibility must be well considered.

But while the law thus interferes with the liberty of the mentally sick of one class, it affords to those of another class a very dangerous freedom. Within the last two years, at least four or five lunatic murderers have been hung in Britain; two or three others have been condemned to death, but had their sentences commuted to penal servitude for life; and several more are now awaiting in prison either their trial or execution. And if the law be faithfully and impartially administered, as the public has a right to expect, many more lunatic murderers will be executed. There is of late a notable increase in the number of insane murderers; it is indeed this increase which has rendered it expedient to hang the insane murderer. Now that is due, I think, not to the increase of lunacy, but to the fact that there is a greater number of dangerous lunatics at large, and these are so at large because of the legal doctrine as to insanity and the responsibility of the insane. For we all know, that in consequence of the numerous actions at law brought of late against them by lunatics, medical practitioners have now to consider well whether in case of action their patient will be legally considered insane before they venture to certify that he is of unsound mind medically, and a proper person to be detained under care and treatment. And as the worst and most dangerous kind of criminal lunatic offers in the early stages none of the symptoms of popular or legal lunacy, he is of necessity left uncertified, and wanders abroad in society, free to commit the vices and crimes to which his insane nature impels him, until, with increase of his malady, he finds his way to an asylum, or a workhouse, or a jail, or the hulks, or the gallows, according to the characters of his insanity. It is not to be supposed that the public, the bench, the bar, or the legislature, can desire that this state of things should continue. The judges in particular must feel deeply the painful position in which they are placed, when they have to pronounce on the weak and wayward murderer, with obvious mental infirmity, the same solemn doom which befits the cunning, able, deliberate assassin. It is, indeed, a saddening sight to see the toils of the law closing round these insane and imbecile homicides, and the instincts for sanguinary excitement and for vengeance on the wretched shedder of blood, pertinaciously seeking their gratification

in a crowded court, or at the gallows. Many more such sights will either familiarise the brutal with death, and so cause fresh murders, or disgust the wise and thoughtful, and lead to the abolition of capital punishment.

Such being the social and professional consequences of the legal doctrine of responsibility of the insane, let us examine whether the method and principles of the courts are equal to the duty imposed upon them, and whether some reform in these is not indispensable. The case of George Bryce is fresh in your recollection, and illustrates them well. Bryce was an unmarried man, of about thirty, of weak mind naturally, but rendered weaker by an attack of fever in boyhood, and during manhood by the use of stimulants. These, taken in small quantities, excited him to maniacal violence, and, in larger doses, induced a comatose condition, mistaken for natural sleep. Such a result almost always marks a tendency to morbid brain-action. That he had such a tendency hereditarily seems probable from certain family facts. On his mother's side he had relatives who were fatuous; one of his uncles, by his father's side, was executed at Edinburgh several years ago for murder, and another is now an inmate of the House of Refuge in this city, with failing memory, very irascible, and, when excited, frequently threatening violence. These hereditary tendencies are of great practical importance, even when the brain is well formed and the intelligence unaffected; but, as you will see by this cast of Bryce's head and face, taken shortly after death, the intelligence and the development of the brain in him must both have been very imperfect. The head is very small anteriorly, and almost idiotic in that aspect, as compared with the face; it is also very irregular in form generally, and appears larger than it is, because the cranium was covered with thick flabby muscles. Very significant, too, is a change in the face which you see on the cast of this idiotic man, who murdered his brother, and in this cast of another idiot. Both have heads no worse than Bryce's; both have a palsy-wasting of the left side of the face. That of the idiotic fratricide closely resembles the well-marked wasting of the left half of Bryce's face, which was not so obvious during life, because the cheeks were covered with whiskers. Indeed it was only clearly observable as to the nose. Now, this wasting corresponded to some internal brain defect of the same kind, the nature of which a careful examination of the brain after death might have revealed. Thus constitued, Bryce showed symptoms of gradually failing health, and at last became the subject of well-marked insanity of a morose, melancholic kind. In an aggravated state of his malady he furiously attacked a nursery-maid, regarding whom he had insane suspicions, and cut her throat with a razor. He was tried at Edinburgh for this murder, found guilty, and executed on the 21st of June last. I felt it my duty to express the opinion at his trial that he had a brain

disease which would progressively advance and end in complete deprivation of reason, if he lived long enough. Further inquiries have satisfied me as to the accuracy of this prognosis. Happily for himself, he was spared the proof.

Three medical questions were raised at Bryce's trial. 1. Was he insane at all when he committed the murder? 2. If insane, was he insane to that extent of insanity which relieves a man of responsibility? 3. Was he insane at the time of his trial? I say these are medical questions, because they plainly involve subordinate questions as to the nature and extent of disorder or disease of the brain; but the Lord Justice-General most clearly laid before the jury that the determination of these questions rested with them, and not with medical practitioners. In this he obviously is in accord with the Lord Chancellor of England. He said—"Gentlemen, the question of insanity—insanity to the effect of relieving a party of responsibility—the question of whether a man was insane to that extent, is a question for you to determine. It is a question upon the whole facts of the case. It is not a medical question." Nothing can be clearer than this. But the Lord Justice-General went farther: he gave the jury to understand that he directed thus, although well aware of the importance of medical opinions to the due administration of justice in such cases. He said—"Medical gentlemen have opportunities of observation which make their testimony frequently very important in reference to such matters. Their experience and observation make it important, but the question is not a medical question. It is a question of fact, whether the man was at that time in that state in which he is not to be responsible for his actions." In accordance with these legal doctrines, neither my able co-witness, Dr. Ritchie, nor myself, was asked whether we thought Bryce responsible or not. See now in what a position the jury is thus placed medically by the law. Like other diseases, insanity occurs in very different degrees of extent and intensity. We often meet with patients who are just beginning to show symptoms of a palsy or a consumption, when it is difficult to decide, without the most careful examination of the patient and weighing of the symptoms, whether he is affected with the disease or not. So it is with insanity in its beginning; it is often very obscure; indeed so obscure that it is only the medical "detective" (if I may so speak of the experienced physician) who can discover it. Now, it is precisely this greatest medical difficulty of all which the law hands over to a dozen or fifteen men who are supposed to know nothing of insanity whatever, while it takes the solution of it from those who are supposed to know all that is known. The Lord Justice-General then proceeded to lay down what was the degree or extent of disease the jury had to determine, and how. He explained thus:—"It is a question of fact whether the insanity did

amount to this, that he was doing a thing which he considered himself—and had grounds for considering himself—warranted in doing." And again:—"The question you have to decide is the question before you—Has it been established, or has it not, that this act was perpetrated through insanity—insanity in this sense, that the party was bereft of mind, and believed that he had good grounds which warranted him in committing a violence against an individual?" As "mind" was probably used in the sense of "understanding," the question in another shape is this—Was Bryce bereft of understanding, and were his beliefs of a certain kind during the five minutes within which the deed was done? This question is not precisely the same, however, as that which is put to the jury by judges in England, who set it forth more specifically thus—Did the prisoner know right from wrong at the time when he committed the act? And I think the Solicitor-General had that in view in his cross-examinations, and in his very able speech, although he quoted the dictum of our great constitutional writer, Baron Hume, to much the same effect as the Lord Justice-General. The essential point in the question is, however, the same in all—namely, whether the degree of the disease termed insanity was of such extent as to constitute the criminal an irresponsible agent, by sufficiently affecting his belief and his knowledge of right and wrong.

Let us now try to realise what principles would guide a well-informed jury and well-informed physicians respectively in weighing the facts, so as to determine the metaphysical questions submitted to them. I have looked into a book published in 1858, and entitled "An Inquiry into the Constitution, Powers, and Processes of the Human Mind," which is from the pen of the Rev. Dr. Pirie, Moderator of the General Assembly, and Professor of Divinity in the University of Aberdeen. It may be held to indicate the state of opinion current amongst our most educated non-medical thinkers. Dr. Pirie is, we may assume, in advance of the class constituting a jury; nay, perhaps, if not in advance of, at least fully equal to, Baron Hume. Now Dr. Pirie tells us something of practical importance in his preface; for he says that he could find nothing satisfactory as to the processes and powers of the human mind in the systems of mental philosophy now current, and had, therefore, to attempt the analysis of mental processes for himself. And in the body of his work, when discussing the mode of investigating the nature of the mind, he remarks that "all classes dogmatise on the profoundest doctrines of theology, morals, politics, education, &c., without apparently having any solid foundation on which to rest their speculations." This is certainly true as to a disordered mind and its relations to morals, government, and education. You will often hear men and women of excellent understanding expressing the most decided opinions as to the morals, responsibility, and

government of the insane, who have not the slightest knowledge of the disease, either theoretical or practical, nay, perhaps have never even seen a lunatic. The moral responsibility of the imbecile and insane has close relations to the legal responsibility. Upon this point so eminent a divine as Dr. Pirie must be considered to give the opinion of an "expert." Well, he says, and very truly, the question is "awful, dark and mysterious." In insanity Divine Providence visits most emphatically the sins of the fathers upon the children, even to the third and fourth generation; so that we can often answer the question as to an imbecile, whether this man sinned or his ancestors, that he was born mentally blind? The great and final tribunal will, we are sure, judge rightly; but as to that before which the lunatic Bryce stood, we can only hope a proper sense of incompetence so to judge was felt by some at least of its members.

But what would be the notions of a jury as to morbid mental states? Dr. Pirie indicates the most common. He says that in these and in sleep, and even when violent passions are in operation, there is "a partial disjunction of body and mind." This is perhaps the most ancient as well as the most popular theory. It is the foundation of all popular doctrines of ghosts and apparitions; upon it, indeed, rests the whole fabric of so-called spiritualism. It is a very probable theory to be held by an intelligent jury, knowing nothing of mental physiology. If, then, the jury in Bryce's case adopted any theory, they would probably try to determine to what extent his body and mind had been "disjoined" by disease. But then Dr. Pirie further affirms that "the action of body and mind, be it what it may, is utterly undiscoverable by us," and, "even if it could be discovered, we should be as far as ever from knowing anything of the mode under which the ideas resulting therefrom could be regulated;" so that ignorance on this point is both admitted and justified. Now, conceive two or three physicians in consultation on a case of insanity attempting to determine its nature, and extent, and treatment on these principles, and we can form some notion how unpractical and absurd popular medical art would be in the jury-box. I do not allude to these doctrines in a critical spirit, but only as representative of the state of knowledge popularly current, and what would probably be found in the most intelligent jury. It is obvious to us, at least, that the best thing for such a jury to do would be to say that they felt incompetent to decide the serious questions submitted to them. It would at all events be the honest thing, and here honesty would surely be the best policy for the public. For if a few juries empanelled to determine questions so manifestly beyond their capacity were to bring in a primary verdict to that effect, a reform in the judicial proceedings regarding the insane would become imperative.

Practically, however, these questions are and must be decided by those professionally competent. But while all liberal and advanced jurists concede the principle, they hesitate as to how they shall be submitted to physicians, and how far our opinions should be adopted. They want a firm faith in us. They say, How can we take your doctrines as our guide when you differ so much in opinion among yourselves? They see, too, that physicians differ according to the side they take. Now, that is mainly due to the fact that we are forced to take a side, although we occupy a position with regard to the medical evidence as strictly judicial and impartial as that of the jury with regard to the whole facts of the case. If the medical practitioners called on both sides in the case of Bryce had been constituted into a jury to determine the medical value of all the facts, they would have been just as impartial as an ordinary jury. But, by the existing system, they are made to take a side, and, in spite of themselves, are forced to a judgment, *ex parte*, before at least they come into court as witnesses. For it is not likely that agent or counsel will collect and lay before the physician the facts which do not favour the conclusion they desire with the same care and zeal as those which do. My friends Dr. Craig and Dr. Littlejohn, who were witnesses for the Crown in the case of Bryce, could not have had all the facts bearing on his insanity laid before them previously to the trial, and they were not asked their opinion as to those which were stated in the course of the trial. I presume they had chiefly before them the facts which proved he was not insane—facts of a wholly different kind from those which proved that he was. Physicians, for obvious reasons, necessarily differ in opinion as to the conclusions to be drawn from facts, when the facts submitted to them differ wholly in kind. Here, then, is a very common source of the medical contradictions complained of, and which can only be remedied by so treating medical witnesses that they shall no longer be *ex parte*, but impartial investigators, like the bench or jury itself. Undoubtedly, another source of difference of opinion would remain in acknowledged differences of doctrine. Independently of physiology, the speculations, contentions, and doubts of mental philosophy have infected medical inquiries into the nature of healthy and morbid mind, and rendered a subject most difficult in itself still more difficult. Unanimity as to doctrine is therefore simply impossible. But I may affirm this—that, however we may differ as to doctrine, we seek to get rid of all subtle metaphysical questions in practice. Our fundamental principle is purely practical; it is this—that the action of the mind on the body, and of the body on the mind, is through the brains. So that, whatever a man feels, or thinks, or does, is medically referred of necessity to the action of his brains. If the mind suffers disorder from the action of the body, it is through the brains; if it causes disorder in the body, still it is through the brains. Man, in short, acts

mentally and consciously in virtue of his cerebral organisation, and of the changes which go on in that. Mental science, from this point of view, has not, during the last twenty-five years, lagged behind other sciences; and if it has not had applications more important to society than those of the physical sciences, it is because they have had no hindrances to practical progress, such as medicine experiences from the influence on public opinion of ancient, deeply-rooted, and barren systems of philosophy. In the magnificent development of the Copernican system of the universe, which only became possible after the Ptolemaic system was overthrown, we have an illustration of what a mental system founded on biology is capable in the world of mind and morals, when it shall be free to evolve into all its multifarious branches, and be developed practically.

So much for the tribunal. Let us now inquire how the facts of a case of alleged insanity are judicially ascertained. Bryce committed the murder suddenly, furiously, in the short space of five minutes. What was his mental state at the time, and just before he committed the act? Now this might be shown by his state shortly after it; for if insane before, he was probably insane after the act, and so it might be concluded he was insane at the time of committing it. Was he insane, then, shortly after? He was taken a few hours after the murder (which was committed in open day and in the presence of witnesses) before the sheriff and the procurator-fiscal of the county, when he "emitted" a declaration, chiefly to the effect that he recollected being in Mr. Tod's kitchen (at whose house his victim was nurse-maid) that morning, and after that he recollected nothing till he found himself lying in a plantation a little to the west of Mr. Tod's house. Both these gentlemen asked him a few questions, and got coherent answers, and thence concluded and witnessed that without doubt he was then in his "sound and sober senses." In other words, they formed the medical opinion that he was not insane a few hours after he did the deed. I am sorry to say that this method of inquiry sometimes satisfies our professional brethren. I need not tell you, however, after the experience you have had at Millholm Asylum, that probably one third of the inmates of our asylums would manifest the same coherence when questioned. You know practically that you cannot be too guarded against erroneous conclusions, nor too careful in your investigations. At a first interview, five weeks afterwards, Bryce did not appear to me to be insane, only of weak mind; and I stated as much to the Procurator-Fiscal, when he precognosced me two days before the trial. But then I took care to add, I had further inquiries to make before I formed a decided opinion. At a second interview, on the day before the trial, I advanced towards a decision, but it was not, in fact, until after hearing evidence in court that I came to the conclusion that he was insane then, and for some months previously. The Commissioners in Lunacy

examined Bryce shortly before his execution, and did not find any positive symptoms of insanity. But then they were well aware that between the murder and that date he had been subjected to important moral influences, which of themselves exert a decided curative action on the diseased brain. It was thought by many, indeed, that he was at all events restored to sanity before his execution: in so far as I could learn, and I weighed all the statements, there was no proof of this, but the contrary. Confessions and statements made in prison are notoriously of little weight, even when the prisoner is of sound mind. Jurists of eminence, indeed, have laid it down as a principle of jurisprudence; for experience abundantly shows that the innocent may, by dint of bad treatment, apprehension, solicitation, and the like, be made the victims of hallucinations and delusions, and confess to crimes of which they are wholly guiltless. Hundreds of wretched women, imprisoned and then burnt as witches, were formerly thus led to confess to personal intercourse with the devil, with full particulars of time, place, bodily appearance of Satan, and the like.

In Bryce's case the valueless negative evidence adduced in proof of the negative opinion that he was not insane a few hours after he committed the murder, was, of course, made available to the further proof that he was not insane at that time; and, taken in connection with other negative evidence, equally inconclusive and valueless, helped also to prove that he was not insane before. All this could only serve to mislead a jury; they were not warned how fallacious negative evidence is, and they judged erroneously. This was probably due to the fact that the courts do not recognise the important principle in medicine that all the evidence of insanity is, strictly speaking, circumstantial. We cannot see, or hear, or feel the brain-disease or disorder which leads to the morbid mental manifestation. Then the patient, if he do not feign symptoms, as he often does, either states hallucinations, as if they were facts, or conceals them; so that our chief witness is untrustworthy. It follows that the practitioner has to be constantly on his guard against attaching much weight to negative evidence, or even to uncorroborated positive evidence; and the more experienced he is as to these sources of error, the more cautious he is in his scrutiny of the facts. It is not so with the inexperienced public. They know nothing of these difficulties; they think negative evidence as good as positive evidence, if not better; and hence the wide gulf which so often divides the medical and non-medical conclusions in cases of insanity.

Now positive evidence, though not free from fallacies, is infinitely more reliable than negative. Eliminate the doubts whether Bryce feigned or not, and it was abundant and conclusive as to his mental condition previously to, and at the time of, the murder. Positive evidence is often, moreover, very microscopic, for you know that not

unfrequently phenomena are most important as to their meaning, which are most trivial and insignificant as to their manifestation. Thus, neither the Solicitor-General nor the Lord Justice-General would admit Bryce's hallucination that John and George Peat had told him his victim had said to them he was a drunken blackguard, to be of any adequate value. If he had had strange and supernatural ideas as to himself and those about him—such as that he was the Divinity and they devils, and the like—he would not have been held responsible, but a mere eccentricity of opinion like that, they said, could not be entertained. Yet it was a very important symptom of the kind of insanity he was affected with. He might certainly have had supernatural delusions if he had had any imagination, but he was so defective mentally that he had very little of that faculty. It is true he said, weeping, to Dr. Craig, after a paroxysm, that he could not tell how it was the devil had tempted him to attack his mother; and before his execution he appears to have said the same as to his murder of Jane Seaton. But then we know that this marks no delusion; on the contrary, it is very common for persons who have insane impulses to commit crime to designate them in this way. Both the clergy and the medical profession know this. It is, in fact, an opinion as to their cause, founded on a very ancient theory of insanity—current long anterior to the Christian era—to the effect that the strange feelings, thoughts, and conduct of the insane are due to evil spiritual agents. This opinion is still held, indeed, in many parts of the world, and insanity is treated by exorcisms. As to these minute indications of Bryce's insanity, I may remark that they were more numerous as delivered *viva voce* in court than appears from the reports of the evidence in the newspapers; and I have no doubt that if I could have cross-examined the witnesses, I should have elicited others. The mother's description of his nightly states was, however, most graphic, and clearly showed that Bryce had nocturnal paroxysms of acute melancholia, which, in a man constituted like him, are sure, if not relieved or checked, to end in homicide or suicide, or both. We can speak of the course of such a case as confidently as we can of a case of epilepsy or spasmodic asthma. I have before me the opinion of my friend Dr. Browne, who, as you know, is greatly experienced in insanity, and a medical commissioner for lunacy for Scotland, as to the mental condition of Byrce, deduced from the evidence as reported in the papers, and it is in general accordance with what I expressed at his trial.* Neither do I think a physician practically acquainted with mental diseases would come substantially to any other conclusion. Nor is it venturing beyond general medical experience to affirm that if Bryce had been detained under care and treatment as a lunatic, both he and his victim would be alive now, in so far as the murder influenced their fates. They both suffered a

* See note by Dr. W. A. F. Browne, at end of this paper, p. 365.

violent death for want of the due and proper application of medical skill. Nay, it is not going too far to say that since many similar lunatics are at large in the United Kingdom at this moment, a proportion of innocent persons now living will perish by the hands of some of them before the year expires.

All this applies mainly to the simple question of insanity; but how is that degree of insanity ascertained judicially which constitutes irresponsibility? In Bryce's case, besides the delusions, the state of the memory was a leading point. It certainly was very defective, as I clearly ascertained by personal inquiry, independently of the abundant evidence of his father and mother, and others who knew him well; and in my judgment, the defect was of that peculiar kind which is seen in the epileptic and others in whom brain-disease is slowly progressing. He said to me, as to others, when charged with the murder, that he did not recollect killing Jane Seaton. Was this true, or was it not? and whether true or untrue, how did it affect the two distinct questions of his insanity and responsibility? I think, gentlemen, after what you have heard in this room as to the connection of memory with organisation, you will agree with me that it is one of the deepest and the most wonderful questions of mental science. From this point of view, it was curious and interesting to see how the judicial inquiry was conducted in the absence of all knowledge of the vital laws of memory (which are modified so strangely in insanity), and of digested experience of its morbid manifestations. The court and general opinion believed that the assertion was not true; they formed the hypothesis that it was a cunning trick, and that on numerous other occasions when Bryce had manifested destructive and homicidal furiosity, and when he invariably made the same declaration, it was equally false, and merely given as a foolish excuse for his bad conduct. The hypothesis was reasonable enough; but if admitted to be true, of itself it proved neither sanity nor responsibility, and might, indeed, when taken with other circumstances, prove the contrary. Cunning of a very remarkable depth is common in homicidal lunatics of a certain class. But then so is want of recollection. Now, as the evidence proved that Bryce's mental state just previously to the attack was morbid, it is reasonable to conclude that it was morbid at the time of the attack; and, consequently, we appeal to our experience of homicidal lunatics to determine the question whether he recollected or not. It is generally believed that the memory and recollection are enfeebled in all kinds of insanity, and more especially in the furious kinds of mania; but this is not strictly accurate. So that when I read the report of the Chancery visitors in Lunacy on the mental state of Townley, and found that they concluded he was not insane when he murdered his victim because he said he did remember, I did not hesitate to doubt their conclusion. So far from the memory thus suffering in all cases, the

contrary condition is manifested in some; so that whatever is done or suffered during the paroxysm is ineffaceably recorded on the morbid brain. I was lately told the case of a gentleman who, being a furious maniac, had the strait-waistcoat put on; his physician on the occasion of a visit took off his night-cap to feel if his head were hot, and did not replace it properly, but left it awry. This slight neglect so deeply offended the patient, that although subsequently quite restored to continued mental soundness, he for several years felt a strong sense of hatred for his physician. Happily, he recognised the morbid character of the sentiment, and kept it in check—at least, so long as he continued well. I had a young lady under my care, naturally of a most excellent disposition, who became the victim of moral insanity in consequence of changes in her bodily health. Although naturally truthful, one of her symptoms was an addiction to the utterance of the most malicious falsehoods. I spoke somewhat severely to her as to her sad vice, and when she recovered, which she did completely by a restoration of her bodily health, she always showed the utmost gratitude to me, but at the same time confessed that she had such a deep-rooted and painful recollection of my reproof that she felt she hated me. Exaltation of memory is, in truth, as I have already shown you, a leading sign in certain kinds of mania, and I do not think it was likely to have suffered in Townley's case. But there are reasonable grounds for believing that Bryce's declaration as to his want of recollection on the various occasions when he was violent might be true, for such an allegation is very common in cases like Bryce's in other particulars, and has been made under circumstances which precluded any reasonable belief that it was feigned. It is shown, for example, in persons in whom a morbid state is produced artificially, as by chloroform or mesmeric manipulations, or more morbidly by some brain-disease, as epilepsy. Homicidal delirium, with want of recollection, is a well-known accompaniment of epilepsy, and when it is manifested in an epileptic compels his seclusion, although in the intervals of the fits he is of sound mind and memory. Somnambulism is another of these diseases in which recollection is involved, and a cause of homicidal impulses, although less generally known to be such. In fact, so common is the allegation of want of recollection in cases like Bryce's, and the tendency to epileptic attacks so striking, that my friend Dr. Morel, of the large asylum at St. Yon, near Rouen, has termed them "masked epilepsy." From the evidence, I suspected epilepsy in him; and if I had been consulted would have directed him to be carefully watched, especially at night, to ascertain the fact. And I may add that my personal inquiries led me to the conclusion that Bryce was a true somnambulist, and that some of the curious freaks he perpetrated were probably of a somnambulistic or epileptic kind.

The manner of the murderer previously to, during, and after the

attack, is of diagnostic value. A blacksmith's apprentice was so struck by the expression of Bryce's countenance a few minutes before he committed the deed, that he mentioned it to his master. The Solicitor-General cross-examined the lad, with the object of showing that it was merely the look of a man who had been dead-drunk the night before. But expressions of countenance cannot be described. How would it help a jury to a decision if none of them had ever seen a smile, to tell them it was "a look of pleasure or kindness," as Walker defines it; or "a contortion of the countenance," according to Johnson? Now, this was precisely their position as to the look which Bryce had. It was morbid—its true nature is known to us who have seen it; but those who have not seen it (and it is very rarely seen) could not conceive what it was like, nor what it meant. Mrs. Tod, who was present when he made his attack, said he "gazed" at her when she seized him, and she could not say he recognised her; and Davidson, who saw him half an hour after, noticed his "raised" look. The probability is, that as he had just awoke from a prolonged comatose sleep of eleven hours' duration, his brain was in a state something like that of somnambulism; and the look which was so peculiar as to attract the notice of a blacksmith's boy was of the kind observed in sleep-walkers.

Another peculiarity was, that after this furious attack and bloody murder, Bryce was seen by two witnesses walking composedly away; and another, that during the attack he was not heard to speak. These two symptoms have a peculiar diagnostic value medically. The Solicitor-General, in his cross-examination of me, asked me whether, if the prisoner had been running for an hour and a half after he committed the deed, did I think the fit passed off while he was running? Now, the evidence on all sides was clear that he did not run at all after he committed the deed, nor at least for three-quarters of an hour after. He walked composedly away, and about forty minutes after was observed by Davidson walking in a plantation a mile distant from the scene of his crime. His account to me was that he came first to his recollection there. He made no attempt to escape until—after talking with him for ten minutes to amuse him, so as to give time for others in pursuit to come up—Davidson told him what he had done; on the contrary, he was quite ready to go to a neighbouring village to drink whisky. He told me himself that he would have gone to Ratho, his own village, for the drink, but he was afraid of meeting his father. It was only when he saw men coming up to capture him that he tried to make his escape and cut his throat. Davidson evidently treated him as an imbecile, and Bryce's whole conduct was in accordance with the notion. He never thought of running away until he was told what he had done, and saw men coming to take him.

As an example of how medical opinions are arrived at in the courts, I may observe that when the Solicitor-General asked me the hypothetical question as to his running for an hour and a half after the act, I objected that that was an assumption, and that I understood I was in court to give an opinion as to the facts of the case. The Solicitor-General replied—"You are quite mistaken, Doctor. You are here entirely to give opinions upon assumptions; you are not here to give opinions upon facts." When, therefore, the Solicitor-General cross-examined me as to Bryce's knowledge of right and wrong, and of what he was doing during the time that he committed the crime, I answered, perforce, the various metaphysical questions put to me—which no man could answer, or pretend to answer, scientifically—to the best of my ability. As a consequence of the method of reporting, all the questions and answers were so mixed as to make the reader understand I was the originator of the assumptions. I gather this from the fact that journalists, in commenting on the case, charged me with bringing forward crude and ill-developed contentions in favour of the murderer. I was, in fact, compelled to speak of what I knew were metaphysical assumptions, and wholly irrelevant to the case practically, and was no more in favour of the murderer than any one of the jury. In this way medical witnesses are often forced into theoretical statements of no value whatever.

Now, if a medical jury had had to determine the question of Bryce's insanity and responsibility, the whole procedure as to the collection and weighing of evidence would have been different. The cross-examinations of the witnesses would have had distinct reference to the origin, cause, and duration of the alleged insanity, and to the particular brain-condition at the time the deed was done; and special points (as to the bearing of which on the case a professional and experienced inquirer could only judge) would have been brought out. Care would have been taken to keep the witnesses themselves in the best mental state for recollecting and clearly stating what they had seen or heard; and I need not say that all puzzling and irritating modes of cross-examination would be avoided. Nay, it would hardly be necessary to solemnly swear these witnesses to tell the truth, although they should be informed that wilful misstatements were punishable. If necessary, the inquiry would be adjourned from time to time for the production of further evidence. In this way the utmost possible accuracy as to both the facts and the conclusions would be attained. Speaking for myself as to the conclusions, I would say that no metaphysical questions whatever should be submitted to either a medical or non-medical tribunal. The question should not be as to the knowledge or beliefs of the prisoner, but this plain proposition—did he commit the crime in consequence of a diseased state of the brain—such that, if he had not had such disease,

there was reasonable probability he would not have committed it. Difficulties would, of course, arise. For example, bad, vicious habits, though uncontrollable, are not disease, but they too often induce mental disease, and then the difficulty would be to distinguish between the vicious habits and their morbid effects. This is often experienced as to habitual and insane drunkenness; but medical experience enables us to distinguish these cases. Again, vicious habits may be induced by disease or defects in persons otherwise moral. This is not uncommon as to drunkenness, and even as to theft, lasciviousness, malicious attacks on person and property, and the like. But medical art, if allowed free action, would satisfactorily determine the question of disease or defect even in these cases. I do not say we can as easily determine the question of degree of responsibility, because that is beset with the greatest difficulties; but in all cases of murder I would certainly fix responsibility somewhere, and if the prisoner were himself found irresponsible, then those whose duty it was to have restrained and controlled him as a lunatic should bear the responsibility. The courts, in fixing who should bear it legally, would perform an appropriate function. This plan would tend at least to diminish the number of dangerous lunatics now abroad. For complete efficiency, however, the medical profession should be protected in the exercise of their difficult and personally dangerous duties towards this class of patients, so that they should be exempt from actions at law for damages, and have security against malicious attacks and personal violence. Their duty is wholly judicial, and in performing it they are as much entitled to protection against such actions as judges and jurymen.

Note by Dr. W. A. F. Browne (*see p.* 360).

* *The opinion alluded to by Dr. Laycock is as follows:*

Memorandum.

"*From a consideration of the evidence given on the trial of George Bryce for murder, as published, I am of opinion—*

"1. *That he was originally of weak or limited capacity.*

"2. *That a fever occurring in youth* may *have caused a change in his cerebral structure.*

"3. *That a marked change in his condition took place about a year ago, probably owing to his intemperance, or to the unusual effects which stimulants are said to have produced upon him.*

"4. *That his soliloquising, restlessness, loss of memory, and other peculiarities, may fairly be regarded as phenomena indicative of an imperfect and unsound organization.*

"5. *That in a person so morbidly constituted trivial and ordinary impressions often acquire the force of powerful influences; and*

"6. *That the will, participating in the feebleness of the general understanding, may fail to regulate or control these impulses.*

* * *

"7. *That, although I observed nothing in my interview with Bryce strongly to confirm these inferences, I observed nothing inconsistent with them.*

"*W. A. F. B.*"

Remarks on the Refusal of Food in the Insane. By S. W. D. Williams, M.D., L.R.C.P. Lond.; House-Surgeon to the Northampton General Lunatic Asylum.

There are few cases more distressing for a physician to witness, or difficult for him to manage, or in which he incurs greater risks or responsibilities, than those varieties of insanity in which refusal of food is a marked and prominent feature. To fix the exact moment when exhausted nature must be replenished; to determine when persuasion shall be given up and force, as a last resort, had recourse to; to estimate the quantity and quality of food required; to distinguish where medicines are life or death; to recognise the variety of medicine necessary to meet the requirements of the particular case; and, lastly, to decide on the mode of administration, are all matters of such primary importance, and require such a sound knowledge and extended experience, that one might deprecatingly exclaim, *Nemo tenetur ad impossibile.*

That, however, the subject is one of primary importance may be inferred from the single fact, that refusal of food is mentioned in the case-books of the Northampton General Lunatic Asylum under the head of "History," of at least 50 per cent. of the admissions during the last two years; not that I would wish to have it inferred that 50 per cent. were required to be subjected to forced alimentation, although, at the same time, I honestly believe that a large proportion, if not judiciously handled, would ultimately have had to be fed by force, and, indeed, such a course was really necessary in 10 per cent. of the cases.

For the sake of convenience I propose considering the subject under the following divisions:

I. The nosology of refusal of food in the insane.
II. The symptomatology.
III. The medical treatment.
IV. The best alimentary materials.
V. The best mode of the forcible administration of food.
VI. The pathology.

I. *Nosology.*—Dr. Harrington Tuke, in an admirable paper on this subject, read before the Association at their annual meeting in 1857, and published in Nos. 23 and 24 of the 'Journal of Mental Science,' says, "I divide those cases in which repugnance to nourishment, or inability to take it exists, into five divisions, more or less distinct from each other.

"Disinclination to food in the insane may arise from—

1. Simple dyspepsia.
2. Delusion as to food itself, or to their power of taking it.
3. Suicidal tendency, or wound of gullet after an attempt at suicide.
4. Stupidity, inertness, idiotcy.
5. Special organic lesion in the brain or other internal organs."

As far as I know, this is the only distinct division of the subject ever attempted. Such being the case, I give it, especially as coming from so high an authority, although not according quite with my own ideas; for the second and third divisions, if not the fourth, almost invariably, instead of being classes, *sui generis,* are simply symptoms of the first division; indeed, in no cases can psychical derangement be traced more surely to a psychical causation than in suicidal melancholia attended by derangement of the digestive organs, as I hope clearly to demonstrate hereafter, not only from the history of symptoms of the case, but also from the treatment and pathology.

It is my intention to confine myself almost entirely to a consideration of the first division, it being impossible, in the limits of a single paper, to deal properly with all four. Moreover, by far the greater majority of cases belong to the first division, those of the other three being, in comparison, extremely rare, and very often a case, apparently of the second class, will, on a closer inspection, be found in reality to belong to the first, so seldom is it that refusal of food cannot be traced to some species or other of dyspepsia, and I verily believe that all delusions bearing on food are, more or less, owing to dyspepsia. There is now under treatment in the Northampton General Lunatic Asylum a shrewd, clever, intelligent man, perfectly

sane in every point but one, which is, that his food is occasionally poisoned by a certain person. We can tell, almost to an hour, when he will lodge this complaint, simply by watching a physical ailment under which he suffers. Directly we see his tongue become coated, and hear him complain of flatulence and headache, and talk about the bright spot before his eyes, so surely we know that within an hour after the next meal he will tell us that Captain —— has been up to his old tricks again, and is poisoning him; and I have been able to put my theory more than once to the test, for we know that it is only after certain articles of food, of an especially indigestible nature, that he talks so. Therefore, by regulating his dietary when his stomach is disordered, it may be confidently relied on that he will soon begin to show his monomania.

This case may be objected to, as being somewhat an isolated one as regards the distinctness of cause and effect, but at all events it demonstrates that such things can be.

I would here take the opportunity of advising against the practice occasionally pursued in such cases, of drugging the food. Nothing can be more pernicious, for the special sense of taste becomes so almost miraculously acute that the least attempt at tampering with the food is infallibly detected, and only serves to foster the delusions and breed more suspicions and distrust, without having any counterbalancing good effect. Far better is it to administer medicine as medicine, and food as food, even though it be by force, than to give ground for suspicion to our patient, whose confidence and esteem it should in such cases be our special object to obtain.

II, III. *Symptomatology and treatment.*—These two divisions of our subject will be most conveniently considered together. Of the first class of cases, namely, those where the refusal of food can be traced to some derangement of the digestive organs, there are two very clear and distinct types, each type widely differing from the other both as to the symptoms and treatment.

The one (*a*) has all the characteristics of æsthenia, the other (*b*), at least in its commencement, is sthenic in its tendency; both, however, when fatal, terminate with well-marked typhoid symptoms.

(*a*) In the first, or æsthenic type, there is generally prostration, both mental and physical, from the commencement. Sleepless nights, and obstinate torpidity of the bowels, commence the illness, and are very soon followed by some species of mental derangement, almost invariably of a melancholic, but not necessarily suicidal nature, although very probably connected with some delusion of a dreadful sin, or of eternal torment. The symptoms of physical derangement then appear; the tongue becomes white, then coated, and, finally, covered by a fetid, brownish cream, which can be plentifully scraped off; the lips swell and crack; sordes form on the teeth, and the

gums look spongy and red; the function of the skin is markedly affected, and a damp clammy moisture bedews the body, whilst a rancid odour pervades it; the circulation is altered, and the pulse rises to 100 or 120, and is small, feeble, and wiry; the respiration is slow and very imperfectly performed, and there is probably some congestion at the base of the lungs, whilst, most marked of all, a gastric fetor so strong taints the breath that it can be detected immediately on entering the patient's room.

The commencement of these symptoms is speedily followed by a refusal of food, and the appearance of some strong delusion, either of a suicidal or suspicious nature.

Immediately an insane patient having the symptoms described as above, refuses food, after the first meal not touched, recourse must be had to treatment; the least delay is most pernicious, for a day lost at this stage in deliberating, would often be the ultimate death of the patient, so essential is it to be prompt in determining, and vigorous in carrying out, the necessary plan of treatment. This should be commenced by obtaining a thorough evacuation of the alimentary canal. For this purpose medicines administered by the mouth are useless, and only waste time; they either fail entirely of their object or but partially effect it. Beef-tea or gruel enemata are likewise of little help. An enema composed as follows never fails: Rub down a little soft soap in a mortar, add to this castor-oil ʒss, and continue rubbing until a thick custard is formed; then slowly, and by degrees, add a pint of boiling water, and, lastly, add half an ounce of turpentine. At least ten minutes is required to prepare this properly, but it never fails; nothing will clear the intestines thoroughly of the marvellous quantity of scyballæ that collect in insane patients so surely as this injection. The turpentine, diluted and disseminated by the soft water, breaks up the scyballous masses, and the castor-oil raises the necessary peristaltic action in the intestines to effect expulsion. Its use has only one drawback, which is, that considerable exhaustion occasionally supervenes, but this can easily be remedied by a little brandy; indeed I generally prefer to give the patient warm brandy and water before administering the enema. After the bowels have been thoroughly relieved the patient should be left quietly in bed for a time, and very often he will fall into a gentle, refreshing sleep, and on awaking take his food willingly. We have ourselves often seen this result brought about, and have been perfectly astonished at the power such a mode of treatment has in effecting a cure for refusal of food. Should, however, such unhappily not be the case, no time must be lost in forcibly administering nourishment. On this point the few late writers on the subject are all agreed. Dr. Tuke thus writes: "From the foregoing remarks it will be easily seen, that I hold decided opinions as to the propriety of forced alimentation in most cases of refusal of food, and that I

strongly advocate the early adoption of this mode of treatment, before the strength fails, and fatal exhaustion is imminent." Dr. Manley, in an interesting paper in No. 10 of 'The Asylum Journal,' after detailing a series of post-mortem examinations, states as one of his conclusions, "that we should at an early period have recourse, if necessary, to compulsory measures to introduce food into the stomach," &c. Mr. Wilks, Dr. Wing, and Dr. Huxley, also write in favour of having resort to early measures for supplying nourishment, but it is self-evident that such should be the plan, the very fact of total abstinence causes disease of the coats of the stomach, and increases the repugnance for food, so that when eventually forced alimentation is resorted to, the stomach has become so intolerant that the food is only partially digested, or else gives rise to distressing vomiting or diarrhœa, under which the patient very soon succumbs; besides, the longer we wait the more exhausted the patient becomes, and therefore, *à fortiori*, less able to bear the inevitable struggle that will ensue when the first attempt is made to feed him forcibly.

Therefore, when it is evident that a good alvine evacuation has failed in its object, and that persuasion is useless, immediate recourse must be had to more heroic measures, and the patient must be fed if necessary by force, and we cannot imagine, ourselves, how such a course can be considered by some authorities a remnant of the old system of restraint. Every one who undertakes the responsibility of such a case should be able to distinguish (a very easy thing to the initiated) whether or not the patient be really in earnest in refusing food. Surely, then, when the mind is made up on this point, it is better to act promptly, with decision, whilst there is still hope of saving life, rather than to wait until all hope be past. As far as my experience goes, it is a most rare thing for death to take place in such cases, provided they be taken in hand in time; indeed, although I have paid special attention to such cases, in the two institutions in which for the last nine years I have studied lunacy, I cannot remember a single case in which it could be said that death had resulted from simple starvation, or anything like it.

Although, however, we have now arrived at the time when forced alimentation must be resorted to, nevertheless medical agents should by no means be neglected. Enemata, if necessary from the state of the bowels, should be repeated twice or three times a week, and two or three minims of hydrocyanic acid given twice or thrice daily. Dr. M'Leod, of the Durham Asylum,* was the first to point out the value of this remedial agent. He, however, confined his observations to the use of heroic doses in cases of excitement, or hyperemia, as he designated them. My observations, although to a great extent confirming his, go to prove that in the class of cases and especially

* 'Medical Times and Gazette,' March 14, 21, and 28, 1863.

the section now under consideration, its greatest efficacy exists. It seems to act both generally and topically; to quiet the circulation, and to induce a more healthy action in the capillaries of the mucous membrane of the stomach; to relieve the mind of its tension, and to promote a return to a more healthy digestion, and yet, having no accumulative properties, to be perfectly free from all the evils of continued doses of opium. Therefore, being able to speak after a most careful trial, I would strongly urge its more extended use. I have rarely seen it fail to restore in a few days the patient's appetite, and no evil has ever, in any single case, resulted. I shall again refer to the theory of its action, when treating of the pathology of our subject.

(*b*) The second or sthenic type of this class in some particulars closely resembles the one just described, but in the most important points is diametrically opposed to it. It is more generally associated with mania, and but seldom with delusions; there is, however, one symptom never absent, and that is insomnia, of a most pertinacious character. Usually the patient can give no satisfactory reason for refusing his food, and, if pressed on the point, merely says he does not want any, and is determined not to eat.

The physical symptoms are sufficiently marked; they are, a dry, very red tongue, marked down the centre by a dark streak; parched, shrivelled lips; flushed face; injected conjunctivæ; dry, harsh, heated skin; marked acceleration of the circulation; scanty, high-coloured urine, and irregularity of the bowels, sometimes diarrhœa, but more frequently constipation.

If the bowels are much confined, the treatment should commence, as in the other case, with an enema, omitting the brandy. If there is diarrhœa, it may be treated by the usual mode. In this type it is not so necessary to commence feeding immediately as it is in the other; but even here forty-eight hours are quite long enough to wait, and if by that time all our arts of persuasion, threats, coaxings, &c., have failed, recourse must then be had to forced alimentation; if we delay much longer, the symptoms soon assume all the characters of the æsthenic type; the repugnance for food becomes greater; delusions creep out; the gastric fetor makes its appearance, and the patient soon becomes prostrate, but a timely administration of nourishment prevents all this, and allows of a medicinal treatment being initiated. This should consist in the energetic administration of opiates and the use of the hot bath, with cold applications to the head every evening. In most cases, small doses of morphia are valueless to produce the wished-for result, viz., sleep. Having given the patient, by forcible means, plenty of nourishment during the day, let him have in the evening a hot bath of the temperature of 96°, for about fifteen minutes, at the same time applying cold to the head by means of constant relays of flannels dipped in cold water, then dry

him thoroughly and well, put him to bed, and administer a grain of morphia, to be repeated in three hours if sleep has not ensued from the first dose.

These means, in the majority of cases, induce a long and refreshing sleep; and if such be the case, the patient generally wakes up willing to eat anything that is put before him, and often in a calm and rational state of mind. If this treatment does not produce the desired amelioration in the case, forced alimentation must be persevered in, and the opiates continued, and in a few days, probably, the repugnance to food will be overcome. I have occasionally found two or three drops of croton oil beneficial, when the other means fail.

IV. *As to the alimentary materials.*—The choice of the variety of aliment with which we should force an insane person, is necessarily a very important subject, and one requiring a little consideration, for *cæteris paribus* on it partly depends the well-being of our patient. Indeed, it is nearly as important as the choice of the medicines, as far as the life of the patient is concerned, for it is necessary to choose both the most digestible and, at the same time, the most nutritious articles, two properties by no means identical. It behoves us to have a special care that the proper proportions of nitrogenous, carboniferous, and mineral components are contained, to take into consideration peculiarities of idiosyncrasy both fancied and real, and yet to obtain a variety of aliments containing all these qualities with as little bulk as possible.

An article of food to be equally digestible and nutritious should produce three properties:

1st. Easy solubility in the digestive fluids.

2nd. Easy transformation into the constituents of the blood.

3rd. And yet contain a sufficient proportion of the alimentary principles. Therefore those are the most digestible, and, at the same time, the most nutritious, which "contain the greatest number of alimentary principles easily soluble, and easily turned into the constituent of the blood;" consequently, it is a *sine quâ non*, in choosing the aliment with which it is intended to feed an insane person, to select those articles of dietary bearing the proper proportions of nitrogenous, carboniferous, and mineral components. Dr. Letheby has stated that 16 oz. of solid nutriment, *id est*, 4 oz. nitrogenous, and 12 oz. carboniferous, are required to sustain a person in ordinary good health and condition. Dr. Dalton, speaking from actual experiment, gives the total amount of solid nutriment required at 21·04 oz.: viz., nitrogenous, 3·92 oz.; carboniferous, 17·12 oz. Dr. Lindsay, however, in the thirty-sixth report of "James Murray's Royal Asylum, near Perth," gives "the average requirements of a healthy man, engaged in average physical

labour, and taking average open-air exercise, being the mean of the most recent experiments of physiologists, as of nitrogenous materials, 3·40; carboniferous, 13·75; total solid nutriment, 17·15." And he further goes on to state, at page 50, "Our own inquiries lead us to the following conclusions, that, in relation to all classes of the general population of this country, including alike the rich and the poor, healthy and infirm, industrious and idle of both sexes, a diet which embraces a daily average allowance of from 3½ to 5 oz. nitrogenous, and from 10 to 20 oz. dry carboniferous nutriment, including a due proportion of salts—that is, from 15 to 20 oz. total solid nutriment—is an ample and sufficient one, regarded simply as a type or standard. In regard to the special population of our public lunatic asylums we have been further led to consider a fair average dietary as one comprising 4 oz. nitrogenous and 13 oz. carboniferous and mineral, or 17 oz. total solid nutriment; while one containing 5 oz. of nitrogenous, and from 15 to 20 oz. of carboniferous and mineral food, is ample, to excess, and is far beyond either the physiological requirements or the digestive and assimilative capacity of the majority of the patients." It is, however, certain that very much smaller quantities of food will sustain life for a long time. Dr. Manley relates in the article already quoted, how Cornaro lived for fifty-eight years on twelve ounces of food, principally vegetable, and fourteen ounces of light wine daily; and how an avalanche overwhelmed a village in Switzerland, and entombed three women in a stable where there was a she-goat and some hay: they survived thirty-seven days on the milk afforded them by the goat, and were in perfect health when relieved. But still more strange than all is the case mentioned by Dr. Willan, of a young enthusiast living sixty days on a little water and two oranges daily.

From the above facts it may be adduced that a person may without doubt be kept well alive on about 17 oz. of solid nutriment, exclusive of stimulants, provided that the nitrogenous and carboniferous principles be in a proportion of about three of the former to fourteen of the latter, a slight dash of the mineral principle being presumed. If, however, stimulants be used, a much smaller proportion of carboniferous principle will suffice, especially as it is probably necessary to keep our patient in an equable temperature in one room, and to debar him from exercise: consequently, neither the lungs nor the skin will consume their usual quantity of carbon. Having these data before our eyes, we have been for some time in the habit of using the following dietary with the patients refusing their food:

At 8 a.m., an egg beaten up in 12 oz. of warm milk.

At 12 a.m., a mixture of 1 egg, 2 oz. of brandy, and 6 oz. of warm water.

At 5 p.m., 1 pint of strong beef-tea, thickened with oatmeal.

At 9 p.m., a mixture of 1 egg, 4 oz. of port wine, and 6 oz. water.

And unless there is some complication of a physical nature causing a drain upon the system, I have never known a patient to lose but very triflingly in weight, and some positively thrive upon it; indeed, only just before last Christmas, a young lady was admitted into the Northampton General Lunatic Asylum, who had refused all food but a little bread and butter for three weeks, owing to gastric disorder, and, consequently, had become very thin; when put on this dietary and a proper medical treatment, she gained flesh rapidly and soon ate voluntarily.

V. *As to the best mode of administration.*—The only three ways now likely to be resorted to are either the stomach-pump, or a tube through the nostril, or else a spoon in the mouth. I shall, therefore, confine myself to these three points, referring those interested in the literature of the subject to the very exhaustive article of Dr. Harrington Tuke, already referred to. Of these three modes the last is, to my mind, in the majority of cases, by many degrees the best. And here I will take the opportunity of describing the process gone through as I have myself practised it, and seen it practised for many years at the Gloucester County Lunatic Asylum, and I must beg to be pardoned if my explanation should approach prolixity, as in these cases the veriest apparent trifles become magnified into important propositions, and if neglected cause serious annoyance to both physician and patient.

With the aid of three attendants, the patient is placed on his back on a mattress on the floor, and covered by bed-clothes, being as a *sine quâ non* in his night-dress as far as the armpits, the arms being free. The head rests on a well filled bolster; an attendant kneels on each side on the bed-clothes covering the patient, and thus easily but effectually secures the body. One hand is placed on the patient's wrist, and the other presses down the shoulder. By these means he is perfectly restrained in the least irksome way to both patient and attendant, and, which is of primary importance, but few if any bruises need be inflicted. Hold a person in any other part of his body or by any other means, and he surely becomes covered after a few operations by a mass of bruises, which often leads to unpleasant recriminations and fancies on the part of friends and relatives, and tends to foster the prevailing ideas current among the many as the management of institutions for the insane; ideas which it behoves every conscientious alienist physician to persistently endeavour to dissipate, if he would wish to hold any claims to philanthropy. The operator kneels at the patient's head; and if the patient is very restive, may steady his head with his knees, but this is seldom necessary. A third attendant takes up his place at

the operator's left elbow. It should be here ascertained that the patient's throat is quite free externally from any clothing. The next operation is to get the spoon into the patient's mouth; this, if the patient be a woman, is generally easily done by getting her to talk, and slipping it in when the mouth is opened to speak; this device failing, however, persistent but moderate pressure with the spoon against the teeth, aided if necessary by inserting a finger between the upper and lower gums behind the last molar, will soon effect our object. Of course, in putting a finger into the mouth, one must look out for being bitten; but if the spoon be firmly pressed against the teeth, so as to slide between them, immediately the masseters are relaxed, such an accident cannot readily occur. The best spoons to use are the small iron ones to be found in most of our large asylums, with the handle straightened. This should be placed far enough into the mouth to command the tongue, care being taken not to excite the reflex action of the fauces. It should then be restrained by the thumb and index finger of the left hand, the palm and remaining fingers firmly grasping the chin and preventing any to-and-fro or lateral motion of the head. The third attendant now passes his right hand under the operator's engaged arm, and firmly but gently closes the nostrils, leaving his other arm free for any emergency that may arise. The operator can now, with his right hand, pour the food into the patient's mouth, and, provided the spoon well commands the tongue, deglutition is easily and perforce obtained even in the most obstinate cases, but the patients are really by this means so completely mastered, that the majority of them drink the food down easily, and often the spoon is not required at all; but the nostrils being closed, the lips may be separated, and the food poured in without opening the teeth. Indeed, for the first three weeks of last January, I fed a young lady in this way four times a day, although she was obstinately bent on refusing food. The most convenient instrument for containing the food is a gutta-percha bottle or ball, holding about half a pint, and having for a stopper a bone tube like the extremity of an enema tube. This bottle can be easily commanded in the hand; and the bone tube having been inserted into the hollow of the spoon as it is held between the teeth, after a little practice, by squeezing the bottle, the quantity of fluid to be injected can be judged to a nicety, and the tube removed after each injection. Not more than half an ounce should be injected into the mouth at once, one good respiration being allowed between each mouthful. After an expiration, there is a short pause before the next inspiration; and if this moment of rest be chosen for filling the mouth, there is but little likelihood of the larynx being irritated by particles getting into it and delaying the operation by causing a fit of coughing. By a careful compliance with these rules, and a little practice, any one may administer

to all ordinary cases at least a pint of liquid in from ten to fifteen minutes, without a possibility of any danger or harm accruing, which cannot be said of the various other modes in vogue. To use greater expedition is not good. Surely it is much more natural thus to nourish a patient, than by injecting a quantity of food into the stomach all of a sudden by means of a long tube passed down the gullet, whether it be by way of the mouth or by way of the nose. Its very tediousness is a point in its favour. All authorities on dietetics are agreed that to suddenly distend the stomach is hurtful to even a healthy digestion; how much worse must it be to our poor patient, who is probably suffering from the very worst kind of dyspepsia, but by the means recommended the stomach is filled as gently and gradually as though nature herself were at work.

Again, we are told* that, by a series of experiments, Spallangani and Reaumur found that food enclosed in perforated tubes, and introduced into the stomach of an animal, was more quickly digested when it had been previously impregnated with saliva than when it was moistened by water. Dr. Wright also found that if the œsophagus of a dog is tied, and food mixed with water alone is placed in the stomach, the food will remain undigested though the stomach may secrete abundant acid fluid; but if the same food were mixed with saliva, and the rest of the experiment similarly performed, the food was readily digested. Frerichs, Magendie, and Bernard, have all arrived at the conclusion that a proper admixture of saliva with the food is a necessary adjunct to healthy digestion; it being believed that starch, which enters so largely into the composition of our food, and is perfectly insoluble, by means of the hyaline contained in the saliva, is transformed into soluble dextrine or grape sugar, and thus made fit for absorption. We are also told that the glands secreting the saliva are very numerous and extensive, and some of them are always in action to keep the mouth in a fit state of moisture; but for the purposes of digestion it is necessary, in order that a sufficient quantity of saliva may be secreted, that they should be stimulated by food in the mouth, and the action of the muscles of masticulation and deglutition. Now if a person be fed by a stomach pump, or by a tube through the nostril, a great portion of this very important adjunct to digestion must be wanting, and what is present cannot have been properly mixed with the food; but if the patient be fed in the way recommended above, the nearest approach possible to healthy deglutition, viz., forced deglutition, is obtained, and the saliva is, if anything, probably secreted in excess, for the very fact of a spoon in the mouth is enough to excite abundant salivation. Moreover the glands, instead of becoming torpid, and unfit to resume work when the patient again voluntarily feeds

* 'Handbook of Physiology,' Kirkes, p. 208.

himself, are kept in a state of healthy activity, and ready to resume their normal functions at a moment's notice. Who does not know the very extreme unpleasantness of a foreign body, however small, in the nostril, to say nothing of a long tube down the œsophagus? and surely the constant passage of a tube, however small, along the Schneiderian membrane, must ultimately exercise a very baneful influence on it.

Authors and others favouring the nostril tube have dogmatised on the cruelty of forcing the jaws apart, and the danger there is of breaking the teeth and wounding the mouth, and wax quite eloquent on the dreadful feelings of impending suffocation that must supervene on forced agglutition; but surely there is some exaggeration in all this. Of course, if teeth were frequently broken, or the mouth and gums wounded, the plan would be open to very grave objections; but all I can say in answer to such objections is, that I have fed many, many patients, and never saw the slightest injury caused to a tooth; and it is only in exceptional cases, where a great many of the front teeth are wanting, that the spoon ever injures the gums, and even then never beyond a slight abrasion. As to wounding the mouth or tongue, that is absurd, therefore we cannot but think that it has been inexperienced and unnecessarily rough handling that has caused broken teeth, &c.

The great objection, however, in my opinion, to the stomach-pump and nasal tube is, that their use is not unattended with danger, and cases by no means isolated are recorded of the lungs being made the receptacle for the aliment instead of the stomach. Dr. Harrington Tuke, when speaking of the stomach-pump, says:—"I have known one of the most expert surgeons in London pierce the thoracic aorta, of course causing immediate death, in consequence of the accidental movement of a patient while the tube of an ordinary stomach-pump was being passed down the œsophagus. Recently, at one of our large hospitals, the trachea was perforated, and the patient's life lost in the same manner; and many cases are on record where the œsophagus was torn, and still more where fluid intended for the stomach has been injected into the lungs with fatal results;" and we are seriously asked to put the loss of a tooth or a slight mucous abrasion in the scale against such dangers as these! Verily, *ut quimus, quando ut volumus non licet;* but, after such a sentence as the above, coming from such an authority, it ought to be very gravely considered before the stomach-pump be ordinarily used in asylums for supplying nourishment; for if such dangers are present when a *willing* and sane person be operated on, it follows, *à fortiori,* that they must increase in a manifold degree when the patient is insane and resisting in every possibly conceivable way.

To the nasal tube the same objections apply, but in a modified

degree, as to the stomach-pump. It is true, we are not so likely to suffocate a patient or wound the œsophagus, and there is not the difficulty of passing the instrument through the mouth, although catheterism of the nostril is not always so easy as would appear; but the danger of entering the larynx is certainly much greater, not only on account of the smallness of the tube it is necessary to use, but also because, as Dr. Tuke points out, a small elastic catheter, on being passed through the nostril, is likely to strike against the anterior surface of the bodies of the cerebral vertebra, and be bent forwards and downwards directly into the larynx.

VI. *The Pathology.*—M. Martial Pellevoisin, ancien interne to the public asylum at Mareville, in a thesis presented to the University of Strasbourg, pour obtenir le Grade de Docteur en Médecine, and entitled, 'De l'Alimentation Forcée chez les Alienès,' truly remarks, under the division 'Lesions Anatomiques:'—"Les centres nerveux intra crâniens ne présentent, chez les alienès morts d'inanition, aucune lesion spéciale, qui ne se rencontre dans des cas analogues, la mort ayant été produite par une autre cause." For as refusal of food may be a prominent feature of almost any variety of insanity, it necessarily follows that, in autopsies on such cases, any variety of organic lesion may be present, and the attempt has yet to be made to trace the causation of sitophobia to any refined structural or functional cerebral lesion. The same holds good with reference to the organs of respiration and of the circulation: it is true that in phthisical mania refusal of food is often an unpleasant complication; but if this were due to the lung disease, we ought, *pari ratione*, not only to have refusal of food in all cases of mania complicated with phthisis, which the gods avert, but also pulmonary tubercles in all patients suffering from mental aberration who refuse their food.

It is, however, in the alimentary canal where we should look for the true course of the sitophobia, because there we are sure to find some structural lesion; and the French writer already referred to, although he simply mentions them amongst other pathological phenomena, without apparently estimating their value in the causation of his subject, yet his enumeration is quite exhaustive when he writes: "Dans des cas d'abstinence prolonga, on a trouve: le calibre de l'œsophage, de l'estomac et des intestins considerablement retrecis, un anuncissement notable des parois de tout le tube digestif, des traces d'entérite, des ulcerations disséminees sur divers points, et paraissant resulter d'une gangrene partielle de la mugeuse, un ramollissement parfois general de la mugeuse de l'estomac, avec coloration noviâtre uniforme, comme dans l'observation de monomanie religieuse, publice par M. le Docteur Dagonet ('Arch. Clin. des Malad. Ment.,' 1861, p. 213), l'absence complete de tissa adisseux dans l'epiploon et le mésentère, réduits à leurs feuillets séreux."

Most of the abnormal appearances, however, are rather the effect than the cause of the prolonged fasting, and probably would be present whether the patient were insane or not, and have therefore in reality but little bearing on our subject.

At the commencement of this paper, when dividing my subject, I gave the first division as 'Refusal of Food caused by Indigestion,' and I further described two types (anæsthenic and asthenic) of this class. The physical signs pathognomonic of the asthenic type are a peculiar gastric fetor and coated creamy tongue, combined mentally with melancholia; and I cannot but fancy that these symptoms are due to a peculiar condition of the parietes of the stomach; and the post-mortem examinations detailed by Dr. Manley, and already referred to, would seem to bear me out in this idea. We are told in works on physiology, that after the introduction of food or other foreign substance into the stomach, the mucous membrane, previously quite pale, becomes slightly turgid and reddened with the influx of a larger quantity of blood. Now, it is a condition like this, only chronic instead of evanescent, that I have invariably found present in patients who have died whilst suffering from the asthenic type of dyspepsia: there may be nothing else abnormal about the alimentary canal, but this chronic blush or congestion of the capillaries of the mucous membrane never fails to be present, and I cannot but think has some intimate relation with the refusal of food. I have said that these cases are so much benefited by hydrocyanic acid, and this fact would seem to support my theory.

At the very time we are writing there is a patient in the Northampton General Lunatic Asylum whose case answers in every particular to my description of the asthenic type, and the mucous membrane of whose stomach I have not the least doubt presents this blush of congestion. He has been in the asylum just a week. The leading features of his history, as given by his father, were—profound melancholy of mind, with occasional violence if interfered with, but no suicidal tendency beyond refusal of all food. He had lost flesh, his bowels were most obstinately confined, and he never closed his eyes at night. After admission into the asylum, two enemata were administered, and the last had the effect of dislodging an enormous collection of scyballæ from the alimentary canal. He was decidedly benefited by this relief, and drank a little tea and ate some bread; but continuing restless and sleepless, morphia and hydrocyanus, with a saline mixture, were persevered in for nearly a week, but with little or no benefit. At the end of that time, his bowels not having acted since the last enema, another was administered, with a little calomel per oris, then the sedations were omitted, and three minims of dilute hydrocyanic acid, of the 'London Pharmacopœia,' prescribed, to be taken thrice daily. After three doses he made a hearty meal of meat, which he would not previously

touch, and has since eaten all that has been set before him: moreover, the improvement in every respect was patent to the most casual observer: this is only one out of many cases of the same kind that I have seen within the last two years, but I choose it because of its recentness.

Provided I am correct in tracing the causation of the sitophobia to this peculiar condition of the coats of the stomach, we may infer it (the sitophobia) to be brought about in the following manner:— Normally this condition of the stomach is only present when food is being digested, therefore the sensation conveyed by it to the afferent or centripetal nerve-fibres, and along them to the brain, and from the brain to the fauces, is one of hunger appeased; if this be so far true, may it not also be worthy of credence, that when the parietes of the stomach are in a state of chronic congestion, although no food may be in the stomach, yet the sensations of the insane patient, suffering from this disease, may be as though his stomach were digesting and he did not require food? This idea is also borne out by the fact that this class of patient does not appear to refuse food from any suicidal tendency, but rather from an idea, as he himself invariably expressed it, "that he does not want any," or "that he has plenty."

Now the hydrocyanic acid, as may be inferred by its action on a congested conjunctiva, by its power of easing the congestion of skin caused by a wasp's sting, and still more by its efficacy in removing passive congestions of the skin, as seen in its action on bedsores, before the skin is broken, probably has the power, to a certain extent, of removing this condition of the mucous membrane of the stomach, hence the frequent abatement of the repugnance of food attendant on its use.

The sthenic type is probably due to a more acute congestion, with a strong tendency, however, to degenerate into the asthenic type, and therefore necessarily indicative of an opiate treatment in order that the sedative action of the drug may be exercised on the nervous system, and through the nervous system on the circulation.

CLINICAL CASES.

Clinical Notes on Atrophy of the Brain. By Samuel Wilks, M.D. Lond., Assistant-Physician to Guy's Hospital, &c., &c., &c.

Were an occasional comparison instituted between the experiences of those who practise in special but different departments of the profession, it would conduce not only to the fulfilment of some higher general truths than we now possess, but afford to the individual labourer in his department a more just and less narrow view of the field of observation which is always more immediately before his eye. A close observance to one section of medicine may produce much accurate and minute knowledge, but since the division of our art into branches is artificial rather than real, the knowledge therein obtained is regarded apart from its natural relations, and becomes so distorted as to lose much of its value as truth. If the various sciences into which we divide nature for the purposes of study are artificial, and it be true that an exclusive devotion to one of them can never give to its follower a correct insight into the operations of nature, so more true must it be that the general laws of human pathology can scarcely be gleaned in an exclusive practice in one single department.

It may seem almost impertinent to make these remarks in a Journal devoted to a special object, nor were they, indeed, intended to apply to the study of mental disorders, which must be undertaken in an almost isolated manner; and yet an opinion has obtained hold of me (which, however, may be erroneous) that even here some too narrow views may be held of cerebral pathology, and this opinion, right or wrong, has suggested the remarks in the present communication. To be more explicit: I have thought that those who are occupied in the practice and study of any one department might possibly look upon some morbid condition or other feature in a case, as peculiar to a certain form of disease. Thus, in connection with the subject on which I purpose to make a few remarks, it has seemed to be inferred that a certain morbid phenomenon has been found exclusively in lunatic asylums; and, at the same time, to be inferred by a writer on infantile diseases, and who is probably destitute of the knowledge just mentioned, that this phenomenon is intimately connected with the cerebral affections of children. So, also, with the general subject of the following observations, atrophy of the brain: this has appeared to me to have been regarded by some as a condition attaching to those who have died of mental affections, and not only

so, but of some special form of insanity; others would describe a similar condition as resulting from repeated attacks of delirium tremens; whilst others write of a state not distinguishable from these as the ordinary result of old age. From having no inclination towards any of these special departments, I have endeavoured to take a comprehensive view of such pathological changes, and, as regards the subject before us, to discover at what stage our knowledge has reached of this morbid condition, and what is its true pathological significance; leaving it for further research to elucidate its varieties and the different methods by which these are brought about.

Having only a very limited practical acquaintance with the experiences of a lunatic asylum, and, at the same time, the opportunities which a general hospital can afford for the post-mortem examination of an insane patient being rather infrequent, my knowledge of the appearances of the brain in those mentally afflicted is derived mainly from the reports of those who have the superintendence of the insane, and the impression which those reports have made upon me is, that the most noteworthy post-mortem appearances are those which indicate more or less atrophy of the brain, and to be more especially found in connection with cases of dementia, epilepsy, general paralysis. That in deaths in various forms of mania, the changes in the brain are not appreciable, but that in long-standing cases of disease, and especially where the powers of the body are feeble, as well as those of the mind, the most marked changes are found, these being of the atrophic or degenerative kind. How far many of these changes denote the existence of a chronic inflammation is a question which pertains to a general pathological doctrine, rather than one to be decided on any special grounds. It is a question to be discussed in connection with similar degenerative changes in other organs, as, for example, the liver or kidney. Just as in these two organs the two theories are held by different writers, so also are they applicable to the brain, viz., that an atrophy may arise as a simple degeneration, or associated and a consequence of a previous inflammatory process. Thus the discussion has not yet ceased, whether a cirrhotic atrophy of the liver or granular degeneration of the kidney is preceded by the production of a new material. My own opinion is, that in both organs the degenerative change may occur without the inflammatory exudation, although, in the case of the liver, there may be sometimes unquestionably a new material of this kind discovered. In like manner, the atrophic change in the brain may be a simple degeneration, or a degeneration associated with those changes which are generally regarded as a result of chronic inflammation.

The more marked changes which have been described as occurring in the insane, especially in those long demented, are those of an atrophic kind; the whole brain, when weighed, is found to be much lighter than an organ would be which had quite filled the skull-case;

but before this trial is made, the atrophy is seen by the wasted convolutions, and by the water which has taken their place. Thus, on removing the dura mater, the surface of the brain is often quite hidden by the layer of serum which lies beneath the arachnoid, and filling up the spaces between the convolutions; instead of the sulci meeting, they are widely separated, and their intervals filled with serum, and which, on being removed with the pia mater, the full depth of the sulci can be seen. Two or three ounces of fluid on the surface have displaced so much good brain substance. At the same time the ventricles are distended by a large amount of serum; their walls are granular, and the choroid plexus is full of cysts. The air which is sometimes found on the surface has been supposed by Morgagni and others to indicate a pathological change, but it appears to be due simply to the sudden removal of the calvaria, whereby a momentary vacuum is produced, and, the arachnoid being cut, bubbles of air rush into the pia mater. Such conditions are indicative of a wasted brain, and are those which I think have been regarded by some as characteristic of a chronic form of insanity. Some writers have described similar changes in connection with epilepsy, others with idiocy, whilst others have described conditions not to be distinguished for these in general paralysis.

During an experience of many years, several instances of demented persons have fallen under my notice on the post-mortem table, and in these, similar conditions to those just described have been found, so that without any previous knowledge of the history of the patient, such an atrophied state of the brain has been sufficient to satisfy me that there has been both bodily and mental weakness for some time previous to death. In a general hospital, however, such cases of idiopathic mental disease are probably not so common as those of mental imbecility arising from some marked evident cause, as found in delirium tremens and chronic alcoholismus. As an independent observation, I had long known that patients who had suffered from delirium tremens had atrophied brains, and my experience being greater in such cases than those in the insane, I was wont at one time to regard such a state as a peculiar result of long-continued alcoholic intoxication, and it was only by observing that a similar condition might occur under other circumstances, and that it was apparently the same as that described by those who had especially studied the pathological anatomy of mental disease, that I ceased to regard such atrophy as peculiar to chronic alcoholismus. I for many years, in my post-mortem room, have spoken of the degenerative changes occurring in the intemperate, especially spirit drinkers. I have spoken of the body as becoming atrophied; of the muscles having undergone fatty degeneration; the viscera, as the liver or kidney, being affected; and the blood-vessels, as a rule, diseased, and the brain atrophied. The surface of this organ is covered with

fluid, so as almost to hide the convolutions, and in sufficient quantity to escape on the ground when the arachnoid is cut; this membrane is opaque and thickened; the ventricles contain a large amount of fluid, and their surface is often granular; the choroid plexus is full of cysts or cretaceous matter. Those conditions observed on the surfaces of the brain, both external and internal, are the more manifest indications of an atrophy, because more easily appreciated in these situations, but there can be no doubt that an equal change has taken place through the whole cerebral structures, and more especially in the cortical part.

In old age very similar appearances are seen, and have been described by those who have especially noted the senile changes in the body. Dr. Clendining showed, in his tables, the decrease in weight of the brain in persons of advanced years; and, indeed, the shrivelling of the convolutions, together with the increase of fluid and thickening of arachnoid, must be known to all observers.

These are perhaps the three most common forms of disease in which an atrophy of the brain is seen, viz., senility, delirium tremens, and insanity; meaning, by the last term, cases especially of dementia, epilepsy, or general paralysis. There are, however, numerous other causes tending to cerebral atrophy, it being a condition met with in many long-standing wasting diseases, and is also produced by mercury, lead, and other substances; violent injuries, also, which produce concussion, may give rise to an impairment of the general structure of the brain.

It may be remarked, that a study of the pathology of cerebral disease affords us some slight insight into the function of the brain; so that we have been enabled to associate the mental powers with the cineritious or cortical substance, whilst voluntary motion is dependent upon the integrity of the central ganglia or the so-called motor tract, which commences above at the corpus striatum, and passing through the thalamus, crus cerebri, and pons varolii, decussates at the pyramids to pass on to the spinal cord. Disease in this tract produces hemiplegia, whilst the mind may remain entire; when blood is poured out sufficient to paralyse a large part of the body, consciousness may remain, and if the limbs should never recover their power, yet the mind may retain its activity. On the other hand, we know that insane persons often possess great bodily strength, and in them there is reason to suppose that the cortical part of the brain is the part affected. This opinion is confirmed by such cases as those of concussion, where we know that it is the surface which has received the injury. In very many instances, however, of chronic disease, it is evident that the whole brain has suffered; that in whatever part it may have commenced, disease has progressed through it as a whole. Thus, in the cases which form the subject of the present remarks, where a chronic atrophy has existed, the whole structure

has undergone a change, for not only is the cortical portion shrunken, but the central parts have lost their plumpness, and present a shrivelled aspect. In such cases it would be expected that both mental and bodily powers had undergone decay. In very many of these cases it might have been surmised from the symptoms that the spinal cord had also undergone degeneration, and this has been found to be the case, for on post-mortem examination it is seen to have suffered a diminution in size.

I have thus been in the habit of regarding the atrophic condition of the brain described as not peculiar to any one form of disease, as some appear to have imagined, but I have viewed it simply as a wasting, and, as such, indicated during life by symptoms more or less in common to all the subjects of it, leaving it for further consideration to discover in what various ways these changes have come about. It then, indeed, may possibly be shown, that although the final symptoms may be identical, yet that during the progress of the complaint characters may exist dependent upon the special cause in operation. On the discovery of such a brain, I have always been well assured that the possessor of it has been enfeebled both in mind and body. If the case has been treated as mental, it has been found to be one of dementia or general paralysis, where both physical and mental powers have long failed. Had the patient been a drunkard, then I am sure that besides his attacks of delirium tremens he has been chronically demented, or will be described by his friends as a "good-natured fool," or as one who had no enemy but himself, and who, if he had been seen alive, would have tottered in his walk and hesitated in his speech, from want of nervous and muscular power. In such a person the words of our great poet are literally true; for when he says, "Oh that men should put an enemy in their mouths to steal away their brains," he is stating a real and substantial fact, for the brain is losing so many ounces of good material to be replaced by water; the figurative expression conveys in it a literal fact. Should it be the body of an old man where such wasted brain is found, I know that he has long been decrepit; that he has tottered in his walk, and that he has been sinking mentally into the stage of second childhood.

I have purposely avoided making allusion to any minor phenomena which might be peculiar to each case, but have wished rather to show how a general resemblance exists amongst symptoms which may be associated and are no doubt dependent upon a marked organic change in the brain. I am well aware that those who devote themselves to mental diseases speak most authoritatively of the easy diagnosis by them of the general paralysis of the insane, but, without wishing to enforce the fact that I have seen experienced men at fault, I may state my own opinion of the very close resemblance of this disease with chronic alcoholismus, witnessed in the loss of mus-

cular power, associated with tremor; the latter seen not only in the limbs, but, more especially, in the face on the attempt to articulate, when the speech is observed to be thick, or there is a clipping of the words, and, at the same time, a tremor of the tongue. I am now seeing two cases of patients suffering from chronic alcoholismus, and in the one there is a partial paralysis of the whole body, in the other, great difficulty in walking; in both, thickness of speech and weakness of mind. I cannot say that they have exalted or ambitious ideas, but at the same time they are cheerful, and far from melancholy or desponding. One might also mention, that patients of this kind often have epileptic fits, as in the general paralysis, and that these also occur in connection with the nervous diseases produced by mercury or lead.

How these atrophic changes are produced is a question for further consideration, and is one on which I shall be content to offer only some very general remarks. The nutrition of an organ being intimately connected with the blood supply, it is not surprising that disease of the vessels is so often found to accompany its degeneration, whether this be the liver, kidney, brain, or other organ, but how far the vascular disease constitutes the primary change, may probably not be determined by any universal rule. As regards the brain, knowing how immediately the nutrition is affected by the state of the blood-vessels, it is not too much to suppose that the atrophy of age has much to do with the senile change in the arteries. Also knowing how the vessels are affected by alcohol, the change of the brain in drunkards may be very fairly considered in great measure due to a deterioration of these blood-channels; and as regards the atrophy in mental disease, some of the most interesting observations in connection with the subject of their pathology have been those of Wedl, Solomon, Sankey, and others, who have shown that there is a primary change in connection with the vessels of the cineritious structure in those affected by general paralysis; that a destruction of the gray matter ensues, and thus the scientific appellation of *cerebritis corticalis generalis*, or *meningo-cerebritis*.* Thus there are brought about, in a very obscure and unknown manner, inflammatory changes in the brain which in the issue are not much unlike what are produced by the more evident causes of alcohol, age, &c.

I might here make a remark, which is applicable to many pathological changes, that disease is equivalent to living too fast; that is,

* From the discovery of such decided morbid change in the paralysis of the insane, a hope has been expressed that the clue has at last been gained to the elucidation of the pathological anatomy of mental disease, but I fear that a hope originating in such a way may be delusive, seeing that this disease, in which something tangible has been discovered, is one in which not only the mind is overthrown but the whole body paralysed, and, therefore, a disease in which one would have expected to have found material degenerative changes, but one so far the more removed from simple maniacal conditions.

that disease will produce, in a very short period, those morbid changes which it would take many years, in the ordinary course of life, to effect. I need only mention one example of the heart, which, from the effects of an endocarditis, may suffer a shrivelling and ossification of the valves, such as in an old person would be attributed to the mere effects of age. As regards the brain, the same fact is seen as a result of intemperance and of other diseases; it is also noted in a striking way by the adhesion of the dura mater to the calvaria, which being a natural condition of old age, is an evidence of disease in a younger person.

I would also revert to the remark made at the commencement of this communication, that it may be a question how far these changes in the brain are due to simple atrophy or are the result of a chronic inflammation. The distinction may not only be founded upon a supposed difference of symptoms, but on a peculiarity in the morbid condition of the organ under review. If, for example, any lymph or fibroid tissue is present, they are supposed to point to a previous inflammatory change, and the pathological process is regarded as different from one of simple degeneration or decay. The question, however, is probably not so important as it might appear, for on regarding it from various points of view, as in the case of cirrhosis of the liver, or Bright's disease of the kidney, it may be remembered that although the first of these conditions may arise from the production of a new inflammatory material occurring in the course of Glisson's capsule, yet that it may arise altogether without this, and therefore it would be unwise to separate two conditions so much alike, on the plea alone of presence or absence of inflammation. In the granular kidney the disease may arise from atrophy, but if also from an intertubular nephritis, there would not be sufficient grounds to separate two morbid conditions so intimately related. So, as regards the brain, the term atrophy is that which is most applicable to the state described, but, at the same time, the fact of thickening of the membranes, the granular state of the ventricles, hypertrophy of bones, &c., might seem to require the adoption of the term inflammatory. Such difference, however, I think should not, from any preconceived importance attached to the term inflammation, allow us to separate cases where so great resemblances in every other respect exist.

In illustration of some of my remarks, I might quote numerous instances, but I will merely select from my note-book of the present year the following outline cases:

Examples of the wasted brain of age I need not refer to. Of delirium tremens and chronic alcoholism, I could give numerous examples, but one which fell lately under my notice will suffice.

Case 1.—A man, æt. 34, who from being in affluent circumstances had fallen into poverty from intemperance, presented all the usual appearances of a spirit drinker; he was wasted, tottered in his gait, hesitated in his

speech from want of facial muscular power, and his mind was enfeebled. He did not die from delirium tremens, upon which he was always bordering, but from pulmonary disease. On post-mortem examination, besides other changes, the brain was found to be considerably wasted on the surface, the convolutions not visible from the amount of fluid covering them, and on account of the opacity of the arachnoid this had a milky appearance before it was allowed to escape. The membranes also were speckled with white patches in places. The choroid plexus contained small cysts, and there was increased fluid in the ventricles.

Under the title of mental affections there would be found in a general hospital, cases which would probably not receive the same true definition as if they had occurred in an asylum, and in all probability from the fact of their coming into an institution like Guy's, they would present some peculiarities, the disease being probably of a more active kind. In such cases, also, there is generally but little history, for the patient is unable to give a true account of himself, and the friends either abstain themselves or withhold the truth. Still, such cases as the following are now and then coming before us, which enable us to get a little insight into the connection between cerebral and mental disorders.

Case 2.—A man, æt. 39, was said to have been tolerably well until about a year before his death, when he was said to have had a fit, and had never been well since. His health had been impaired, and his mind had become affected in such a manner that he had been unable to follow his employment as a clerk, and his temper so irritable that all domestic happiness had disappeared. He had another fit, and was brought to the hospital in an unconscious state and died. On post-mortem examination, when the dura mater was removed, the arachnoid was seen to be opaque, and in parts thickened. A considerable quantity of fluid lay beneath the membranes, and taking the place of the convolutions, which were consequently shrunken, the sulci between them being in some places very deep, and holding a large quantity of clear fluid. The ventricles contained an excess of serum. This was not measured, but there was probably about two ounces in all, and on examining the surface of the ventricles, they were seen to be universally granular, being covered, as it were, with fine sand. This condition proceeded down to the fourth ventricle, which showed the roughness to a much greater extent, the granules being much larger, and more closely set. The whole surface had a translucent appearance, as if it were covered with a uniform layer of the same substance as that of the granules. The choroid plexus contained cysts. The brain substance appeared healthy as far as the eye could discern. The fornix and central parts were quite firm.

The importance of recognising those slight conditions in a brain which might by a superficial examination have been pronounced healthy, was seen in this case, where the history was only obtained after the patient's death. In a hospital, persons are brought in insensible or dying, and it requires a careful post-mortem examination to discover the cause of disease. There was found a chronic inflammatory atrophy, and the symptoms afterwards learned accorded with this condition.

The following case, where atrophy of the brain was found, occurred lately, and the principal symptoms observed were those of excessive feebleness.

Case 3.—Man, æt. 61. Had suffered for six years with neuralgic pains in his head; he looked very aged, was excessively anæmic, and kept his bed several months before his death. On post-mortem examination the calvaria was found to be much increased in thickness, and was also very dense. The dura mater was very adherent over its whole surface. The brain, as a whole, was atrophied, the convolutions were shrunken. and the subarachnoid fluid was in excess; there were two slight spots of softening in the interior. The surface of all the ventricles was slightly granular.

Case 4.—A woman, æt. 40, was said to have been well until a few months before her death, when she became feeble and her speech affected. When brought to the hospital she was placed in bed, and could with difficulty move any part of her body. When spoken to she stared in an inexpressive manner, and was able only to answer the simplest questions. She often talked incoherently, and attempted to get out of bed. The case appeared much like one of general paralysis. She very quickly became quite helpless, the evacuations passed involuntarily, and towards the close she had some jactitation of the limbs. On post-mortem examination the brain was found shrunken, with a large quantity of subarachnoid fluid on the surface, and the ventricles contained about six ounces. The convolutions were wasted and faded in colour, so that they were with difficulty distinguishable from the medullary substance. The central ganglia seemed shrunken or less plump than in a healthy brain. There was a small spot of softening in the pons varolii; the ventricles were granular.

Case 5.—A woman was brought to the hospital in a fit. When she recovered she was found to be insane; she was incoherent, and her memory was gone. She refused to take nourishment, and was consequently for a long time fed on enemata, but she gradually sank. The brain, on examination, was found to be wasted, but the most noteworthy condition was the interior of all the ventricles being universally and minutely granular.

