Thirty-third annual report of the directors of James Murray's Royal Asylum for Lunatics, near Perth. June, 1860.

THIRTY-THIRD

ANNUAL REPORT

OF

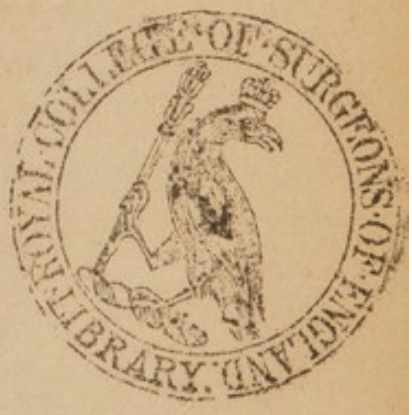
THE DIRECTORS

OF

JAMES MURRAY'S ROYAL ASYLUM

FOR LUNATICS,

NEAR PERTH.



JUNE, 1860.

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MDCCCLX.

LIST OF OFFICE-BEARERS.

1860-61.

WILLIAM PEDDIE, Esq. of Blackruthven, *Chairman.*

DIRECTORS.

I.—EX-OFFICIO.

The Right Hon. the Earl of Kinnoull, Lord-Lieutenant of the County of Perth.
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Hugh Barclay, Esq., LL.D. Sheriff-Substitute of the County of Perth.
William Imrie, Esq., Lord Provost of the City of Perth.
Thomas Richardson, Esq., Dean of Guild of said City.
John M'Euen Gray, Esq., First Bailie of said City.
Alexander Fleming, Esq., Convener of the Trades of Perth.
James Spottiswoode, Esq., President of the Society of Procurators, Perth.
The Rev. Archibald Scott, Minister of the East Church, Perth.

II.—LIFE DIRECTORS.

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Major-General John Murray Belshes, Invermay House.
John Beatson Bell, Esq. of Glenfarg.
John Marshall, Esq. of Rosemount, Perth.

III.—ANNUAL DIRECTORS.

William Thomson, Esq. of Balgowan.
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Archibald Turnbull, Esq. of Bellwood.
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John Murray Drummond, Esq. of Megginch.
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Sir John Stewart Richardson, of Pitfour, Baronet.
James Maxtone, Esq. of Redgorton.
David Craigie, Esq., Banker, Perth.
Dr Francis I. White, Perth.

COMMITTEES.

I.—WEEKLY COMMITTEE.

William Peddie, Esq.	D. L. Jolly, Esq.
Major-General Belshes.	William Ross, Esq.
John Marshall, Esq.	Sir J. S. Richardson.
Archibald Turnbull, Esq.	D. Craigie, Esq.

II.—HOUSE VISITING COMMITTEE.

William Peddie, Esq. | John Marshall, Esq. | David Craigie, Esq.

W. Lauder Lindsay, Esq., M.D., *Physician.*
W. C. M'Intosh, Esq., M.D., *Assistant Physician* and *Superintendent.*
The Rev. John F. Thomson, of St Leonard's Church, Perth, *Chaplain.*
Messrs Mackenzie & Dickson, Solicitors, Perth, *Joint Secretaries* and *Treasurers*
Messrs J. & R. Morison, Accountants, Perth, *Auditors.*
Miss Matilda Giddings, *Matron.*
Miss Ann Muirhead Shearer, *Housekeeper.*

ANNUAL REPORT

BY THE DIRECTORS OF

JAMES MURRAY'S ROYAL ASYLUM

FOR LUNATICS.

11TH JUNE, 1860.

It is now the duty of the Directors to submit the Thirty-Third Annual Report of the Institution.

At the date of the last Annual Report there were in the House 201 patients—98 males and 103 Females. Since then 57 patients have been admitted—24 males and 33 females. The total number of patients under treatment during the year was 258—122 males and 136 females. Of this number 22 have recovered—6 males and 16 females; 7 were removed improved—3 males and 4 females; 14 were removed unimproved—8 males and 6 females; and 10 have died—5 males and 5 females. There now remain in the Asylum 205 patients—100 males and 105 females,—being 4 more than at the same period last year. For the ages of the patients admitted during the past year, the form of their insanity, its causes, duration, and other particulars, reference is made to the Report of Dr Lindsay, the Physician, and Appendix thereto, subjoined to this Report.