As before remarked, it may be a question how many of the changes observed in this class of brain are to be styled inflammatory. In our present knowledge I think this term must be used, especially as it is clear that one of the conditions so often met with, the granular state of the ventricles, is often of very recent origin, as the following cases which have lately occurred to me will show:

Case 6.—Eliza C—, æt. 14, had general tuberculosis, and died of tubercular meningitis. She was admitted to the hospital in the last stage of the cerebral affection, having been ill seven weeks. The brain presented the usual appearances of the disease, as lymph at the base, effusion in the ventricles, with softening of the central parts; but besides these there was, as is occasionally seen in these cases, a granular condition of the ventricles.

Case 7.—H. Douglas, æt. 6, fell on his head on April 20th, 1864, producing a scalp wound and exposing the bone. The bone soon began to die, and cerebral symptoms to appear, from which he died on May 5th, fifteen days after the accident. Two days before his death he was trephined, and a

little pus removed from both above and beneath the dura mater. The brain was found to be soft beneath the seat of injury, and there was general arachnitis. On opening the ventricles the whole of their surface was seen to be minutely granular.

Although such granular condition of ventricles is generally associated with chronic disease of the brain, yet if it can arise so quickly as in the preceding case, its presence will not much assist us in determining the age of the disease as in the following instance of acute mania :

Case 7.—Jane V—, æt. 42, came to the hospital in order to have a cancer removed from the breast. She was much depressed with the thought of the operation, and for four nights before this was performed she had no sleep. On the 5th April, 1864, it was done under the influence of chloroform. The wound began to heal, but the patient still remained in an excited state, when she at last became perfectly maniacal, and was obliged to be sent to a separate room, and required constant watching to confine her to her bed. Opiates and other remedies had no effect; she was constantly talking, using expressions of a religious character, and on the 17th she died. From inquiries afterwards made it was said by her relatives that she had never before suffered from any mental disorder, and the medical man whose patient she had been had never treated her for anything but headache, and which he believed to be dyspeptic. He knew of no hereditary history of insanity, but her father was eccentric. On a careful examination after death the calvaria was found to be much thicker than a healthy one, the diploë was gone, and showed a uniform dense osseous substance through the whole thickness. The interior was irregular and covered with minute, bony projections or granulations ; some of these were rounded and nodular, as if of long standing. The membranes were quite healthy. The brain substance was not wasted, and presented a natural appearance, and nothing remarkable was observed in the layers of the gray matter. The Pacchionian bodies were small and few ; the ventricles of ordinary size, surface minutely granular ; in each of them, over the tenia semicircularis, was a cyst containing clear serum ; this was contained beneath the lining membrane (?), which it raised up to about the size of a pea. The colon was dragged down to the pelvis, and the omentum was adherent to the abdominal walls below.*

In this case, probably, there had been chronic changes in the brain, but the symptoms were in abeyance, or the patient kept them to herself, until at last they were lighted up suddenly by such a violently exciting cause, as an operation, and, perhaps, increased by the inhalation of chloroform.

* This malposition of the colon I could not fail to point out to my class as one of those remarkable conditions sometimes found coincident with insanity, and yet at present perfectly inexplicable. The extreme mental depression arising from abdominal disease, especially in the intestines is well known, as we lately had an opportunity of verifying. An oldish lady had for many years tired out all the doctors by her dismal complaints referable to her abdomen. She was looked upon as a hypochondriac, if not worse. Dying from an accidental complaint, I examined her, and found the colon dragged down to the femoral ring by adherent omentum. I therefore concluded that her troubles had an objective reality, and were not, as believed during her lifetime, altogether subjective and having their origin in the brain. Still the mental depression was extraordinary.

I believe the importance of the granular condition, as well as other slight changes on the surface, is, that it is indicative of much more serious and graver alteration in the cerebral substance, and therefore one, as well as other apparent trifling morbid appearances, worthy of attentive observation. I have often remarked it in epilepsy, and, indeed, it was in a case of this disease that I witnessed the most remarkable instance of the condition that I have ever seen; the granules were almost as large as peas, and the whole surface of the ventricles had very much the appearance of the leaf of an ice plant. In some cases, the exudation forms flattened scales or patches on the surface instead of granules.

As before said, I think there can be little doubt that in the cases to which I have been referring, the term atrophy of the cerebro-spinal centres would be equally correct as atrophy of the brain, for the symptoms, as well as the actual examination, show that the spinal cord is involved in the general wasting; also, together with the atrophy, there are signs of a chronic inflammatory process having taken place in this origin.

Case 8.—A woman, æt. 57, was lately brought to the hospital in a dying state; she was much wasted, and the muscles of the extremities so degenerated, that it was at once suggested that there was disease of the spinal cord, and a long-standing paralysis, from which it was afterwards learned that she had suffered. The brain was much shrunken, sulci wide, and filled with fluid. The spinal cord appeared very small, and its posterior surface covered with large, bony plates.

Case 9.—A woman, æt. 34, came to the hospital with a general weakness of the limbs, and in three months' time was totally paralysed. She had been a compositor, and it was thought that her complaint might have arisen from lead, and this opinion was strengthened by lead being found in the tissues of her body. She was much wasted, especially as regards the muscles. The brain was found atrophied with much fluid. The spinal cord was small, with bony plates on the surface.

I some time ago made an inspection of a young man who had long been totally paralysed, and whose mind was gone; whether the case had been styled general paralysis I do not know. The anterior lobes were so much wasted that a large bag of subarachnoid fluid was seen to occupy their space, and, at the same time, the diminution in size of the spinal cord was most striking. As regards bony plates on the spinal cord, it may be remarked that they are always attached to the visceral arachnoid on the posterior surface of the cord; and as for their meaning, I think that neither of the extreme views of their unimportance or of their being the cause of irritation is correct. At one time they were catalogued in museums as being associated with chorea, epilepsy, and afterwards, when found to be not uncommon, were disregarded as being unimportant. I should say, however, that they generally are associated with a chronic inflamma-

tion or atrophy of the spinal cord. *Bony* plate also is the true term, for perfect osseous structure may be found in them, and even when recent and soft, the lacunæ may be discovered appearing in the fibrous structure.

I will repeat, in conclusion, that the object set forth in this paper is not to introduce any novel observation, but to state briefly how the question of atrophy of the brain stands at present according to my knowledge of the subject; and thus being impressed with the idea that it is not to be regarded exclusively in connection with any one morbid manifestation, I have placed the matter before others as it has framed itself to my own mind. In a word, that there is often found in the post-mortem room an atrophic state of the brain, and which has been associated during the life of the patient with mental and bodily infirmity. Admitting this, a further inquiry would no doubt discover differences of a minor kind, as well as various causes which have conduced to the degeneration, and with these no doubt a variety in the symptoms attending its progress. It may be also affirmed that in very many cases it is certain that the atrophic changes are intimately connected with disease in the blood-vessels, whether these arise immediately from alcohol, from age, or chronic inflammatory condition as in general paralysis, and thus we cannot be surprised to find that the old imbecile man tottering on the edge of the grave, the drunken sot, or the poor patient with dementia paralytica, have much in common. This paper contains no more than an attempt at a generalisation.

PART II.—REVIEWS.

Lectures on Epilepsy, Pain, Paralysis, and certain other Disorders of the Nervous System. By Charles Bland Radcliffe, M.D., Physician to the Westminster Hospital, and to the National Hospital for the Paralysed and Epileptic, &c. London, 1864, pp. 334.

Certainly the most striking and encouraging feature in recent physiology has been the important progress made towards bringing nervous action within the domain of rational investigation. Because the nervous system was plainly so intimately concerned in mental manifestations, the exalted and indefinite conception entertained of mind has, until quite recently, reflected on the nervous functions a sort of spirituality or unreality, and has caused them to be removed from the category of like organic processes; not content to declare the mind to exist independently of all physical processes which may determine the mode of its manifestations, those who were metaphysically minded have even imposed a spirituality on nervous element as the instrument of so exalted a mission. This was exactly what might be expected to happen whilst there was an entire ignorance of the nature of nervous function; the unintelligible is ever the wonderful. Men are little apt to believe that what is not understood by them is obscure because of their deficiencies; they at once assume that it must belong to a different order of things which it was never intended they should interpret. The regions of the unintelligible or miraculous have, however, gradually lessened year by year as science has advanced its lines, and the recent investigations into the physiology of nervous element have invaded and definitely taken possession of its territory for physical science.

And how has this excellent result been brought about? Just as advance is effected in any other science—by the discovery of a means of penetrating into a secret recess of nature hitherto closed to human sense. All the great advances in science have followed the invention of some instrument by which the power of the senses has been increased, or their range of action has been extended. The telescope did not invent the stars, but only enabled the human eye to reach them; the microscope did not create the world of infinite littleness, but only enabled human sense to penetrate it; matter was as in-

destructible, eternal, before the manufacture of the extremely delicate balance as it is now, when its protean changes can be exactly weighed and measured; metallic vapours have been glowing in the sun's atmosphere from that time when the Spirit first moved on the face of the waters until now, and yet it is only quite recently that the method of spectral analysis has endued man with the power of detecting them; light and heat were forms of motion on that day when the creative *fiat* issued the decree, "Let there be light!" and yet it is only the experiments of this century that have proved the truth. So, also, has it been with regard to nervous function; in the electric stream there has at last been found a means of investigating its subtle secrecies similar to that which there is in polarized light for investigating the inmost relations of crystallized bodies. And the means of penetrating the hitherto unapproachable secret of these delicate organic processes having been obtained, no physiologist doubts that the knowledge of them must sooner or later follow, as the knowledge of the heavens followed the invention of the telescope.

The study of nervous action has already proved that time is required in the process, just as it is required in the motions of the heavenly bodies. A definite period of time is necessary for the propagation of a stimulus from the peripheric ending of a nerve to its central ending in the brain; and when a stimulus has arrived at the brain, a certain lapse of time takes place before the will can send a message to the muscles so as to produce motion. This time-rate varies in different persons and at different periods in the same person, according to the degree of attention and other circumstances; but whether it be quick or slow, a certain time must always elapse from the irritation of a sensory nerve to the resultant movement of muscle; and a message from the great toe to the brain will take an appreciably longer time than a message from the ear or face. Haller first proposed to measure this speed of propagation of nervous action, and, indeed, made a calculation of it in man, which was not very far from the truth; but after him no one for a long time attempted the task, and Müller even pronounced it impossible, because the time seemed to him infinitely little and unmeasurable: in frogs poisoned with opium or nux vomica, he could not detect the slightest interval between the stimulus and the resulting contraction. Helmholtz has, however, proved Müller to be quite wrong, and, by the help of a very ingenious and delicate mechanism, found the rate of conduction by nerve to be not only measurable, but comparatively moderate, —in man about 180 feet in a second, and in the frog about 80 feet in the second. We can scarce do better than add his instructive commentary:—"So long as physiologists," he says, "considered themselves obliged to refer nerve-action to the passage of an imponderable or psychical principle, it might well seem incredible that the speed of the stream should be measurable within the limits of the

human body. At present we know, from Du Bois Reymond's investigations into the electromotor properties of nerve, that the activity of them, whereby the conduction of a stimulus is effected, is at least intimately connected with an altered arrangement of their material molecules, perhaps, in truth, essentially conditioned by them. Accordingly, conduction in nerves would belong to the series of continuous molecular movements of ponderable bodies, to which, for example, the conduction of sound in the air or in elastic substances, or combustion in a tube filled with an explosive mixture, is to be reckoned. Under these circumstances, it can no longer be surprising that the speed of conduction is not only measurable, but very moderate." *

The physiology of nerve has, however, made the greatest and most hopeful progress through the discovery of its electrical properties, whereby, indeed, it might almost be said an insight has been obtained into its elementary physical constitution. So long ago as 1786, Galvani accidentally discovered the existence of electricity in animal tissues; but his conclusions were denied by Volta, who attributed the electricity produced to the reaction of heterogeneous metals employed in the experiments. As Volta shortly afterwards discovered the voltaic pile, his fame eclipsed that of Galvani, and attention was almost entirely withdrawn from animal electricity. In 1799, however, Alexander von Humboldt, by certain ingenious experiments, established beyond doubt the presence of electricity in animal tissue;† and from that time the matter received little further development until Matteuci published an important essay upon it in 1844. It was that essay which incited Du Bois Reymond to those prolonged and fruitful researches which have made his name the greatest in this department of physiology. The pity of it is that Du Bois Reymond has so severely criticised Matteucci as to render it a perplexing matter for the uninitiated to determine what confidence they ought to put in the latter. In this country no one but Dr. Radcliffe, as far as we know, has devoted himself to the patient, delicate, and laborious work of systematic examination of the electrical relations of nerve; and one cannot wonder at it when we consider the long apprenticeship which is needed in order to make trust-

* "Ueber die Methoden kleinste Zeittheilchen zu messen und ihre Anwendung für Physiologischen Zwecke, gelesen in der Physik. Okonom. Gesells. zu Könisberg, 1850.

Also "Messungen über den zeitlichen Verlauf der Zuckung animalischer Muskeln und die Fortpflanzunggeschwindigkeit der Reizung in den Nerven." Müller's 'Archiv,' 1850, S. 276—364.

For the further application of Helmholtz's most ingenious method to the measurement of the rate of conduction in the "electro-tonic" nerve, see 'Untersuchungen über die Electrische Erregung der Nerven und Muskeln,' 1861, by Arnold von Bezold.

† 'Versuche über die gereizte Muskel und Nervenfaser nebst Vermuthungen,' &c., A. von Humboldt, Berlin, 1797.

worthy experiments, and the great cost of the required instruments. Owing to the absence of proper physiological laboratories in England, there is, unfortunately, no means of getting the proper training for such experimentation; and it does not seem unlikely, therefore, that for future progress in this department of physiology, as in most other departments thereof, we shall have to be indebted to the scientific men of other countries. At present, it is certain that a student cannot thoroughly learn physiology in England; he must go to Berlin if he will do so. How long is this unhappy state of things to last?

In the first of these lectures, which he has lately published, Dr. Radcliffe gives a concise history of the discovery of animal electricity, and thus sums up the relative merits of Matteucci and Du Bois Reymond:—"In the mean time, it may be said that M. Matteucci has demonstrated in the most unequivocal manner that animal electricity is capable of decomposing iodide of potassium, and of giving 'signes de tension avec un condensateur délicat,' as well as of producing movement in the needle of the galvanometer; and not only so, but also—a fact, the discovery of which will always give M. Matteucci a place in the very foremost rank of physiological discoverers—that muscular attraction is accompanied by an electrical discharge analogous to that of the torpedo. And as for M. Du Bois Reymond, it may be said that he has demonstrated that there are electrical currents in nerve—in brain, spinal cord, and other great nervous centres, in sensory, motor, and mixed nerves, in the minutest fragment, as well as in masses of considerable size—that the electrical current of muscle, which had already been discovered by M. Matteucci, may be traced from the entire muscle to the single primitive fasiculus, that Nobili's 'frog current,' instead of being peculiar to the frog, is nothing more than the outflowing of the currents from the muscles and nerves; that the law of the current of muscle in the frog is the same as that of the current of the muscles in man, rabbits, guinea-pigs, and mice; in pigeons and sparrows; in tortoises, lizards, adders, slow-worms, toads, tadpoles, and salamanders; in tench, in fresh-water crabs, in earthworms; in creatures belonging to every department of the animal kingdom; that the law of the current in muscle agrees in every particular with the law of the current in nerve, and also with that of the feeble currents which are met with in tendon and other living tissues,—and that there are sundry changes in the current of muscle and nerve under certain circumstances, as during muscular contraction, during nervous action, under the influence of continuous and interrupted galvanic currents, and so on, which I shall hope to show in the sequel are of fundamental importance in clearing up much that would be otherwise impenetrable darkness in the physiology of muscular action and sensation."

As we cannot follow Dr. Radcliffe in his detailed account of the

electrical phenomena belonging to living nerve and muscle during action and inaction, it must suffice to note the points wherein he differs from Du Bois Reymond, whose views for the most part he adopts and confirms. These are—(1), that the "muscular current" and the "nerve current" are not, as Du Bois supposes, primary, but that the natural electricity of muscle and nerve during rest is *statical*, and not current; (2), that electrical discharges like those of the torpedo are essential to the interpretation of muscular action.

With regard to the first point, it is well known that Du Bois Reymond looks upon the "nerve current" which passes to the galvanometer, when a piece of living nerve is included in a particular way within the circuit of the instrument, as a *derived* portion of the strong currents moving in closed circuits round the ultimate particles of the structure. On the other hand, Dr. Radcliffe thinks it more correct to suppose that the arrangement of the ultimate molecules is one of mutual repulsion, positive electricity being opposed to positive electricity, and negative electricity to negative electricity. The condition, then, is one of tension, of statical and not of current electricity; and to obtain the current, all that is necessary is to bring the ends of the coil of the galvanometer into relation with two points of dissimilar electric tension. The direct consequence of this view of things is most important; it is that the elongated state of the fibres of living muscle is due to the presence of electricity, the molecules repelling each other, and that the contraction of the muscle is due to the absence of the natural electricity, the natural attraction of the molecules having then free play.

This brings us to the second point, namely, the supposed electrical discharge during muscular action. Is there, or is there not, such a discharge? It is admitted on all hands that there is a diminution of the proper current of nerve or muscle during action, the needle of the galvanometer showing a negative variation. But Du Bois Reymond and the Berlin school never speak of this diminution of the proper current as owing to a *discharge* of electricity; and in this Dr. Radcliffe thinks they are wrong and Matteucci right. Certainly the evidence of any such discharge does not appear to us quite as decisive as it does to Dr. Radcliffe. In reality, it seems to amount to an *inference* from one experiment, which admits of divers other interpretations. The experiment is this: the nerve of a duly prepared rheoscopic limb, *b*, is laid on the muscle of another rheoscopic limb, *a*, and the latter is made to contract by stimulating its nerve. Thereupon "induced contraction" occurs in *b*, by reason, it is assumed, of an electrical discharge from *a*. The "secondary" contraction will still occur if small pieces of lamp-cotton, well moistened in salt water, be made to connect the nerve of the rheoscopic limb, *b*, with the muscle of the limb *a*, electricity being supposed to traverse the cotton. But it must be borne in mind that contraction will

happen in the limb *b* when its nerve is laid upon the muscle of *a*, though the latter is not stimulated at all, but simply because the nerve, *b*, touching different electromotor points of the surface of the muscle, conducts the derived proper current of the muscle *a* just as the galvanometer does. So that you get secondary contraction in *b*, both when *a* is not in action and when it is in action. But it is only in the latter case that the negative variation of the galvanometer would show a diminution of the proper current of *a*, and, therefore, that a discharge of electricity from it could be assumed. It may be that there is a discharge of electricity during muscular contraction or nervous action, but it is obvious that the "secondary contraction" in the above experiment admits of another interpretation; the limb *b* will, in fact, be excited to secondary contraction by every sudden variation of the proper current of *a*.* But that is not all; for tolerably strong evidence that the "secondary contraction" was entirely misinterpreted by Matteucci—that it is really the result of the variation in the current of the primarily contracting muscle, seems to be afforded by an observation of Du Bois Reymond. It is this—that the induced contraction *does not take place at all*, if the nerve of the second rheoscopic limb be made to touch the muscle of the first at two *similar electromotor points, or only at one point.* To suppose, again, that the variation of the current in the primarily contracting muscle *must* be due to a discharge of electricity, would be quite unwarrantable; for the chemical and molecular changes which undoubtedly take place in muscle during contraction are amply sufficient to account for it.

Another fact which might seem to oppose the idea that muscular contraction is attended with a discharge of electricity to which the negative variation of its proper current is due, may perhaps be found in the observation of Helmholtz—that the negative variation of the muscular current appears earlier than the contraction of the muscle. There is, in fact, a period of "latent stimulation" before the contraction, and the greatest variation of the muscular current occurs about the middle of this period. Thinking that this interval of the latency of stimulus might be partly or entirely owing to a delay in the propagation of the impulse from the muscle to the marking apparatus used, Harless instituted a different method to test this supposition; but his results confirmed a discovery which Helmholtz

* The most interesting experiment showing this induced contraction of muscle is one by Kölliker and H. Müller. When the heart of a frog is cut out, it continues to beat regularly for some hours; and of course the proper current of the muscle regularly undergoes a negative variation at each contraction. If now the nerve of a rheoscopic limb be placed upon the heart, the limb will contract synchronously with each beat of the heart—and this may go on for an hour. *The contraction of the limb on each occasion precedes that of heart*, proving that *the negative variation in the current of the muscle of the heart precedes the actual contraction*—therein confirming Helmholtz.

had himself sufficiently tested in other ways. Now, if the negative variation of the muscular current is owing, as Dr. Radcliffe supposes, to a discharge of electricity, and if, as Helmholtz has proved, this negative variation precedes the contraction and is greatest about the middle of the period of "latent stimulation," can we justly say, with Dr. Radcliffe, that "the state of action in a muscle is accompanied by a discharge of electricity"? One cannot but think that if such were really the case, Du Bois Reymond, to whom we are mainly indebted for our knowledge of the electrical relations of nerve and muscle, and the Berlin school, the recent investigations of which have carried the matter so much further, would not entirely ignore the possibility of anything of the kind. Knowing the extreme caution and accuracy of Du Bois Reymond, it is difficult to think so, while it is not so unusual a thing for Matteucci to make a hasty generalisation which does not stand the test of time.

On such a matter, however, the decision must rest with the experimental workers; any such incidental criticism as the foregoing should be taken at its true value. What we may, perhaps, not unfairly make a reproach to Dr. Radcliffe is, that he has given us an account of the electrical phenomena of living nerve and muscle only so far as was useful for the illustration of his theory; that all experiments which he adduces are interpreted by its light or bent to its yoke. He would have done a good service to those who have not the exact and complete knowledge of the matter which he has, if he had made these lectures embrace a summary of the recent investigations of Helmholtz, Pflüger, and Arnold von Bezold, and had pointed out the import and relations of their discoveries. As things are at present, the more one strives to get exact notions, the more difficult does the task appear. Certainly, Dr. Radcliffe's theory is sufficiently definite and consistent, and there is little confusion in his book; but such clearness is obtained by leaving unnoticed many experiments which it is difficult to reconcile with the theory.

Passing, then, from the consideration of the electrical phenomena of nerves and muscles, any interpretation of which must, by the changing state of our knowledge, be rendered doubtful, let us give briefly Dr. Radcliffe's conclusions.

There are unmistakeable signs of natural electricity in living nerve and muscle during the state of rest.

This natural electricity is during rest statical, and not current.

The living muscle is kept in a state of relaxation by this statical electricity. An electrical discharge, analogous to that of the torpedo, accompanies the action of nerve or muscle.

A nerve or muscle thrown into action by electricity or other means loses its natural electricity.

A muscle deprived of its natural electricity passes into a state of contraction, because it then yields to the action of the attractive

force which is inherent in the physical constitution of its molecules. The contraction is not continuous in living muscle, because its electricity is immediately recovered.

Rigor mortis is continuous, because the natural electricity is then permanently lost. The true theory of muscular action is a purely physical theory.

It is proper to add that Dr. Radcliffe does not claim to be the first to put forward the theory that muscular motion is a physical result due to the withdrawal of nervous influence; in an appendix to these lectures he gives quotations from the writings of different authors who have more or less plainly anticipated such view. But for the full development of the theory, for the utilisation of recent discoveries in physiology in the illustration and in the confirmation of it, Dr. Radcliffe may certainly claim all the glory: whether the theory stand or fall, he must be considered the representative of it.

But he has done more; for his ultimate aim has been to show that a fundamental change is necessary in the theory and treatment of all disorders of the nervous system. Accordingly, a part of these lectures is devoted to proving that the pathology of convulsions, tremor, spasm, and pain, is in strict harmony with the views which he holds with regard to the physiology of nerve and muscle. And whatever be the fate of his particular hypothesis with regard to the electrical relations of nerve and muscle, these general views may remain unaffected. Let us state them with more fulness.

The well-known experiments of Brown-Séquard and Stannius have proved that muscles which have passed into the state of rigor mortis will return into a state of relaxation if they are supplied with a sufficient amount of blood. What is the inference? That rigor mortis depends upon the absence of the due action of the blood, which would seem to be to produce relaxation. This influence is quite in accordance with other facts—that with loss of blood there is increased disposition to muscular contraction; and that general convulsions are brought on by sudden hæmorrhage, or by arresting the arterialization of the blood. The presence of a sufficient supply of natural blood would seem then to have to do with the production of the relaxed state of muscle.

So also with regard to "nervous influence." There is reason to believe that ordinary muscular contraction is associated with deprivation of "nervous influence," and certainly rigor mortis is associated with the entire absence thereof. A proposition which Dr. Radcliffe makes is that the power of muscular contraction is inversely related to the amount of nervous influence supplied to the muscle from the great nervous centres! And he furthermore believes that "nervous influence," apart from nerve-electricity, is a very indefinite idea. Accordingly, when a muscle is made to contract by means of its nerve, he supposes that the electrical discharge which, he

thinks, accompanies nervous action, reverses the electrical relations of particles of the muscle; that this reversal leads to the discharge of the electricity which is present in the muscular fibres during rest, and which keeps them relaxed; and that this discharge brings on muscular contraction, as the attractive force of the muscular molecules then comes into play.

For the ingenious use which Dr. Radcliffe makes of different physiological observations to support his theory, and for the explanations of facts which he affords by it, we must refer to his book. One example only of far-reaching ingenuity we give. As arterial blood must have the effect of producing dilatation of the vessels by putting an end to the contraction which venous blood must produce in them, it is plain that arterial blood will favour its own admission into the vessels, and that venous blood is itself the cause of an action to drive it onwards. "There may be, it is plain, a state of diastole and systole in the minute vessels which is strictly analogous to the diastole and systole of the heart; there may be, that is to say, a state of things which will readily furnish a physical and intelligible explanation of that independent power in the vessels which evidently co-operates with the heart in carrying on the circulation, and which is generally spoken of under the name of capillary force." A little further on, Dr. Radcliffe explains the full pulse of the epileptic paroxysm by supposing that the arteries are labouring under a load of black blood. What has become of the effectual capillary contraction which should drive on the blood under such circumstances? Possibly, we must now suppose that the contraction of the vessels is enduring, and therefore becomes itself a cause of obstruction to the blood. Further on still in the book, however, we find this sentence in explanation of the relaxation of the vessels in inflammation: —"And so likewise it is not difficult to understand how the continuance of the state of irritation in the vaso-motor nerves will issue in congestion or inflammation; for when this irritation has been carried to a point which deprives the nerves of their irritability, the state of action which previously kept the vessels in a state of contraction is at an end, and the vessels, thus left to themselves, will relax and receive more blood." But surely, if the previously propounded theory of muscular action is correct, vessels deprived of their nervous influence—left to themselves—should not relax, but contract. As it is, we seem to have the deprivation of nervous influence at one time used to account for muscular contraction, at another time to account for muscular relaxation.

An interesting part of Dr. Radcliffe's book is that which is occupied with the demonstration that the true pathology of convulsion, spasm, and tremor, is to be found in the view of the physiology of muscular motion which he upholds. It must suffice here to say that from a detailed consideration of the condition of the functions of

respiration, circulation, and innervation in each of the pathological states, he concludes, as it seems to us very rightly, that the muscular disorder is connected with a state of depressed vital energy, and not with exalted vital energy. So also with regard to pain; there is the best reason to think that it is a sign of defective vital power, and that, in this respect, it is the exact equivalent of convulsion, tremor, and spasm. Such views of the import of convulsion and pain are now becoming so general, and have of late been so much insisted upon in this Journal, that it is not necessary to dwell further upon them. The particular question with regard to them now is whether they do actually strengthen Dr. Radcliffe's view of the physiology of muscular motion, and receive support from it; and on that point it would be presumptuous to venture a positive decision without a far more careful and extensive consideration of the whole matter than we have ever given to it. It must be admitted that Dr. Radcliffe's views have a consistency and completeness which will not be found elsewhere; and even though a part of them be ultimately upset, the rest may still stand secure. Thus, if the particular hypothesis with regard to the electrical relations of muscle and nerve should turn out to be incorrect, it may still be that the theory of the relation of muscular contraction to nervous influence is well founded; and even if this theory should not finally be accepted, it is probable that the more general views with regard to the vital import of convulsion, spasm and pain, will be unassailable.

To assent to the views propounded in these lectures, as a whole, would certainly, in the present state of knowledge, be premature. In the first place, it is not quite certain that there is that discharge of electricity during muscular contraction which Dr. Radcliffe argues for so earnestly; and, in the second place, we cannot conceive how it is possible to reduce muscular action to a mere physical attraction of molecules, like that of the molecules of a piece of india-rubber. What place does the chemical action which undoubtedly takes place during contraction, hold in such a theory? The investigations of Becquerel and Breschet have proved that the temperature of muscle rises one degree during contraction; Ludwig has shown that the arterial blood which is carried through muscle in a state of contraction is almost completely deprived of its oxygen; and the chemists have discovered lactic acid, kreatin, uric acid, &c., as waste products of muscular action—results of the retrograde metamorphosis of tissue. This retrograde metamorphosis of statical elements is the condition of activity, and the loss thereby is steadily repaired by nutrition during rest; an increased nutrition following within certain limits on increased exercise. Is it possible, then, to ignore all these important facts, and to rest content with an assumed discharge of electricity and a supposed physical molecular attraction? Can we honestly accept a hypothesis which compels us to regard rigor mortis as the highest expres-

sion of muscular action? To us it appears that Dr. Radcliffe has glided into a fundamental error in making, as he does, the conditions of pain identical with those of natural sensation, the conditions of convulsion identical with those of co-ordinate muscular action, and the conditions of rigor mortis identical with those of muscular contraction during life. Convulsions, spasms, pain, are undoubtedly results of diminished vital energy; but that would appear to be just the reason why their conditions cannot be identical with those of healthy vital action. The degenerate display of force implies a degenerate condition of the statical element.

The observations which, in his sixth lecture, Dr. Radcliffe makes with regard to the treatment of convulsions are necessarily of great value. He believes that in many cases of chronic convulsive disorder the diet ought to contain somewhat more than an average quantity of oily and fatty matters, and somewhat less than an average quantity of lean meat; and he has found cod-liver oil to be very beneficial in many such cases. Bromide of potassium he considers an invaluable remedy in many cases of epileptic and epileptiform disorder, and he even has a faith that phosphorus is a very suitable remedy in some cases. Of the advantage of belladonna in epilepsy and other chronic convulsive disorders he has great doubts; but alcoholic stimulants "are very trustworthy antispasmodics in the prevention and treatment of convulsions." In this last observation we, who have ever found gin to be the best remedy for hooping-cough in children, heartily concur.

To say that Dr. Radcliffe has earned the right to our thanks by his very original work would be but an unworthy compliment to his labour, learning, and talent. To hope that his deeply considered opinions may initiate an important advance in physiological thought, and lead to a more successful treatment of disease, is to hope for that result which, we doubt not, would be the most grateful reward their author would desire. H. M.

Hospital Construction and Management.

1. *Notes on Hospitals.* By Florence Nightingale. Third edition, enlarged, and for the most part rewritten. Longmans, 1863, pp. 176. (With numerous plans.)
2. *Rapport sur les Hôpitaux Civils de la Ville de Londres, au point de vue de la comparaison de ces établissements avec les Hôpitaux de la Ville de Paris.* Par M. Blondel, Inspecteur principal et M. L. Ser.-Ingénieur de l'administration de l'assistance publique. Paris, 1862, pp. 238.
3. *Etude sur les Hôpitaux considérés sous le rapport de leur construc-*

tion, de la distribution de leur batiments, de l'ameublement, de l'hygiène et du service des salles de malades. Par M. Armand Husson, Directeur de l'administration générale de l'assistance publique. Paris, 1862, pp. 607. (With numerous plans.)

We need scarcely apologise for introducing into the pages of this Journal the question of hospital management. An asylum for the insane is essentially a hospital; insanity is one of the diseases of the body, and hence all that concerns hospital management is as intimately related to the successful treatment in our asylums of mental disease as it is to the medical or surgical practice of a general hospital. Moreover, the advance in the treatment of the insane in asylums has been in a direct ratio to our departure from the old asylum traditions, and has progressed through the assimilation of these buildings, in their internal management, to the standard of a general hospital. And there can be little doubt that the day will arrive when all these fortresses with iron windows and high walls, and prison corridors and galleries, in which we now confine the lunatic, will be replaced by the ordinary hospital ward arrangements. Already, in most of our county asylums, the tendency to assimilate the building to a general hospital may be traced in the designs adopted for the enlargements which are from time to time made, and in which, almost uniformly, the prison cell and gallery type is replaced by dormitories and day-rooms on the usual hospital model. It cannot thus be wanting in interest to the members of this Association to learn of the most recent opinions advanced on the question of hospital construction and management abroad.

"The third edition of 'Notes on Hospitals,'" writes Dr. Farr, "is, in my opinion, the most judicious, complete, and masterly treatise that has recently appeared on any subject." This is saying a good deal; yet, allowing a little for the enthusiasm which Miss Nightingale's name involuntarily evokes, we are ready to endorse Dr. Farr's encomium. Her essay will also bear favorable comparison with the more pretentious and elaborate French productions which we have placed beside it at the head of this article. There is a simplicity and charm of style in Miss Nightingale's essay which carries one on with its perusal as if it were a story rather than a dry scientific treatise. It is, without question, the most complete and instructive hospital manual which has ever been published, and it is, moreover, adapted to the capacity of all. Physician and nurse will alike learn much from a perusal of its pages. The first lines of the preface suffice to arrest the attention of the most careless reader.

"It may seem," writes Miss Nightingale, "a strange principle to enunciate as the very first requirement in an hospital, that it should do the sick no harm. It is quite necessary, nevertheless, to lay down such a principle, because the actual mortality *in* hospitals, especially

in those of large crowded cities, is very much higher than any calculation founded on the mortality of the same class of diseases amongst patients treated out of hospital would lead us to expect."

M. Husson's large volume, 'Etude sur les Hôpitaux,' is a perfect encyclopædia on all points relating to hospital management and construction. It contains, also, a large number of drawings and ground-plans, and is furnished with a complete table of contents and an index. MM. Blondel and Ser, on the other hand, confine their observations to the comparison of the London and Parisian hospital system. Their report is drawn up with much ability, and they frankly praise—where praise is due—arrangements which they find better in London than in Paris.

We shall, on the present occasion, briefly consider the several questions involved in the terms "Hospital Construction and Management," according to the arrangement adopted by Miss Nightingale.

I. *Sanitary condition of hospitals.*—An inspection of our large London hospitals will raise, in the minds of those experienced in sanitary arrangements, grave doubts as to whether the sick do not materially suffer from that obvious neglect of the laws of health which meets one at every turn. Impure air, want of ventilation (often from defective original construction), inattention to personal cleanliness and ablution, are the usual conditions under which the sick are there treated. Dr. Richardson, in his 'Medical History of England,' recently ventured to hint at this state of things, in comparing the comparative mortality of the Norwich and London hospitals after severe surgical operations.

Miss Nightingale, with the aid of some statistical returns furnished by the Registrar-General,* boldly meets this same question. She gives the following table as the basis of her argument:

Mortality per cent. in the principal Hospitals of England. 1861.

	Number of Special Inmates on April 8, 1861.	Average Number of Inmates in each Hospital.	Number of Deaths in the Year 1861.	Mortality per Cent.
In 106 Principal Hospitals of England...	12,709	120	7,227	56·87
24 London Hospitals	4,214	176	3,828	90·84
12 Hospitals in Large Towns	1,870	156	1,555	83·16
25 County and important Provincial Hospitals	2,248	90	886	39·41
30 Other Hospitals	1,136	38	457	40·23
13 Naval and Military Hospitals ...	3,000	231	470	15·67
1 Royal Sea Bathing Infirmary (Margate)	133	133	17	12·78
1 Dane Hill Metropolitan Infirm. (Margate)	108	108	14	12·96

* See note at the end of this review, p. 413.

On this table she observes—

It will be seen that the hospitals are grouped according to locality. Now, let us compare three of these groups with each other. We have twenty-four London hospitals affording a mortality of no less than 90·84 per cent., very nearly every bed yielding a death in the course of the year. Next we have twelve hospitals in large provincial towns, Bristol, Birmingham, Liverpool, Manchester, &c., yielding a death-rate of 83·16 per cent. And there are twenty-five county hospitals in country towns, the mortality of which is no more than 39·41 per cent. *Here we have at once an hospital problem demanding solution.* However the great differences in the death-rates may be explained, it cannot be denied that the most unhealthy hospitals are those situated within the vast circuit of the metropolis; that the next lower death-rate takes place in hospitals in densely populated, large manufacturing and commercial towns; and that by far the most healthy hospitals are those of the smaller country towns. These results are quite reliable, and are preferable to those derived from individual hospitals; otherwise it might be stated that the death-rate of certain hospitals situated in large towns is so enormous that every bed is cleared out in the year, and in some of them once in about nine months. Facts such as these (and it is not the first time that they have been placed before the public) have sometimes raised grave doubts as to the advantages to be derived from hospitals at all, and have led many a one to think that in all probability a poor sufferer would have a much better chance of recovery if treated at home.

Miss Nightingale attributes to the following defects in site, construction, and management, this low sanitary condition of our large hospitals:

1. The agglomeration of a large number of sick under one roof.
2. Deficiency of space per bed.
3. Deficiency of ventilation.
4. Deficiency of light.

The consideration of these elements of disease leads to the second division of the subject of "Hospital Construction and Management," viz.:

II. *The defects in existing hospital plans and construction.*

The conditions essential to the health of hospitals are thus stated by Miss Nightingale:

1. Fresh air.
2. Light.
3. Ample space.
4. Subdivision of sick into separate buildings or pavilions.

She assigns the following as the principal causes in the usual ward construction which prevent us from obtaining those necessary conditions of health in hospitals:

1. Selection of bad sites and bad local climates for hospitals.
5. Construction of hospitals on such a plan as to prevent free circulation of external air.
8. Defects in ward construction injurious to ventilation, including—defective height of wards; excessive width of wards between

the opposite windows; arranging the beds along the dead walls; having more than two rows of beds between the opposite windows; having windows only on one side, or having a closed corridor connecting the wards.

4. Defective means of natural ventilation and warming.
5. Defects of drainage, waterclosets, sinks, &c.
6. Using absorbent materials for walls and ceilings, and washing floors of hospitals.
7. Defective hospital kitchens.
8. Defective hospital laundries.
9. Defective accommodation for nursing and discipline.
10. Defective ward furniture.

Our limits entirely preclude our following Miss Nightingale into the consideration of these several heads. Her observations on them are full of sound practical sense, and are illustrated by some interesting plans of existing faulty hospital construction.

We pass to the third division of our subject—III. *Principles of hospital construction.*

Miss Nightingale lays it down as the first principle in hospital construction that the sick be divided among separate pavilions, meaning by a hospital pavilion a detached block of building, capable of containing the largest number of beds that can be safely placed in it, together with suitable nurses, rooms, ward sculleries, lavatories, baths, waterclosets, all complete, proportioned to the number of the sick, and quite unconnected with any other pavilions of which the hospital may consist, or with the general administrative offices, except by light airy passages or corridors. This pavilion system is in principle identical with the asylum block system advocated by Dr. Bucknill, and now in course of construction at the new Surrey asylum at Woking.

Miss Nightingale treats in thirteen several sections of the (1) number of floors in a pavilion; (2) the number of wards to a floor; (3) the size of wards, pavilions, and hospitals; (4) the space and area of the bed; (5) the number of beds to a window; (6) material for walls and ceilings of wards; (7) ward floors; (8) nurses' rooms and sculleries; (9) bath rooms and lavatories; (10) waterclosets and sinks; (11) ventilation of wards; (12) ward furniture; (13) bedding; (14) water supply; (15) drainage and sewerage; (16) kitchen; (17) wash-house; (18) operating theatre. Of course, the limited space of this review prevents our noticing these sections in detail; we can but briefly allude to one or two of the more important.

Size of hospital—Miss Nightingale places the utmost limit of a general hospital at 1000 beds. We have always held a similar opinion of the possible ultimate dimensions of our county asylums. From 800 to 1000 patients, sane or insane, can be worked by one

set of officers and on one system. Any number beyond this leads only to increased expense, a multiplied staff and divided authority, with its natural result, discord and mismanagement. We have at least two practical illustrations of the working out of the law that the divided authority, necessitated by increased numbers, materially lessens the efficacy of management in a public asylum for the insane.

Of the ultimate dimensions of a pavilion-hospital, Miss Nightingale thus writes:

> The next point is to determine what ought to be the size of a hospital; in other words, how many beds it can contain with safety. But from what has been said, it will be observed that this question resolves itself into the previous one, viz., what should be the size of each hospital pavilion? Because, if a pavilion of healthy construction is obtained, it is evident that the only limit to the size of the hospital will be an administrative one. An hospital may be constructed for any number of sick, until a point is arrived at when some portion of the administrative arrangements, material or personal, has to be provided in duplicate. Any further extension beyond this ceases to be economical.
>
> Considering each pavilion as a separate unit in the hospital construction, any number of single or double pavilions could be put together up to accommodation for, say, 1000 beds, beyond which it would be difficult, if not impracticable, to have good adminstration with one set of officers. It is to be hoped, however, that few hospitals will ever be built for such a number now-a-days. The fewer hospitals required, and the smaller their number of sick, the better will it be for civilisation. All I submit is, that the pavilion construction may—not should—be safely used up to this extent.

Space and area of the bed.—The usual method of calculating the space per bed is by cubic measurement. In hospitals this measurement gives from 1000 to 1500 cubic feet per bed, while in lunatic asylums it does not exceed 500. The correct principle of measuration is, however, the superficial foot, not the cube. Miss Nightingale thus aptly argues this point:

> Having determined the number of beds per ward, the next point is to ascertain what amount of cubic space should be given to each patient. There is scarcely a point of hospital construction in which there has been so much error as in this. The chief element in the question, and that one which has been very generally overlooked, is the superficial area per bed. If it be—as it is—an essential condition to the healthy state of an hospital that there should be ample facility for the air moving around and in the immediate vicinity of the sick, it is quite clear that, if the beds are placed as close as they can stand, it matters very little whether you give your patient 1000 cubic feet or 20,000 cubic feet. To show the importance of this, it may be sufficient to state that, if a large building, say a church, be selected for a war hospital on account of its spacious light, cheerful aspect, if it be measured to ascertain its cubic contents, its height being no more than 60 feet, in such a building the very liberal war hospital allowance of 1200 cubic feet per bed would render it necessary to place the beds on the floor so close together that not even a pathway would be left between them. Has not this, in times past, been one cause of the frightful mortality in these

hospitals in India? where they give 1000 cubic feet per bed, the superficial area for each patient is only 24 square feet. But then the architect has made such a spacious ward—no less than 42 feet high (!); that it is supposed to make amends.

Let us inquire what is the smallest amount of superficial area we can do with. Hospital beds are generally from 3 feet to 3 feet 6 inches wide, and 6 feet 3 inches long, the bed space being increased to 7 feet by the bed being a little removed from the wall.

The mere surface required to hold the bed is hence from 21 square feet to 24½ square feet. It is quite clear that, whatever surface area is required for ventilation, administration, or for clinical instruction, must be in excess of this amount. There should also be room for free movement of three or four persons, for the use of a night-chair without annoying the next patient, and also for a portable bath, when required. The distance from foot to foot of opposite beds should be sufficient to afford space for a movable dresser or table, benches on either side, and easy passage way. In a well constructed civil hospital in England, occupying a healthy, airy position, it cannot be said that 80 square feet besides the bed space are too much. In round numbers, the superficial area per bed should be not less than 100 square feet.

Ventilation of wards.—Miss Nightingale has no faith in artificial ventilation. "If an hospital (she writes) must be ventilated artificially, it betrays a defect of original construction which no artificial ventilation can compensate; it is an expensive and indifferent means of doing that which can be done cheaply and efficiently by constructing the building so as to admit the pure air around." We concur with Miss Nightingale in her remarks on the injurious results to the sick of attempts at the artificial introduction of warmed air, after the practice of the French hospitals, into the wards. "It strikes me, on examining this process, that it is not in accordance with nature's method of providing fresh air. She affords air both to sick and healthy, of varying temperature, at different hours of the day, night, and season—always apportioning the quantity of moisture to the temperature, providing continuous free movement everywhere, and warming, not by warm water in iron pipes, but by radiant heat. We all know how necessary the variations of weather, temperature, season, are for maintaining health in healthy people.

"Have we any right to assume that the natural law is different in sickness? In looking solely at combined warming and ventilation, to ensure to the sick a certain amount of air at 60°, paid for by contract, are we acting in accordance with physiological law? Is it a likely way to enable the constitution to rally under serious disease or injury, to undercook all the patients, day and night, during all the time they are in hospital, at one fixed temperature? I believe not. On the contrary, I am strongly of opinion—I would go further, and say I am certain—that the atmospheric hygiene of the sick room ought not to be very different from the atmospheric hygiene of a healthy house. Continuous change of the atmosphere of a sick ward to a far greater extent that

would pay a contractor to maintain, together with the usual variations of temperature and moisture given by nature in the external atmosphere, are elements as essential as any other elements to the rapid recovery of the sick in most cases."

Miss Nightingale hardly, however, gives sufficient credit to artificial methods of extracting the foul air out of hospital wards, and for which purpose a system of air-shafts, meeting at a centre where there is heat—be it a hot-water tank or large kitchen flue, on the method advocated by Sir Joshua Jebb—to extract the air, is required. The system she suggests of air-shafts carried up from the ceilings of the wards to above the roof, answers in fine weather, when the air is rarified, but in cold and wet weather becomes the cause of most unpleasant down-draughts. She gives full credit to the ventilating powers of the open chimney, now so general in all our English hospitals. The fire sets it acting, and it takes the air from the ward so successfully that, as has been proved by direct experiment, a single chimney will, in certain states of the wind, remove 60,000 cubic feet of air in an hour, or as much as the French contract system allows for twenty-four patients.

M. Blondel, in his very candid survey of the English and French hospital systems, dwells on the extent to which, in the English hospitals, the windows are opened, and how a preference is here universally given to this method of ventilation. He further admits that he failed in the London hospital wards to trace that peculiar odour which greets one in all French hospitals, but he expresses a doubt whether the physicians in France would sanction the exposure of their patients to the frightful currents of air which reign, he says, in the London wards. "Vous ne sauriez, M. le Directeur (he writes), pour vous figurer ce que nous avons vu, donner trop d'extension à cette expression *d'ouvrir les fenêtres ;* vous resterez toujours au-dessous de ce qu'elle signifie en Angleterre. Ce n'est pas çà et là, comme chez nous, une partie de croisée qui laisse entrer l'air du dehors ; ce sont toutes les croisées, toutes les portes des salles qui demeurent ouvertes constamment ; et pour que cela ne suffise pas, on ménage des communications directes ou indirectes avec l'extérieur, à travers les murs, dans les impostes des portes, au-dessus des croisées, quand celle-ci ne montent pas jusqu'au plancher haut ; on en voit aussi dans les plafonds, dans les coffes des cheminées . . . . Quand nous parlions du froid qui devait résulter d'une semblable ventilation, des courants d'air qu'elle occasionne, et dont tous trois habillés et le chapeau sur la tête, nous étions incommodés, ou nous répondait que ces inconvénients valent mieux que le manque d'air pur. Le programme de nos voisins, en fait de ventilation, est donc des plus simples : *De l'air pur, quelle que soit la température, quels que soient les courants.*"

Baths.—The absence of all bathing arrangements in our metropolitan hospitals is deplorable, and is only equalled by the uniform

neglect on the part of their physicians of this great curative agent. We doubt whether one in twenty of the patients either in St. George's or King's College has that essential to health—a daily bath. The personal ablution of the patients in these hospitals is still of the middle-class English type—the application, once a day, of a little tepid water and soap to the face and hands with a weekly foot-bath. M. Blondel reports with truth that the bathing arrangements of the English hospitals are "*très-peu développés.*" There are not (he says) any *salles de bains* in the London hospitals. In one or two hospitals there is in the basement a room with several baths and a furnace, and above one of the baths perhaps a shower-bath apparatus is fixed. This arrangement (he adds) suffices for important establishments like St. George's Hospital. The dismal unused bath-cellar of that hospital is worthy of a visit from the curious in such matters.

M. Husson gives, at page 102 of his large work, a plan of the admirable bath-house at the Hôpital Saint-Louis. It consists of two dressing-rooms and of two large bath-rooms (containing each thirty separate baths), one for each sex; of a plunge bath, a vapour bath, a vapour douche, water douches, and a room for fumigation. Similar arrangements exist at La Charité, l'Hôpital de Beaujon and Necker. The baths are used alike for the treatment of the in- and out-patients of these hospitals. During the year 1861 there were administered in fifteen of the principal hospitals in Paris 174,632 ordinary baths, and 161,685 medicated baths, to the in-patients; and 21,363 ordinary, with 96,301 of the medicated, to the out-patients; making a yearly total of 453,981—*nearly half a million*—baths administered. We doubt much whether the whole hospital population of London had one hundredth of this number of baths. Miss Nightingale, under this head, advises, in her model hospital, a separate bathing establishment, which should contain hot- and cold-water baths, sulphureous-water, hot-air, medicated, and vapour baths, shower baths, and douche. The walls should be of white tiles or cement, the floors of wood. There should also, for the use of the sick who cannot be moved so far, be a small bath-room, with one fixed bath of white glazed terra-cotta, supplied with hot and cold water, adjoining each large ward. She mentions among the requirements for a bath-house a hot-air bath, but without pressing so far, as we are prepared to do, the great therapeutic value of the Roman (hot-air) bath in the curative treatment of disease. We can only ask, again, how long this culpable neglect by the London hospital physicians of the healing powers of baths, in their varied forms, is to continue?

We cannot linger longer on this chapter. No one, in future, building or organizing a hospital or asylum, can study its every section without benefit to himself and to the sick to be treated within its walls.

We would, in conclusion, say a few words on the ninth chapter of

Miss Nightingale's work, treating of the much debated and much neglected question of *Hospital Statistics*. A uniform system of hospital statistics she pleads for, as urgently as we have done for a uniform system of asylum statistics. Without such a uniform system, it is self-evident that deductions drawn from the numerical results of different hospitals and asylums can lead only to error, and that all the teaching of the past, thus negligently recorded, is made of little or no avail. Miss Nightingale has devoted much care and time to the compilation of one general statistical form (being similar to that in use for many years in the Registrar-General's office for the registration of deaths), and which is divided vertically into columns, containing the ages in monthly and yearly periods, from under one year to five. Above five, the ages are given quinquennially. She proposes that this same form be used for each statistical element. Seven elements are required to tabulate the results of hospital experience, and hence Miss Nightingale recommends that seven separate forms of this table be kept, writing in, as separate headings, these seven elements. They are—

1. Remaining in hospital on the first day of the year.
2. Admitted during the year.
3. Recovered, or relieved, during the year.
4. Discharged incurable, unrelieved, &c.
5. Died during the year.
6. Received in hospital on the last day of the year.
7. Mean duration of cases in days and fractions of a day.

We should thus be furnished with the means of tabulating every fact we require. Provision can be made for different sexes in one of two ways—the column for each age may be subdivided for males and females; or it might be more convenient to have two sets of forms, one for each sex.

Miss Nightingale thus sums up her opinion of the value and adaptability of this form, for the purpose of recording hospital statistics:

> The primary object of these tables is to obtain a uniform record of facts from which to deduce statistical results, among which the following may be mentioned:
>
> 1. The total sick population—*i. e.*, the number of beds constantly occupied during the year by each disease for each age and sex.
> 2. The number of cases of each age, sex, and disease, submitted to (medical or surgical) treatment during the year.
> 3. The average duration in days and parts of a day of each disease for each sex and age.
> 4. The mortality from each disease for each sex and age.
> 5. The annual proportion of recoveries to beds occupied and to cases treated for each age, sex, and disease.
>
> In reducing the data to give the annual results, either per-centages or per-thousands be used.
>
> The number of beds constantly occupied may be obtained by taking the

mean of the numbers remaining at the beginning and end of the year, if the hospital has been fully occupied; or the mean of the numbers remaining at the beginning and end of each quarter; or oftener, if the hospital be irregularly occupied; or, the total number of days spent in hospital by all the cases during the year might be obtained; and by dividing the sum by 365, the mean daily sick would be arrived at. [The total "diets" issued during the year, divided by 365, would give the same result.]

The "sick treated" during the year may be obtained by taking the mean of the admissions, and of the discharges from all causes, including deaths.

With fixed data, arrived at on these principles, we can readily obtain the proportionate mortality, not only of the whole hospital, but of every ward of it, and also the proportionate mortality and duration of cases for each age, sex, and disease.

It need hardly be pointed out of what great practical value these and similar results would become, if obtained over a large number of hospitals.

The laws which regulate diseased action would become better known, the results of particular methods of treatment, as well as of special operations would be better ascertained, than they are at present. As regards their sanitary condition, hospitals might be compared with hospitals and wards with wards.

The whole question of hospital economics, as influenced by diets, medicines, comforts, could be brought under examination and discussion.

The liability of particular ages, sexes, occupations, and classes of the community to particular forms of disease, might be ascertained; other data, such as "married" or "single," previous attacks of illness of the same or of different kinds, birthplace, &c., might be added for comparison, and hospital experience might thus be made to subserve sanitary improvements.

The data for these latter comparisons would have to be kept separately as, indeed, they generally are in all well-regulated hospitals.

The present proposal for improved hospital statistics is confined to those points bearing directly on the welfare of sick admitted to the wards.

The work has been materially assisted by the kindness of the authorities of St. Thomas's, University College, and St. Mary's Hospitals, who have been at great pains in having experimental sheets (sent to them) accurately filled up, and to whom grateful acknowledgments are here expressed.

These forms are now in use in St. Bartholomew's Hospital, and in the London Hospital, and the recommendations of the Statistical Congress have led to a greater uniformity in keeping the records of several other large hospitals.

In addition to the chapters whose contents we have thus too briefly noticed, there are others on *Improved Hospital Plans; Convalescent Hospitals; Children's Hospitals; Indian Military Hospitals; Hospitals for Soldiers' Wives,* &c. &c.; with an Appendix on *Different Systems of Hospital Nursing.* Our limits, unfortunately, confine us to this bare enumeration.—C. L. R.

Note.

As a further aid to forming a just opinion on the debated question of the comparative mortality in the metropolitan and country hospitals, we reprint here entire the portion of Dr. Farr's letter referred to in the text by Miss Nightingale.

EXTRACT FROM DR. FARR'S LETTER TO THE REGISTRAR-GENERAL.—APPENDIX TO REGISTRAR-GENERAL'S TWENTY-FOURTH REPORT.

Public Institutions.

The great majority of the people of England live in detached dwellings; and a certain number reside in barracks, asylums, workhouses, hospitals, lunatic asylums, and prisons, or in public institutions, as they have been called, of various kinds. The mortality of the inmates of some of these institutions is, for various reasons, much above the average; so the inmates having been returned at the census, it was thought right to pick out the principal institutions in which the mortality was likely to be so great as to affect the mortality of the sub-district in which the institution is situated, The list has been compiled on this principle, and does not include a great number of institutions of various kinds. It includes all the principal hospitals and workhouses. The Commissioners in Lunacy, the Inspectors of Prisons, and the Poor-law Commissioners, publish in their annual reports accounts of the respective institutions which come under their cognisance. The statistics of the hospitals of the country are not given at all, or are not given upon a uniform plan. Miss Nightingale, who perceived all the importance of this information, suggested that the hospital statistics should be collected in forms, of which the members of the Statistical Congress in London approved; and if the hospital boards carry out the plan, they will place the hospital statistics on a level with those of the other institutions of the country.

TABLE XIV.—*England: Public Institutions.*

England.	Number of Inmates on April 8, 1861.	Deaths in the year 1861.			Annual Rate of Mortality per Cent.
		Persons.	Males.	Females.	
In 853 Public Institutions	154,602	32,437	19,137	13,300	20·98
„ 690 Workhouses.....	119,984	22,785	12,822	9,963	18·99
„ 106 Hospitals	12,709	7,227	4,950	2,277	56·87
„ 57 Lunatic Asylums...	21,909	2,425	1,365	1,060	11·07

The number of institutions in the Table XIV is 853, which held 154,602 inmates on the day of the census, exclusive of the officers and servants. 32,437 inmates died in the year; and, assuming that the average is represented by the enumerated population, the mortality was at the rate of 20·98 per cent., or 210 per 1000; while the mortality of the population of all England was at the rate of 22 in 1000, or 2·163 per cent.

The mortality in these institutions was ten times as high as the mortality in the population generally.

The annual rate of mortality in the lunatic asylums was at the rate of 11 per cent.; in the workhouses, 19 per cent.; and in the hospitals, 57 per cent.

With respect to hospitals, then, while the annual mortality of the general population was 2·16 per cent., the mortality of their inmates was at the rate of 56·87 per cent., or 26 times as high. The inmates of 6 hospitals are, it is scarcely necessary to say, all suffering from diseases which tend, generally, to increase the risk of death.

The hospitals are filled by a succession of inmates, who remain for a time varying from a day to a month or a year; and the mortality is often given

as so many deaths per cent. on the cases treated. The mean term of treatment varies in different hospitals; in many it averages 36·5 days, or the tenth part of a year. Assuming that term of treatment to be applicable, the mortality of the cases in these hospitals was 5·687 per cent. in 36·5 days; or the hospitals, to every 100 beds occupied, had nearly 57 death annually.

Hospitals enable the charity of the country to supply the sick with skilful medical advice upon the cheapest terms, and this has led to the establishment of the institution upon the voluntary principle in every county. An eminent physician or a surgeon can visit his patients in a short time as they lie in the same or in contiguous wards; and he often consents to attend them without any fee or salary. The collection of the sick under one roof conduces also to economy in the nursing department, in the kitchen as well as domestic service, and in the pharmacy, as the drugs can be purchased and dispensed at a cheap rate. A resident medical officer can attend to all the urgent cases.

TABLE XV.—*Principal General Hospitals in England and Wales*, 1861. (*Special Hospitals are excluded from this Table.*)

	Number of Hospitals.	Inmates.	Average Number of Inmates in each Hospital.	Deaths.	Mortality per Cent.
Total Hospitals	80	8535	107	6220	72·88
Hospitals containing—					
300 inmates and upwards	5	2090	418	2101	100·53
200 and under 300	4	913	239	838	91·78
100 and under 200	22	2898	132	2041	70·43
Under 100	49	2634	54	1240	47·08

The cost of the building is generally so great as to make the lodging much dearer than the best cottage accommodation.

One great evil has often counterbalanced all the advantages. The collection of a number of persons, exceeding those of an ordinary family, under one roof, has hitherto always had a tendency to increase the dangers of disease; for several diseases are, like fire and ferments, diffusible. The danger is increased when all the inmates are sick, for their breath and excretions spread through the wards. The dangers, too, are likely to increase in a faster ratio than the numbers, and the patients are less likely to recover health in the sickly atmosphere of a large building in a city than in pure country air.

These institutions were, accordingly, at one time, infested by hospital gangrene, and by erysipelas; the lying-in hospitals were depopulated by fever (metria); infants perished by hundreds in the Foundling Hospitals; and even in the present day patients often die of hospital pyæmia so frustrating the hopes of the skilful surgeon. It must be stated that nothing can scarcely be worse than the ventilation and all the arrangements of the old hospitals. The classes of cases which are admitted into particular hospitals, and the reason for which patients are discharged, differ largely, so that the investigation of the effects of hospital air, and of treatment in the various establishments, requires great care and skill. It is so importaut, however, that it should be undertaken for the sake of the sick, and for the sake of medical science. A careful comparison of the duration and of the rate of mortality of certain well-defined diseases in hospitals and in private practice would

settle the question. In the mean time, it is evident from the tables that the mortality of the sick who are treated in the large general hospitals of large towns is twice as great as the mortality of the sick who are treated in small hospitals in small towns. It remains to be seen whether the mortality in small hospitals is not twice as great as the mortality of the same diseases in patients who are treated in clean cottages. Should this turn out to be the case, the means of realising the advantages of the Hospital system, without its disadvantages, will then be sought and probably found, as the problem is not insoluble.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

I.—*Foreign Psychological Literature.*

By J. T. Arlidge, A.B. and M.B. Lond., M.R.C.P. Lond., &c.

Archivio Italiano per le Malattie Nervose.—The first four parts of this Journal, which we introduced to our readers in our number for April last, are now before us. The original memoirs they contain are, "On Phrenopathy considered Pathologically in its Genera and Species," by Professor Carlo Livi; "On the Relations of the Sulphocyanide of Potassium in the Saliva to the Poisons of Hydrophobia and Curara," by Dr. Filippo Lussana; "On the Asylum of Ancona," by Dr. Filippo Cardona; "On the Influences of Soil, Climate, and Grade of Civilisation upon the Character of Insanity and on Idiocy, studied in relation with Sicily and the Department of the Loire in France," by Professor Pignocco; "On the Therapeutical Action of Arnica on certain Neuroses," by Dr. Brizio Cocchi; "On the Cerebellar System as the Organ of Physical and Moral Excitation, and on Certain Abnormal Varieties of Sensation causing Insanity," by Dr. G. Clerici; "An Introductory Lecture to a Course of Clinical Psychiatry at Venice," by Dr. Berti; "On the Statistics of the Asylum of San Servili at Venice," by Dr. Biffi; and "On the Remembrance by the Insane of the Circumstances befalling them, with especial Reference to Legal Medicine," by Dr. F. Bonucci.

The first essay named, by Professor Livi, appears as a serial in two numbers, and is to be continued. It is devoted to a theoretical inquiry respecting the pathology of insanity, well written, but replete with little practical matter, to be reproduced in an analysis such as we undertake to prepare. He recognises four primary faculties of the mind, viz., the sensational, emotional, perceptive, and volitional, and teaches that disorder may manifest itself in one or more of these, and that when restricted to one, it constitutes monomania. His second paper is chiefly occupied with a review of the modes in which the sensational faculty may be affected, and, consequently, is largely taken up with the consideration of hallucinations and illusions. Near the close of this essay the consequences of lesions of volition are undertaken, including impulsive or instinctive madness, dipsomania, &c.

The paper by Dr. Lussana on sulphocyanide of potassium in the saliva is also a serial, and not yet completed. The writer confirms the statement of most physiologists, that the salt in question is a constant and peculiar ingredient of the saliva of man and of the mammalia in general; that at the same time it is not primarily formed in the salivary gland, but arises in the mouth by a sort of fermentative act, resembling the transformation of amygdalin into prussic acid by the contact of water. Although in itself a poisonous salt, and especially destructive of muscular irritability, it exists in too minute a quantity in the saliva to give this secretion actively poisonous qualities; hence the statements of Galen and some subsequent observers, that the human saliva poisons serpents and other reptiles immediately on its contact with an absorbing surface must be rejected.

Ancona Asylum.—The history, construction, and organization of the Ancona asylum are well detailed by Dr. Cardona. Until 1818 the insane of the province had been shut up in inconvenient houses, and little cared for or looked after; but in that year the brethren of St. Jean de Dieu took the poor lunatics under their patronage, obtained an annual grant from the municipality of the city for their maintenance, and subsequently established an asylum for them in a separate wing of the hospital. In 1840 the Prior of the order engaged Dr. Benedetto Monti to act as the chief physician of the asylum. On the annexation of Ancona to Savoy the government of the institution passed from the brethren of St. John to the Congregation of Charity.

As a building not constructed for the purposes of an asylum, but only an appendage to a general hospital, it presents no architectural features worth noting as suggestive of what an asylum should be. On the contrary, its situation and structural defects are such as render it an unfit habitation for the insane.

The present director, Dr. Cardona, is the first superintendent who has resided in the institution, and it has devolved upon him to almost completely reorganise it, and frame rules both for patients and attendants under the sanction of the society, with whom the chief control remains. The quiet and convalescent patients are taken out once a week for a walk, and a few belonging to the richer classes are allowed occasionally to take drives. Relatives and friends are permitted to visit twice a week, and oftener in certain cases where thought desirable. Restraint in bed and otherwise is still resorted to. Between the 1st of January, 1861, and the 31st October, 1863, there were under treatment 207 males and 140 females. Of the former, 141 were unmarried, 62 married, and 4 widowed; of the latter, 71 were single, 47 married, and 22 widowed. Again, 56 males and 29 females were classed as monomaniacs; 76 males and 61 females as suffering from mania, 14 of the former and 21 of the latter as imbecile, and 61 and 39 of the two sexes respectively as demented; 118 men and 82 women were considered curable, and 89 and 58 respectively incurable. There were, besides, 9 epileptic men and 5 epileptic women. Taking the annual admissions into the asylum as a guide, the writer calculates that there is only one lunatic in 2800 inhabitants, throughout the population of the entire province. We need hardly say that the data assumed are quite inadequate for calculation, and that the lapse of time, extension of knowledge, and of means for the treatment of the insane, will soon reveal the existence of lunatics within this Italian province in a tenfold higher ratio. The latest enumeration of the patients of the asylum showed 92 male and 79 female lunatics. The remaining statistics, being taken from the records of only two years, need not detain us.

Arnica in Neuralgic Affections.—The paper by Dr. Cocchi on the therapeutical virtues of arnica is written to recommend the use of this drug in neuralgic or spasmodic pains of parts that have been bruised at a former and comparatively remote period. He administers the medicine prepared as an extract, both internally and, by inunction, mixed with some simple ointment, externally.

Dr. Clerici's essay on the cerebellar system, as the organ of physical and moral excitation, and on abnormal sensibility as the cause of insanity, is a theoretical physiological production, built upon inconclusive data. He contends for a duality in cerebral organization and in mental phenomena, treating the intellectual powers and their cerebral centres as intrinsically disassociated from the moral and emotional, both in nature and in localization. He represents anatomy as teaching that all the nerves of sensation converge towards and terminate in the cerebellar system, and that all the nerves of motion which are concerned in intellectual and volitional acts direct their course to the cerebral hemispheres. With the researches of Van der Kolk, Lockhart Clarke, Brown-Séquard, and others before us, we may fairly hesitate to accept this anatomical dictum of the Milan physician, and the deductions he would make from it. He denies the existence of intellectual insanity as a primary condition, regarding it as always secondary to sensory or moral disorder, which has its seat in the cerebellar system. He proposes the two problems for demonstration, viz. (1) that sensations may provoke mental affections or conditions of one sort and another, independently of any exercise of the reasoning faculty; and (2) that all emotions are the consequences of reactions taking place in the cerebellar centre which is furnished with its own proper nerve-fibrils, destined for peripheral innervation.

The Lecture by Dr. Berti, the chief physician of the Venice asylum, is introductory to a course of clinical instruction. In it he takes a general survey of the nature of the task he has undertaken, points out the difficulties in the study of mental disorder, and unfolds the plan he proposes to adopt in subsequent lectures. It is a well-written paper, but presents no points of special importance for abstract.

Statistics of the Asylum of St. Servilio at Venice.—Dr. Biffi contributes a short paper on the statistics of the asylum of St. Servilio from tables put into his possession by the superior, Father Salerio, who is also the director of the institution; for this asylum, devoted entirely to male lunatics (the one in the city of Venice, under the charge of Dr. Berti, being exclusively for female patients), is under the control of that most useful and Christian order, the Brethren of St. Jean de Dieu. In the period of seven years, ending December, 1863, 1727 patients, including 337 remaining on the 1st of January, 1857, were under treatment. Of these male lunatics, 109 were widowers, 575 married, and 1043 unmarried. The discharges amounted to 838, but in many cases patients were sent out who were not recovered entirely, or who were considered harmless, in order to make room for fresh applicants for admission, the accommodation of the establishment being very inadequate to the wants of the province. The deaths in the seven years amounted to 480, or 27·89 per cent. of the whole number under treatment. Relative to age, at the date of attack, 132 were under twenty years old, 435 between twenty and thirty, 463 between thirty and forty; 360 between forty and fifty, 226 between fifty and sixty, 94 between sixty and seventy, and 17 above the last-named age. Agricultural labourers constituted 690 of the whole number, 1727, and artisans 511. The next in number were servants and day labourers, who amounted to 217, whilst members of the

liberal professions were 113 in number—a large proportion, we conceive, considering their ratio in the general population. Among the assigned causes pellagra is the most prominent, 503 of the 1727 cases being due to it. Epilepsy stands for 66, abuse of spirituous drinks for 129, and cerebro-spinal affections for 132. The cases of general paralysis are not distinguished. Of the deaths, 8 were due to apoplexy, 33 to epilepsy, 7 to anasarca, 2 to heart disease, 8 to broncho- and pleuro- pneumonia, 13 to hydrothorax, 54 to pulmonary tuberculosis, 19 to gastro-meningitis, 9 to gastro-hepatitis, 75 to chronic gastro-enteritis, 2 to cystitis; 181 to tabes, including a good proportion of the deaths from pellagra, and also from scrofula, 66 to paralysis, probably in most instances general paralysis, 2 to carbuncle, and 1 to erysipelas.

The remembrance by the insane, after recovery or during remissions, of events and actions that occurred in the course of the active stage of their malady, is illustrated by two or three cases by Dr. Bonucci, in a brief original memoir. This remembrance of the past may at times, when the delirium is ignored and actions attributed to various false motives, be productive of grave consequences, by rendering it uncertain whether the disordered actions are truly criminal or blameworthy, whilst the question also arises how far the testimony of the patient himself, as the agent, is worthy of regard with respect to them.

Percussion of the Head as a means of Diagnosis.—Dr. Berti asserts that in one case of apoplexy he was able to discover the position of the clot by percussion of the head. To use this means of diagnosis, the ear is lightly applied to the part of the head of the patient, and the head then smartly tapped by the middle and forefinger ends, especially over the temporal region. The two sides of the head should not be struck together, but alternately, so that the sound may proceed separately from each side. The situation of the clot is marked by a duller sound and a slighter degree of vibration.

Alienati ed alienisti,—i.e., lunatics and lunacy doctors—is the title of an admirable brochure, of ninety-six pages, from the pen of Dr. Augusto Tebaldi. This young Italian physician having visited most of the countries of Europe, with the special object of examining their asylums and noting their modes of practice, has put together in this essay the results of his observations with critical remarks, distinguished by perspicuity and good sense. He divides his work into four parts or memoirs: the first on the different forms of asylums and their relative advantages; the second on the internal arrangements and management of asylums; the third on the various existing medical schools of Europe in relation to mental pathology; and the fourth, on some questions in mental pathology, and on certain principles taught in the medical schools of the present day. A few notes from each of these memoirs is all we can attempt to produce.

Dr. Tebaldi speaks in praise of the new asylums of Holland, particularly of that at Meerenberg. This institution, as he remarks, carries out to the greatest extent yet attempted the plan of distributing the insane in detached buildings, as opposed to that of congregating them within one large edifice, as usually pursued. He visited also the celebrated industrial colony of Fitz-James, near Clermont, conducted by the brothers Labitte with so much success; but whilst admitting its many excellences he comes to the conclusion that this mode of provision for the insane is not generally applicable or desirable by itself, though most valuable as complementary to a "closed" asylum. He holds a similar opinion with respect to Gheel, remarking that the needful medical supervision and treatment are not attainable for its

insane patients, and that their distribution in cottages among the general population is particularly unsuitable to many of their number, especially such, for instance, as the epileptic.

The reception of private and pauper patients within the same establishment, Dr. Tebaldi considers objectionable; as certainly not advantageous with respect to the internal management, and as unfavorable to treatment, particularly in the case of the poor. He advocates it, as the just due of the insane, that they should receive some recompense for the work they perform, and he also gives his hearty concurrence to the plan of making the medical officer the superintendent of an asylum, with paramount authority. On the subject of non-restraint, he expresses himself as fully impressed with the true practical value of the system, and ably disposes of the specious objections of many continental physicians. This he is well qualified to do, from having minutely examined for himself the details of some English institutions where that method of treatment is fully carried out. He concludes his observations on this subject thus, "Without doubt the day will come when non-restraint shall no longer be styled the English system, but be recognised as that of all civilised nations."

The third memoir is partly historical and partly critical. The author sketches in it the modifications in the principles and practice of psychological medicine which have of late years been brought about, and he presents a critical notice of the prevalent opinions in the principal countries of Europe on mental pathology, and of the literature, periodical and other, in which those opinions are illustrated. He pronounces the English school as the most practical, and as the least encumbered with verbal details and scientific theories. At the same time he considers English medical science to be in a transition stage, foreign teaching, especially the analytical doctrine of Germany, influencing and modifying the national habit of thought.

In his fourth and last memoir, several points in practice are briefly examined, such as bleeding, tonic treatment, the use of baths, the douche, &c. He is particularly severe upon the abuse of the douche common in France.

It is evident from the tenor of his whole book that the author was particularly impressed and pleased with what he saw and understood of English asylum practice and management, and we are sure his little work will tend to dissipate many doubts and misgivings prevailing among his countrymen as to the humane treatment of the insane, and, further, will encourage them in the great task they have recently undertaken of rendering Italian asylums worthy of their country in this nineteenth century.

Brevi Cenni sulla Classificazione e cura delle Pazzi, (pp. 95). Short notes on the Classification and Treatment of the Insane. By Dr. B. F. Amedeo. —The author of this brochure is an assistant-physician of the Turin asylum, the chief physician of which is the well-known and esteemed Dr. Bonacossa. The author's remarks are founded on his experience in the Turin Asylum since 1861, and particularly on the statistics of that institution for the year 1862. He commences with a description of the building, which, though superior to most in Europe at the date of its erection, will not now be valued as a model on account of any details in structure it may present. Its population amounts to nearly 500, and owing to the demands for more accommodation a portion of a convent, three miles outside the town, was taken possession of in 1852, and now contains 320 patients. The medical staff of the asylum consists of a physician inspector, two physicians in ordinary—one for each division, a consulting surgeon, and an assistant medical officer, neither of them resident, a phlebotomist, and an apothecary. It is odd to read of a phlebotomist as an ordinary member of the medical staff in these Italian asylums, for this officer is not peculiar to the Turin establish-

ment, but is also met with in the Ancona and other public receptacles for the insane in Italy. His presence points to past usages and a nearly bygone practice, although, indeed, the functionary so named, having his occupation gone, is turned to a useful account in those institutions as an additional medical officer, charged, as at Ancona, with the functions of an ordinary assistant.

The usual medical visits to the wards are daily made between six and seven o'clock in the morning, and between three and four o'clock in the evening; supplementary visits also are made between eleven and twelve a.m. and at ten p.m. The whole of the duties of nurses on the female side are performed by the sisters of charity; on the male side there is a principal guardian, with five head attendants, and a staff of inferiors, so as to allow one attendant to every ten or twelve quiet, and to every seven or eight refractory patients. During the year 1861, 419 patients were admitted, 225 discharged, and 162 died; whilst in 1862, 394 were admitted, 208 discharged, and 202 died; consequently, in the former year the discharges were, relatively to the admissions, 43·69 per cent., and the deaths 38·66; and in the latter year they were respectively 52·79 and 51·26. These figures apply to the town and country institutions conjointly, and exhibit an excessive rate of mortality. Assuming, as the returns seem to justify, the average daily number under treatment to have been 800, the deaths equalled one fourth of this number in the year. The number of males admitted exceeded that of females. Of 210 men no less than 112 were unmarried, whilst 91 were married and 7 widowed. Of 184 women, 67 were single, 93 married, and 24 widowed. Of the 208 patients discharged in 1862, 18 were reported cured, 152 improved, 25 were removed from various causes, and 13 (men) escaped. Ten of the 18 cures effected were among patients admitted previously to the year 1862. The cures (18) to the admissions (394) equalled only 4·56 per cent. This, however, exhibits no absolute truth, for the fact of cure is arbitrarily fixed and the requisite standard of recovery will be variously estimated by different individuals. If the number of improved be added to that of the cured, we get a total of 170, which is equal, in proportion to the admissions in the year, to 43·15 per cent. This calculation is in all probability as much too favorable as the previous one is the contrary, regard being had, in the comparison of this asylum with other such institutions, to the usual plan of making returns. The ratio of recoveries among the male patients very much exceeded that among the females; the same held true of the relative mortality of the two sexes. Of the 202 deaths, 8 were assigned to apoplexy, 85 to gastric enteritis, 38 to pleuro-pulmonitis, 64 to cerebro-spinitis, and 8 to other causes. The excess in the mortality of men occurred from the two classes of causes, pleuro-pulmonitis and cerebro-spinitis.

In the matter of treatment, Dr. Amedeo informs us that venesection and debilitating drugs have been well-nigh laid aside of late years in the Turin Asylum. In the two years that he has held office in the establishment the medium number bled has not exceeded one a day, in a population of 500 insane people. This statement is honestly advanced to exhibit the remarkable disuse of bleeding as a remedial measure of late years, in an Italian asylum; however, to the mind of an English superintendent such a daily use of the lancet will be considered of marvellous frequency, recourse to that instrument, in all probability, not being had in his practice once a year. Again, at Turin, hydro-therapeutical measures are regarded as of the highest value as remedies, particularly where cerebro-spinal disease is diagnosed. Seclusion is employed to calm excitement, at times in a darkened, at others in a light room. The value of employment is fully understood, and its only very partial application, owing to surrounding impediments, much deplored.

In the earlier portion and at the close of his treatise Dr. Amedeo refers to the sad defects of the present asylum in Turin, particularly to the want of

land for employment, of space for exercise, of means of amusement, and of structural conveniences for a proper classification of the inmates; and he regrets the long time that has been allowed to elapse since the production of an admirable asylum plan by Dr. Bonacassa, without any attempt being made to carry it out, and although an excellent site for its erection at Collegno has for several years been actually in the possession of the provincial authorities.

Della Colonizzazione dei Pazzi, Cenni del Dottor Serafino Biffi. 4to, pp. 59.—Notes on the Colonization of the Insane.—Dr. Biffi, the author of this essay, is one of the best known psychiatrists in Italy, and the physician of the private asylum of St. Celso, near Milan. He has visited Gheel, and witnessed its progressive improvement as a resort for the insane, and has become a warm advocate of the Gheel system, and of its introduction into Italy.

He commences his paper by an historical notice of Gheel, and then proceeds to call attention to the great question, what is to be done with our lunatics whom we find constantly growing in number around us, notwithstanding a perpetual expenditure in enlarging old, and building new asylums. In considering these matters, he remarks on the accumulation of chronic lunatics in asylums, of the consequent overcrowding with them, and of the ill effects of these conditions in creating impediments to the ready admission and successful treatment of recent cases. In the next place, he examines the relative advantages and disadvantages of the closed asylum, and of a "paternal" establishment, such as Gheel. In so doing he assumes the closed asylum to possess every advantage in structure and organization, not venturing to introduce into the comparison the asylums of his native land, which, for the most part, are so defective in their material conditions that the plan of colonization would without question be a great boon to their unfortunate inmates.

Dr. Biffi does not detect any great deficiencies in the classification at Gheel, but he admits the want of an infirmary or central hospital for particular cases, not conveniently or successfully manageable in the cottages of the peasants, as well as for cases newly received into the community. He apologises for the fetters used at Gheel to prevent patients escaping, being of opinion that it is better to have liberty outside an asylum with such inconvenient restrictions to movement, than to enjoy full freedom of motion with the limbs within the narrow and samely bounds of an asylum. Dr. Brierre de Boismont arrived at the conclusion that insanity was especially prevalent among the indigenous inhabitants of Gheel, but, as Dr. Biffi says, the careful inquiries of Drs. Parigot and Bulckens have shown that such is not the case, but, on the contrary, that insanity is less rife among them than among the people of other countries of Europe; and hence the inference vanishes, that their constant occupation with the insane is detrimental to their mental soundness.

He takes a wider view of the capabilities of a colony like that of Gheel than the Parisian Commission did, for he would not limit them only to chronic and harmless insane, but claim for them a proportion of recent and curable cases. In combating the objections of the French commissioners he employs the equivocal argument that the French asylums partake in a greater or less degree the defects discoverable in Gheel—a line of argument which fails to explain away those admitted defects. The difficulty of establishing a colony of insane in an untried country, anticipated from the want of experienced and intelligent cottagers, Dr. Biffi thinks may be surmounted, particularly by employing, as Dr. Roller, of Illenau, has suggested, attendants of good character who have left the service of asylums, to constitute the nucleus, so to speak, of the proposed community. Lastly, he points out a large area of waste land in the Milanese territory, as very suitable to the experiment of establishing in Italy a colony for the insane. Such a colony

should have its infirmary, and be in general a complementary establishment to an asylum as usually constituted.

Lettera del Dottor Serafino Biffi al Dottore A. Verga.—This letter from Dr. Biffi to his friend Dr. Verga, Director of the Milan Hospital, is occupied with the medico-legal bearings of a case of murder, where the criminal named Berte had killed his wife and sister. The plea of insanity was set up, but medical opinions, were, as is too often the case, divided, and the man was condemned. Dr. Biffi was impressed with the conviction that the criminal was insane, and in the pamphlet under notice, has sufficiently shown good grounds for his opinion, which, as we learn from a note affixed at the end, was endorsed by the University of Pavia, and followed by the remission of the sentence and the transfer of the man to the public asylum. Space fails us to analyse this pamphlet; at the same time we look upon it as a well-written medico-legal disquisition on an interesting case.

Intorno ad Alcuni Prospetti Statistici del Manicomio di Alessandria.—This is an extended statistical account of the Piedmontese Asylum at Alessandria from the pen of Dr. Ponza, the chief physician. It consists mainly of a collection of tables, drawn up with the greatest precision and diligence, prefaced by a short notice of the history of the institution. From this it appears that the present structure was erected for its purpose as a hospital for the insane, and opened for their reception in 1785, under the control of a religious order, the "Confraternita della Trinità." At first all the patients were received gratuitously at the cost of the charity, but for some years past a small charge for maintenance has been made. As is usually the case with asylums constructed many years since, this one at Alessandria is within the city, with very little open space about it. Its general outline is that of a parallelogram, open on the east side, but it is, as a whole, a group of buildings of different dates, the original structure having been from time to time added to. The conclusion to be gathered from the description given in the essay, as it is indeed the one arrived at by Dr. Ponza himself, is, that the present asylum building is unsuitable for the treatment of the insane, and that it should be replaced by one on a proper site in the country. On the matter of mechanical coercion Dr. Ponza considers that this means of restriction cannot be laid aside, and least of all in an asylum such as he is called upon to superintend. He is evidently labouring under a misconception with regard to the asylums of this country, which he refers to as constructed on the cellular system—a mode of construction which he believes essential to the practice of non-restraint, as though the seclusion of the insane was its leading principle. We would recommend this physician to read Dr. Tebaldi's essay, 'Alienati ed Alienisti,' above noticed, and to make himself practically acquainted with what English asylums really are.

The statistical tables extend over a period of six years, from 1857 to 1862, during which 518 patients were admitted, 291 discharged recovered (?), and 194 died. At the commencement of the period there were 87 patients in the house, the residue of previous years, and at its close there remained 120. The whole decrease in the number of patients is shown under the two heads of cures and deaths; but there is no question that many patients discharged as recovered were in no strict sense cured, but merely were removed from some cause or other, and possibly in many instances improved. However this may be, the ratio of discharges to admissions equalled 56·17, and that of deaths 37·45 per cent. Unlike what we found prevail in the other Italian asylums noticed, the mortality among the female inmates was greater than among the male. At the same time the recoveries among males were, as elsewhere, in a higher ratio. Of 518 cases admitted, 238 were referred to

mania, 177 to melancholia, and 103 to dementia. A table of the social state of these 518 lunatics shows, 239 were single; 251 married, and 28 widowed. The admissions of males exceeded those of females, viz., 316 of the former and 212 of the latter; but the proportion of married women was greater than that of married men.

Del Cretinismo in Lombardia, Relazione della Commissione nominata dal R. Istituto Lombardo di Scienze e Lettere (1864), 4to, pp. 70.—This is the report of a special commission appointed by the Royal Lombard Institute of Science and Literature to examine into the prevalence, the pathology, and the external conditions or causes of cretinism, and, so far as we have yet been able to examine it, it is a most valuable production. We have, moreover, just received a contribution on the same subject from one of our esteemed honorary members, Dr. Morel, the chief physician of the Rouen Asylum, entitled, 'Du Goître et du Crétinisme, Etiologie, Prophylaxie, Traitement: Programme Administratif,' &c., par M. le Dr. Morel (1864), 8vo, pp. 79.—In 1848, a report of a Sardinian Commission on the same subjects was published, and very recently a commission was appointed at Paris to investigate the cretinism in France, but has not, as far as we are aware, yet published its report. These several reports, and the treatises of M. Morel and others recently published, furnish ample and most valuable materials for a complete résumé of the present state of knowledge respecting that most singular endemic malady, whilst, by their copiousness, they are beyond the compass of an abstract such as the present paper can rightly serve for.

De la Formation du Type dans les Variétés Dégénerées, ou Nouveaux Eléments d'Anthropologie Morbide, &c. Premier Fascicule, 1864, 4to, pp. 40.—This is another production from the fertile pen of M. Morel, on a topic which he has made his own by the originality and extent of his investigations of the forms of human degenerescence. Many of our readers will have seen his admirable 'Traité des Dégénérescences Intellectuelles, Physiques et Morales de l'espèce humaine;' to this, the work under notice is a sort of supplement, intended to appear in several successive parts, the first of which only is at present published. It is accompanied by several highly illustrative plates, and cannot fail to be a work not only of the highest interest, but of great usefulness to those engaged in the treatment of the insane.

It has been Dr. Morel's aim to reduce the multiple varieties of human degenerescence to certain definite types, each standing in a particular relation to morbid causes, operating, as a rule, endemically. His observations were begun at the Maréville Asylum, near Nancy, and have been subsequently prosecuted at the large asylum of St. Yon, at Rouen. At the establishment first named patients were received from five departments, containing populations differing considerably in manners, occupation, and mode of life. So, again, in the department of the "Seine-Inférieure," he has come into contact with other races of people, with other and different characteristics as to habits and modes of existence, &c. Nevertheless, these differences of race and physical and moral characters do not abolish the relations existing between those allied by pathological conditions. Individuals who are the victims of congenital degeneration of mind and body bear no resemblance to their progenitors, though they distinctly do so to each other, and in this way are reducible to certain types, representing diseased varieties of the human race. "They reveal their common origin by identity of character and disposition," and these morbid types owe their formation to certain fixed and invariable laws, which the author zealously seeks to discover and elucidate. Among the productive causes of degenerescence are mentioned intemperance (alcöolism) of parents, endemic goître, cretinism, &c.

The characters of degenerescence are displayed in the physiognomy, and in both external and internal parts. They are seen externally in the conformation of the head, in the form and position of the ears, the development of the jaws, the nose, lips, &c. Internally, they occur as want of symmetry and regularity of organs, and particularly in defects of the reproductive organs. The terms imbecility and idiocy are commonly applied to the unfortunate victims of degenerescence, but are useless for the purpose of distinguishing as well their origin as the characters of the type to which they belong. Moreover, the insane with hereditary tendency belong to a form of degenerescence, whose characteristics are marked, though faintly it may be, in most cases.

La Folie devant les Tribunaux, par Dr. Legrand du Saulle (1864), 8vo, pp. 624.—This is a very considerable work on the medical jurisprudence of insanity, by an author well known to the profession by several books of considerable merit published by him at various times, and particularly well qualified for the task he has now undertaken by diligent labour as a law student. Indeed, he has struck out for himself, as the special field for practice, the subject of medical jurisprudence, and describes himself in the title-page of his last work, as a physician-expert to the civil tribunals of the Seine. Moreover, we are informed in the preface that the Minister of Public Instruction has imposed upon him the task of giving a course of lectures at the school of the Paris Faculty, on the legal relations of insanity—a gratifying indication of the high opinion entertained of his knowledge and skill in that department of jurisprudence. He commences the volume by a résumé of the Roman law applying to mental disorder, and proceeds to divide and discuss his subject in a novel and instructive manner. His following chapter is entitled "L'aliéné devant la Justice," or the position of the insane under judicial examination, and briefly sketches the relative bearings of several mental conditions on the degrees of legal culpability and the question of responsibility for crimes committed by the insane. In his section "on the influence of the faculties upon acts committed," he distinguishes three degrees of culpability: 1st, where the act is accomplished under the complete domination of the feelings (sensibilité), without the intervention of the intellect and the will, when it is called "instinctive;" 2nd, where an overwhelming privation of feeling has not allowed time for a clear view of the act, when there is "spontaneous" activity or excitement; and 3rd, where the execution of the deed has followed examination and deliberation, when the "activity is reflected," or the course is knowingly taken. In "instinctive activity" there is no imputability; in "spontaneous activity" there is imputability with slight culpability; whilst in the last-named form there is both imputability and complete culpability. Three expressions, indicative of deranged mental condition, are used in French law, viz., dementia, imbecility, and furor; and each condition so designated has no imputability in law attaching to it. The insufficiency of these terms for the objects they have to serve is evident enough. Drunkenness not complicated with actual delirium claims no exemption from responsibility on account of acts committed in that state.

The third chapter considers "L'aliéné devant le Médecin Expert," reviewing the relations between physician and patient, where the latter is the subject of examination. The differential characters between an ordinary criminal and a lunatic, the interrogation of the insane, the characters of their writings, &c., are among the matters treated of in this chapter. The important subject of lucid intervals in their judicial bearings is next taken in hand, but is too summarily disposed of. He strongly denounces Justice Hale's criterion of the degree of mental capacity to which culpability attaches, but himself offers no rule for guidance in the difficulty, and leaves the matter *in statu*

quo. The several following chapters on various mental conditions in relation to testamentary capacity are much more complete and satisfactory; and it is but justice to add that lucid intervals again come under discussion relatively to the validity of wills made during their existence. The illustrations to these chapters from cases on record in French and other authors, are much more numerous than elsewhere. He examines the mental state of the aged and of the dying; the intellectual disturbances attendant upon dissolution, the influence of apoplectic attacks on the mental powers, &c., &c. Drunkenness and crime accomplished under its influence in their legal relations constitute the subject of the sixth chapter. Dr. du Saulle recognises three stages of intoxication, of which the second or intermediate one alone is liable to be attended with acts of violence. But besides these three degrees, he admits a distinct variety, viz., convulsive drunkenness, as described by Percy and Laurent. In this form the victims resemble ferocious animals animated with cruelty and violence. Delirium tremens is dismissed with very few observations, and is spoken of as a simple morbid state without attempt to distinguish the two forms now generally described. Somnambulism in connection with crime and suicide perpetrated during its existence, the delirium of pellagrous patients, and anthropophagy, are the topics discussed in the three following chapters. Hysteria and epilepsy next come under consideration, the former, however, obtaining less than its importance deserves. On the other hand, the essay on the medico-legal relations of epilepsy is very elaborate, being the longest in the book, occupying 100 pages. On the question of the marriage of epileptics, the conclusion is that it is prejudicial in its influence upon them. As to their responsibility, it is argued that, for an act committed under the undoubted influence of an epileptic seizure (crisis), they are not to be held responsible, but that for one not committed under such direct nervous influence, they are partially responsible; and that, in general, after their mental state is investigated, the penalty of crime should be mitigated in proportion to the diminished degree of moral resistance capable of being exercised. Evidence, however, of cool deliberation and of direct motive, particularly when fits are infrequent and the intellect is unimpaired, establishes their responsibility before the law. Again, an inexplicable crime, at complete variance with the antecedents of the accused individual, who is not reputed to be epileptic or insane, and which has been accomplished in an unusually instantaneous manner, rightly suggests the inquiry whether epileptic seizures have not occurred by night and been misunderstood or overlooked.

Chapters on incendiary mania and erotomania follow, and we naturally look for others on other generally admitted varieties, such as homicidal mania and kleptomania, but are disappointed in not finding them. Undoubtedly such forms are incidentally mentioned elsewhere in the work, but, in our opinion, they had an equal claim to a place in the book as those selected for consideration. The author, however, passes on to more general topics, inquiring into the operation of certain influences liable to compromise the liberty of the subject, such as irritation, nostalgia, the use of opium and of absinthe, and pregnancy. Some general considerations on the nullity of marriage, on the value of the evidence of the insane in legal matters, and on the application of photography to the study of mental disorders, follow, and constitute the subjects of the next three chapters. The treatise is terminated by a copy of the French laws and ministerial ordinances relative to lunacy, lunatics, and asylums.

With so copious a work before us as the one now commented upon, no other course is feasible than to indicate its contents, its particular scope, and, in general, its mode of execution. This we have endeavoured to do in the foregoing observations, but would, before closing our notice of the treatise,

assign to it a high value, as a whole. Nevertheless, there are marked inequalities in the completeness of the different chapters and their subdivisions; in many parts the examination of points of importance is too synoptical, whilst in some few instances unnecessary details are introduced, considering the prime purpose of the work; such for instance as the differential diagnosis between hysteria and epilepsy, which would be proper enough in a pathological treatise. These imperfections, and others that might be noticed, will doubtless be remedied in a future edition of the volume; for as it is a work of great utility, it will, we doubt not, soon reach a second edition.

Commentaires médico-administratifs sur le Service des Aliénés: par L. F. E. Renaudin, M.D. Paris, 1863, 8vo, pp. 344.—The scope of this treatise specially recommends it to the study of the medical superintendents of asylums. It is concerned with all that appertains to the general administration and the internal economy of such institutions. The work indeed may not add much to the general stock of information of our English asylum physicians on the subject of management, but it will prove very serviceable to them by the exposition it affords of the general mode of government and of the interior arrangements, economical and other, of French institutions, and by the lessons deducible therefrom.

The French law of 1838 requires every department in the country either to provide an asylum for its own lunatics, or to contract with such an establishment, public or private, situated within its borders or in another department, for their care and maintenance. The departmental asylums, so established, are only in small measure under the actual control of the local authorities, the central government reserving to itself the chief power, both by appointing the resident officers, by making and sanctioning regulations, by directing the expenditure, and ordering alterations. Notwithstanding, however, this centralisation of power, the communal and other local authorities contrive, in many places, to thwart the intentions of the law, by withholding the means,—as raised by local taxation, to erect new asylums, and carry out their notions of economy by retaining old and unfit establishments, or by indifferently farming out their lunatics.

Dr. Renaudin very rightly requires, when a new asylum is to be erected, the provision of accommodation in it for a considerably larger number of inmates than that actually enumerated in the district it is intended to serve. He insists on the advantages of a large population to an asylum, particularly in an economical point of view; but fails to recognise the fact that, over and above a certain number, these advantages are lost, and are, in fact, replaced by numerous evils. His remarks on the principles of asylum construction and of the distribution and size of its sections are well enough, so far as they go; but for the purpose of serving as a guide in such matters they are too superficial to be of value. He is especially inimical to single rooms for patients, even for the refractory or excited, and evidently has some fanciful notions of the extent and mode of use of cells in asylums generally where they are found. For instance, he denounces them as aggravating excitement and delusions, and as even developing the latter. He also talks of their injurious effects on health, of inducing a sort of "cretinisation and marasmus," and of blanching the frame, just as though patients were subjected to perpetual cellular imprisonment. He would divide the male and female departments, each into eight sections, for as many classes of patients, exclusively of a section for convalescents, and one for the newly admitted (quartier d'épreuve); and rightly advocates the separation and distinction of the night from the day accommodation.

The regulations for the admission of patients into asylums appear based

upon those in force in this country. To the plan of boarding chargeable patients in the cottages of the poorer classes, and, in general, to the system of Gheel, Renaudin exhibits decided opposition. Just as in England, so in France, there is a great tendency to delay the removal of lunatics to asylums. The communal and other local officers will send insane patients, as well in the acute stage of their disease as in the chronic, to the wards of "Hospices" and to "Depôts de Mendicité," from motives of economy, in opposition to the law and to the detriment of the sufferers. This practice the author most properly exposes and condemns, as he does also that of forwarding lunatics to asylums under the charge of gendarmes.

The heads of establishments are required to draw up a half-yearly report, exhibiting the condition of every patient, the nature of his malady, and the results of treatment. This report is transmitted to the "préfet," who is authorised to determine on the discharge or the continuance in the asylum of each patient.

The course to be taken, and the conditions to be observed in pronouncing an individual insane and in placing him under restraint, are deserving attention, as suggestive of improvements in our English law and practice. The same may be said of the rules relating to the discharge and removal of patients from asylums, and kindred matters.

The maintenance of the insane in asylums is the subject-matter of the fourth chapter; and under this head are considered the estimate of the expenditure, that of the daily cost of the inmates, the management of the resources of the establishment, &c. The administration of asylums next comes under discussion, including the part assigned in it to the central authority and its local representatives, and to the Commission of Surveillance, or, as we say in England, the Committee of Management. This Commission consists of five members named by the prefect; one member going out of office annually. Though so appointed they, however, cannot be deposed except by the Minister of the Interior, upon a report from the prefect. The meetings are monthly, and these must be held within the asylum; extraordinary meetings may be convened elsewhere by the prefect. The director and the chief-physician may be present at the meetings, with a deliberative voice only; and when the Commission discusses the expenditure or such reports as are to be directly addressed to the prefect, those officers are required to retire.

We have heretofore had to express our disagreement with M. Renaudin's views respecting mechanical restraint; we are now therefore happy to congratulate him on the sound views he entertains of the position and functions of the medical officer of an asylum. For he has very well placed before his readers the arguments for constituting the physician the sole superintendent, with full and paramount powers within the asylum. The French law recognises two officers, a director, and a physician-in-chief, the latter restricted to ill-defined medical duties, and the former virtually his superior, whether a medical man or not. At the same time the law permits the whole duties of the two offices to be united in the same officer, as physician-superintendent, and Dr. Renaudin advocates making this plan universal.

In the author's account of the internal administration of asylums he sets forth the budget, the receipts and expenditure, with their ordinary items, the nature and purpose of the medical report, the nature of contracts, and other cognate matters. He next reviews the personal cost of the different employés, always adducing the rules laid down by the Government authorities, and naming and estimating the persons to be employed in relation to the number of patients under treatment. Moreover, in doing this he introduces valuable and instructive comments upon the duties to be performed by the different officials. With respect to the nursing of asylums, he gives the preference to members of religious orders, at least as nurses for the

female inmates, and appends some general rules for guidance in regulating their duties.

The remaining four chapters are likewise devoted to details of management in all that relates to the material requirements of the insane, their food, their clothing, and their furniture. The moral management of the insane he has not gone into, and has thereby avoided the bugbear of non-restraint, and so saved his readers—his British ones at least—the annoyance of encountering the worn-out arguments against the practice which are ever ready at hand to those continental physicians who have never sought to learn in an English asylum what non-restraint is.

By way of appendix Dr. Renaudin has added at the close of his treatise his report of the Dijon Asylum for 1862. On the present occasion we cannot attempt its analysis.

His remarks on the laws and regulations of the central authority are characterised by that deference that is to be looked for from those dependent upon it for their position and prospects. Here and there indeed the author has suggested some slight modifications of the law, but in general has accepted its motives. Nevertheless, it must be confessed that the French laws of lunacy constitute a very excellent code, chiefly trenching upon English notions by the large powers assigned to the central government.

II. *English Psychological Literature.* By J. T. Arlidge, M.B., Lond.

Eighteenth Report of the Commissioners in Lunacy to the Lord Chancellor, 1864.

Thirteenth Report of the District, Criminal, and Private Lunatic Asylums in Ireland, 1864.

Sixth Annual Report of the General Board of Commissioners in Lunacy for Scotland, 1864.

In these three official reports we should naturally look for a complete history of the state of lunacy, of the number of the insane, and of their condition and distribution in the three kingdoms. However, on examining them attentively, we discover that the actual number of the insane existing cannot be accurately estimated by means of the returns supplied, and that, owing to the different system pursued in framing the several reports, a satisfactory account of the condition and distribution of lunatics is not attainable. It appears to us, indeed, very desirable that these parliamentary reports should be constructed on a similar model, with statistical and other tables on a like pattern. At present they agree generally only in one matter, viz., in the blue colour of their paper covers. The reports of the English commissioners claim precedence by their longer issue, but to those of the Scotch lunacy board we give the preference for the arrangement pursued, and the fulness of information supplied. However, we shall on the present occasion give the English report the first place in our analysis.

I. England.—It is very gratifying to learn that "the general condition of county asylums throughout the country is highly creditable, and that progressive improvements in their management continue to be made." The

accommodation for the insane is quite inadequate in many counties, but the commissioners set their faces against the usual remedy applied for such inadequacy, viz., "the congregation of very large numbers of the insane under one roof and one management," by successive additions to existing asylums, at times even without providing additional land for the recreation and employment of the population superadded. A decisive opinion is put forward relative to the matter of asylum burial grounds, viz., "that it is not at all desirable to establish cemeteries exclusively devoted to patients dying in asylums, and that the practice should not be adopted, except where it is not possible to make any other arrangements."

The long time exceptional government of the Cornwall Asylum has been set aside, and replaced by the appointment of a medical superintendent as the central, chief authority. At the Devon Asylum overcrowding suggested enlargement of accommodation in the building by the very objectionable plan of converting some workshops placed "below the surface of the ground" into dormitories. This plan the commissioners rightly rejected. It would also appear that, at this asylum, the plan of distributing patients in detached buildings, cheaply constructed, as begun there by Dr. Bucknill, has not been proceeded with; for the main building is unequal to the demand upon it for accommodation, and there is a great accumulation in it of chronic cases, which do not need the appliances of a highly and expensively organised asylum.

At the Middlesex asylums there is a "necessity for considering at the earliest period the question of the best mode of providing additional asylum accommodation for the increased and rapidly increasing numbers of pauper lunatics in the county;" and it is gratifying to learn that the visiting justices have at length come to the conclusion that the huge receptacles for lunatics now standing need not be further added to, to secure them a worse pre-eminence than they already hold among European asylums. They are not prepared to advise the expediency of further enlargement (Appendix E). This being so, it is to be hoped they will comprehend the expediency of making provision for the early treatment of acute cases of insanity in a separate institution, where individual treatment can be carried out by a sufficient medical staff.

Haverfordwest Asylum is still exceptionally bad, and the commissioners hope that in their next report they will be enabled to state that it is closed, and that its patients have been removed to the new asylum now building near Caermarthen. The Hull Borough Asylum presents also great room for improvement.

Workhouses.—Recent legislation gave permissive power for the removal of a limited number of chronic lunatics from overcrowded asylums to workhouses, in order "to make provision for the immediate reception into the asylums of all recent and probably curable cases." It seems, however, that this power has hitherto been very sparingly exercised, boards of guardians having probably arrived at the conviction that, if the directions laid down by the commissioners relative to the provisions to be made in workhouses for the reception of such patients are to be observed, their great cry of economy to the ratepayers will entirely fail them. Indeed, if the conditions insisted on by the lunacy board for the legal detention of lunatics in workhouses be fully carried out, the result would be the construction of as many small asylums as there are workhouses; in other words, all those additional charges for building, supervision, and means of exercise must be incurred, which together represent the difference of cost obtaining between asylum and workhouse accommodation for lunatics. Moreover, even should the rules laid down be conscien-

tiously carried out, would, it may be asked, the interests of the insane be as fully and satisfactorily taken care of as they are in properly built and organized special institutions on a not too large scale? The authorities at Whitehall are clearly of opinion that such would not be the case. "In the most favorable circumstances (they remark, page 75) the provision made at a workhouse will always fall short of that which is furnished by an asylum; and there is never any certainty that improvements made by one board will not be permitted to deteriorate under another board of guardians. All such improvements in workhouses exist only by sufferance. There is no obligation or law to continue or enforce them. It is important that the legislature should watch jealously, therefore, every disposition to such employment of the power given by the recent act, as would convert any large additional number of workhouse wards into *asylums without their safeguards.* Every added year's experience, in short, confirms us in the opinion, that where the lunatics detained in workhouses are of such kind and number as to require wards for their accommodation apart from the rest of the inmates, the result is disadvantageous. . . . On the other hand, there is a class of patients among the idiotic and weak-minded, whose quiet habits and tractable dispositions not only permit of their living in all respects with the ordinary paupers of workhouses, but even render them very often the most trustworthy and useful of all the inmates in employments about the house," and their condition, in many of the smaller county workhouses, "even preferable to that of the same class in some well-ordered asylums."

It is satisfactory to report that workhouse authorities have become persuaded of the advantage of removing acute or recent cases at an early period to asylums, but as yet they have failed in carrying out with anything like completeness the system of visitation of the insane in the workhouses required of them by the recent Act of Parliament. If this legislative provision was intended to effect a useful and sufficient supervision of lunatics in workhouses, in the absence of that exercised by the lunacy board, it will, we are confident, fail in its purpose. In fact, the present report shows such supervision to be inefficient, and that the lunatic wards of workhouses require even more oversight by an independent central authority than do asylums themselves,

Patients in Asylums.—It has long been notorious that persons far above the position of paupers have, when insane, been placed in county asylums, and that, by collusion with parochial officers, the parishes from which they come have been wholly or in part reimbursed by their friends. Such proceedings must, as the commissioners remark, "be regarded in the nature of a fraud upon the county," but they, moreover, operate unfairly to the medical profession, involve an imposition upon the ratepayers taxed for the construction of asylums, and are productive of injustice to pauper lunatics by usurping accommodation specially intended for them, often, indeed, in crowded institutions, to their exclusion and detriment. The present report discusses the legal bearings of the practice, and it is determined that the payment of the *whole* weekly charge in an asylum, made by a person legally bound to maintain the patient, is contrary to the intent of the law, and that the visitors of the asylum may order the discharge of such a patient. On the other hand, the law permits the partial reimbursement of parishes for the maintenance of a lunatic in an asylum by the friends chargeable with it—a permission which will often be advantageous to all parties, where the means of the patient and his friends are very limited, and will particularly be so, by reason of the deficiency of asylums for insane persons somewhat above the condition of paupers. On the continent, the law makes

especial provision for assessing the means of maintenance possessed by the lunatics admitted into departmental asylums, and enforces a proportionate payment to partially cover their cost. A similar scheme might be applied in this country, for of the inmates found in English asylums, not a few have some personal property, or their relatives legally chargeable with their maintenance possess property, which, in justice to the ratepayers, should be taxed to reimburse a portion of their cost.

The following opinion is put forth by the Poor Law Board,—that "no person should be sent to an asylum by the justices on the application of the relieving officer, unless such person be a pauper lunatic, that is, one who is chargeable upon the poor-rate. This fact should be established to the satisfaction of the justices before they make the order." On this opinion the commissioners in lunacy make the following strictures: that "the question of chargeability is an uncertain, if not an unsafe test. The circumstances and the nature of relief which constitute chargeability vary much according to the views of different relieving officers . . . . and it appears very desirable that the word 'chargeable' should be further defined by express legislation to meet the cases referred to. The policy which should obviously guide parish authorities in dealing with the insane should be to break through, as far as possible, technical barriers to their early care and treatment, and not to apply to them the tests which they may think it their duty to enforce with regard to the sane poor generally."

Lunatics in Gaols.—Another piece of legislation is suggested by the commissioners in the interests of lunatics in gaols, and generally of criminal lunatics; viz., that, in certain cases of insane prisoners, the visiting justices of the gaol have authority to send them to the county asylum, without the intervention of the Secretary of State. The removal of insane patients to the asylum would thereby be greatly facilitated, and the gaol officials relieved of much anxiety and trouble; while the number of lunatics so improperly classed as criminal in the existing state of the law would be materially diminished. . . . A large number of criminal lunatics have from time to time come under our notice whose sentences have long expired, in some instances for years, and, although still insane, much injustice is done in regarding and treating them as insane." It appears, therefore, most desirable that the power given to the Secretary of State to order patients in criminal asylums, whose term of imprisonment may have expired, but who are still of unsound mind, to be discharged, in order to be placed in county asylums, and treated as ordinary lunatics, not criminal, be extended to criminal patients in any asylum, hospital, or licensed house, without, as at present, requiring their previous removal to the state asylum.

Single patients and accidents.—A notice of the history of several cases of neglect of patients in workhouses and of single patients follows, in which the case of Porter necessarily occupies a prominent place.

The statistics of insanity during the year we defer examining, until we have analysed the two remaining reports of the Irish and Scottish Boards.

II. IRELAND.—The district asylums in actual operation amount to seventeen, and contained 4672 patients on the 31st December, 1863. Six are in course of erection, to accommodate an additional 1800, but this provision leaves the wants of the lunatic population of the island unsatisfied, and particularly so in the metropolitan district, comprising the counties of Wicklow, Louth, and Dublin, containing 572,000 inhabitants. The deficiency here is so great that no less than 140 dangerous lunatics are confined in the gaols, "and it is in vain as a definite remedy to

remove parties from them to the asylum, their places being at once filled up by committals under the Act."

Impressed with this sad state of things, the Inspectors have sought to obtain an extension of accommodation, but have been opposed in their attempts by the grand juries of Louth, Drogheda, and Wicklow, for the very sage reason that in the overcrowded asylum at Richmond their due proportion of patients cannot be received; Dublin, we presume, having somewhat more than its share. This way of viewing their duties towards the insane poor is certainly very Irish, and were it not for its consequences might be treated as a joke; but those consequences are serious enough, from two to three hundred lunatics belonging to the district being deprived of the advantages of asylum treatment, many of them lying in the gaols of Wicklow and Louth, while the Richmond Asylum is overcrowded by about fifty inmates. If each county will have its exact share in the existing accommodation duly meted out, ere it will take the initiative to provide for the surplus insane population, we give them the benefit of the following plan, viz., to have an "asylum delivery,"—monthly if they please, and thereby adjust their proportion of patients, discharging redundancies, and supplying deficiencies, by mutual accord; the ballot being adopted as the fairest plan to eliminate and to elect. This scheme would have the gratifying advantage of being original, and if the authorities in question are not too tardy in adopting it, they might secure to themselves the glory of initiating an "Irish system" of admitting and discharging the inmates of asylums.

Unlike the workhouse authorities in this kingdom, those in Ireland exhibit no readiness to undertake the charge of insane patients. A few boards of guardians acceded to the proposition "to receive into their respective workhouses patients belonging to their electoral districts, the nature of whose malady afforded no reasonable hope of recovery, and whose dispositions were tranquil and conduct inoffensive; . . . . but the majority dissented altogether from it, for two reasons, the one being that they did not like the trouble of having insane of any kind in workhouses, the other that they escaped local electoral charges by fixing the cost of lunatics on the county cess. That they were strongly influenced by the first reason we are convinced, from the naked fact that, on our visitations to workhouses, we have been asked to have parties removed to asylums, simply, as we found, because they now and then gave inconvenience."

Although persuaded that many such cases could, with due care and kindness, be very well treated in workhouses, the inspectors retain their conviction "that the insane, of all denominations, should be under special control, no matter where located. We think that ample asylum accommodation should be secured for those likely to benefit thereby, or who require particular supervision, and that such accommodation should be so established as to be of easy access, and limited as much as possible to individual counties. Formerly from four to five counties had an asylum in common, but, according to existing arrangements, there will be fourteen counties each with a lunatic hospital for itself;" the eighteen remaining having asylums in common to two or more of their number.

The inspectors are opposed to over-large asylums, and prefer a subdivision of accommodation, so as to make it more accessible to the population requiring it, "for distance materially interferes with the facilities of conveyance, and the advantages derivable from institutions for the insane." In consequence of this conviction, they oppose the enlargement of the Richmond Asylum, already containing 680 patients, and also that of the Cork Asylum.

The question what to do with "the surplus of the chronic, epileptic, and idiotic classes not placed in asylums, and those whose habits and dispositions render them innocuous," it is thus proposed to deal with, regard being had to the rapid decrease of the population of the country and the heaviness of local taxation, viz., "to determine whether, in each county according to its size, two or three poorhouses might not be selected in suitable localities" for their reception, "and their maintenance be charged, not to electoral districts, but to the unions at large to which they belong. An arrangement such as this would prevent the necessity of establishing at farthest more than two new asylums, and tend for the future to disembarrass gaols altogether of the detention in them of lunatics. . . . As a matter of course, however, due precautions should be taken to secure adequate attention to the wants of the insane so located, whose management should be under the direct control of this office, in which, too, a power should be vested of directing the exchange or removal of patients to and from asylums." This plan is rendered feasible by the gratifying fact that the paupers in workhouses have decreased to 54,900 from a total of 144,000 ten years ago; and it recommends itself further to the minds of the inspectors, as it seems to supply all the provision necessary for a class of patients who do not "require the expensive machinery of a lunatic asylum."

Of particular asylums, the Ballinasloe, Belfast, Kilkenny, Killarney, Richmond, Sligo, and Waterford, are commended for their internal management, though in the case of no one of the other asylums is any fault found on this matter, so far as the duties of superintendence are concerned. For the notices of defects and the suggestions for improvements point to structural faults, to overcrowding, and to conditions under the control of the governing bodies. At the Belfast Asylum the deaths amounted to only 3·01 per cent. on the daily average number under treatment. Of 59 persons discharged as recovered, 43 had been received into the asylum before the disease had existed three months; and 42 were under forty years of age. These facts, as the inspectors remark, indicate "that success in the treatment of insanity materially depends on the application of curative agencies in its early stages; and that the recuperative power of the mind is much stronger in youth and early manhood than at subsequent periods of life. . . . The unmarried preserve the same proportion towards the married as in other establishments generally, being in the ratio of three to one; while the curable constitute, unfortunately, but little more than one third of the total number confined."

The interior arrangements of the Carlow Asylum are very defective, but there is this much to serve as apology, that "it is already overcrowded by a double number of inmates. A new asylum is, however, building at Enniscorthy, for Wexford, which will withdraw 120 from Carlow. At Clonmel an auxiliary building, an old disused workhouse, has been brought into use to save the cost of an additional asylum. The parent establishment is especially intended as "a curative institution," the annexe as an establishment for chronic cases. "The establishments are in juxtaposition, and lunatics are removable from one to the other, as circumstances may render desirable;" they are also under the superintendence of the same physician, and under the same regulations.

In this Clonmel establishment we have, therefore, for the first time in Great Britain, an example of the German system of "relative connection," as particularly advocated by Damerow, of Halle, "and thus far (the Inspectors report) the arrangement has fully realised the expectations of the local authorities."

The Cork Asylum contained 500 patients, of whom 230 were consi-

dered as "probably curable, a larger proportion than the average of most other asylums . . . The annual cost per head was only £16 14*s.* 6*d.*, a sum less than in any other asylum in Ireland. . . . The dietary, though ample in quantity, is not so generous as it might be." The cost per head, at Belfast, was £18 19*s.*; at Killarney, £20 0*s.* 9*d.*; at Richmond, £23 14*s.* 11*d.*; at Waterford, £23 1*s.* 8*d.*, and at Clonmel, £35 4*s.* The comparatively high rate in the last-named establishment was owing, "in a great measure, to the purchase of various articles of furniture, and the outlay attending the arrangement and fitting up of a new building." In other words, the year ending January 1st, 1863, was an exceptional one at the Clonmel Asylum, and the expenditure therefore exceptional also.

"The prevalence of a *hereditary tendency* to insanity in the Londonderry district is exhibited very strongly by the return of the assigned causes of mental derangement, and particularly so in the case of persons from the mountain ranges of Donnegal, where, hitherto, from want of general means of communication and from more clannish habits, intermarriages may have been more prevalent." The asylum at Derry is labouring under the disadvantage of being too close to the town, which is indeed extending almost around its area of twenty-nine acres.

At the Omagh Asylum a death occurred from an overdose of morphia administered to a patient by an attendant. The patient had been suffering from cough, and took medicine in tablespoonful doses, three times a day. An alteration was made, and a mixture of morphia given, "the written directions on the label being a teaspoonful three times a day. The bottle was left in the room occupied by the attendant who had charge of the patient during his absence, and his attention was not therefore specially directed to the change that had been made, and as the two medicines resembled each other, he, without reading the directions, administered a tablespoonful of the mixture of morphia, supposing it to be the same medicine as that which the patient had been taking previously. This dose was repeated twice, and death ensued." The coroner's jury found a verdict of manslaughter against the attendant, but the grand jury at the assizes ignored the bills of indictment.

At the Sligo Asylum a female "hanged herself in the bath room, with a piece of rope composed of cocoa-fibre matting, apron-check and calico, which she had cunningly concealed on her person. It was no doubt a very premeditated case; but it would appear from the evidence taken at the inquest that she had not previously manifested any suicidal tendency, and as she had pleaded illness, eluding the attendants in charge during breakfast hour, they were held blameless by the jury, a verdict in which we, under the circumstances, concurred. In this asylum there has been, ever since its opening, a larger margin of vacancies than in any other of like size in Ireland, the board and physicians paying particular attention to the admission of patients, and restricting it as far as possible to those likely to benefit thereby."

Another suicide occurred at the Waterford Asylum, the victim having "inflicted a wound on himself with a knife, which he surreptitiously obtained, and kept concealed on the grounds. Another man made four attempts at self-destruction." A marked relationship and hereditary tendency to disease among its inmates has been constantly observed in this establishment.

The following paragraphs of the Report call for particular notice, more especially from the central authorities in whose hands the remedy for the evils displayed, virtually rests.

"The resident medical superintendents in Irish district asylums,

"though fully on an equality in professional status and acquirements with their brethren in England and Scotland, receive smaller salaries and less domestic allowances, at the same time that they have more duties to perform, inasmuch as on them the fiscal management of their respective institutions mainly devolves."

"The attendants, too, as a body, are underpaid, hence persons of inferior position, and with little or no education, are so frequently engaged," who often leave the service, when they have saved a few pounds, enough to emigrate. "Hence a serious disadvantage accrues to the insane from a constant change in those placed immediately over them," and from the loss of those who have experience and knowledge of their duties.

Appendix B shows what the salaries of the several medical superintendents are. The two highest are £440 and £430, at Richmond and Cork respectively, with only lodging, fuel, light, and vegetable besides. There are two appointments at £350, but the average rate is £300 per annum, without board.

The Inspectors therefore have good reason for making an official representation to the Executive Government on this subject, and they certainly deserve the best thanks of the asylum superintendents, not only in Ireland, but also in England and Scotland. In this matter we can unite in the well-worn cry of "Justice to Ireland," and trust that this distinct recommendation of improved salaries to the Irish superintendents will speedily be attended to.

Lunatics in Gaols.—The very objectionable plan of committing lunatics to gaols, for the purpose of security, is very much resorted to in Ireland. By the Act of Parliament which is used to sanction it, such a proceeding was never contemplated. It permitted the temporary removal to prisons of such lunatics as were dangerous to themselves or to others, but it required sworn depositions to the fact that the lunatic had committed or intended to commit an indictable offence, to be made before two justices, who were further authorised, if they deemed fit, to call to their assistance a medical practitioner, before signing the warrant of committal. But, as the inspectors inform us, no statutes probably are more constantly disregarded by the magistrates than these, "inasmuch as too frequently they neither investigate as they ought to do, cases brought before them, nor even see the parties themselves, although the Act distinctly requires them to satisfy themselves on 'view and personal examination' as to the actual condition of the lunatic. . . . It cannot, therefore, be a matter of surprise, that the most unsuitable cases for such confinement are to be found in gaols."

Despite these abuses the Inspectors consider the Act, if properly administered, "productive of good, by opening district asylums to the truly destitute insane. Nor would they desire its repeal until ample and suitable provision for the insane be made, for otherwise matters would be rendered worse, as magistrates would then be obliged to commit as criminals those who were before regarded as simply dangerous to themselves or others, by taking information founded on charges of the most frivolous character, and returning them to the assize or quarter session court; thereby imposing a useless trouble and uncalled-for expense on the executive."

As new asylums are erected, the gaols will be emptied of these lunatics, but at the beginning of 1863, there were 378 such in those buildings, 709 were committed to them during the year, and 389 remained in them on the 1st of January, 1864.

"With reference to the treatment of lunatics in gaols, we have (write

the inspectors) to report favorably of the general care bestowed upon them," yet no care will compensate for the disadvantages and injury inflicted by detention in a prison.

Criminal Asylum—Dundrum.—This institution is reported upon separately, and in the present blue book the inspectors give a general resumé of its working since its first opening in 1850; we must, however, defer our notice of it to another opportunity.

Private Licensed Houses.—These are seventeen in number in Ireland, exclusive of three charitable foundations for the insane, in which a portion of the patients pay towards their maintenance and treatment. "The latter comprise St. Patrick's or Swift's Hospital; the Retreat, near Donnybrook, belonging to the Society of Friends, and the Richmond Retreat, under the religious sisterhood of St. Vincent de Paul." They are exempted from taking out licenses. "The Lucan Asylum, containing 73 lunatics, originally located in houses of industry, and chargeable to Government, may be regarded in the light of a private licensed establishment, as there are also in it 29 patients of a humble grade of life supported by their friends."

The total number of patients in all these establishments amounts to 556, viz.—285 males, and 271 females. "Generally speaking, their management is satisfactory."

SCOTLAND, ASYLUMS OF.—The district asylum of Argyllshire, was opened in June, 1863, and on the 1st of January contained 89 patients, 40 males, and 49 females. Since the opening the washing-house and laundry have been accidentally destroyed by fire. The Banff New Asylum is at this date, nearly ready for opening. The Elgin Asylum is to be enlarged, and new buildings are to be erected for Fife and Kinross, for Haddington and for Stirling; one at Inverness is in course of construction, and the new asylum for Perth has reached completion. Lastly, Paisley is to provide for its pauper insane by enlarging the lunatic wards of its workhouse, and Greenock proposes to follow this uncommendable example.

Lunatic paupers have, on an average cost £19 0s. 3d. per annum. The cost of pauper patients in public and private asylums was more than double that in poorhouses and private dwellings. "The chief cause of this difference lies in the lower cost of maintenance in private dwellings, arising partly from the absence of establishment charges, partly from the style of living being there less costly, and partly from the burden falling in a considerable degree on the patient's relatives. Hence it is obvious that the greater the number of pauper lunatics who can be properly accommodated in private dwellings, the lighter will be the burden of their maintenance on the public; and (we quote the Commissioners words) as we have pointed out in former reports, it is chiefly in this direction that we must look for the means of keeping this expenditure within due bounds. But in order that the condition of patients in private dwellings shall be sufficiently satisfactory to sanction their being so disposed of, the existence of adequate asylum accommodation must be at command; for not only will the means of proper treatment thus be provided for those patients who specially require such accommodation, but a salutary influence be exercised on the condition of those for whose proper care asylums are not absolutely necessary. In the event of any one being subjected to improper treatment or neglect, no impediment would then exist to his removal from the unfavorable circumstances in which he was placed."

Under the provisions of a recent Act, a class of homes called "special licensed houses," for the reception and detention of lunatics not

exceeding four in number. Only nineteen such houses have hitherto been licensed, and say the commissioners, "the limited degree in which this kind of accommodation has been made use of for private patients has surprised us, and appears to indicate a desire on the part of their friends to avoid official supervision." There can be no question of the operation of such a desire; and we can imagine the impression to prevail with regard to licensed houses for four, that whilst residence in them exposes their inmates to an objectionable official supervision, and to mingling with other insane people, they, by their limited scope and organization, do not present equal advantages with establishments for a larger number; inasmuch as a greater population and a larger amount of receipts permit more elaborate arrangements, and a larger supply of amusements and the like, together with more varied society, and in most cases, direct and constant medical supervision.

"The counties in which the largest proportion of pauper lunatics are placed in establishments, are those which rank as the wealthiest and most populous, and are most abundantly provided with asylum accommodation. . . . On the other hand, the highest proportions of those left in private dwellings are found in poor and thinly peopled districts, remote from asylum accommodation." This is the converse of the proposition that proximity to an asylum facilitates and promotes the transfer of patients to it. "We believe (continue the commissioners) that a considerable degree of unwillingness exists among the parochial authorities, more especially in country parishes, to place their pauper lunatics in asylums, from the fear of their detention being unnecessarily prolonged; and for this reason, among others we consider it extremely desirable that measures should be adopted for bringing the mental condition of patients in asylums periodically under review, for the purpose of determining in what cases removal to private dwellings might be properly undertaken.

Insane in Asylums.—The number of patients in establishments continues to increase to a limited extent, except in parochial asylums and in the lunatic wards of poorhouses, where the augmentation is more marked. This increase is not due to the greater frequency of madness, but to the accumulation of chronic cases. Once sent to an asylum, the continuance of the patient there, if he lives and does not get well, is treated as a matter of course. This fact, and the practice of placing together large numbers of insane in overgrown establishments, and there detaining them after their maladies have assumed a chronic form, and no danger is to be apprehended to themselves or others, are conditions rightly reprobated by the Scottish Board.

The following observations dictated by the ample experience of these able public servants, though not new, are most deserving of serious consideration as indicating that we have hitherto proceeded on a wrong plan in dealing with the insane population of the country. "Such gatherings (in large establishments) may no doubt facilitate the disposal of patients who cannot, without risk, be left in private dwellings, or whose habits are such as to make their proper treatment by unskilled persons difficult, if not altogether impossible. But, on the other hand, the association of large numbers of demented patients can scarcely fail to exercise a deteriorating influence on the whole assemblage, by sacrificing in a great degree whatever good effect companionship with the same is calculated to produce. It is difficult to imagine any sight more depressing than that of asylum galleries, and airing courts crowded with fatuous patients, who, regarded not only as incurable, but as almost beyond the influence of palliative treatment, are left to drag out a dreary and mono-

tonous existence. The larger the establishment the more likely will this condition be found. The very number of the patients renders it difficult for the superintendent to deal with them individually; and as the means of employment which an asylum commands are commonly too small for general active occupation, it frequently happens that those patients only are employed who can do the most efficient work with the least amount of supervision. At the same time there is no doubt that with proper surveillance, and extensive and varied means of occupation, the number of patients actively and appropriately employed might be increased far beyond the point which has been attained in most of our public asylums." In illustration of the occupation to be found where there is a manageable number of patients, the Scotch Commissioners cite the Elgin Asylum, where of 33 males, 26 were found employed. To exhibit the reverse side of the picture, we may cite the Middlesex buildings for collecting the insane, at Hanwell and Colney Hatch, where the English Commissioners have to deplore the dreary, monotonous, and useless lives of by far the greater part of the inmates.

"The experience of this (the Elgin) asylum (continue the Scotch reporters) further shows that a large proportion of the patients whose malady has passed into a chronic stage, require only authority, common sense, and kind treatment for their management, and support the view that many patients of this class may very properly be accommodated in private dwellings." The difficulty of efficient supervision by the superintendent over patients and attendants, in a large asylum, was painfully exemplified, as the commissioners report, at the Royal Edinburgh Asylum during the past year. "In an establishment so extensive (as the one just named), the attendants must frequently be left to exercise almost unchecked control over the patients, and there is certainly always a risk that this power may be used in a harsh and unjustifiable manner. . . . . Many accidents occur in asylums of which we hear only incidentally; and we have reason to think that many injuries are inflicted by patients and attendants which never come to our knowledge." Moreover, the history of the discovery of severe bodily injury among newly admitted patients, some days or weeks after admission and upon examination after death, "suggests the propriety of placing new cases under special observation, for a certain period, in wards specially reserved for the purpose."

Most of the preceding remarks are made in the report, in connection with the question of the correspondence of asylum inmates; the commissioners contending that facilities should be given to patients to address themselves to the Board. The very objectionable practice permitted by the statute, that one of the two medical certificates required for admission may be signed by the medical superintendent of the asylum, is most properly animadverted upon, as calculated to put that officer in a false position with his patients, and to exercise a deleterious influence also upon himself.

Defects in Asylums.—In the case of the Dumfries Asylum various defects have from time to time been noted, but the steps taken to remedy them do not meet the approval of the Lunacy Board. "It appears to us (to quote the Report, p. xxxvii) that too little is done by ordinary care and attention to promote the general comfort of the patients, and that the efforts of the directors, and the resources of the institution, are too much absorbed by costly alterations, which do not in any material degree improve the condition of the establishment. What we have striven to introduce are comfortable beds, comfortable furniture, and comfortable meals, but our success hitherto has been only very partial."

"The Dundee Asylum continues to exhibit a very stationary condition. The general arrangements of the building are old, inconvenient, and gloomy, and there is a lack either of the zeal or knowledge necessary to make the best of the existing conditions. It appears that about 80 per cent. of the patients are restricted in their exercise to the airing-courts, and that the number engaged in active industrial occupations is extremely limited. . . . The usefulness of the establishment is still limited by the overwhelming numbers of chronic cases."

At the Edinburgh Asylum, the changes among the attendants are particularly frequent; and "when the responsible nature of the duties of attendants is considered, it will be at once apparent how extremely detrimental to the welfare of the patients such frequent extensive changes must be, and how greatly they must increase the risk of accident and improper treatment." The pauper department of the Glasgow Asylum presents many defects. Its furniture is exceedingly scanty, and its general aspect bare and comfortless. Moreover, more means of diversified industrial occupation and of recreation are required.

Parochial Asylums.—By this appellation the Scottish commissioners designate lunatic wards of poorhouses which admit patients for curative treatment, and restrict the term of lunatic wards of poorhouses to those establishments which receive only patients who are considered harmless, and not amenable to curative treatment." In these so-called parochial asylums, the changes among the patients are in a higher ratio than in public, and in a still higher than in private asylums, and the recoveries exceed half the admissions. "These results are doubtless to be ascribed to a larger proportion of slight cases being received into the first named institutions." On the other hand, the mortality in them is higher than in public and private asylums. Of the majority of the parochial asylums the commissioners report favorably.

The recoveries in the lunatic wards of poorhouses equalled, on the admissions, 14·3 for males and 10·6 per cent. for females. The ratio of deaths is higher than in asylums, public or private.

The number of persons arrested and sent to asylums as dangerous lunatics continues to decrease. "Insane persons who have committed petty assaults, and have been arrested by the police, are sent to asylums as 'dangerous lunatics,' at the instance of the procurator-fiscal. Such patients, however, are discharged by the superintendents, whenever recovered; or, if not recovered, they may be removed by their friends, on caution being found to the satisfaction of the sheriff for their safe custody. . . . We are under the impression that in England and Ireland many of this class would be regarded as criminal lunatics."

On the 1st of January, 1864, there were twenty males and twelve females in the lunatic wards of the general prisons, confined as criminal lunatics. "In Scotland only persons who have committed serious offences while insane, or who after conviction have become insane in prison, are reckoned criminal lunatics, and they get quit of this distinctive term when removed from the lunatic wards of the central prison to the ordinary asylums. It occasionally happens, however, that persons arrested for infanticide and other serious offences, when certified to be insane to the satisfaction of the sheriff, are placed by this functionary at the disposal of their friends, by whom they are sent to asylums on the ordinary forms, and are thus not reckoned as criminal lunatics, as would have been the case had they been brought to trial. Indeed, great differences in regard to the procedure adopted in the disposal of lunatics who have committed criminal offences prevail in different counties. Thus, a patient in Murray's Royal Asylum, in Perthshire,

who killed another patient, was removed to the County Asylum, and having been found insane in bar of trial was then placed in the lunatic wards of the general prison. On the other hand, two patients in Montrose Asylum, in the adjacent county of Forfar, who had each killed a fellow patient, remain in that asylum as ordinary patients, after an investigation of the circumstances by the procurator-fiscal."

STATISTICS.—One general fact deducible from the three Reports on the State of Lunacy in Great Britain and Ireland is, that the number of lunatics progressively increases, except in Scotland.

ENGLAND.—A summary view of the records of *patients in asylums* in England, in the several quinquennial periods between 1849 and 1864, inclusive, shows that on the 1st of January, 1849, there were 14,560; on the 1st January, 1854, 19,455; on the 1st January, 1859, 22,852; and on the 1st of January, 1864, 28,285, being an increase of 4895 in the first quinquennium; of 3397 in the second, and of 5433 in the third. The total increase in the whole term of 15 years equalled 13,725, or 915 year by year. The advance was greatest in the last five years.

"The admissions (observe the English commissioners) into all asylums during the last 15 years have amounted to nearly 120,000; when divided into periods of five years, as in the case of the number of inmates resident, we also find a great increase of late. The tables show that during the first period, namely, in 1849, and the four following years, upwards of 36,000 patients were admitted, that in the second division the admissions were more than 38,000; and that during the five years ending the 31st of December, 1863, as many as 44,693 were received. A glance at these figures renders obvious an important fact, deserving serious consideration, namely, that we have to deal not only with a progressively increasing number of resident inmates of asylums, but also with a great advance in the number for whom admission is sought. This increase is confined almost entirely to the pauper class."

"The increase is attributable in great measure to the accumulation of pauper and criminal patients, and to the addition of certain cases now ranked as private, who were not previously enumerated, or directly brought under our supervision."

Fifteen years ago there were only 6269, of 10,801 pauper lunatics detained in *county* asylums, or 58·04 per cent., at the present date, of 22,958 there are 21,320 in such establishments, or 92·86 per cent.

With regard to the sexes of lunatics, "in the pauper class the number of women exceeds that of the men by 2000. In the private class, the number of men exceeds that of women by 795; whereas, in 1849, "the reverse obtained in this class." The explanation of this circumstance is, that, in the last returns, male patients were enumerated, not previously included, as, for instance, those belonging to the army and navy.

In the course of the last fifteen years more men than women have been admitted, and more women than men discharged; the number of recoveries has also been greater among the women.

"The discharges during the fifteen years have amounted to 71,361; namely, 42,921 recovered, and 28,440 not recovered. During the first five years 12,570 were discharged recovered, and 9378 not recovered; in the middle period the discharges were 14,649 recovered, and 8632 not recovered; and during the last five years 15,702 were sent out recovered, and 10,470 not recovered."

Deaths.—"There have been 34,490 deaths in asylums during the last 15 years; namely, 9204 in the first period; 14,198 in the second, and 13,088 in the last five years. . . . The rate of mortality is much greater in the male than in the female sex."

From the above data it follows that the recoveries were in proportion

to the admissions, in the first quinquennium, 34·91 per cent; in the second, 38·55, and in the third only 35·20. Consequently, so far as such calculations can show, an increased and improved accommodation in county asylums has been (unattended, particularly in the last quinquennial period when this accommodation has attained its maximum), by any advantages to the insane, so far as the cure of their malady is concerned; in other words, the ratio of recoveries has become less.

On the other hand, if the extension of improved accommodation has not been attended by an augmented ratio of recoveries, it has been followed by an increased proportion of deaths; for this was in the first five years in question, equal to 25·5 per cent. of the admissions; in the second similar period, 29·46, and in the third 29·35.

There may be a relatively larger proportion of chronic and incurable cases in existence at the present time than there was fifteen years ago; and this circumstance may be supposed to exercise some unfavorable influence upon the rate of recovery, whilst an increasing proportion of incurable lunatics in age may have added to the rate of mortality, of late years: yet, after making all such allowances, and apart from the influence of various conditions of modern asylum construction and management favorable both to recovery and to life, the results we have arrived at indicate something unsatisfactory in the present mode of treating the insane.

"Looking back and comparing the extremes of the whole period under review, we find that our asylums now contain nearly twice as many patients as they did fifteen years ago."

Further, notwithstanding the additional asylum accommodation provided for pauper lunatics, it is proportionately as inadequate for the reception for all such disordered persons (supposing such sort of provision to be necessary in all cases of madness) as it was fifteen years ago. That is, by the multiplication and enlargement of asylums no ground is gained in the way of giving the accommodation of such institutions to all the insane of the country, an object once indeed hoped for. The number of pauper lunatics on record for 1849, who were not in asylums but resident in workhouses, in lodgings or with friends, we cannot just now discover, but on January 1st, 1844, it is stated at 9339; in 1852, at 9157; in 1857, at 12,297; in 1859, at 13,208; and in 1863, at 16,410. At the same periods there were respectively in asylums, hospitals, and licensed houses, 11,272 (in 1844); 17,412 (in 1852); 21,344 (in 1857); and 28,275 (in 1853). Hence, of the whole number of insane known; 54·6 per cent. were in 1844 provided with asylum accommodation; 65·5 per cent. in 1855; 63·4 per cent. in 1857; and 63·2 per cent. in 1863.

"Fifteen years ago there were in licensed houses nearly as many patients as in hospitals and county asylums; whereas we now find that in the latter there are more than five times as many patients as in the former."

The commissioners in lunacy calculate that there are in England and Wales, known to them, 44,695 insane persons, exclusive of Chancery patients living out of asylums, and the insane confined in gaols. The following summary exhibits their mode of distribution:—

In County or Borough asylums			21,551
Hospitals			2,279
Licensed houses			4,555
Workhouses			9,710
Single Private Patients			159
Single Pauper Patients	Resident with relatives	5,523	6,541
	Boarded out, or in lodgings	1,018	
Total			44,695

IRELAND.—The inspectors of Irish asylums report the total number of insane under their supervision to have been, at the end of 1863, 8272. They were distributed as follows:

	Males.	Females	Total.
In District Asylums	2439	2333	4672
Central Criminal Asylum	86	41	127
Lucan Asylum	56	17	63
Private Asylums	285	271	556
Gaols	266	123	389
Poorhouses	954	1501	2455
Total	4086	4186	8272

Of the 8272, 5690 are described as lunatics; 1377 as idiotic and imbecile, and 1,265 as epileptics.

"If to the above there be superadded 8384, contained in the aggregate list supplied to us from the 266 police districts of the country, the total reaches the large figure of 16,256, or nearly the same as appears to have been the amount at the close of the year 1862. We may here observe, that no very perceptible diminution has taken place in the number of the insane in this country within the last ten years, notwithstanding a marked decrease in the population at large. On inquiring throughout the provinces which, on official inspection, it is our duty frequently to traverse, we learn that not only are the infirm of mind and body left at home by their emigrant friends, but that the insane, the epileptic and debilitated are often sent back to their native country from America, as being ill-calculated for social employment or military duties."

During the year 1420 patients were admitted into the district asylums; viz.:—753 males, and 667 females. Of these no less than 354—(219 males, and 135 females) were transferred from gaols as dangerous lunatics, under warrant of the Lord Lieutenant. The movements in the district asylums may be tabulated thus:

Remaining 1st January, 1863.	Admitted.	Recovered.	Discharged improved.	Discharged unimproved.	Died.	Remaining 1st Jan., 1864.
Males 2319	753	292	50	111		2439
Females..... 2186	667	335	66	63	156	2233
Total 4505	1420	627	116	174	336	4672

Among those discharged unimproved are comprised 5 men and 1 woman, who escaped; and among the 336 deaths, seven were due to accident, in 5 males and 2 females. "Of the 4672 patients remaining at the commencement of 1864, no less than three fourths are returned as probably incurable." The increase of inmates during the year 1863, amounted, as shown in the above table, to 167.

"On admissions, the cures equalled 44·25 per cent., or if calculated on the daily average under treatment, 13·50 per cent. . . . The convalescent discharges—many of them far advanced to recovery, if not cured altogether—amounted to 116, or on admissions to 8·16 per cent.

That we are justified in relying on a large number of cures under the above head, may be deduced from the fact that the total relapses for the year did not exceed an eighth of the total admitted." "Nine per cent. per annum may be considered on an average the proportion (of deaths) that generally obtains, as against 7·26 in the district" asylums of Ireland.

"The proportion of insane between the sexes is, for all practical purposes, equal, although the causes productive of mental disease are not alike in the same extent. Physical causes would appear to predominate among men who are more exposed to their action; while the moral or emotional are much more prevalent with females. Hereditary predisposition would appear to exercise an equal influence over either sex." Insanity appears most prevalent between the ages of twenty and thirty-five. Of the total recoveries, 427 were in patients not arrived at forty, the oldest cured being 76.

"There is one point (the inspectors assert) at which the statistics of lunacy in England and in Ireland diverge to a remarkable extent. The unmarried in the asylums of this country are three times as numerous as the married, while in England the very reverse obtains. The total unmarried on the 31st December last in Irish asylums, amounted to 3094; the married to 1060, the widowed to 220." In the absence of general official tables in England to show these points, the inspectors quote the returns made in several of the English asylum reports. "That the insane here should stand in the proportion it does is quite intelligible, when the number of the married and unmarried in the population at large is taken into account; but it is not quite so clear, why in England, with twenty millions of inhabitants, and according to the last census, 6,988,000, or a third of the whole married, there should be in the two social states so marked a disproportion of mental disease. In France a more equable relationship is maintained, the insane single exceeding by about 18 per cent. the married lunatics.

In *workhouses* there were 220 more mentally disordered inmates on 31st December, 1863, than at the end of the preceding year. About three fifths of the total number (2455) "are females, and in the genuine meaning of the term, not more than one eighth of the whole lunatics," but are for the most part impaired in intellect and advanced in life. "Occasionally, however, some of them become intemperate and intractable; when, through the intervention of guardians who happen to be justices of the peace, they are promptly committed to gaol as dangerous: this mode of getting rid of them being less troublesome and more certain than by regular application for admission into a district asylum." Causes from which they may depose to dangerous acts or tendencies are readily found, "the breaking of a window, for example, or the tearing of a pillow-case, supplying sufficient reason for magisterial interference, with all the circumstances of a police escort for some twenty or thirty miles, in transferring to gaol some decrepit offender." This abuse of the law has been previously referred to, and it assuredly calls for speedy reform. We would further remark that the escorting of lunatics by the police is highly objectionable, and is a proceeding that should be put a stop to at once. In France the gendarmes are employed on similar commissions, and the superintendents of the asylums in that country are impressed with its mischievous influence upon the patients, and seek to have the custom abolished.

Scotland.—The total number of the insane in Scotland officially known was, on January 1st, 1863, 6327. The following table exhibits their distribution, &c.:

	M.	F.	Total.	Private.			Pauper.		
				M.	F.	Total.	M.	F.	Total.
In Public Asylums.....	1405	1417	2822	414	389	803	991	1028	2019
Private	409	518	927	93	127	220	316	391	707
Poorhouses.....	361	517	878	—	—	—	361	517	878
Private dwellings	756	944	1700	8	13	21	748	931	1679
Total	2931	3396	6327	515	529	1044	2416	2867	5283

Besides these officially known lunatics, there are 1900 others, resident in private dwellings and maintained from private resources, and 32 criminal lunatics detained in the central prison at Perth. Adding these to the previously found total of 6327, we obtain the sum of 7215, as representing the entire number of the insane in Scotland of whom the authorities have cognizance in any degree. Comparing the returns in the above table with those made on the 1st of January, 1862, a decrease is found of 8 private patients and of 6 paupers.

On this apparent decrease the Scottish Commissioners make the following judicious observations:

"We do not, however, regard the falling off in the numbers of reported pauper lunatics as absolute proof that there is a decrease in the occurrence of lunacy among the indigent classes, for the cause may possibly lie in the omission of inspectors of the poor to make correct statutory returns." There is a disinclination to report cases which do not appear to them to need asylum treatment, and even where this "is more decidedly indicated, means are occasionally taken to afford the patient parochial relief, without registering him as a pauper. . . . . In the two or three first years after the passing of the Lunacy Act, the apparent number of new cases was fallaciously increased by the intimation of many paupers who, although insane for many years, had remained unreported as pauper lunatics, until they came under the notice of the visiting commissioners, and some time must necessarily elapse before the average growth of pauper lunacy can be correctly ascertained."

Whatever be its explanation the circumstance of no increase occurring during the whole year 1862, in the number of the insane in Scotland contrasts strongly with the known fact of the unvaried annual augmentation that goes forward in England. There is this much to be said, that there has never been in England so thorough an investigation as in Scotland of the number of insane in existence.

Upon a review of the returns for the five years ending January 1st, 1863, and of other statistical inquiries, the Scottish Commissioners infer that there is actually "a gradual but positive decrease in the occurrence of insanity among both private and pauper patients. We here use the term *occurrence* to mark the difference between the number of lunatics actually existing at any one time, and that of persons becoming insane within any fixed period. A decrease in the number of new cases must, it is obvious, be, nevertheless, accompanied by an increase in the total number of the insane, whenever the removals from the list by recovery or death are less than the additions; and this fact ought to be carefully borne in mind in forming an estimate of the stationary or progressive condition of lunacy from the number of patients under treatment or observation on any one day." This in a few words means that the increase must be distinguished from the accumulation of insanity.

"It might be expected, as a general fact, that the proportion of

newly occurring cases of lunacy coming within our cognizance would be greatest in the large centres of population, where life is most active, and the tear and wear of the nervous system . . . greatest. But this theoretical view is not altogether borne out by the data before us. To a certain extent the number of cases . . . in the various districts is influenced by the existing facilities for placing patients under treatment." Moreover the number of chargeable lunatics in different districts is materially influenced by the proportional prevalence of pauperism. "In the whole population of Scotland, the proportion of pauper lunatics annually intimated is 38·5 for every 100,000 inhabitants. In Argyllshire this proportion is 37·6, and in Lanarkshire 40·7; but we should not be justified from these figures in deciding that the greater mental activity of Lanarkshire increases the pauper lunacy of that county by only three cases in every 100,000 of the population. Before adopting this conclusion we must show that the inhabitants of the two counties are placed in similar circumstances in all essential respects; but as the proportion of persons in receipt of parochial relief is in Argyllshire 45 per 1000, and in Lanarkshire 30 per 1000, it is evident that this is far from being the case."

Private patients annually brought under official cognizance are about one third the number of pauper patients, but the removals unrecovered among the former are proportionately much higher than among the latter, and hence, probably, their nearly stationary position in the registers and the gradual augmentation in the number of paupers. "But the greater removal of private patients, and the extent in which accordingly they must be accommodated in private dwellings, suggests the idea that possibly an equal proportion of pauper patients might, under judicious arrangements, and with adequate parochial allowances, be accommodated in a similar manner, and a stop be thus put to the indefinite extension of asylums."

The excess of female lunatics is owing, not so much to a greater disposition of the sex to lunacy, but to their preponderance in the population. Thus, males in Scotland are to females as 100 to 111·2; and, in the case of paupers, the former are in the ratio of 100 to 118·6.

The proportion of recoveries to admissions, in the public asylums of Scotland, was 32·8 for males, and 40·8 for females, or 36·58 for the two sexes together. The ratio of deaths to admissions was, for males 25·9, and for females 18·6; but their proportion to average number resident was 8·8 for men, and 6·7 for women.

A comparison with the returns of 1862, shows that there was in 1863, "a considerable increase in the admissions, in the recoveries, and in the removals of unrecovered patients, and a marked decrease in the mortality. . . . The average mortality in public asylums for the six years, ended December 31st, 1864, was 9·1 for males, and 7·4 for females.

In the licensed houses, the recoveries per cent. on admissions was 26·5 for males, and 44·1 for females, or 35·3 for the two sexes together. The deaths per cent. to the number resident were 6·8 for men, and 8·9 for women.

In the parochial asylums, the recoveries per cent. on admissions were 50·8 for men, and 51·1 for women; and the deaths, on the number resident, were 12·6 for the former, and 7·8 for the latter sex. In the lunatic wards of poorhouses these proportions were respectively, 14·3 and 10·6 of recoveries, and 8·2 and 9·1 of deaths. An excellent summary is given in a tabular form at p. 129, of the causes of death in the public and private asylums and poorhouses, from which we gather that of 383 patients, 153 died from cerebral and spinal diseases, 129

from thoracic disease (viz. 117 from consumption and pulmonary disease, and 12 from cardiac maladies), 45 from abdominal disease, including 22 from dysentery and diarrhœa, 15 from fever, erysipelas, cancer, &c.; 39 from general debility and old age, and 2 from suicide and accident.

Lunacy in the United Kingdom.—From the three reports under notice, we may calculate the total number of insane, under official inspection, in Great Britain and Ireland, to be—

England and Wales	44,695
Ireland	8,272
Scotland	6,327
Total	59,294

If the number of lunatics belonging to the Channel Islands and the Isle of Man were added, the total might be stated at 60,000. In the summary presented by the English Commissioners in Lunacy, the number of single private patients is put at 159; we cannot make out whether the 50 single chancery patients mentioned at p. 103, are included in that amount. But however this may be, it is certain that neither 159 nor 209 represent the entire number of single private patients in the country. We have seen that in Ireland the inspectors acknowledge the existence of rather more insane people not under their inspection than of lunatics in institutions of all sorts, including poorhouses. So again in Scotland a total of 1932 mentally disordered persons is known to exist beyond the pale of the commissioners' actual jurisdiction. With these numbers before us, and the known facts that both Scotland and Ireland have been more closely examined with regard to the statistics of lunacy than England, the conviction becomes inevitable that the proportion of insane beyond the direct supervision of the English Commissioners must be very considerable. It would be a very moderate assumption to put it at 2,000.

By adding, therefore, the unregistered insane to the certificated or registered, we obtain the following sum—

England and Wales	44,695 + 2,000 = 46,695
Ireland	8,272 + 8,384 = 16,656
Scotland	6,327 + 1,932 = 8,259
Total.....	71,610

If the insane in the Channel Islands and the Isle of Man be added, the total lunacy of the United Kingdom may be approximatively put at 72,000 individuals. Taking the population of England and Wales (in 1862) at 21 millions, the percentage of insanity equals 0·22 of the whole population, or 2 and a fraction lunatics in a thousand inhabitants, or 22 in 100,000. In Ireland the population is estimated at 5,798,967; hence the percentage of lunacy in it is 0·28, and there will not be far short of 3 lunatics in every 1000 people, considering the population has decreased since the census. In Scotland the population in 1861 was 3,062,294, and may be put at the end of 1862, at 3,100,000; consequently the insane are in the proportion of 0·26 per cent., or there are rather more than $2\frac{1}{2}$ persons insane in every 1000, or 26 in every 100,000 of the inhabitants.

I. T. A.

PART IV.—NOTES AND NEWS.

ANNUAL MEETING

OF THE

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE.

The Annual Meeting of this body was held in the Library of the Royal College of Physicians, on Thursday, July 14th, 1864.

Members present:—Dr. Henry Monro (President), Dr. Thurnam, Dr. Boyd, Dr. Fox, Dr. Stewart, Dr. R. Stewart, Dr. McCullough, Dr. Jacobs, Dr. Paul, Dr. C. H. Fox, Dr. Fayrer, Dr. Davey, Dr. Down, Dr. Sheppard, Dr. Kirkman, Dr. Wood, Mr. Sankey, Dr. Robertson, Dr. Maudsley, Dr. Wing, Mr. Terry. Dr. Addison, Dr. Burnett, Dr. Bacon, Dr. Murray Lindsay, Dr. Stephens, Dr. Gardiner, Dr. Stilwell, Dr. Harry Browne, Baron Mundy, Dr. Tuke, &c., &c., &c.

Among the visitors were Dr. Morel of Rouen, Dr. Jules Falret of Paris, Dr. Moore, Dr. Hart Vinen, Dr. Ogle.

Letters of regret, for unavoidable absence, were received from Dr. Skae, Dr. W. A. F. Browne, Dr. Hitchman, Dr. Rorie, Dr. Campbell, Sir Charles Hastings, Dr. Sherlock, and Professor Laycock.

The Chairman.—Gentlemen, I am very sorry to say that you will not have the pleasure of hearing an address this morning from Dr. Skae, who has written to say that he is detained by unavoidable business in Scotland, and regrets that he cannot attend this meeting. I believe it will be in your recollection that last year I accepted the great honour of the Presidentship of this Association, on the special promise that I should not be called upon to read an address to you, so that I am afraid you will have no address at all. But let me observe that, as we meet only once a year, I really think we should occupy all our time in matters of real genuine interest to the Association, and that a long address from any member, however able he may be, comes a little in the way of our practical work. Still, I cannot take this chair without saying a few words to intimate how sensible I am of the great honour of filling an office which has been held by such eminent men as Dr. Conolly, Dr. Sutherland, Dr. Bucknill, Dr. Kirkman, Dr. Skae, and others. I do assure you I feel the honour to be very great. If I were allowed to make any suggestions to this meeting (which I am almost afraid to do, seeing that we have so much already upon our agenda), it would be to call the attention of the Association to something which will place the mental physicians of England in a higher position than they are in at the present moment. I feel that we are a very ill-used body. We have been the constant object of attack from the public. There has recently appeared, a book which I have not read myself, entitled 'Hard Cash,' which has been as I hear, so exaggerated in all that it says that I really think it has done more good to our cause than harm. But I do think that it ought to be our first object to raise, in some way, the standard of our peculiar branch of the profession. Medical men, in general, are sufficiently ill-treated everywhere—in the

army, the navy, or wherever it may be. It does so happen that those men to whom everybody has recourse when he comes to grief are, in the time of prosperity, thought little of, and they are supposed to be highly honoured if they are considered equal to the other officers of their regiment, and so on. But if the medical profession at large has to complain of this, we most especially have to complain of it. I should not have alluded to this point unless I had one or two things in my mind by which I thought our position might be a little raised. I think one great reason why we fail so much, as a public body, is that we have so very few opportunities of meeting together, and doing anything in concert. Through the great zeal and energy of the founders of this institution we have this opportunity of meeting once a year, and through the kindness and liberality of the College of Physicians we have the honour of meeting in this building. Those two circumstances I consider as very happy ones for our speciality; at the same time I think it would be a very fortunate thing if we could meet oftener. It may seem the most impracticable scheme possible to practical men; still I would throw out this suggestion. I should be exceedingly sorry, so long as we remain as we are, that the habit of meeting in this college should be given up; but if we could have a building of our own in this metropolis, or large rooms like the Medico-Chirurgical Society has, and where we could have our own library, and places of call in London, where our friends could have the opportunity of meeting more frequently than once a year; if we could thus get into bricks and mortar, and have a more solid existence than at present, that would help to establish us very much. Of course, one objection to the scheme would be that our friends in Scotland and Ireland and distant parts of England would say, "This is becoming more and more a metropolitan affair," and I feel the weight of that consideration. Again, it may be said that it would be utterly impossible for us to meet often, because we are so scattered a body. I am perfectly prepared to find that the suggestion I make is but little thought of, but I throw it out as something which may possiby help to bring about the end we have in view of making the Association of greater importance. There is another thing also which I feel very strongly, and that is that we are very much the victims of the conduct of attendants. Inquests and trials now and then occur at which we find ourselves in that position, and I think it would be a great gain for us, as well as a great mercy for our poor patients, if we could, in some way or other, raise the standard of attendants. If we had such an institution as I have been speaking of, a part of it might be devoted to the supervision of attendants, and somebody might be resident on the spot whose duty it should be to inquire into the character of those who applied. There are various ways, two of which only I have mentioned, in which greater facilities for meeting, and especially a place belonging to ourselves, might be of great service to the Association. I will not occupy your time any longer. I will only say that perhaps I feel most especially the sort of stigma which the public have thought right to throw upon our department, as I am myself, as many of you are aware, the fifth physician in descent who has made mental disease his study.

Dr. Tuke then read the minutes of the previous meeting, which were confirmed.

PLACE OF MEETING, 1865.

The President.—The first thing which we are called upon to do is to consider the election of President for the coming year. One little matter has arisen, which I must put before the meeting, as we desire to get the opinion of the members on the subject, and we do not wish that the meeting should

think that there are any secrets in the adjoining room. The question now to be brought before you is, whether it is advisable that the annual meeting should always occur in London, or some other place in England, or whether it should not sometimes take place in Scotland or Ireland. It is necessary to discuss that question before we consider the appointment of the next President, because, if we agreed to hold our meeting in Edinburgh, we should most likely appoint as President for the next year a gentleman eminent in the profession in that part of the kingdom; whereas, if we decide that the meeting should be held in London, we should probably choose an English physician.

Dr. Tuke.—Perhaps it would be in order if I proposed, not officially, or in any way dictating to the members, that we meet in Edinburgh next year. The number of our Scotch members is very large, and we have not met in Edinburgh for eight years. We have but few Scotch members present to-day; but I think they will very much desire to see the Association meet again in the north.

Dr. Stewart.—I beg to second the proposition of Dr. Tuke. I was present at the consideration of the question whether the meeting should constantly take place in London or elsewhere; and I admit that there are many reasons why it would be more convenient to meet in London. At the same time I think there are many arguments in favour of meeting occasionally in Scotland and in Ireland; and, in doing so, we should be only adopting the precedent of other societies, like the British Association for the Advancement of Science, and the Evangelical Alliance. I have had the pleasure of meeting Dr. Skae in Edinburgh, and I find that he is held in very high estimation by the profession generally. In a conversation I had with Professor Simpson I mentioned that I was engaged in the speciality of treating the insane, and he instantly referred to Dr. Skae, and spoke of him as a very superior man. We could not have a more delightful or picturesque place of meeting than Edinburgh; and with regard to sociality and hospitality, I know no place equal to it. I feel great interest in the place, having begun the study of my profession there forty years ago, and I shall be very glad to have an opportunity of visiting it again.

Dr. Davey.—I beg to move as an amendment that the next meeting of the Association take place in London. I do this so that the members at large may be able to entertain the question, and express their individual opinions upon it. I do not wish that we should take it for granted that it will be the proper thing to go to Edinburgh next year.

Dr. Burnett.—I beg to second the amendment. When we were in the habit of meeting in different parts of the kingdom, the question was very frequently agitated whether we should not make London a permanent place of assembly. I was one of those who certainly did propose that we should make London a permanent place of meeting, as best accommodating the members generally, and also avoiding any invidious feeling that might arise in moving from one asylum to another, especially when we were in the habit of selecting the physician of the particular asylum we visited to fill the office of President. I remember urging at the time the objection that we should never go through all the counties, and that there were many distinguished members who would never occupy the chair, according to the plan then adopted. The President has remarked that we should do everything we can to promote the welfare of the Association and defend ourselves from the assaults of the public. Now, nothing will tend to give so much strength to any society as union; and I hope, wherever we meet, that feeling will be uppermost in our minds. At the same time we are mortals, and there will arise feelings of disappointment at members being selected under the circumstances in which they have been hitherto been chosen to fill the chair.

Last year we discussed the question of making a permanent President. That would have been a very serious thing, because we are all so short-lived, and the opportunity of paying any compliment to our members would be taken out of our hands, and we should fall into the errors and foibles of societies that have been conducted in a similar manner. I think it would be almost a pity to go back to go our former plan, which did not appear to give satisfaction; and I therefore second the amendment of Dr. Davey. There is another reason why I think it would be better to remain in London; we are talking of bricks and mortar, and of having a place of meeting for ourselves; now, I do not know that there would be any case at all approaching what ours would be if we had a permanent institution in London and went down in a body to meet in the provinces. This is a question that will require a great deal of deliberation, especially as our Association is at present situated. We do not want to encourage any feelings of jealousy towards each other, and we should take care that no opportunity is afforded for doing so. I may also say that we should have a more general opportunity of expressing our opinions individually at these meetings. I do not doubt that there are numbers in the provinces whose reputation is so great that they would have the highest claim to the chair, but I think they are for the most part men who have attained such a position that they would rather not fill the office. It seems to be rather the spirit of great minds not to court prominent positions. For these reasons, I think, it will be far better that the meetings should be held in London, and that we should ourselves have the opportunity of exercising our judgment as to who should be selected as President.

Dr. Robertson.—I would venture to say a word in favour of Dr. Tuke's proposition that we go to Edinburgh, and I would argue the point on the question of finance. The Association is at a large annual expenditure, and of course it depends upon the annual subscriptions of the members, and particularly of new members. The last time we went to Scotland, seven years ago, we had twenty new members, fifteen of whom still remain in the Association. Since then several of the new district asylums have been opened, and their medical officers would, I have no doubt, if they heard of the Association meeting in Edinburgh, be induced to join our ranks. Being a Scotchman, I may, perhaps, be rather prejudiced in favour of the north. I am often in communication with Scotchmen, and I know that there is a strong feeling among the Scotch members that the Association should give them its countenance by meeting again in Scotland. I can promise you a hearty and warm reception, both from the College of Physicians, who would doubtless also place their hall at our disposal, and from the professors of the University. Several professors have assured me that if we go to Edinburgh we may rely upon being very heartily received.

Dr. Fayrer said that the proposal to have a building of their own in London was a cogent reason why they should assemble in the metropolis. He therefore supported the amendment.

Dr. Robert Stewart.—I certainly think that London should be our great centre; but that, in order to create a cordial bond of union, we should occasionally meet both in Ireland and in Scotland. With regard to the proposal of a special building of our own, I think it would lead to the supposition that the society was becoming a strictly metropolitan one, instead of it being what it should be, a peripatetic society. I therefore strongly support the original resolution. I think there are some large provincial towns also, such as Liverpool and Manchester, where we might occasionally meet; at all events, I think it should be a *sine quâ non* that we should occasionally assemble in Dublin and Edinburgh.

Dr. Thurnam.—Our rules are clearly in favour of our generally meeting in London; but the option is certainly given of holding the meetings occasion-

ally at some other places, according as the interests of the Association may consider it desirable. My own feeling is that it would be desirable to go to the other great capitals, and possibly to some of the large provincial towns.

Dr. Wood.—This is a matter of so much importance to the Association that we ought to try and come to some unanimous opinion upon it. I think our rule is a wise one, which makes it the practice to meet in London; but I strongly sympathise with those who think that at least in such a case as Dublin or Edinburgh, there ought to be an occasional exception. That, I think, seems to be pretty nearly the unanimous opinion. The only question to be determined is how often the occasion should arise. If it is seven years since we had the pleasure of meeting in Edinburgh, and there are gentlemen there who have volunteered to entertain us, and expressed a wish that we should go, I think it would be showing some discourtesy to them not to accede to the proposition. I am not prejudiced to one course or the other; but the inclination of my opinion is, especially after what Dr. Robertson has said, that we ought not lightly to reject the proposal of going to Edinburgh on the next occasion.

Dr. Down.—This question should be settled on the basis of fair play. It would be selfish on our part to insist that the meetings of the Association should always take place in the metropolis; and I would suggest that the meetings should occasionally take place in Scotland and Ireland, the frequency being determined by the relative proportion of the number of members.

Dr. Sheppard.—I shall support the amendment of Dr. Davey, because I think it is of great importance that we should always meet where we are likely to secure the largest number of attendants.

Dr. Tuke.—The largest meeting that we ever had was in Edinburgh.

Dr. Sheppard.—I did not say it was not. What I say is, that it is of importance we should always meet where we are most likely to secure the largest number; and I believe that we shall be always likely to get the largest gathering in London. I remember the wretched little meeting we had at Liverpool some years ago. While I have reason to thank the Liverpool physicians for the kind reception they gave us, I am sure it was a matter of intense disappointment to every member that there should be so small a gathering. I remember when Sir Charles Hastings got up and addressed some six or seven members, and I should not like to see the same farce enacted over again; nor, indeed, do I say that such a farce would be enacted in Edinburgh or Dublin. Personally, I should like to visit both of those places, and I believe we should have very successful meetings in either city; but I still adhere to the opinion that London is the place where we ought to meet as a rule. There is one other remark I would make in reference to Scotland. It is an undoubted fact that Scotchmen have largely and extensively attached themselves to our speciality, and peculiarly so in this country; therefore, it cannot be said that by not going to Edinburgh we are in any degree slighting the Scotch members.

Dr. Jacobs.—I think that by varying our places of meeting we are most likely to obtain a large accession of members to the society, and new blood is very desirable in every association. If we meet constantly in London I am afraid the Association will be in the hands of a few, and that the members will gradually drop off.

Dr. Kirkman.—If we went to Edinburgh it would entail a great expense on a number of members, and I question whether we shall gain more by the members who are likely to join us there than we should lose amongst those who would not go. I certainly understood that it was almost permanently settled some years ago that we should meet in London. I shall certainly support the amendment.

The President.—May I be allowed to say one word before putting this question to the vote? As I explained in my opening remarks, the great object I think is that this Association should have more frequent opportunities of meeting—that we should, in point of fact, be bound together more into one body, instead of being separated all over the country. If there is anything in the suggestion which I threw out in regard to the question of bricks and mortar, our going about to Ireland and Scotland would very much interfere with the utility of that proposal. I am in favour of meeting in London; and I think with Dr. Sheppard that the Scotch members, at least, cannot consider themselves ostracised in any way, when it is considered how large a proportion of offices in connection with county asylums they hold.