The Directors are happy to think that during the past year the Institution has been conducted with its usual efficiency. During that time the Directors, in conjunction with the Medical Officers, have been endeavouring to increase, to the utmost of their power, the comfort of the patients, and considerable sums have been expended for this purpose.

The Report by Dr Lindsay enters minutely into all those details likely to be interesting to the public, and particularly to medical and other professional men, and it is only necessary, therefore, to refer to that Report.

In the course of the past year the Institution sustained a great loss through the death of Dr Malcom, who has been identified with it since its opening. It is due to the memory of the late Physician to mention, that at a General Quarterly Meeting of Directors, held in December last, the following motion was unanimously agreed to :—

"The Directors desire to record their profound sense of the great loss which the Institution has sustained through the decease of Dr Malcom, who, from the commencement of it, during the long period of thirty-two years, has filled the office of Physician to the Asylum, in a manner which, besides reflecting the highest honour on him, was calculated to give the utmost satisfaction to the Directors, and great and general advantage to those whom the dispensation of Providence had placed under his care."

The Directors have been fortunate in securing as Physician, and as a successor to Dr Malcom, the able services of Dr Lauder Lindsay, who, from his previous connection with the Institution as Medical Superintendent, had obtained the entire confidence of those in the management.

In conclusion, the Directors trust, that by the combined exertions of the Directors and of the various Officers of the Institution, it may continue, through the Divine blessing, to confer important advantages on the community.

REPORT OF PHYSICIAN

FOR THE YEAR 1859–60.

General Results.

Unprecedented fullness of Institution.

At last Annual Meeting we had occasion to announce the unprecedented fullness of the Institution. When we did so, we were under the impression that our population had reached its maximum, and that the demand for accommodation, as well as the number of our residents, would gradually diminish somewhat during and subsequent to the year 1859-60. The demand for admission during the past year has certainly been less than during 1858-9, there being a decrease in the admissions to the number of 22 patients—a circumstance probably attributable, in great measure at least, to the provision of extended accommodation for the pauper insane (under the operation of the Lunacy Act of 1857), by the opening of the new Asylum at Sunnyside, near Montrose, and by attaching Lunatic Wards to various Poor-houses. But, from the circumstance that during the past year the discharges and admissions have been about equal, and therefore counterbalance each other, our population remains much in the position it did in June 1859. If we take actual figures, the number of residents at the present date exceeds that at the corresponding date last year by 4 patients. Further, the mean daily number of patients under treatment during the past year exceeds that during the preceding year by 5.697 patients, as is shown by the following table, which exhibits the general results of the last six years. This mean number has been gradually rising since 1854-5; the increase during the last six years, or, in other words, in favour of 1859-60, being 60.629 patients.

Gradual Increase of Population since 1854-5.

YEAR.	Mean daily number of Patients under Treatment.	Admissions.	Discharges.	Recoveries.	Percentage of Recoveries, calculated on Admissions.	Deaths.	Percentage of Deaths calculated on total number of Patients under Treatment.
1854-5,	135.378	36	74	17	47.20	15	7.24
1855-6,	140.549	39	26	16	41.02	7	4.07
1856-7,	150.063	47	38	22	46.80	7	3.62
1857-8,	164.358	69	49	22	31.88	14	6.42
1858-9,	190.310	79	53	34	43.03	11	4.33
1859-60,	196.007	57	53	22	38.59	10	3.87
Average of last six years,	162.777	54.50	48.83	22.16	41.42	10.66	4.92

Continued demand for Accommodation.

Its Advantages and Disadvantages.

It cannot be denied that our present large population far exceeds the number of residents for whom regular or architectural provision has been made in the Institution; that we have been able to make room for so many inmates only by specially fitting up portions of the building not originally intended for the reception of pauper patients; and that the number of our pauper residents depends on the number of patients who are not paupers—an increase in the proportion of our higher class *private* patients leading to a corresponding decrease in the proportion of our *paupers*, and *vice versa*. But, as *per contras*, we have to place the urgent demand on our space by clamant cases of our own town and county; the anxiety of the Directors to meet such demand, and to accommodate such cases, so far as they possibly can, with equal justice to the patients already resident and to those admitted; the conviction that our temporary accommodation, with attendant inconveniences of over-crowding or otherwise, is superior, as to special curative or general sanitary advantages, to the squalid, dark, damp, dirty, ill-ventilated houses of most of the pauper patients admitted; and the belief that the demand for extra accommodation will not be permanent in its character.