The meeting then divided, and the result was as follows:

In favour of Edinburgh, 15 votes.

In favour of London, 15 votes.

Dr. Tuke stated that the President had voted in favour of London, so making an equality of votes. He considered that the majority was in favour of Edinburgh, and that the Chairman should only give the casting vote in the event of the numbers being equal.

Dr. Thurnam considered that the President was entitled to the casting vote in addition to his vote as an ordinary member. He also thought it would be an invidious thing to meet in Scotland upon a small majority of one against the feeling of so large a number of members.

Dr. Wood said he assented to that view.

The President.—If I have a right to vote a second time, I shall give my casting vote in favour of meeting in London.

The amendment was then declared to be carried.

ELECTION OF PRESIDENT.

The President.—The next question for consideration is the election of President for the ensuing year. The Council do not desire to take the initiative in the matter, and perhaps, therefore, some member will propose any gentleman he thinks best fitted for the office.

Dr. Davey said it was understood that future elections of President should be by ballot.

Dr. Tuke said he certainly understood that the election was to be by ballot, but that the names were to be proposed and seconded as usual.

Dr. Davey objected to that course. The proper method would be for each member to write the name of any gentleman upon a slip of paper without any previous proposal.

Dr. Thurnam asked if Dr. Davey was quite correct in his interpretation of the society's rule. It would be a great convenience to the members to have some gentleman proposed before his election, otherwise they might vote in the dark.

Dr. Tuke said he was anxious to follow past precedents. The Association had been well governed for seventeen or eighteen years on the old plan, and he did not think a new one was likely to conduce to harmony. He begged to move that Dr. Wood be President for the next year.

Dr. Davey protested against the course adopted by Dr. Tuke, as not being in accordance with the society's rule.

Dr. Wood.—It appears to me altogether opposed to the practice of every scientific society that a question of such importance should be left open in the way proposed. Thirty or forty names may be brought before us, and how are we to determine amongst them who is the proper person? It may even turn out that the gentleman elected may decline to accept the office

and then what would our position be next year? I think the Committee should at any rate go through the preliminary work of ascertaining whether the gentlemen who may be proposed will accept the office. I think it is impossible to come to any satisfactory conclusion if each person is to be at liberty to vote for any separate candidate he may think fit. It appears to me that one of the chief functions of the Committee is to suggest the proper officers; it being, of course, open to the members to substitute any others.

The President.—The reason why the sub-committee have not acted in that way on the present occasion is, that there was a feeling expressed last year that it took too much on itself.

Dr. Thurnam asked if honorary members were eligible to the office of President.

The President said he thought that they were not, but he would take the opinion of the meeting upon the subject.

The question was then submitted to the meeting, and decided in the negative.

Dr. Wood suggested that the Committee should meet and decide upon the names to be submitted to the meeting.

The President seconded the nomination of Dr. Wood.

Dr. Burnett.—I beg to propose Dr. Thurnam.

Dr. Thurnam said that he had already filled the chair.

Dr. Burnett said he had always understood that the President should be selected one year from gentlemen in private practice, and the next from officers of county asylums.

The ballot was then taken, Dr. Maudsley and Dr. Robertson being appointed scrutineers.

The President announced that the election had fallen by a very large majority on Dr. Wood.

Dr. Wood—I feel very much flattered by the honour which the Association has conferred upon me. It is certainly one for which I was entirely unprepared. If I had had a choice in the matter, I should have preferred that some gentleman connected with the provinces had taken the next turn. However, as it is the will of the Association that I should endeavour to fill the chair which has been so ably occupied by others, I will do my best; and I have only to thank you sincerely for the honour you have conferred upon me.

Dr. Paul read the Treasurer's report, which was as follows:

THE TREASURER'S ANNUAL BALANCE SHEET,

July, 1864.

EXPENDITURE.	£	*s.*	*d.*
By Annual Meeting in July, 1863 . .	17	7	8
Editorial expenses (one year) . . .	37	14	6
Printing and publishing four numbers of the Journal	150	5	9
Sundries—			
of Treasurer	1	0	0
of Secretary for Ireland (two years) .	1	4	10
of Secretary of Scotland . .	0	3	0
of General Secretary (two years) . .	5	10	6
	213	6	3
By Balance of Treasurer . . .	39	15	5
of Secretary of Scotland . .	18	15	0
	£271	16	8

RECEIPTS.	£	*s.*	*d.*
By Balance of 1862	60	3	8
of General Secretary . .	6	6	0
of Secretary for Ireland . .	26	5	0
	92	14	8
By Subscriptions received—			
by Treasurer . . .	133	5	0
by Secretary for Ireland . .	25	4	0
by Secretary for Scotland . .	18	18	0
Dr. McIntosh for engravings .	1	15	0
	£271	16	8

ROYAL COLLEGE OF PHYSICIANS;

July 14*th*, 1864.

Examined and found correct,

(Signed) JOHN KIRKMAN.

The report was unanimously received.

Dr. Sheppard proposed that Dr. Paul be re-elected Treasurer.

The proposal was seconded, and unanimously adopted.

Dr. Thurnam proposed the re-election of Dr. Robertson and Dr. Maudsley as Editors of the Journal. He said the members had no alternative, that they would be stultifying themselves not to re-elect the present excellent Editors, who conducted the Journal with so much credit to themselves and to the Association.

Dr. Robert Stewart seconded the motion, which was unanimously agreed to.

Dr. Sheppard proposed the re-election of Dr. Tuke as Secretary. He was quite sure that the Association would be only too glad to avail itself of that gentleman's valuable services.

Dr. Robert Stewart seconded the motion, which passed unanimously.

Dr. Tuke.—I am much obliged to you for re-electing me. It is a great pleasure to be officially brought in contact with the members of the Association, amongst whom I have many warm friends. I trust that any remarks I may have made in my conservative views as to the management of the Association may be taken as an expression of my earnest feelings for its advantage.

Dr. Kirkman proposed the re-election of Dr. Robert Stewart as Honorary Secretary for Ireland.

Dr. Wood seconded the motion, which passed unanimously.

Dr. Robertson proposed the re-election of Dr. Rorie as Honorary Secretary for Scotland.

The motion, having been seconded, was unanimously agreed to.

Dr. Robertson proposed the re-election of Dr. Helps as Auditor, and the election of Mr. Sankey in the room of Dr. Kirkman.

Dr. Maudsley seconded the motion, which passed unanimously.

Dr. Robertson proposed the re-election of the Members of the Council, with the exception of the two senior members, Dr. Burton and Dr. Gilchrist, for whom he proposed to substitute Dr. Duncan and Dr. Sibbald.

Dr. Maudsley seconded the motion, which was unanimously agreed to.

The following new members were then elected:

Edward Moore, M.D., Victoria Park.
Alonzo Stocker, M.D., Grove Hall, Bow.
Cornelius Black, M.D., Chesterfield.
James Ellis, M.R.C.S., St. Luke's Hospital.
John Robertson, L.R.C.P., County Asylum, Hanwell.
Edward Rutherford, M.D., Perth District Asylum.
William Stockwell, M.R.C.S., Millholme House, Musselburgh.
George Bodington, M.D., Sutton Coldfield.
John Foster Reeve, M.D., London.
John Hansell Brown, Esq., Grove Hall, Bow.
Thomas Bigland, Esq., Kensington House, London.

The following honorary members were also elected:

Thomas Watson, M.D. Cantab.; F.R.S.; President of the Royal College of Physicians, London.
Alexander Tweedie, M.D. Edin.; F.R.S. F.R.C.P., London.
Professor Griesinger, M.D., Zurich.
Dr. Kirkbride, Philadelphia.

Dr. Stewart proposed the election of Mr. Blake, M.P., as honorary member; but, previous notice not having been given, according to the rules, the proposal was necessarily deferred until next year.

Dr. Tuke said he had received a complete set of the asylum reports for

Suffolk, and Dr. Robertson had promised him the Hayward's Heath reports. From Dr. Tuke, of Falmouth, he had received a parcel of pamphlets containing some interesting plans for the building of the Retreat at York, some papers connected with the establishment of that asylum, and a copy of Samuel Tuke's 'Translation of Jacobi.' He moved that the thanks of the Association be given to the donors; and requested that members having odd numbers of reports would send them to him for the purpose of completing his sets.

The vote of thanks passed unanimously.

Dr. Tuke.—In deference to the wishes of some of our members, the Council did not propose a President this year; they would otherwise have nominated Dr. Daniel Tuke and Dr. Williams, the Consulting Physician of the Gloucester County Asylum. I certainly think that the Council are better choosers than a meeting of a large number of the society is likely to be, and that it would have been better to have proceededupon our old plan. I wish now to put it on record that these two gentlemen would have been recommended by the Council, and the only thing I regret is that their state of health would have, in both cases, prevented their accepting office.

The President said the next business was to receive

THE REPORT OF THE COMMITTEE ON THE SUPERANNUATION CLAUSE.

Dr. Robertson.—I may state that we had, in December, a meeting by appointment with the Commissioners, but they only gave us forty-eight hours' notice, so that we were driven somewhat irregularly to draw up a report, which all the members, especially the chairman, had not seen. The Commissioners received us extremely well, and expressed their sympathy with us. They assured us that on the first occasion when any amended Bill, or any consolidation of the lunacy laws, should be brought before the House, they would give careful consideration to our wishes, and endeavour to put the superannuation clause on a better footing. They then asked what suggestions we had to make, and, not having had the opportunity to discuss the subject before, I ventured on a suggestion of my own, which, however, did not meet with the approval of Dr. Kirkman. Our proposal now is, that you reappoint us for another year, in order further to consider the question, and, should any legislation arise next year, to take steps in the matter.

Dr. Kirkman.—The object of my seeking the appointment of the Committee was to render the superannuation clause a compulsory enactment, as I think anything short of that would not be satisfactory to the superintendents of the county asylums. Under the circumstances I should be glad of more time; and I think that there should be an addition to the members of the Committee, and that they should be more closely located, so that they might have more frequent opportunities of meeting.

Dr. Maudsley proposed the reappointment of the Committee.

Dr. Sheppard moved that Dr. Maudsley's name be added to the members of the Committee.

Dr. Kirkman seconded the proposal.

The Committee was unanimously reappointed, with the addition of Dr. Maudsley.

Dr. Robert Stewart hoped that the Committee would take Ireland into consideration as well as England.

Dr. Thurnam thought that object would be secured by the addition of Dr. Stuart's name to the list, which he accordingly proposed.

Dr. Davey seconded the motion, which passed unanimously.

Dr. Sheppard proposed that a list of the members of the Association should be published with each number of the Journal.

Dr. Robertson stated that the list had been omitted as it occupied so much room. The editors were limited to ten sheets, and the list of the members occupied one sheet.

The proposal was seconded by *Dr. Davey*, supported by *Dr. Thurnam*, and unanimously adopted.

REVISAL OF THE RULES.

Dr. Davey stated that last year a Committee, consisting of Dr. Kirkman, Dr. Thurnam, Dr. Robertson, Dr. Sheppard, and himself, was appointed to consider an alteration in the rules. The altered rules were, he believed, in the hands of Dr. Tuke, and he suggested that they should be laid before the meeting.

On the motion of *Dr. Tuke*, seconded by *Dr. Davey*, the consideration of the question was deferred till the afternoon meeting.

RESOLUTIONS PROPOSED BY BARON MUNDY.

Baron Mundy.—I beg to claim for a few moments your kind and serious attention for the support of my motion, which I now abstain repeating, having placed it before you in print.

Excuse a personal explanation:

Family circumstances, whose chief origin can be traced in mental science, have only permitted me, when more advanced in years, to devote my life and labours to our speciality, for which I felt from my youth an instinctive impulse.

After indefatigable studies in the theory and practice of our science I visited repeatedly, with open eyes and impartial mind, a considerable number of asylums in Europe.

I stopped for a long or short time in these institutions, and took advantage to be present at their clinical investigations, joining the instructive studies and conversation of my colleagues.

The melancholical asylum life of the sequestered insane, and the millions which are swallowed up by these institutions, attracted me impulsively to the particular study of the only part of the world in which nearly 1000 insane are allowed to live in free air and liberty, in the midst of sane people and their families, for a very small outlay.

Here, after laborious studies of months, and after careful comparisons with these principles and the actual existing general practice in asylums, I became a zealous advocate of non-sequestration and family treatment.

Where should I have gone to correct and complete my studies, if not to England, where this half Herculean work was already done, through the practice of "non-restraint"?

I have passed the greater part of my time during the last four years in your country, occupied with constant studies of your asylum practice and management.

I never went, either in this or any other country, before a Committee, a Board of Commissioners, or any other official or governmental persons who were engaged in lunacy matters; much more, I abstained from making their personal acquaintance.

I never spoke in public about the reform which I advocate, if not before medical men or corporations, who have exclusively devoted themselves to our speciality. I also strictly abstained to write in a popular way on this question, and my few publications are articles only written in different medical journals, chiefly those of mental science.

Offers to realise the practice of the system which I defend, by voluntary contributions or shares, I have often refused, and will do so in future.

My first aim is to reserve the triumph of this cause to a medical corporation.

With such principles, gentlemen, you certainly will not accuse me to jeopardise the reform question.

These words I spoke to what I may call *the moral support* of my resolution, and you will certainly excuse this necessary diversion.

Passing on to *the material or scientific* support of my motion, I fear you will, perhaps, be shocked by the great extent which I have given to my questions; but you will, at the same time, admit that a subject of such a magnitude cannot be restricted to a few words, and if, as I believe, the time is ripe to solve these questions, with all their consequences, you should not be shaken and lose courage through real or imaginary difficulties.

In regard to the first question, we all agree that the present system "does not answer satisfactorily to the exigencies of the social, medical, and economical science of our time."

Also when we abstain from going to extremes, and when we are unwilling to accept the correctness of a modern assertion of some psychologist, "that insanity is *ipso facto* a termination of a disease, and therefore incurable," we certainly cannot be satisfied with the present result of our therapeutic.

Many believe that the life in asylums is a most important therapeutical agent; others are again of the opinion that sequestration, centralisation, and other evils in asylums, cannot counterbalance this alleged boon; also the condition in which a great part of the insane are kept in England, and more especially on the Continent, is certainly not so good as science and humanity imperatively require.

The social law and human freedom is apparently damaged through the actual practice of *indiscriminate sequestration* of the insane.

Further, the economical principles which are now adopted by the erection of asylums and their management, are by no means in proportion to the results, and menace by-and-by to ruin the fortunes of the sane population, or to injure real humanity.

Touching at the second question of my motion, no psychologist will deny the facts that the existing law for the insane wants, in all countries throughout the world, a radical reform, and specially *the medico-legal part* of it, being actually contradictory, not only to our science, but altogether to common sense.

It is now the fashion to make psychologists, when experts, responsible—I need not say how unjustly—for the different monstrous consequences which from time to time result out of these bad laws. You will certainly spare me to quote here the striking instances of the last time.

This fashion went yet so far that every vulgar periodical writer has become so impertinent as to assert in his paper that "*our science does not exist at all*, and that any one who has some little common sense could judge correctly in matters of insanity."

Indeed, every snob has now become accustomed to sneer at "mad doctors."

A good and radical reform in the administrative and legislative part of our science will never be introduced by Parliament, or any other legislative corporation, neither in your country nor in any other, if we not prepare the path.

The latest debates on the Criminal Lunatic Amendment Act in your Parliament give sufficient proofs of this.

I may venture to pass such censure, having been constantly present at these debates.

Gentlemen, you will also not forget that in many parts of Europe there exists, at present, no lunacy law at all, and that the outcry for the necessity of such a law has become general.

Here I could mention to you again many facts, but it was certainly not my intention to enter into details to-day, and therefore I go on to ask you at once if it is not also a fact that the general, and especially the clinical, instruction in mental science is now utterly neglected, and, more than that some medical men feel even proud to ignore our speciality.

I will pass in silence the melancholy consequences of such a state, which can only be altered by your energetic interference.

I further venture to ask you, gentlemen, if you can agree with the actual practice of control over asylums and their management.

This question I would have liked to be answered principally in regard of the postulation in our science, and the position of their representatives, I mean "the medical superintendence of asylums."

Concluding with my third question, permit me to explain to you in which way, with submission, in my opinion, the proposed Committee should come to issue:

Elect a President, and for every question three reporters, for instance—

For the medical and social part of the first question—Drs. Maudsley, Sankey, and Skae.

The economical part of the first question could be, perhaps, solved by Drs. Robertson, Hitchman, and Caleb Williams.

Choose as reporters for the second question such men as may suit best. The collective propositions of these reporters in the summing up of the President of this Committee will be the final answer to the third question.

These reports, with the President's opinion, should be printed in a separate or extra number of our Journal, *in extenso*, which should be ready for the next April.

Nine months will certainly be sufficient for such labours, and three months for the consideration of the members.

Next year, in July, we could finally fight out, at our general meeting, this great war of opinions.

There we should make a pact for the future, a scientific, healthy, and practically useful agreement, which certainly will promote the benefit of our scientific honour and interests.

Indeed it is high time! Or do you prefer to be sneered at like "Olim," the Roman Haruspices!

Pardon me, that I have been candid, laying aside for a moment the fallacious mask of common courtesy, and this in the true interest of positive and practical science.

Do not let me despair, that the motion which I lay before you perseveringly but honestly, and with a practical aim, will again fall to the ground.

Science is undoubtedly cosmopolitical, and I cannot believe that a medical body should refuse a proposition only for the simple reason that it originates from a Patagonian or Moravian.

Baron Mundy concluded by moving the following resolution:—"That in the interest of the present and future conditions of the asylums, and in that of the theoretical and practical progress of phrenopathy, a special Committee shall be appointed to draw up a report on the following questions, and that the same shall be laid before the next annual meeting for general discussion and final resolution.

"I. *Question.*—Does the present system in the cure and treatment of the insane, and in the management of asylums, such as is practised in England and on the Continent, answer in every respect satisfac-

torily to the exigencies of the medical, social, and economical science of our time; and does this system attain its practical aim in the cure of curable and the welfare of incurable insane patients?

"II. *Question.*—Is there no defect at present—

(*a*) In the general law for the insane, including the medico-legal part of it?

(*b*) In the general, and especially in the clinical, instruction in mental science?

(*c*) In the administrative and executive form of control over the asylums as now practised, both on the part of Government and that of other corporations?

"III. *Question.*—What practical propositions can be recommended to our Association by the members of this Committee to redress the sad conditions which necessarily must be reported in answer to the first and second questions, and how can these suggestions be carried out?"

Dr. Robertson seconded the motion.

Dr. Tuke.—I regret that, on a former occasion, when this subject was mooted, and I was asked to be a member of the Committee, I expressed an opinion that it was a most absurd and Utopian scheme, which might be considered to be a rude expression towards my esteemed friend Baron Mundy. I hope he will allow me to withdraw it. I shall be happy to work on the Committee if one is appointed. Although I do not agree with Baron Mundy as to the practicability or possibility of carrying out the cottage system or the patronal system in England, I still think the subject is worthy of examination, and I will do the best I can to arrive at a proper conclusion respecting it.

Baron Mundy.—I never considered the words used two years ago, in this room, by Dr. Tuke, in a serious light. In France and Germany the expressions were regarded in that sense, and Dr. Tuke and I have been accordingly regarded as personal enemies. Everybody here knows that we are intimate friends, and that I have the greatest respect for him and for the management of his asylum, which I often have an opportunity of seeing. I beg to say that the apology of Dr. Tuke, with regard to myself personally, was quite superfluous; but I am much obliged to him for it.

The appointment of the Committee proposed by Baron Mundy was deferred till the afternoon meeting.

The meeting then adjourned.

AFTERNOON MEETING.

The members reassembled at three o'clock.

The following members were appointed on Baron Mundy's Committee:—Dr. Down, Dr. Kirkman, Dr. Maudsley, Dr. Monro, Baron Mundy, Dr. Robertson, Dr. Skae, Dr. Henry Stewart, Dr. Thurnam, Dr. Tuke, and Dr. Wood.

Dr. Tuke.—I have in my hand the revised laws sent to me by the members of the Committee appointed last year. There has been no meeting of this Committee, but a copy was sent to each member, and it has been returned to me with some verbal corrections and three additions to the rules, principally with reference to the election of President by ballot. As we have already had a long discussion, and as the time of the meeting might be better employed this afternoon than by going again over these laws, I would propose, if convenient to the members, to postpone the discussion altogether till next year, asking the Committee to report upon the rules, which they have not yet done. The alterations that have been made are of a very

unimportant nature, and I think the Committee might have made suggestions as to several more necessary changes.

Dr. Davey said he did not think the alterations were of an unimportant character.

Dr. Tuke said they were already in the bye-laws, and the only result of accepting the emendations would be to transfer the proposed regulations from the manuscript bye-laws to the printed rules.

Dr. Davey said he was willing, as a member of the Committee, to postpone the formal consideration of the rules till next year.

Dr. Thurnam said he should not have attended the meeting had he not supposed that the matter would be determined. It was desirable that no uncertainty should exist with regard to their laws.

Dr. Maudsley said that many of the members of the association did not know what the proposed alterations were. It would be much better to postpone the consideration of the question in order that the rules with the proposed alterations might be printed on the *agenda*, and that the members might have an opportunity of knowing what they were required to vote upon. He proposed that the consideration of the rules be postponed till the next annual meeting, and that the alterations be then printed in the *agenda*.

Baron Mundy seconded the proposal, and it was unanimously adopted.

Dr. Tuke said that, as his resolution would probably occupy some time, and involve a discussion, he would, if permitted, propose that the paper of their distinguished foreign visitor Dr. Morel should take the precedence.

A paper on the present state and future prospects of Psychological Medicine was then read by M. le Dr Morel, Médecin en chef de l'Asile de St. Yon, Rouen. [This paper will be found in *Part I. Original Articles*, of this Number.]

A vote of thanks to Dr. Morel was passed unanimously.

Dr. Tuke.—The resolution I am about to propose, will probably appear to most of us present, as the mere enunciation of a truism. I have, in the paper I hold in my hand, collected a number of cases, to prove that that which seems to us, to whom the symptoms of mental disease are familiar, so very simple, is by no means generally understood; and I believe that a declaration of our views upon the subject may be productive of much good. I do not know that we can do anything more useful at our meetings, than discuss such questions. You will remember the very interesting debate last year, upon the resolution of Dr. Robertson, as to the expediency of removing the patients at Bethlehem into the country, which resulted in an unanimous vote in its support. I propose to day to elicit your opinion upon the legal test as to the responsibility of lunatics, which is familiar to you, and which has recently so much engaged public attention. I shall not take up the time of the association by reading my paper, but in a few words introduce my resolution.

An excellent illustration of the necessity for some further education of the popular mind upon the subject of criminal and especially homicidal insanity, is afforded by the case of McNaughten, and the proceedings which followed his trial: McNaughten was proved to have murdered Mr. Drummond under the influence of a delusion; the then Attorney-General, Sir William Follet, as prosecutor for the Crown, put the following question to the late Dr. Monro, who had given evidence of the prisoner's insanity:—"May the insanity exist with a moral perception of right and wrong?" It was at once answered, that such a coexistence is very common. Chief Justice Tyndall, in summing up the case, after carefully laying down the law, that the test of responsibility is whether a man has mind enough to distinguish between right and wrong, said to the jury,—"But I shall leave this point to you alone, one thing has struck me in the medical evidence, the whole of it is on one side, there is no part which leaves any doubt upon my mind." The result of such

an opinion from the Bench was, of course, the acquittal of the prisoner, on the ground of insanity; and, I think, looking at the case after a lapse of twenty years, that there can be little doubt that the verdict was just and thoroughly consistent with that dictum of the great English lawyer, Sir Edward Coke, who said that to punish a madman is useless, and the execution of a lunatic a "sorry sight to see." This verdict, however, was followed by a storm of popular indignation. and even our then greatest lyric poet, broke out in some verses in the 'Times,' not, I am happy to say, included in his collected works, which are more rhythmical than reasoning, and are certainly unworthy of the muse of Thomas Campbell; his opinion would not be endorsed by his successor, as great a poet, and from his special experience, a better authority upon such a question. In consequence, or at least subsequent to this pressure from without, came the questions in the Lords, and the elaborate answer of the Judges, since so constantly quoted in criminal trials, in which the knowledge of the difference between right and wrong is laid down as the sole test of responsibility. It is curious to find that the Judge who, as senior, read this decision to the Lords, was the very Justice Tyndall, whose humanity had saved McNaughten, as it would appear in contradiction to the law, which demanded his execution.

It is this clashing between an antiquated law rule and simple humanity, that has led me to bring the subject before you; it is obvious that the test as to right and wrong, if strictly applied, should result in nearly every lunatic who commits a murder being hanged, but as this would be rather too much even for lawyers, they have hit upon a course which seems to me to be repugnant to our notions of justice. One Judge will force from the medical witness the admission that the lunatic knows right from wrong, and then will tell the jury they must find a verdict of guilty, whether the man is insane or not. A second judge will rule the case as in McNaughten's trial; and a third, after having condemned the prisoner, will write to advise a remission of his punishment on the ground of his insanity. A conscientious judge, in many cases, must find it impossible to carry out to its full extent the severity of the law; they practically do not act upon it; nevertheless, the counsel for the Crown will sit down satisfied if he can drag from the medical witness an admission that the prisoner, for whom he appears, knows right from wrong, although he may be suffering under absolute mental disease. This same counsel, when a judge, will take care that homicidal lunatics are not generally punished with death, and, in point of fact, the law is almost a dead letter, not on account of the "crotchets of mad doctors" or the want of clearness in the written law, but on account of the merciful consideration of judges and jurymen, who will spare themselves if they can, that "sorry sight," as Coke calls it, the execution of a lunatic. It can be shown statistically that my statement is correct. During the last five years no less than *eighty* murderers have escaped capital punishment upon the plea of insanity. The number among these who had mind enough to know right from wrong we cannot estimate, but certainly the greater part must have been able to do so, and were therefore spared contrary to the law of England. Than that this anomaly should continue it were better to abolish capital punishment altogether.

The resolution I will ask you to discuss bears only upon the one point, that the presence of a knowledge of the difference between right and wrong is no proof of sanity; it leaves the question open as to the true test of responsibility. To me, I confess, it would seem intolerable that such a man as Townley should escape punishment, and absurd to suppose that a man sane enough to manage his affairs, should be allowed to commit murder with impunity, because he thought himself a tea-pot. Each case must be judged by its own merits. With our increased knowledge of the nature and symptoms

of mental disease, the time may come when we can with certainty mete out even-handed justice, as it is I am sure that the present test of responsibility is practically useless, and founded upon an erroneous idea of mental derangement. I beg, therefore, to move the following resolution—"*That so much of the legal test of the mental condition of an alleged criminal lunatic, which renders him a responsible agent because he knows the difference between right and wrong, is inconsistent with the fact well known to every member of this meeting, that the power of distinguishing between right and wrong exists frequently among those who are undoubtedly insane, and is often associated with dangerous and uncontrollable delusions.*"

Dr. Jacobs seconded the motion.

Dr. Morel said he was quite astonished to find it to be the law of England that when a man has a knowledge of what he has done, he is perfectly responsible. Many of their patients, especially of the class "*delirants par persecution,*" had a complete idea of what they were intending to do. There were many who had no idea of their actions, who were instinctive, like the epileptic. The best way of ascertaining if the act of an insane person corresponded to a particular trouble or disorder of the mind, was to study the nature of the act in relation to the particular malady or trouble. Different classes of insane persons had different ways of arriving at their purpose, and in studying the nature of the acts, and the modes in which they were performed, we might be able to ascertain whether a man acted in a state of insanity or not.

The President said that the knowledge of right and wrong was not only frequent among the insane, but was very general, except in cases of acute mania, profound dementia, or cases where a delusion was so strong as enentirely to absorb the mind.

Dr. Davey said he thought it would be well, in connection with the resolutions proposed by Dr. Tuke, to allude in some way to the answers given by the judges in 1842, in the case of Daniel M'Naughton, and which were intended to convey the present state of the law as regards the responsibility of the insane. Those answers were a disgrace to the legislature, involving a series of errors, and tending to the perpetuation of false views concerning insanity and responsibility. Upon them depended the fate of many an unhappy lunatic. We were accustomed to see lunatics dragged to the gallows, and transported for life, in consequence of the false views entertained on the subject. He thought the course suggested was a very proper one, and he had no doubt it would be attended with the best effect.

Dr. Tuke said that the judges did not express their opinion, but merely expounded the state of the law, which, he believed, they must have done with regret. They gave no opinion on the subject; they gave their views as to meaning and force of the statutes bearing upon the subject, even this not unanimously. The resolution that he had proposed does not impugn the decisions of the judges, but merely aimed at exposing the mistaken view of a purely psychological question, upon which the legal test of insanity is founded. This idea as to being a test of a knowledge of right and wrong is almost as old as the statute law itself; and, although it is so constantly quoted as the opinion of the judges, they in fact only laid down the law as they found it. Two hundred years ago, Chief Justice Hale, in his 'Pleas of the Crown,' laid down the same rule, in almost the same language, "if the accused," he says, "is able to discern the difference between good and evil, then upon the fact proved, the judgment of the law must take place." It was not, therefore, the decision of the judges, that his resolution sought to impugn, but the rule of the law which forces them sometimes to inflict sentences which sometimes appear to be legally rather than morally just, and are moreover often inoperative.

Dr. Maudsley said that one objection to giving the questions and answers in connection with the resolution was, that one part of the answer of the judges contradicted another, and the whole was completely unintelligible.

The resolution was uanimously agreed to.

The following paper upon the "advantage of the cottage plan over all others for the accommodation and treatment of the insane" was read by Mr. E. Toller. [This paper will be found in *Part I. Original Articles*, of this Number.]

The President.—Probably you will wish to discuss this interesting paper as well as that of Dr. Morel. It is well that we should distinctly bear in mind that that the two schemes brought before us are perfectly distinct, although both have been called "the cottage system." The scheme just brought before us is one for the building of small asylums instead of a large one. There are many asylums in which there are only fifteen patients, and this assemblage of small asylums cannot be looked upon in the same light as Dr. Morel's scheme for the treatment of the insane at their own homes. It is important in the discussion of these papers that we bear the distinction in mind.

Baron Mundy said that on the occasion of the previous discussion on the subject, Dr. Monro inquired what was meant by the cottage system, single houses, small asylums, or large asylums, with detached cottages? He (Baron Mundy) abstained from giving an answer to the question, as it could not be given in a few words, and it was then proposed that the discussion should be adjourned. The cottage system be understood to be that which was first carried out in England by Dr. Bucknill about ten years ago, when he was superintendent of the Lunatic asylum at Axminster, where he placed a number of patients among the families in the neighbourhood, beginning with eight, and afterwards increasing to thirteen. The system was a good deal discussed, and it was tried to a certain extent in Scotland, but not fully carried out. Dr. Bucknill's treatment was followed by the best results. The system was afterwards adopted by Dr. Robertson at Hayward's Heath, where he had six out-patients in cottages, placed with families at shorter or longer distances from the asylum. Dr. Robertson would, no doubt, be prepared to endorse his (Baron Mundy's) opinion that the system answered very well. The system recommended by Dr. Toler was of a more extensive character, embracing cottages to contain fourteen or fifteen patients There were many private asylums in the country containing a small number of patients, and which might be considered as being conducted on the cottage system. The system of having detached buildings from the main asylum was not properly included in the cottage system. The meeting certainly would not have time to discuss these various methods, and he would not attempt to enter into the question. The system of placing the insane in villages should rather be called the colonization system. If the proposition he had made to the meeting should be carried out, these different systems would be examined, and detailed reports would be presented to the members on a future occasion.

Dr. Fox said he did not think that the instances referred to by Dr. Mundy formed a fair test of the cottage system, because both Dr. Bucknill and Dr. Robertson had had the opportunity of selecting their patients from large asylums. The system could not be said to be applicable in the case of violent maniacs, but for harmless imbeciles, no doubt, it might be successfully adopted.

Mr. Toller said that he proposed a small block of three cottages to be specially appropriated to the more severe cases.

Dr. Fox said he was not prejudiced against the system, but it was obvious that the gentlemen who had been named had had most favorable materials to work upon, having had the opportunity of making a selection.

Dr. Mundy said he did not deny the necessity of a central asylum; and it was essential in making the experiment that cases should be selected. He never generalised, or stated that all patients could be treated on the same system.

The President said there appeared to be a general agreement as to the propriety of having small detached houses in connection with large asylums. Dr. Morel's view, however, appeared to be that the whole system of asylum practice was unadvisable, and that the domestic scheme should be adopted.

Dr. Robertson said that an effort was made last year in an Act of Parliament to give the unions power to open lunatic wards where it was thought chronic cases might be placed. A subsequent Act, however, to amend the previous one, required any unions opening such wards to receive patients from every union in the county. It was obvious that no Board of Guardians would consent to accommodate patients belonging to other unions, so that the enactment is a dead letter. Considering the great increase in the number of insane persons, the question should be carefully considered. It appeared from the statistics, carefully prepared by Dr. Boyd, that of every 100 patients admitted during fifteen years into the Somerset Asylum, 36 had been discharged cured, 8 relieved, 30 died, and 26 remained; so that in county asylums admitting 150 patients a year there was a steady increase of from 30 to 35 patients a year. The result was that most asylums were full. Finding his own asylum in that condition he (Dr. Robertson), at Dr. Mundy's suggestion, tried the cottages, on a small scale; two with three patients each. Curiously enough, the patients preferred the asylum, principally in consequence of the better diet. In the asylum the food was carefully distributed, but in the cottages the patients were at the mercy of the attendants; and though he allowed eight shillings a week for food alone, there were constant complaints on the score of diet. The great value of asylums, which ought not to be overlooked, was to be found in the power of supervision by the principal officers.

Mr. Toller said he did not advocate the placing of patients with persons who were paid for their board. By his proposed plan the attendants were all under the authority of the superintendent, as in the case of large asylums, and a uniform diet was established for all with the exception of those cases to which he had referred that might admit of a slight diminution.

Dr. Robertson said it appeared that at the end of twenty-five years there remained fourteen patients out of every hundred admitted. He was disposed to think that Dr. Bucknill's plan was the best—that of small blocks for chronic cases. He did not, however, see any objection to enlarging county asylums where there was plenty of land, even to the extent of accommodating 1000 or 1500 patients. He had seen some handsome blocks at Brentwood, but they were fitted up in rather a costly manner he thought, at a total cost of about £125 for each patient. He believed that detached blocks built in an economical manner formed the most satisfactory mode of meeting the accumulation of chronic lunatics. With regard to the domestic mode of treatment, that might be carried out round the asylums, or else throughout the country where the patients lived, in their own villages where they were known and would in a measure be protected by the public feeling and opinion. In Scotland a large number of pauper lunatics were boarded in that way, and the system was carried out under the supervision of the Scotch commissioners. Cottages were licensed for from three to five patients, who were visited by deputy commissioners at least once a year, and reports were made on every patient. Notwithstanding his friend Dr. Mitchell's statements in his recent work he (Dr. R.) viewed the whole system with grave suspicion. He doubted much whether the people had yet, even in Scotland, reached that state of progress in which they might safely be entrusted with the care of their in-

sane relatives. Cupidity, fear, and ignorance were strong motives of action with the masses, and he (Dr. R.) for one would hesitate before he submitted the insane poor to such hostile influences. On the contrary, he believed that rich and poor alike still required the safeguards which public asylums for the insane alone afforded. Mr. Toller's paper he viewed as an interesting contribution to the extension of that system. He begged to congratulate him on this his first appearance before the Association as a contributor to their papers.

The President said he should like to ascertain the opinion of the meeting with reference to Dr. Morel's plan of treating the insane in their own homes.

Dr. Morel said that the cottage system had been adopted in the asylums near Rouen, but only for the higher class of *pensionnaires payants*. He was glad to find that Baron Mundy was not exclusive in his system, because it France he was generally considered to be so. He appeared now to admit that there would always be a certain number of patients for whose accommodation an asylum would be necessary. They should learn from all systems; but he thought it necessary that there should be a renovation of the entire system of building, as well as a renovation of the modes of studying mental disease; profiting always by the experience of the past.

Dr. Tuke wished to know whether the cottage system was proposed for poo only, or for the higher ranks of society.

Mr. Toller said that his scheme was designed entirely for paupers, and that he had not specially considered the treatment of the rich.

Dr. Tuke asked if Baron Mundy thought that the plan of putting out one or two patients by themselves was better than keeping them in an asylum, say for ten or twenty patients.

Baron Mundy said that the Chancery patients would furnish a complete answer to the question, but he would make it a law that no insane patient should be treated out of an asylum except under the care of a phrenopath, a psychologist, or a specialist in mental science. Asylums were not needed by the rich, who could be well treated in private establishments or single houses under proper superintendence, not that of the general practitioner.

ASYLUM STATISTICS.

Dr. Robertson said he had prepared a long paper on Asylum Dietetics, but at that advanced hour he would not read it. He would, however, occupy the time of the meeting for a few moments by bringing forward the question of Asylum Statistics. It was very desirable that the financial tables of county asylums should be drawn on some uniform plan. He brought the subject forward three years ago, and a committee was appointed, but it never met, and the thing died. The commissioners, in preparing their last statistics, had evidently found the greatest difficulty in dealing with the returns from the different asylums owing to this want of uniformity. Again, it often happened at county asylum boards that some visitor produced a report from another asylum, and said, "How do you account for such an asylum maintaining its patients at a lower rate than yours?" It required some time to furnish an answer to the question, and then it usually appeared that the discrepancy arose from the different charges which the maintenance account had to bear in different cases. In one case he had discovered that a great element of economy was the marvellously small cost of the beer consumed, so that instead of spending £1000 a year, as asylums of similar size did, on beer, the establishment in question expended only £400, making a difference of fourpence on the rate. He begged to propose the appointment of a committee, who should be requested

to submit, next year, half a dozen tables which might be adopted in county asylums, so as to produce a uniformity in the returns.

Dr. Maudsley seconded the proposal.

Dr. Thurnam said he had long felt an interest in this question, and he had no doubt that the result at which Dr. Robertson was aiming was a very desirable one. He almost despaired, however, of getting the members to act upon a uniform plan, and if even they were willing he doubted whether the authorities of the asylum would sanction any deviation from the existing methods. He believed that nothing short of legislation would accomplish the desired result. Even in the outward form of the reports they could not secure uniformity, and he doubted where there was a disposition on the part of the members, even with regard to what was for the most within part their own power. He should be happy, however, to support any plan which might be suggested, and to make another trial.

Dr. Wood said that the principal thing wanted was some one to start the plan. If the proposed committee drew up certain forms of returns, submitted them to the commissioners, and obtained their approval, no doubt many of the members would be induced to adopt them. At present they had no standard, and each man was left to his own device, and thus he naturally fell into the groove made by his predecessor. Some might be still unwilling to adopt the plan recommended, but when the returns were once authoritatively sanctioned, he believed they would be generally employed in connection with large asylums. The statistics at present rendered were of very little value. Very excellent reports indeed were issued from some asylums which it might be invidious to name, but others were of a very different character; and it would be a great pity if a uniform system were not adopted.

Dr. Thurnam said that the returns in some of the tables were so incomplete that even the distinction of sex was not marked. He believed there had been some improvement in the returns of late years, but no uniformity of system was observed.

The motion was then passed as follows:—"That a Committee of three, viz., Dr. Robertson, Dr. Thurnam, and Dr. Maudsley, be appointed to draw up a series of tables, and a form of register which might be the basis of a uniform system of asylum statistics; that these tables be submitted to the Commissioners when drawn up, and that they be asked to sanction and promulgate them."

Dr. Davey.—There is a very agreeable duty which now devolves upon this society—that of returning our best thanks to Dr. Monro for the very able and courteous manner in which he has presided over us this day. I am sure you all feel with me that he is the right man in the right place. I need not say how excellently he has conducted the business, how clearly he has seen through a difficult point, and with how much courtesy he has put us right when we were going wrong. These are great requisites in a chairman, and Dr. Monro possesses them. I have great pleasure in proposing that our best thanks be given to him for his able and impartial conduct in the chair.

Mr. Toller seconded the motion, which was unanimously carried.

The President.—I beg to thank you for your kindness.

Dr. Tuke proposed a vote of thanks to the President and Fellows of the College of Physicians for granting the Society the use of their hall.

The motion was seconded, and carried unanimously.

The proceedings then terminated.

ANNUAL DINNER.

The Annual Dinner of the Association was held at the Crystal Palace; Dr. Monro, President, in the chair. Dr. Bucknill, as an honorary member, dined with the Association, and was the sole representative of the English honorary members of the Association. M. Morel represented the foreign members. Among the guests were Dr. Hawkins, Dr. Copland, Dr. Webster, Dr. Sibson, Dr. Ogle, Dr. Llewellyn Williams, and Mr. Ernest Hart. The *conversazione* on the evening before, at the house of the President, was numerously attended by the members of the Association, and by a number of the leading physicians and surgeons in London.

The following letters have been received by the Honorary Secretary, upon the announcement to the writers of their election as honorary members of the Association:—

16, Henrietta Street,
Cavendish Square, W.;
July 23, 1864.

My Dear Sir,—I am desirous of expressing my grateful sense and high appreciation of the honour which I have received in having been elected as Honorary Member of the Association of Medical Officers of Asylums for the Insane.

I beg leave to thank you also for sending me the July Number of the 'Journal of Mental Science.'

Believe me to be, dear Sir,
Yours much obliged and faithfully,
Dr. Tuke. Thos. Watson.

17, Pall Mall; *July* 18, 1864.

Dear Dr. Tuke—I beg to acknowledge and thank you for your letter of the 15th instant, in which you announced that the Association of Officers of Asylums and Hospitals for the Insane have done me the great honour of electing me an Honorary Member.

I beg you will convey to the members my appreciation of their kindness, and that I shall endeavour to promote, so far as I have the means, the interests of the Association which is calculated to confer great benefit on the public at large, and more especially on those who labour under a most important and often varied class of disease.

Believe me,
Yours very faithfully,
Dr. Tuke. A. Tweedie.

Zurich, *September* 24, 1864.

Dear Sir,—By your letter of September 4 you kindly informed me that the meeting of the Association of Medical Officers of Asylums, held last July 14th, did me the honour to select me an honorary member of this Association. Believe me, sir, that I feel really touched and very much honoured by this nomination of a Society containing so eminent men, and pray have the kindness to transmit my sentiment of warmest gratitude to the Association. I am Sir,

Truly yours,
Dr. W. Griesinger,
Professor of Clinical Medicine and of Psychiatrie at the University of Zurich.

Dr. Robertson, Hayward's Heath, Sussex, England.

Appointments.

G. Makenzie Bacon, M.D., M.R.C.S., has been appointed Assistant-Medical Officer to the Cambridge Lunatic Asylum, Fulbourne.

W. G. Coombs, M.D., has been appointed Assistant-Medical Officer to the Dorset Lunatic Asylum, near Dorchester.

Charles F. Long, M.R.C.S.Ed. and L.S.A. has been appointed Assistant-Medical Officer to the Norfolk Lunatic Asylum, near Norwich.

T. R. Pearson, L.R.C.P. Ed., has been appointed Assistant-Medical Officer to the Middlesex County Lunatic Asylum at Colney Hatch.

Notice to Correspondents.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Hayward's Heath, Sussex; or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents, Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York.

Dr. Brosius, Bendorf.—Letter of 10th July received. The *Irren-Freund* has since been regularly received.

Dr. Tebaldi, Milan.—Letter of the 7th August, received. We shall attend to the same.

The Right Reverend Bishop Willson, D.D., of Hobart Town, Tasmania, is thanked for his interesting communication. The documents referred to have also been received and shall be duly noticed.

We are compelled by the lengthened report of the Annual Meeting of the Association, to omit all the Notes and News, and to defer to our next number (*January*, 1865) *the list of Publications, Reports, &c., received, as also Original Communications by Dr. Wilks, M.D. Lond., Dr. Ogle, M.D. Oxon, Dr. Hayes, M.D. Edin., and Reviews of Dr. Mitchell's Essay on the 'Insane in Private Dwellings,' and Mr. Bain's work on the 'Senses and the Intellect.' We are still desirous to see an enlargement of the Journal so soon as the funds of the Association will admit.*

(No. 52. New Series, No. 16.)

THE JOURNAL OF MENTAL SCIENCE, JANUARY, 1865.

[*Published by authority of the Association of Medical Officers of Asylums and Hospitals for the Insane.*]

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No 53 (*new series No.* 17) *will be published on the* 1*st of April*, 1865.

THE JOURNAL OF MENTAL SCIENCE.

No. 52. JANUARY, 1865. Vol. X.

PART I.—ORIGINAL ARTICLES.

On the several means of Providing for the Yearly Increase of Pauper Lunatics. By C. L. Robertson, M.D. Cantab., Medical Superintendent of the Sussex Lunatic Asylum, Haywards' Heath.

The number of lunatics under care and treatment in the public asylums of England and Wales continue yearly to increase. On the 1st of January, 1849, there were 7629 patients in the public asylums. On the 1st of January, 1854, this number rose to 14,575; on the 1st of January, 1859, to 17,836; and on the 1st of January, 1864, to 23,830.*

Taking the decennial period 1854-63 as a fairer basis for observation, the same increase, though not in so large a degree, is to be observed.

In the first five years of the decennium 1854-63 the total admissions and mean population resident in the asylums in England and Wales stand in the following relation to the second half of the period:

* With this yearly increase in the number of inmates of the public asylums we may contrast the statistics in the metropolitan licensed houses, where the numbers are yearly decreasing, or are at most stationary. In 1854 they had 1206 private patients and 1141 pauper, total 2347. In 1864 these numbers are 1480 private and 842 pauper, total 2322. *In the decennium* 1854-64 *there is thus a decrease of* 25 *in the numbers in the metropolitan licensed houses.* In the provincial licensed houses there has been a similar decrease. In 1854 and 1864 their total numbers were 2533 and 2133 respectively, *being a decrease of* 400 *in the decennium.* In 1854 the mean population resident in all the licensed houses (metropolitan and provincial) was 4604; in 1863 it was 4531, being a decrease of 73 on the number of inmates of all the licensed houses.

	County and Borough Asylums.	Lunatic Hospitals.	Licensed Houses.	Total.
Total admissions, 1854-58 . .	23,256	4,206	10,990	38,452
Mean population resident during these five years	13,986	1,717	4,948	20,652
Total admissions, 1859-63 . .	31,482	4,359	8,852	44,693
Mean population resident during these five years	18,419	2,102	4,468	24,989
Mean population, 1854	12,972	1,624	4,604	19,200
Mean population, 1863	20,573	2,234	4,531	27,338

During the five years ending December 31st, 1863, the number of admissions into the public asylums of England and Wales, including the lunatic hospitals, has exceeded the previous quinquennial period by 8,379, and the mean population resident has risen from 15,703 to 20,521, being an increase on the quinquennium of 418. The present yearly rate of increase in the public asylums may thus, in round numbers, be stated at 1000 on their mean population of 22,807—the yearly admissions being 7000, the discharges 3800, and the deaths 2200.

The Commissioners in Lunacy, in their Fifteenth and Eighteenth Reports, arrive (after a careful survey of all the circumstances influencing this annual increase of population in our public asylums) at the conclusion that, the causes being still in operation, we can only calculate on a further increase in these yearly numbers. A similar result is obtained by studying the statistics of a single asylum extending over the same period of fifteen years. Thus, in the Annual Report for 1862 of the Somerset Asylum, Dr. Boyd shows that of every hundred cases admitted during the fifteen years the asylum has been in operation, while 30 have died and 44 have been discharged, 26 remain in the asylum. Applying this result to the 120,000 patients admitted into all the asylums in England and Wales during the fifteen years 1849-64, we obtain* very nearly the mean number now resident in these asylums. It may thus, for general purposes, be taken as a rule in calculating the possible increase in the numbers in a public asylum during the first fifteen years from its opening, that of every 100 cases admitted, 25, or one quarter, will remain to swell the number of incurable lunatics under treatment. The more extended experience of Hanwell,† while confirming this result, shows that at the end of twenty-five years there remain only fifteen out of every hundred admitted, which fifteen per cent. on the admissions may be taken as the probable

* 100 : 26 : : 120,000 : 31,200. The actual number resident at the end of the fifteen years is 27,338.

† I am indebted to Dr. Sankey, of Sandywell Park, for this information.

ultimate increase—irrespective of the increase of population in the several districts—in the annual numbers of the inmates of the public asylums under the present system of management.

The means at our disposal for providing for this yearly increasing number of pauper lunatics may be thus stated:—

I. *Licensed Lunatic Wards in Workhouses.*

II. *Single Patients; the Insane in Private Dwellings.*

III. *Agricultural Lunatic Colonies.*

IV. *Extension of the Public Asylum System, by the enlargement of the existing Buildings, by the erection of Detached Blocks, and also of Asylum Cottages on the County Asylum Estate.*

I. Licensed Lunatic Wards in Workhouses.

The number of lunatics in workhouses is also steadily on the increase. In 1857 there were 6800; in 1861, 8803; and in 1863, 9710 lunatics and idiots, confined in an irregular and very unsatisfactory condition in the union-houses of England and Wales. In a supplement to their Twelfth Annual Report (1859) the Commissioners in Lunacy give a detailed account of *the condition, character, and treatment of lunatics in workhouses.* This report was analysed by Dr. Arlidge, in the pages of the 'Journal of Mental Science' for July, 1859. The Commissioners demonstrated, in this report, the entire inadequacy of workhouses for the care of lunatic patients, and also the wrong done to the insane poor by their indiscriminate admission, unauthorised detention, and ill-regulated and uncontrolled discharge in these houses. They further directed attention to how the wants incident to persons labouring under insanity were supplied in workhouses, "so as to fall short, not merely of what is now attainable in the worst-managed asylum, but even of common decency."

In subsequent reports, also, the Commissioners continue to condemn the practice and method of treating the insane poor in workhouses. Thus, in their Seventeenth Report, for 1863, they remark:—

> We have never ceased to be of opinion that the general construction and arrangements of workhouses render them altogether unsuitable for the accommodation and treatment of insane patients. The restrictions under which workhouses are managed, and which are, perhaps, necessary to check imposition and disorderly conduct on the part of ordinary paupers, are ever more or less extended to the insane paupers also, who likewise share to a great extent the gloomy unfurnished wards, the narrow airing-courts, and the low diet. Boards of guardians, who view them as paupers only, are very rarely persuaded to extend to the lunatic and the idiot inmates the comforts and indulgences which their malady or their helplessness so urgently needs. So long as the patient is not dangerous or unusually troublesome, he is kept in the cheerless wards of the workhouse, and many curable cases are thus retained until their disease becomes chronic and their case hopeless.

The whole relations of the question of the detention of the insane poor in workhouses has been so ably put by Dr. Bucknill, in an early number of this Journal (May 15th, 1855), that I am tempted to reproduce it in part here:—

The detention of lunatics in union-houses is wrong in principle and most unsatisfactory in practice. The detention of a lunatic, whether rich or poor, is an abrogation of the liberty of the subject, an act of imprisonment for his own benefit and for the safety of the community. Such imprisonment of a pauper lunatic is legal when it takes place in the state institution provided for the purpose, under the control of the justices of the peace, as administrators of the law, and under the checks and stringent regulations of statutory enactments. But the continued detention of a lunatic against his will in a union-house is an act of illegal imprisonment, and the practice of it is indefensible. In such a case the liberty of the subject is destroyed, without the checks imposed by the statutes, and which are without any registered or other legal authority for the act. Every adult inmate of a union-house has by law the right of exit, upon giving three hours' notice; and the detention of a lunatic in opposition to this in a union-house is a positive misdemeanour. But in addition to its illegality, such detention has been found to work in the most unsatisfactory manner. Chronic lunatics, who are harmless, tranquil, and even happy under the circumstances which surround them in a well-conducted asylum, where their dietary is good, their habits regulated by experienced attendants, their occupations and recreations rightly ordered, their mental and physical symptoms watched with skilful care, become, if these circumstances are changed or reversed, morose, irritable, and far from harmless. In union-houses these circumstances are altogether reversed; the dietary is professedly such that no person will willingly continue to subsist upon it who can obtain better food by hard work out of doors, and it is quite inadequate to afford to the ill-nourished brain of the lunatic those supplies which are essential to his *euphoria* and tranquillity. There are no pleasure-grounds, no regulated occupations and recreations, and, above all, no attendants under constant and experienced medical direction. The ordinary inmates of a union-house are persons whom accident, infirmity, or vagrant habits, or indolence, or want of work or character, or some other cause, have compelled to seek refuge in the place, which is purposely conducted so as to render voluntary residence therein a test of destitution. Such persons are not likely to view with favour the compulsory companionship of a madman, an object to them of dread and dislike, nor do their objections to such association appear altogether unreasonable. Constant companionship with the insane is a matter so little desirable in itself that strong inducements of duty or interest are required to make persons who have a choice to tolerate it. But to compel the ordinary inmates of a workhouse to such companionship is to inflict upon them, most unjustly and illegally, a hardship which one cannot wonder that, in their own unreasoning manner, they should resist or revenge. Whether this be the principal cause or not, the lot of a chronic lunatic detained in a union-house is a most unhappy one. By day he is the subject of jeer and jest, and of small practical jokes; at night he talks, and the inmates of the dormitory endeavour to quiet him by a sound thrashing. He becomes enraged, and attempts some act of violence; or his misery finds vent in moans or cries, which cause more disquiet to the establishment than acts of violence themselves. The master and mistress complain, and the patient is again removed to the asylum, in a condition which makes the superintendent resolve to sanction the discharge of no more uncured cases, if by any means he can avoid so doing.

Recent legislative enactments have been directed towards improving in some degree the condition of the insane poor in workhouses, by authorising the Commissioners to order the removal of unfit cases to the county asylum, and by requiring records of the quarterly visits by visiting committees of guardians to be kept for their inspection.

The following remarks, taken from the last Annual Report of the Commissioners (1864), will show how far these enactments have hitherto tended to improve the condition of the insane poor in workhouses:—

In the course of our visits we have from time to time exercised the powers lately conferred upon us, by ordering the removal to asylums of acute and curable cases; but we think there is reasonable ground for expecting that the fact of the existence of this power of removal will probably prevent any frequent necessity of resorting to it. We find already a disposition in guardians and medical officers, certainly not before existing to the same extent, not only to act readily on suggestions for removal in acute or recent cases, but even to anticipate them by observing in this respect more carefully the requirements of the law. Of the other clause in the statute of 1862 having important bearing on the insane in workhouses, whereby quarterly visits are directed to be paid by visiting committees of guardians, with a view to such recorded expression of their opinions at those visits or the dietary, accommodation, and treatment, as may call attention to any existing defects, and can be laid before the Commissioners subsequently visiting, we are unable to say that, as yet, it has been carried out with any completeness, or that its purport and intention are in every case understood. In several workhouses the necessary register for the record of such visits has not yet been obtained; and in not a few the committees appear to think that, provided their visits are duly made, and the register signed in evidence of that fact, the written expression of any opinion upon diet, accommodation, and treatment, is discretionary. This, it need hardly be pointed out, is an entirely mistaken view of the 37th clause. Its instruction, that they "shall once, at the least, in each quarter of a year, enter in a book, to be procured and kept, *such observations as they may think fit* to make," &c., applies only to the language in which the opinion may be expressed, an expression of the opinion being essential. And it is to be hoped that visiting committees, in complying with this part of the law, will not be content to limit themselves, as heretofore has been almost universally the case, to mere general phrases of approval, but will see the importance of stating, however briefly, the grounds on which approval or otherwise has been given; for it is only thus that the visiting Commissioners can hope for any essential improvements from the co-operation of the visiting members of boards of guardians.

Despite these enactments and their careful enforcement, the condition of the insane poor in union-houses continues at the present time far from satisfactory. Let the following extract from the same Report of the Commissioners (1864) suffice, in proof of this almost inherent unfitness of the guardians of the poor, or their medical officers, to deal wisely or well in the care of the insane:—

The subjects most frequently and urgently insisted on have been the advantage of paid attendants; of some kind of night supervision; of greater

liberality and variety in the diet; of more extended means of out-door exercise, and of suitable easy employments; of small comforts of furniture, such as movable seats, leaaning chairs, and blinds or curtains; of better provision for personal cleanliness; and of the supply of amusements of some kind. These are the wants that constantly recur, and as to which existing arrangements almost everywhere are for the most part gravely deficient. Other topics that have also entered into our correspondence of the past year may be described as exceptional, though recurring still too often. We have had to complain, in many instances, of the practice of placing two male insane paupers to sleep in the same bed. We have had to object strongly to the use of day-rooms with flagged or cement floors, especially where many epileptics were placed, with no proper provision against accidents from falls. We have had to point out, on more than one occasion, the impropriety of treating insane inmates as the ordinary refractory paupers are treated, and causing them to be punished for conduct that should have been regarded only as disease. Whe have had to condemn both the clothing and the bedding of the patients as worn, dirty, and insufficient for warmth. We have had to order the discontinuance of mechanical restraint at the mere discretion of master or attendants, and to require that in no case should it be used except by direct instructions from the medical officer. And, finally, we have had urgently to protest against a highly objectionable and dangerous practice prevailing in a particular union, and which, in a modified form, appears to exist in many others, whereby the relieving officer has been in the habit of taking, in the first instance, to the workhouse all cases of insanity, leaving it to the parish authorities subsequently to determine the propriety or otherwise of not sending at once to an asylum even the most acute cases.

In addition to the existing arrangements in workhouses, the statute of 1862 (25 and 26 Vict., cap. 111, § 8) provided that the visitors of any asylum, and the guardians of any parish or union within the district for which the asylum had been provided, might, if they shall see fit, make arrangements for the reception and care of a limited number of chronic lunatics in the workhouse of the parish or union, these cases to be selected by the superintendent of the asylum, and certified by him to be fit and proper so to be removed; such arrangements to be subject to the approval of the Commissioners in Lunacy and of the President of the Poor Law Board.*

With reference to this statute, it is important to observe that, by

* In Scotland the practice of licensing lunatic wards for chronic cases in workhouses, viewed at first as a temporary expedient, has been finally confirmed by the 3rd section of the 25 and 26 Vict., cap. 54 (29th July, 1862). On the 1st of January, 1864, there were 878 pauper lunatics in these licensed wards. In their Report for 1863 the Scotch Commissioners made some remarks on this system, according with the view taken in this paper of the treatment of the insane in workhouses. "The chief motive," they observe "of parochial boards in providing such accommodation is undoubtedly economy. They are of opinion that the rate of maintenance in poor houses will be less than in asylums; but this belief can be realised only by limiting the appliances of treatment and restricting the comforts and enjoyments of the patients; or by selecting only those patients who require no special attendance nor any particular care." The whole section ('Fifth Annual Report,' pp. xlvi-lv) on lunatic wards in poor houses is worthy of careful consideration by those who in England would imitate the system.

"*The Lunacy Acts Amendment Act,* 1863" (26 and 27 Vict., cap. 110, § 2), it is further explained, that these provisions for the licensing of lunatic wards in the workhouse of a parish or union, for the reception of a limited number of chronic lunatics, *includes chronic lunatics chargeable to other parishes or unions as well as chronic lunatics chargeable to the parish or union into the workhouse of which they are proposed to be received.*

In November, 1863, the Commissioners in Lunacy published a minute,* with reference to these provisions, for the reception of certified chronic lunatics in workhouses, in which they state the conditions on which they are prepared to sanction the opening of such wards. They add that, as the object of the legislature was not the constitution of a number of small lunatic establishments in the workhouses throughout the country, but the selection, by the visiting justices of the county asylum, of one or more workhouses in which adequate accommodation, care, and attendance, can be ensured, *that all applications for the approval of the Commissioners must originate with the visitors of asylums, and no such application received directly from a board of guardians can be entertained.*

It is not provided in the Act how the charge for the maintenance of the chronic lunatics thus placed in these licensed wards is to be defrayed, whether from the common fund of the union or by the visitors of the asylum. In the former case it is not probable that the guardians will be disposed to open wards in their union-house to which the medical superintendent has authority to send patients from the county asylum of every parish or union in the county besides of that which has provided these wards. Again, should the maintenance charge come to be borne by the visitors of the asylum, it is still more unlikely that they would concur in an arrangement which would make them liable for expenditure, the control of which would rest with the guardians of the union. Under this twofold difficulty it is pretty certain that the provisions of the Lunacy Acts Amendment Act, 1862, for the legal reception and care of chronic lunatics in workhouses will remain—as, indeed, best it should—inoperative.

In the 'Journal of Mental Science' for July and October, 1863, I published extracts from Dr. Campbell's and Mr. Ley's Reports for 1862, in which these experienced superintendents condemn this plan of licensing lunatic wards in union-houses; and they argue that, even on the score of economy, there will be no ultimate reduction in the total cost of the pauper lunatics of the country.

Dr. Thurnam, in his Thirteenth Annual Report (1863), relates how this subject was discussed by the visitors of the Wilts Asylum, in conjunction with a report which they required from him "as to

* See 'Journal of Mental Science,' January, 1864, "Notes and News."

the number of patients, if any, who, in his judgment, may be advantageously removed to the workhouses," and adds a note to the effect that the visitors, at their January meeting, 1864, resolved "that it appeared from the report of the superintendent there was no present prospect of the committee being able to avail itself of the provisions of these Acts."

In the Eighteenth Annual Report of the Worcester Asylum Dr. Sherlock publishes some admirable remarks on the same question, and which apparently led the visitors to form a similar conclusion.

II. Single Patients; the Insane in Private Dwellings.

On January 1st, 1864, there were in England and Wales 1018 pauper lunatics (including idiots) boarded in private dwellings as lodgers, and 5523 living with relatives, who were in receipt of relief from the parish as payment for their maintenance; making a total of 6541 insane paupers lodging in private dwellings. Returns are sent yearly to the visitors of the county asylums of the names of these patients, and of the persons with whom they are boarded, and the sum paid by the parish for their maintenance. In looking over the returns for the county of Sussex I find that these single patients, 150 in number, are boarded at an expense of about five shillings weekly. They are chiefly idiots, and reside mostly with near relatives.

Taking the total number of pauper lunatics and idiots in England and Wales at 38,000, the per-centage of distribution stands in the following proportions:—

In asylums, 56 per cent.; in workhouses, 26 per cent.; boarded out as single patients, 18 per cent.

In Scotland the total number of pauper lunatics and idiots on the 1st of January, 1863, was 5283, of whom 68 per cent. were in asylums (including the licensed lunatic wards of poor-houses), and 32 per cent. as single patients in private houses.

With regard to the present condition of the insane poor in private dwellings, the information which we possess in England is very meagre. There are quarterly reports of their numbers sent to the Commissioners and to the visitors of the county asylum, and also a yearly detailed statement. These patients are visited quarterly, and reported on by the union surgeon, but otherwise little or nothing is known of them. When it is remembered how little conversant with the treatment of insanity these medical officers are, and how they are subject to the antagonistic pressure of the boards of guardians in any of their efforts to increase the medical comforts of the poor, it will be obvious that little value can be attached to their official inspection of the insane in private dwellings. Experience, moreover, shows how insufficient their inspections have been to prevent the most gross abuses of this system.

The present condition, in England, of the insane poor boarded in private dwellings, either with relatives or with strangers, is most unsatisfactory. In almost every one of the annual reports of the Commissioners cases of ill-treatment and neglect of single pauper patients will be found recorded. In the Thirteenth Annual Report (1859) the Commissioners relate the difficulties they have had to contend with in procuring the returns required by law of the condition of the insane poor at home or boarded out. Next year (1860) they again recur to this question, "still thinking that this class of cases should be brought under better supervision." In 1861 they observe that further inquiry into the condition of single pauper patients has tended to confirm the opinion expressed in former reports as to the necessity of a closer supervision in regard to them. In 1862 they report that "from time to time we have visited and reported on single pauper patients, several of whom we have found in a miserable and disgraceful condition." In 1863 they again remark "We have repeatedly drawn attention to the necessity of extending a larger amount of protection over single pauper patients; for, although their general condition may have been materially improved by the regular visitation of the district medical officers, and the examination made by us of their reports, yet instances of gross neglect are still occasionally brought to light." This year (1864), after detailing a most revolting case in Essex, where an idiot, aged thirty-five, lived in a wretched cottage with his mother, a lunatic—"living like a beast, with her idiot son, both sleeping on one wretched bed on the floor"—the Commissioners remark that "instances such as this, occurring among paupers, as well as others of a similar kind met with in the labouring and middle classes, show the necessity of extending a larger amount of supervision over patients who are detained out of asylums."

In contrast, we find in Scotland that the whole system of *the insane in private dwellings* * is organized under the Commissioners in Lunacy, and subject to the inspection of the two Deputy-Commissioners, whose services are retained solely for this purpose. In each of the yearly reports of the Scotch Commissioners reference is made in detail to the results of these visitations. "The reports on single

* 'The Insane in Private Dwellings,' by Arthur Mitchell, A.M., M.D., Deputy Commissioner in Lunacy for Scotland. Edinburgh, 1864, pp. 97. *The notice which we have in this article given to this question renders it superfluous now to insert the review of Dr. Mitchell's interesting essay, prepared for publication in this Journal last April, but omitted both from the July and October numbers, owing to the continued pressure of other matter on our space. We would now refer those desirous of learning in detail the working in Scotland of the system of "The Insane in Private Dwellings," to Dr. Mitchell's well-written essay. Were we disposed to criticism, we might add that his views betray a want of practical knowledge of the treatment of the insane in public asylums, and that he is thus disposed to assume the fitness of lunatics, whom asylum discipline alone renders bearable, for the greater freedom and excitement of the private dwelling.*

patients," observe the Commissioners,* "continue to afford very satisfactory evidence of the zeal and diligence of the Deputy-Commissioners, and of the great benefits which result to pauper lunatics from their inspections. In Appendix E we have printed two general reports by these gentlemen on the condition of the patients in the districts which they respectively visited."

In Scotland there are 1679 patients boarded in private houses, at the charge of the parish, being 31·7 per cent. of the whole number of pauper lunatics. Further, the Scotch Commissioners have, towards the extension of this same object, licensed, since 1863, a class of houses under the provisions of 25 and 26 Vict., cap. 54, § 5, "special-licensed houses," for the reception and detention of lunatics, not exceeding four in number, without the exaction of any license fee. The Commissioners report (1864) that nineteen such houses have now been licensed—five for private patients and fourteen for paupers. This system is thus still an experiment. Dr. Paterson, one of the Deputy-Commissioners, in his last report (for 1863) says that among those in charge of single patients he has met with several persons who appeared well qualified to keep such houses; and he suggests that, with respect to pauper lunatics scattered through wild and outlying parishes, it would be desirable if these special-licensed houses could be concentrated within the reach of the medical officer and inspector of poor, so as to obtain the benefit of more regular and constant supervision than it is now possible for these patients to receive. His colleague Dr. Mitchell,† with reference to this same subject of special-licensed houses, and of the desirability of collecting them within a circle, observes :—

> It is creditable to the local board of the City of Edinburgh, and to its inspector, that they have taken the initiative in this experiment, with the results of which, up to this point, they are highly satisfied, and which they think they can advantageously extend. It is all the more to their credit that, having to deal with a city parish, the experiment to them was difficult, since they were unable to find suitable private houses in Edinburgh, and were consequently obliged to look for accommodation in other parishes. Most of their patients have boarded in the parish of Kennoway, in Fifeshire, where they have been repeatedly visited during the course of the past year by officials of the Board of Lunacy. In many respects these "special-licensed houses" may be looked on as an experiment, and consequently (as, indeed, was expected) difficulties were encountered which had not been foreseen. These, however, were not of a character which proved troublesome in correction, or which may not in future be obviated. Hitherto, in short, the experiment has been attended with a more decided success than could have been fairly anticipated—in its result, at least—and enough has already been seen and done to demonstrate the propriety and advantage of giving to this plan of providing for one class of the pauper insane a much wider extension.

* 'Sixth Annual Report of the General Board of Commissioners in Lunacy for Scotland, 1864.'

† Op. cit.

Almost without exception the patients thus disposed of are found to be contented and happy, and to exhibit an improvement in their physical health. They are treated as members of the family, occupy the same sitting-room, and eat at the same table. They are clothed as the villagers generally are, and most of them go regularly to church. They send and receive letters, and are visited by their friends, and occasionally by the clergyman of the locality. They have tea-parties and pic-nics; their occupations are varied, and usually such as they have been accustomed to. Some are chiefly employed in ordinary household work, and others in knitting and sewing; one acts as nurse to her fellow-patient, who is old and infirm. Some of the men do field-work and look after cattle, and one was met returning from a neighbouring village, to which he had been sent with butter and eggs. In short, their time is spent in occupations of a quiet and commonplace character, which is not, however, less useful or proper on that account. Care has been taken to secure comfortable sleeping accommotion, and each patient has been provided with a separate bed. As a rule, the best room in the house has been made the sleeping-room, and it is generally snugly and fully furnished. In one or two cases, indeed, the bedroom is quite equal, as regards comfort, to what is furnished to better-class asylum patients. The guardians are personally reputedly of good character, and without any such employment as would take them from home. The common remuneration is five shillings per week, body-clothing not included.

In their Fourteenth Annual Report (1860) the Commissioners suggest, towards the improvement of the condition of single pauper patients in England, measures for bringing into more complete operation the existing statutory provisions, by impressing all officials on whom duties devolve, as respects this class, with a due sense of their responsibility. With this view they recommend (1) that the relieving officer be urged to a more liberal view of the requirements of the insane in private dwellings; (2) that the medical officer be desired to take a broader view of his duties, and to give a larger amount of consideration to the wants of his charge; (3) that the visitors of asylums—who are *ex officio* guardians in their own union—may, by acting on the board of guardians, be a most useful agent towards amending the condition of pauper patients boarded out or sent to a workhouse.

I fear the case will not so easily be mended. The machinery of the Poor Law has never been adapted for dealing with the insane poor, and no ingenious device will fit it for this purpose. The insane poor will never be properly cared for until their whole charge, whether in the county asylum, in the workhouse, or in private dwellings, is placed under the control and direction of the visiting justices of the county asylum. Until the name of every pauper lunatic is entered on the books of the county asylum, and his condition regularly reported to the visiting justices, the care and treatment of the insane poor in England cannot be said to be in any way thoroughly carried out.

Our system, as regards 56 per cent. of the insane poor, is a tri-

umph of science and humanity. The paupers in the county asylum are already cared for as the rich are not. The other 44 per cent. of the insane poor—of whom 26 per cent. are in workhouses and 18 per cent. in private dwellings—are, on the other hand, as the official reports of the Commissioners show, in a miserable plight. I would transfer their care, by a slight modification of the existing law, entirely to the committee of visitors of the county asylum. If every lunatic in the union-house or boarded in private dwellings were certified, and the certificates sent to the Commissioners and to the clerk of the visitors, and if authority were given to the visitors to inspect personally or by their medical superintendent every lunatic so certified, their condition would rapidly be improved. As regards the lunatics in union-houses, suggestions made by the committee of visitors to the guardians for their better management would rarely fail to be attended to, seeing that the visitors have even now the power to order these patients at any time into the county asylum.*

As regards the patients in private dwellings, I would place their supervision, including the amount of the sum, and its payment, for their maintenance—and which might be charged to each union in their quarterly accounts with the asylum—entirely under the control of the visitors. The occasional inspection of these patients by the medical superintendent of the county asylum would tend to keep the local practitioners—to whom the visitors might entrust the medical charge of these patients—up to their work, and would in time secure to them fit and enlightened treatment. By such a system the county asylum would become the centre of all the lunacy business of the county, while the standard of treatment in the union-houses and in private dwellings would gradually be so raised, that they would tend more and more to relieve the asylum of the chronic lunatics who now are year by year there accumulating, simply because these outlets are, by the inefficient manner in which they are conducted, as yet closed against them.

III. Agricultural Lunatic Colonies.

A few words are necessary here on the question of agricultural lunatic colonies, detached from the asylum—and only a few. For

* In the 'Journal of Mental Science,' April, 1859, will be found a letter by Dr. Bucknill, on "Lunacy Reform," addressed to the chairman of the Devon Committee of Visitors, and a member of the Parliamentary Committee on Asylums then sitting, containing suggestions in unison with those which I here advocate. "I propose," he writes, "to remedy these evils by removing from boards of guardians all authority and control over lunatic paupers, by giving to the committees of justices power to visit union-houses and to order the removal of any lunatics found therein, and the power to order and direct the medical visitation and pecuniary relief of lunatic paupers at their own homes, or wherever else they may think it expedient that it should be administered."

the last two or three years the agricultural lunatic colonies of Gheel and of Fitz-James have been persistently forced on our attention, as the only remedy for the ills of overcrowding which we are now suffering. The limits of this paper entirely preclude my discussing so voluminous a subject in detail. I would merely say that, after a very careful examination of the whole question, I am led to the opinion that it would be utterly impracticable—and, if practicable, not very wise—to found such a colony in England. Among the mass of literature which the Gheel controversy has produced, I would refer those further interested in this subject to three papers—one by Dr. Sibbald, which appeared in the 'Journal of Mental Science' for April, 1861; one by Baron Mundy, M.D., of Moravia, reprinted from the (late) 'Medical Critic' for July, 1861; and, lastly, to a very important paper in the same Journal for January, 1861, by Dr. Browne, Commissioner in Lunacy for Scotland.

I leave this question, then, with the simple remark that agricultural lunatic colonies do not appear to me to offer *any present aid* towards relieving the pressure on our county asylums, the subject which I am at present discussing.

IV. Extension of the Public Asylum System by the enlargement of the existing Buildings, by the erection of Detached Blocks, and also of Asylum Cottages on the County Asylum Estate.

If past success, unaparalleled and unhoped-for almost, were to be the test of the means most suitable to provide for the future increase of pauper lunatics, the present public asylum system would stand without a rival. It is only necessary to view the arrangements, medical and sanitary, of our county asylums—arrangements exceeding in their completeness and efficiency those of the London hospitals, and offering to the pauper lunatic means of cure which the rich man rarely can command—to realise the immeasureable boon which the Report of the Metropolitan Commissioners of 1844, and the consequent legislation, have, in the erection of the county asylums of England, conferred on the insane poor. It has not often been given to the same men thus both to sow and to gather in of the work of their hands in such rich abundance. The twenty years which have passed since 1844 have seen a progressive advancement in the treatment of the insane of all classes, taking its rise—under the fostering care of the Commissioners—in the public asylums of England, of which the annals of medicine offer no similar record. It does, therefore, appear unwise rashly to abandon the hope of providing, through means of the public asylum system, for the care and treatment of the increasing numbers of pauper lunatics, when already so much has been secured, and when, comparatively speaking, so

little remains to be done. Union-houses have always been found unfit places for the treatment of insanity; the private dwelling is, from the nature of the disease—as Dr. Mitchell, on his hobby, hardly sufficiently realises—of only very limited application; and agricultural lunatic colonies are but the day-dream of benevolent enthusiasts unversed in the real life of the insane.

In contrast stand the public asylums of England, rich with the practical fruits of twenty years experience, trusted by the poor at home, and known throughout the civilised world for their success in turning the house of cruelty and bondage into a quiet haven of peace and rest.

The Public Asylum System admits of a threefold extension:

1. By enlargement and better arrangement of the present Building.
2. By the erection of Detached Blocks in the vicinity of the Asylum.
3. By the erection of Cottage Asylums on the estate.

1. *Enlargement of the present Buildings.*—In the first place, I think most county asylums, now averaging 500 beds, will admit of some enlargement; many of them to the extent of 800 beds, without impairment in the efficiency of their working. There is hardly an asylum which would not be improved by such structural alterations and enlargement. There is a third story to add—a chapel or recreation-hall, too small for their uses, to convert into dormitories—the usually ill-placed and ill-contrived house of the medical superintendent to convert into wards (a detached house, as is the invariable rule in Scotland, being built for him outside the walls)—a new infirmary, with hospital arrangements for the sick, to build—a new general dining-hall for each sex, to relieve the crowded day-room space—a new building at the farm, to accommodate the male working patients—workshops, which are usually too small, to build detached, applying their space to the enlargement of the beds &c. &c.—alterations which, while materially adding to the efficient working of the asylum, can be handsomely carried out at the moderate cost of £50 per bed gained. One has only to look at the transmutation of the West Riding Asylum on this principle, under the able superintendence of Mr. Cleaton, and its adaptation to the requirements of 1000 patients, to see how cheaply, yet well, these extensions and alterations can be carried out. Similar works have been recently undertaken at the Lancaster Asylum at Prestwich; at the Abergavenny, Worcester, and Warwick, and are in contemplation at the Lincoln County Asylum. I also, two years ago, prepared a general plan, and which is now in part being carried out, for such additions and alterations to the asylum at Haywards' Heath as will extend the accommodation from 400 to 800 beds, and yet in every way increase the efficient working of the asylum and add to

the curative resources of the house. We shall gain two new infirmaries for the sick, new and more suitable workshops, two new dining-halls, a new recreation-hall, a new general bath-room, including a Russian bath, and ultimately new quarters for the officers, and, not least, a detached residence for the medical superintendent; and so add, at an estimated cost of £50 per bed, 400 beds to the previous number of 400, and yet in every way improve the capabilities of the asylum for the curative treatment of mental disease.

A part of this plan has already been sanctioned by the Secretary of State, and the number of beds have been increased from 400 to 600 by the erection of a new female infirmary, third-story dormitories, a general dining-hall for the female patients, and by the remodelling of the workshops.

While thus advocating the gradual extension of our present asylum buildings where the architectural arrangements are—as is usually the case, owing to the present progressive character of our views on asylum treatment—such as to be benefited by the additions, I am far from viewing this plan as our ultimate resort. I only urge that, so long as the original fabric can by additions and alterations be expanded and remodelled at a cost within £50 a bed, this course is the wisest. When, however, the asylum comes to be enlarged as far as its original structure will admit of, we turn to the next means of extending the public asylum system.

2. *The erection of Detached Blocks.*—In the 'Journal of Mental Science' for April, 1858, Dr. Bucknill published a description of *the new house at the Devon Asylum*—the first example of what we now term a detached block. It accommodates a hundred patients, and cost £38 10*s.* per bed. It is provided with a separate kitchen, larder, &c. "Although the number of patients," writes Dr. Bucknill, "for whom it was desirable to build rendered it impossible to use the homelike dimensions of the cottage wards which we had found so agreeable to the patients, the preference of rooms to long galleries was maintained, and, so far as we are able to judge, with the best results, both in regard to economy of construction and efficiency of arrangement." I saw this building shortly after it was opened, and I was much pleased with its light and well-ventilated day-rooms and comfortable sleeping accommodation. It answered every purpose for which it was constructed. In the Commissioners' Report for 1860 will be found some drawings of two similar blocks, built in imitation of Dr. Bucknill's "New House," at the Chester Asylum. They each accommodate one hundred patients, and cost £39 per bed. I have heard the highest praise of the comfortable home these blocks afford to the patients. Dr. Campbell has built, at the Essex Asylum, three detached houses, connected by an open verandah with a detached kitchen and a beautiful dining-hall. These three houses

accommodate seventy patients and their attendants. They cost above £100 per bed, which is too much.

In these detached blocks Dr. Bucknill has given us a means of asylum extension capable of infinite application, as they may, of course, be indefinitely multiplied. They afford a bright, quiet home to the working patients and to the feeble and demented—removed as they are from the bustle and discipline of the main building.*

3. *Cottage Asylums.*—The detached blocks are supplemental asylums, differing only from the main building in greater simplicity of structure and less appearance of restraint. The principles of treatment in the isolation of the patients from the external world, and in the discipline of asylum life, remain the same in the main building and in the detached block. The cottage asylum, on the other hand, places the lunatic again in the family life from which his disease had alienated him, and is thus an addition to our curative appliances, as well as a means of extending the accommodation in our public asylums.

Dr. Browne published two most interesting papers on cottage asylums† in the late 'Medical Critic,' which exhaust the subject. He thus states the general idea of a cottage system as contrasted with the theories of agricultural lunatic colonies, and of the practice of boarding the insane in private dwellings:—

> The object aimed at was the incorporation of cottage residences with a central institution, of which the tenants were to be salaried officers, and in no degree dependent upon the work of their charges, from which all authority was to be delegated, all instructive superintendence, medical and moral prescriptions, were to issue; and towards which all appeals, all applications, all desires for society, amusements, worship, were to gravitate. It might be matter for consideration whether the community should be surrounded by walls or other enclosures, although I conceived such an arrangement important; whether the dwellings should be solitary or grouped together, limited to

* In the 'Journal of Mental Science' for January, 1864, will be found a sketch by Dr. Bucknill of an asylum for 650, entirely constructed on the separate-block system. I believe it is from this plan that the new asylum for the county of Surrey, in course of erection at Woking, was designed.

At the last annual meeting of the Association of Medical Officers of Asylums and Hospitals for the Insane Mr. Toller read a paper (subsequently published, with plans, in the 'Journal of Mental Science' for October, 1864), "Suggestions for a Cottage Asylum for 525 Patients," which is, however, merely a plan for an asylum on the separate-block system, carried to the minute subdivision of 35 blocks with 15 patients in each. While admiring Mr. Toller's ingenuity, I cannot regard his plan as likely to answer in practice. Thus, he proposes 35 separate kitchens—one for each block, with a patient for a cook in each. Again, he has only one attendant in each block, &c. How the night-nursing also is to be carried out in 35 separate buildings he does not say. Mr. Toller's whole plan strikes me as being capable of much improvement; and for a block-asylum plan, which it is, I regard it as inferior to Dr. Bucknill's.

† 1. "Cottage Asylums; by W. A. F. Browne, one of the General Board of Commissioners in Lunacy for Scotland;" 'Medical Critic,' April, 1861.

2. "Cottage Asylums: a Sequel;" ibid., July, 1861.

the territory specially belonging to the corporation, or that its roots and ramifications should spread into the adjoining hamlets and through the surrounding country. But it was my opinion that, whatever arrangement was adopted, the different houses should form parts of the one asylum, and be subject to the same influence and rules, or to such modifications of these as might seem advisable to the medical officers. I shall not shrink from the honour or discredit of having formularised this idea, or of having proposed its practical application as a mode of providing for and treating large classes of the insane.