Admissions.

The female admissions predominated over the male admissions during the past year in the proportion of 33 to 24 cases. While 39 patients were admitted of ages between 20 and 50, only 18 were admitted of other ages. The single more than equalled the aggregate number of married and widowed. The form of disease in the majority of cases was Melancholia, the next most frequent forms being Mania and Monomania respectively. The duration of the insanity prior to admission was under six months in 36 cases, and upwards in 21. The re-admissions were 15; the interval between discharge and re-admission in 5 cases being under 6 months, and in 2 others between 20 and 30 years—these periods representing the extremes. 13 patients had unmistakably manifested suicidal or homicidal propensities prior to admission. These results differ in no way in their bearing on the general "Statistics of insanity" from those given in our previous Reports.

Re-admissions.

Removal of Non-recovered cases.

21 patients were removed not recovered—some of them for the purpose of being placed in other Asylums, a few to be boarded in private houses or families, and still fewer to return to their relatives. Several patients were removed *on probation* at our suggestion, or with our approval, being boarded in private houses or with relatives, and remaining for a time under the supervision of intelligent and kind Inspectors of Poor. So far as we have heard, all these cases have subsequently done well. It is regretable that the Act of 1857 makes no special provision for the legal removal of paupers or other patients *on probation*—a system which is carried out in the English County Asylums with the best results. In Scotland there is no intermediate step—legally speaking—between resi-

Removals on probation.

dence in the Asylum and return to the duties of life. Of many of the patients removed in opposition to our advice we have not heard since removal; but in the case of others, the result has been unsatisfactory—in one instance fatal. One male pauper was removed to his parish of settlement in Uist: another to his native country, Ireland; but in neither case either at our suggestion or with our approval. Another male pauper was supposed by the parochial authorities to be a proper case for being boarded in a private house, where his labour might be made available for his own support,—founding their opinion apparently on the fact, that in the Asylum he was ever a docile, quiet, industrious garden-labourer. He was accordingly removed to be so boarded; but within a week he made his escape from his custodiers, and came back voluntarily to the Asylum. His guardians were glad to procure his re-admission, and he has since been, what he was before removal, docile, industrious, happy, and quiet. A case of Melancholia, with determined suicidal desires, which was removed in opposition to our advice, was re-admitted in a worse mental condition, after a trial at home of about six weeks. The same patient was removed a second time in opposition to our recommendations, and a short time thereafter she died suddenly, apparently with the symptoms of poisoning. She was a most intelligent, well-read girl, was in robust bodily health when removed by her relatives, and had formerly attempted to poison herself with the leaves of the garden Aconite. Almost yearly we have occasion to chronicle some suicide or other accident, arising from the removal by obstinate relatives of non-recovered patients under circumstances, where we have repeatedly protested against such removals, on the score of the danger either to the patients themselves, to the public, or to both. Such accidents have not hitherto had much effect in deterring from the repetition of these, or the committal of similar, mistakes,—which latter appear chiefly due to the very erroneous inference, that because a patient appears healthy and happy *in* an Asylum, he must necessarily be equally so *out* of it; or indeed more so, inasmuch as he is exchanging constraint, disagreeable discipline, and the society of insane strangers, for freedom, indulgence, and the fond circle of his relatives. This is a species of "zeal without knowledge," upon which we cannot animadvert in too strong terms.

Removals of Aliens under Poor-Law Act.

Effects of premature removals.

Voluntary Patients.

Suicide as a result of premature removal.

Causes of premature removal.

Of the patients discharged recovered, the single predominated over the married and widowed together in the proportion of 12 to 10. 16 cases were below the age of 50 on discharge, and 6 above it—the former being, therefore, more than twice as numerous as the latter. In 9 cases the form of insanity was Mania, in 8 Melancholia, and in 5 Monomania. The duration of insanity prior to admission was under 3 months in 17 cases, upwards in 5; while the duration of treatment in the Asylum was under a year in 17 cases, upwards in 5. Of the whole patients admit-

Recoveries.

Proportion of Recoveries.

ted from the opening of the Institution in 1827, till 1859—viz., 1209—the recoveries constitute 42.34 per cent. The calculation of the recoveries on the *admissions* is recommended, as most likely to yield fair results, by Dr Bucknill in his "Manual of Psychological Medicine" (p. 263), and by Dr Thurnam in his "Statistics of Insanity" (p. 106). The conclusion arrived at by the latter authority, from an elaboration of a vast mass of the statistics of British, Continental, and American Asylums, is that, "as regards the recoveries in Asylums, which have been established during any considerable period, say 20 years, a proportion of much less than 40 per cent. of the admissions is, under ordinary circumstances, to be regarded as a low proportion, and one much exceeding 45 per cent. as a high proportion" (p. 106). Tested by this standard, the proportion of recoveries in this Asylum since its establishment presents, therefore, a fair average; perhaps more than this, if we consider the age of the Asylum—33 years—and the very large proportion of hopeless cases among our residents, as is shown by the following table:—

Mode of Calculation.

Standard proportion.

Proportion of Incurables.

Of our present residents there are—	Per cent.
Incurable, ...about	88.
And of Dirty,.....	15.
Helpless from age or disease, ...	10.
Violent and destructive, ...	5.

There are undoubtedly great difficulties and fallacies connected with the calculation of the proportion of recoveries among the insane. Different standards are used in different Asylums. It is hard to define *what is recovery*, and it is seldom or never possible to ascertain what proportion of cases "discharged recovered" subsequently relapse or remain permanently sane. But, even were these data given, there are fallacies inseparably associated with the *mode of statistical inquiry* itself. It is apparently too much the practice to quote the results most favourable to the supposed efficiency of a particular Asylum, or to the views of a particular Superintendent. *One-sided* results of this kind, which statistics may easily be made by ordinary arithmetical rules to furnish, are liable to be unfair, and therefore useless. So great is the diversity of principle and practice among statists, in calculating the proportion of recoveries and deaths among the insane, and so liable are one-sided calculations to mislead, that, with a view to greater accuracy and fairness, we have always been in the habit of giving in our annual Reports, not only the actual figures, but the per-centage calculated in four ways—viz., on 1, The Discharges; 2, The Admissions; 3, The mean daily number of Patients under Treatment; and 4, The total number under Treatment during the year. If, for example, we calculate the proportion of deaths from 1827 to 1859 to the *admissions* during the same period, the result

Fallacies of Statistics.

Mode of calculating proportion of Recoveries and Deaths employed in these Reports.

Mortality rate.

is 18.36 per cent., which would represent an enormous mortality; whereas we believe that the average of the five years ending 1859, calculating the deaths to the total number of patients under treatment during each year —viz., 5.13—is a much fairer and real view of our mortality. Dr Thurnam, whose basis of calculation of deaths among the insane is the average population of an Asylum—the mean number of patients resident —says, "Taking considerable periods of time, during which there have been no extraordinary circumstances in operation, in a mixed county Asylum, or in one for the middle or more opulent classes as well as paupers, a mortality which exceeds 9 or 10 per cent. is usually to be considered as decidedly unfavourable, and one which is less than 7 per cent. as highly favourable" (p. 138). A calculation based on the total number of patients under treatment during the year, therefore, places our mortality for the five years ending 1859 in Dr Thurnam's category of "highly favourable;" and it would be still more "highly favourable" did we omit the year 1854-5, during which the deaths were unusually numerous from epidemic cholera. The mode of calculating the deaths on the *total number*, instead of the *mean daily number* of patients during the year, we regard as preferable; but, as we have already stated, we believe it to be still fairer to give results according to at least four modes of calculation.

Standard Mortality rate.

It is of some interest and value, for the purposes of prognosis, to ascertain what is the proportional curability of different forms or phases of insanity—in what types of the disease recoveries most frequently and most seldom occur. With a view to elucidate this point, we have searched the records of the Institution anent *recovered cases* for about 30 years—from its opening on 1st July, 1827, till 31st May, 1859—with the following results:—

Curability of different forms of Insanity.

Form of Disease.	Males.	Females.	Total.	
			Actual Numbers.	Per Cent.
1. Mania,	118	145	263	55.02
2. Melancholia,	53	97	150	31.38
3. Monomania,	21	12	33	6.90
4. Dementia,	16	16	32	6.70
	208	270	478	100·

From the foregoing table, it would appear, that of a total of 478 cases, the recoveries from Mania amounted to 55.02 per cent.; Melancholia standing next in the proportion of 31.38 per cent.; while Monomania and Dementia presented the nearly equal number of

Greater curability of acute and recent Insanity.