* * * * * *

In this inquiry there has been a tendency to confound the cottage system with that in which it is proposed to have a number of block-houses in place of one, an arrangement which it may either supplant or be associated with. This division may be for the purpose of placing the sexes in distinct buildings, as in Pennsylvania; or for the segregation of the convalescent, as at Illenau; for the elimination of the agitated, as at Salpêtrière; for the separation of the patrician and plebeian; or for the association in pursuits, as is attractively shown in the advertisement of the Colonie de St. Sauer; but whatever the motive, and however excellent the object, the arrangement is not that now proposed. It is a mere multiplication of asylums, and does not, and is not intended to, secure that family life, that individualisation, which is desired. These observations may be extended to the succursal dependencies in various institutions, to the pavillons at Varoles, the châteaux at Brislington, the cottages at Aberdeen. They are detached portions of the asylum, but they do not differ from it; in regulations, regimen, furniture, they are identical. With signal advantages peculiar to themselves, they do not realise the idea of the domestic circle, the relations of parent and child, guardian and ward, host and boarder, and not even master and servant, nor of the frank-pledge which has been attempted, and which might be so beneficially engrafted on such communities. *What, then, is a cottage asylum?* Definition should be avoided as well as dogma; and even description should allow for amplification and development in the same direction. As at present contemplated, it is intended to convey the idea of an establishment in which, around or in connection with a large hospital or sanatorium for certain classes of the insane, there shall be smaller buildings capable of containing families of which other classes shall form members; all members of the community being equally under the care and authority and constant supervision of a central medical staff. What is wanted is a village around a manor-house—vast parks and farms are not expected; and as the mere erection of cottages will not increase the gross population of the asylum, the ordinary amount of ground, the ordinary proportion to each patient, will suffice. But the inhabitants of the park-hamlet must be entirely under moral control, an allegiance which can only be maintained by the limitation, not the abrogation, of physical liberty; by sustained supervision, and the contact of a trained and trustworthy body of guardians.

The cottage asylums thus stand midway between the asylum wards and the private dwellings, and combine, to my judgment, the advantages of both. The asylum discipline is to some extent upheld, and, while the patient is readmitted to the domestic circle, his cottage home is on the asylum grounds, and keeps him still under the supervision of its officers, and enables him to share the advantages of the general dining-hall, at least for the principal meal, a point on which I would set considerable store.

In the fourth Annual Report of the Sussex Lunatic Asylum (Christmas, 1862) I suggested the erection, at Haywards' Heath, of six such cottage asylums:—

> The success which has attended the trial sanctioned by the visitors (at the general meeting held at Hayward's Heath, September 26th, under the provisions of the 16 and 17 Vict., cap. 97, § 79), with the approval of the Commissioners in Lunacy, of boarding six of the quiet and convalescent female patients with two of the married attendants, points to how the erection by the county of cottages for these servants may serve the further purpose of extending the accommodation and means of classification of the asylum. If six such cottages were built on the estate, each with an additional room for three patients, the whole cost of each cottage would be defrayed by an expenditure which the cost of finding similar room in the asylum would alone equal; for such a cottage could be built for £150, including fittings, while no attempt at cheap asylum extension has hitherto provided beds in the house at a lower figure than £50 each. Of the benefit which a certain class of patients is likely to derive from this transfer to the healthier influences of home life from the asylum wards, the medical superintendent entertains no manner of doubt. Indeed, he believes that the present active discussion at home, and in France and Germany, of this question of cottage asylums as a means of meeting the constant increase of lunatics in our public asylums, will result in its adoption on a wider and more ample scale than he has ventured, on the present occasion, to suggest to the consideration of the visitors, or than it has yet been thought practicable.

I could not draw a better picture of the life in these proposed cottages than is thus sketched by Dr. Browne in the papers from which I have already quoted:—

> If individuals or small groups—and they should be as small as possible—join their associates at the public dinner—for the influence of society must not be superseded by the claims of segregation—and be accompanied by their matron or guardian, the kitchen arrangements and duties become occasional and slight; and if the industrial part of the population should be transferred to the single houses, and continue their trade in workshops or in the fields, their homes would more and more resemble that of the husbandman, which is deserted, ventilated, cleaned, and set in order during the day, and occupied, lighted, heated, attractive, before and after the hours of labour and activity. Or should the aged and infirm, the dreamy monomaniac, or the hopeful convalescent, prefer the quiet or busy circle round the kitchen fire to the large assemblies in the central house, there seems to be no good reason for disturbing what is a legitimate and pleasing part of the peasant's family life. The experience of attendants will secure a higher style of order and embellishment than what exists in an ordinary cottage; for training, if it avails in nothing else, is equivalent to the appreciation of refinement in habits and manners, of personal neatness and tidiness, and to a knowledge of what comfort is.

In estimating the increased accommodation which these several forms of asylum extension may afford, the only limit imposed is that of the ultimate numbers of which it may be deemed wise that an asylum should consist. I place this at from 800 to 1000 patients;

probably 1000 is a fair average. The present asylum accommodation of England does not average 500. Let this be thus doubled, and, by enlargements, by detached blocks, and by asylum cottages, and we have at once a provision to meet the yearly increase of admissions (1000) for twenty years to come. We need hardly, in this transitional period of the history of our art, look further.

The objections which have been made to these large numbers in public asylums have, it will be found, arisen from the partial failures in the working of the system at Hanwell and Colney Hatch. It may suffice here for me to observe that Hanwell and Colney Hatch are wanting in what I regard as essential to the success of every public asylum, viz., A Medical Governor. There each department is, as is well known, managed independently one of the other by the committee of visitors. I cannot accept the failure of this scheme as in any degree condemnatory of large asylums fitly governed. Moreover, I have never heard of any similar difficulties at the West Riding Asylum, which already contains 1000 patients. With the aid of two assistant medical officers, two clinical clerks (students), a dispenser (who would act as clerk also in writing up the rough of the case-books), 1000 patients may be better managed and more systematically treated than 250 can be by a medical superintendent left to his own unaided efforts. With such a staff I should, in addition, be prepared to undertake the work consequent on placing, as I have above suggested, the control of all the lunatics in the county in the hands of the committee of visitors of the asylum.

I have dwelt on the supposed disadvantages of large public asylums for the insane. I would add one word, before I conclude, on their real advantages. The superintendent of an asylum for 1000 patients has a gross income of £30,000 a year to deal with. He commands the assistance of a well-salaried staff in every department. His workshops are under the control of competent master tradesmen, while the number of his patients almost ensures a variety and choice in every trade. So also of the farm. Again, the provisioning of a large house can surely be done on better terms than a small one. The beer and the bread are likely to be better made by men earning their 25*s.* to 30*s.* a week than when some broken-down journeyman adds to the duties of attendant efforts at these two callings. Skilled gardeners and a florist, and a greenhouse and a hothouse, would follow, as a matter of course almost, in a large asylum. Expenses which would alarm a committee who had nicely to adjust them over 250 persons come to be trifles when the divisor is 1000. Again, how all the outdoor games, the concerts, the theatricals, proceed with life and vigour, when those who aid are recruited from a staff of a hundred well-chosen attendants. The large asylum can afford to keep a second-rate attendant who proves himself a skilful bandmaster or scene-painter, and to bear with the shortcomings of the

base or tenor who leads the Gregorian chants in chapel. Further, while in an asylum of three or four hundred patients the time of the medical superintendent is sadly encroached on by the attention he is called to give to the repairs and new work going on always, more or less, in an asylum of 1000 patients, a clerk of the wo rks would relieve him of much of this detail supervision, and do such work probably better.

That these and a hundred like advantages, enjoyed by the superintendent of a large asylum, melt into thin air under the withering influences of discord and divided authority is, as I have already said, beside my argument.

Summary.

It has been my object in this paper to show that the yearly increase in the number of pauper lunatics in England and Wales, and the yearly addition of 1000 *lunatics to the admissions into the public asylums (county and borough) can for many years to come be provided for by a fair extension and adjustment of the existing system. Thus :—*

1. *A limited number of the chronic lunatics who now occupy beds in the public asylums may be placed as boarders, either singly or in small licensed houses of four (as in Scotland) in their own villages. In order to this, however, it will be necessary, by legal enactment, to place the control of these patients and of those they are boarded with, in the hands of the visitors of the county asylums.*

2. *While licensed lunatic wards in workhouses are not to be recommended, and while the recent enactments for their constitution will be found inoperative, there remains yet much room for improvement in the treatment of idiots and demented persons in the union-houses, mixed, as is now the practice in country unions, with their inmates, and employed in the work of the house. Such patients ought, however, to be certified, and their names kept on the books of the county asylum, by the superintendent of which they should regularly be visited, and their condition reported on yearly to the visitors.*

3. *The county asylums of England and Wales may, by judicious enlargements, by the addition of detached blocks and of cottage asylums, have their average accommodation raised from* 500 *to* 1000, *with a common gain of* 20,000 *beds, and without any impairment of their efficiency, but much the contrary.*

4. *It is further to be observed that, with a well-organized medical staff, there can be no real impediment to bringing all the insane poor of the county within one system, directed by the committee of visitors of the county asylum. The saving to the rate-payers of such an uniform system in the management of the pauper lunacy of the county would soon show itself, while the resulting benefits to the insane poor*

of such an extension of the asylum system would amply repay the additional labour thrown on the visiting justices and the county asylum superintendents.

5. *Moreover, under this extension of the jurisdiction of the visiting justices over all the insane poor of the county, the hands of the Commissioners in Lunacy would be greatly strengthened in their work; their suggestions then being made to a board and to officials capable of recognising their value, and sufficiently independent of local pressure to carry them into effect.*

Vital Statistics, and Observations on the first thousand Female Patients admitted into the Somerset County Lunatic Asylum; the Results compared with an equal number of Male Patients, together with an Analysis of the Causes of Death in both Sexes.

By R. Boyd, M.D. Edin., F.R.C.P.

In a previous number (39) of this Journal are recorded the statistics of the first thousand cases of male patients admitted into the Somerset Lunatic Asylum, with an analysis of the causes of death. The same method is followed in the present communication with regard to the first thousand female admissions; a comparison is made between the sexes, and a general review from some authorities on these subjects.

Thirteen years and four months after the opening of this asylum 1000 female patients had been admitted; of these, 129 were readmissions, leaving the number of individuals admitted, 871. Of the readmissions, 75 were readmitted once; 11 twice; 8 three, and 2 four times.

Season.—The admissions were least in winter, 18¼ per cent.; 27¾ in spring; most in summer, amounting to 33¼ per cent.; and in autumn to 20¾ per cent.

Age and Civil state.—The greatest number admitted was between the ages of twenty-five and thirty-five years, amounting to nearly 25 per cent. of the whole. The proportion of single to married was 63¼ to 33½ per cent.* The average number of children was 2 per cent. Under twenty-five years of age the admissions were 15¼ per cent.; thirteen were married and one widowed. From thirty-five to forty-five years the admissions were 22 per cent., of which one half were married. From forty-five to fifty-five the admissions were 17¾ per cent., of which more than half were married. From fifty-five to sixty-five

* In nearly 6000 cases by Esquirol, Desportis and Jacobi, the unmarried were more than double the married; nearly 1 in 10 were widowed.

the admissions fell off one third, being 12 per cent., of which less than half were married and one fourth widowed. After sixty-five years the admissions were 8 per cent.; ten of the number were unmarried.

The number admitted under	a first attack of insanity	was	623, or	71¾	per cent.
„ „ „	second attack	„	145, or	16½	„
„ „ „	third attack	„	31, or	3½	„
„ „ „	fourth and upwards	„	11, or	1¼	„
„ „ „	unknown	„	61, or	7	„

The bodily health on admission	was good in . . .	29¾	per cent.
„ „ „	indifferent in .	45¾	„
„ „ „	bad in . . .	24½	„

Duration of the disorder prior to admission:

Acute cases of	less than three months' duration . . .	42	per cent.
„ „	from three to twelve months' duration .	19	„
„ „	from one to ten years' duration . . .	24½	„
„ „	more than ten years' duration . . .	11¾	„
„ „	unknown duration	2¾	„

About two thirds of the admissions were members of the Church of England, and above two thirds had received some degree of education.

The numbers admitted from	their own homes were . .	52	per cent.
„ „	hospitals and infirmaries were	1½	„
„ „	other asylums were . .	23	„
„ „	workhouses were . . .	23½	„

The occupations of the greater proportion were in household work, as the wives of labouring men, or servants; about 12 per cent. gained their livelihood by needlework.

About 78 per cent. of the admissions were from twenty-two unions and parishes which had contributed to the county rate, and were at the lowest charge. About 22 per cent. were from two non-contributing boroughs within the county—Bath and Bridgewater, which at an early period after the opening of the Asylum agreed to pay 5½*d.* a day for each of their paupers above the lowest rate; and 35 female patients and 54 males were from Cardiff and St. James', Westminster, for a limited period, at the rate of 9*d.* a day above the lowest rate. The St. James's patients have been withdrawn, and the Cardiff patients will be removed as soon as their County Asylum is ready to receive them. The same charge in excess, of 9*d.* per diem, is made for all patients belonging to other counties, and for those who are not chargeable as paupers. The excess so obtained has been appro-

priated to the formation and support of the building and repair fund since 1849. The same measure is adopted in the Act passed in 1862, to amend the law relating to lunatics, cap. xci, sect. 6. For some years the excess payments realised about £500 a year. After the reception of the Cardiff patients it amounted to £800, and last year to £1093. From this fund increased accommodation for two hundred patients has been made in the asylum without any call on the county or assistance from the ratepayers.

Of the forms of insanity, mania was much the most frequent, after which came melancholia. The cases of mania, including 52 of puerperal mania and 39 of monomania, amounted to 59 per cent. of the whole; melancholia to 21½, dementia and fatuity to 12, general paralysis to nearly 2, moral insanity to nearly 1, and epilepsy and idiocy to above 12½ per cent.

The physical causes were the most common, amounting to 43, the moral to 29¾, and with no cause assigned, to 27¼ per cent.

Dr. Duglison, in his statistics of insanity in the United States, observed the same excess of physical over moral causes. Dr. Copland states that "some authors have differed as to the comparative influence of *moral* and *physical* causes in occasioning this malady. But the difference has arisen chiefly from the more extended signification assigned to the latter term by some, and from their having compressed under it various important causes kept entirely apart by others—and especially the greatest of all causes—hereditary predisposition. Leaving this out of the arrangement, or rather, considering it separately, there can be no doubt of the influence of the moral causes, in the production of insanity, being much greater than that of the physical. Still the matter is not so satisfactorily solved, especially by referring to statistical tables, as may be imagined. For although it may have appeared that the malady was produced by some moral cause, yet there may have existed at the time, or closely upon it, some physical disorder, and especially some functional disturbance of the digestive, assimilative, and excreting organs, or a morbid susceptibility of the nervous system, or both, without which the moral affection may have been quite inoperative."

It would not be difficult to cite cases illustrative of the above important remarks, where patients have been brought to the asylum in a state of delirium or nervous excitement, from latent disease or functional derangement, which was not discovered, owing to their incoherent and excited state. There is sometimes a difficulty in distinguishing between insanity and delirium from disease or functional derangement of some organ sympathetically affecting the brain. It is to the patient a matter of vital importance that the distinction should be made, as it would be a very serious error to send a person to a lunatic asylum who is not insane. It is also very important that those persons having the medical charge of lunatics should have

had experience in nosology, and have previously acquired a knowledge of the treatment of disease, as they will seldom be able to obtain much information from catechising an insane patient. They will find that these persons are carried off by a variety of diseases; that it is not always cerebral derangement that destroys them, although it is generally sufficient to cloak the symptoms of that malady which is hastening their end.

The peculiarities in the medical treatment and moral management of the insane may quickly be acquired by any person of good discrimination, and possessing a practical knowledge of the profession. Like children, the insane can be more readily conciliated by kindness, combined with firmness and discretion; they require constant vigilance. A great responsibility attaches to those who have the care of them.

Memory was good in more than half the number, and in about the same proportion the affections were changed.

The disorderly in conduct were four to one, including the violent, dangerous, noisy, mischievous, and those of filthy habits.

In conversation, 15½ per cent. were rational, 76 per cent. irrational, and 8½ silent or dumb.

The facial expression was natural in 14 per cent., melancholic in 29½ per cent., sullen in 6½, sly in 7½, vacant in 10½, wild in 27¾, and not stated in 4¼ per cent. The expression was often characteristic of the form of the disorder.

The results in one thousand female admissions have been, that the recoveries amounted to 38·8, relieved 9·2, not improved 3·9, died 25·8, remaining under treatment 22·3 per cent. The most favorable age for recovery has been from twenty-five to thirty-five inclusive, amounting to nearly 42 per cent. of the whole—the admissions were most frequent at this age, and mania was the prevailing form of insanity, and the one from which the greatest proportion recovered. After forty-five there was a marked diminution in the number of recoveries among females.

The state of the pulse on admission, in 202 females, varied in frequency from 100 to 156 beats in a minute; in only one did it reach 156; in two it was 150; in three from 140 to 144; in nineteen from 130 to 136; in forty-seven from 120 to 126; in thirty-four from 110 to 116; and in ninety-six from 100 to 109. In 245 females the pulse varied from 90 to 98; in 186 from 80 to 88; in 167 from 70 to 78; in twenty-seven from 60 to 68; in one the pulse was 58, and in 172 not recorded.

The tongue was clean in 418 on admission; white in 312; red in 41; raw in 3; loaded in 30; furred in 12; brown in 3; flaccid in 6; paralysed in 7; not stated in 21.

The condition of the skin natural in 23; cool in 412; cold in 65; warm in 168; hot in 184; clammy in 10; not stated in 138.

Results.—The following table shows *the results*, in both sexes, in quinquennial periods, in two thousand cases:—

Age in 14 periods, of 870 males and 871 females.	Recovered.		Relieved.		Not improved.		Died.		Remaining.		Male Cases.	Female Cases.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Under 20 years	17	21	1	5	7	2	12	4	16	7	53	39
From 20 to 25 years	16	33	3	13	6	6	17	15	24	31	66	98
„ 25 „ 30 „	26	41	4	7	5	4	31	24	22	31	88	107
„ 30 „ 35 „	26	42	9	9	7	7	34	27	22	28	98	113
„ 35 „ 40 „	31	27	7	6	9	4	36	30	29	25	112	92
„ 40 „ 45 „	21	33	5	6	8	4	39	26	27	33	100	102
„ 45 „ 50 „	22	19	3	6	2	3	43	25	19	23	89	76
„ 50 „ 55 „	26	15	6	4	1	3	23	25	10	17	66	64
„ 55 „ 60 „	20	18	5	5	0	1	20	18	9	10	54	52
„ 60 „ 65 „	28	19	6	9	1	0	21	23	5	9	61	60
„ 65 „ 70 „	9	3	1	3	1	0	23	17	4	4	38	27
„ 70 „ 75 „	7	4	5	4	0	0	10	18	5	4	27	30
„ 75 „ 80 „	2	1	0	0	0	0	8	3	0	0	10	4
„ 80 and upwards	1	0	0	2	0	1	7	3	0	1	8	7
Total	252	276	55	79	47	35	324	258	192	223	870	871
Readmissions	106	112	19	13	5	4					130	129
Gross total	358	388	74	92	52	39	324	258	192	223	1000	1000

By comparing these results, it appears that, in the earliest period, under twenty years, the males were more numerous than the females, and the mortality was greater by 13 per cent. amongst the males; the recoveries more (54 per cent.) among the females. In the next fifteen years, from twenty to thirty-five years, the females were more numerous and the recoveries were more, but the deaths continue to be more among the males. In the following six periods, from thirty-five to seventy years, the males were more numerous than the females, and the recoveries and the deaths were also more numerous than among the females. From seventy to seventy-five the females were more numerous and the mortality was much greater amongst them, the recoveries being greater amongst the males at that period. In the two following periods the males were again more numerous and the mortality was greater amongst them. For the whole period the recoveries amounted, in the males, to 35·8 per cent., in the females to 38·8 per cent.; the cases relieved, in the males to 7·4 per cent., in the females to 9·2 per cent.; not improved, in the males to 5·2, in the females to 3·9 per cent.; the mortality in the males to 32·4, in the females to 25·8 per cent.; remaining 19·2 males and 22·3 per cent. females. The recoveries were 3 per cent. greater in the females than the males, and the mortality 6½ per

cent. greater in the males than the females. Authors state that insanity is, generally speaking, more curable in *women* than *men*. The most favorable *age* for recovery is between the twentieth and thirtieth year, but few recover after the fiftieth year. Esquirol states that of 209 recoveries at Charenton, the greatest number of cases were from the twenty-fifth to the thirty-fifth year. Recoveries diminish progressively from the forty-fifth year. The diminution is more abrupt in females and more gradual in males. Twenty men recovered after the fiftieth year, and four out of twelve lunatics, above seventy; so that advanced age does not preclude hope.*

The forms of the disorder in the two thousand cases, of both sexes and at fourteen periods of life, were as follows:—

Age.	Mania.		Recurrent Mania.		Puerperal Mania.		Monomania.		Melancholia.		Dementia and Fatuity.†		Moral Insanity.		General Paralysis.		Delirium Tremens.		Idiocy.		Epilepsy.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 20 years .	14	21	0	0		0	0	2	4	3	0	0	1	1	0	0	0	0	19	5	15	7	53	39
From 20 to 25 yrs.	16	34	5	5		6	0	2	10	27	1	5	0	0	0	0	1	0	13	4	20	15	66	98
„ 25 „ 30 .	33	31	5	11		15	8	3	12	20	5	6	3	1	3	0	1	0	4	4	14	16	88	107
„ 30 „ 35 .	34	41	7	7		9	7	4	9	25	7	8	4	2	13	4	6	0	2	3	9	10	98	113
„ 35 „ 40 .	34	25	12	7		12	8	6	14	11	10	8	2	3	14	3	6	1	0	3	12	13	112	92
„ 40 „ 45 .	38	37	5	6		8	4	4	12	28	6	7	1	0	15	4	4	0	1	2	14	6	100	102
„ 45 „ 50 .	28	26	10	7		2	7	6	8	15	7	7	0	0	16	3	3	0	3	2	7	8	89	76
„ 50 „ 55 .	18	23	12	5		0	6	3	14	20	4	8	0	0	5	2	1	0	3	0	3	3	66	64
„ 55 „ 60 .	11	16	8	5		0	10	4	10	9	6	11	0	0	3	1	1	0	1	4	4	2	54	52
„ 60 „ 65 .	17	21	4	3		0	2	3	27	22	8	11	1	0	0	0	0	0	0	0	2	0	61	60
„ 65 „ 70 .	12	8	2	2		0	1	0	7	5	10	10	0	0	1	0	0	0	2	0	3	2	38	27
„ 70 „ 75 .	4	7	8	1		0	1	2	4	3	5	16	0	0	2	0	0	0	0	0	3	1	27	30
„ 75 „ 80 .	5	2	0	0		0	0	0	1	0	4	2	0	0	0	0	0	0	0	0	0	0	10	4
„ 80 & upwds.	1	1	0	0		0	0	0	0	0	7	6	0	0	0	0	0	0	0	0	0	0	8	7
Total . .	265	293	78	59		52	54	39	132	188	80	105	12	7	72	17	23	1	48	27	106	83	870	871
Readmissions	27	63	32	67		7	9	3	26	30	1	2	8	1	5	0	19	0	1	1	2	5	130	129
Gross Total .	292	356	110	126		59	63	42	158	218	81	170	20	8	77	17	42	1	49	28	108	88	1000	1000

The forms of the disorder varied at the different ages, as shown in the table, and also in the sexes. In early life idiocy (not complicated with epilepsy) and epilepsy prevailed amongst the males, nearly two thirds of the cases being of these classes, as might be expected,—the one being congenital, and the other usually a disease originating in early life; whilst among the females, at the earlier periods, mania was the most prevalent form, and the cases of idiocy and epilepsy were not half so numerous as in the males. The reverse of this is stated. "Before the age of seven years the influence of sex is not apparent, but after that age epilepsy is most common in females. On the 31st December, 1831, there were 162

* Copland's 'Medical Dictionary,' vol. ii, p. 467.

† Nineteen cases of fatuity in males, and sixteen in females, after sixty years, and including all cases, eighty and upwards.

male epileptics at the Bicêtre, and 389 female epileptics at the Salpêtrière. J. Frank found that of 75 epileptic patients, 40 were females. The greater proportion of females is to be accounted for by the increased irritability of their nervous system."* The annual reports of this institution have shown a preponderance of male epileptics. The greater size of the head of the male fœtus, and consequently the greater difficulty and liability to injury in parturition, renders the males more liable to convulsive diseases in early life. On the 31st December, 1862, of 71 epileptics, 38 were males. From twenty-five to fifty-five mania was the most prevalent form of insanity in both males and females. Melancholia was most common in males from sixty to sixty-five, in females from twenty to thirty-five, and in females from forty to forty-five; on the whole it was most frequent in females. Monomania was more common in males than females from twenty-five to sixty. Dementia occurred from thirty to sixty, after which cases of fatuity were included—it prevailed most among females. Cases of general paralysis occurred from thirty to sixty, and was four times greater amongst males than females; delirium tremens occurred from thirty-five to forty-five, and was almost exclusively confined to males; and the readmissions of these patients, once affected with delirium tremens, were in a large proportion to their numbers. The other cases of readmissions were chiefly cases of recurrent mania, and of melancholia. The cases of mania and recurrent mania were the most numerous in both sexes, but most so in the females, which is contrary to received opinions, as it is stated to be more common in males than females, and to assume a more acute or violent form in the former than in the latter.† As a general rule the observation of Esquirol holds good, that insanity might be divided, "relative to ages, into imbecility for childhood, mania and monomania for youth, melancholy for consistent age, and into dementia for advanced life."

The forms of insanity have been classified under the following heads :—

1. Ordinary mania.
2. Recurrent or periodical mania, with comparatively lucid intervals.
3. Puerperal mania.
4. Monomania.
5. Moral insanity, described first by Dr. Prichard, and defined by him as consisting in "a morbid perversion of the feelings, affections, and active powers, without any illusion or erroneous conviction impressed upon the understanding." There are many persons living at large, in *easy circumstances*, and are reputed of singular, way-

* 'Library of Medicine,' vol. ii, p. 165.
† Copland's 'Medical Dictionary,' vol. ii, p. 459.

ward, and eccentric character, who are affected, in a certain degree, by this modification of insanity.

6. Melancholia.

The three last-mentioned forms,—monomania, moral insanity, and melancholia, are sometimes comprehended under the term *partial insanity*.

7. Dementia or incoherency, and fatuity, or decay and obliteration of the intellectual faculties.

8. Congenital idiocy and imbecility.

9. Epilepsy.

10. Delirium tremens.

Mania, or general insanity, affects all the operations of the mind. Maniacs are incapable of carrying on, in a collected manner, any process of thought, their disorder becoming apparent whenever they attempt to enter into conversation—their ideas are hurried and confused, they are vehement and excited, restless and absurd. The excitement becomes less as the disorder becomes chronic, but the false impressions as to matter of fact, or illusions and hallucinations, exist or change, and they are incapable of self-control or continued rational conversation; this is the most numerous class in asylums, although it is also the one in which there are most recoveries. In addition to the numerous cases of ordinary chronic mania, there are also some chronic cases of what is defined as *intermittent mania*, attended with lucid intervals, which may continue for weeks, but the patients are subject to paroxysms of raving madness.

The following is a table of the results, obtained in this institution, in cases of mania and recurrent mania, in decennial periods, in 1000 males and 1000 females:—

Age.	Forms of Insanity.	Recovered.		Relieved.		Not improved.		Died.		Remaining.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 20 years. .	Mania ...	12	17	0	2	0	1	1	0	1	1	14	21
From 20 to 30 ...	Mania ...	23	21	2	6	7	4	9	11	8	23	49	65
	Recurrent	6	6	0	3	0	2	3	1	1	4	10	16
„ 30 „ 40 ...	Mania ...	20	22	6	3	7	2	21	20	14	19	68	66
	Recurrent	10	7	2	2	0	0	2	1	5	4	19	14
„ 40 „ 50 ...	Mania ...	21	22	2	8	3	3	24	12	16	18	66	63
	Recurrent	4	4	0	0	3	1	4	2	4	6	15	13
„ 50 „ 60 ...	Mania ...	11	10	2	2	0	1	12	14	4	12	29	39
	Recurrent	13	6	1	1	0	0	3	0	3	3	20	10
„ 60 „ 70 ...	Mania ...	13	10	2	5	0	0	13	9	1	5	29	29
	Recurrent	4	2	1	0	0	0	0	3	1	0	6	5
„ 70 and upwards	Mania ...	4	3	0	2	0	0	5	3	1	2	10	10
	Recurrent	3	0	2	0	0	0	1	1	2	0	8	1
Readmissions		49	74	8	7	2	0					59	81
Total.....		193	204	28	41	22	14	98	77	61	97	402	433

Hence it appears that mania, occurring in early life, is very curable; under twenty years of age, 86 per cent. of the males recovered, 7 per cent. died, and 7 per cent. remained under treatment. Of the females, at the same period, as many as 91 per cent. were discharged recovered and relieved; 4·5 per cent. not improved; and 4·5 cent. remaining. There were no cases of recurrent mania at this period. At the next period, from twenty-five to thirty years, there was a falling off of a third in the proportion of recoveries, which were more numerous in males than females. In the next decennial period, from thirty to forty, the recoveries were slightly greater in the females, amounting to a third, not including those relieved; the mortality was high—30 per cent. In the next decennial period, from forty to fifty, the recoveries were much the same as in the preceding one, and the mortality was highest in the males, amounting to 36 per cent.; about half that amount in the females. In the three remaining periods the recoveries were 41 per cent. in the males, and 30 per cent. in the females; the mortality was 44 per cent. in the males, and 33 per cent. in the females. For the whole period of life, including the cases of recurrent mania, the recoveries amounted to 48·1 per cent. in males, and 47·1 per cent. in females; the relieved to 6·1 per cent. in males, and 9·5 per cent. in females; not improved to 6·6 per cent. in males, and 3·2 per cent. in females; the deaths to 24·2 per cent. in males, and 17·8 per cent. in females; and remaining 15 per cent. males, and 22·4 females. The readmissions were 15·7 per cent. in males, and 18·7 per cent. in females. In comparing the number of manias, of each sex, we find the females more numerous, viz.: 40·2 per cent. males, and 43·3 per cent. females, which is contrary to experience in France; superadded to these were 52 cases of puerperal mania, occurring at three decennial periods, from 20 to 50,—of these 36 recovered, 6 died, and 10 were discharged not improved.

The results obtained in those suffering from partial insanity, including monomania, moral insanity, and melancholia, in the 1000 males and 1000 females, were as follows:—

Age.	Forms of Insanity.	Recovered.		Relieved.		Not improved.		Died.		Remaining.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 20 years.....	Monomania.....	0	1	0	0	0	0	0	0	0	1	0	2
	Moral Insanity ...	1	1	0	0	0	0	0	0	0	0	1	1
	Melancholia.....	2	2	1	0	0	0	0	1	1	0	4	3
From 20 to 30	Monomania.....	2	1	1	1	1	0	2	1	2	2	8	5
	Moral Insanity ...	1	1	0	0	1	0	1	0	0	0	3	1
	Melancholia.....	7	24	1	4	0	2	5	5	9	12	22	47
„ 30 „ 40	Monomania.....	5	6	1	0	1	0	1	0	7	4	15	10
	Moral Insanity ...	5	2	0	1	0	0	1	0	0	2	6	5
	Melancholia.....	8	15	0	3	3	2	5	7	7	9	23	36
„ 40 „ 50	Monomania.....	3	2	2	0	2	1	3	2	1	5	11	10
	Moral Insanity ...	0	0	0	0	0	0	0	0	1	0	1	0
	Melancholia.....	8	20	1	1	0	0	5	10	6	12	20	43
„ 50 „ 60	Monomania.....	4	3	5	0	0	0	4	3	3	1	16	7
	Melancholia.....	15	12	1	2	0	1	5	9	3	5	24	29
„ 60 „ 70	Monomania.....	3	1	0	0	0	0	0	1	1	1	4	3
	Melancholia.....	16	9	2	4	1	0	13	10	2	4	34	27
„ 70 and upwards.....	Monomania.....	0	0	1	1	0	0	0	1	0	0	1	2
	Melancholia.....	2	0	0	0	0	0	2	2	1	1	5	3
Readmissions		35	32	3	1	1	1	0	0	0	0	39	34
Total		117	132	19	18	10	7	47	52	44	59	237	268

In the first period, under twenty years, there were not many cases of the three forms of the disorder, classed under the head of partial insanity; but at the next period, from twenty to thirty, when the feelings and affections are fully developed, the cases were numerous amongst females. In the next period, from thirty to forty, the numbers were more nearly equal between the sexes, but still greatest amongst females; and again, from forty to fifty, the proportion of females was much greater than of males,—the cases of melancholia being more than double. After fifty these cases rapidly diminished in number, especially amongst females,—the number amongst the males gradually exceeding those of the females at the later periods of life; on the whole the females were more numerous than males.

The recoveries were—males 49·5, females 49·2 per cent.; relieved, males 8·1, females 6·7 per cent.; not improved, 4·2 males, females 2·6 per cent.; died, males 19·7, females, 19·4 per cent.; remaining, males 18·5, females 22·1 per cent. The readmissions were—males, 16·4, and females 12·7 per cent. The readmissions in the cases of monomania were five males and three females, making the total number of 59 males and 42 females,—or, 5·9 and 4·2 per cent. respectively; so that this form of insanity is not of very frequent occurrence, the term being applied to cases in which the intellectual faculties are unimpaired, except with relation to some particular

topic. Unless the power of reasoning correctly on subjects unconnected with the illusion is retained, the disorder is not a case of monomania. A common illusion of monomaniacs is, that they hold conversation with spirits. In many cases of partial insanity melancholia connects itself with the subject of delusion; these cases have been classed as melancholia.

Esquirol states that the monomaniac is gay, petulant, rash, audacious, in contradistinction to the melancholic or lypemaniac, who is sorrowful, calm, diffident, and fearful. He considers that authors have not observed the difference between monomania and mania, because of the excitement, susceptibility, and fury of some monomaniacs; they have confounded monomania with melancholy, because that in both one and the other the delirium is fixed and partial. He considers the delirium in melancholia to depend upon some abdominal lesion, and in monomania on some abnormal condition of the brain.

Foville considers monomania excessively rare, and has seen but two or three monomaniacs either at the Salpêtrière, or St. Yon (Rouen). Partial delirium, says Esquirol, is a phenomenon so remarkable, that the more we observe it the more are we astonished that the man who feels, reasons, and acts like the rest of the world, should feel, reason, and act no more like other men, upon a single point. Dr. Prichard says that monomania, applied to moral and instinctive insanity, without lesion of the reasoning powers, does not correspond, in our acceptation of it, with the word mania, which presents to the mind the idea of intellectual disorder.

Moral insanity occurred before the middle period of life, the cases are few, 18, out of which 11 recovered; this form of insanity is often associated with mania, or delirium tremens. It is stated to be characterised by a total want of self-control, with an inordinate propensity to excesses of various kinds, among others habitual intoxication (dypsomania). This is often followed by an attack of mania, which speedily subsides when the patient is confined, but is generally reproduced by the same exciting cause soon after he is discharged. Among the female inmates there are some whose disorder principally consists in a moral perversion, connected with hysterical or sexual excitement, and in one case especially this is very remarkable.

The symptomatic classification of insanity, although it does not meet the philosophical views of many modern writers, for practical purposes it is the most convenient, as all the physician can do in insanity, as in diseases generally, is to watch and treat the symptoms as they become manifest.

Melancholia is the most common form of partial insanity, and there have been 132 males and 188 females; of these 58 males and 88 females were discharged recovered; 6 males and 8 females

relieved; 4 males and 5 females not improved; 35 males and 44 females died; 29 males and 43 females remaining.

Some of this class of patients have no disorder of the understanding, and manifest no delusion, but merely suffer from lowness of spirits, with a total indifference to the concerns of the world; some with strong suicidal propensities; in a few cases this state alternates with a buoyancy of spirits and state of excitement. It is very frequently difficult to determine in what degree melancholia, when it exists without delusions, constitutes insanity: many sad cases are retained as a precaution against suicide, to which they are prone, from a disgust to life. Many complain of gastric uneasiness, and fancy that there are devils put in their inside; others fancy they have no inside, and require "forced alimentation," and are treated for dyspepsia; recovery in such cases has often taken place.

The man who recently committed suicide in this house by making an opening into his abdomen with a piece of glass, and drawing out the small intestines, said he did it to let the wind out, and that he felt no pain; he lived for ten hours after. He had no organic disease. In the second case of suicide in 1862 also, a man in a state of melancholia was haunted with the idea that people were watching him; that he had committed some very grave offence, which he would not impart to any one. Other melancholics fancy some unreal misfortune,—are convinced that they have committed unpardonable offences, and are doomed to perdition. Some fancy they are watched by the people, being suspected of some heinous crime. Esquirol is of opinion that attempts at self-destruction are voluntary, and not the effect of irresistible impulses, as some suppose.

Dementia, or incoherence, is that form of insanity in which the powers of the mind have been lost, and in that respect it differs from idiocy and imbecility, in which they have never been developed. It is sometimes a primary disorder, but more frequently a sequence of mania, also of epilepsy, apoplexy, and other affections of the brain. Out of 235 cases given by Esquirol, 12 occurred before the age of twenty years, and near two thirds from the age of forty and upwards; and the same author gives as the most common physical causes, critical period, progress of age, and moral causes, political shocks, and domestic trials.

The cases of fatuity have been here classified with those of dementia, as it is the usual form of insanity in advanced life.

The following were the results, in decennial periods, in a thousand males and a thousand females:

Age.	Forms of Insanity.	Recovered.		Relieved.		Not improved.		Died.		Remaining.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 20 years...	No Cases	...	...	...	...	...	...	...	...	...	...	...	...
From 20 to 30 ...	Dementia.....	0	1	1	0	1	0	0	2	4	8	6	11
„ 30 „ 40 ...	Dementia.....	0	3	1	0	1	2	10	7	5	4	17	16
„ 40 „ 50 ...	Dementia.....	0	0	0	1	0	1	9	6	4	6	13	14
„ 50 „ 60 ...	Dementia.....	0	2	1	2	0	2	7	9	2	4	10	19
„ 60 „ 70 ...	Dementia and Fatuity.....	0	0	0	2	1	0	13	16	4	3	18	21
„ 70 and upwards ...	Dementia and Fatuity.....	0	2	1	2	0	1	14	17	1	2	16	24
	Readmissions	1	0	1	1	0	1	0	0	0	0	2	2
	Total	1	8	5	8	3	7	53	57	20	27	82	107

Of these 189 cases none occurred before the age of twenty, and only 6 from twenty to twenty-five; as age advances the numbers gradually increase to the latest period of life, and in this respect it differs from every other form of insanity. The few recoveries that occurred were entirely confined to females, amounting to about 7 per cent. The mortality amounted to 66·6 per cent. in the males, and 54·3 per cent. in the females. The proportion of dementia and fatuity to the other forms of insanity was 8 per cent. in the males, and 10·5 per cent. in the females. This proportion is much greater amongst those remaining in the asylum, as many of the patients admitted under other forms of insanity have since fallen into a state of dementia. Esquirol divides dementia into three varieties—acute, chronic, and senile. The acute, he finds, results from fever, hemorrhage, metastasis, suppression of habitual evacuations, &c., and is curable. The second, chronic dementia, is generally consecutive to the various forms of insanity, and is very rarely cured. The third, senile dementia, results from the progress of age.

General paralysis of the insane was first described by Esquirol; it is distinct from ordinary paralysis and from insanity. The paralytic symptoms sometimes precede those of mental disturbance, which is to be accounted for by the spinal marrow being frequently the seat of the disease. When inflammation first occurs in the spinal marrow, the paralytic symptoms manifest themselves first, and when the inflammation extends to the brain, the mental derangement follows; generally the mental derangement first appears, and the paralytic symptoms follow, in which case the inflammation of the cerebral membranes precedes that of the spinal cord, as frequently observed in this institution, and stated in the earlier reports. Writers have stated that general paralysis is often the result of intemperance, and

seldom occurs in females. It is stated to be incurable, and speedily fatal, seldom of longer duration than two or three years.

Calmeil observed three degrees in the general paralysis of the insane; in the first, an impediment in the articulation in the movements of the tongue, a sort of mumbling and stammering in speaking, the mobility of the limbs not impaired. In the second degree, the symptoms of the first period are increased in intensity; scarcely a word is pronounced distinctly. When he attempts to walk he raises himself slowly, and, like a child, seems to balance himself before he moves off, and has a tottering gait. The upper extremities display less the effects of paralysis, and when in bed he is able to move all the extremities. In the third stage nothing is more deplorable; he can neither feed himself nor answer the calls of nature, neither can he articulate; in the last stage he is reduced to a state of mere vegetation; his existence being a kind of slow death.

Amongst the two thousand cases under consideration, the earliest period at which general paralysis occurred was from twenty-five to thirty, and 3 males died. From thirty to forty, there were 27 males and 7 females, of whom 23 males and 5 females died. From forty to fifty, there were 31 males and 7 females, of whom 25 males and 7 females died. From fifty to sixty, and upwards, there were 11 males and 3 females, of whom 9 males and 3 females died. The total numbers were 72 males and 17 females, and the deaths 60 males and 15 females.

The head is generally large and well formed in these cases.

The form of the head in idiots is generally defective, either too large or too small—sometimes the two sides of the cranium are unequal. Congenital idiocy and congenital imbecility are classed together; in the first, the faculties have never been developed, the latter is the result of some original defect, rendering the mind feeble in all its operations, although not altogether incapable of exercising it within a limited sphere.

Epilepsy is complicated with defects or disorders of the mind in various ways; with idiocy, imbecility, dementia, melancholia, and mania, and sometimes with raving madness, and such cases are perhaps the most troublesome in an asylum.

In the official returns required periodically to be forwarded by the unions to the visitors, only two forms of insanity are recognised, under which all the pauper lunatics are classified—namely, lunatics and idiots. The former include mania, partial insanity, and dementia; the epileptics, for reasons above stated, are divided between these two classes, and the idiots and imbeciles are included in the latter.*

* Taking the population of this county at 445,000, there is one insane person in about 800; the proportion of idiots in the quarterly returns from the Poor Law Unions, added to those in the asylum, is one in 1110, but the accuracy of

The following table includes the idiots and epileptics at each period, in both sexes, in two thousand cases:

Age.	Forms of Insanity.	Recovered.		Relieved.		Not improved.		Died.		Remaining.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 20 years...	Idiocy.....	0	0	0	1	5	0	6	1	8	3	19	5
	Epilepsy...	2	0	0	2	2	1	5	2	6	2	15	7
From 20 to 30 ...	Idiocy.....	0	0	2	0	0	1	7	4	8	3	17	8
	Epilepsy...	1	5	0	3	1	1	18	13	14	9	34	31
„ 30 „ 40 ...	Idiocy.....	0	0	1	2	1	2	0	1	0	1	2	6
	Epilepsy...	0	1	5	2	2	2	6	12	8	6	21	23
„ 40 „ 50 ...	Idiocy... ..	0	0	0	1	0	0	0	2	4	1	4	4
	Epilepsy...	2	0	2	1	2	1	10	10	5	2	21	14
„ 50 „ 60 ...	Idiocy.....	0	0	0	0	0	0	1	3	3	1	4	4
	Epilepsy...	0	0	1	2	0	0	5	2	1	1	7	5
„ 60 „ 70 —	Idiocy.....	0	0	1	0	0	0	1	0	0	0	2	0
	Epilepsy...	1	0	1	1	0	0	3	1	0	0	5	2
„ 70 and upwards.	Idiocy.....	0	0	0	0	0	0	0	0	0	0	0	0
	Epilepsy...	1	0	1	1	0	0	1	0	0	0	3	1
Total...	Idiocy...	0	0	4	4	6	3	15	11	23	9	48	27
	Epilepsy	7	6	10	12	7	5	48	40	34	20	106	83

There were 75 cases of idiocy, exclusive of those cases complicated with epilepsy which have been included with the 189 cases of epilepsy.

The recoveries in epilepsy were 6·6 in the males and 7·1 in the females; the cases relieved 10 per cent. in males and 14 per cent. in females; the mortality in epilepsy was 45·5 per cent. in males and 48·3 per cent. in females. The mortality in idiocy was 31·2 per cent. in males and 40·8 per cent. in females; showing that the mortality—contrary to what it has been in the other forms of insanity—has been higher in females than males, in both idiocy and epilepsy.

Delirium tremens is usually considered a specific disease. It was considered by old writers under the names of "Phrensy," "Demonomania," "Mania à Potu," "Oinomania." It is the result of intemperance, and frequently follows the use of spirituous liquors in small quantities, popularly termed *tippling*. It is not a disease of long duration, but terminates, for the most part, either in death or in recovery. There have been 23 males and 1 female so affected, and of these 15 males recovered and 3 died.

According to the experience of this institution mania was the most prevalent form of insanity, including recurrent and puerperal mania,

these returns cannot be relied on, persons in a state of dementia being often classified as idiots in the returns.

amounting to 34·3 in males and 40·4 per cent. in females. Partial insanity which includes monomania, moral insanity and melancholia, 19·8 in males and 23·4 per cent. in females. Dementia and fatuity, 8 in males and 10·5 per cent. in females. General paralysis, 7·2 in males and 1·7 per cent. in females. Idiocy and epilepsy, 15·4 in males and 11 per cent. in females. Delirium tremens, 2·3 in males and 1 per cent. in females. Readmissions, 13 in males and 12·9 per cent. in females; more than half—54·1 per cent.—of these readmissions were cases of recurrent mania.

From the North-American 'Medico-Chirurgical Review' for July, 1860.—According to Dr. Dunglison, in the United States the proportion is—1 idiot in 1469, and 1 insane person in 1485 of the population.

Treatment.—The treatment is divided into moral—which includes the employment of the patients in their various trades and occupations—and medical, under different heads: *alterative*, as the "liquor hydrargyri bichloridi," and "iodide of potassium," often prescribed in cases of meningitis and general paralysis; *counter-irritants*, as blisters, also used in these cases; *astringents*, *diaphoretics*, *diuretics*, *purgatives*, and *sedatives*, including opiates, digitalis, and the shower-bath, which has been frequently used; *stimulants*, as ammonia, ether, and wine; *tonics*, as quinine, iron, cinchona, and gentian, with the mineral acids. The cases requiring to be fed were numerous, and are specified.

Moral treatment was chiefly employed in 308 males and 277 females; 16 males and 13 females were under twenty years of age; of these, 8 males and 6 females recovered, 4 females relieved, 4 males not improved, leaving 4 males and 3 females under treatment.

From twenty to thirty years, 63 males and 77 females; of these, 16 males and 30 females recovered, 6 males and 9 females were relieved, 6 males and 3 females not improved, 1 male and 1 female died, leaving 34 males and 34 females remaining.

From thirty to forty, there were 83 males and 67 females; of these, 32 males and 32 females recovered, 10 males and 3 females were relieved, 4 males and 5 females not improved, 2 males and 2 females died, and 35 males and 25 females remained.

From forty to fifty, the males were 64, females 58; of these, 21 males and 18 females recovered, 3 males and 7 females were relieved, 7 males and 4 females not improved, 2 males and 1 female died, and 31 males and 28 females remained.

From fifty to sixty, there were 41 males and 32 females; 25 males and 14 females recovered, 3 males and 5 females were relieved, 1 male and 2 females not improved, 3 males and 1 female died, and 9 males and 10 females remained under treatment.

From sixty to seventy, there were 30 males and 21 females; 17 males and 11 females recovered, 3 males and 7 females were relieved,

2 males not improved, 6 males died, and 2 males and 3 females remained.

From seventy and upwards there were 11 males and 9 females; of these, 6 males and 3 females recovered, 2 males and 2 females were relieved, 3 males and 1 female died, and 3 females remained.

Hence it appears 35·4 per cent. males and 31·8 females came under moral treatment; of these, 40·6 per cent. males and 41·2 females recovered, 8·7 per cent. males and 13·1 females were relieved, 7·8 per cent. males and 5 females were discharged not improved, 5·5 per cent. males and 2·1 females died, 37·4 per cent. males and 38·6 females continued under treatment. The discharges were 10 per cent. more, and the mortality less than half, in females.

Medical treatment was principally employed in 375 males and 395 females, purgatives in 37 males and 16 females, combined with sedatives in 19 males and 24 females, with stimulants in 4 males and 9 females; of the first, 11 males and 5 females recovered, 3 males and 3 females were relieved, 3 males not improved, 11 males and 5 females died, and 9 males and 3 females continued; of the second, 5 males and 7 females recovered, 1 male and 2 females were relieved, 1 female not improved, 12 males and 10 females died, and 1 male and 4 females remained; of the third, 1 female recovered, and 1 was relieved; all 4 males and 7 females died. Antispasmodics in 25 males and 10 females, combined with purgatives in 14 males and 3 females; of the former, 3 males and 2 females recovered, 1 male and 2 females were relieved, 5 males and 2 females not improved, 8 males and 5 females died, and 8 males and 3 females remained; of the latter, 1 male recovered, 1 male was relieved, 2 males not improved, 6 males and 2 females died, and 4 males and 1 female remained. Diaphoretics and diuretics were given to 15 males and 9 females; of these, 3 males and 4 females recovered, 1 male and 1 female relieved, 2 males not improved, 9 males died, 4 females remained. Diaphoretics and stimulants were given to 12 males and 12 females; of these, 2 females recovered, 11 males and 10 females died, and 1 female remained. Sedatives were chiefly employed in 74 male and 120 female cases; of these, 21 males and 29 females recovered, 6 males and 5 females were relieved, 4 males and 6 females not improved, 40 males and 46 females died, and 3 males and 34 females remained. Alteratives and counter-irritants in 24 males; of these, 2 recovered, 1 was relieved, 1 not improved, 19 died, and 1 continued under treatment. Stimulants were employed in 85 male and 78 female cases; 7 males and 11 females recovered, 4 males and 9 females were relieved, 2 females not improved, 67 males and 51 females died, and 3 males and 5 females remained. Stimulants combined with sedatives were given in 32 male and 80 female cases; of these, 4 males and 15 females recovered, 2 males and 3 females were relieved, 2 males and 2 females not improved, 21 males and 57

females died, and 3 males and 3 females remained. Stimulants were combined with alteratives and counter-irritants in 34 males and 23 females; of these, 3 females recovered, 3 females were relieved, 2 males and 2 females not improved, 21 males and 15 females died, and 3 males remained under treatment.

The above cases under medical treatment amounted to 43·1 per cent. males and 45·4 per cent. females; of these, 15·1 per cent. males and 20 per cent. females recovered, 5·2 males 7·3 per cent. females relieved, 5·2 per cent. males and 3·8 females discharged not improved, 64·1 per cent. males and 52·7 per cent. females died, and 10·4 males and 16·2 per cent. females remained under treatment. The recoveries were 5 per cent. more in females than males, and the mortality 11½ per cent. less, and the numbers remaining nearly 6 per cent. more in females.

Medical and moral treatment was combined in 120 males and 153 females, or 13·8 per cent. males and 17·5 per cent. females; of these, 35 per cent. males and 40·7 per cent. females recovered, 5·8 per cent. males and 7·8 females were relieved, 2·5 males and 1·9 per cent. females not improved, 30·8 males and 16·3 females died, and 25·9 males and 33·3 females continued under treatment.

*Feeding cases.**—67 males and 46 females required to be fed by the stomach tube; of these, 3 males and 2 females were under twenty years of age; each of the males required to be fed for one day only, 2 of them recovered and 1 died, both the females recovered.

From twenty to thirty, there were 14 males and 9 females, 11 of the males and 5 of the females only required to be fed for one day, and 3 males and 5 females for longer periods, 7 of the males and 7 females recovered, 1 not improved, 5 males and 1 female died, and 2 males remained under treatment.

From thirty to forty, there were 13 males and 13 females; of 9 males and 3 females 3 required to be fed only once, 4 males and 5 females recovered, 1 female was relieved, and 1 not improved, 9 males and 4 females died, and 2 females remained.

From forty to fifty, there were 16 males and 7 females; of these, 8 males and 4 females required feeding but one day, 7 of the males and 3 of the females recovered, 1 female not improved, 9 males and 3 females died.

From fifty to sixty, there were 11 males and 8 females; of whom 5 males and 2 females required to be fed each on one day only, 5 males and 3 females recovered, 1 male was relieved, 2 males and 5 females died, and 3 males remained.

From sixty to seventy, there were 9 males and 5 females; of these, 6 males and 2 females required to be fed but for one day, 3 males

* In all cases requiring to be fed, a funnel with an œsophagus tube attached is all that is used. The fluid is poured slowly from a jug into the funnel, and descends by its own gravity into the stomach.

recovered, 4 males and all the females (5) died, and 2 males remained.

From seventy upwards, 1 male and 2 females; 1 female recovered, and 1 male and 1 female died.

The feeding cases amounted to 8·7 per cent. males and 5·4 females. In these cases, 41·9 per cent. males and 45·6 per cent. females recovered, 1·4 males and 2·1 females were relieved, 6·3 not improved, 46·2 males and 41·6 females died, and 10·5 males and 4·4 females remained—the recoveries being $3\frac{3}{4}$ per cent. more, and the mortality about $4\frac{1}{2}$ per cent. less, in females than in males.

An analysis of the causes of death in 539 *cases examined, of both sexes, from the first* 2000 *admissions.*—The cause of death was ascertained by post-mortem examination in 295 out of 324 males, and in 244 out of 258 females in the first two thousand admissions, one thousand of each sex. The mortality was in the ratio of 29 per cent., about 2 per cent. of these cases were not subjected to post-mortem examination. An analysis of these cases has been given yearly with the statistics of the institution; for the sake of comparison they have now been collected as a sequel to the statistics of the admissions.

Assigned causes of death in 295 males and 244 females at three periods of life, as follows:—

Diseases of	From 20 to 40 years.		From 40 to 60 years.		From 60 and upwards.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Digestive organs	7	13	8	14	3	14	18	41
Genito-urinary organs	0	0	0	1	2	0	2	1
Respiratory organs ...	59	43	66	36	22	25	147	104
Vascular system	1	3	1	8	9	7	11	18
Nervous system.....	37	22	45	28	29	23	111	73
Locomotive organs ..	1	0	0	2	0	1	1	3
Fevers	1	0	0	2	1	0	2	2
*Inquest cases.....	1	1	0	0	2	1	3	2
Total	107	82	120	91	68	71	295	244

Half the mortality amongst the males was ascribed to diseases of the respiratory organs, 50 per cent., and 43 per cent. of the females, principally from pneumonia and pulmonary phthisis; 91 cases of the former and 44 of the latter amongst the males, and 57 of pneumonia and 42 of pulmonary phthisis in females. Diseases of the digestive organs, principally peritonitis, enteritis, and dysentery, were found in 18 males and 41 females, and most frequently in females from thirty years of age and upwards. In 2 males and 3 females there

* Several of the cases not examined were also inquest cases.

was disease of the kidneys. Of diseases of the vascular system, 11 occurred in males and 18 in females; 5 were cases of pericarditis, 4 in males; 14 of dropsy, 9 in females; and 11 of cachexy, of which 7 were females. Diseases of the nervous system were found in 111 males and 73 females, viz., cerebral apoplexy in 9 males and 8 females; meningitis in 22 males and 18 females; disease of brain in 55 males and 35 females; paralysis in 2 males and 1 female; myelitis in 23 males and 11 females; so that 37¾ per cent. of males and 27½ per cent. of females had organic disease of the cerebral organs. There were three deaths from lumbar abscess, 2 from cancer, 2 from erysipelas, 4 from fever, and 3 were inquest cases. It may be well to remark that in many of the cases there was disease of more than one organ, and it was often difficult to determine to which to ascribe the immediate cause of death. From examinations made in previous years of the sane at the same periods of life, the proportion of diseases of the nervous system, viz., the brain, its membranes, and the spinal cord, did not amount to half that of the insane; so that organic changes in the cerebral spinal system are frequent in fatal cases of insanity, especially in general paralysis. Half the mortality in both sane and insane was from diseases of the lungs. Cases of melancholia frequently were attended with pulmonary phthisis, which has been so fatal to the insane. Pneumonia has been also very fatal to chronic cases confined to bed from debility or any cause.

The diseases of the nervous system occurred at the following periods of life:—

Diseases.	Under 30 years.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		Over 80.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Apoplexy	1	3	2	1	0	2	3	1	2	1	0	0	1	0	9	8
Paralysis.....	0	0	1	0	0	1	0	0	0	0	1	0	0	0	2	1
Meningitis.....	2	1	3	4	4	5	2	2	7	4	4	1	0	1	22	18
Cerebritis	7	4	14	7	15	9	7	6	7	4	3	5	2	0	55	35
Myelitis	1	1	6	3	10	3	4	2	1	2	1	0	0	0	23	11
Total.....	11	9	26	15	29	20	16	11	17	11	9	6	3	1	111	73

Of the 9 cases of apoplexy in males, 3 had mania, 2 dementia, 2 melancholia, and 2 epilepsy; of the 8 in females, 3 had mania, 1 melancholia, and 4 epilepsy. There were 11 cases of congestion of blood in the brain and spinal cord in males, and 16 in females, not enumerated in the foregoing table, in cases of epilepsy especially, in mania, and a few in melancholia. One case of paralysis was in a male in a state of mania, the other in dementia, and 1 in a middle-aged female. Of the 22 cases of meningitis in males, 10 had mania, 6 dementia, 3 melancholia, and 3 epilepsy; of the 18 cases in

females, 7 had mania, 5 dementia, 3 melancholia, and 2 epilepsy. Of the 55 cases of cerebritis in males, there were tumours in 2, 1 case of epilepsy, and 1 of mania; softening of brain in 13 cases of mania, 7 of dementia, and 20 of general paralysis; fluid in the ventricles in 6, 3 mania, 1 monomania, 2 dementia; of the 35 cases of cerebritis in females, there were tumours in the brain in 2, in 1 case of monomania, and 1 of general paralysis; there was gangrene of the cerebellum in 1 case of epilepsy; there was atrophy in 3 cases, 1 of dementia, 1 of mania, and 1 of general paralysis; there were 10 cases of mania, 12 of dementia; there were 5 cases of melancholia, and 2 of general paralysis. Myelitis in 23 males, all in cases of general paralysis, and in 11 females in cases of general paralysis, combined with mania in 2, dementia in 7, and epilepsy in 2. There was hypertrophy of the brain in 7 males and 8 females, and atrophy was remarkable in 4 males and 6 females.

Forms of insanity in 295 males and 244 females:—

Terms of Insanity.		From 20 to 40 yrs.		From 40 to 60 yrs.		60 years and upwards.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.
	Mania	29	34	39	24	19	15	87	73
	Monomania	4	1	6	6	3	4	13	11
	Melancholia	8	9	13	19	11	17	32	45
	Dementia	9	8	17	16	26	31	52	55
	Delirium tremens	1	0	1	0	0	0	2	0
	Idiocy	4	1	1	3	0	2	5	6
Epilepsy with	Mania	12	15	8	7	3	1	23	23
	Melancholia	2	2	1	2	0	0	3	4
	Dementia	2	2	2	4	2	0	6	6
	Idiocy	14	5	1	1	0	0	15	6
General Paralysis with	Mania	8	2	13	3	2	1	23	6
	Monomania	6	0	0	0	0	0	6	0
	Melancholia	1	0	3	0	0	0	4	0
	Dementia	7	3	15	6	2	0	24	9
Total		107	82	120	91	68	71	295	244

From this table it appears that mania was the most common form of mental disorder in both sexes in early life, and dementia was most fatal in after life; that epilepsy, of which there were 47 fatal cases in males and 39 in females, was mostly fatal before the middle period of life; more than half these cases were combined with mania. There were 57 cases of general paralysis in males combined with mania and dementia, and 15 cases in females; these were more fatal in the middle period of life, after forty years. The highest mortality occurred in persons from forty to fifty, and nearly one half the deaths took place between the ages of thirty and fifty. There were 20 fatal cases of idiocy in males and 12 in females,

TABLE *showing the maximum, minimum, and average weight and height of the Human Body, and internal organs, and measurement of the head, in* 539 *cases,* 295 *males and* 244 *females, at three different periods of life.*

Age.	Sex.	Body.		Measurements of Head.			Cerebral Organs.				Spinal Cord.	Thoracic Organs.			Abdominal Organs.							
							Cerebrum.															
		Weight.	Height.	Circumference.	Antero-posterior.	Transverse.	Right hemisphere	Left hemisphere	Cerebellum.	Pons and Medulla.	Encephalon.		Right Lung.	Left Lung.	Heart.	Stomach.	Liver.	Spleen.	Pancreas.	Right Kidney.	Left Kidney.	Renal Capsules.	Uterus.
		lb. oz.	ft. in.	in.	in.	in.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.
From 20 to 40 years.							maximum															
	M.	185.0	6.0	24.0	15.2	15.5	25.5	25.5	7.0	1.5	58.0	1.7	74.0	52.0	16.5	9.0	84.0	12.7	6.0	10.0	10.5	1.2	—
	F.	127.0	5.8	23.0	14.0	15.5	24.5	24.7	6.2	1.7	55.7	1.5	46.5	33.0	16.0	7.0	114.0	20.2	5.0	7.5	8.0	1.0	4.5
							minimum															
	M.	55.0	5.2	20.3	10.0	10.0	13 5	8.0	3.2	0 7	30.0	0.7	8.0	6.0	5 0	3.5	28.0	2.2	2.0	1.7	1.5	0.5	—
	F.	47.0	4.10	19.0	9.0	9.0	13.0	13.0	3.5	0.7	31.0	0.7	7.0	6.0	4.5	3.2	24.5	1.7	1.7	2.0	2.7	0.2	0.7
							average															
	M.	97.7	5.6	22.9	13.2	13.2	20.3	20.4	5.2	1.04	47.1	1 1	25.3	23.3	9.3	5.7	52.8	5.2	3.5	4.8	5.7	0.8	—
	F.	77.12	5.3	21.2	12.9	13.0	18 8	19.1	4.9	1.03	43.8	1.06	19.7	17.8	7.3	5.8	44.1	5.3	3.0	4.1	4 4	0.7	1.5
40 to 60 years.							maximum															
	M.	257.0	6.3	24.5	16.0	15.0	25.5	25.5	7 0	1.5	57.7	1.5	73.7	60.0	24.0	10.0	95.0	15.0	7.5	7.5	9.0	2.0	—
	F.	132.0	5.7	23.0	14.5	15.5	23.0	23.2	6.5	1.5	51.7	1.4	39.0	40.0	16.7	8.2	119.5	14.0	5.5	7.7	7.0	1.5	3.0
							minimum															
	M.	51.0	5.0	20.0	10.5	10.2	14.5	14.7	4.0	0.7	34.5	0.7	10.2	8.0	5.0	3.7	13.0	1.7	1.7	3.0	2.5	0.5	—
	F.	47.0	4.7	19.0	10.0	10.0	11.7	11.7	3.0	0,5	27·2	0.7	6.5	6.0	4.7	3.0	24.5	1.5	1.2	1.7	1.5	0.5	0.5
							average															
	M.	101.2	5.8	22 3	13.1	13.3	19.9	20.2	5.4	1.07	46.7	1.09	27.9	24.4	10.9	6.1	54.9	5.1	3.6	5.0	5.2	0.9	—
	F.	78.6	5.2	21.5	12.9	12.8	18.3	18.5	4 9	1.03	42.7	0.98	18.6	16.5	8.7	5 3	44.5	4.3	3.1	4.2	4.2	0.7	1.8
60 years and upwards.							maximum															
	M.	188.0	6.0	23.5	14.5	15.0	25.5	26·0	6.0	1.9	58.7	1.5	74.5	47.0	27.5	10.5	73.0	10.0	5.7	6.7	7.5	1.5	—
	F.	132.0	5.8	22.5	14.2	14.0	21.5	21.5	6.5	1.2	48.2	1.2	34.0	50.0	15.5	7.5	58.0	8.2	5.0	6.5	6.7	1.7	2.5
							minimum															
	M.	63.0	5.1	21.0	10.5	11.5	15.0	14.7	4.0	0.7	34 7	0.7	8.5	7.0	6.0	3.2	32.0	1.2	1.5	2.0	2.7	0.5	—
	F.	46.0	4.10	20.0	10.5	10.5	14.0	14.0	3.2	0.7	33.2	0.7	8.5	7.5	6.0	2.7	27.0	1.5	1.7	2.0	2.5	0.5	1.0
							average															
	M.	107.9	5.6	22 3	13.3	13.2	19.6	19.9	5.1	1.0	46 2	1.0	23.8	20.6	12.4	5.4	45.8	3.5	3.2	4.1	4.6	0.8	—
	F.	87.12	5.2	21.3	12.8	13.0	17.9	18.1	4.9	0.9	41.6	0.9	15.9	15.5	9.2	5.0	40.1	3.7	2.9	3.6	3.5	0.8	1.6

three fourths of the males and half the females were subject to epileptic fits, and have been classed under that head. General paralysis was, after mania, most fatal to males; it is the most hopeless form, and prevails to a much greater extent in males than females. Epilepsy was also more fatal among males than females. Melancholia was most fatal amongst females. In the other forms of mental disorders there was no undue proportion of fatal cases between the sexes.

The average weight of the encephalon in 100 cases:—87 of mania and 13 of monomania in males was 48·36, and in 73 of mania and 11 of monomania in females, 43·1 ounces; the maximum weight in males 58, in females 53½,—the minimum in males 39½, in females 36 ounces; in 32 cases of melancholia in males the average was 47·1, in 45 cases in females 43·7,—the maximum in males 56, in females 55¾, the minimum in males 35¼, in females 34½; in 52 cases of dementia in males the average weight was 46·4, in 55 cases in females 41·9; the maximum weight was 53½ in males, 51¾ in females, the minimum in males 35¾, in females 33½; in 57 cases of general paralysis in males the average was 44·3, in 15 females 42·8; the maximum in males was 57, in females 55¾, the minimum in males 35¼, in females 34¼; in 52 cases of epilepsy in males, including 5 of idiocy, the average weight was 47·3, in 45 of females, including 6 cases of idiocy, 42·5; the maximum in males was 57¾, in females 49, the minimum in males was 30, in females 35¾ ounces.

These averages agree generally with those of Dr. Sutherland in his "Croonian Lectures," page 10, 'Journal of Mental Science,' April, 1861, except that in the above cases the highest average was in the cases of mania instead of epilepsy.

The weight of the body appears to have gone on increasing, and not to have arrived at its highest average, until the later period of life, sixty years and upwards; the average height of the body was greatest in males at the middle period, and in females before the middle age. The heart is the only internal organ which, like the body, goes on increasing in size to the later period of life. The brain arrived at its maximum average weight before middle age; it did not increase in weight after thirty years. The lungs in females arrived at the maximum also before middle age, but in males they did not arrive at the maximum until middle age. The abdominal organs, with the exception of the stomach in females, and the spleen in both sexes (which were highest in early life), gave the highest average at middle age. In the later periods of life all the internal organs, with the exception of the heart, showed a diminution in weight.

English Patients in Foreign Asylums; a Sequel.

In the 'Journal of Mental Science' for April, 1863, we published some general observations, condemnatory of the practice of sending insane patients from England to the Continental asylums.*

Our remarks have recently received a practical illustration in a case which, under the sensation title of "the alleged abduction of a nun," has been the theme of comment in the daily papers, and the subject of correspondence with the Home and Foreign Offices.

Among the passengers who embarked in the Dover night mail, on the 7th Sept., were two Sisters of Mercy, in charge of a young girl of unsound mind, whom they were conveying, with the aid of an attendant of Bethnal Green Asylum, from the hospital of S.S. John and Elizabeth, in Great Ormond-street, to a Belgian Asylum (St. Julian at Bruges), and whose struggles to get loose attracted the notice of the other passengers..

The occurrence was very fully commented on by the daily press. On the 21st of September the case was, in consequence of a communication from the Home Office, brought by the Mayor (Captain Noble, R.N.) before the Dover Town Council, at a special meeting, ('Daily Telegraph,' Sept. 22). Captain Noble informed the Council that he had received a letter from Dr. John Millar, of the Bethnal House Asylum, informing him "that he was called upon, with other medical men, to see a lunatic patient, the poor girl in question, as it was believed, who was suffering from acute mania. Her friends were Roman Catholics, and they were desirous that she should be kept in an asylum where the rites of that religion were solemnised; and there being no such asylum in this country, it was determined to remove her to the well-known *maison de santé* at

* This question of *English patients in foreign asylums* was thus referred to by Lord Shaftesbury in his examination before the Parliamentary Committee of 1859:

"12. *Mr. Coningham.* Are not a great many patients taken abroad?—Yes; I understand that of late a certain number have been taken abroad, both single patients and others who would have been in the licensed houses; it has not been to any great extent, but still to a greater extent than I should desire to see.

"13. You have no check over that?—We have no check over that, although the law of the country to which they may go is sometimes very stringent.

"14. Have you any reason to suppose that there is that kind of superintendence over the patients who are taken abroad, which you say is requisite?—Yes; there is very considerable nominal inspection and authority exercised over them. All those things appear upon paper, and if you read the accounts of the system under which lunacy is governed in France, you would think that nothing could be more perfect; but when one comes to examine into the matter, I think it is very doubtful whether it is so. I had heard a great deal about foreign asylums, but when I examined into them, I thought them wonderfully inferior to our own, and very deficient in things that we in this country consider to be absolutely necessary."

Bruges, founded for the reception of religious persons of the Roman Catholic persuasion. He explained that he should have written earlier, but he thought the matter might drop without any explanation of this kind being required."

On the 8th of October the Vicar-General of Westminster, Dr. Edward Hearn, D.D., addressed the following letter to the 'Telegraph,' giving the official (Roman Catholic) version of the story:—

Sir,—Although it would have been better, in my opinion, if the above question had ceased to be publicly discussed until the result of Sir George Grey's inquiry had been announced, I think it due to the Hospital of St. John and St. Elizabeth, against which institution some disparaging remarks have been thrown out, to give a short statement of the facts of the case. The facts are these:—

1. Towards the end of August one of the Sisters of Mercy residing in the Commercial Road, a lady 27 years of age, became insane, the attack being one of acute mania.

2. She was seen at first by Mr. Mahony, the ordinary medical attendant of the convent, and subsequently by Dr. Millar, the physician to a large lunatic asylum in Bethnal Green, who also sent one of his attendants to assist in taking charge of the patient.

3. These two gentlemen certified that the patient was suffering from acute mania, and ought to be removed at once to some asylum.

4. It was determined that she should be sent to Bruges, to the well-known institution of St. Julian's—an asylum under the inspection of the Belgian Government—where, during convalescence, should she recover, she would have the advantages of the consolations of religion and the society of persons of her own faith.

5. The superioress of the community in the Commercial Road, worn out with anxiety and a fortnight's care of a violent lunatic, requested the superioress of the Sisters of Mercy, under whose care the Hospital of St. John and St. Elizabeth has been for several years placed, to give her the advantage of her counsel and assistance.

6. The superioress of the convent in Ormond-street, proceeded accordingly to the Commercial Road on the evening of September 6, and with great kindness volunteered to assist in taking the patient to Bruges.

7. It not being possible to take the patient abroad that night, the superioress, in order to relieve the community in the Commercial Road, with the help of Dr. Millar's attendant, brought the patient to Ormond Street, where she remained in a separate room until the following evening. On the evening of September 7 the superioress of the convent in Ormond-street, together with a lay-sister and Dr. Millar's attendant, took the patient to Bruges, *viâ* Dover and Ostend.

Such are the facts of the case. If there have been any technical illegalities in the proceedings, Sir George Grey will doubtless inform us. Of this, however, I feel sure, that nothing has been done of which any concerned need feel ashamed, or which they have the slightest wish should remain concealed. As far as the hospital is concerned, an irregularity was without doubt committed. It is against the rules for any patient to be admitted without the sanction of the Medical Committee.

I remain, Sir, yours, &c.,

Edward Hearn, D.D., Vicar-General.

24, Golden Square, Oct. 8.

On the 15th of November Sir George Grey addressed the following letter to the Mayor of Dover:—

WHITEHALL, *Nov.* 15, 1864.

SIR,—With reference to the correspondence which has taken place respecting the removal to Belgium of a British subject, named Mary Ryan, otherwise "Sister Theresa," a Sister of Mercy, from the Hospital of St. John of Jerusalem and St. Elizabeth, No. 47, Great Ormond-street, Queen-square, London, I am directed by Secretary Sir George Grey to inform you that he has caused all the papers on the subject to be submitted to the law officers of the Crown, for their opinion as to the liability of persons concerned in such removal to prosecution, and that they have given it as their opinion that *the removal of the said lady from this country under the circumstances stated was illegal, and that all parties concerned in it are liable to an indictment for the offence of forcibly abducting her to parts beyond the seas.*

Inasmuch, however, as those concerned appear to have been actuated by no improper motives, Sir George Grey has intimated to the lady superintendent of the said hospital, who is reported to have superintended the removal, that he does not propose to institute legal proceedings in the present instance; but that he considers it his duty to warn her of the consequences of taking part in any similar case which may hereafter occur.

I am, Sir, your obedient servant,

H. WADDINGTON.

The Mayor of Dover.

On the 23rd of November the Protestant Alliance wrote to Earl Russell, saying, that although Sir George Grey had made known the opinion of the law officers of the Crown on the case, to the effect that the removal was illegal, yet, as he had at the same time intimated that, for reasons stated, he was not prepared to take proceedings to punish the guilty parties, they now urged that measures should be taken to restore to her country and to liberty the young person who had, in the judgment of her Majesty's legal advisers, been so illegally and violently carried off into a foreign land. To this letter they received the following reply:—

FOREIGN OFFICE, *Nov.* 26, 1864.

GENTLEMEN,—I am directed by Earl Russell to acknowledge the receipt of your letter of the 23rd inst., and to state to you in reply that by his lordship's directions inquiries have been made by her Majesty's consul at Ostend into the condition of Mary Ryan, now an inmate of the lunatic asylum of St. Julien at Bruges. From these inquires it appears that Mary Ryan receives most kind and considerate treatment, that she declares that she has no subject of complaint, and appears to have confidence in and to be attached to the persons attending her, and that free access to her is permitted to those who may, upon sufficient grounds, desire to communicate with her. *From the certificate of the physician upon which she was placed under restraint and removed from England,* and the certificate of the Belgian physician which authorised her being detained at the asylum of St. Julien, no doubt can be entertained of the condition of the lunatic.

Earl Russell is further informed that the laws affecting the treatment of lunatics in Belgium are very strict, and that with a view to the more special protection of foreigners against abuse certain formalities are required to be observed, the duplicate of the regulations is communicated to the representa-

tive of the country of which the patient may be a native, and that the civil authorities would upon suitable representation and precaution at once facilitate the removal of patients to their own country.

I am further to state that no representations have been made to Earl Russell by the family or friends of Mary Ryan on the subject of her removal to Belgium or of her detention in the asylum in which she has been placed.

Under these circumstances his lordship does not at present consider it advisable to take any further steps in the matter.

I am, Gentlemen, your most obedient humble servant,
(Signed) A. H. Layard.

To the Secretaries of the Protestant Alliance,
7, Serjeants' Inn, Fleet Street, London.

The case rests for the present here. The law officers of the Crown have given it as their opinion *that the removal of the said lady from this country, under the circumstances, was illegal, and that all the parties concerned in it are liable to an indictment for the offence of forcibly abducting her to parts beyond the seas.* Sir George Grey, determined, as he says, by the motives of those concerned, does not propose to institute legal proceedings; and Earl Russell goes farther, and in his letter to the Protestant Alliance rather seems to approve of the whole proceeding.

The Protestant Alliance will doubtless, when Parliament meets, take measures to bring the whole case before the House, and obtain official copies of the papers and correspondence relating to the transaction.

One question we would ask—*Who was the English physician, alluded to by Earl Russell, who signed the certificate?* Dr. Hearn states in his letter of the 8th October, that Mr. Mahony, the medical attendant of the convent of the Sisters of Mercy in the Commercial Road, and Dr. Millar, of Bethnal Green, both saw the patient and certified that she was suffering from acute mania, and ought to be removed at once to some asylum, and he adds that one of Dr. Millar's attendants accompanied the patient on her journey to Bruges, on the night of the 7th of September. On the other hand, the following note in the 'Lancet' of the 26th November, appears to give a formal denial to Dr. Hearn's statement as it relates to Dr. Millar:—

The late alleged Abduction of a Nun.—We understand that Miss Ryan was removed to Belgium solely upon the authority of the lady superintendent of the Hospital in Ormond-street. It is only an act of justice to Dr. John Millar, the superintendent of Bethnal House Asylum, to state that he neither signed a certificate nor sanctioned her removal. Dr. Millar is a gentleman of the highest respectability, and we are glad to know that he was no party to the proceeding which has naturally given rise to severe and condemnatory observations.

In the 'British Medical Journal,' December 3, the denial is still more explicit. "*Mr. Millar, we are informed, neither signed a*

certificate nor had anything to do with her removal." The medical officers of the hospital from which the patient was removed have also denied all knowledge of the certificate referred to by Earl Russell :—

> The medical officers of the Hospital of St. John and St. Elizabeth present their compliments to the Editor of the 'Daily Telegraph.' In a leading article of the 17th instant, he has commented upon the case of a patient who, labouring under insanity, was being conveyed to an asylum in Belgium, and referred to her as having come from the hospital to which they are attached. They beg to be allowed to state that she was not a patient of the hospital, nor a member of its community of nursing sisters; nor was she ever seen by the medical officers, who, indeed, only learned the occurrence from the notice in the papers. They understand that the patient was merely at the convent for a few hours before proceeding to her destination.
>
> St. John's and St. Elizabeth's Hospital, 47, Great Ormond Street, Queen's Square, Bloomsbury, Sept. 20.

From the 'Tablet' of the 26th November we learn that on the 19th, Cardinal Wiseman preached a sermon on the festival of St. Elizabeth, at this hospital, at the conclusion of which he made some observations on the so-called "violent abduction of a nun." After correcting some errors in the accounts which have gone forth, he emphatically declared that, should either of the proposed courses be carried into effect of a parliamentary or of a judicial investigation, he, and whoever acted on his behalf, would put no obstacle whatever in its way. For he was perfectly satisfied that any impartial examination of the entire case, even though there might have been any unintentional errors in the course of it, must end in a complete vindication of the conduct of all concerned in it. His Eminence, in the most explicit manner, declared that none of the medical gentlemen who so disinterestedly gave their services to the hospital, were, in the remotest degree, involved in the transaction, as the *Religieuse* in question did not in any way belong to the community attached to the hospital.

There can be little doubt but that the Protestant Alliance will procure from Parliament the inquiry which the Cardinal desires. It is evident that Miss Ryan, the sister in question, was of unsound mind, having been certified as such by Dr. Millar. Moreover, as a Roman Catholic, she would be likely to benefit by treatment in an asylum where the offices of her religion are performed, and where the whole system of treatment is assimilated to her previous convent life.

So far, therefore, as the removal of Miss Ryan to the asylum at Bruges is concerned, we are disposed to endorse the Vicar-General's statement in his letter to the 'Telegraph,' "that nothing has been done of which any concerned need feel ashamed, or which they have the slightest wish should remain concealed;" and the Cardinal's

assertion, that any official inquiry must end in a complete vindication of the conduct of all concerned in it, is doubtless true.

A full description of the Asylum of St. Julian, at Bruges, will be found in the 'Journal of Mental Science' for April, 1857. ("The Belgian Asylums for the insane.") It is a large private asylum owned by an ecclesiastic, the Canon Maes, and is situated in the ancient city of Bruges, having two branch asylums in the country. It contains over 300 patients, and would appear to be well conducted. It was visited by Dr. Webster in 1856.

One may also fairly assume—beyond the good faith which appears to have actuated all those engaged in the removal of Miss Ryan—that they were ignorant of the illegality of the proceeding.

Roman Catholics place great value on the services of Sisters of Mercy and other religious orders in the case of the sick and of the insane, though the physicians attached to the continental asylums certainly do not endorse this opinion. They have now a good opportunity of showing what their religious organisation can do in the management of the insane. The removal of their patients abroad is found to be illegal; let them now open a middle-class Roman Catholic Asylum in the vicinity of London, on the full ecclesiastical system. They will not want for patients, and if success attend their efforts the experiment will repay all its expenses. In a Roman Catholic periodical, the 'Month' for November, 1864, such a project is indeed mooted and urged, both on the religious ground and also on the greater efficiency of the sisters in the care of the insane, as contrasted with hired attendants. The rejoinder at present is, that the English asylums, with their hired attendants, are conducted with more humanity and skill than are the foreign asylums with all their brother- and sister-hoods. The most superficial inspection of the asylums of Belgium or Italy will show that the theoretical superiority of the religious orders, as guardians of the insane, to the paid attendants of England, has hitherto not been realised in practice. We should be glad to chronicle the attempt in England, practically to work this ecclesiastical system.

CLINICAL CASES.

Clinical Notes on Chronic Hydrocephalus in the Adult. By Samuel Wilks, M.D. Lond., Assistant-Physician to Guy's Hospital.

The following cases are published in the 'Journal of Mental Science,' principally to elicit from those who have a large experience in the treatment of mental disorders, the frequency of chronic hydrocephalus as a cause of a permanent weakness of mind and body.

At the last spring assizes held at Bodmin, the trial of Millett *v.* Edmunds was one in which the plaintiff sought damages on account of the defendant having charged him with killing his brother. This brother was about fifty years of age, had been of feeble intellect since childhood, which incapacitated him from earning his livelihood. He was taken charge of by a domestic, who assisted to dress him and who accompanied him in his walks. He had a very large head, which was noticeable by strangers, especially as he wore his hat on the back of it; this, with a peculiarity in his gait, made his state of mind at once apparent. After having been ailing for a week or two with headache, he returned home from a walk about two o'clock, not feeling well. He, however, partook of a hearty dinner of beef, and a dessert of apples; after which he retired to his room. He was seen by the servant about an hour afterwards sitting on the stairs, when he was conducted to a sofa, and he sat there some time in a half-conscious state; he then fell back insensible, and was carried to bed. This was half-past four in the afternoon; at eight o'clock stertor came on, and continued until the morning, when he died at half-past six. On post-mortem examination the body was found healthy, and the brain likewise was said to be in the same condition, but contained half a pint of fluid in the ventricles, which were consequently of enormous size. The medical men who examined the body at first declared that this was sufficient to account for the symptoms and death, and subsequently they reiterated the same opinion; at a critical time, however, when a charge of poisoning was made, they hesitated in expressing a decided opinion as to whether this effusion in the ventricles was sufficient to cause death.

At the trial which subsequently took place arising out of the proceedings connected with this gentleman's death, my opinion was asked

I believe, because the two following paragraphs were to be found in my 'Lectures on Pathological Anatomy;' and in a volume of the 'Guy's Hospital Reports:'—"Chronic hydrocephalus has a somewhat difficult pathology, and probably more than one disease is included under this name. Common as the disease is, yet, being of long duration, the chances are few of our being able to watch a case to its termination, and to examine the parts after death. Some have thought that the disease is altogether analogous to a pleuritic effusion, when the pleura appears healthy; others, that there is some local inflammatory process whereby the veins of Galen become impeded, and so a dropsy of the ventricles is caused. I have now seen several cases of chronic hydrocephalus in grown-up persons, but which probably depended upon some diseased action in infancy. I have seen a young man who had been affected with his head all his life, which was not larger than natural, die after a short illness, and the ventricles of his brain found immensely distended with fluid. I have showed you already the skull of an adult who seemed to have had a hydrocephalic head all his life; and not long ago I examined, with Mr. Hilton, the head of a gentleman who had never had his mental faculties right since birth, and dying rather suddenly, an immense ventricular effusion was found. In this case the arachnoid appeared everywhere opaque, particularly at the base, and this seemed to close the fourth ventricle; and thus the opinion of Mr. Hilton that this is one cause of ventricular effusion; for, as you know, there is a natural communication between the lateral, third, and fourth ventricles, and from the latter to the sub-arachnoid space; so, if the opening from the fourth ventricle be closed, the fluid will naturally collect in the lateral ones above. As I said before, in chronic hydrocephalus the fluid is always within the ventricles; an external hydrocephalus is spoken of, but I never saw an example of it." In another place I say, "The so-called *serous apoplexy* is a disease of which I know nothing, it was a term formerly used to designate those cases of very speedy death with coma where no blood was found effused in the brain. There can be little doubt that many of these cases, which were described by Abercrombie, were examples of Bright's disease, &c. &c. It is possible that some instances may have been of a kind such as I have mentioned under chronic hydrocephalus, where, for a long time, a chronic inflammation has been going on in the ventricles; and yet symptoms of death sudden and very little found but increased fluid in these cavities."

Speaking of chronic hydrocephalus, in a paper in the 'Guy's Hospital Reports,' I say, "There is still a third affection, which can with propriety be separated from these, in which the head is not necessarily enlarged, and is fatal only after a lengthened period or even in adult life. It is probable that these cases have arisen from some acute affection in childhood, and that from the severe change then

occurring the brain and its functions are never perfectly restored; consequently, a dulness of mind or idiotcy may result, and after death a ventricular effusion be found."

The cases referred to above were the following:—The first has a striking resemblance to the one which formed the subject of the trial. It is given in detail by Mr. Hilton, in his 'Lectures on Rest and Pain,' as follows:

"The gentleman who was the subject of this disease died at the age of thirty-four. On the day of his death he had visited the Crystal Palace. He had been seized with vomiting in the morning, and again about two hours before he reached home. He walked from the Crystal Palace (a mile or so), and when he entered the house he staggered and said he felt giddy and oppressed. He was placed on a bed, and cold applied to the forehead, but he died in a very short time with stertorous breathing, remaining insensible, however, almost to the last moment. I examined the body, assisted by Dr. Wilks, of Guy's Hospital, and this is his report of the post-mortem examination:

"'On exposing the brain, the convolutions were flattened, and were apparently large and few; the brain structure appeared healthy. On opening the ventricles, they were found to contain at least four ounces of cerebro-spinal fluid, the sp. gr. of which was 1008, and possessed all the usual characters of this fluid. The ventricles were greatly enlarged, and all the receding and projecting angles of the boundaries and cornua were lost or subdued. The foramina of Munro were rounded, and capable of admitting a large quill not quite a third of an inch in diameter. The lining membrane of the ventricle and the choroid plexus were healthy. The septum lucidum and the fornix were softened, but the microscope showed no trace of inflammatory deposit or softening. The fourth ventricle was greatly dilated in all its directions, showing well its lateral cornua, which support the pneumo-gastric, auditory, and other accompanying nerves. The cerebro-spinal opening between the under surface of the cerebellum and the upper surface of the medulla oblongata was completely closed by a tolerably dense membranous structure, which formed a kind of pouch projecting downwards, and showed the direction of the fluid tension upon it to have been from above to below. The other organs of the body were healthy.'

"I asked his brother, who was not a professional man, to oblige me with a detail of the symptoms which he presented during life, and this is his account of them.

"'He always had delicate health, the nails of his fingers were peculiar in form; as a child he was active, but very irascible, as a man he was very spare and delicate. He had a fancy for turning and gardening, but disliked the excitement of London. At the age of sixteen he had a severe nervous illness. with great depression, brought on by application to business in the City; his business, however,

was not at all intense, and would have been thought nothing of by ordinary men. His food was of the simplest kind, even tea and coffee appeared to derange his stomach. Winter and cold always affected him injuriously. He said himself he only half lived in the winter; he would appear torpid and would drop into a deep sleep after a meal, from which it was often difficult to rouse him, when he seemed scarcely to know where he was. Excitement often brought on impediment in the speech. For many years he was subject to headache, derangement of stomach, and occasional deafness. He had a peculiar restless look of the eyes and stare, and for the last year lost flesh; became stooped and feeble in his gait. He also carried his head peculiarly as if affected with slight stiffness of the neck. A few months before his death he had a severe attack of vomiting with great prostration without any apparent cause. The last month or two were marked by a morbid activity and restlessness. On the day of his death he had been to the Crystal Palace, whilst there he vomited; he walked home, staggered, felt giddy and oppressed. He was placed on a bed, and died in a short time with stertorous breathing.' "

The case of the young man referred to who suffered from chronic hydrocephalus, was about twenty years of age. He had suffered all his life with his head. Sometimes his mind appeared enfeebled, and, indeed, there was little doubt that his intellect was not very acute, although this was hidden from us by his friends. For some months he had been under medical treatment for headache, &c., but had never been confined to the house. He died at last rather unexpectedly; and on post-mortem examination the ventricles were found immensely distended with clear serum, the medical man who assisted me said there was as much as a pint. No appearance of acute disease.

In cases of this kind, where the head has been large from infancy, and the mind enfeebled, there can be little doubt that the chronic hydrocephalus has existed during the whole of life. Whether the fluid collects for the reason suggested by Mr. Hilton, from a closure of the fourth ventricle by the arachnoid, may be a question; but I think there can be little doubt that the whole cerebral structures are impaired at the period of the development of the disease,and that the symptoms cannot be due to the pressure of the fluid alone. Why death should at last ensue from a cause which has been so long persistent, creates a difficulty which occurs in many other chronic diseases. The statement made by the medical witnesses in the first case was, that some increase of the serum had suddenly occurred, and thus the apoplectic condition which was so rapidly produced. This might have been true, but at the same time it must be remembered that with this condition of brain the powers of the body as well as the mind are very low, and a trifling cause may bring the whole

machinery to a stop. That the water has existed in these cases through the whole of the patient's life there can be no doubt, for in infancy the cranium becomes larger, much broader from side to side, and its whole capacity much greater than that of the healthy skull. If fluid were not known to occupy the centre of such a head by a post-mortem examination, there could be no doubt of its existence, for no one would suppose that a person with a feeble mind and an extraordinary large head, had the latter filled with brains. In the museum of Guy's Hospital there is the skull of a middle-aged man who had suffered from chronic hydrocephalus; it is much larger than natural and is broad; the bones thick, and dura mater partly ossified. He was in tolerable possession of his powers of mind and body.

The case of the youth who was flogged to death by his schoolmaster, Hopley, at Eastbourne is, no doubt, well remembered; but, perhaps, it is not so fresh in the memory that he was of feeble intellect and had water on the brain. When, therefore, the medical witnesses stated that there was nothing found in his body, not even the ventricular effusion, to hasten or facilitate his death, I think they were speaking too strongly; for without wishing to exculpate the prisoner for his brutal and ignorant mode of procedure with a boy of this mental calibre, I think it must be admitted that in such a subject with such a brain, the physical is impaired as well as the intellectual force, and that the powers of resistance are very slight, and that they soon succumb to external agencies. I think, therefore, that, although his beating was very severe, that it would not have caused his death so suddenly had he been in good health, and above all, had he had a good organ for the production of nerve force.

The prisoner spoke in his defence of the boy's peculiarities of character, which was corroborated by others, but which Hopley attributed to wilful obstinacy. He said the boy was very peculiar, very obstinate, determined not to learn; when he arrived at the age of sixteen, he could not or pretended not to know a sixpence from a shilling. He often took fits of obstinacy for days together. He was a nervous, timid boy, was frightened to go over a plank by himself; he also suffered from chilblains in the winter. The medical men were assisted by most experienced surgeons in London, and their evidence was that the head was very large, and appeared from its configuration as if he had suffered from water on the brain; such was found to be the case, for on examination of the brain its cavities were found to be filled with a large quantity of fluid, from six to eight ounces, and from the appearance of the parts seemed as if this effusion had been of many years duration. The appearances, it was said, would certainly lead to the belief of the boy's defective intelligence. The medical witness considered that death was caused

by shock to the nervous system, and on being asked whether the ventricular effusion would cause the nervous system to be depressed, he answered, *no*.

Lord Chief Justice Cockburn in summing up said, as for the dulness displayed by the boy, that could scarcely be wondered at after hearing the medical testimony that there was proved to be six or seven ounces of water on the brain. Mr. Hopley ought to have considered that there must be some natural defect which prevented the boy's learning.

From a comparison of this case with the preceding, and some others, I think there can be no doubt that with a brain of this kind there is not only a mental but physical weakness, that just as his feeble powers of mind were stunned by the ignorant force which was used to conquer his obstinacy, so his powers of body, at an equally low standard, could not resist the chastisement he underwent. Even were it shown that the latter was greater than I imagine it to have been, nevertheless, I believe the principle just asserted to be correct.

These cases here detailed, together with some others, afford the foundation for my experience of a chronic hydrocephalus beginning in infancy sometimes continuing to adult life. The subject of it is enfeebled both in mind and body, and a very trifling circumstance deranging his nervous system is sufficient to bring about his dissolution. Most authors are silent on the subject, or I would not have ventured to trespass on the space of the 'Journal of Mental Science' with these cases, but even this silence does not preclude the possibility of such an affection being much more common than I suppose, and being perfectly well known to the superintendents of lunatic or idiot asylums. In the latter I cannot but think they must be sometimes met with; and if so, I for one should be much pleased to hear more on the subject from those who have charge of these institutions.

Blood-Cysts situated within the Arachnoïd Cavity in Cases of General Paralysis of the Insane. By John W. Ogle, M.D. Oxon., F.R.C.P., Assistant-Physician and Lecturer on Medical Pathology, St. George's Hospital. (*With a Plate.*)

The post-mortem discovery in some cases of insanity, of cysts within the arachnoïd cavity containing blood, has been noticed by certain writers on Psychological Medicine. For example, Calmeil, to whose researches we are indebted for the first clear perception and understanding of general paralysis of the insane, when enumerating the various morbid changes met with inside the cranium

of persons who have died of this form of disease, mentions the occurrence of cysts filled with blood between the two laminæ of the arachnoid membrane; or rather, as it should perhaps more properly be stated, between the dura mater and the arachnoïd. The reader may be referred to Calmeil's 'Mémoire' on the form of insanity in question, and more specially to his 'Treatise on the Inflammatory Diseases of the Brain,' Paris, 1859,* in which he describes a series (Quatrième Série) of cases of what he calls diffuse chronic peri-encephalitis, in which, along with other lesions, false membranous cysts filled with blood are found in the cavities of the cerebral arachnoïd. Of this complication he instances five cases, which appear to be all that he has had personal experience of.

At the present time, I suppose, as well in England as on the continent, such cysts would be considered, for the most part at least, the result of changes which had been wrought in blood extravasated, as the result of injury or otherwise, within the so-called arachnoïd cavity; but as I do not propose to take this opportunity of discussing their general origin and nature, I will not speak further of the characteristics of these cysts in general, but proceed at once to give the details of an interesting case of general paralysis of the insane which fell under my own care, in which, after death, such an intra-cranial cyst was found, and then add the description of a similar case which occurred in the experience of Dr. Bacon, to whom I am indebted for the opportunity of mentioning it in this place.†

Case 1.—*Hæmorrhage within the arachnoïd cavity on both sides of the brain—Formation of a cyst containing blood-coagulum and bloody fluid on the left side—Delusions—Maniacal excitement—General Paralysis—Dementia—Partial Hemiplegia—Coma.*

The patient, æt. 32, was a well made, and strong and healthy looking man, whose father had died of some form of paralysis. As a child he had been remarkable for gentleness of disposition; as a young man he had been dissipated in habits and suffered from syphilis, and some forms of secondary symptoms, for which he had been salivated, though not without great difficulty. Before his marriage, which occurred when he was about 28 years old, he began to be odd in temper, and often abstracted in manner; and soon after the birth of his first child, which was in 1859, during the summer time it was noticed that he was "very irritable." He afterwards became affected by what was termed "weakness of the ankles and sinews of the calves," and unable to walk up stairs without difficulty. On one occasion, about the same time, it was remarked that he was unable to button his waistcoat, and also that the mouth was "drawn much to one side for an hour or two." He

* Tome i, p. 537.

† I will only observe (touching upon the comparative rarity of these so-called blood-cysts in the arachnoïd cavity) that whilst Dr. Joire, who has had much experience as an alienist physician, has collected 29 cases in which intra-cranial hæmorrhage external to the serous cavity existed; he has only encountered 12 in which the hæmorrhage has taken place into what he terms the intra-arachnoïd sac. I must remark that he recognises, as does Calmeil, hæmorrhage between the dura mater and the *parietal* layer of arachnoïd.

recovered from this condition, but a few months afterwards great irritability of temper and manner again came on, and also great "variability of spirits." At the latter end of 1861 he increased his daily work very materially, rising unusually early and going to market, and dividing his time between his farm in the country and his town business, and working very hard at each place. In January, 1863, he became highly excitable, and in March, on one occasion, taking a single glass of beer before dinner he perfectly lost consciousness, and fell down but did not struggle. Ever after that time he was more or less the subject of a morbid dread of evil, and low and depressed in spirits. On two or three occasions there was a complaint of *numbness* of the *left* arm and hand; and at times he stumbled in walking. There never was any complaint of "double sight." Later in the year 1863, whilst at some races with his wife he behaved to her most unreasonably, leaving her without money to find her way home unattended. He became addicted to self-pollution. He also lost flesh considerably, and his wife observed that his pulse and the action of the heart were apt to become very irregular, sometimes being unusually quick, at others unusually slow; the bowels also became very irregular, being either very confined or much the contrary.

Symptoms when first treated by myself in Nov. 1863. His manner was somewhat sluggish, and he had rather a heavy look about the eyes. The pupil of the *left* eye was decidedly much *larger* than its fellow; both of them were somewhat inactive to light. There was no strabismus and no apparent want of balance in the features of the opposite sides of the face. He often complained of "odd feelings" about the head, but never of actual pain, and he frequently raised the hand to the head. His sleep was reported as restless and disturbed. The pulse was small and quick but quite regular; the cardiac sounds were natural. The urine was acid, 1033 sp. gr., and quite free from albumen or sugar, but deposited large quantities of phosphates when heated. He was ordered a vegetable tonic with ammonia and chloric ether.

On further watching I found that every alternate day he was subject to great heat of skin and feverishness, with a quick pulse and very moist skin. On these days he was unusually sullen, would remain in bed or in a chair without moving, refusing to speak, or eat, or even to open the mouth, and the saliva would accumulate in large quantities in the mouth as if he was unwilling or unable to swallow; and on these days also he refused to pass his evacuations, and at times would pass the fæces into his trousers. The conjunctiva of the *left* eye was often very "blood-shot," and the mucous membrane of the throat was very red and inflamed. On one occasion I was sent for and found him sitting in his chair in a state of great stupor, but capable of being roused; as this condition lasted some time in spite of sharp aperients, fearing some effusion within the cranium and having some suspicion that his ailment might possibly depend upon some syphilitic affection, I determined to place him quickly under the influence of mercury; in about three days, under the use of calomel and the application of mercurial ointment to a blistered surface on the neck, he was well salivated, with the best results inasmuch as the heavy drowsy state completely passed away. The accessions of feverishness and other symptoms above described still, however, continued, observing the alternate days pretty regularly, and the bowels became very costive, requiring frequent aperients. I then determined to treat him with quinine in doses of 2 grains twice or thrice a day, giving him wine freely as the circulation was feeble, and sending him for a time to the seaside. He considerably improved, but still the symptoms, though mitigated, recurred on alternate days as before; and I then gave him five grain doses of quinine twice a day. This agreed with him, and in about three weeks he was in a much more natural condition, he was much less irritable,

and quieter, he would feed himself comfortably, and in about two weeks more there was scarcely any difference between one day and another. During this illness he got it into his mind that he was not at home, that his house was uninhabitable, without a roof, or broken down, and that he was always in some other town than where he was; moreover, he was impressed with the idea that he had no money, no boots, clothes, &c., and had also other delusions. All these continued. If thwarted he was very hasty, and would push people about, but otherwise was quite quiet and free from violence. He then began to entertain an aversion to his wife's relatives. He became possessed with the idea that his children had lost their heads and legs, and he would go about everywhere looking for them and seeing that it was not so. He also persisted in thinking that he smelt chloroform everywhere and tasted it in everything, and that his children had been poisoned by it.

About the middle of February, 1864, I was sent for to see him after he had eaten a heavy indigestible meal. There was a difficulty and embarrassment in speech, and he complained of giddiness and odd sensations about the head; there was, also, a very slight degree of "twitching" of the left side of the face. Under the use of aperients he was as well as usual in two days; but at the end of the month he was again somewhat excited, going about whispering things to himself, thinking aloud, and saying he saw people about him who did not exist, and heard them conversing with him. He was under the impression that his children were poisoned by chloric ether, and for two nights he had no sleep, constantly getting up and trying to walk about the house. Having become more rational and quieter he went again to the sea-coast, and on one day took a very long walk there: in a few days he was brought up to London in a highly furious and maniacal state, constantly talking with a trembling, quivering voice, and shouting imprecations against his wife's friends, threatening to cut off everybody's head, declaring that his children were killed and trying to find the murderers, and asserting that he had come *up* to London by a *down* train (an incongruity which had puzzled him for several weeks and which, in his attempts to understand it, made him constantly angry). He ate no food for several hours, and being in this constant state of mental and bodily excitement became at last quite exhausted. He then was with difficulty persuaded to take a small amount of food and porter containing some laudanum, which caused him to pass a tolerable night. Being the next day removed into the country he was much less excited, but still was so to a certain degree, and jumped into a pond of water, trying to escape from attendants. For a few days after his return to London there was no return of great excitement, but he again became maniacal, not being violent, but talking constantly and rapidly, fancying himself at one time in prison, at another about to marry every female he could think of, chiefly the royal princesses, to whom he would constantly write long letters. At this time his condition was certified to by Dr. Blandford, whose remarks as to his state are contained in the foot-note appended below.* He then troubled himself for several days

* "Mr. G.'s case at the time I saw it presented an extremely well-marked specimen of the expansive variety of general paralytic insanity in its second stage. My interview was a short one, but I recollect that he was unsteady on his feet, and his speech extremely inarticulate. His delusions were characteristic. In his *délire ambitieux* he told me that he was a baronet; that he was going to marry the Princess of Denmark and all the other Princesses; that he could buy all Bond Street as well as Hanover Square; that he had raised Bond Street a story higher by means of mesmerism; that he was going to give his medical attendant £1000, and any amount to me. The case was so clearly one of general paralysis that I was enabled to sign a certificate without hesitation. I expressed an opinion that it would run a very rapid course. (Signed) G. F. B."

about an inguinal hernia, which it was thought he formerly suffered from, and he began to expose his person and to be very obscene. At this time the pupil of the left eye was at times, but not always, larger than the opposite one; and the left upper eyelid would at times droop decidedly With intervals of three or four days he had four or five attacks of maniacal excitement, when he would not sleep for two nights together; with intervals in which he would sit in a listless and sullen state, or in a composed condition, smiling at everything said or done. The tongue became furred and the mouth very dry. Nothing seemed to give relief and quiet so much as ice to the head, kept applied for several hours continuously in a bladder. I tried tartar emetic and also hydrocyanic acid and digitalis, but found more soporific effect from half-drachm doses of the Liquor Opii Sedativus. Purgative injections were administered, and food, with wine, given according to circumstances.

He then, about the end of April was taken charge of by Dr. Horsbrugh, of Norwood Green. I visited him about the middle of June. I found him lying on the sofa in rather a lethargic manner, leaning on his left side and using his right hand, but moving the left one very slightly. There was decided ptosis of the left upper eyelid. He knew me, but was very undemonstrative. He was unable to walk without assistance, and when he did so the *left* leg was manifestly dragged after him. He complained much of pain at the fore part of the head whenever he was raised up, and then he would put his hand to the head. It was stated that there had been a fœtid discharge from the right nostril some days before, but no blood; of this there was no trace when I saw him. He had lost flesh, but it was stated that he had had better nights of late. The tongue was red at its edges, with the papillæ much enlarged. It had been necessary to give him aperients and enemata. The pulse was feeble but regular, the heart's sounds natural; the surface of the body cool. It was determined to continue the use of tonics which he had been taking, and to apply ice to the head in a small bladder, which gave relief as before.

Ten days later I visited him with Dr. Horsbrugh, and found him in a semi-comatose condition, but he could be roused so as to recognise others. The mouth was slightly but unmistakeably drawn to the *right* side. The conjunctiva of the left eye was very vascular and of a dull "glazed" character; the left eyeball was quite immovable, its pupil being of the same size as that of the opposite eye. The powers of swallowing were much diminished. There were occasional startings and twitchings of the *left* leg, and a peculiar drooping forward of the head, evidently from loss of power in the neck muscles. The heat of the surface of the body was much below par. Stimulants were freely given and a blister applied to the neck. On the day following, the dysphagia was greater, and the saliva was retained in the mouth; the pulse was, however, firmer and the body was warmer—otherwise he was much in the same state. The urine was passed under him. He died on the subsequent day, having become gradually more comatose.

Post-mortem examination made by Mr. Marshall, F.R.S., in the presence of Dr. Horsbrugh and myself.—The body was well proportioned and in very fair condition; the pupils of the eyes were equal and of natural size. *Cranium.*—The bones of the skull were very dense and thick, and the transverse occipital ridge was very prominent, but internally the cranial bones presented nothing unusual. On dividing the dura mater a very large amount of bloody fluid escaped, which appeared to come mainly from the left side of the brain. On removing the dura mater its inner surface on the right side, where covering the upper portion of the right cerebral hemisphere, was lined by a layer of dark-red coloured "false membrane." This did not extend into the base of the cranium, and the arachnoïd membrane covering the brain structure was in *every part quite transparent* and natural, the

blood-vessels, which were beneath and very congested, being well seen through it. On the left side some difficulty was experienced in removing the dura mater from the surface of the brain, and much dark bloody fluid mixed with some blood-clot escaped in the attempt. This difficulty was found to be owing to the pressure of a large *cyst situated in the arachnoïd cavity*, formed of tolerably firm dark blood-stained "false membrane" adherent firmly to the inner surface of the dura mater, and very slightly also but firmly to the arachnoïd membrane covering the brain; and containing a quantity of red fluid and firm blood-coagulum. This firm false membrane, having strong and large vessels coursing along its substance, extended over the whole surface of the left cerebral hemisphere, including the base of the brain, but it was only over the upper surface of the hemisphere that it formed the bag or cyst above described, as illustrated by the drawing (see Plate). The cyst was converted into a bi-locular one by reason of a firm adhesion at one part between the two membranous laminæ composing it. The arachnoïd membrane immediately covering the left cerebral hemisphere, as in the case of the corresponding membrane on the right side of the brain was quite natural and transparent, and in no part was anything like arachnitis (pus or fibrine beneath the membrane) met with. Moreover, the various nerves issuing from the base of the brain were natural in all respects. On making section of the brain its vessels were found to be very full of blood: its upper surface on the left side was somewhat flattened, of a darker hue than on the right, and somewhat of a violet colour, apparently owing to staining by the contents of the arachnoïd cavity, but it was quite firm in consistence, and otherwise natural. On further dividing the brain the right lateral ventricle was found to be larger than the left one and to contain more fluid, which was quite limpid, and this inequality seemed to be partly dependent upon the pressure exercised upon the left cerebral hemisphere by the bloody effusion into the left arachnoïd cavity and partly owing to a *remarkable projection into its cavity of the floor of the ventricle, the result merely as it appeared of a congenital arrangement of the brain tissue, and not caused by any morbid deposit or change.* It was also found that some degree of softening of the fornix and of the corpus callosum existed, as also of the right corpus striatum and right optic thalamus, but this was not to any very great degree. On dividing the pons varolii it was, however, found that slightly to the *left* of the median line there were two patches of more decided softening (of rather a pink hue) situated, one towards the upper portion of the pons, and the other near the under surface (towards the occiput). No disease of the various sinuses or of the various bony parts at the base of the cranium was encountered. The other parts of the body were not examined.

Microscopical examination.—Minute examination merely showed the presence of such elements in the false membranes as are usually found in strong and newly-formed fibrous tissues. The contents of the cyst proved to be merely altered blood-coagula. The false membrane was very vascular.

Commentaries.—On examining the detailed symptoms of the preceding case in connection with the results of the post-mortem investigation, it must be considered, I think, that disease had set in long before I had the opportunity of seeing him at the end of 1863. The change in temper of mind, and general disposition, taken in connection with symptoms which must be looked upon as indicating gradual paralysis of one or both of the legs and arms, and the spasm or paralysis of one or other side of the face, followed by the cause-

less dread of impending evil—all pointed to the supposition that disease had been for a length of time gaining ground; and from the patient's habits, I was inclined at first to regard his illness as possibly of syphilitic origin. It is, of course, difficult, from the wife's history, to ascertain what limbs had been affected (when, for instance, as it was stated, he had stumbled, or been unable to button his waistcoat, and the mouth had been drawn on one (? which) side; but as the "numbness" was positively alone referred to the *left* arm and leg, it is at least probable that, throughout, the limbs, on the same, the *left* side, of the body, had been those concerned in the symptoms above referred to. If so, this supposition receives confirmation from other symptoms which I had the opportunity of witnessing during the future part of his life. It was, at any rate, obvious that cerebral disease, most probably effusion of some fluid, existed; but it was at the same time worthy of remark that so little reference, by reason of pain, giddiness, &c., was made by the patient to the head. I need not dwell upon the acknowledged difficulty in exactly diagnosing such cases as this in their earlier stages, nor the difficulty in certainly predicting what lesions will be met with within the cranium after death. I was persuaded that good resulted for a time from the use of mercury, and I had the impression that possibly the continuous and gentle use of mercury at an earlier stage of the disease might have been of essential service to him. As respects treatment also, the use of quinine in breaking the periodic character of the febrile symptoms is not a little interesting, and goes far to indicate how such periodic attacks in brain disease may be readily likened to attacks of ague, or even (as has occurred) be absolutely mistaken for such attacks.

The delusions experienced by the patient are, I suppose, such as are often met with in certain cases of so-called general paralysis of the insane, and do not deserve lengthened comment. The one of supposing that he came "Up" to London from the sea-coast by a "Down" train, one which troubled him very deeply, for no conversation or attempts on the part of others could, of course, disabuse him, is not a little interesting in a psychological point of view. The idea that his children had been poisoned by chloroform, and that he had it about his bed on all occasions, was, doubtless, the result of certain objective sensations which he associated with the smell of this medicine, which had previously been given to him. Of course, considering that in addition to the extreme disease on the LEFT side of the brain, we found also softening of the pons Varolii it is difficult, in our present state of brain physiology, with any degree of positiveness to associate symptoms with one or other lesion alone, nevertheless we cannot but remark upon the extensive lesion on the *left* side of the brain coincident with the drooping of the *left* upper eyelid (paralysis of the levator palpebræ muscle), the dilatation of the pupil of the LEFT eye, and finally, the fixing of the

left eyeball (paralysis of motor oculi nerve). The same must be said of the numbness and the loss of power of the *left* side of the body, especially towards the close of life. Such one-sided or hemiplegic symptoms are, I believe, not uncommon in some cases of general paralysis of the insane, but most likely they are always the result of some lesion, visible or not to the naked eye, of the brain tissue, either softening or effusion, or morbid deposits or degenerations,—alterations which, of course, may exist and produce diverse symptoms quite independent of this form of general paralysis. It may be noticed that in this case there was no distinct history of any epileptic attacks, excepting quite at the onset of the symptoms, when on one occasion he lost consciousness, but was not affected by convulsions of any kind. The presence of an increased quantity of phosphates in the urine, as frequently ascertained, is an interesting point in connection, most likely, with the softening and disintegration of the Pons Varolii. It was a matter of regret that we could not make an examination of the spinal cord in this case.

I may in conclusion refer to the fact that we found, on post-mortem examination, no thickening of the arachnoïd covering the cerebral convolutions, very slight adhesion of the blood-cyst to the arachnoïd membrane, no adhesions of the cerebral membranes to the brain, no atrophy or softening or induration of the cortical part of the brain, and no sub-arachnoïdean ecchymosis of blood: and that the vessels of the pia mater appeared to be in a natural state. I regret that I did not ascertain the specific gravity of portions of the brain-tissue.

The second illustration of general paralysis of the insane associated with a blood-cyst within the arachnoïd cavity, which I said I should describe, was the following. It occurred at the Norfolk Lunatic Asylum, whilst Dr. Bacon was resident there.

Case 2.—*Hæmorrhage into the arachnoïd cavity on the right side of the brain—Formation of a cyst containing altered blood—General paralysis—Dementia—Coma before death.*

The patient, Benjamin D—, of middle age, was admitted into the asylum March 7th, 1861, having been transferred from Hanwell in a state of well-developed general paralysis of the insane. Subsequent to the usual series of variations he became quite demented, and died rather unexpectedly after two days' severe illness. He had been declining in strength for some time, but was in tolerable condition and took food well until two days before death, when he was found in bed unconscious, with his limbs drawn up; the breathing was not much impaired, and he died comatose.

Post-mortem examination.—There were signs of old arachnitis, and the lining membrane of the cerebral ventricles was rough and granular. Between the dura mater and the arachnoïd covering the right cerebral hemisphere, was a large cyst, containing turbid fluid, like blood somewhat altered. The cyst-walls were of tough and regularly organised structure, and held nearly

half a pint. The cyst could be readily separated from the subjacent dura mater, which was healthy. The thoracic viscera were healthy.

Dr. Bacon, in a letter to me containing the above particulars, proceeds to observe, "the only other case of which I know, you will find an account of in the 'Guy's Hospital Catalogue,' as the specimen is in the museum, and was sent to Dr. Wilks. It was also in a general paralytic."

I may observe that in the case of blood-cyst found in the arachnoïd cavity, described by Mr. Hewett in his paper on "Extravasations of Blood" into this cavity, published in the 'Transactions of the Royal Med. and Chir. Society,' Vol. xxviii, p. 63, it is observed that in addition to paralysis of both legs and one arm, the intellectual faculties had been remarkably weak, and the memory very defective. The speech had also been affected, and the bladder paralysed.

In conclusion, I will allude to a somewhat recent case of dementia in which, after death, a soft, pinkish, jelly-like membrane, having extravasated blood between its layers, was found covering the middle and posteror lobes of the right cerebral hemisphere. This is reported upon by Dr. J. C. Howden, in his Appendix to the 'Annual Report on the Montrose Royal Lunatic Asylum,' 1863.

Clinical Cases illustrative of Moral Imbecility and Insanity. By Stanley Haynes, M.D. Edin., Assistant Physician, Royal Edinburgh Asylum.

The following cases may be deemed interesting as a contribution to our knowledge of the natural history of one variety of the more obscure forms of mental disease. I have collated the cases from the records of the Royal Edinburgh Asylum, and I avail myself of the opportunity to thank Dr. Skae for his kind permission to give the following abstracts of them. They show the general family features, so to speak, of moral imbecility. It will be at once seen that there is little difference in the character of the mental deficiencies, but that the cases vary principally in the amount of moral perversion.

Under the term "*Moral Imbecility*" I include all those cases in which there is a congenital deficiency of one or more of the moral powers. In using the word *congenital*, I include those cases in which the disease is obviously strictly congenital, or dating from a very early period of life—cases in which there has been an arrest in the development of the brain; using the term in an enlarged

sense, in a similar manner as the word *idiocy* is understood to apply to cases in which epileptic convulsions during dentition, or other causes, have induced the malady, as well as to those in which the mental state is attributed to ante-natal causes.

With many of the pauper patients the information supplied is so scanty that their histories are exceedingly imperfect. The difficulty in obtaining correct data is increased by the often unintentional, but too often wilful, falsity of the patient's friends, who commonly imagine there is something disgraceful in admitting the existence of long-standing mental infirmity, or of hereditary pre-disposition to it on the part of those whom they place in an asylum.

Case 1.—L. M—, æt. 17, single. She was stated to have been naturally weak-minded, obstinate, and quarrelsome in disposition, moody and reserved, of idle and vicious habits. Two half-cousins of her father were affected in a similar manner. She had always been a spoiled child. Her friends recognised that her disease was inherent, and stated it had become more apparent for three or four years preceding her admission, *i. e.*, when she was between twelve and thirteen years old. She was an incorrigible liar and thief. She had been apprenticed to a dressmaker, but never went to the shop, telling her mother that the dressmaker was not well, and the dressmaker that her mother required her at home. Her education was exceedingly imperfect, because she never would learn anything. Although she had always been more kindly treated than any other of the family, she had always complained of not being sufficiently well treated. She was restless, sleepless, violent, and destructive, and had threatened to injure her mother and sisters with lethal weapons. With the exception of some hysterical fits shortly before her admission, her bodily health had been in every respect good. She was of short stature, rather stout, of the bilio-lymphatic temperament.

For the first three months she appeared quite sane, being quiet and well-behaved both by day and night, and industriously occupied in needlework: no trace of any delusion could be ascertained. She deeply deplored her conduct towards her mother. She continued quite quiet until she begged to be sent home, and promised implicit obedience to her mother, but on its being hinted she had better remain a short time longer, the malignant expression of her countenance was such as ill agreed with the protestations of repentance and reform she had made a few minutes before. For a year after this she now and then exhibited the most morbid feelings of hatred to her relatives: at times she was most troublesome and obstinate, doing whatever she ought not, and never doing what she ought. She showed considerable moral weakness, and displayed some unfounded suspicions in the opinions she formed of the motives and intentions of others. She then continued quiet, most civil and obliging, industrious and well-behaved, for nine months, at the end of which time she had a quarrel, and at bed-time positively refused to go to bed, and bestowed a well-directed shower of blows on the attendants. She had behaved so well that it was considered proper to see how she could get on outside the asylum, and she was therefore let out on pass to visit her relatives, whom she threatened to hurt, taking articles off the mantelpiece, lifting a poker, &c., to effect her intentions: she terrified her relatives by her expressed hatred of, and violent conduct towards them, so much that they earnestly begged she might not be sent out again. She did not have another outbreak in the asylum for a year, when she became cross and sullen, obstinate and quarrelsome, required to be fed for nearly a fortnight, was very destructive to her clothing, and

violent in her language, and now and then committed acts of violence: from this attack she gradually recovered, and was restored to her former quiet condition, but occasionally she was passionate and obstinate, cursed and swore, broke windows, and tore her own and the attendants' clothes,—a very little sufficed to induce one of these attacks. After a time she improved, and continued, for her, pretty well (with the exception of transient turns of obstinacy and ill-nature) for four years, when she had another, but short, violent outbreak. For the last three years she has continued unchanged: every six weeks or so she becomes sullen, idle, moody, careless of dress, and desirous of keeping in bed; this is followed by a state of irritability and crossness, during which she is very impulsive: masturbation is the cause of these periodical attacks. In the intervals she is very well-behaved and industrious.

At the end of ten years this patient remains without any intellectual disorder, if her natural weakmindedness be excepted. Her case is one of pure moral congenital imbecility, in which many of the emotions and sentiments are perverted. The patient has very little self-control, and does not seem at all desirous of exercising what little she has, being very easily transformed from a quiet, well-behaved, and industrious woman, to an obstinate, vicious, and quarrelsome termagant. Masturbation may fairly be attributed to her want of self-control, and it is only too probable will cause her case to become one of dementia. Throughout her residence in the asylum the patient has been repeatedly tried at home; but all the members of her family were terrified by her threats, on every occasion, of personal violence. She tells the most monstrous falsehoods about the treatment she has received from her relatives, and takes every opportunity to abuse and swear at them.

Case 2.—M. N—, æt. 21, single. She was stated not to have any hereditary predisposition. Her natural disposition was frank. Her peculiarities were first remarked when she was sixteen or seventeen years old, when she occasionally laboured under restlessness and bad temper. She then took a strong dislike to the members of her family, and especially to her mother and sisters—on one or two occasions she threatened to cut a sister's throat. She has become gradually and progressively worse since that time. She fancied herself exceedingly clever, which she certainly was not.

On admission she appeared quiet, but was very unsettled in her manner. She seemed to be of a hysterical temperament. She soon became very troublesome, from her passionate and quarrelsome disposition; had a great talent for setting her neighbours by the ears, and frequently became enraged without cause, then becoming exceedingly noisy; on her being removed into another and less quiet gallery, she immediately became well-behaved, and promised better behaviour.

After being nine months in the asylum her state was thus reported:—"At one time quarrelsome, passionate, and abusive, and at another trying to gain favour by good conduct, which is very transient. Has been refusing food, being, as she says, very anxious to die, and having bound herself by the most solemn oaths never to taste food again; these resolutions soon gave way after she had been fed. Is either in a very contrite or a very abusive mood." Three months afterwards it is recorded of her, that "she lies

and swears abundantly, and is a proficient in awful and obscene abuse." She continued without much change for a year and a half, after which she behaved herself well, and was industrious from a desire to get away, which she did on probation six months afterwards.

Within two months of her discharge she was brought back in consequence of having conducted herself very badly ever since she left the asylum—she stormed and scolded, threatened to throw herself over the window, and to cut her sister's throat: on readmission she feigned penitence. From that time (three years and a half ago) to the present she has been without any change. Occasionally she is troublesome, passionate, deceitful, fond of falsehood, quarrelsome, swears, and uses obscene language, and is very abusive: at other times she behaves very well for a variable time, especially when she has an object, and often feigns illness so that she may obtain indulgences.

In this case the symptoms, from being slight, have progressively increased, until the patient labours under a total perversion of all the moral sentiments. She is revengeful, dangerous, and threatens suicide; egotistical, sullen, passionate, and vicious; fond of making disturbances between other patients, swears fearfully, has an utter disregard for the truth, breaks out into torrents of abuse, and sometimes uses very obscene language. And yet, when she wishes (which is, unfortunately, seldom) she can exercise a considerable amount of self-control, being able to behave herself very well, be industrious and cheerful, and use proper language.

Her insanity appears to have developed itself at puberty, although doubtless it must have been connected with some natural defect of her moral constitution.

Case 3.—B. M—, æt. 17, single. Insanity, in this case, became well marked when the patient was twelve years of age. She was very self-willed and violent, and had gradually become more and more so up to the time of her admission. She had been naturally cheerful and frank in her manner, though quiet; had at times worked but little, and was very unsettled; at other times she had been industrious and quiet. The catamenia were quite regular. She was sent to the asylum in consequence of her having become quite uncontrollable at home, assaulting her parents with a poker and other weapons, using improper and disgusting expressions, and sometimes satisfying the wants of nature in the presence of her family.

On admission she was obstinate, restless, very much disposed to have her own way, and cross; when she had been in the asylum for a short time, she became sullen, rude, and mischievous, but soon improved, and was discharged three months after admission.

For some time after her discharge, she continued to conduct herself well, but she had again become unmanageable at home, and when readmitted was in a similar state as on her previous reception, *i. e.* restless and unsettled, speaking absurdly, admitting she had frequently assaulted her parents, for which she could or would not give any reason. At the end of six months she was again removed; during her residence in the asylum, she had been often very petulant and rude, sullen and idle, very apt to make mischief among the other patients, and very desirous of attracting the attention of the physician.

She was again readmitted sixteen months after the last discharge, never

having been well, but in the same state as hitherto. She laughed without cause, was incapable of carrying on a continued conversation coherently, was rude, behaved indecorously, and made use of filthy language. One night, four months after admission, she screamed, broke windows, said there was some one under the bed, was violent, tore her dress, and spoke incoherently; for a month after this she continued more or less maniacal—she was noisy both by day and night, dirty in her habits, and slovenly in her dress, obscene and filthy in her manner and conversation, and masturbated: a month later she was destructive to her clothing and to the furniture, sometimes naked, and could hardly be got to answer a simple question coherently. She then gradually improved, so much that she was again discharged, a year and a half afterwards, as relieved. Nine months after that (last June) she was readmitted for the third time: she took little or no notice of anything or any one, was taciturn, idle, and sullen. At present she is silly, sings, and is noisy at night, and masturbates.

This case demonstrates how a case of pure moral disease can become one of intellectual insanity as well. When first admitted she was labouring under moral insanity, which gave rise to masturbation, that has led to a general impairment of her whole moral and intellectual faculties, which, with her natural deficiency, renders her case one of a very hopeless description.

Case 4. C. H—, æt. 19, single. Little was known of her history; it appeared she was a native of Orkney, and had lived at Leith for two years preceding her admission. She had been seduced a year before, and since that time had led a most reckless and abandoned life. Dissipation, poverty, and remorse, seem to have combined to aggravate her natural tendencies. About a fortnight before admission, she had attempted suicide by taking laudanum. She had shown strong suspicions, was restless and sleepless, and had attempted death by precipitation. She was short in stature, of a melancholic temperament, rather stout, and apparently in good bodily health.

As a general rule, she was quiet, orderly, and industrious, but at times she was obstinate and impatient of control. Six months after admission she had an attack of hysterical mania, when she became very violent, swore much, and showed a strong suicidal tendency—she spoke of hanging herself, of cutting her throat, and of drowning herself; but it was doubted whether she was in earnest, it being thought more likely that she wished to create sympathy. It is reported of her four months later, that she took care she had a good audience whenever she threatened or attempted suicide, or had an explosion of excitement and violence. She then began to improve, and nine months later was discharged as recovered.

She was readmitted rather more than three years afterwards, having in the mean time conducted herself well until a few days before admission, when she became restless, said she was miserable and unsettled, and was found in the streets with laudanum in her pocket. After behaving in the same manner as on the previous residence in the asylum, she was again discharged, eleven months after her second admission.

After this she continued out of the asylum for six months, when she was again found in the streets excited, and with laudanum in her pocket. It appeared she had been living her old kind of life since her discharge. She soon began to excite other patients against the attendants; when checked for that, she broke windows, and when stopped at that, attempted to commit suicide by throwing herself into the fireplace. A short time afterwards she

was delivered of a child; she improved after this, and was again discharged after being in the asylum for seven months.

A year and a half later she was admitted again; in the mean time she had been behaving tolerably well, until a short time before admission, when she got into a similar state as before, and on readmission was much excited. She now had phthisis. After showing the same mental symptoms as previously, she was dismissed again in July last, after a residence of fifteen months.

This case was a good deal complicated by hysteria. It is reported she occasionally had epileptic fits of a hysteric type about five months before she had the attack of hysterical mania. In speaking of the desire to commit suicide, she said she feared she would some day die by her own hand. She seemed to dread it, although she was at times intensely suicidal. She suffered from several bodily ailments. It was most difficult to distinguish between them and their hysterical counterfeits, and to satisfy one's mind whether she laboured under insane suicidal impulses, or whether the outbreaks were not purely hysterical, and in a great measure encouraged by herself, to create sympathy and make a little commotion. At the menstrual periods she had frequent hæmatemesis, but was at first stout and strong, and without phthisis, showing the hysterical element of her case. The gradual development of phthisis (which was carefully watched during her various residences in the asylum, and which was recognised six months before her second dismissal) did not cause any change in the character of the mental symptoms.

She had a feigned delusion that her child was a serpent, but during no period of her history did she exhibit any well-marked symptom of insane delusion.

Case 5.—R. A—, æt. 22, single. At the time of her admission she was reported to have been insane for three or four months; the attack commenced with great depression of spirits, which had continuously increased, and was accompanied by strong suicidal impulses, which she acknowledged, stating they always came on suddenly. A month after admission she had hysterical convulsions. She gradually became more cheerful, and was discharged three months after admission. After a lapse of fifteen months she was readmitted in a similar state as on the first occasion, very dull and despondent; while out she had often attempted suicide; she improved so much that she was discharged in two months, but in four months' time she was again admitted. She had manifested a great deal of ill-nature, and had been very quarrelsome, often striking and fighting; this condition has continued at intervals ever since. A year after her admission she obstinately attempted self-strangulation. She has had and has an ungovernable temper and passions, is very suicidal when excited or annoyed, occasionally querulous, irritable, and abusive. Every now and then she has an outbreak, breaking windows and swearing. She gets out occasionally on pass with an attendant, but cannot be trusted alone. She often wishes and intends to do well, but cannot; she cannot help her desire to get drunk. In the intervals between her fits of excitement she is quiet and well-behaved, but has a very

loose appearance and manner, with a bold and brazen expression of countenance.

There is no history of this patient being insane until the age of twenty-two. During the first two residences in the asylum she laboured under melancholia, but was without any delusions. The whole history and character of her case confirms me in the opinion that she affords another illustration of a class of patients labouring under a congenital moral defect in whom, with every wish to do well, there exists an inherent incapacity to exercise self-guidance and self-control.

Case 6.—E. J—, æt. 20, single. This patient was reported to have been insane for about a month before her admission; she was desponding, and made ceaseless efforts to escape for some time after her reception. She seldom spoke spontaneously, but replied to questions rationally. Her manner was retiring, unconciliating, abrupt and repulsive. She was usually lazy, slovenly, and inattentive to herself, but at times was industrious and civil. Three years and a half after admission she was so well that she was removed by her friends on trial, but in a month she was readmitted, having in the mean time been unruly, obstinate, and indolent; she had a strong desire to return to the asylum; she continued in much the same state for some time. Six months after her second admission it is reported of her that she was shy and timid, but stiff and self-willed. She was usually very untidy in her dress, was very irritable and indolent, sullen and unsociable, but sometimes she was orderly, tidy, and less sullen and distant to her companions. When irritated she became violent, and every now and then broke windows in her paroxysms of excitement. This condition gradually passed into dementia, in which she remains.

On making more particular inquiries into the early history of this patient, it was ascertained that there had always been peculiarities of disposition similar in kind, but less marked in degree than those which ultimately developed themselves into morbid, sullen, obstinate, and uncontrollable impulses, passing gradually into confirmed dementia, but at no period of her history complicated with insane delusions.

Case 7.—M. H—, æt. 28. Three years prior to admission she commenced to have paroxysms of crying, lowness of spirits, and incoherent talk, and manifested at such times a suicidal tendency whenever she was in the least crossed in her wishes or undertakings, or if she took a very small quantity of whisky. She was originally sober and industrious. She is naturally extremely sensitive and intense in all her emotions.

After admission she was most industrious, and cleaned all she put her hands to to perfection; if any disparaging remark was made her chagrin was intense, and she always became violently excited for ten or twelve hours, at the end of which time she settled down into her usual state. After a residence of seven months she ceased to be excited on small provocation, and as she continued apparently quite well for two months longer, she was discharged, but two days afterwards was readmitted, violently excited; the attack was brought on by an injudicious taunt about her having been in an asylum: after being detained for nine months, during the first seven months of which time she continued to have outbursts of the same kind and duration as before, she was removed to Ireland.

In rather more than two years she was again admitted. She had been furious and violent, noisy and destructive, used profane language, and was abusive. She remained in the asylum for two years and a half; excepting for a few months before her liberation, she very frequently had paroxysms of excitement, which were caused by her being offended on the slightest

occasion, by her jealousy of others and by her pride, which was excessive; if anything came in her way she shouted, cursed at and abused all about her; she was then vindictive, threatening to others, and struck them. At most times she was subtle, venomous, and given to lying, although industrious and quiet, but so impulsive that in a moment she was often changed from one of the best to one of the worst patients, using obscene and profane language, forward and impudent in her manner, ill-tempered and discontented, and making a great noise. When menstruating she was more than usually inclined to be suspicious, irritable, and easily upset. She very frequently showed a strong suicidal tendency during her paroxysms of excitement.

A little more than two years elapsed, when she was admitted for the fourth time; from that time to the present she has been in the same condition as formerly, *i. e.* at times irritable, very abusive on the least provocation, extremely jealous, and occasionally violent for a short time; at other times she appears to be quite well, sometimes for a considerable period, but at the best her temper cannot be trusted for an instant.

It is well remarked of this patient in the case-book, that "her temper is so excitable, and her mind so delicately balanced, that she is totally unfitted to encounter the *contre-temps* of the world outside an asylum."

This patient, during no part of her illness, ever displayed any intellectual impairment or insane delusion; yet, it cannot be doubted that she was destitute of self-control to the extent of making her dangerous both to herself and others, and that this condition could be ascribed only to an original want of balance in her moral nature.

Case 8.—C. W—, æt. 23, single. This patient was a notorious gaol-bird; she had been convicted three years before her admission, and since then had been four times in confinement for falsehood, fraud, and imposition. She was described as being "a consummate impostor, deceiving gentlemen, inspectors of poor, police officers and others, with false and carefully got up, as well as plausibly told, stories of her parentage, life and education, acting whatever character she assumed so well that those to whom she was a stranger were completely imposed upon." "She has tried many a trick in her time. She once passed herself off in an institution as deaf and dumb, and continued to maintain the character of a mute for a number of months." She left her parents about nine months before her admission into the asylum; in the mean time they were ignorant of her whereabouts.

For a short time after admisssion she behaved in an eccentric manner, but was able to reason correctly. She was cunning, and showed a wish to be mistress of those with whom she associated. She soon became passionate and insubordinate, but behaved well when the privileges she enjoyed were curtailed. For seven months there was no change; she was exceedingly troublesome, violent, passionate, very revengeful if opposed, dangerous and insubordinate, but could, and sometimes did, behave herself very well when she had an object to gain; she then became desirous of leaving, and continued to conduct herself so well that she was discharged thirteen months after admission.

She evinced much astuteness and intelligence, as is evidenced by the foregoing abstract of her case, but showed a lamentable want of moral power; she would lie, be passionate, revengeful, violent and ungovernable when she made no attempt to control herself, but when she did, could conduct herself with perfect propriety.

Like the preceding cases, this patient displayed no intellectual impairment or delusions, but on the contrary manifested a considerable amount of talent and ingenuity in carrying out her various projects. The moral perversion in this case was almost incredible. For several months after her discharge she was heard of from many different parishes as an escaped lunatic presenting various forms of insane conduct; for the furtherance of her course of deception she assumed different names in the course of her travels both before and after her residence in the asylum.

Very similar to the case of L. M—— (Case 1), but a slight contrast to it as showing how pure moral insanity may finally become associated with delusions and dementia, is the following case of a girl who has been admitted thrice, having been twice discharged.

Case 9.—J. F—, æt. 19, single. She was congenitally weak-minded, and possessed but little self-control; naturally forward and insolent in her manner, very indolent in disposition, and got drunk whenever she had the opportunity. She had been resident in a poor-house most of her life. Shortly before admission she had gradually become more unmanageable, and was at times very violent, noisy, and destructive. Sometimes she spoke to imaginary persons, whom she appeared to think addressed her; it was suspected this was feigned. She threatened to attempt suicide, but it was not imagined she had any real intention of doing so. She spoke correctly and civilly when addressed.

For the first six weeks she appeared sane, but then became, and was for the greater part of two years violent, at times striking right and left, tearing and screaming to her utmost, using most obscene language, was quarrelsome and passionate; when these attacks passed off she became sullen, obstinate, and extremely perverse; whatever she was told to do she would not, and *vice versâ*. She was discontented, and always plotting and carrying out some mischief. Five months after admission she pretended to be maniacal; she was destructive and dirty in her habits, talked nonsense, and was constantly noisy; she always got worse in the presence of strangers, and always took care not to injure herself by tumbling about, which she did in a most absurd manner; the expression of her face was unchanged. After a time she improved, behaved with perfect propriety, became industrious and very obliging, and was discharged after being two years in the institution.

She became a servant, but relapsed within two months; in the interval she had exhibited much of her usual ill-temper and bad natural disposition; shortly before readmission she had become quite unmanageable. She behaved after readmission much the same at first as on the last occasion, but speedily improved, and was discharged in five months.

She continued to conduct herself well for four months, and during that time was a domestic servant, but a few days before her readmission she became very violent, talked constantly, was very quarrelsome, and threatened to strike others. She was discontented, quarrelsome, troublesome and idle, and got worse, until, in four months' time, she became distinctly maniacal, had various delusions, and stripped herself naked; this attack was short, but left her somewhat demented, but very impulsive and liable to sudden attacks of excitement and violence, apparently without cause; in this state she continued for eighteen months, when she had hallucinations of hearing, and fre-

quently became maniacal. This state continued for about a year, when sexual hallucinations were developed; she fancied everything was hers, and stole everything she could, and she frequently had maniacal attacks. She remains in the asylum, and is now generally pretty well behaved, and is quiet, but she is slightly demented, vain, irritable, discontented, querulous, and occasionally abusive; almost every day she has an outburst of temper, and is very violent. She has lately had one of her maniacal attacks, in which she was more than usually violent and aggressive. She now labours under persistent delusions of a sexual character.

I now select a series of cases from the male patients, illustrative of the same subject, viz.—insanity referable to congenital moral defect in the constitution.

Case 10.—W. P., æt. 27, single. He was brought to the asylum from gaol, where he had been sent for being the principal actor in a street disturbance; that is all that is known of his antecedents. He said he was a vagrant. His physiognomy is strikingly that of a person of a low type of organisation; it has been ascertained that his brother is a convict, and he belongs evidently to that class from which so large a proportion of our convict population is derived.

On admission he was, with his own limited sphere of ideas, shrewd, sagacious, and clever, but displayed no conscientiousness, and took a great delight in annoying whomsoever he could. He told falsehoods with great facility. He was industrious. Two years after admission he is described as being a thief and a vagabond, less prone to mischief than he had been, but would do it if he got a good chance; he was fond of decorating himself with gaudy-coloured articles, and was very filthy in his habits. If not addressed as Mr. P— he became sullen and revengeful, but timid and cowardly in carrying out any purpose of retaliation, but if humoured was very industrious, and conducted himself pretty well.

During the next three years he was frequently troublesome, from his constant annoyance of and consequent brawls with others, and required strict discipline. He was fond of lying, impudent, slovenly, indolent if not humoured a little, and infamously dirty. The next year he improved, inasmuch as he was quieter and more orderly. He was industrious, and liked best to be put to the dirtiest work about the place, such as assisting at the furnaces; when so engaged his cup of happiness seemed to be overflowing. From that time (eleven years ago) to the present he has continued without any marked change; he is still disposed to be mischievous and to annoy others; any allusion to death puts him in a fury, especially if any one offers to measure him (as if for the length of a coffin), or mentions coffins to him. He does not tell downright lies now, but he exaggerates to a great extent. He still delights in dirty work, and seems best pleased when he has got his hands well daubed with tar. He gets out on pass by himself once a week (always behaving himself well then), and can be trusted with simple messages; if there be any complexity in them his mind seems unable to grasp them. He lost sixpence three years ago; its loss had a very depressing effect on him, from which he recovered very slowly. He does not appear to have any delusions, and has never evidenced any.

I have inserted this case as a typical one, illustrative of many of those cases which help to people our jails and reformatories, but in which the tendency to vice is obviously connected with a congenital or hereditary moral defect. It affords a link between cases of a low

type of intellectual development, accompanied with moral imbecility, and those cases where the same moral defect is conjoined with a higher type of intellectual organisation.

Case 11. A. M—, æt. 16, single. The history of this patient only dates from about a year preceding his admission; it is stated that until that time he was as smart as other boys, with the exception that he never had been able to get on at arithmetic; since that time his mind had been affected, and during the two months immediately preceding admission, he has become much worse. An aunt was insane, an uncle was epileptic, several of his father's relatives had been paralytic, and his father was intemperate. It is stated, that he commenced to take epileptic fits more than a year before admission; during that time he had attacks of excitement, which had increased in frequency, being two or three times a-week on his admission; these attacks came on at uncertain times; before them he was elevated, and after them was violent, and threatened to strike with anything he could lay his hands on; when excited, he fancied that persons were quarrelling with him, and speaking about him, and thought the walls of the house were in a blaze; he then, and then only, had a dislike to all the members of his family. He generally became quiet when a stranger entered the room. He threatened to drown himself two months before admission.

On admission, he was quiet and good-natured. He was small for his age, and very slightly formed: his head was small and very narrow, appearing as if compressed laterally. He continued quiet for three months, when he became quarrelsome and passionate, and swore loudly and continuously; he has continued to take these attacks pretty regularly every six months; in the intervals he has been amiable, obliging, and perfectly quiet, and has been discharged thrice since his first admission, seven years ago; he has always been brought back within a year of his discharge (the last time he was only out for two months) in a similar state as described previous to his first reception. He had an attack of excitement and noisiness in July last. He says he feels very doubtful if he could get on if he left the asylum. The least thing annoys him, and makes him quarrelsome and irritable—at such times he talks much to himself, and manifests a considerable want of self-control. When not excited, there is not a better patient in the house; he is quiet, civil, and obliging, industrious, and energetic. Last winter he wrote two papers, which he read before the Library Club of the institution—they showed a fair amount of intellect.

He has not been once known to take a fit, either by night or day, during his residence in the asylum. He can exercise sufficient self-control to get on well in the asylum, where there is nothing to annoy him much, but not sufficient to stand the bustle of the world.

Case 12.—N. W—, æt. 19, single. Although it was attempted to give him a good education, he was unable to acquire the ability to spell correctly, or to progress beyond the elementary branches of education. His disposition was naturally moody; he had been quarrelsome, and was of very idle habits. From infancy he had presented certain peculiarities of conduct, such as a great desire to appear in ragged and dirty clothes, particularly in circumstances calculated to vex others—he would on his return from church put off his Sunday clothes, clothe himself in the worst clothes he could procure, and go out and parade his rags. When fifteen months old, he had hydrocephalus, in the opinions of the late Drs. Abercrombie and Beilby; at nine years he broke his arm, and was then delirious, and attempted to leap out of the window. He was placed in various offices as a clerk, but

found to be incompetent, although trustworthy, and was ridiculed by the other clerks. He was then fitted out to go to Australia, but he prevailed on the captain of the ship to land him at Falmouth, whence he went to North America, it was supposed as a ship's boy; he was accidentally discovered by some friends there, and sent home. Since his return, he had been drinking freely for some months before admission, and every eight or ten days was taken home by the police, generally in a state of frenzy, fighting with and striking any one who interfered with him; in this state, on one occasion, he assaulted the medical man of his family in the dark, in his own room, and told him he had the means of killing him. He intimidated his mother for money. His maternal grandmother had been of a very nervous temperament.

For two months after his admission he conducted himself pretty well, but he then tried to send letters away surreptitiously; at times he was sulky, delighted in teazing and irritating inoffensive and quiet patients, manifested great self-esteem and credulity, believed readily the most unlikely stories, and spoke with the authority of a statesman about politics, although he was very deficient in information, and confidently foretold what Austria and France would do. He became learned on the law regarding insanity, and argued his own case with much ingenuity. Four months afterwards he made an impulsive and altogether uncalled for assault on one of the attendants. He was very slovenly in his habits. Shortly afterwards, he used most violent and abusive language to the physician, and threatened the life of a doctor in Edinburgh, saying, that after being in an asylum he would not be held responsible for the doctor's death. A month later he professed penitence, but his countenance indicated a sullen vindictiveness that ill accorded with his profession; when unobserved, he irritated inoffensive patients. He continued in a variable state, sometimes being idle and abusive, lying, violent and teazing others, at others, studying, amiable, and quiet. After a year he was discharged at his friends' earnest request, after a residence of eighteen months.

A month afterwards he was readmitted; in the mean time he had been violent, threatening the lives of his mother and others, and drinking. His friends again removed him, after he had been in the asylum for two months, during which time he had conducted himself much the same as during his first detention, but was still more specious, untruthful, ingenious in arguing the question of his sanity, and vain than before.

In seven months he was again brought back, having become quite unmanageable and dangerous; this time he was in the asylum for three months, when he was removed again, after behaving very well and quietly; it was evident he exercised all the self-control he could.

Case 13.—D. H—, æt. 17, single. It was stated he had been occasionally excited for two years, previous to which no distinct peculiarities in feeling or thinking were observed. No "distinct" hereditary predisposition existed. He had been tolerably well at times, but two months before his admission he had indulged freely in the use of spirituous liquors, which had aggravated his disease. He was of an irritable disposition, and his habits were very dissipated. His illness was attributed to disappointment in obtaining a commission in the army, on which subject and poetry, he became much excited. He had not displayed any symptoms of delirium tremens.

Shortly before admission he became much excited, cursing and swearing, and threatening violence to the attendants; at one time he preached, at another he sung. He made rational replies to observations and questions, but could not converse without speaking in the highest terms of his own

talents. From this state he gradually improved, and was discharged three months after his admission.

Five months afterwards he was readmitted. Until a little while before this, his second admission, he had conducted himself with propriety, but he relapsed, became irritable, excited, and uncontrollable in language and habits, was very egotistical, obscene in his language, and dangerous when opposed. On admission he spoke incoherently, tore his clothes, and refused his meals. Two months subsequently he was removed to another asylum; he was then quite demented, often would not speak, and was destructive and filthy in his habits.

This case presented all the features of one of congenital moral defect, gradually aggravated by habits of dissipation, until attacks of maniacal excitement, unaccompanied, however, with insane delusions, ultimately terminated in dementia.

Case 14.—M. A—, æt. 20, single; from earliest childhood he has been peculiar—he never played with other children. When a schoolboy he commenced to steal; he took things which were quite useless to him, such as his sister's gloves, handkerchiefs, &c., and then concealed them; he took little trouble to avoid detection. He often used to cry bitterly at his frailties, and tell his mother he was really sorry he could not help them. The kleptomania grew upon him as he grew older; until things he had taken were found he denied he had stolen them, but he then admitted it. He used, as a schoolboy, to deceive his father with regard to his status in his school, and frequently took occasion to steal money from his father's desk. He was apprenticed to a civil engineer, but was obliged to leave, in consequence of his having borrowed money largely on false pretences, for which he had no necessity, and which he made no use of, except that he gave it freely to others; he had to leave another situation for obtaining money fradulently—the money so obtained he squandered away in the most open and thoughtless manner, often giving all he stole to the first companion he met. He always maintained that his thefts were objectless, that he wished to possess money but when he had it did not know what to do with it; his mother believed this statement but his father did not, and enlisted him as a private in the army. He soon became a favorite in the regiment, especially with his sergeant, from whom he stole £10, the greater part of which he gave to one of his comrades. He was, of course, detected, was tried and sentenced to six months' imprisonment; this term was changed to six weeks, when it was certified he was mentally affected, and he was immediately thereafter sent to Morningside Asylum. An uncle committed suicide. The patient has always been of a gentle and affectionate disposition.

He is apparently a gentle, manly, high principled young man, and is a great favorite with all. He receives instruction in algebra, mathematics, &c., daily from the chaplain, pays great attention to his studies and makes good progress. He says he cannot help stealing, and seems extremely sorry he cannot.

For a time after admission he did not attempt to steal anything, to deceive any one, or to do anything with which the least fault could be found, but it soon afterwards became painfully evident that he is led by any one in whose company he may be, either for good or evil; that he cannot resist temptation, being morally as weak as a child. It now appeared that the theft from his sergeant had not been objectless, but was for the purpose of paying for some drunken debauch and its results, which he had had with his com-

rades, by whom he always liked to be looked up to as a gentleman, and whom he had been treating to a "spree." He has recently been trusted with money, and gave a false account of what had become of it; but when accused of the falsehood he admitted it, and seemed extremely penitent and very much ashamed of himself. He said he had spent the money foolishly and had been afraid to say so. The impression is, that very little reliance can be placed in his word.

Although every inducement has been held out to him to act honestly and ask for whatever he required, with the assurance that it would be supplied to him, he has on various occasions, when he had an opportunity, ordered articles of clothing and jewellery, for which he had no need, although aware that such purchases would inevitably be found out in a short time, and deprecated by his friends as breaches of the trust reposed in him. Whenever he is detected in a delinquency he expresses his deep regret at his inability to control his acquisitive tendencies.

Case 15.—P. H—, æt. 16. In this case there is a strong hereditary predisposition; his father and paternal grandmother died insane. From a very early age he evidenced a great propensity to steal, and used to take things of little or no use to him—these things he used to secrete. He was sent to a succession of schools, but was obliged to leave each of them after a while; one in consequence of his being known or strongly suspected to have appropriated books; another, because the master of the school expressed his conviction that the young man was certain to end his life on the gallows; and on different other occasions no reason was assigned, but it was simply requested he might be removed. While at these schools he was always thought to have some deficiency about him, and to be mentally unlike his schoolfellows, who recognised the fact. When visiting friends he was in the occasional habit of helping himself to books, especially sensation novels and railway guides, which constituted his most acceptable mental pabulum. His intellect is of a high order; his correct memory of dates, places, and times, is extraordinary; he has travelled a great deal in Great Britain (having a passion for railroads), and knows the lines running into each town he has visited (and their name is legion), and the times at which the trains arrive at, and depart from, the stations, to and from other stations; like Mr. Wyndham, he was fond of driving trains himself, or of being in the guard's van.

Shortly prior to his admission he had disappeared from his mother's residence in Scotland, after having, in her name, drawn £200 from a bank; the next thing heard of him was by a letter sent to his mother from London, stating he had invested the £200 in railway shares along with £500 he had received from a nobleman for some great service he had rendered him, the nature of which he would explain on his return. This statement was entirely without foundation. During his sojourn in London (where he remained for some time) he devised a plot which, for refined ingenuity and diabolical cunning, would have made an excellent foundation for one of those morbid productions, unhappily now so common, termed—and only too appropriately—*sensation* novels. The plan he proposed to carry into effect was to obtain the assasination of an uncle and cousin, in order that he might, as next heir, inherit a large estate; he offered £12,000 for the murderers. The police heard of the plot, an investigation was made and was terminated by the young man being placed in the Royal Edinburgh Asylum; the adoption of this course appears to have satisfied the uncle, who had reasonably become very much alarmed, and the police.

I have previously mentioned proofs that his memory is extremely clear and retentive; to a certain extent he is clever. His judgment of other persons, and of the motives which influence them, is, in some respects, very

true and rapid, in others obviously and remarkably deficient. He soon finds out whether a man is conceited, absurd, or a fool, but does not seem to recognise the fact that any of his fellow-patients are insane; he does not attach any psychological or pathological importance to what they do, but speaks of them as "vapid asses," "fools." He does not consider himself a patient, or to think that he is looked upon as mentally affected. He seems incapable of judging whether a man has any emotions or passions—whether he is generous or selfish, religious or blasphemous, highminded or depraved. For those who are excited and quarrelsome, or miserable and misanthropic he has no compassion or sympathy; according to him they are equally "fools" or "vapid asses."

When questioned about his proceedings in London and asked whether he was cognisant he had done wrong, he replied he supposed he had; but he could not be made to appreciate that it was a subject of any import, to express any regret or to be ashamed of himself. If spoken to about his plot he does not attempt any defence of his intentions, or to palliate them, but speaks of them as a matter of course, and altogether shows a deplorable want of feeling as to what is right and what is wrong; he seems, in fact, quite incapable of judging at all between the two. The only apparent check upon his committing actions which are wrong is, his dread of being found out—not because they *are* wrong.

He has always been very gentle and affectionate in his disposition, especially to his mother, whom he seems to love in the same way as a daughter might be expected to do. There is very little manliness about him; he seldom appears to be speaking honestly and in a straightforward manner; while speaking he often looks at one in a stealthy, cunning, cat-like manner, with his eyelids drooping; for a long time (until, indeed, laughed out of it) he would not play cricket, and when he plays he is well padded, and avoids every ball at all likely to hit him; when skating he always pushed a chair before him; if trying to go at all fast, if without the chair, he was very uncomfortable, and went with great caution, manifesting the greatest dread of falling; the approach of a wasp or bee causes him to shrink and to shriek with a short cry of agonized terror; in any games he attempts he displays an absolute want of courage. He is very fond of whist; although told, over and over again, that hints are not allowed, and that tricks must not be looked at after turning them over, he is constantly winking or nodding at or hinting to his partner, and frequently turns over the tricks to see what cards have been played; when detected cheating, and spoken to about it, he says, "No, its not a good plan. I see it doesn't do." He seem to lack the boldness of dancing anything more complex than a quadrille, while the idea of waltzing never seems to enter his imagination. At meals he does not think of the possibility of others liking what he relishes until he has had enough; for instance, if there were a few strawberries on the table, he would eat them all unless something else happened to tempt his appetite. So long as things are done or got for him, he never considers the trouble which may be entailed on others. When any of his numerous attempts at deceit are discovered, and he is spoken to about them, he laughs, and seems to think them good jokes. He said he is intimately acquainted with a noble duke and other members of the peerage, whereas the contrary is known to be the fact. It is stated that soon after he came here he offered a minister a living in England if he would become an Episcopalian. He also said that in consequence of his coming here the meals were very much improved.

For some months he has been receiving instruction in mathematics and kindred subjects, and has made great progress, showing a more than average intellect, and this notwithstanding that he is extremely apathetic about it. If he have a problem to solve, and finds it at all difficult, he will

not exert himself to overcome it, but says it is a "beastly one," or a "bore," or "ridiculous," and tries by all the means in his power to avoid it. He is very irregular in his attendance, making all kinds of frivolous pretences and excuses; one day he says he could not attend in consequence of a severe attack of tic (which he never has), another, that his mother is coming to see him, &c. While at work the least thing suffices to arrest his attention; if any one passes he jumps up to see who he is, where he comes from, and whither he goes. He is extremely inquisitive.

He seems totally destitute of the moral sense, or any capability of distinguishing right from wrong, and never once was known to characterise any act, although calculated to excite the utmost indignation in a well-regulated mind, as a thing which was wrong, but simply as "a bad plan, or "foolish," and that only *because* it had been found out.

The foregoing cases are such as often cause much dispute between the medical and legal professions. Psychologists recognise the existence of an abnormal condition of some of the cerebral functions in these cases, and consequently urge, when they become bones of legislative contention, that there is a greater or less incapacity in the patients of command over their feelings, emotions, and passions, which exempt them, more or less, from responsibility for their actions. Lawyers, on the other hand, hold that all such patients are legally responsible, as they know right from wrong, are without delusions, and are not fatuous or furious. The law does not recognise any mental gradations between perfect sanity and absolute insanity, but pronounces a person to be either the one or the other, and therefore quite responsible or quite irresponsible in their actions. Psychologists acknowledge there are infinite gradations between sanity and that amount of insanity which the law only recognises (the same as between corporeal health and disease), so that it cannot be distinguished where the one terminates and the other commences. That being the case, physicians consider that there are consequent degrees of responsibility in various insane patients: for example, the impression would be that of the cases I have brought forward, M. A— is more responsible for his actions than P. H— is, and less so than C. W— (Case 8). The advisability of modifications or alterations of the laws respecting lunacy is recognised throughout our profession, and it is just in the class of cases I have endeavoured to illustrate that there is the most urgent need of such changes: in a court of law nearly all the patients I have mentioned would be held to be responsible agents, although it is *à priori* undisguiseable that they cannot control their—one might almost say—*instincts*, and are therefore suitable cases for asylum supervision and control. It may fairly be stated that none of the patients I have described were or are fit to be free from all surveillance; most of them have repeatedly had opportunities for manifesting their capabilities to enjoy liberty, but all have failed. If we ascend a few steps higher in the scale of cerebral development, we

find ourselves surrounded by a large proportion of the inhabitants of our prisons: a careful inspection of our reformatories would bring to light the fact that very many of their occupiers are congenitally or hereditarily of imperfect mental organisation: how often do we not read in the reports of the police courts of persons who have been most carefully tended in reformatories for years, but who turn out perfectly hopeless and incorrigible?

On taking a retrospective view of the cases I have described, it will be readily recognised that, although there is a great general similarity between them, there is a great difference in the amount of self-control exercised by the patients. In the case last reported there is a perfect want of any sense of right and wrong, and the patient does not regulate his actions by any moral standard, but the self-control which he displays is simply a matter of discipline which regulates his actions on the ground of expediency alone; he does that which is right neither for the approval of others nor for his own self-approval, but merely from the conviction forced upon him by experience that a contrary course of conduct would be found out and be unsuccessful —to use his own words, "would be a bad plan;" he cannot appreciate the motives which influence others, but regards them simply as motives of expediency: in the case of M. A— the sense of right and wrong is present, but the patient has so little command over himself that he is unable to resist any temptation to do what is improper; after having done it, he deplores his acts and expresses feelings of shame and remorse: in the other case (that of P. H—), no such feelings have been exhibited, but, on the contrary, those simply of chagrin on being found out and thwarted. In all the other cases we perceive there is a certain and variable amount of self-control, ascending from the very small amount of it displayed by M. A—, to the great power of self-control frequently displayed by C. W—.

These observations would naturally point to the inference that *degrees of responsibility* ought to be legally recognised by our courts of law: this point has been so admirably elucidated by Dr. Bucknill, in his excellent essay on 'Unsoundness of Mind in relation to Criminal Acts,' that I do not presume to enlarge further upon its importance, but content myself by submitting the preceding selection of cases as a contribution to our knowledge of this difficult subject in its very important medico-legal relations.

PART II.—REVIEWS.

The Senses and the Intellect. By Alexander Bain, M.A., Professor of Logic in the University of Aberdeen. (Second Edition.) London: Longman and Co., 1864, pp. 646.

That this work has arrived at a second edition is seemingly a favorable sign of the times, forasmuch as the fact may be assumed to indicate a general progress towards juster conceptions of the nature of mental phenomena and of the method to be followed in their investigation, than have commonly hitherto prevailed. Mr. Bain has been the first in England amongst the so-called mental philosophers to recognise the supreme importance of physiology as lying at the bottom of a true mental science; in other words, he has been the first architect in that department who has thought it necessary to look to his foundations. For a long time physiology has been steadily encroaching on territory which the metaphysical psychologist thought to be his own; and it now requires no great sagacity to see what the not distant end must be. After the psychological method has been in fashion for at least two thousand years, what is the result? Truly, a barrenness of result which its extremest advocate cannot well applaud, inasmuch as, to use Bacon's words, "not only what was asserted once is asserted still, but what was a question once is a question still; and instead of being resolved by discussion, is only fixed and fed." It cannot, then, be accounted presumption if we refuse to believe that what has not been done by Plato and Descartes will be done by others following the same method. But it is reasonable to believe that what great men have not done may yet be done by inferior men adopting a method which they had not tried. At the present time it is simply an impertinence—etymologically speaking—in any one who has not made himself acquainted with the physiology of the nervous system to vex a heavy laden world with vague and vain psychological speculations; like the Aturian parrot of which Humboldt tells,* the metaphysical psychologist may almost be said to

* "There still lives, and it is a singular fact, an old parrot in Maypures, which cannot be understood, because, as the natives assert, it speaks the language of the Atures"—an extinct tribe of Indians, whose last refuge was the rocks of the cataracts of the Orinoco.—'Views of Nature.'

"Wherefore your dabblers in metaphysics are the most dangerous creatures breathing; they have just abstraction enough to raise doubts that never would have entered into another's head, but not enough to resolve them."—Tucker's 'Light of Nature Pursued.'

speak in the language of an extinct tribe to a people which understand him not.

As the first genuine recognition, then, of physiology by an eminent psychologist, Mr. Bain's work has an importance apart from any question as to its execution. It cannot but be for the good of real science that one edition has been exhausted. Why it did not sooner get to its second edition, when the condition of thought was so favorable to the acceptance of a work of its kind, may perhaps be owing to these considerations: First, it is not physiological enough for the physiologist, who may naturally still prefer the concise, consistent, and suggestive account of mental phenomena which Müller has given in his excellent work on physiology. Secondly, it has been too physiological for the mere psychologist, who, preferring easy speculation to laborious acquisition and the conceit of dogmatising to the humility of learning, has been disgusted by matters which he knew nothing of, and which he was too indolent or too self-sufficient to study. Thirdly, it must be confessed that the descriptive character of the book, with its excess of elaboration and superfluity of detail, renders an excellent work somewhat tedious to the reader.

Mr. Bain's method.—As was well pointed out by Mr. Herbert Spencer, in a review of the 'Emotions and Will,'* the method which Mr. Bain adopts is such as must render his work essentially transitional, and, we may add, less interesting than it might easily be. He describes in great detail, with a superfluity of illustration, and not unfrequent iteration, the most manifest mental characters as they are observed subjectively and objectively, and takes little or no account of the genesis or development of mind as it is displayed in man or through the animal kingdom. Accordingly, we have a descriptive psychology which is scarce more lively than a school lesson in geography, and from which one would not easily learn that there was such a thing as an idiot in the universe, or that the infant's mind was a very different matter from that of the cultivated adult. Now there can be very little doubt that the study of the plan of development of mind is what is especially wanted at the present time; and there can be even less doubt that such research, when rightly pursued, will do more than all that has yet been done towards establishing the principles of a science of mind. The only way of truly interpreting life in any of its forms is to investigate the plan of its development; and to give a laboured description of all its external features, without analytical insight into the mode of its being, will convey no more adequate an idea of it than one would get of a violet by buying from the chemist a dram of syrup of violets. We cannot, indeed, see how Mr. Bain reconciles his plan with the natural history method which he professes to follow; for the position of any creature in the animal kingdom is not determined from superficial

* 'British and Foreign Med.-Chir. Review,' 1860.

resemblances, but from the deeper identities of structure, as these are recognised by anatomical analysis and the study of development.

Without being guilty of extravagance, it may be held that a descriptive psychology never can be truly descriptive; for it must deal only with the surface of a fact, not with the fact itself. A fact never is a fact in science until its relations are discovered and its nature guaranteed. Before admitting a proclaimed fact, it is of essential importance to know something of the observer's previous education and training; otherwise one may not unlikely get about as correct an estimate of it as the ignorant peasant would give of the sun's diameter from his personal observation. Whosoever would truly realise this truth, let him analyse what are called the facts of consciousness. Sensation, for example, is generally used in works on psychology to denote a certain constant inborn faculty, instead of being understood as—what Berkeley's writings might have shown it to be—a general term summing up a multitude of particular phenomena of every degree of variation: the abstraction from the particular is converted into an objective entity which henceforth tyrannises over the thoughts. The sensation of each sense is in truth a gradually organised result or faculty which is built up through experience: the visual sensation of the cultivated adult is a very different matter from that of the child whose eyes have only been some weeks open upon the world; the tactile sensation of the blind man is a very different matter from that of the man who has always had the full use of his eyes; and the blind man whose sight was restored in the age of miracles saw men, not as men, but as trees walking. The complete sensation is slowly built up in the nervous centres from the residua or traces which previous sensations of a like kind have left behind them; and the sensation of the cultivated sense thus sums up, as it were, thousands of experiences, as one word often sums up the accumulated acquisitions of generations. Simple as a sensation appears, it is in reality infinitely compound. Of what permanent value, then, can any system of psychology be which takes no account of the gradual development of sensation as a process of organisation? Mr. Bain has analysed with great skill and completeness our perceptions of solidity, distance, figure, space, but he does not seem to have sufficiently recognised the important range of function of the sensorial ganglia as nervous centres with a power of independent action.

There can be no doubt that the large collection of carefully classified materials which Mr. Bain has made will be of the greatest value to some future architect whose good fortune it shall be to build up the fabric of a mental science. One can only regret that he himself should have wanted that organising faculty; for not only is he thereby prevented from raising the structure that shall endure, but his work, as far as it goes, suffers not a little. A striking feature, for example, in the book is the quantity of anatomical detail, and yet it might be

truly said that the physiology and psychology are not really blended; but suggest the idea of being unwillingly chained to one another. While giving an adequate description of the structure of the nervous centres, Mr. Bain has, in fact, almost forgotten to give any account of their functions: the consequence is, that physiology avails him but little in his psychological disquisitions, and that throughout his book it rather suffers the torture of Mezentius, whereby the living are stifled in the embraces of the dead. Had the kind Destinies but thought well to roll into one philosopher Mr. Bain and Mr. Herbert Spencer—with true respect for such eminent men be it said—and how excellent would have been the result! They supplement one another so exactly that the writings of one are the best criticism on those of the other.