6.90 and 6.70 per cent. respectively. In other words, the recoveries from acute and recent insanity were 55.02 per cent., while from all other forms they amounted to 44.98 per cent. These figures confirm our general impression and experience, that Mania is the most, and Dementia the least, hopeful form of insanity, and that the chances of recovery are greater in Melancholia than in Monomania. The above table further shows that the recoveries were considerably greater in females than males—the numbers admitted being nearly the same,—and that the female recoveries exceeded the male in Mania and Melancholia, while the male exceeded the female in Monomania, and the sexes were equal in Dementia. Of our present population, the *possibly curable* amount to 70, and those who are in all likelihood *incurable* to 135, so that the latter are about twice as numerous as the former. But even of the possibly curable, a large number will undoubtedly be gradually drafted to the incurable section, so that the *really curable*, or those who will ultimately recover, form a very small proportion of our population—probably not more than 5 per cent.

Female versus Male Recoveries.

Proportion of Incurables.

Expenditure on Improvements.

Seldom is a year not marked by the expenditure by the Directors of several hundred pounds, in adding to the furnishings of the Establishment, or in making alterations calculated to increase its efficiency and comforts. During the past year this expenditure has taken the following directions :—

Establishment of Workshops for Males and Females.

We have long felt the want of workshop accommodation, especially *within* the Institution ; for there is a class of workshops which ought undoubtedly, if possible, to be provided for out-of-doors, in the form of separate cottages or buildings. This want has materially interfered with our utilising the capability of labour of all classes of patients, and more particularly of the artizan class. But the want has now been in great measure supplied, and the results already arising are of the most pleasing and encouraging kind. Two balconies or verandahs, facing the north, which have been only nominally useful, and which, when viewed from the exterior of the Institution, have a forbidding cage-like aspect—each 39 feet long, 18 broad, and 10½ high—have been fitted up as apartments, by glazing the fronts, supplying to each a couple of Arnott stoves—one at either end—conveniently lighting with gas, and providing with presses and other furniture. The higher one is set apart as a workshop for such of the male patients and attendants as are occupied as shoemakers, tailors, carpenters, and painters, and is accordingly furnished with suitable benches, tools, &c. There are 8 to 10 men working in it daily : these are artizans, chiefly of the pauper class of patients. But this workshop is frequented also by patients of the higher classes—amateurs, who work fitfully and for their own amusement in the first instance, though generally ultimately for the public good. One gentleman has been recently occupied in making trays for minerals, and other fittings

Workshops for Shoemakers, Carpenters, Tailors, Painters, &c.

Amateur workmen among higher class private Patients.

for our Museum; another is making the model of a ship, and has also constructed a Harmonicon, on which he plays with equal taste and accuracy; a third is engaged in making picture frames; a fourth in constructing portfolios for our periodicals; a fifth in the formation of a scrap-book. Some of the latter class of gentlemen have been of material service in arranging the specimens in the Museum, and in cataloguing the contents of the Library. One of the most pleasing results of possessing a workshop of such dimensions as we have above indicated is, that several patients, of the pauper class especially, are learning trades, which may be useful not only to themselves on their removal, but to their families and to society in general. Our classes conspire to the same beneficial end, by imparting the advantages of education to many who, on admission, were wofully ignorant of the rudiments of knowledge. The lower apartment is fitted up as a workroom for such of the female patients and attendants as are engaged in needlework and millinery, and is suitably provided with work-tables, presses, and other conveniences. This apartment is also used in the evenings as a class-room, and occasionally as a Saloon for soirées or other social re-unions, for all of which purposes it is admirably adapted. The apartments above described are most commodious, and are well lighted, ventilated, and heated: they command a beautiful view of the valley of the Tay and the range of the Grampians, and altogether they are among the finest rooms in the Institution. We have specified the use to which they are presently applied; but it is right further to explain, that, should occasion require, they will form equally admirable dormitories, parlours, or dining saloons.

Teaching of Trades.

Classes.

Workshops for Milliners and Dressmakers, &c.

Occasional use of Workrooms for Soirees, Classes, and Lectures.

Contingent use as Dormitories, Parlours, or Dining-rooms.

A large portion of the roof of the Institution has been re-slated with the best quality of Ballehulish slates, and the removed slates have been partly used in covering the range of piggeries and poultry-houses built during the previous year by some of our patients.

Re-roofing Asylum and out-houses.

The wooden bottoms of the beds set apart for dirty patients—beds which have served our purposes for 33 years, and which could not, therefore, be now reasonably expected to be immaculate, either as to smell or any of the other cardinal virtues of good bedsteads—have been replaced by moveable canvas frames, which are shifted and cleaned daily; each bed having two such bottom-frames. In order to clean and dry these thoroughly, a hot-air apartment has been fitted up as a drying-closet in the Laundry; and the erection of this, again, has further necessitated certain alterations on the Laundry furnaces and flues. The great increase in the number of our patients, during the last two years more especially, has led to the purchase of a considerable number of new bedsteads. These have consisted in all cases of light iron frames, precisely such as are used in private houses. They possess great advantages over the clumsy, heavy, expensive, old wooden bedsteads, inasmuch as they are much more elegant, occupy less space, are lighter and less expensive,

Bedsfordirty Patients.

Hot-air Press.

Laundry Furnaces.

Iron Bedsteads.

while they contribute materially to the *home-like* appearance of the dormitories or rooms in which they are placed. We are gradually substituting such bedsteads for the old wooden ones, as the latter decay or become otherwise unserviceable. The majority of the old bedsteads have been painted, a proceeding which serves to conceal many of their deficiencies or deformities. Still, *ápropos* of bedsteads—we have, as a general rule, caused the removal of all curtains and hangings, as inimical to cleanliness and to proper ventilation and light-supply. The removed curtains and hangings have been appropriated to the ornamentation of certain of the galleries, parlours, and bed-rooms, as will hereafter appear.

Re-painting.

Day-rooms in Pauper Wards.

By a re-arrangement of the apartments in the Malcom and Conolly galleries, roomy, well-lighted suitable day-rooms and dining-rooms have been secured.

Laboratory and Dispensary.

The opening of the workroom and workshop, already referred to, has placed at our disposal a conveniently situated room, which has been fitted up as a Laboratory for the dispensing of medicines, and for the prosecution of researches in Chemistry, Histology, or Pathology.

Water Cisterns.

A supplementary regulating cistern has been attached to the hot-water cistern, which supplies the baths for the higher classes of patients; and large repairs have been executed—as happens almost yearly—on the bottom or lining of cisterns corroded by the gradual action of hard waters on the lead.* During the past year a variety of powerful testimony has appeared in support of the views on the action of waters on lead, which we were led to adopt as the result of experiment in 1857, and which we published in 1858. The subject has been copiously reviewed in the *Times*, in whose columns a variety of persons—architects, builders, chemists, and others practically conversant with the subject—give corroborative evidence. Quite recently, equally favourable testimony has been given in an article on "Our Water Supply," in the *Scottish Review*.†

Action of hard waters on lead.

Testimony of Dr Hassall.

The distinguished analyst, Dr Hassall—the "Analytical commissioner" of the *Lancet*, and the author of the well-known work on "Food and its Adulterations"—remarks: "From the number of samples of water which I have received containing lead, I am induced to believe that that metal is more frequently introduced to the system in this way than is commonly suspected; indeed, so many well-ascertained cases of lead-poisoning, arising from the use of water contaminated with it, have occurred, that I am of opinion that the use of lead for the storage and conveyance of water *ought to be entirely discarded*, especially in the cases of small towns and single houses."‡ In America, the subject of the use of lead in the manufacture of vessels or pipes for the storage or conveyance of water has been considered of such importance, that a bulky

* *Vide* our 32d Report (for 1859), p. 36.

† April, 1860, pp. 170, et seq.

‡ On "Unsuspected Sources of Lead-Poisoning."—*Lancet*, April 7, 1860.

volume thereanent has appeared recently in New York.* It fortunately happens that there is no reason why we should restrict ourselves to the use of lead for such purposes. Cast-iron cisterns are now frequently substituted in large institutions—among which may be specified some of the new English County Asylums,—and slate is equally easily procured; while for pipes, glass, gutta-percha, or even bitumenised paper or papier-maché, and lead itself, if coated internally with various compositions of caoutchouc and gutta-percha, or with gum-resins, &c., have been confidently recommended. The only secure mode of guarding against lead-poisoning by the water supplied to towns or houses is the prohibition by Government, or cessation by the public, of the use of naked or ordinary lead in the manufacture of vessels for storing or conveying water.

Substitutes for lead in making of water cisterns or pipes.