If it be said, in answer to the foregoing observations, that our knowledge is so incomplete and changing as to render it absurd to attempt any final result in mental science, the reply must be allowed to have great weight. For some time to come, undoubtedly, all works on mental science must be provisional; but there does not appear to be any wisdom in establishing provisional systems which are inconsistent with actually known facts, as the so-called empirical psychologists are continually doing. They claim for their science the character of being inductive, while they persistently ignore the instances in their simplest forms, and have recourse to the most complex. That is a fine sort of induction! Where have the idiot, the animal, and the infant their places in this inductive psychology? To speak of induction where such a number of important instances are neglected is an unjustifiable and mischievous misuse of the word. A psychology which is truly inductive, and therefore of permanent worth, must follow the order of nature, and begin where mind begins in the animal and infant, gradually rising to those higher and more complex phenomena of mind which the introspective philosopher discovers or thinks he discovers: the genesis, the progression, and the decay of mind as traceable in the animal or infant, the philosopher, and the maniac or idiot, should severally receive full consideration. "The truth is," as Bacon says, "that they are not the highest instances which give the best or securest information, as is expressed not inelegantly in the common story of the philosopher who, while he gazed upon the stars, fell into the water; for if he had looked down he might have seen the stars in the water, but looking aloft he could not see the water in the stars."

Certainly it may be said, and it is said, that conclusions as to the mental phenomena of the child can be correctly formed from the phenomena of the adult mind. But it is exactly because such inferences have been made that the mental phenomena of the child have been misunderstood and erroneously interpreted, and that psychology has not received the benefit of the corrections which a right interpretation of them would have supplied. It may be said again, and it is said,

that the mental phenomena of the idiot or lunatic are morbid, and do not therefore concern psychology. They certainly do not concern a psychology which violently separates itself from nature. But it is exactly because psychology has thus violently separated itself from nature—of which the so-called morbid phenomena are no less natural a part than are the phenomena of health—that it has not sure foundations; that it is not inductive; that it has not profited by the corrections which the faithful observation of the phenomena of the unsound mind would have afforded. In reality, insanity furnishes what in such matter ought to have been seized with the greatest eagerness—as they cannot be made—actual experiments for the establishment of true principles; and the only excuse the psychologists can have for ignoring them as they have done is that they would undoubtedly have rendered most of their works unnecessary, and have laid bare their ridiculous pretensions to science. The laws of action of the unsound mind are not different from those of the sound mind, only the conditions are changed: nature does not recognise the artificial and ill-starred divisions which men for their convenience make; and a mental science which shall truly reflect nature must embrace all mental phenomena. Meanwhile, such works as do not, even though elaborate and valuable as Mr. Bain's is, must be essentially transitional.

General plan of the book.—After a preliminary description of the nerves and nervous centres, it is divided into two principal parts:

I. The first division consists of four chapters, the first of which treats of *Action and movement* considered as *spontaneous*, together with *the Feelings* and impressions which result from *muscular activity;* the second is occupied with an elaborate account of *the Senses* and *Sensations;* the third deals with the *Appetites*, or the cravings produced by the recurring wants and necessities of our bodily or organic life, such as *Sleep*, *Exercise*, *Repose*, *Thirst*, *Hunger*, and *Sex;* the fourth chapter finally includes the *Instincts* or the untaught movements, and also the primitive rudiments of Emotion and Volition: only the rudiments of these last, be it observed, for the 'Emotions and the Will' are treated of fully in a separate book.

II. The second division of the book is occupied with an exposition of the *Intellect*, the three primary or fundamental attributes of which are described as (1) Consciousness of *Difference*, or Discrimination; (2) Consciousness of *Agreement*; and (3) *Retentiveness*—the commonly recognised intellectual faculties being resolvable, Mr. Bain holds, into those three primitive properties. The first two chapters of this second part are occupied with a full development of the two processes of Retentiveness and Agreement; a third chapter is devoted to cases of complicated mental reproduction, including association by contrast; and a fourth interesting chapter deals with the application

of the intellectual forces in the formation of original constructions—the so-called creative or inventive faculty of the mind.

As it would be absurd to attempt to criticise in detail so large and important a work, it must suffice here to fix arbitrarily upon certain points which seem to demand consideration, or which appear to be especially instructive. It would be quite easy to fill pages with valuable extracts, but as those who take a great interest in the progress of mental science have read or will read the book itself, nothing would be gained by such unnecessary mutilation.

The Brain as the Organ of the Mind.—While Mr. Bain holds it to be certainly proved that the brain is the principal organ of the mind, and that—though sensible of the value of *quality*—there is an indisputable connection between the size of the brain and the mental energy displayed by the individual man or animal, he appears to be somewhat troubled by the unfortunate fact that the connection of force of mind with richness of convolutions is liable to exceptions: the sheep's brain, for example, is more highly convoluted than that of the dog, the donkey's brain more highly convoluted than that of the beaver. As the popular views on this subject are not very exact, we take leave to add a few observations.

As a general proposition, it is rightly held that the size of the brain in man is in proportion to the intelligence; but in judging of the relation in any case, it is obviously of great consequence to discriminate the kind of intelligence: there is all the difference in the world between the man of genius who is possessed of the creative faculty and marks out new paths, and the man of industrious talent who plods on with intelligent success in the old paths. For some time, again, it was believed that man had absolutely the greatest brain weight amongst animals; but though the proposition was true of most animals, it was found not to be true of the elephant and whale, neither of which of course approach man in intelligence. Then, it was said that if man had not the heaviest brain absolutely, his brain was still the heaviest in relation to the weight of his body—a relation which is in him as 1 to 36, whilst amongst most intelligent animals it seldom exceeds 1 to 100. Some of the smaller creatures, however, upset that proposition; the smaller singing birds, for example, exhibit variations in the relative proportions which exceed the normal proportion in man; and even the small American apes are said to have a proportionately greater weight of brain than man.

It is not absolutely true, again, that one animal is more intelligent than another as the convolutions of its brain are more numerous and the sulci deeper. Certainly, there are no convolutions in the lower mammalia, whilst they are met with in the carnivora and the apes with very few exceptions. The development of the convolutions in those animals which do possess them appears, on closer examination, to be in some degree in relation to the size of the body.

Not that all large animals are more intelligent than the smaller ones; for the brains of the ass, the sheep, and the ox are more convoluted than those of the beaver, the cat, and the dog. But a mathematical consideration comes into play here: when two bodies of like form but different size are compared, their relative volumes are as the cubes of their diameters, while the superficies of them is related as the squares of the diameter; or, in other words, the volume of a body which increases in size, increases in greater proportion than the superficies, and the latter again in greater proportion than the diameters. Now, in every natural group or order of mammalia the head, but specially the capacity of the skull, has a certain relation to the body which remains nearly equal in different species: the head of the tiger or the lion has the same proportion to the body as the head of the cat has to its body, although the sizes of the animals are so different. The relative proportion of the brain to the body in the tiger being, then, equal to the proportion in the cat, the superficies of the skull cavity will be proportionately smaller in the larger animal; and, consequently, to obtain an equal development of the gray superficies, this must be convoluted in the larger animal, while it may remain smooth in the smaller one. Plainly, then, this is an important consideration to be borne in mind in examining the fashioning of the convolutions in relation to the development of intelligence in different animals. Comparisons on such matters can only be rightly made between members of the nearest allied groups.

Of man, it may be added that not only is his skull more capacious in proportion to the size of his body than that of the larger animals, but that he far surpasses all other animals in the number and variety of his convolutions. And there can be no doubt that the complexity of his convolutions is in relation to the superiority of his intelligence. That wherein the monkey's brain differs from his—viz., the greater simplicity of the convolutions and their more symmetrical character—is that in which, in less degree, the brain of the lowest savage differs from the brain of the average European; the lowest savage undoubtedly occupies, as regards the conformation of his brain, an intermediate position between the European and the ape, though of course he is very much nearer to the European than he is to the ape.

The remarks which follow will serve to show how little liable Mr. Bain is to any charge of dealing with mental phenomena in the metaphysical spirit, and are not without interest as coming from a Professor in a Scotch University:—

"It is now an admitted doctrine that the nervous power is generated from the action of the nutriment supplied to the body, and is therefore of the class of forces having a common origin, and capable of being naturally converted—including mechanical momentum, heat, electricity, magnetism, and chemical decomposition. The power that animates the human frame and keeps alive the currents of the brain has its origin in the grand primal

source of reviving power, the sun; his influence exerted on vegetation builds up the structures whose destruction and decay within the animal system give forth all the energy concerned in maintaining the animal processes. What is called vitality is not a peculiar force, but a collocation of the forces of inorganic matter in such a way as to keep up a living structure. If our means of observation and measurement were perfect, we might render an account of all the nutriment consumed in any animal or human being; we might calculate the entire amount of energy evolved in the changes that constitute this consumption, and allow one portion for animal heat, another for the processes of secretion, a third for the action of the heart, lungs, and intestines, a fourth for the muscular exertion made within the period, a fifth for the activity of the brain, and so on till we had a strict balancing of receipt and expenditure. The evidence that establishes the common basis of mechanical and chemical force, heat and electricity, namely, their mutual convertibility and common origin, establishes the nerve force as a member of the same group."

Reflex action.—It has been already said that Mr. Bain's ideas of the functions of the different nervous centres do not seem to represent adequately the present state of knowledge; in fact, he mostly confounds their independent and special actions under the one general name of mental action. The consequence is, that actions in which the mind, as usually understood, has no part are by him endued with consciousness, and a want of exactness vitiates much of what he says. One of the results of the removal of the cerebral hemispheres he describes to be the entire extinction of all power of moving for an end; and yet he is immediately afterwards driven to acknowledge with surprise "an extraordinary apparent exception" to this conclusion in a well-known experiment by Pflüger. That physiologist wetted with acetic acid the thigh of a decapitated frog over its internal condyle, and the animal wiped it off with the dorsal surface of the foot of the same side; he thereupon cut off the foot and applied the acid to the same spot, and the animal—deceived, seemingly, as the man who has lost a limb is, by the eccentric sensation—would have wiped it off again with the foot of that side. But after some necessarily fruitless efforts it ceased to try in that way, seemed unquiet "as though it were searching for some new means," and at last it either made use of the foot of the other leg, or it so bent the mutilated limb that it wiped it against the side of its body. Struck by this wonderful adaptation of movements to an end by a headless animal, Pflüger actually inferred that the spinal cord, like the brain, was possessed of sensorial functions. And Mr. Bain appears to be of much the same opinion, for he says—"These actions have the character of voluntary actions, and yet they proceed from no higher centre than the spinal cord. We have no means of adequately explaining such a phenomenon. Possibly, in animals of a low order, the processes of will and intelligence are not so exclusively centralised in the brain as in the higher vertebrata." It would be rather interesting if Mr. Bain, in his next edition, would give a chapter on the *processes of*

will and intelligence in animals of so low an order as the frog; we fear that it would very much resemble the celebrated chapter 'Concerning Snakes in Iceland.'

Let us consider for a moment Pflüger's experiment. Is it not quite possible to draw another inference from it than that which he drew? Assuredly it is: the so-called design of an act is not necessarily evidence of the existence of will, forethought, or even consciousness. That would seem to be a far juster inference. No doubt there appears to be purpose in the movements of the decapitated frog, as there is purpose in the movements of the anencephalic infant's lips; but in both instances the co-ordinate activity is the result of a prearranged endowment of the nervous organisation. Accordingly, we see that the frog which has lost its leg acts as if its foot were still there, which, had it consciousness, it plainly should not, and only employs other means when the irritating action of the stimulus continues unaffected by its efforts. As, in certain morbid states of the human organism, we observe that the continuance of an irritation which at first only causes slight reflex action may produce more general involuntary reaction or convulsions; so, in the frog, the enduring stimulus which has not been affected by the customary reflex movements, gives rise to those further co-ordinate reflex movements which would have now come into play had the frog still possessed its brain. In the constitution of the spinal cord are implanted the capabilities of such energies, and the degree of the necessity, or the intensity of the stimulus, determines the extent of the activity. But the movements take place without consciousness; and all the design which there is in them is of the same kind as the design which there is in the formation of a crystal, or in the plan of growth of a tree. A crystal cannot overstep the laws of its form, nor can a tree grow up into heaven; the particles of the crystal aggregate after a certain definite plan, and thus strictly manifest design. Are we then to assume that because of the design there is consciousness in the forming crystal or in the growing tree? Certainly not; and yet it is to that absurd conclusion that the arguments of those who look upon the so-called design of an act as evincing consciousness must lead. The design evident in any act is nothing else but the correlate in the mind of the observer of the law of the matter in nature; and each observer will see in any act just that amount of design which he brings with him the faculty of seeing.

Let it be remembered that reflex co-ordinate movements may not only take place as the result of an innate endowment of the spinal cord, which is commonly the case in the lower animals, but that the faculty of such movements is an acquired faculty of the cord in many of the higher animals and in man—an organised result in the spinal centres built up through particular experience and training. Pathological records will furnish many instances in which movements having

the appearance of design are notably accomplished by man when the influence of the cerebral hemispheres is suspended and consciousness absent. When Coleridge, in one of his letters to Godwin, asks "whether there be reason to hold that actions bearing the semblance of predesigning consciousness may yet be simply organic, and whether a series of such actions are possible," he was uncertain about that which some of his great predecessors had very distinctly and very justly perceived, and which, if he had forgotten Hartley, a glance at the physiology of his time might have easily decided. Not to instance the mechanical automata which Descartes makes of the animals, Spinoza had put the matter in no uncertain manner. "No one," he says, "has in fact yet determined what the body is capable of; in other words, no one has learned from experience what the body can do and what it cannot do by the mere laws of its corporeal nature, without receiving any determination from the mind." And after saying that no one has sufficiently studied the functions of the body, and instancing the marvellous acts of animals and of somnambulists—"all things which prove that the human body, by the mere laws of its nature, is capable of a multitude of acts which are astonishing to the mind"—he concludes, "I add, in conclusion, that the mechanism of the human body is constructed with an art which infinitely surpasses human industry." The attentive study of the development of the functions of the spinal cord does indeed appear to us to be an essential prerequisite to the formation of just conceptions of the large part which it undoubtedly plays in the phenomena of our mental life.

Sensori-motor action.—After what has been said, it will not be surprising that Mr. Bain rejects sensori-motor actions as a class apart from others, believing that Dr. Carpenter, with whom he was at one time disposed to agree, has laid hold under that division of a number of movements due to the diffusive influence of feeling—an influence upon which Mr. Bain insists much.* It would be very desirable that any one who is about to quote Dr. Carpenter on any subject should try to get back to the original source from which that eminent and useful compilator has gathered his materials. Certainly it is not very probable that he will find the references where they might be expected to be, but he must be none the less

* The way in which Mr. Bain speaks of this diffusion of emotion, as if it were something hitherto almost entirely neglected, is rather surprising. In reality it has been over and over again dwelt upon with much greater exactness than by Mr. Bain. Bichat ('Sur la Vie et la Mort') located the passions in the organs of organic life, so much was he impressed by it; Henle described the emotions as sympathies between the organ of thought and the bodily nerves ('Ration. Pathologie,' vol. i, 1846); Domrich treats in detail of the influence of the feelings not only on motor nerves, but on the different organs and upon nutrition ('Die Psychischen Zustände, ihre organische Vermittlung,' &c., 1849); and Wachsmuth ('Allgemeine Pathologie der Seele), is sufficiently distinct upon the subject; as most German manuals of psychology are.

sure on that account that there are such. With regard to this question of the sensori-motor actions, which Dr. Carpenter has done so much to illustrate, the criticism of Mr. Bain is in some degree valid; but it is so only in so far as Dr. Carpenter has confused, by doubtful instances, a well-defined class of movements. Perhaps the most lucid and philosophical account of sensations as independent causes of movement will still be found in a paper by Griesinger, published in 1843. It is entitled, "On Psychical Reflex Action," and it is specially devoted to displaying a parallel between the actions of the brain and the spinal cord. Mr. Bain's doubt of the existence of such a class of movements must seem to the physiologist inexplicable. Not only physiological and pathological observation, but experiments on animals and anatomical researches, have agreed in proving both the possibility and the actuality of the movements; and have proved also that they are by no means insignificant in the daily actions of life. Unwarrantably to suppose, as Mr. Bain does, that the cerebral hemispheres are essential to the manifestation of sensori-motor actions, only shows how dangerous it is to give an opinion upon a physiological question on psychological grounds, or on the basis of unassimilated extracts from physiological text-books. It is an error from which a consideration of the place of development of mind would have haply saved him; for it is the simple fact that in a great number of the lower animals, in which there are no cerebral hemispheres, the actions are entirely reflex and sensori-motor. It is not, indeed, till we get near to the lowest forms of the vertebrata that any higher form of mental action is manifest.

Movement precedes sensation, and is at the outset independent of any stimulus from without.—This is a matter upon which Mr. Bain lays the utmost stress, returning to it again and again with an iteration which, though it may be impressive, certainly becomes rather irritating. As he points out, the original spontaneity of movement was taught by Müller, who maintained that the fœtus moves its limbs at first, not for the attainment of any object, but *solely because it can move them.* The mistake of Müller, which was a very natural one at the time, was, that he called this spontaneity voluntary; which Mr. Bain, notwithstanding that he himself can find processes of intelligence and will in the frog, asserts very properly that it is not. But has Mr. Bain altogether avoided confusion on this matter? One thing has forcibly struck us in his disquisition; it is, that he has confounded, or certainly not sufficiently discriminated, a stimulus and a sensation. It is obviously quite possible—and, indeed, it is not denied—that movement may, and does, precede sensation; but it does not thereupon follow that it is independent of a stimulus from without. The reflex movement is independent of consciousness, but it is not independent of the

stimulus from without. Whether the first movement of the fœtus takes place on the occasion of some external stimulus, or whether it is a spontaneous outburst of energy, in either case there is the best reason to believe that it is unattended with sensation. If all that Mr. Bain means to say is, that movement precedes sensation, he only says what, as far as we know, no one denies. But if he wishes to uphold that movement takes place independently of a stimulus, then it is necessary to come to some agreement as to what a stimulus shall mean.

Physiologists are in the habit of describing a class of stimuli as the *organic stimuli*, and of laying the greatest stress upon the important influence which these conditions arising within the body exercise upon the tone of the nervous centres. Ordinarily their agency is exerted upon our unconscious mental life—a life of which we observe, not without amazement, that Mr. Bain takes no account in his book; but in the abnormal case of a disturbance in some of the organs of the body, an influence usually exercised without consciousness forces itself into consciousness, and produces easily recognisable effects. The phenomena of insanity, and the disorders of motility, furnish many instructive examples of such action. Now, as it would of course be impossible to say that movement is independent of a stimulus, if the organic stimuli were admitted, Mr. Bain sweeps them away from the field, scarce deigning them a moment's consideration. "A constant stimulus," he says, "is in our estimation no stimulus at all." Very well: but, pray, let us have some consistency. If a constant stimulus is no stimulus at all, what does Mr. Bain mean by talking, as he does very fluently and very hypothetically, of the tonicity of certain muscles being kept up by a *stimulus originating in a nervous centre, and constantly flowing out from that centre*—an assumption, be it observed, out of which he fashions an argument in favour of the spontaneity of movements. In this regard he has plainly not been sufficiently careful and exact. Moreover, if it be true that a constant stimulus is no stimulus at all, the admission does not settle the matter; for the organic stimuli are not constant, but vary with every variation in the condition of the organs—variations to which the complex and delicate machinery of the organism is exceeding sensitive. A movement then may be excited, not only directly by a stimulus from without, but also indirectly through the obscure effects produced by the external stimulus upon the organic stimuli. And as the infant, when it gets into the world, is surrounded with a universe of external stimuli; and as its organic stimuli at once come into play with the commencement of life on its own account, we must confess that Mr. Bain's undiscriminating proposition hardly seems to do justice to the difficulties of the question.

We do not say that Mr. Bain is wrong; on the contrary, we

are of opinion that his arguments for the spontaneity of movements—when the term is properly defined—are of great weight, and might have received stronger illustration; but we certainly think that he has exaggerated the value of his own rather vague and general proposition, and has very much underrated the more exact knowledge which was in existence. When he goes on, for example, to argue that the nervous centres do not merely reflect the stimulus of the afferent on to the efferent nerve—that the reflex movement is not the pure creation of an outward stimulus, but is determined partly by the stimulus and partly by the specific force of the centres—he is simply stating one of the most elementary propositions in physiology, and, in so far as he is fighting, is fighting with an imaginary enemy; the principle is at the foundation of that discrimination of nervous centres which physiologists have long made, but which Mr. Bain unfortunately does not make. Did any mortal ever think when he touched his horse with the whip or the spur that the consequent activity merely represented the transferred stimulus? When, again, he cites the phenomena of awakening from sleep to prove that movement precedes sensation, he appears to be all unaware of the possibility that the senses may be awake while the cerebral hemispheres are asleep, as the cerebral hemispheres may be active while the senses are asleep. On the whole, it must be said that his physiological knowledge is wanting in exactness and completeness, and by no means reaches the level of the present condition of the science.

That acknowledgment made, however, we would again direct attention to his valuable observations upon the spontaneous energy which is stored up in the nervous centres by nutrition, and discharged, whether on the occasion of some external stimulus or not. Of especial value is his exposition of the primitive combined movements as original and instinctive in man as well as in the animals; the associating link existing in the original conformation of the nervous centres. This pre-established adaptation for locomotive movements involves, as he points out, first, the *reciprocation* or vibration of the limb, which certainly is not due to volition; and, secondly, an *alternate* movement of corresponding limbs, or of the two sides of the body. In animals, whose particular ways of walking are transferred as an inheritance of structure, the primitive adjustment is more evident; and in man there is, as Müller observes, an example in the movements of the two eyes together of associated *simultaneous* movements depending on the structure of the nervous centres. Is it not strange, however, that Mr. Bain, insisting so much upon this primitive germ of a locomotive harmony, should have thought it essential in an earlier part of his book to associate processes of will and intelligence with co-ordinate movements? Per-

haps we should not be far wrong in saying that there is a mechanical conformation rather than an organic unity apparent in his work; that the structure seems complete, but life is wanting.

Muscular feelings.—By no one in England has the analysis of onr muscular perceptions been so thoroughly done as by Mr. Bain. He distinguishes three distinct classes of muscular feelings:—

1. Feelings connected with the organic conditions of muscles, as those arising from injuries, disease, fatigue.

2. Feelings connected with muscular action, including all the pleasures and pains of exercise.

3. The feelings which indicate the various modes of tension of the moving organs. These are the feelings which enter largely into our intellectual life, and play a most important part in thought. This function of muscular sensibility arises from our being conscious of the different degrees of tension; and the modes of muscular action which thus affect us Mr. Bain holds to be three:—(*a*) The first is the amount of exertion which measures the *resistance* to be encountered; and under this category comes the discrimination of weight, of tenacity, of elasticity, &c. It is the feeling and measure of resistance or force—the feeling that is the principal foundation of our notions of an external world. (*b*) The second has regard to the *continuance* of the exertion, and applies both to dead strain and to movement. It stands for a measure of time. "All impressions made on the mind, whether those of muscular energy or those of the ordinary senses, are felt differently according as they endure for a longer or a shorter time. This must be true of the higher emotions also. The continuance of a mental state must be discriminated by us from the very dawn of consciousness, and hence our estimate of time is one of the earliest of our mental aptitudes. It attaches to every feeling that we possess, although we do not always exercise the power of making this special comparison and commit mistakes in consequence. When we pull an oar or raise a weight, we know that we are moving and not simply resisting; there is the sweep of the organ through space, and the range of muscular contraction thus connects itself with the measure of space or extension." Not very distinctly at all times, as Mr. Bain must allow, if he has ever pulled very hard against tide, and, notwithstanding the sweep of the organ through space, made little or no progress. "This is the first step, the elementary sensibility in our knowledge of space. And although we must combine sensations of the senses with sweep of movement in our perception of the extended, yet the essential part of the cognition is due to the feeling of movement." The sensibility becomes the means of imparting to us the feelings of *linear* extension, inasmuch as that is measured by the sweep of the limb; and of course discrimination of length in one direction includes extension in every direction. "Hence superficial and solid dimensions,

the size or magnitude of a solid object, come to be felt through the same fundamental sensibility to expended muscular force." (*c*) The third form of muscular feeling is connected with the *rapidity* of the muscle's contraction to which the velocity of movement corresponds. For when we accelerate a movement we are aware, not merely that more power is going out of us, but we have a feeling of the rapidity of the muscular contraction, which is thence transferred to the moving object, so that the velocity of motion is estimated. "The feeling of the rapidity of muscular contraction has a further office. It is an additional means of measuring extension. An increase of velocity in the same time corresponds to an increase of range or extension, no less than the same velocity continued for a greater time. Extent of space thus connects itself with two separate discriminations—continuance, and velocity of movement."

It is plain, however, that the sense of touch co-operates largely with our muscular feelings in the formation of our notions of extension and solidity. Movement only would not give that distinction between succession and co-existence—time and space—which must be arrived at before we recognise extension. "When with the hand we grasp something moving, and move it, we have a sensation of one unchanged contact and pressure, and the sensation is embedded in a movement. This is one experience. When we move the hand over a fixed surface we have, with the feelings of movement, a succession of feelings of touch; if the surface is a variable one, the sensations are constantly changing, so that we can be under no mistake as to our passing through a series of tactile impressions. This is another experience, and differs from the first, not in the sense of power, but in the tactile accompaniment. The difference, however, is of vital importance. In the one case we have an object moving and measuring time or continuance; in the other case we have coexistence in space. The coexistence is still further made apparent by our reversing the movement, and thereby encountering the tactile series in the reverse order."

The perception of solidity is a complex result obtained through the union of touch and muscularity; and *distance, direction,* and *situation* involve in the same manner the active organs; "the tactile sensations merely furnishing marks and starting-points like the arrows between the chain lengths in land measuring."

"The observations made on persons born blind have furnished a means of judging how far touch can substitute sight, both in mechanical and intellectual operations. These observations have shown that there is nothing essential to the highest intellectual processes of science and thought that may not be attained in the absence of sight. The integrity of the moving apparatus of the frame renders it possible to acquire the fundamental notions of space, magnitude, figure, force, and movement, and through these to com-

prehend the great leading facts of creation as taught in mathematical, mechanical, or physical science."

Theory of Vision.—In a recently published book an energetic attempt has been made by Mr. Abbott to overthrow what is called the "Berkleian Theory of Vision," which, being the theory commonly accepted, renders it necessary for its opponent to encounter both Mr. J. S. Mill and Mr. Bain. To us it appears that Mr. Abbott has not adequately interpreted Berkeley, or certainly has not criticised him in a sufficiently wide and liberal spirit; and that in his somewhat confident energy he triumphs, not over real adversaries, but over adversaries whom he has himself in great part created. At the present time it is probable that Berkeley's writings, honestly studied, would be very serviceable in illustrating how gradually our sensations are built up from the aggregate or residua of past impressions of a like kind—a fact which, in the case of vision, the stereoscope has experimentally demonstrated. Be that as it may, however, we do not find in the book of Mr. Bain those one-sided and incomplete opinions in regard to vision which Mr. Abbott quotes and exerts himself to overthrow. Let us exhibit this in greater detail.

The sensations, or the proper elements of sight, are, Mr. Bain holds, partly optical, resulting from the effect of light on the retina; and partly muscular, arising through the action of the six muscles of the eye. The complex sensations are formed from this combination, which, as in the case of touch, is necessary as a basis of our perception of the external world—externality, motion, form, distance, size, solidity, and relative position. Mere light and colour will not suffice to found these perceptions upon. The eye follows a moving object, and through the muscles acting we get a discrimination of direction, as also of continuance of movement, while the velocity causes graduated sensations of speed. "The muscular sensibility of the dead strain, or of resistance, can scarcely occur in the eye, there being nothing to resist its movements but its own inertia. Hence, of the three primary sensibilities of muscle—resistance, continuance, and speed—two only belong to the ocular muscles. Accordingly, the eye, with all its superiority in giving the mind the pictorial array of the external world, cannot be said to include the fundamental consciousness of the object universe, the sense of resistance. There is a certain kindred susceptibility in the common fact of muscular tension; but it is by association, and not by intrinsic susceptibility, that the power of vision impresses us so strongly with the feeling of the object world." This is distinct enough: Mr. Bain holds that by the eye alone we never could attain to the perception of things external to us, to the recognition of an external world.

How do we get our perception of distance? There is a double adaptation of the eye to distance, namely, a change in the convexity of the lens for near distance, and an alteration in the direction of the axes of the eyes for distance both near and far; and as these adaptations are muscular, the corresponding muscular feelings give us our discriminating consciousness. "The recognition of difference of remoteness from the eye, in so far as can be done by vision alone, is the fusing of definite changes of adjustment with a definite series of optical impressions; the series being inverted by an inverted adjustment, and being repeated in the same order any number of times. With the near adjustment one class of objects are imaged distinctly to the mind; with an altered adjustment these objects, though still in view, fade into a characteristic indistinctness, and a new portion of the sphere attains the clearness of outline that the others formerly had. With another adjustment the same optical change is repeated, and so on till the eyes have gone through the entire compass of accommodation to distance."

By combining the impressions of varying distances with the sweep of the eye over the object or the field of view, it is possible to conceive how we get visible pictures of the three dimensions of space, or recognise objects in their solid forms; for by a series of appropriate movements of the eyes we follow the outline of an object, obtaining thus certain optical effects in association with muscular feelings. "The union of those that are characteristic of each object is our permanent impression of that object, and is our means of recognising it in after times."

Such are Mr. Bain's opinions respecting our perceptions of distance and solidity, as they are expressed in one part of his book; but in another part of it he maintains that distance and the dimensions of a body in space cannot be perceived through the medium of sight alone. The meaning of distance, he there says, implies that it would take a certain number of paces to get to the object—a certain locomotion, in fact, measured by the putting forth and continuance of a certain muscular energy. "I say, therefore, that distance cannot be perceived by the eye; because the idea of distance, by its very nature, implies feelings and measurements out of the eye, and located in other active organs." This assertion, which is scarcely consistent with what has been previously said, represents a very dangerous style of argument, or rather it represents no argument at all. To say that the idea of a thing implies such and such consequence is simply to re-assert the same proposition in other and more objectionable words. The distance of an object in yards or feet may be a matter of locomotive determination; but it scarcely thence follows that we have no perception of externality and distance by the eye. What is the cause that immediately

determines the adjustment of the eye to distance? Certainly the adjustment is not a locomotive acquisition: it is a consensual, or, if you prefer the vaguer word, an instinctive act, in respondence to a visual sensation or picture—an act of which there is no direct consciousness, and over which the will has no direct control. Let this question, then, be put: If the sense of muscular energy is the basis of the idea of an external world, and the sense of its continuance is the basis of the notion of distance, as Mr. Bain maintains, why should not the muscular feeling of the consensual muscular contraction in the unconscious adjustment of the eye be also the basis of the idea of the external object, and the feeling of the continuance of the consensual act also be the basis of a notion of distance? The feeling of expended energy must surely impart a discrimination in the case of one muscle just as much as in the case of another—nay, even more distinctly in the case of the exceedingly susceptible muscles of the eye. But, says Mr. Bain, the eye cannot give you the feeling of resistance. What? Is the feeling of resistance, in any case, anything more than the feeling of expended muscular energy? In the case of any acting limb, is not the feeling an internal fact? How, then, do you get the notion of the external object? And if in such instance you do contrive, in some inexplicable way, to get such notion from a feeling which is purely internal, why may not a similar feeling in the eye give you a similar result? Nay, is it not far more likely to do so, seeing that in the eye a visual picture, which itself determines the muscular act, is constantly associated with the corresponding muscular feeling? No doubt the association of locomotive efforts with certain feelings in the eye is the rule, and the notion of distance is a compound result; but that the eye alone cannot impart such notion is certainly an assertion which will not easily be proved, and which Mr. Bain has not proved.

There is a distinction to be borne in mind in discussing this question, which, if we remember rightly, Mr. Abbott neglects. To say that the visual sensation may give us the perception of externality and distance is obviously a very different thing from saying the eye may give us such perception. It is not the visual sensation as such—not the eye as receiving the visual picture—which directly gives us the perception of distance; but it is the muscular feeling of adjustment which imparts the discrimination, just as the muscular feelings of our limbs do. In both cases in man the sensation is at first confused and uncertain, and the respondent muscular adaptations are gradually effected so that definite muscular intuitions are organised; and in both cases in some of the lower animals the muscular intuition is distinct and complete from the first. Certainly we may well entertain great doubts whether the

visual sensation itself would ever give us the notion of externality and distance.*

II. *The Intellect.*—It is a matter of unavoidable regret that we cannot afford to give an account of the second division of Mr. Bain's valuable work. It must suffice to say that he resolves all the commonly recognised intellectual faculties into three primitive properties—Discrimination, Retentiveness, Similarity. Memory is founded on the retentive power, aided sometimes by Similarity; Reason and Abstraction involve Similarity chiefly, there being in both the identification of resembling things; Judgment may consist in Discrimination on the one hand, or in the sense of Agreement on the other; and Imagination is a product of all the three fundamentals of our intelligence, with the addition of an element of Emotion. All this is fully and systematically set forth in the chapters of the second part of the book. To us it would have been far more satisfactory if for the words Discrimination, Similarity, and Retentiveness Mr. Bain had substituted the physiological ideas of Assimilation and Differentiation, or the general idea of Organisation. What he has said would have lost nothing thereby, and his book would have gained something in unity. Moreover, we do not find in his proposed terms any important advance on those which were previously in use: *Discrimination* seems to be very much what is commonly called *Perception* or *Discernment; Conception* would embrace most of what he includes under that "vile phrase" *Similarity;* and if one must hold to psychological nomenclature, there does not seem to be any very cogent reason for putting *Retentiveness* in the place of the ancient and familiar *Memory*. To change old terms for new, when there is no actual increase in our knowledge of the facts denoted, and when we gain little or nothing in exactness thereby, is rather a questionable advantage.

Thus much, then, in the way of criticism of a valuable work, which is very carefully executed and full of information. With less labour we might have selected as extracts many excellent observations by Mr. Bain, and have followed these up with the usual unintelligent approbation of the professional writers: had the book been an indifferent production, that is the way we should have depreciated it; but as it is not an indifferent book, it seemed more fitting to give it the appreciation of a discriminating criticism. Perhaps it may appear to

* Since the above was written we have met with a little work by C. S. Cornelius, ('Zur Theorie des Sehens mit Rücksicht auf die neuesten Arbeiten in diesem Gebiete,' Halle, 1864,) which contains a complete summary of all the arguments in favour of the muscular sensations of the eye as the important agents in vision. A larger work by the same author is 'Theorie des Sehens und raumlichen Vorstellens,' 1861. It appears that the influence of the muscular sensations was set forth by Steinbuch as early as 1811; first applied in a comprehensive theory by Herbart and his school; is expounded in detail by Cornelius, and supported by Lötze and Wundt. Waitz, however, holds that the sensations of colour may, without any co-operation of muscular feeling, lead to the conception of extension in space.

some that, seduced by the critical spirit, we have been too much occupied in fault-finding; if so, let such read the book and get a correct notion of its value for themselves. Others may think that we might have done well to make larger quotations; if so, let them accept an excuse in Milton's words: "Others may read him in his own phrase and ease me, who never could delight in long citations, much less in whole traductions; whether it be natural disposition or education in me, or that my mother bore me a speaker of what God made mine own, and not a translator." (*'Doct. and Discip. of Divorce.'*)

H. M.

Crania Britannica. Delineations and Descriptions of the Skulls of the Aboriginal and Early Inhabitants of the British Islands, together with Notices of their other Remains. By J. Barnard Davis, M.D., F.S.A., &c.; and John Thurnam, M.D., F.R.C.P., F.S.A., &c. Decade V. London, 1862.

Though late with our notice of this most valuable and original work (inasmuch as it has reached the fifth section or "decade" of six which will complete it), yet we should neglect a positive duty did we let those of our readers, who have not yet met with it, continue ignorant of the character and merits of its contents, particularly as one of its authors is a member of the Association, and the much-esteemed Superintendent of the Wilts County Asylum.

The study of the human cranium as the enclosing and protecting envelope of the brain—the organ of the mind—and intimately correlated with the brain in structure and development, is necessarily a favorite one with those who make mental medicine the special object of attention. That such is the case is evidenced sufficiently by the comparatively large number of names of medical officers connected with our English asylums found in the list of *subscribers* to this work. For we should have noted that it is published by subscription by Taylor and Francis, Red Lion Court, Fleet Street.

Dr. Thurnam is united in the production of this laborious treatise with Dr. J. Barnard Davis, of Stoke-on-Trent, a gentleman who, amidst the arduous duties of general practice, has found leisure to prosecute craniological researches most thoroughly, and to form the finest collection of skulls to be met with in Europe.

Such works reflect credit, not only on their authors, but also on their native country. The original conception of the work appears to have been borrowed from Prof. Morton's celebrated 'Crania Americana.' It does not consist in dry, anatomical details of structure, but the study of the crania is used to, as it were, resuscitate the races to which they belonged, and to bring before us the

aboriginal and immigrant races of Great Britain and Ireland in connection with their whole physical conformation, their languages, arts, religion, and ethnological relations. Thus a considerable portion of the decade before us is taken up with a most able sketch of the historical ethnology of Britain, embracing an account of the mythology and religious rites of the Britons and other Celts, of their language and letters, &c., from the pen of Dr. Thurnam; and this chapter is followed by another, an "Ethnographical Sketch of the Successive Populations of the British Islands."

The illustrations of crania are beautifully engraved; but besides these are sketches of the barrows where skeletons have been found, and of the other contents of the barrows—vases and drinking-cups, flint arrow-heads, rings, &c.—which add much to the general interest of the work, and will particularly recommend it to those who have an antiquarian taste.

From an advertisement on the cover we perceive that Dr. Davis is about publishing, by subscription, a new work of a similar nature, but wider compass, under the title of 'Amænitates Ethnographicæ,' comprehending descriptions of human races and skulls, not of Great Britain alone, but of the whole globe, commencing with the Sub-Himalayan tribes. We heartily wish him success in his arduous undertaking, and commend it to all students of the most engaging science of ethnology.

The Lunacy Acts: containing all the Statutes relating to Private Lunatics—Pauper Lunatics—Criminal Lunatics—Commissions of Lunacy—Public and Private Asylums—and the Commissioners in Lunacy. With an Introductory Comment, Notes to the Statutes, including References to Decided Cases, and a Copious Index. By Danby P. Fry, Esq., of Lincoln's Inn, Barrister-at-Law, and of the Poor-Law Board. London: Knight and Co., 90, Fleet Street, *Publishers by authority to the Poor-Law Board, and to the Home Office, for the purposes of the Local Government Act,* 1858. 1864, pp. 731.

Pending the consolidation of the Lunacy Laws into one statute, we thankfully accept Mr. Fry's publication of the 'Lunacy Acts' in one volume. It is something to have these confusing statutes printed consecutively, and bound up in one volume. Mr. Fry is, however, far from having confined himself to such a reprint. The work is prefaced by a valuable introduction of 144 pages, divided into four chapters, giving a summary of the legal relations of—

I. Private Lunatics; II. Pauper Lunatics; III. Criminal Lunatics and Insane Prisoners; IV. The Commissioners in Lunacy.

The several statutes are printed in full, and Mr. Fry has added, to almost every page, notes and illustrations from cases decided.

The work is invaluable to all connected with the care and treatment of the insane, and it must find a place on the board-room table of every county asylum in England and Wales. A copious index completes the book, and adds materially to its value.

PART III.—QUARTERLY REPORT ON THE PROGRESS OF PSYCHOLOGICAL MEDICINE.

I.—*Foreign Psychological Literature.*

By J. T. Arlidge, A.B. and M.B. Lond., M.R.C.P. Lond., &c.

The American Journal of Insanity, vol. xx.—The numbers of this journal for January, April, and July, 1864, contain a report of the meeting of our Association, held in 1862, by Dr. Tilden Brown; a medico-legal case; a paper on "General Mental Therapeutics," by Dr. Parigot; one on "Mental Unsoundness as affecting Testamentary Capacity," by Mr. Edmund Wetmore; a "Notice of Insanity following Exposure to Fumes of Mercury," by Dr. Chapin; a lecture on "Suicide," by Dr. Ordronaux; a "Case of Insanity and Homicide;" a "Critical *Résumé* of Van der Kolk's 'Pathology and Therapeutics of Insanity,'" by Dr. Workman, continued in succeeding numbers; a description, by Dr. Kirkbride, of the male department of the Pennsylvania Hospital for the Insane; an essay, by Dr. Ray, on "American Lesgislation on Insanity;" and, lastly, a report of the proceedings of the Association of Superintendents of American Institutions for the Insane, at their meeting in May, 1864. To these original memoirs must be added Dr. Kellogg's "Psychological Delineations of Shakespeare," in continuation of those previously published by him in this journal. This paper, in the April number, is occupied with the character of Ophelia as a psychological study; whilst that in the July number discusses Shakespeare's suicides, the first illustration being found in "Othello."

Medico-legal case—Murder.—The analysis is given of the evidence of Dr. Gray on the mental condition of Dr. David M. Wright, who shot Lieutenant Sanborn, in July, 1863, in the public street of

Norfolk, Virginia, and was tried by a military court, and sentenced to be executed. The plea of insanity was set up, and the president appointed Dr. Gray, Superintendent of the New York State Asylum, as a commissioner, to take evidence, and to report to him his conclusions as to Wright's sanity, both at the time of the homicide and at that of his examination. The testimony adduced to prove him insane at the time of the act, or at any previous period, was very weak; and Dr. Gray arrived at the conviction that the crime was committed "under the influence of a burst of passion," without the presence of delusion or hallucination; "that though insanity may be in a manner latent for a long time, and at last appear suddenly by an act of violence, it is incredible that insanity of such a kind should have existed without previously disclosing at least more indications of its presence than are to be found in the testimony in this case. Latent insanity, suddenly appearing in the manner mentioned, does not instantly disappear with the accomplishment of the violent act, as it has done, if it existed, in the present case. There are so many circumstances of deliberation in the act of Dr. Wright, besides other evidences of sanity, that it is, in my opinion, impossible to attribute it to irresistible insane impulse."

The history of the murder, and of the circumstances attending it, may be conveyed in a few words. The Federals had some time previously possessed themselves of the city of Norfolk, in which Dr. Wright resided. His sympathies were with the Southern Confederacy; but he had never taken an active part in politics, and had quietly carried on his practice, abstaining as far as possible from intercourse with the Federals. Lieutenant Sanborn was an officer of one of the negro regiments, and an entire stranger to Dr. Wright. On the day of the crime he had marched with his company through the street in which the doctor resided. This was not seen by the latter, but reported to him, and he exhibited some excitement. Subsequently he left his house to go to his stable for his horse, in order to visit his patients, and just then the company of negroes was returning. "Dr. Wright procured a loaded revolver, and stood in the door of a store, apparently awaiting the passing of these troops, holding the pistol behind him, and concealed under his coat. When the lieutenant was directly in front of the doctor, the latter used some very offensive language. After marching a few paces a halt was ordered, and the lieutenant walked back to the doctor, and said, 'You have insulted an officer of the army,' or words to this effect; 'I arrest you!' and turned to give an order . . to make the arrest. At this instant the doctor fired twice, and the unfortunate officer died in a few moments."

Dr. Wright was fifty-four years of age, was married, and had several children. He was of high social standing, an upright, amiable, and peaceable citizen, an affectionate father and husband, and of

strictly temperate habits. He complained that his memory had of late years failed him. He had suffered much anxiety for his son, who was in the Southern army, and from whom he had not heard since the battle of Gettysburg. He had from his youth a horror of blood, and was very humane; "had not shot twenty guns in his life, and had rarely used a pistol—recently, in a club, had practised a little." Formerly, from the influence of education in the North, he was opposed to slavery, and had sold all his own slaves; but subsequently his opinions were changed, and he believed it to be for the true welfare of the negro, "and he looked upon its attempted destruction as a wrong to both races. . . . . He had no enmity towards coloured soldiers, though, with most Southern men, he thought the arming of slaves a great wrong." He had never heard of Lieutenant Sanborn, and, of course, had no feeling towards him personally. His act he attributed to an irresistible impulse; "that immediately afterwards he felt the most awful agony of mind," and suffered intensely for a few days, till tears relieved him. There was no history of serious bodily disease, or of signs of mental disturbance during the course of his life.

The paper on *General Mental Therapeutics*, by Dr. Parigot, is one of a series, and is well worth perusal. The author, it will be remembered, was for several years chief physician at Gheel, and one of the most able advocates of that colony for the insane.

"The Belgian system (he writes) of *free air* and *family life* is, strictly speaking, no more entitled to be called a therapeutical method than the English system of *non-restraint*. Both are simply more or less favorable *conditions* for the cure of the insane. On the contrary, the *restraint* and *disciplinarian* systems are active agents employed in the moral treatment; but these are applicable only in the great minority of cases . . the real therapeutical means which are effective in the hands of experienced psychopathists being the moral and medical treatment."

The author's observations on change of air and scene, diversion of mind, amusements, and occupation, are very good. Employment in workshops he regards with no favorable eye, and states that it is always beneficial to substitute out-door labour for that of shoemakers, tailors, and so on; their mental and corporal condition improving under it, both by the change of life and the greater healthiness of the occupation. There is much force in the following remarks:—"Now, the question arises, if, as in the so-called colony of Fitz-James, we must first make an asylum *self-paying*, and thus make a profit out of human infirmities! We say patients ought never to be converted into machines and tools for private speculation. Voluntary labour is the only kind that should be proposed to patients."

The observations on restraint will not meet with the same accept-

ance. "Employment, distraction, and travels, have a good effect upon those cases in which the reflex and morbid sympathy of the organism has vitiated the *volition*. In these cases, also, moral restraint, discipline, and even material restraint, constitute an important part of the moral treatment. When, as sometimes happens, a patient says 'Hold me! secure me! I am going to kill you!' is not the case similar to the maniacal crethism where the insane strive to inflict some injury on themselves or others? There restraint is called for, and is necessary. But what is the best mode of restraint? Certainly that which most speedily calms the patient. The worst form is where patients are held by the attendants; the next is the cell, which first requires violence, and which, secondly, leaves the patient to his exasperation between four walls. In our opinion, the leather strap about the wrists is the best material restraint, for then the patient may enjoy the liberty of walking in the fields; he has no hatred and vengeance for those who have applied it (?), for it may be put on during the night by those he does not know, and his attendants take no part in the matter. The patient may be left alone; no offered active violence overpowers him; it is but a *passive resistance* which annihilates his efforts; and the distractions of the fields, and the calming influences of the open air, soon overcome his irritation."

It seems strange to receive these sentiments from the other side of the Atlantic, where the principle of non-restraint has been so well received and generally acted upon. We fear Dr. Parigot has not made use of the opportunities presented him for discovering what non-restraint is, and in what way it is to be put into practice. Non-restraint, we would remind him, does not presuppose restraint by the hands of attendants, nor seclusion in a cell; and we doubt whether he would hear any demands from patients, in an asylum where it is properly carried out, to be secured or coerced. It is, indeed, the known existence and use of means of restraint in an institution that would suggest the cry. And we would ask Dr. Parigot who are the persons who, unknown, are to put on the leathern straps during sleep without disturbing the patient, other than the attendants?—and whether, on waking, the fettered individual is likely to arouse in a calm state of mind on finding the trick played on him? Again, would it be justifiable to apply restraint to a sleeping man, who must then at least be calm, and free from the state of mental erethism spoken of; and who also, on waking, will, in all probability, be tranquil—unless, indeed, he finds an advantage to have been taken of him in his helpless position to coerce him? Lastly, let Dr. Parigot try the distractions of the fields, and the calming influences of the open air, which he descants upon, without the adjunct of the wrist-belts, and so learn what those mental calmatives may be worth when used alone.

Mr. Wetmore, the author of the essay on *Mental Unsoundness affecting Testamentary Capacity*, is a law student of the Columbia College Law School. The essay gained a prize. It is in a great measure historical, the writer referring to cases and decisions in law courts, upon which the prevailing legal doctrines of mental unsoundness are based, both in England and in the United States.

Insanity following Exposure to Fumes of Mercury.—The sufferer in this case had worked two years in California, at the gold-diggings, and during that period was engaged once a week, or once in two weeks, in separating gold from its amalgam, whereby he became exposed to the fumes of mercury. Frontal headache was the first symptom, but soon the general health failed; the countenance assumed a cachectic and bronzed appearance, and there were two or three attacks of ptyalism. At the same time his mind gave way; he became silent, replied in monosyllables, and showed an inclination to wander. When admitted into Dr. Chaplin's asylum he had the appearance of complete dementia; he would sit in one posture for several hours together; appeared bewildered when disturbed; the mental operations seemed generally suspended, except with regard to memory, for when his attention was fully aroused and maintained, some connected history could be got from him, with some difficulty and patience. The habits were neat, and he dressed himself properly. The circulation was sluggish; extremities cool; countenance pale, and the pupils largely dilated. The gait is described as unsteady, and, at the same time, Dr. Chaplin remarks that there was no perceptible muscular paralysis, and no muscular rigidity. Iodide of potassium was given in five-grain doses, and continued for five months; improvement followed, and at the end of that period he was sufficiently restored to be discharged.

The report of the *Case of Insanity and Homicide* will be interesting to the student of the jurisprudence of insanity. The criminal, named Jesse Davenport, killed a young man by stabbing him in the region of the heart. He was one of a family of sixteen children, two of whom were insane. His maternal uncle was also insane, and his mother was a nervous, feeble-minded woman, with a marked tendency to tubercular disease. He himself had suffered from mania on one occasion, and on others had received injuries to his head, and exhibited much excitement and many peculiarities. Among other things, he once attempted to castrate himself; cut out one testicle with a razor, and nearly succumbed to the injury. His trial resulted in a verdict of "Not guilty, by reason of insanity," and he was removed to the state insane asylum.

In this case the court ruled, "that medical witnesses can only be asked what certain facts, admitted or supposed, *tend* to prove in

respect to the mental condition of an accused party." This was done, probably, "upon the ground that the general rule, by which facts and not opinions are properly admissible as evidence, should be rigidly adhered to." However, "it is far from being the general disposition of American courts rigidly to apply the rule excluding the opinion of skilled witnesses."

There was apparently no question raised, on this trial, as to the type of insanity with which the accused "was presumed to have been affected. Such an inquiry would probably have had the effect only to puzzle the jury as to the real meaning of the medical opinions, and it was wisely omitted. It is greatly to be wished that this course might be oftener taken. For, respecting typical cases of insanity, of course no question can arise as to whether disease is present. It is generally where faint marks of all the chief divisions of mental disease are seen blended together that uncertainty exists. This seems to have been the character of the mental disorder exhibited by Davenport. We could not with accuracy speak of his case as one either of mania or dementia, according to medical definitions, or of active or passive insanity in the legal use of these terms. There was, certainly, delusion in the non-technical sense, but there were not enough other symptoms of mania present to characterise that disease. Without the evidences of dementia the delusions could hardly have been considered insane delusions, and yet these evidences were not such as, taken by themselves, should relieve from the presumption of responsibility. In fine, this seems to have been one of those instances where a congenital tendency to mental disease is slowly and obscurely developed throughout many years, in a manner to defy our feeble efforts at classification and definition. It is these cases, especially, that need to be examined in the light of their entire history, by those whose experience of similar ones has been most intimate and extensive."

The paper by Dr. Ray, on *American Legislation on Insanity*, is virtually a report drawn up by him as chairman of a committee appointed by the Association of American Asylum Superintendents. This well-known writer on the jurisprudence of insanity enters on the consideration, in the paper under notice, of the best means to be taken to regulate the confinement or the isolation of the insane, with reference to the present and ultimate good of all concerned. In the course of his arguments he shows cause for rejecting the numerous and public formalities some persons advocate as remedies against improper seclusion, and arrives at "the conclusion that the only formality that should be required to authorise the isolation of an insane person should be the certificate, signed by one or two physicians, that the person is insane, and an application from some one whose character and position furnish presumptive proof of the

correctness of the transaction." This course has been pursued in several of the 'States;' "that it has been sufficient to prevent abuses, the testimony of our experience warrants us in declaring in the most unqualified terms."

The various popular objections to this course are enumerated, and Dr. Ray proceeds to inquire—granting that a wrong may be committed—what are the safeguards against it, and the practical results, as shown by experience. As to the question of the necessity of isolation in any given case, "who," asks Dr. Ray, "is so competent as a physician to make an inquisition necessary to solve it? If he has been acquainted with the person, he has materials for forming his opinion which no one else may have. If, on the contrary, he is a stranger, he is, of course, as far beyond the influence of prepossessions and biasses as any functionary whom the law might designate for the purpose. It is a question of expediency, not of abstract right, and the physician is as likely, to say the least, to decide it correctly as any commissioner or judge; with this advantage, that no unnecessary trouble or publicity is given to an afflictive domestic allotment."

The appointment of a special permanent commission, empowered to investigate every case of doubtful insanity in the hospitals or of alleged unfitness for hospital treatment, to discharge such patients as they think proper, and generally to superintend the interest of the insane, is a plan that finds little favour with Dr. Ray. He contends that an enlightened sense of honesty, justice, and fair-dealing, is not a sufficient guide to a body of commissioners, but that they must also possess the special knowledge and experience of experts. "In the class of cases where the interference of the commission would be considered most desirable, there are always facts on the true significance of which the question of sanity or insanity must turn. If, in any given case, the conclusions of the commission coincide with those of the officers of the hospital, the fact may inspire fresh confidence in the latter, and, to that extent, be of some service; but if, on the contrary, they differ, it is not easy to see why the decision of the commission, not one of whom may have had any practical knowledge of insanity, can be more reliable than that of the officers whose field of observation may have been before them for years, and embraced thousands of cases. If it is to be considered a part of the duty of their officer to visit the hospitals of the state, and investigate the case of every patient who complains of being unjustly confined, one can scarcely exaggerate the amount of mischief they would accomplish. And if, among the scores of cases to which their attention might be called, they should happen to find one unjustly detained, the service thus rendered would be dearly purchased by the restlessness and disappointment to which all the rest would be subjected."

A preferable agency to any such Government commission Dr. Ray considers to exist in the board of management of public asylums,

In the prevailing state of opinion and practice in England relative to the detention of lunatics, he finds illustration of the evils consequent on over-legislation in the imagined interests of the insane. The very numerous restrictions in force, he argues, fail in their professed purpose, and do not satisfy the morbid sensitiveness of the public respecting the confinement of the insane.

The life-long imprisonment of criminal lunatics is rightly condemned by Dr. Ray, who would have them discharged when there are satisfactory signs of recovery of sufficient duration. "Besides," he adds, "the discharge need not be unconditional. The law may require some securities from the friends or guardians, which would lead them to seasonable interference on the occasion of any subsequent attack. . . . . The only suitable place for this class of the insane is an establishment constructed and managed with sole reference to their requirements." Their intermixture with the inmates of an ordinary public asylum is both mischievous and unjust. Concerning the responsibility of the insane for immoral acts, "it would, in fact, be difficult to indicate a single rule or principle on this subject which may be considered as settled and universally admitted by courts of law." This comes to pass, owing to the rules of law relative to insanity being laid down by men who may have seen, but never observed, a single case of the disease.

"The only general rule we are disposed to sanction is that which has long been recognised in the French code, and in the statutes of some of our own states. It is, that no person shall be deemed guilty of a crime who was insane when it was committed." The adoption of this rule "would render the legal consequences of monomania, delusion, and other mental infirmities, no longer a matter of question. We would not say that insanity necessarily, in each and every case, annuls responsibility; but, the existence of the disease being established, it should be held to have this effect until the contrary is shown."

"A great imperfection in our present mode of criminal procedure is the absence of any provision for ascertaining the mental condition of the party accused." Friends, and others, may visit and inquire into his mental state while in prison previously to his trial; but opportunities, such as a hospital alone can furnish, for steady, persistent observation, necessary to arrive at a satisfactory conclusion, are wanting. Besides, the plea of insanity may be set up during the trial without an opportunity being afforded to test its validity. "Wisely, therefore, the state of Maine provides that a person waiting trial for any criminal act shall be placed by the court in a hospital for the insane, when satisfied that the plea of insanity will be made in his defence, there to be detained until the officers of the institution shall have formed an opinion respecting his mental condition."

With regard to the consequences of insanity in civil cases, only a few certain general principles can be admitted. It is provided by law, in many states, that a testator should be of sane mind. "Of course (remarks Dr. Ray) if this expression is to be applied in its literal and common meaning, no insane person, whatever the form of his disease, could make a valid will—a result the very opposite to that which is favoured by a true sense of right and the uniform practice of courts."

In the matter of *tort* and *trespass*, "there seems to be no way of avoiding the general conclusion, that inasmuch as the ultimate consequences of an insane person's acts must fall either upon himself or on the aggrieved party, it ought in justice to be the former. He may be innocent of any intention to do wrong, abstractly considered; he may be unconscious even of having done anything; yet the injury is no less real, while the aggrieved party is equally innocent of intention or consciousness of wrong." The difficulties that may arise in adjudicating on this principle must be met by the discretion of courts and juries.

"In the appointment of a guardian the procedure differs considerably in different states. In some it is made a necessary consequence of isolation; in some it is made a function of the Probate Court; in others it is entrusted to a commission, general or special, with or without a jury. . . . . In most of the New England States the Court of Probate summons the parties to appear before it, makes inquisition into the case, and determines accordingly. Unquestionably this method secures the ends of justice as effectually as that of a large and costly Commission of Lunacy. There is one objectionable feature, however, in all these methods—that of serving the notice upon the person who is the object of the inquiry. The effect of this measure upon the disordered imagination of the patient is but poorly paid for by any fancied requirement of justice. In fact, the process, after all, is little better than a farce; for the court does not expect that the person, even if under duress, will be brought before it; and if satisfied by competent evidence of the insanity of the party, it may not ask for the reason of his absence. Now, this is very loose and very uncertain practice. If the party must be summoned, the court should insist on his production. If the condition of the patient should sometimes render this quite impracticable, then it is but a cruel mockery to read the writ; and if the reading of the writ may be waived in one case for good and sufficient reasons, then it may in others, without necessarily defeating the ends of justice. In the State of Rhode Island, where the writ is directed to a patient in the hospital, it is not read to him if, in the opinion of the physician, such reading would be likely to be detrimental to his health. This is a wise provision, and worthy of universal adoption."

"The common law assumes that insanity does not necessarily deprive one of the testamentary capacity; . . . and in cases of doubtful capacity it should be incumbent on the party setting up the will to prove that the testator was able to comprehend the various relations implied in the particular act, and was free from all morbid influences in his views and feelings towards those who are the natural objects of his bounty."

The course of practice in lunacy has been, in the United States, always regulated by the common law; and special statutory provisions are few in number. "The absence of any Chancery Court has rendered it necessary to provide for the guardianship of the insane by means of some other judicial power," and a great variety of arrangements have been made for the purpose.

The right of friends to keep patients at home, or to place them in hospitals for the insane, as they please, without any sanction of law, is recognised in most states of the Union. "In some states the right may be implied in the conditions prescribed for the admission of persons into the public hospitals. . . . In a few states this right of disposal on the part of friends has been curtailed by positive enactments. Thus, in Maine it is confined to minor children, and can be exercised only within thirty days after the attack begins. In all other cases application must be made to the municipal authorities; who, if satisfied, on inquiry, that the person is insane, and that his safety and comfort, and that of others interested, would thereby be promoted, order his committal to the hospital, there to be detained until restored or otherwise discharged by due process of law."

Every state provides for dangerous lunatics at large, destitute of friends or related to such as cannot, or will not, take care of them, or who may prefer that their isolation should be executed in due course of law. "Authority for this purpose is, in most states, given to justices of the peace—one, or more—or judges of law or probate. In Connecticut and Indiana it is given to the municipal officers. In most states these tribunals make direct inquiry, and their decision is final. In Massachusetts the judge must give the case to a jury, if the party desire it. In Indiana the jury trial is imperatively provided, and is accompanied by some singular conditions."

In most instances the authorities can order the seclusion of a patient on one medical certificate. In New Jersey and Maryland two certificates are required. In Massachusetts paupers having no settlement in the state may be committed by two justices of the peace. In all these instances the magisterial power to order seclusion is discretionary. On the contrary, in New York State the law is imperative, so that every insane pauper shall have the benefits of a hospital.

In criminal cases "it is presumed that the insanity which led to

the criminal act has continued up to the time of trial. In most States no provision is made for establishing this fact; on the presumption, probably, that whether recovered or not, the party is liable to have another attack, when he would be dangerous to be at large."

"The discharge of patients from confinement, other than such as are committed by some legal process, is effected, in practice, by the parties that provoked the confinement." Where they have "been committed by some legal process, the usual course is for the authority that commits to discharge also; but there are many variations from this rule."

The guardianship of lunatics is variously provided for in different States. It may be regulated by a decree of the Probate Court, with or without a previous inquisition by the municipal authorities, or by a jury; or by a decree of a Chancery Court, appointing a commission; or by one issued by a Court of Common Pleas, or a Supreme Court, preceded by the finding of a jury, or of a commission of inquiry, that the party is insane.

"In Pennsylvania the insane are not liable to arrest or imprisonment on mesne or final process in any civil action."

We have given Dr. Ray's sketch of the lunacy regulations prevailing in the United States of America at considerable length, on account of its importance; and we now add the "*Project of a general law for determining the legal relations of the insane,*" which represents the result of that physician's labours, and has an evident claim to be inserted in full in these pages."

"*Project of a General Law for Determining the Legal Relations of the Insane.*

"1. Insane persons may be placed in a hospital for the insane by their legal guardians, by their relatives or friends in case they have no guardians, and, if paupers, by the proper authorities of the towns or cities to which they are chargeable, but in all cases according to the rules hereinafter mentioned for the admission of persons into such hospitals.

"2. Insane persons may be placed in a hospital or other suitable place of detention by order of a magistrate, who, after proper inquisition, shall find that such persons are at large, and dangerous to themselves or others, while the fact of their insanity shall be certified by a responsible physician.

"3. Insane persons may be placed in a hospital by order of any Justice of the Supreme Judicial Court, after the following course of proceedings, viz.: on statement in writing of any respectable person that a certain person is insane, and that the welfare of himself or of others requires his restraint, it shall be the duty of the judge to appoint immediateiy a commission, who shall inquire into and report

upon the facts of the case. If, in their opinion, it is a suitable case for confinement, the judge shall issue his warrant for such disposition of the insane person as will secure the objects of the measure.

"4. The commission provided in the last section shall be composed of not less than three nor more than four persons, one of whom, at least, shall be a physician and another a lawyer. In their inquisition they shall hear such evidence as may be offered touching the merits of the case, as well as the statements of the party complained of, or of his counsel. The party shall have seasonable notice of the proceedings, and the judge is authorised to have him placed in suitable custody while the inquisition is pending. The expenses of the inquisition shall be defrayed from the estate of the party alleged to be insane. If he have no estate, then they are to be paid by the party making the request for the inquisition.

"5. On a written statement being addressed by some respectable person to any Justice of the Supreme Judicial Court, that a certain person then confined in a hospital for the insane is not insane, and is thus unjustly deprived of his liberty, the judge shall appoint a commission of not less than three nor more than four persons, one of whom, at least, shall be a physician and another a lawyer, who shall hear such evidence as may be offered touching the merits of the case, and, without summoning the party to meet them, shall have a personal interview with him, so managed as to prevent him, if possible, from suspecting its objects. They shall report their proceedings to the judge, and if, in their opinion, the party is not insane, the judge shall issue an order for his discharge. The expenses shall be defrayed as in the last section.

"6. The commission provided for in the last section shall not be repeated, in regard to the same party, oftener than once in six months; and in regard to those confined under the third section, such commission shall not be appointed within the first six months of their confinement.

"7. Persons confined in a hospital under the first section of this Act, may be removed therefrom by the party that placed them in it.

"8. Persons confined in a hospital under the second section of this Act may be discharged by the order of a magistrate, unconditionally, if recovered, and if not recovered, on recognisance being entered into by competent authority.

"9. On statement in writing to a Justice of the Supreme Judicial Court, by some friend of the party, that a certain party confined in a hospital under the third section is losing his bodily health, and that consequently his welfare would be promoted by his discharge; or that his mental disease has so far changed its character as to render his farther confinement unnecessary, the judge shall make suitable inquisition into the merits of the case, and according to its result may or may not order the discharge of the party.

"10. Persons confined in any hospital for the insane may be removed therefrom by parties who have become responsible for the payment of their expenses; provided that such obligation was the result of their own free act and accord, and not of the operation of law, and that its terms require the removal of the patient in order to avoid further responsibility.

"11. Superintendents of hospitals for the insane shall receive no person into their custody, under the provisions of the first section, without a written request from the party therein authorised to make it, and a certificate of insanity from some regular physician.

"12. Insane persons shall not be made responsible for criminal acts in a criminal suit, unless such acts shall be proved not to have been the result, directly or indirectly, of insanity.

"13. Insane persons shall not be tried for any criminal act during the existence of their insanity; and for settling this issue, one of the judges of the court by which the party is to be tried shall appoint a commission consisting of not less than three nor more than four persons, one of whom, at least, shall be a physician, who shall examine the accused, hear the evidence that may be offered touching the case, and report their proceedings to the judge, with their opinion respecting his mental condition. If it be their opinion that he is not insane, he shall be brought to trial; but if they consider him insane, or are in doubt respecting his mental condition, the judge shall order him to be confined in some hospital for the insane, or some other place favorable for a scientific observation of his mental condition. The person to whose custody he may be committed shall report to the judge respecting his mental condition, previous to the next term of the court; and if such report is not satisfactory, the judge shall appoint a commission of inquiry, in the manner just mentioned, whose opinion shall be followed by the same proceedings as in the first instance.

"14. Any person in confinement, waiting trial for crime, shall be examined by a commission appointed and constituted as in the last section, by any judge of the court by which he is to be tried, when satisfied that there are reasonable grounds for suspecting the person to be insane; and the report of the commission shall be followed by the same proceedings as in the last section.

"15. Whenever any person is acquitted in a criminal suit, on the ground of insanity, the jury shall declare this fact in their verdict, and the court shall order the prisoner to be committed to some place of confinement, from which he may be discharged in the manner provided in the next section.

"16. If any Judge of the Supreme Judicial Court shall be satisfied by the evidence presented to him that the prisoner has recovered, and that the paroxysm of insanity in which the criminal act was committed was the first and only one he had ever experienced, he

shall order his unconditional discharge; if, however, it shall appear that such paroxysm of insanity was preceded by, at least, one other, then the court shall appoint a guardian of his person, and to him commit the care of the prisoner, said guardian giving bonds for any damage his ward may commit.

"17. If it shall be made to appear to any Judge of the Supreme Judicial Court that a certain insane person in the custody of his friends is manifestly suffering from the want of proper care or treatment, he shall order such person to be placed in some hospital for the insane, at the expense of those who are legally bound to maintain him.

"18. Application for the guardianship of an insane person shall be made to the Judge of Probate, who, after a hearing of the parties, shall grant the measure if satisfied that the person is insane and incapable of managing his affairs discreetly. Seasonable notice shall be given to the person who is the object of the measure, if at large, and, if under restraint, to those having charge of him, but his presence in court, as well as the reading of the notice to him, may be dispensed with, if the court is satisfied that such reading or personal attendance would probably be detrimental to his mental or bodily health. The removal of the guardianship shall be subjected to the same mode of procedure as its appointment.

"19. Insane persons shall be made responsible in a civil suit for any injury they may commit upon the persons or property of others; reference being had, in regard to the amount of damages, to the pecuniary means of both parties, to the provocation sustained by the defendant, and any other circumstance which, in a criminal suit, would furnish ground for mitigation of punishment.

"20. The contracts of the insane shall not be valid, unless it can be shown either that such acts were for articles of necessity or comfort suitable to the means and condition of the party, or that the other party had no reason to suspect the existence of any mental impairment, and that the transaction exhibited no marks of unfair advantage.

"21. A will may be invalidated on the ground of the testator's insanity, provided it be proved that he was incapable of understanding the nature and consequences of the transaction, or of appreciating the relative values of property, or of remembering and calling to mind all the heirs-at-law, or of resisting all attempts to substitute the will of others for his own. A will may also be invalidated on the ground of the testator's insanity, provided it be proved that he entertained delusions respecting any heirs-at-law, calculated to produce unfriendly feeling towards them."

A discussion followed on the reading of the foregoing report and project of law, at the eighteenth annual meeting of the Association of Superintendents of American Institutions for the Insane, held at

Washington, in May, 1864, under the presidency of Dr. Kirkbride, the highly respected physician of the Pennsylvanian Hospital for the Insane. Twenty members were present, and the sittings were extended over four days. The discussion was limited to the first two sections, and deferred to a subsequent meeting, each member being in the mean supplied with a copy of the report and the project of law. The discussion, so far as it went, led to no definite propositions for accepting the clauses as they stood, or for their amendment. The use of the term pauper was offensive to some few, but the majority saw no impropriety in applying it to indigent patients, maintained at the public cost.

Dr. Gray, the physician of the New York State Asylum, remarked that he agreed with Dr. Ray, that a Commission of Lunacy for the supervision of State or Corporate Asylums is unnecessary, cumbersome, and injurious. "It would take the government of our institutions from managers and trustees, and place it in the hands of one or two individuals." He much preferred their supervision by the present system of boards of management or of trustees. Moreover, no charge of abuse or of inefficiency had ever yet arisen against the existing plan. On the other hand, he asks, "Has the condition of the English and Canadian institutions, where these commissions have been introduced, been improved? Have the commissions advocated a higher medical standard, more thorough vigilance, any increase of comfort? Have they, in any way, advanced their usefulness?" The reports of the English Commission do not so indicate. They are largely taken up with minor questions and trifling criticisms. The report of the Canadian Commission for 1862 does no credit to that country, as far as the work of the commission is concerned. This report shows that not only is there no manifest improvement to be looked for, but a tendency to degenerate, if their views are to be controlling. As an illustration of this, we find them selecting for special commendation, among all the institutions of Canada, a building containing about four hundred patients—without a medical resident—and mainly on the ground that it "accommodates a larger number of patients in a given cubic space than any other."!! The inexpediency of instituting lunacy commissions to supervise public asylums—thus vigorously urged by Dr. Gray—was generally agreed to by the members present at the meeting, and a resolution embodying this opinion was proposed and unanimously adopted. At the same time, the necessity of providing in each State some system for the care and supervision of the insane in other than public asylums, recognised by law, and placed under the control of duly appointed managers or trustees.

The subject of steam and hot water heating apparatus for asylums was discussed at one sitting of the association, and it may be gathered

from the report that the use of such warming apparatus is general in the North American asylums. Some members preferred steam to hot water for heating purposes, but the majority advocated the circulation of hot water. Several spoke of the employment of a fan to distribute the heat obtained and to regulate it, but no conclusions were arrived at of a general character, each member giving the preference to the apparatus he himself employed.

The case of Sir G. Simpson is thus stated, and the remarks of the judge animadverted upon.—An action was brought in the superior court of Montreal to compel the executors of Sir George Simpson, of the Hudson's Bay Company, to pay over the amount of a certain check, drawn by Sir George on the 4th of September, 1860, during his last illness, and delivered over to his private secretary to be handed over to the plaintiff as a dying bequest. The defence of insanity was interposed, but failed, and judgment was given for the plaintiff. The executors appealed against this judgment; it was, however, affirmed.

"Mr. Justice Mondelet is reported to have expressed himself as follows:

"He 'observed that if the court were to be guided exclusively by the opinions of medical men, it would be difficult to arrive at any decision, for in this case, as in many similar ones, we found that they were contradictory. Owing either to the profundity of the science, or to intellectual peculiarities, the most learned physicians were almost sure to disagree. His Honour was inclined to believe that a person who was afflicted with insanity at one time might have intervals of lucidity, during which he would be capable of performing reasonable acts. Was it because Dr. Workman, who had not been present, expressed the opinion that deceased could have had no lucid intervals, and because Dr. Sutherland, though a physician of great eminence, expressed the same opinion, that the judges of that court, who were supposed to have within their own resources the means of forming an opinion on every-day occurrences, were to declare that the deceased was of unsound mind? His Honour thought not. *They, the judges, might not be so scientific or learned, but perhaps they occupied a more fortunate position; for, not being so wise or learned, they might not have the same difficulty in forming a conclusion from the facts elicited.* The doctors might resemble the German philosophers—very learned in their observations, but arriving at entirely contradictory conclusions. After reading the evidence with great care, His Honour had come to the conclusion, that on the fourth and sixth of September Sir George Simpson was rational enough to render the acts performed by him valid.'

"This language is unbecoming a judicial bench of high character. It is neither dignified nor forcible, and it betrays a narrow prejudice

which we scarcely expect to find anywhere, certainly not in the decisions of a respectable court.

"The affectation of native common sense, and ostentatious derogation of science here displayed, is particularly captivating to the vulgar mind, and is frequently assumed by lawyers who have no great regard for the credit of their profession, as one of the many tricks of the trade peculiarly effective in addressing a jury. Such displays, however, find their only appropriate place in the eloquent appeals of some Mr. Serjeant Buzfuz. It is not difficult to see in what the attractiveness of a so-called 'plain common-sense view' of a case like the present consists. The intimation is that you and I, who know nothing of these sounding phrases and scientific distinctions, but come to our conclusions by the exercise of mother wit alone, are, between ourselves, tremendously sharp fellows.

"Mr. Justice Mondelet congratulates himself and his brethren that they 'occupy a more fortunate position [than physicians], for, not being so wise or learned, they have not the same difficulty in forming conclusions from the facts elicited.'

"Perhaps not. No one doubts that the less wise and learned a man may be, the less difficulty he encounters in forming an opinion upon any subject. He is troubled by no doubts, delayed by no distrust of his own perceptions. He judges from first appearances, and generally adheres to his own views with a confidence that no refutation can shake. Whether the same fortunate absence of wisdom and learning enhances the value of the conclusions thus readily reached, in the same ratio that it diminishes the difficulty of coming to any conclusion whatever, is quite another matter."

However, it is certainly reasonable to suppose that a thorough practical knowledge of the phenomena and treatment of insanity renders a man more competent to express an opinion upon a given case of doubtful mental capacity, than another can be without such special knowledge, though aided by the best native sagacity.

"Judge Mondelet complains that the doctors do not agree. If there is any reproach contained in this, the medical profession shares it with every other liberal profession, most especially with that of the law." Will the members of the legal profession agree to accept the rule that their opinions on questions of law shall not be received, because their conclusions are contradictory?

An allegation of insanity is surely not disproved simply because the medical testimony in regard to the point is conflicting. It is right that the testimony of medical experts should be weighed like any other testimony, and the preponderance allowed when every circumstance has been fully taken into consideration. Two physicians may contradict each other, but the one may be corroborated by other circumstances, and may support his conclusions by reasons, the force of which is evident to all, while the other may have nothing better

than his *ipse dixit* to rely upon. A decision in such a case might be reached without discarding the testimony of both. "At all events, reflections that indicate so narrow a spirit as that displayed by the remarks of Judge Mondelet are not calculated to inspire confidence in the conclusions deduced under their influence." It is stated that an appeal against the decision of the Montreal Court has been made to the Privy Council.

II.—*English Psychological Literature.*

Biographical Sketch of Sir Benjamin Brodie, late Sergeant-Surgeon to the Queen, and President of the Royal Society. By Henry W. Acland, Regius Professor of Medicine in the University of Oxford. Longmans, 1864, pp. 31.

We extract from this graceful sketch by Professor Acland of the life of our late distinguished honorary member, an estimate *of the character of Sir Benjamin Brodie, and of his attainments as a Psychologist.* "The character of Brodie" (writes Professor Acland) "can only be properly considered as a whole. Neither as scientific man, nor as surgeon, nor as author, was he so remarkable as he appears when viewed as he was—a complete man necessarily engaged in various callings. It was impossible to see him acting in any capacity without instinctively feeling that there he would do his duty, and do it well. Nor could he be imagined in a false position. A gentleman, according to his own definition of that word, 'he did to others that which he would desire to be done to him, respecting them as he respected himself.' Simple in his manners, he gained confidence at once; accustomed to mix with the poorest in the hospital and with the noblest in their private abodes, he sympathised with the better qualities of each—valued all, and despised nothing but moral meanness. Though as a boy he was retiring and modest, he was happy in the company of older persons, and, as he grew older, loved in his turn to help the young. 'I hear you are ill,' he wrote once in the zenith of his life to a hospital student of whom he did not then know much; 'no one will take better care of you than I; come to my country house till you are well;' and the student stayed there two months. He was thought by some reserved—he was modest; by others hasty—he valued time, and could not give to trifles that which belonged to real suffering; he was sometimes thought impatient, when his quick glance had already told him more than the patient could either describe or understand. Unconscious of self, of strong common sense, confident of his ground or not

entering thereon, seeing in every direction, modest, just, sympathetic, he lived for one great end—the lessening of disease. For this object no labour was too great, no patience too long, no science too difficult. He felt indeed (to use his own words on the day of his election as President) 'his happiness to be in a life of *exertion*.' As a professional man he valued science because it so often points the way to that which is practically useful to man; but as a scientific man his one object was the truth, which he pursued for its own sake, wholly irrespective of any other reward which might or might not follow on discovery. He had not the common faults of common men, for he had not their objects, nor their instinct for ease, nor their prejudices: though he became rich, he had not unduly sought riches; though he was greatly distinguished, he had not desired fame: he was beloved, not having courted popularity. What he was himself, that he allowed other men to be, till he found them otherwise. He saw weak points in his profession, but he saw them as the *débris* from the mountains of knowledge and of wisdom, of benevolence and of self-denial, of old traditional skill ever growing and always purifying, those eternal structures on which are founded true Surgery and Medicine. If ever he was bitter in society, it was when they were undervalued; if ever sarcastic, it was when the ignorant dared assume to judge them. A light is thus thrown on his even career of uniform progress. Training his powers from youth upwards, by linguistic and literary studies, by scientific pursuits, by the diligent practice of his art, by mixing with men, he brought to bear on the multifarious questions which come before a great master of healing, a mind alike accustomed to acquire and to communicate, a temper made gentle by considerate kindness, a tact that became all but unerring from his perfect integrity. He saw that every material science conduces to the well-being of man; he would countenance all, and yet be distracted by none. He knew the value of worldly influence, of rank, of station, when rightly used; he sought none, deferred excessively to none; but he respected all who, having them, used them wisely, and accepted what came to himself unasked, gave his own freely to all who needed, and sought help from no one but for public ends. A few words only may be added on the inner life of his later days. Those who knew him only as a man of business would little suspect the playful humour which sparkled by his fireside—the fund of anecdote, the harmless wit—the simple pleasures of his country walk. Some, who knew these, might not have imagined another and deeper current which flowed unheard when neither the care of his patients nor his literary pursuits or memories engaged his mind. He who from his early professional life sat down every night, his work ended, his notes entered, his next day ordered, to ask what could have been better done to-day and what case otherwise managed, was

not one to reach threescore years and ten without a keen onward gaze on the entire destiny of man. Yet he who realised in his profession the answer of Trophilus the Ephesian to the question, Who is a perfect physician?—'he who distinguishes between what can and what cannot be done'—such a man would not dogmatise on what cannot be known, nor would he, so humble, attempt to scan the Infinite. But his nature yearned for some better thing to come; and yearning, it became satisfied. He had for many years thought and conversed among his friends on facts he had noted in relation to our mental organisation. In the year 1854, he published anonymously a volume on *Psychological Enquiries*. This was followed by a second, with his name, in 1862. These volumes contain little that is actually new to professed psychologists; but they are the conclusions of one who had thought and worked—variously, consistently, practically. Living not in the closet, but hearing the opinions of every party and of every kind of men—liberal in all his views—without prejudice, and ever open to conviction, yet tinged with a general dislike to change as such—he tells in these volumes what he had concluded concerning the mind of man—its laws, its discipline, its future state. They therefore who value such a character will prize these writings for qualities other than the novelties they may contain. It will be remembered that the scientific inquiries of his early life related to the influence of the nervous system on certain parts of the animal economy. To the ordinary physiologist this may be a purely material question; to him it was not so. In middle life he said to a friend, speaking of his lectures on the Comparative Anatomy of the Brain, 'the complexity of the mechanism of the higher brains is enough to make one giddy to think of it.' A fortnight before his death he once more talked to the same person of this mysterious link between our consciousness and our visible material organisation, descanting with keen interest on the relations between mind and body, and the mutual reactions of one on the other. As he then lay on his sofa almost for the last time, in great pain, having scarce for many months seen the outer world, which had been so much to him, and to which he had been so much, he spoke freely of our ignorance as to many things which it would be a joy to know—of the existence of evil—of the too little attention which philosophers had paid to the terrible nature of physical pain—of the future state. So gathering up the teachings of his useful life, and still, as ever, looking forward, he waited its close. Not many days after this he breathed his last, at Broome Park, on October 21, 1862, in possession of the full calm power of his disciplined mind to within a few hours of his death."

The Asylums of Victoria, New South Wales, and Tasmania.

1. *A few Observations relative to the Yarra Bend Lunatic Asylum.* By the Right Rev. R. W. Willson, D.D., Catholic Bishop of Hobart Town. 1859.
2. *Letter from the Catholic Bishop of Hobart Town respecting Lunatic Asylums.* Ordered to be printed by the Legislative Assembly, New South Wales, 12th August, 1863.
3. *Letter from Dr. Campbell, Superintendent, Tarban Asylum, to the Colonial Secretary.* Ordered by the Legislative Assembly to be printed, 20th August, 1863.
4. *Second Progress Report from the Select Committee on the Present State and Management of Lunatic Asylums; together with Minutes of Evidence.* Ordered by the Legislative Assembly to be printed, 20th April, 1864.
5. *Report of the Commissioners of the Hospital for the Insane, New Norfolk, for the years* 1860, 1861, 1862, *and* 1863.

In the 'Journal of Mental Science' for January, 1863, was given the story of the abominations of the Yarra Bend Asylum, near Melbourne, the exposure of which, mainly owing to the benevolent zeal and persevering energy of the Right Reverend Dr. Willson, Catholic Bishop of Hobart Town, issued, as our readers know, in the appointment of our associate Dr. Paley as medical superintendent. Since he has been in charge of the asylum, the greatest improvements have been effected; and it appears that all is now done that can be done for such a place. Unfortunately a badly-selected site, and the ill-construction of a building which is overcrowded, are difficulties in the way of a complete success; and Dr. Willson has accordingly not ceased to urge strongly on the Government the desirability of erecting on a good site an additional small asylum, which might be used as a hospital for curable cases. We hope we are not premature in saying that this is now to be done, the Government of Victoria having appropriated 320 acres of land for the use of a proposed hospital for the insane, near Melbourne. Two other similar institutions are also to be erected in the country. Very gratifying it is thus to learn that the work of reform is being attended with such complete success in Victoria.

Much remains to be done, however, in other colonies. In the

April number of this Journal for 1864 are quoted some severe strictures by two members of the Legislative Assembly of New South Wales on the wretched condition of the two metropolitan asylums at Tarban Creek and Parramatta. One of these gentlemen—Mr. Holroyd, who in the course of his life had visited many asylums in different parts of the world—had only seen one that was so badly managed; and that was at Cairo. And others seem to be of much the same opinion. "All that we have to boast of," says the *Sydney Empire*, "is one asylum for incurables and another asylum for making incurables." Dr. R. Greenup is the medical superintendent of the asylum at Parramatta, in which the incurables are stowed away; and Dr. F. Campbell is the medical superintendent of the asylum at Tarban Creek, in which the incurables are supposed to be manufactured.

As in Victoria, so in New South Wales, Bishop Willson was the first to call attention to the defects of these asylums; and we doubt not that he will be the last to be silent until those defects have been remedied. "Where good is to be done or evil undone," says the *Melbourne Argus*, "there the Roman Catholic Bishop of Tasmania is to be found, as much by inclination as in virtue of his office." It was unavoidable that the bishop, though conducting his benevolent crusade with great moderation, should wound the self-love of a self-satisfied medical superintendent. A man who is living contentedly in a system of which he is the founder or the advocate—how vicious soever it may be—is not easily persuaded that there are other and better things in heaven and earth than what are dreamt of in his philosophy. He is apt to identify himself with a corrupt system, and an attack upon it is a mortal offence to his self-love. This it is which commonly makes it necessary to sweep away along with the bad system the men who have administered it and grown to it, if a full and lasting reform is to be accomplished. The traditions of the old and iniquitous system of dealing with the insane will not die out as long as men are alive who were engaged therein, and on some of whom the reform was unwillingly enforced; who bowed their heads before it, not in hearty acquiescence, but under the load of a disagreeable necessity. It is painful to confess that there are yet some who seem ready and eager, on the slightest gleam of encouragement or the chance of impunity, to retrograde to words that cruel barbarism which was such a grim satire on a boasting civilisation, and the tardy overthrow of which has made the lives of Pinel and Conolly a bright page in the world's history. Most necessary, therefore, is it that all those who are truly interested in the welfare of the insane should watch with severe and jealous scrutiny the management of the asylums in which they are confined; the sincere reformer cannot yet afford to be indolent or careless, nor, from any amiable kindness to individuals, to forbear the severest condemnation

on occasion of the slightest retrogression. Heartily, therefore, do we sympathise with Bishop Willson in his zealous exertions; and even if he had painted the bad in colours a little too dark—which, we are bound to say, there is no reason to suspect—we could readily forgive so slight a fault in so great and good a cause.

The Superintendent of Tarban Creek Asylum, however, can by no means forgive the bishop for not having recognised the perfect success of his management. In reply to the strictures passed upon the asylum, he has addressed a long letter to the Colonial Secretary of New South Wales, from which we shall now extract, for the amusement and edification of our readers, this hero's estimate of himself. It would appear that the world has hitherto been most culpably ignorant of the existence of a mighty benefactor, who, long patient under cruel neglect, at last comes forward and "fearlessly vindicates his own claims to the rank of a successful reformer, second to none in Christendom, though the bishop may think otherwise." We confess with sorrow that we can find no excuse for so natural a thought in the bishop. Distant as it is our misfortune to be from the newly-risen prophet, we can put forward a sort of plea of justification for our ignorance; but how it happens that one of his own country has failed to recognise this great and successful reformer, is certainly puzzling. It is but one more instance, we fear, of that perversity of human nature, whereby it happens that a prophet ever is without honour in his own country. Dr. Campbell must console himself as lesser reformers—such, for example, as one Lord Bacon—have done, by appealing to an enlightened posterity and to future ages. It matters not much that some quacks, well skilled in thrasonical boasting, have made that appeal also, and that vainglorious madmen commonly do so; only a man who, like the Right Reverend Bishop Willson, had, from pure motives of benevolence, visited very many asylums in different parts of the world, and had been an earnest reformer before reform was so fashionable as it is now—having, so long ago as 1831, fought a hard battle for a total reform in the Nottingham Asylum—could fail to appreciate the transcendent merits of a system which had for superintendent one who was 'second to none in Christendom.' Though thus blushing unseen, however, it is gratifying to think that the fragrant sweetness of this modest flower is not entirely wasted on the desert air. "And when it is further shown," Dr. Campbell writes, "that the number of cures, calculated on the same favorable ratio, exceeds considerably any return that Drs. Conolly and Bucknill, with all their boasted advantages, could ever make out, and even superior to the highest number of cures in the crack establishments of St. Luke's and Bedlam, the equivocal postulate of the supersession of the present management, and its possible consequences, by either of the above eminent names, accompanied by all their mob-catching statements and improvements,

is a very unfortunate one for the bishop's logic, and undoubtedly points at my inefficiency." Let not the reader, hastily thinking to find an exceeding vulgarity of tone in this characteristic outburst, decline to follow patiently a little further.

"Let it not be supposed for one moment that I would derogate from the well-earned fame of the first of these physicians, but I pretend to be neither Dr. Conolly nor Dr. Bucknill; I am simply the superintendent of a colonial lunatic asylum; and having achieved a work which Dr. Conolly, distinguished as he is, has not equalled, I wish to stand on my own merits beside him, but not below him. I am the first reformer of the abuses peculiar to mad-houses in the southern hemisphere; and my reform, though carried on through incredible difficulties and most trying circumstances, has been rendered the most complete on record. In spite of all the imperfections, the disadvantages, and impediments to improvements pointed out by the bishop as antagonistic to successful management, I have the unspeakable satisfaction of having thoroughly and demonstrably gained the advantage over the most enlightened of British superintendents, and placed the asylum over which I preside in a loftier position, in regard to government and the treatment of lunatics, than the most advanced and favoured of European asylums. I therefore deny the right of any one to hustle me from the honorable niche in which my own unaided exertions have placed me. Not even the bishop's favorite shall stand above me there, till they do what they have not yet done."

After pointing out with what advantages he supposes that Dr. Conolly was surrounded at Hanwell, where "every assistance that wealth, civilisation, and science could render was placed at his disposal; and of course he succeeded," Dr. Campbell proceeds:— "Who could fail to succeed under such favouring circumstances? The case was far otherwise with myself. To be brief, it was altogether the reverse of this pleasing and wise procedure of the Hanwell authorities. When I entered on my career of reform here, many years ago, all the encouragement and support I obtained came from my own unquenchable zeal, my energy, and my fixed resolution to begin and go on with my important enterprise, through good and bad report, until I reached the goal; and the facilities which smoothed my path, and the applauses which cheered me on my course, were bitter and satanic persecution by those whose position and influence in society, with ample means of vengeance, gave them the unholy power of persecuting with deadliest effect. Even the Government of the day rendered me no active or material assistance, but looked on with solemn indifference: or when I chanced to stand at bay against the calumnious shafts of my vindictive assailants, became suddenly endued with imperial sensitiveness, and recompensed my efforts at self-defence with pompous menaces and censure. Dis-

couraged from without, and obstructed from within, by an undercurrent of treacherous opposition, I had to maintain, single-handed, the contest of craft against honesty on the one side, and of cruelty against mercy on the other, with a staff of assistants only half sufficient in proportional number, and they the very garbage of humanity. Such were the propitious conditions and bountiful support by which I was enabled to accomplish my arduous and onerous undertaking. The results are—*omnibus et lippis notum et tonsoribus esse;* they are even in the hands of the venerable bishop, to whom I sent them shortly after his visit, though it would appear he ignores the facts stated and demonstrated in one of the documents."

Such outspoken candour can scarce fail to excite approval as well as surprise in rightly-constituted minds; it is not every one who would so honestly confess that he had "maintained single-handed the contest of craft against honesty on the one side, and cruelty against mercy on the other." We should attach more importance to the confession if we were convinced that the capacity of writing English was one of Dr. Campbell's accomplishments, and that he had not in this case said exactly the opposite of what he wanted to say. Windy words are ever apt to carry light heads into confusion of thought.

One more extract, and we have done with this melancholy exhibition of overweening conceit and arrogant puerility, the extravagance whereof is not less pitiable than it is ridiculous. It is not likely that any one will ever be so successful in writing Dr. Campbell down that which one Dogberry wished to be written down, as Dr. Campbell himself. Such stilled fustian as he indulges in surely marks a want of cultivation as well as want of modesty and want of sense, which it is happily not our painful lot often to meet with.

"With reference to the epileptics, I can assure the bishop that they are most particularly cared for. Their lamentable condition was a source of the deepest anxiety to me for years, until, by God's help, I happened to invent a bed so admirably adapted for that peculiar class of patients, that I have been repeatedly complimented on its supreme usefulness and fitness for the purpose. The sides are deep and well padded all round from top to bottom, and it is very ample; so that the patient in the convulsive struggles of a paroxysm is perfectly safe, both from falling out and from injuring himself against the sides."

We do not doubt for a moment that Dr. Campbell has done much good in bettering the condition of the insane of New South Wales; but we certainly think his friends must regret that he did not employ some one else to put forth his merits and claims in language which would have gained much in efficiency by wanting bombastic inflation and offensive vulgarity. By the exercise of a prudent moderation he would have gained considerably in strength; and had

his cures been a little less than 78 per cent. on the curable admissions—as he states them to be—one would not have been so prone to suspect that he may, if his life be spared, some day present to the world cures in the proportion of 101 per cent. on the curable admissions.

Notwithstanding Dr. Campbell's letter, or perhaps in consequence of it, a Select Committee of the Legislative Assembly was appointed on the 14th July, 1863, to inquire into and report upon the condition of the two metropolitan asylums; and the evidence which was taken before the Committee and ordered to be printed on 20th April, 1864, now lies before us. It appears to justify completely the strictures of Bishop Willson. We are sorry to add that the tone and style of Dr. Campbell's evidence tend to strengthen the unfavorable opinion which his letter produces. Here are some extracts from the Minutes of Evidence:

Question 163.—"With regard to amusement and cheerful recreation, I allude more to the system adopted in England of having music, dancing, and such amusements in the asylum—you have no means of carrying these out? Yes, you could carry out dancing; that is, you could carry out the principle—whether I could bring it into practice is another thing; but I do not like exhibitions; I have always set my face against exhibiting that most appalling of all calamities to which flesh is heir, to the public gaze."

Q. 164.—"Could it not be done among the patients themselves, without making an exhibition of it? It might be, but I doubt whether it is practicable without great risk. I think with the 'Man of Feeling,' that it is an inhuman practice to expose the greatest misery to which our nature is afflicted, to every idle visitant," &c.

Q. 165.—"Is it not done in England? In large establishments, where there are large rooms, and a great number of inmates; but with all their clap-trap about holding these assemblies, you will find that two thirds of those who are present are sane people. The number I could send out to dance would not be more than two dozen, or, more near the truth, one dozen of each sex (there being 411 patients). There would be considerable probability of painful displays. We must take facts, not shows, to guide us."

Q. 168.—"I am not asking you so much what could be done at Tarban Creek Asylum, but what might be done if there were a proper place? If I had the means at my disposal, I would have a place that should be a perfect paradise. I would give these poor creatures every accommodation and means of enjoyment that could be thought of." If Dr. Campbell were the superintendent of his own paradise, we think on the whole that we should prefer for residence the other place. A little further on in his evidence, he says that he would not advise a large asylum; "but if you will have a large asylum, my advice would be to turn that premature birth of vanity,

the Sydney University, into a great asylum; it would make a capital asylum."

Q. 188.—"What is your opinion of the appointment by Government of boards over particular asylums? I have never liked boards; they only cause confusion. I speak of boards of control." Perhaps Dr. Campbell's patients might have a different opinion.

Q. 217.—"Is the drainage good from Tarban Creek? The drainage is excellent, but there is one great objection, and I do not understand it—the architects even do not seem to understand it—about our waterclosets. They do not please me; there is, in certain states of the atmosphere, an offensive smell from them."

Q. 218.—"Have you an ample supply of water for them? Not enough of water to wash the grosser matters down; but even if we had, that would not remedy the evil."

Q. 219.—"Do you ever use disinfecting materials? It would take all the disinfecting materials in the colony to keep them sweet and pure, in the present condition of the cesspools." And would be a needless waste, Dr. Campbell seems to think, for he says—"but smells of this kind are not positively unwholesome, as is generally supposed." Stinks might perhaps appropriately form one of the attractions of his paradise.

To comment upon such kind of evidence would be a miserable and useless waste of time and labour. It is not likely that anything others may say will have any effect upon one who speaks in the style which Dr. Campbell thinks it decent and proper to use. He has, with characteristic taste, gone out of his way to tell a Committee of the Legislative Assembly that the Sydney University is a "premature birth of vanity;" and, without going out of his way, he has successfully exhibited to the world what a monstrous birth of vanity is. Were so self-sufficient a man amenable to a word in season, we should recommend to him a story and a prayer: the story is that of the aspiring frog in the fable which came to so untimely an end; and the prayer is from the English Litany—to be delivered from "envy, hatred, and all uncharitableness," "from all pride, vainglory, and hypocrisy." We sincerely hope that the result of his evidence may be to impress upon the Legislative Assembly, and all who have the welfare of the insane at heart, as it has impressed upon us, the urgent necessity of a speedy and radical reform in the Tarban Creek Asylum.

The Parramatta Asylum, to which incurables are mostly sent, and in which there are 469 patients, appears also to be in a very defective condition; indeed, the evidence discloses a worse state of things than at Tarban Creek.

Q. 412.—"How is the asylum supplied with water? It is supplied by a culvert from the river, which comes under a pump which is used by the patients."

Q. 413.—"Is your supply of water ample? Except when the pump breaks we have plenty."

Q. 414.—"Are your buildings sufficiently supplied with water-closets and other conveniences for the use of patients? The buildings are not supplied with water-closets; there are privies in the yards."

Q. 415.—"The old night-buckets are still used? Yes."

Q. 416.—"Do you not think that they are objectionable? With cleanliness I do not know that they are more objectionable than water-closets. It is very difficult to keep water-closets clean."

Q. 432.—"How many attendants have you at Parramatta? I have a return of them here. About one to twenty patients."

Q. 433.—"How does that proportion stand when compared with the number of attendants in lunatic asylums at home and in other parts of the world? I have no data beyond the bishop's letter, which states that the number of attendants at home is much greater."

Q. 462.—"Do the lunatics destroy the books? Very much."

Q. 463.—"Wantonly? I can hardly say wantonly; but they do destroy the books."

Q. 464.—"What are your means for religious instruction? We have no means for religious instruction."

Q. 465.—"Is there no clergyman attending? Whenever a clergyman is sent for he comes."

These extracts are from the minutes of the evidence of Dr. R. Greenup, the medical superintendent. The following are from the evidence of Mr. Michael Prior, master's attendant:

Q. 1271.—"Do you recollect a patient who was in in the month of July last, of the name of Robert Shaw? I do."

Q. 1272.—"Do you remember his being ill-used by a keeper of the name of Luke Dunn, by Gately, and 'Jemmy the washerman?'" On the evening previous I was going round to see that the patients got their provisions; he was very much excited, although generally a quiet man; I attempted to abate his excitement, and he struck me. I ordered an attendant to put him in a cell, and removed him to another ward. As he was going to bed he was very much excited, and attempted to knock out the brains of one man, and I ordered him to be handcuffed and secured to his bed. In doing this I was obliged to use coercive means, but I used no more force than was necessary, as I am always opposed to the exercise of brute force."

Mr. R. Melville, a discharged patient, gives the following evidence:

Q. 2248.—"Was there sufficient attention paid to the cleanliness

of the patients in general? They were compelled to bathe once a week; I should suppose that was sufficient."

Q. 2250.—"And there was an ample supply of water for these purposes generally in the institution? There was an abundance, but sometimes it was disagreeable to wash after a great number had washed in the same water."

Q. 2251.—"Were they made to wash in the same water? Yes, there were five large vats, in which from 150 to 200 would have to wash."

Q. 2252.—"That was about thirty or forty to each vat? Yes."

Q. 2255. "The water naturally would become filthy before forty or fifty men had finished their washing operations in it? Sometimes it would, for some of these patients were very dirty."

It further appears that, for the drying of themselves, all these patients had but one piece of linen about twelve feet long.

Two of the attendants gave evidence that patients who displeased Prior, the head attendant, were sometimes 'dipped' with their clothes on, being held under water till they were nearly suffocated.

Mr. Prior was recalled, and further examined.

Q. 2909.—"Do you recollect a man of the name of Robert Floyd? Robert Loyd, I do."

Q. 2910.—"It has been stated that he has been bathed in one of the dirty vats with his clothes on, as a punishment, and another patient cried 'Murder! in a Christian country to treat any person in such a way'? Not to my knowledge with his clothes on."

Q. 2911.—"Has it ever been the practice to dip patients in water, and hold them under until they have been nearly suffocated? Never."

Q. 2912.—"You never recollect a case of that description? I have dipped this Loyd, but not to the extent described. It used to be a system when I first went there—that was six years ago—and the practice has been discontinued."

Q. 2925.—"When men were dipped with their clothes on, was it as a punishment, or was it the then usual mode of ablution? I never knew them to be dipped with their clothes on, but with their clothes off. It was, of course, as a punishment."

Q. 2926.—"The charge against you is, that you dipped Loyd? Not with his clothes on."

Q. 2927.—The charge is that you dipped him with his clothes on. I never did; it was the mode when I went there, but it was discontinued afterwards."

Thus much we quote from the evidence taken by the select committee, and worse remains behind, if the statements of some attendants and a discharged patient, who were examined, are to be trusted. No one, we think, can fairly weigh the evidence without being convinced that there is great cause for dissatisfaction with the condition

of both these asylums, and that it was full time that some one should stir up the stagnant iniquity and arouse public attention to the great offence existing. It is plain that one of the first and most obvious things to do is to appoint an efficient board of control to see to the proper management of the asylum, in place of the irregular and inefficient supervision which, not without amazement, we find now to exist as little more than a mere formal matter. It is certainly to be hoped that the investigation which Dr. Willson has been the means of promoting, and which has disclosed a worse state of things than probably he was prepared for, will be followed by the adoption of speedy and effectual means for rendering the provision for its insane worthy of the great colony of New South Wales.

The hospital for the insane at New Norfolk, in Tasmania, has the services of a kind-hearted and efficient medical superintendent, and is under the effective supervision of a board of commissioners, who meet at the hospital once a month. The reports of the commissioners exhibit, year after year, a regular progress in improvements made; and, were the construction of the hospital not somewhat defective, little would now be left to be desired.

"The commissioners, in closing their report for 1863, feel that they only discharge a debt of justice to the superintendent and medical officer, Mr. Huston, in testifying to the cordiality and zeal with which he has seconded them in every proposal for the amelioration of the hospital; and to the tact, discretion, and kindness, which have marked his intercourse with the patients of all classes, conciliating thereby their confidence and good feeling."

Those who are truly interested in the welfare of the insane, in whatever part of the world, must feel most thankful to the Right Reverend Bishop Willson for the zeal and energy with which, through good report and through evil report, he presses forward the good work of reform, and will hope that the life of this veteran reformer may long be spared, that he may continue to plead so earnestly and well the cause of those unfortunate beings who, by reason of a great affliction, cannot plead for themselves.

1. *Observations on the Treatment of certain forms of Epilepsy by Bromide of Potassium.* By Robert M'Donnell, M.D., Surgeon to Jervis Street Hospital.

('Dublin Quarterly Journal of Medical Science,' February, 1864.)

2. *On the Action of the Bromide of Potassium.* By S. W. D. Williams, M.D., L.R.C.P. Lond., House-Surgeon General Lunatic Asylum, Northampton.

('Medical Times and Gazette,' July 23.)

3. *Epilepsy, and the Administration of Bromide of Potassium.* By G. Goddard Rogers, M.D., Physician to the West London Hospital.

('Lancet,' December 10.)

In the 'Journal of Mental Science,' July, 1864, p. 281, we gave a report of Mr. Behrend's observations on the action of bromide of potassium in inducing sleep, as published in the 'Lancet,' May 28th. Dr. M'Donnell, in his paper in the 'Dublin Quarterly,' observes, that he writes "with the view of directing the attention of practitioners to the use of a remedy—bromide of potassium—which, if due discrimination is practised in the selection of the cases for which it is suited, will be found one of singular efficacy. I am very well aware," he says, "that many medical men have already recognised the value of this remedy. I do not speak of its use as any novelty. Sir Charles Locock, in 1853, bore strong testimony in its favour; since then Dr. Brown-Séquard, Dr. C. Bland Radcliffe and others, with an experience far beyond what I can boast, have added the weight of their evidence in the same direction. Dr. Radcliffe says:—'I can testify that this remedy has proved more or less serviceable in cases the most dissimilar in character; so serviceable that the name of Sir Charles Locock ought to be remembered with gratitude by every epileptic, and by many suffering from other forms of convulsive disorder.' Sir Charles Locock, writing in 1853, says:—'About fourteen months ago I was applied to by the parents of a lady who had hysterical epilepsy for nine years, and had tried all the remedies that could be thought of by various medical men, myself among the number, without effect. This patient began to take bromide of potassium last March twelvemonth, having just passed one of her menstrual periods, in which she had two attacks. She took ten grains, three times a-day, for three months; then the same dose

for a fortnight previous to each menstrual period; and for the last three or four months she had taken them for only a week before menstruation. The result has been that she has not had an attack during the whole of this period. I have only tried the remedy in fourteen or fifteen cases, and it has only failed in one, and in that one the patient had fits not only at the time of menstruation but also in the intervals."

After relating a well-marked case of epilepsy connected with uterine disturbance, and in which great relief had followed the use of the bromide in ten-grain doses three times a-day, Dr. M'Donnell adds:—"These and other similar cases lead to the belief that we have in the bromide of potassium a remedy of considerable efficacy in epileptiform disease, when connected with uterine derangement. But in urging my professional brethren to use it in such cases, I would say that it certainly will not be found successful in every case, even of epilepsy connected distinctly with menstrual derangement. I have administered it, with the consent of my colleague, Dr. Banon, to a young woman in the Mountjoy Female Convict Prison, who had puerperal convulsions at the birth of her first child, and has since been epileptic, her attacks occurring for the most part at the menstrual period. In this case, although I expected much from it, I cannot say that any substantial benefit has arisen from its use, yet it has been given perseveringly and in large doses. With reference to the dose, from a not inconsiderable experience in the use of this medicine, I can state that it may be given with perfect confidence and safety, in much larger quantities than it is usually prescribed. I have given thirty or forty grains, and even more, three times a-day, for months without observing any bad results; and of this I am certain, that often such a dose as ten grains, three times a-day, is too small to develop any good result. Although the independent testimony of several practitioners points to cases of epilepsy, with derangement of the uterine functions, as those in which the bromide of potassium is most likely to be beneficial, yet there are others in which its effects are unquestionably good."

Dr. S. W. D. Williams has recorded, in the 'Medical Times and Gazette,' some observations of his own on the use of this drug.

"Through the kindness of Dr. Wing," he writes, "I have been enabled freely to try it in as many as thirty-seven cases. These were all epileptics, and I append a table showing in one column the number of fits registered during the last five months of last year, when they were taking no medicine, and in the other the number registered during the first five months of this year, when each case was taking, on an average, ten grains of the salt twice daily.

Males' Names.	Fits during last Five Months of 1863.	Fits during first five Months of 1864.	Females' Names.	Fits during last Five Months of 1863.	Fits during first Five Months of 1864.
W. M.	148	107	E. H.	23	19
J. R.	69	45	E. J.	25	37
J. B.	32	21	M. K.	60	27
J. J.	246	91	E. H.	29	9
W. L.	55	37	E. W.	50	56
S. L. B.	19	24	C. S.	17	23
T. H.	40	29	S. A.	82	85
C. B.	52	46	M. L.	20	5
R. H.	112	102	A. S.	41	22
G. M.	47	64	E. G.	46	53
W. W.	36	37	H. W.	1	—
J. L. M.	33	26	M. L.	57	8
T. G.	13	4	A. C.	11	22
R. G.	30	9	M. C.	1	—
J. K.	25	16	S. A. P.	577	556
E. E.	8	14	S. A.	1	—
W. O.	10	10	S. S.	73	37
W. M.	29	14	T. G.	13	11
J. J.	8	10	—	—	—
	1012	706		1127	970

From this table it will be seen that the number of fits amongst the males decreased by 306, and amongst the females by 157; that all the patients but 5 males and 6 females were benefited more or less; that the improvement was, however, more apparent amongst the males than the females; but that no patient of either sex was entirely cured. It is right to remark that all these patients are more or less insane, and many of them extremely violent at times.

"Mr. Henry Behrend, the writer in the 'Lancet,' confines his remarks to the powerful effect this drug has on 'insomnia and restlessness, accompanied and dependent on nervous excitement and irritability,' and this statement my own observations fully corroborate; but I have not the same confidence in recommending, as he does, the unfettered use of half-drachm doses; for in several of the cases recorded above, it was found necessary to reduce even the average—ten grains twice daily; and in the majority the first use of the drug was accompanied by sickness and lassitude. Those patients on whom the drug seemed to take the most effect in this way were seven in number; after using it for a few days the action of their hearts became slow and fluttering, the eye lost its lustre, the skin was cold and clammy; they had a wearied, anxious look, and complained of headache, and sickness, and shivering, and of unusual weakness at

the knees, and invariably sat crouched up by the fireside all day, evidently devoid of all energy and resolution. Curiously enough, in all the cases thus powerfully affected, the fits were increased instead of diminished. The drug excited hypercatharsis in two patients, which was repeated, again and again, each time it was renewed; the fits in both these cases were diminished; in the case of the female, from 41 to 22. One patient, S. A., was apparently, five months ago, one of the most healthy persons in the home—fat, strong, and rosy; but soon after taking the bromide, the peculiar symptoms described above developed themselves, and the medicine was immediately omitted; but, although she rallied a little, her system never thoroughly recovered itself; tubercles became developed in the lungs, and she died towards the end of April. Truth compels me to confess that I have my doubts whether the bromide of potassium had not something to do with this poor girl's death—at all events, this occurrence has made me very watchful when using it. On the other hand, considerable benefit has arisen from its use in some cases; it undoubtedly exercises a most powerful influence on the nervous system, and often soothes the irritability of epilepsy, even if it does not diminish the frequency of the fits, when no other medicine will take any effect, and in this way will be found a most valuable adjunct to the repertory of an asylum dispensary. I cannot think that it has much effect, however, on the sexual system; for in some cases where it was used more especially with that view, there was no apparent result; but of its powers in inducing sleep in cases dependent on nervous irritability there can be no doubt, and often from ten to twenty grains, twice daily, will suffice to effect this."

Dr. Rogers, in his observations in the 'Lancet,' on the "Use of the Bromide of Potassium in the Treatment of Epilepsy," publishes the following interesting case, which we give in full, to show how fair a trial the remedy had, and the method of its administration:

Case.—R. B——, æt. 34, married, with two children, the youngest eleven years old, first came under treatment at the West London Hospital in May, 1861. About six months after marriage she miscarried, and had for three weeks frequent attacks of syncope, followed a few weeks later by a convulsive seizure, during which she lost her consciousness. She does not remember being told afterwards whether she foamed at the mouth or bit her tongue. These attacks were few in number for some years; but she often had "fainting fits" and "sighing fits," during which she "felt lost"—(*petit mal?*)

In the early part of 1861 the fits recurred more frequently; so that she was obliged to give up her employment as occasional nurse. Feeling low-spirited, and despairing of aiding her family, she came to the hospital. She was rather below the middle height, of florid complexion, with a wild staring expression, and very excitable manner. The heart's action was somewhat feeble, the breathing tranquil, and the bowels apt to be somewhat relaxed.

Pressure of the crowd in the waiting-room, or the anxious struggle to be amongst the first served with medicine after seeing the physician, would sometimes bring on a seizure. One I particularly remember was most violent, and lasted a long time. Although the true fits, or, as she always termed them, the "struggling fits," were principally confined to the pre-menstrual or post-menstrual epochs, yet they occasionally followed coition, as I learned from the husband, who, by the way, has been a noted pedestrian in sporting circles during the past twelve years.

I first gave turpentine and castor-oil draughts; but no worms were dislodged. Bichloride of mercury with bark was next tried; and remembering that valerian had been mentioned by some authorities as putting in a claim for approval, I tried it in many forms—infusion, ammoniated tincture, valerianate of iron, of zinc, and of quinine. Dr. Duncan Gibb, who was about that time my colleague, had been giving the bromide of ammonium to allay irritability and decrease sensibility of the larynx and pharynx prior to using the laryngoscope. Thinking the same drug might act beneficially on the mucous lining of the uterine organs, I administered it freely to my patient; but with no good effect. The same was the case with iodide of potassium; and I then accidentally refreshed my memory by reading Sir C. Locock's paper on the bromide.

From the 21st November, 1862, to the 3rd December, R. B—— took bromide of potassium in four-grain doses three times a day, with compound tincture of valerian. Between these dates she had two fits of a mild character. The medicine was intermitted until the 9th, when she came in great distress, saying that she was suffering from severe flooding, and had had several violent fits, on one occasion nearly falling into the fire. She was ordered to resume the medicine.

Jan. 2nd, 1863.—To leave off the tincture of valerian, and take ten grains of the bromide in water three times a day.

8th.—Two severe attacks.

16th.—No seizure since last entry.

She now took quinine and ammonia up to March 6th. The seizures were very frequent during a portion of this time, and she suffered severely from menorrhagia.

From the 13th March to the 12th May she took ten grains of the bromide three times a day, and much improved. In fact, she relied solely on the medicine, and declared that the fits would return directly she left it off. To test this statement, during the latter half of July I merely prescribed a placebo of aromatic water; but so great was her distress that she implored me to allow her to resume the original medicine, and during August and September she took fifteen grains of the bromide three times a day. I afterwards increased the dose to a scruple. Beyond this dose I never found occasion to go with the patient, and, from my experience in other cases with larger doses, I am compelled to differ from Dr. M'Donnell when he says that ten grains three times a day is "too small a dose to develop any good result."

In January, 1864, I discharged my patient, she not having experienced a severe fit, or one of the *petit mal* description, for more than three months. She resumed her former work of nursing, and I saw nothing more of her until the 10th of June last, when she came to me complaining of vertigo and "fulness about the throat," the "choking aura," which was the sure precursor of a seizure at a menstrual period. Two days later the seizure occurred, but it was of a very mild type. I kept her on scruple doses of the bromide up to the 15th July, seeing her during this time on six occasions. She remained quite free from attacks up to the time of her dismissal in

July, and on the 3rd November I heard that her good health had been uninterrupted. I do not mean to say that she is cured; but in 1861 and 1862 her life was a burden in consequence of frequent attacks, and from these she has enjoyed an immunity for three, four, or five months.

With reference to the supposed action of this drug in reducing the sexual powers, Dr. Rogers adds, that "systematic writers on materia medica have dwelt much on the anaphrodisiac influence of bromide of potassium. I do not think its beneficial influence is to be looked for in a simple lowering of the sexual power. When that power is unduly drawn upon, a degree of irritation is produced which the bromide may calm. But in the case above related, I had the fullest opportunities of learning from the husband that there never had been any diminution in his wife's *empressement*. And to arrive at greater certainty, the husband coming under my care for some trivial ailment during his wife's attendance at the hospital, I took the opportunity of administering the bromide of potassium to him in fifteen and twenty-grain doses three times a day. The information supplied after the lapse of a month satisfied me that here, at all events, the depressing property of the drug was *nil*. Where there is irritation and frequent priapism, the result of onanism or venereal excess, and where there is every reason to conjecture that such irritation is at the bottom of the epileptic seizures, then the bromide of potassium is, I think, of service."

Murder and Insanity.

(*Abstract of Return to an Address of the Honorable The House of Commons, dated 5th April*, 1864.)

Return of the number of persons in each of the last seven years, from 1857 to 1863 inclusive, committed in England and Wales for trial on the charge of murder; the number of such persons put on their trial; the number acquitted, distinguishing those acquitted on the ground of insanity; the number found insane on arraignment; the number of such persons convicted of murder; the number of such persons convicted of manslaughter; and the number of concealment of birth; and the number executed.

YEAR.	Committed and put on their Trial.	Acquitted.	INSANE.		CONVICTED.			Executed.
			Acquitted as Insane.	Found Insane on Arraignment.	Of Murder.	Of Manslaughter.	Of Concealment of Birth.	
1857.....	100	36	9	5	20	19	11	13
1858.....	99	35	11	4	16	19	14	11
1859.....	106	44	5	3	18	28	8	9
1860.....	80	28	2	3	16	17	14	12
1861.....	94	30	6	2	26	13	17	14
1862.....	108	32	10	7	28	19	12	15*
1863.....	104	41	7	6	29	12	9	22
Total	691	246	50	30	153	127	85	96

* Sixteen were condemned. One committed suicide on the morning of his intended execution.

H. WADDINGTON.

WHITEHALL, 27*th April*, 1864.

PART IV.—NOTES AND NEWS.

Circulars by the Commissioners in Lunacy.

I.—Lunacy. Single Patients.

Office of Commissioners in Lunacy,
19, Whitehall Place; *October 10th*, 1864.

The Commissioners in Lunacy having reason to believe that many persons of unsound mind are illegally received or taken charge of, and that the law relating to insane persons not in asylums or licensed houses, but under individual care as "Single patients," is extensively violated, desire to draw the attention of medical practitioners and others to the provisions of the 8th and 9th Victoria, cap. 100, sec. 90, as amended by the 8th section of 16 and 17 Vic., cap. 96.

By these enactments no person (unless he derives no profit from the charge or be a committee appointed by the Lord Chancellor) can receive one patient in any unlicensed house, neither can any person take care or charge of any one patient as a lunatic or alleged lunatic without the same form of order and medical certificates as are required upon the admission of a patient into a licensed house, copies of which are to be sent to the Commissioners in Lunacy, together with other particulars, which are fully stated in printed instructions to be obtained on application at the Office of the Commissioners, 19, Whitehall Place.

By the first-mentioned Act every person neglecting to comply with the requirements of the statute is liable to prosecution for a misdemeanour.

By the interpretation clause the word "lunatic" is declared to mean "every insane person, and every person being an idiot or lunatic, or of unsound mind."

According to the law as laid down by the judges of the superior courts, the provisions and penalties of the Act apply to all cases of insane persons taken or retained under care or charge in unlicensed houses, whether or not they were of unsound mind when first received.

The Commissioners will feel it their duty in cases of violation of the law hereafter brought under their notice, to proceed by indictment against the offending parties.

By order of the Board,
W. C. Spring Rice, Secretary.

II.—The Medical Superintendents' Half-yearly Statements.

Office of Commissioners in Lunacy,
19, Whitehall Place, S.W.; 20*th December*, 1864.

Sir,—The attention of the Commissioners in Lunacy has been specially drawn to the difficulty experienced by clerks to boards of guardians, in collecting the detailed information necessary to enable them to prepare their annual returns of pauper lunatics chargeable to unions and parishes on the 1st of January, by reason of some of the particulars required, relative to patients in asylums, being obtainable only from those institutions.

With a view to remove this difficulty in the most simple and convenient way, the Commissioners have communicated with the Poor Law Board, who have expressed their concurrence in the following suggestion.

The Commissioners suggest that the half-yearly statements required by the 34th section of the "Lunacy Acts Amendment Act, 1862," to be transmitted by superintendents of asylums to boards of guardians (or overseers), be made applicable to the 1st of January, and 1st of July, in each year, and that they should contain the following particulars, of which some are not within the knowledge of the union or parish authorities:—

1. Name of patient.
2. Age.
3. Sex.
4. Whether "lunatic" or "idiot."
5. Dangerous to himself or others.
6. Of dirty habits.
7. Mental state.
8. Bodily health and condition.
9. Observations (special, if any).

I am, Sir,
Your obedient servant,
W. C. Spring Rice, Secretary.

To

Clerk to Visitors of the *Asylum.*

The Royal Hospital of Bethlehem and the Charity Commissioners.

(See 'Journal of Mental Science,' July, 1864.)

The following letter has been sent to us for publication:—

To the President, Treasurer, and Governors of the Royal Hospital of Bethlehem.

Lords and Gentlemen,—We have the honour to acknowledge the receipt of a copy of an extract from the report of a meeting held before F. O. Martin, Esq., inspector of charities, containing four suggestions submitted by the inspector to your committee as worthy

of their consideration, and upon which the governors have desired our opinion. We have given the whole subject our earnest and careful consideration, and, as each suggestion involves important subjects, we will, with your permision, offer our opinion upon each in rotation.

> 1*st.* "*That the Revenues for Incurables should be amalgamated with the General Revenues of the Hospital.*"

This suggestion refers to matters so intimately connected with the departments of president and treasurer, that we cannot recognise it in our province as medical men to advise; and we feel sure the governors will view it as a question to be referred, as regards its desirability, should it be practicable, either to the committee, or a special meeting of the governors.

> 2*nd.* "*That a Branch Establishment be provided in the country for the temporary reception of such of the patients as the Resident Physician of the Hospital may consider likely to be benefited by the change.*"

We are decidedly of opinion that much benefit and advantage would result from the establishment of such a branch institution in the country. A house capable of accommodating about ten patients of each sex, surrounded by gardens, and having the advantages of country walks, and country air and scenes, would be beneficial, and no doubt would be much enjoyed by the patients during the summer months. To this establishment all the patients in Bethlehem Hospital, whether belonging to the permanent or curable list, might be sent for such a length of residence as the committee, on the recommendation of the resident physician, should direct. We presume there will be no difficulty in procuring a suitable extent of land on high and gravelly soil in an open country, abounding with fine prospects, and abundantly supplied with good water, near a railway-station, for the erection of such an establishment. Little additional staff would be required, except a good matron and housekeeper; each party of patients visiting their country-house would be accompanied by their well trained and experienced nurses and attendants, and so change of air and scene would be always at the command of the governors, both for the patients committed to their charge, and for the servants who were faithfully engaging themselves in their duties.

> 3*rd.* "*That the Rules of the Hospital be so altered as to allow the admission of patients suffering under a greater variety of forms of insanity.*"

We are of opinion that the benefits of the hospital may be greatly increased by an alteration in the rules respecting the admission of patients :—

THE PRESENT RULES.

1. All poor lunatics presumed to be curable are eligible for admission into this hospital, for maintenance and medical treatment, except—
   1. Those who have sufficient means for their suitable maintenance in a private asylum.
   2. Those who have been insane more than twelve months.
   3. Those who have been discharged uncured from any other hospital for the reception of lunatics.
   4. Those who are pregnant.
   5. Those who are in a state of idiocy, or are afflicted with any form of paralysis, or are subject to epileptic or convulsive fits.
   6. Those whose condition threatens the speedy dissolution of life, or requires the permanent and exclusive attendance of a nurse.
   7. Those whom disease or physical infirmity renders unfit to associate with other patients.

N.B.—"A preference will be given to patients of the educated classes—to secure accommodation for whom, no patient will be received who is a proper object for admission into a county lunatic asylum."

THE RULES WE SUGGEST.

1. All poor lunatics presumed to be curable, are eligible for admission into this hospital, for maintenance and medical treatment, except—
   1. Those who have sufficient means for their suitable maintenance in a private asylum.
   2. Those who have been insane more than twelve months and are considered by the resident physician to be incurable.
   3. Those who are in a state of idiocy, or are subject to epileptic fits, or whose condition threatens the speedy dissolution of life, or requires the permanent and exclusive attendance of a nurse.

N.B.—"A preference will be given to patients of the educated classes—to secure accommodation for whom, no patient will be received who is a proper object for admission into a county lunatic asylum."

4*th*. "*That with the view of extending the experience requisite for the efficient Medical Treatment and Management of the Insane, a limited number of young medical men who have recently completed their other medical studies, and have obtained their several diplomas, be received into Bethlehem Hospital under such regulations as to residence, duties, and allowances, as shall be adopted for the purpose.*"

We feel very strongly the value of this suggestion, and unhesitatingly appeal to the governors to give it support. At the present time no institution offers any assistance to the medical student in search of practical knowledge as to the treatment of mental disease, beyond some scattered lectures delivered at a few asylums, and an annually published invitation to attend the Physician's Practice and Lectures at St. Luke's and Bethlehem Hospitals, at a very moderate fee, which invitation is almost entirely neglected. There are many reasons why it is so disregarded. Experience has led to the conviction that a visit to the hospital, or a walk through the wards two or three times a week, added to the clinical instruction of the physician, will not alone teach the student how to grapple with the violent and often sudden paroxysm of mania, any more than to remove the morbid self-accusations of the melancholic, and restore his bright eye and cheerful smile.

Such occasional observation will not teach the student how to lighten the heavy dulness of the demented nor how to dissipate the vacant foolishness of idiocy. This necessary information can only be obtained from constant observation at all hours, and under every variety of circumstance. The daily habit of mixing with the insane, watching for all their feelings, desires, passions, and emotions, will alone give the student a true knowledge of the disease, or teach him how to mitigate the awful sufferings it involves. We, therefore, strongly recommend the governors to authorise the admission for a limited period of two resident students, who have completed their other medical studies, and have obtained their diplomas; that they be provided in the hospital with lodging and board, and held subject to such regulations, as regards their official work, as shall be submitted by the resident physician, and approved of by the governors. Very little difficulty need be anticipated in providing the necessary accommodation, some rooms at the south side of the first floor of the building might be made available and comfortable (at a trifling expense), and we recommend that this suggestion be carried out with as little delay as possible, and the advantages offered be at once made public; since we feel sure the resident physician will very shortly be able to assure the governors, not only that the advantages of the hospital are accepted and prized by the profession, but that his own labours are materially lessened by the additional assistance thus rendered him. We have now offered you our mutual view on all the subjects upon which you have honoured us by seeking our opinion, and in conclusion have only to express regret that there has been so much delay in placing this report before you. The time of year, and the pressure of very heavy professional duties, may, we trust, be accepted as some apology for this tardy reply to your communication.

We have the honour to be,

Lords and Gentlemen,

Your obedient humble servants,

W. Charles Hood, M.D.
W. Helps, M.D.

24*th November*, 1864.

[*We published in our July number a report (copied from the 'Lancet') of the inquiry into Bethlehem Hospital, held by Mr. F. O. Martin, one of the Inspectors of Charities, in the Court Room of Bridewell, New Bridge Street, on the 9th of April. As the result of that inquiry, Mr. Martin would appear to have addressed a communication to the Bethlehem Committee, making four suggestions for the more efficient management of the charity. These suggestions are given in the above letter of Drs. Hood and Helps to the governors.*

Although very far from meeting all the requirements of the case, or indeed the most urgent, viz., the removal of the hospital out of London, Mr. Martin's suggestions and the recommendations of Dr. Hood based thereon are worthy of every consideration. Mr. Martin must in his inquiry have learnt many valuable facts connected with the administration of this charity, while of Dr. Hood's zeal for and ability to counsel on any real improvements in the management of Bethlehem we are well assured.

The suggestions of the Charity Commissioners relate—

I. To the better management of the revenues of the hospital.

II. To the provision of a branch establishment in the country.

III. To a relaxation of the rules so as to allow the admission of patients suffering under a greater variety of forms of insanity.

IV. To the admission of pupils at Bethlehem.

We would add one word on each of these points.

I. Whether it be by amalgamation of the revenues for incurables (as suggested by Mr. Martin) with the general revenues, or by some other means is immaterial, and a mere question of detail, so long as the principle is admitted that a hospital with a revenue of £22,000 a year should afford relief to the largest possible number of the insane of the middle class, instead of as now to an average of 210 only. We do not share Dr. Hood's feeling of reverence for the departments of president and treasurer which induces him to avoid the discussion of this question. We share herein the opinion of the Earl of Shaftesbury, which we have more than once quoted in this discussion,—"That the public have a right to ask from the Governors of Bethlehem the full benefit of the magnificent revenue in their possession." We must add, that the maintenance of 210 patients out of this revenue does not accord with our conception of the full benefits which should be realised by the public.

II. The second suggestion of the Charity Commissioners refers to a branch establishment in the country. Dr. Hood takes the mildest possible view of this suggested arrangement. Country quarters for twenty patients, with "a good matron and housekeeper," meet all his aspirations in this direction.

We have again and again, in the pages of this Journal, argued and asserted our opinion of the unfitness of conducting a hospital for the curative treatment of mental disease in the vicinity of Newington Causeway; and no mere addition to the present system of country quarters for twenty patients will meet the requirements of the case as we view them.*

In this year's (1864) *Report, the Commissioners in Lunacy on this question of the site of Bethlehem Hospital remark:—*

* See 'Journal of Mental Science,' for April, 1863; July, 1863; October, 1863; and July, 1864.

"In our last Report we spoke with confidence and satisfaction of the fair prospect which then existed of effecting the removal of Bethlehem Hospital from its present unfavorable locality to a better one in a rural district. A new site being required for St. Thomas's Hospital, the governors offered at least £150,000 *for the premises and grounds of Bethlehem Hospital. It appeared to us that an offer so favorable could not be refused, and we anticipated with a considerable degree of certainty that the Governors of Bethlehem Hospital would avail themselves of this opportunity to transfer their patients to some site affording better means of treatment and cure. We regret to learn that no immediate prospect exists of effecting an arrangement in every way so desirable, and we again express our conviction that most important benefits are derived by the insane from a residence in the country."*

III. The revisal of the rules for the admission of patients.

Dr. Hood concurs in our opinion that the benefits of the hospital may be greatly increased by a relaxation of the rules respecting the admission of patients. His suggestions (see above) are good and wise; yet why should Bethlehem exclude a case of insanity simply because the symptoms are so severe as to require the permanent and exclusive attendance of a nurse? The county asylums must take such cases with less means at their disposal.

IV. The admission of pupils at Bethlehem.

Dr. Hood, it will be seen, sets little store on the clinical teaching of insanity. "There are many reasons (he writes) why it is disregarded at Bethlehem." Such is not the result of experience elsewhere. In Edinburgh, in Paris, and in Vienna, the systematic and clinical teaching of pyschology is regularly followed. Moreover, in the rules which were drawn up in 1852 *for the guidance of the resident physician of Bethlehem, he is required to give, during each term, a course of lectures; and it is also provided that, at the close of the session, the most successful pupil shall be recommended to the Committee for the appointment of Clinical Clerk.*

We cannot believe that these intentions of the Governors and the claims of the London students in medicine on the resources of Bethlehem, will be allowed to end in the excellent yet disproportionately small recommendation of Dr. Hood for the appointment of two resident students. If the Resident-Physician of Bethlehem is prevented by his arduous duties, or otherwise, from giving the desired clinical instruction, surely some lecturer may be found to supply the want, and the funds of Bethlehem are ample to pay the small additional cost.

In the pages of this Journal for October, 1863, *we thus stated the reforms necessary to place the Royal foundation of Bethlehem on a satisfactory footing:—*

"1. The removal of the site of Bethlehem some twelve miles into the country.

"2. The erection there of a hospital adapted for the cure of the insane in place of the present prison-like structure.

"3. A revisal of the rules for the admission of patients to the benefit of the charity, and the removal of the present restrictions which exclude a large majority of those for whom its benefit is most needed, and would be most valuable.

"4. The extension of the numbers by a wiser application of the large revenues of the charity, and by the admission of patients paying a portion of the cost of maintenance.

"5. The systematic and clinical teaching of Psychology, as followed in Paris, Vienna, and Edinburgh."

And we added to this summary the following words by Dr. Conolly:

"A new Bethlehem, judiciously situated and planned, might be a model, a school of instruction, and a benefit for ever. We should then possess a public asylum in which the intentions of the charitable founders, and the exertions of humane and scientific physicians, would not be frustrated; and where, above all, the amplest possible means would be furnished, and their application perpetuated, for the relief of the most terrible of all forms of human misfortune."

It will be seen that the Charity Commissioners and Dr. Hood already, to some extent, have accepted our programme. The value of a country site is acknowledged in the suggestion of the branch establishment in the country; the rules for the admission of patients are to be relaxed, and some attempt is to be made to render Bethlehem available as a school for the clinical study of mental disease. Let us hope that a farther consideration of the views which we have felt it our duty strongly to insist on may lead the governors of Bethlehem and their adviser Dr. Hood to enlarge the boundaries of that noble institution, which already owes so much to the skilful organization of its late resident physician.]

Recent Suicides.

"Among the many mysteries of human life few things are more mysterious than those moral epidemics of which our universal self-knowledge now informs us. Like physical diseases, they seem to sweep from time to time through the moral atmosphere with a course so irresistible and uniform that philosophers have been led to doubt whether we have a free will in moral matters any more than in physical. In both alike we seem creatures of circumstances, unable to avoid, to resist, or to remedy our inevitable evils. One of the most remarkable of these epidemics appears to be running its course now. Our readers cannot have failed to notice the number of suicides which have been reported lately. Our impression of Thursday contained accounts of five, one being an aggravated case of combined murder and suicide.

One young woman of nineteen, a stranger to London, having lost her situation after a month's employment, had attempted to throw herself over London Bridge. A young girl, who had deserted her home, and got into bad habits, and was on the verge of destitution, had also tried to drown herself; and two married women, in fits either of passion or of drink, had attempted to poison themselves. The other case was a very sad one. A young married woman had, with her husband and three children, removed from Tunbridge Wells to Reading, with all the furniture of their little home, in hopes of obtaining some employment. After a day or two her husband deserted her, and she wandered from one inn in Reading to another, until her scanty store of money was exhausted, and she had to sell her few sticks of furniture for forty shillings, to buy a little longer lease of life. When this was almost exhausted, she hired a perambulator, drew her children down to the river side, and there, half an hour after, the perambulator was observed standing empty, and the woman and her three children were floating, quite dead, in the water. In spite of all we have heard of the periodic recurrence of moral epidemics, it is impossible not to ask ourselves whether any reason can be assigned for the multiplication of such cases. It seems very strange at first sight that they should be on the increase just now. There can be no doubt that the country is, on the whole, very prosperous, and the working-classes generally well off. There is certainly nothing to show that there is greater distress than usual, and there ought to be much less. The prolonged dry weather is said to have some effect upon the nervous system; but we look for some substantial and moral cause, and in the apparent absence of general distress it may seem at first sight difficult to account for such an epidemic.

It is not, however, mere distress or suffering, or even severe pain, that leads to suicide. Pain and suffering, by a merciful law, seem to generate a reactionary force of patience, and, perhaps, the sharpest pain of body or mind, if it be sheer pain and no more, is borne with the most submission and calm. Those who have seen much of human suffering will bear witness that the quietest and most cheerful sufferers are frequently those who have the most to bear, and that the greatest impatience is often seen in the least grievous misfortunes. Nor is it strictly among the class of paupers or extremely poor that suicides are common. The regular pauper is content to exist so long as the workhouse will give him a scanty subsistence. When refused admission at critical moments he will sometimes lie down and die, but we do not hear of his committing suicide. And the very poor, who are just above the workhouse, able perhaps by the help of occasional charity to keep a room and a few pieces of so-called furniture about them, are often more bright and energetic than those above them. In a small dark kitchen you may find an old sailor racked with rheumatism, scarcely able to move, and in

agony at every change of wind, yet cheery and hopeful. He has been over the greater part of the world; after his service at sea he turned itinerant preacher, and has been a sort of bishop *in partibus infidelibus* among his sect; and one would think it an unbearable misery to him to be dying in a dark kitchen of a back street. But in the intervals of his pain he will fight his battles and preach his sermons to you over and over again with never-flagging delight, and maintain a cheery interest in all the news you can bring him. Or you shall find an old woman in a garret who is not able to get downstairs except at long intervals, and sits alone all day with only the exchange of an occasional word with perpetually shifting neighbours in the next room, and sometimes does not know how to get a cup of tea. Yet she shall tell you she is never dull, quite comfortable, and has everything she wants, and she will seem to cheer you more than you can cheer her. Even those who are engaged in the hard struggle of supporting a family against slack work and weak health will, so long as they are able to get on at all, work with never-flagging heart. If they fail at last, they will apply to the workhouse with an overworn and numbed sensation, and be incapable of the sharp and stinging pain which is implied by an act of suicide.

In the same way with other classes, it is not the mere sense of pain, however sharp, that impels to self-destruction; it is the loss of hope, the keen sense of despair, in whatever way it may be produced, that drives men to this miserable refuge. To take, again, an example from the poorer classes:—A young Danish tailor comes over to England with his wife and child. He is as attractive a character as any of the simple nation with which we have lately been made so well acquainted, and he prospers with his work. But his young wife dies in her second confinement, and leaves him alone in England, scarcely able to make himself understood, and with two little children on his hands. He struggles bravely for a time, but the misery of his loneliness, the despair of being able to take care of his children, the complete break-up of his hopes, overpower him at last, and he hangs himself. So, in the case of the young woman who had left her Norfolk home and come to push her way as a servant in London, but found herself after a month friendless and helpless, it was the collapse of hope, the despairing prospect, which made life intolerable. In the instances of the three women of bad character there was the same sort of feeling, with, besides, the desperate spirit which has wrecked everything that was valuable in life, and feels that life itself may as well follow. More evidently still is this the case with the higher classes. Among these it is seldom the mere fact of their being reduced to want or poverty which impels them to suicide. But a fall with them is often deeper and more painful by contrast than in the lower classes, and after a sudden loss of money and all it involves they look up as from the

bottom of a terrible precipice. The sense of a gulf between the past and the present establishes an irremediable despair, and they cannot face the hopeless prospect before them. The worst case on Thursday was an instance to the same effect. It was not mere poverty that drove the unfortunate woman at Reading to drown herself and her children. It seems she had a brother just returned from Australia who offered to keep her, but she said she had never been dependent on any one, and she never would be. It was the nakedness of desertion, the despair of the sudden change, which destroyed her. This feeling, too, is intimately connected with that sense of injustice and wrong which often oppresses the minds of those who destroy themselves; for it is this feeling, that all the world is against them, that they can get no redress and no justice, which often loosens the last hold of hope and completes the work of despair.

If this be anything like a fair account of the state of mind which leads to this unhappy crime, we may, perhaps, see something in the present state of things to account for its prevalence. We are often reminded of the increased pace in life at the present day, of the increased excitement, and the keener struggle. Human life has been always compared to a race, and, like a race, it seems to get faster the longer it lasts. The pace now is certainly excessive. Everything and everybody are in a hurry and rush. Our minds and habits are like the trains on metropolitan railways—working at the very highest pressure that circumstances will allow. Business is now getting as fast in comparison as the two-minute trains. But the same haste and hurry and rush that we witness in towns extends in its degree and kind through every grade of society. Almost every class is overstocked, and what in the higher classes is a struggle for success becomes in the lower classes a struggle for life and death. This not only overstrains and overwears the nerves, and leaves men with less power of self-control, as it gives them less time for healthy reflection, but it increases the desperation at such falls and disasters as we have been considering. To slip, or still more, to fall in the race of life, is now often almost fatal. To the man himself who has stumbled it nearly always appears to be. A crowd rush in to take a man's place when he is down for a moment, and there seems no chance of recovering his position. In such a merciless struggle what wonder if some, like the poor servant girl of our report of Thursday, are frightened into despair at the very entrance into it, and take the first wild means of escape? Less wonder still if those who have fought well and suddenly failed abandon all effort, and violently snatch themselves and their children from being further trampled down!

But, whatever the cause may be, there is the fact; and it is one, unfortunately, with which we are almost powerless to deal. It will not be changed by increased prosperity, if increased prosperity, by

involving a keener struggle and more exhausting labour, itself feeds the evil. To restrain the crime by the dread of punishment is the most hopeless plan of all, for when a man is bent on inflicting the last punishment on himself it is of no use to threaten him with fine and imprisonment. The only effective remedy for this, as for all diseases, would be to remove or soften its causes, and this might be done if the restraining and encouraging influence of sympathy could meet the sufferer at the critical time. Such a remedy, however, it is very hard to apply. It is one of the consequences of the rush and hurry of life of which we have spoken that men easily become very much alone in the world. A man's neighbours, and even relations, whose friendship would have sustained him in quieter times, are absorbed in their own occupations, and even husband and wife fail sometimes to find opportunities for that mutual refreshment of quiet confidence which is one of the great benefits of such a relation. How, then, can poor people in one of the labyrinths of this great city find a friend at the crisis of their despair? Such an office is the peculiar duty of a clergyman, and of those who, under whatever names, devote themselves to the Christian office of visiting the sick and suffering. It is not our province to speak of the religious encouragements which can be offered, though these ought to be the strongest of all, but the mere exercise of kindly feeling, of genuine sympathy, would be enough to soothe many of these overworn beings, and lead them out of their despair. There is a charm about a bright smile, a kind eye, and a gentle voice, which has a subtler and more penetrating influence upon the human heart than all the arguments and punishments in the world. It is true in our overgrown parishes, it is as hard to apply this remedy as the others. But this is the direction in which to work at this moral disease if its epidemic character continues. Every addition to the means of quiet, to the influences which lead to rest, contentment, and peace, will tend to counteract the evil. The more the turmoil and hurry of our life increase, the more necessary is it to increase the opportunities of escaping from them, or at least of softening them.—*The Times*, August 13.

The Overgrowth of our Public Lunatic Asylums.

A prominent and painful feature in the Reports of these different county asylums is the general outcry for an increase of accommodation. Although it is not yet satisfactorily proved that there is a positive increase in the annual production of lunacy, it is certain that each asylum in its turn becomes unequal to the wants of the county. New buildings are nearly completed, we are told, at the Sussex Asylum; additions have been made to the Wilts Asylum, by which accom-

modation for 80 more females has been obtained, but the male side is still full; at the Essex Asylum new buildings to contain 75 inmates have been opened during the year; estimates have been approved for increasing the Joint Counties Asylum to the extent of 100 more males and 120 females; the Commissioners in Lunacy urge upon the Visiting Justices of Colney Hatch Asylum the necessity of considering at the earliest period the question of the best mode of providing additional accommodation; and the Committee of the Cumberland and Westmoreland Asylum regret to say "that they are not able to provide sufficient accommodation," and that "unless some provision be made for the care of chronic and incurable cases," they will have to enlarge the asylum. The question as to what is to be done with our pauper lunatics is thus assuming great importance. Are the existing county asylums to be enlarged time after time until they become as monstrous and unmanageable as the metropolitan ones are? Colney Hatch already contains 1930 patients, and is too large for successful management by the most willing and attentive officers. We are glad to see that the Committee of Visitors have recognised this, and "are not prepared to advise the Court of Quarter Sessions that it would be expedient to enlarge the asylum any further."

With the object of relieving the county asylum, the "Lunacy Acts Amendment Act of 1862" provided that chronic diseases might, with the approval of the Commissioners and of the President of the Poor-law Board, be removed to workhouses "in which adequate accommodation and care and attendance can be ensured." But as the Commissioners—as stated in their last Report—are of opinion that "the general construction and arrangement of workhouses render them altogether unsuitable for the accommodation and treatment of insane patients," and require, therefore, as indispensable conditions of their consent, that such arrangements should be made as would convert a part of the workhouse into a counterpart of the asylum, it is plain that guardians have nothing to gain in the way of economy by taking lunatics from the asylum, while they would gain a great increase of responsibility and trouble. The consequence has been that scarcely any use has been made of the Act, and the enlargement of one asylum after another throughout the country continues a necessity.

The usual and cheapest mode of enlarging the asylum seems to be, by adding new buildings to it at any convenient corner, or by raising it a story where that is possible. This can generally be done at a cost of from £35 to £50 per patient; but there comes a time, even in the case of a metropolitan asylum, when it can go on no longer. It is generally admitted, too, that an asylum, to be well managed, must not contain more than 800 patients. A second mode of extension, which obviates the necessity of a new asylum, is by separate buildings containing large rooms, and adapted for the

convalescing and quieter patients who are capable of being employed, and are fit to sleep in dormitories. This plan has been adopted at the Essex Asylum, where three blocks, connected by covered corridors, furnish accommodation for seventy-five patients. The Commissioners in Lunacy, we observe, speak highly of the comfort of these blocks, but they say nothing of the cost of them. On referring to the building account in the Essex Report, we find that the total cost of them is put down at £8905 19*s.* 5*d.*, which is actually all but £120 per patient. Probably the sum would rise still higher if all incidental extras were included in it; but as it stands it is extravagant enough to suggest a reflection as to whether there is to be a limit to the amount of money which may be spent on a pauper lunatic. Such lavish expenditure appears as unnecessary as it is inexplicable; for at the Devon Asylum excellent accommodation was provided in a detached building, by Dr. Bucknill, for a hundred patients, at a cost of £3800, or £38 per patient. If all the ratepayers were county magistrates, not a word need be said even if it were determined to build a pauper asylum of marble; but while many of them have a hard struggle for existence, there is perhaps more to praise in the just and considerate economy of Devon than in the apparent extravagance of Essex.

A third proposed plan of extending the provision for the insane, which has received great attention and been much discussed of late, is to place such of them as are suitable in cottages in the neighbourhood of the asylum—a system which, when carried out on a large scale, is known as the "Gheel system," or the "colonisation of the insane." It has recently been determined at Lyons, in France, to place 100 insane in this way as boarders in the families of peasants; and one third of the pauper lunatics of Scotland are now living in private houses, at a cost of 5¾*d.* a day, or 3*s.* 4¼*d.* a week each, while it appears that the cost of each patient in the English asylums varies from 7*s.* 8½*d.* per week at the Wilts, to 9*s.* 5¾*d.* at the Essex. At Gheel there are 800 patients treated under this family system, the principle there adopted being that, as a rule, the insane need not be sequestrated. With a fundamental principle so doubtful, it is no wonder that the Gheel system is not a great success. In the first place, cases that are known to be dangerous, or otherwise unsuitable, are not sent there; in the second place, as appears from a report by Dr. Wiedemeister to the Hanoverian Minister of the Interior, as many as sixty-eight patients constantly wear long iron chains to their feet, or restraint-girdles to which their hands are fastened; in the third place, it has been found necessary to build at Gheel what is called an infirmary, but what is really a central asylum for fifty patients, and which contains the disproportionate number of eighteen strong seclusion cells; and lastly, while a large number escape from Gheel and are never recovered, as many as half of those

who are admitted each year die. There can be no doubt that the right principle to begin with is that the insane must be sequestrated, and exceptions may afterwards be made of particular cases. It certainly is not necessary to sequestrate all the insane; many of the Chancery patients are living in private houses, with the best results as regards comfort; and the superintendent of the Joint Counties Asylum says in his report that he has provided for twelve men at the farm, where "the degree of domestic comfort and liberty they enjoy is very pleasing." There are a large number of women, at least forty, he says, who might be so accommodated with advantage. The superintendent of the Cumberland Asylum has carefully classified his patients (225) with reference to the kind of treatment under which they might be placed; and he finds that there are 16 who are fit to be in cottages, or under family treatment; 72 who are fit to be in a detached building of an inexpensive character; and that 137 remain who require ordinary asylum accommodation.

It is evident that the question of further provision for the pauper insane requires fundamental consideration. The Commissioners in Lunacy, on finding an asylum full, urge the necessity of increased accommodation; and the magistrates, after avoiding the expense as long as they can, usually make the necessary increase at as little cost as possible. Meanwhile there are more than 8000 lunatics in the different workhouses of England and Wales, who, if the opinion of the commissioners as to the accommodation in such places be right, must be improperly treated; and no one knows how many single patients may be pining in solitude and filth, as the poor man at Flushing was, whose case recently excited such horror. The account lately given of the state of lunacy in Scotland proved how miserable was the condition of single patients there before the commissioners began their supervision; but it is not the duty of the English commissioners to visit those pauper lunatics who are living in private houses, and accordingly there is no guarantee that they are being properly treated. Some observations in the report of the Abergavenny Asylum indicate what is the condition of things in the distant counties of England and Wales. A question arose whether insanity was as common in Radnorshire as in the other counties which send their insane to that asylum, because the number of patients sent from that county was much smaller, in proportion to the population, than from the other counties. Dr. McCullough found, on examining into the matter, that those who were sent from Radnorshire were of a particular class—namely, such as, from their excitement, their attempts to commit suicide, or other causes, were least manageable at home or in the workhouse. There was not one case of imbecility, or of those milder kinds of mental disease which form a considerable proportion of the general admissions. Where, then, are those cases which are not so violent as to be unmanageable? and who is respon-

sible for their proper treatment? Only a few days ago a lunatic murdered his brother in a Welsh county; and it was stated that the relieving officer had been urgently asked to remove the man previously, because he was not safe, but had refused. Certainly it seems very desirable that a regular system of supervision, not only of the insane in workhouses, but also of pauper lunatics in private houses, should be established. If that were done, it might then be well to allow those patients who are fit for cottage treatment to live out of the asylum under proper care; thus to permit them all the comfort and liberty which their state will admit of, and to relieve the over-crowded asylums.—*The Lancet, July* 2.

Illegal Detention of a Lunatic.

Mr. Henry Wilkins, a surgeon, residing at Ealing, surrendered to take his trial upon a charge of misdemeanour, for having undertaken the charge of a lunatic patient for profit, his establishment not being duly licensed for the reception of such patients. It will be remembered that on the morning of the 6th of August, a young lady named Eliza Mitton was found in the Edgeware Road by a police constable, who put some questions to her, the result of which appeared to be that he considered she was unable to take care of herself, and he conveyed her to the Marylebone workhouse, where she was seen by Mr. Fuller, the resident medical officer, and Dr. Randall, the physician of the establishment. They both came to the conclusion that the young lady was of unsound mind, and she was placed in the ward appropriated for the reception of such persons. On the same day the defendant claimed her as his patient, and it turned out that the young lady had been placed in his charge by her father, and that he received an allowance of £180 a year for taking care of her; and he took her away with him. Mr. Giffard and Mr. Poland conducted the prosecution, on behalf of the Commissioners of Lunacy; and Mr. Metcalfe appeared for the defendant. The defence was, that at the time the patient was sent to the defendant she was not insane, but merely excitable and nervous, and required change of air and attention.

Mr. Baron Pigott described the Act under which the proceedings were taken as a most sensible and humane Act, and one much called for. In his directions to the jury he said that it was shown that the house of Mr. Wilkins did not answer any of the conditions therein laid down, neither had Mr. Wilkins received any order or certificate from a duly qualified medical practitioner, nor had he of course complied with the Act, which requires that he should send to the Secretary of State a copy of such certificate. With respect to the fact of the patient not being of unsound mind at the time of her reception by the defendant, if that view were taken by the jury, the case

would, nevertheless, come within its provisions if it appeared that she subsequently became so, and was retained by the defendant for his emolument.

The jury, after a brief consultation, returned a general verdict of guilty, and the defendant was ordered to be bound in his own recognisance in £200 to appear on the first day of next term to receive judgment.—*Central Criminal Court.* (*Before Mr. Baron Pigott.*) *Sept.* 21*st.*

The Metropolitan Asylum at Melbourne.

We are glad to learn that progress is being made in respect to the new asylum, which is to be put up on high ground, not far from the site of the existing establishment, and in the neighbourhood of Kew, 320 acres. The plans selected will bear a general likeness to those of the Derby County Asylum, and the two branch asylums, at Beechworth and Ararat, will more or less resemble the metropolitan institution. Dr. Paley, with Mr. W. W. Wardell, the inspector-general of public works, and Dr. Barry, chairman of the Lunacy Commission, have lately selected the sites for the branch asylums, and the plans for their erection are well advanced. The new metropolitan asylum will take two years to complete; but as soon as a portion is put up it is proposed to carry thither some of the working patients, who will thus make room for new arrivals. That this may speedily take place must be the earnest wish of all.—*Melbourne Argus, July* 8*th*, 1864.

Publications Received, 1864.

(*Continued from the 'Journal of Mental Science,' July*, 1864.)

'Clinical Observations on Functional Nervous Disorders.' By C. Handfield Jones, M.B. Cantab., F.R.S., Physician to St. Mary's Hospital. John Churchill and Sons, New Burlington Street, pp. 385. (*Will be reviewed in our next number.*)

'Pathological and Practical Researches on the various forms of Paralysis.' By Edward Meryon, M.D., F.R.C.P., late Lecturer on Comparative Anatomy at St. Thomas's Hospital, pp. 215. John Churchill and Sons, New Burlington Street. (*Will be reviewed in our next number.*)

'Lectures on Epilepsy, Pain, Paralysis, and certain other Disorders of the Nervous System.' Delivered at the Royal College of Physicians in London. By Charles Bland Radcliffe, M.D., F.R.C.P., Physician to the Westminster Hospital, and to the National Hospital for the Paralysed and Epileptic, pp. 340. John Churchill and Sons, New Burlington Street. (*Was reviewed in our number for October*, 1864.)

'Suggestions on Hospital Nursing and Visiting: being an Address read at Trentham Parsonage, on Wednesday, May 24th, 1864.' By Dr. Arlidge, Physician to the North Staffordshire Infirmary, pamphlet, pp. 22.

'La Sicilia e la Loira Inferiore in Francia ossia influenza del suolo del clima e dei gradi di civilta su le specie di follia e sull' idiotismo,' *per Francesco Pignocco*, Medico ordinario del R. Manicomio di Palermo. Milano, 1864.

'Guide in the Sick Room.' By Richard Barwell, F.R.C.S., Assistant-Surgeon to the Charing Cross Hospital. London and Cambridge: Macmillan and Co., 1864, pp. 196.

A useful handbook for the sick-room; got up also in Messrs. Macmillan's best style.

'Socrate était il fou?' réponse à M. Bally (de l'Academie de Médecine). Par M. Bourneville, rédacteur au 'Journal de Médecine Mentale.' Paris: V. Masson, 1864 (pamphlet).

'Des Maladies Mentales, et des Asiles d'Aliénés; Leçons cliniques et considérations générales.' Par J. P. Falret, Médecin de l'hospice de la Salpêtrière, &c., 1864, pp. 185.

We learn that this work is now, with the sanction of the author, under translation by our associate, Dr. Blount, whose previous translation of M. Falret's Clinical Lectures is familiar to the members of this Association. We reserve our review of the present work until after the appearance of Dr. Blount's translation.

'Brevi cenni sulla classificazione e cura delle pazzie con alcuni dati clinico-statistici sul movimento operatosi l'anno 1862.' Vel R. Manicomio di Torino. Per Berroni Frederico Amedo. Torino, 1863.

We regret to notice in the Italian papers the premature death of this promising young physician, which occurred at Turin, in August. We were indebted to him for an interesting day at Turin, in April, when he was in the enjoyment of perfect health.

'Thoughts on Insanity and its Causes, and on the Management of the Insane; to which are appended a few hints on the Construction of Asylums.' By William Williamson, 2nd edit. London: A. W. Bennett, 5, Bishopsgate Street Without, pamphlet, pp. 79.

'Biographical Sketch of Sir Benjamin Brodie, late Serjeant-Surgeon to the Queen, and President of the Royal Society.' By Henry W. Acland, Regius Professor of Medicine in the University of Oxford. London: Longman, Green, Longman, Roberts, and Green, 1864, pamphlet, pp. 31. *See Part III, 'Quarterly Report on the Progress of Psychological Medicine.'*

'Proceedings of the Royal Medical and Chirurgical Society of London,' vol. IV, No. vi. London, 1864.

1. 'Tasmania. Hospital for the Insane.' Report of Commissioners for 1861, 1862, 1863. (Laid upon the table by Mr. Colonial Treasurer, and ordered by the House to be printed, 29th June, 1864.)

2. 'Penal Establishments;' letter from the Catholic Bishop of Hobart Town. (Ordered by the Legislative Assembly of New South Wales to be printed, 12th August, 1863.)

3. 'Lunatic Asylums;' letter from the Catholic Bishop of Hobart Town, respecting. (Ordered of the Legislative Assembly of New South Wales to be printed, 12th August, 1863.)

4. 'Legislative Assembly, New South Wales, 1863-4.' Second Progress Report from the Select Committee on the present state and management of Lunatic Asylums, together with the Proceedings of the Committee, Minutes of Evidence, and Appendix. (Ordered by the Legislative Assembly to be printed, 29th April, 1864.) Sydney: Thomas Richards, Government

Printer, 1864. Price 4*s.* 6*d.* *See Part III, 'Quarterly Report on the Progress of Psychological Medicine.'*

'Case of Degeneration and Atrophy of the Cerebrum, causing Unilateral Epilepsy.' By Kenneth M'Leod, A.M., M.D., Assistant Medical Officer. Durham County Asylum, Sedgefield. Reprint from the 'Edinburgh Medical Journal,' October, 1864.

Dr. M'Leod here records with great minuteness a very interesting case of epilepsy, together with the post-mortem appearances illustrated by four plates.

'Public Health.' Sixth Report of the Medical Officer of the Privy Council, with Appendix, 1863. Presented pursuant to Act of Parliament. London, 1864, pp. 789.

We shall notice this able Report in the next number of this Journal.

'Lunacy and Law, together with Hints on the treatment of Idiots.' By T. E. D. Byrne, L.R.C.P. London, 1864, pamphlet, pp. 41.

The hints on the treatment of idiots occupy four pages; the rest of the pamphlet is filled with the story of the Flushing case, already familiar to our readers, and fully detailed in this year's Report of the Commissioners in Lunacy.

'The President's Address at the Thirty-second Annual Meeting of the British Medical Association,' held in Cambridge, August, 1864. By George E. Paget, M.D. Cantab., &c., pamphlet, pp. 31.

'The Lunacy Acts: containing all the Statutes relating to Private Lunatics—Pauper Lunatics—Criminal Lunatics—Commissions of Lunacy—Public and Private Asylums—and the Commissioners in Lunacy. With an Introductory Comment, Notes to the Statutes, including References to Decided Cases, and a Copious Index.' By Danby P. Fry, Esq., of Lincoln's Inn, Barrister-at-Law, and of the Poor Law Board. London: Knight and Co., 90, Fleet Street, publishers by authority to the Poor-law Board, and to the Home Office, for the purposes of the Local Government Act, 1858. 1864, pp. 731. *See Part II, Reviews.*

County Asylum Reports, 1864.

(*Continued from the July number of the 'Journal of Mental Science.'*)

45. First Annual Report of the Argyll District Asylum for the Insane, 1864.

46. Annual Report of the York Lunatic Asylum for the year 1864.

47. Report of the Committee of Visitors of the Lunatic Asylum for the counties of Bedford, Hertford, and Huntingdon, for the year ending 31st December, 1863.

48. Forty-fourth Annual Report of the Directors of the Dundee Royal Asylum for Lunatics, 20th June, 1864.

49. Annual Report of the Royal Edinburgh Asylum for the Insane, for the year ending 31st December, 1863.

50. Thirty-fourth Annual Report of the Belfast District Hospital for the Insane Poor, 31st March, 1864.

51. Sixty-eight Report of the Friends' Retreat, near York, June, 1864.

52. Medical Report of the Royal Lunatic Asylum, Aberdeen, for the year ending 31st December, 1863.

53. Report of the Medical Superintendent of the Norfolk Lunatic Asylum, for the year ending 1863.

54. Report of the Sligo and Leitrim Hospital for the Insane, for the year 1863.

55. Twenty-fourth Annual Report of the Crichton Royal Institution Hospital for the Insane, Dumfries, November, 1863.

56. Fourth Annual Report of the Longview Asylum, State of Ohio, for the year ending December, 1863.

57. Report of the Armagh District Lunatic Asylum, ending 31st December, 1863.

58. Dorset County Lunatic Asylum Report for the year 1863.

59. Report of the Lunatic Asylum of the North and East Ridings of York shire, 23rd December, 1863.

60. Annual Report of the State Lunatic Asylum, Pennsylvania, ending December, 1863.

61. Annual Report of the Royal Lunatic Asylum, Montrose, for the year 1864.

62. Twelfth Annual Report of the Derbyshire County Lunatic Asylum, January Sessions, 1864.

Société Medico-Psychologique.

At a meeting of the *Société Medico-Psychologique* of Paris, Dec. 26th, 1864, the following gentlemen were unanimously elected—on the motion of Dr. Jules Falret—honorary members of the society :—Drs. Roller, Damerow, Griesinger, Lockhart Robertson, Maudsley, Mundy, Harrington Tuke, and Fleming.

Appointments.

Robert A. Davis, M.D., L.R.C.P., has been appointed Resident Medical Superintendent of the New Asylum for the county of Stafford, at Burntwood.

E. Jeffrey, M.R.C.S.E., has been appointed Assistant-Medical Officer to the Stafford County Lunatic Asylum, vice R. A. Davis, M.D., appointed Medical Superintendent of the New Asylum for the County of Stafford, at Burntwood.

W. Rayner, M.R.C.S.E., has been appointed Assistant-Medical Officer to the Stafford County Asylum.

J. H. Simpson, L.R.C.P.L., late Assistant-Medical Officer at the Kent County Lunatic Asylum, Barming Heath, Maidstone, has been appointed Assistant-Medical Officer at the Gloucester County Lunatic Asylum, Wotton.

J. W. Warburton, M.R.C.S.E., has been appointed Assistant-Medical Officer to the County Asylum, Lancaster.

F. Wilton, M.R.C.S.E., Assistant-Medical Officer at the Gloucester County Lunatic Asylum, has been appointed Resident Medical Superintendent to the Carmarthenshire, Pembrokeshire, and Cardiganshire new Joint Lunatic Asylum at Carmarthen.

Sir Alexander Morison's Lectureship on Mental Disease at the Royal College of Physicians of Edinburgh.—Sir Alexander has endowed a lectureship on mental disease with £50 a year, at the Edinburgh College of Physicians. He has nominated Dr. William Seller as the first lecturer. The lectures, six in number, will be delivered in the College Hall, in June, free of charge to the profession.

Dr. Seller, a late President of the College, is well known in Edinburgh for his great learning in every department of medical literature.

Notice to Correspondents.

English books for review, pamphlets, exchange journals, &c., to be sent either by book-post to Dr. Robertson, Hayward's Heath, Sussex; or to the care of the publishers of the Journal, Messrs. Churchill and Sons, New Burlington Street. French, German, and American publications may be forwarded to Dr. Robertson, by foreign book-post, or to Messrs. Williams and Norgate, Henrietta Street, Covent Garden, to the care of their German, French, and American agents, Mr. Hartmann, Leipzig; M. Borrari, 9, Rue de St. Pères, Paris; Messrs. Westermann and Co., Broadway, New York. Booksellers' parcels from abroad bring our exchange Journals with such irregularity, that we must request the Editors of the *Zeitschrift für Psychiatrie*, of the *Correspondenz Blatt* (and Archiv für Psychiatrie), of the *Irren Freund*, of the *Annales Médico-Psychologiques*, of the *Journal de Médecine Mentale*, and of the *Archivio Italiano per le Malattie Nervose e per le Alienazioni Mentali*, to continue to transmit our exchange copies by *BOOK POST*. The copies of *The Journal of Mental Science* will in future be regularly sent *by Book-post* to our foreign Correspondents and Honorary Members, and we shall be glad to be informed of any irregularity in the receipt of the 'Journal of Mental Science.'

The following *EXCHANGE JOURNALS* have been regularly received since our last publication:—The *Annales Medico-Psychologiques* (July and September); the *American Journal of Insanity* (October); the *Zeitschrift für Psychiatrie* for 1863; the *Correspondenz Blatt* (monthly); *Archiv für Psychiatrie* (1864, Parts 1, 2, 3); the *Irren Freund* (monthly); *Journal de Médecine Mentale* (1864, Nos. 7, 8, 9, 10); the *Social Science Review* (monthly); the *Archivio Italiano, &c.* (No. 6, November); the *Edinburgh Medical Journal* (monthly); the *Medical Mirror* (monthly); the *Dublin Quarterly Journal* (August and November); the *British and Foreign Medico-Chirurgical Review* (October); the *Glasgow Medical Journal* (monthly); Dr. Beale, *Archives of Medicine; Medizinische Jahrbücher; Zeitschrift der K. K. Gesellschaft der Aerzte in Wien Redigirt Von C. Braun, A. Duchek, und L. Schlager*, Parts II, III, IV, V, 1864; the *Ophthalmic Review* (quarterly).

The *British Medical Journal*, the *Medical Circular*, and the *Journal of the Society of Arts* (weekly).

Correspondenz Blatt der Deutschen Gesellschaft.—We are indebted to Dr. Erlenmeyer for his hint in the October number. We trust he will inform us of any future irregularity in the receipt by post or in the prepayment of the 'Journal of Mental Science.'

Journal de Geneve, 5th November; *Medical and Surgical Journal* (Australasian), August; the *Scotsman*, August 4th; the *Gloucester Journal*, October 22nd; the *Bristol Mirror*, October 8th; the (Edinburgh) *Daily Review*, October 20th; *Dover Chronicle*, November 19th.

Editors of the American Journal of Insanity.—Letter of the 31st October received. We have to request that all exchanges, Books, &c., *from America*, be sent to the care of Messrs. Westermann, Broadway, New York, addressed, "*Dr. Robertson, care of Messrs. Williams and Norgate, Henrietta Street, Covent Garden, London.*" The wretched postal arrangements between this country and the United States of America prevent our sending or receiving exchange copies, &c., by book-post. On each number of the *American Journal of Insanity*, already prepaid in New York, we have to pay 1*s.* 4*d.* English postage, while to Australia the 'Journal of Mental Science' can be sent free for 6*d.*

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II.—REVIEWS.

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IV.—REPORTS ON ENGLISH PSYCHOLOGICAL MEDICINE.

V.—NOTES AND NEWS.

The Editors are indebted to Dr. Dean Fairless, *of the Old Asylum, Montrose, for the compilation of this Index.*

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