We have endeavoured to give a *home-like* aspect to certain parts of the Institution, especially those devoted to the educated classes, by providing with curtains and hangings the galleries, parlours, and bedrooms—by furnishing windows with window-blinds of the kind usually met with in private houses—by introducing basin-stands into the bedrooms and dormitories—couches, sofas, or settees into the parlours and galleries,—and pictures, statuary, flowers, birds' cages, and other minor ornaments, wherever they can appear to advantage. These constitute important additions to the amenities of the Institution, whether it is viewed from the grounds or inspected from within. Not a great many years ago it was, and to too great an extent, we fear, it still is, a principle acted on by authorities in the furnishings of asylums or their grounds, that there should be an absence of everything not absolutely essential by, with, in, or through which a patient might do injury to himself or his fellows. This principle appears abundantly harmless and satisfactory in theory, but in practice it leads to the most absurd and mischievous results. For instance, in the course of our visits to various Asylums—even those of first-class reputation in this country—we have found ordinary windows objected to, and not used, because patients might precipitate themselves therefrom; window-blinds, because patients might use the cords for suicidal purposes; pictures on the walls, because the suspending nails or cords might subserve similar ends; open fires, because patients might set fire either to themselves or the building; ponds and fountains, because patients might drown themselves therein; flower-gardens, because such plants as Aconite, Bay laurel, or the Poppy, might be used as poisons; artificial mounds or embankments, because patients, whose suicidal propensities take the direction of butting their heads against walls, might find the additional impetus acquired by rushing down such slopes an important aid to suicidal attempts; cricket and archery tabooed, because the bats and

Home-like Furnishings.

Curtains.

Window-blinds.

Washing-stands.

Sofas and Settees, Pictures, Statuary, Flowers, Birds.

Mistaken ideas as to construction and furnishing of Asylums.

Practical results of such ideas.

* Collection of Reports (condensed) and opinions of Chemists in regard to the use of Lead Pipe for Service-Pipe in the Distribution of Water for the supply of Cities. New York. 8vo. cloth, pp. 343, 9s. 1859. London: Trübner & Co.

balls, bows and arrows, might be employed as weapons of offence, and rear a race of homicides; quoits and all the Highland athletic games forbidden for similar reasons; pic-nics to lakes, waterfalls, and similar scenes, as well as boating or fishing parties interdicted or unheard of, inasmuch as such localities or such occupations might suddenly awaken suicidal or homicidal desires. These are a few instances; but the absurdity of the principle appears in an infinity of forms. Far be it from us to assert that accidents, deeply to be deplored, never have occurred, and never would occur, from opposite principles or opposite practice; the history of asylum life in all countries proves the reverse. Suicides undoubtedly have happened from the use of cords, or nails, or poisonous plants; patients have killed themselves by leaping from open windows--have drowned themselves in artificial sheets of water, lakes, or streams; but such cases are certainly exceptional, happening in a very few cases indeed. Similar accidents occur, and will continue to occur, in spite of every precaution. The number of such accidents is not, according to our experience, increased by placing the majority of the insane on the same footing as the sane, in regard to the furnishing of their dwellings, or to their occupations or amusements; and it appears to us not only ridiculous, but eminently unjust, because one patient out of several hundreds--perhaps 0.10 per cent.—and in the course of several years, commits suicide by means of some article of furnishing which was not essential, and might therefore have been absent, to punish the said several hundreds--the great majority of patients--who can appreciate and make the proper use of such surroundings, games, or amusements as we have mentioned—by depriving them summarily thereof. Undoubtedly, as we freely admit, there are exceptional cases requiring great cautions and precautions—for instance, cases of acute mania, determined suicides, epileptics, pyromaniacs, and others, which cases or patients can, or at least ought to be secluded from the general mass of their fellows. But, as a general rule, the majority of patients may be treated, so far as regards their occupations and amusements, clothing and diet, and the furnishing of the Asylum and its grounds, as if they were sane; at least such has been our principle--such has been our practice,—and we cannot remember a single case which has caused us to regret either principle or practice. We have, in short, endeavoured for years—for great changes cannot be brought about in a moment —to make this Institution as much as possible a *home* for its inmates—(and the comparative smallness of our population, when contrasted with that of the public Asylums of Edinburgh or Glasgow, and still more so of Hanwell and Colney Hatch, near London, enables us to do so)—to provide home comforts and home surroundings, to cultivate home habits and home tastes, and to treat the inmates, so far as is consistent with salutary discipline, as if they really were *at home*. Our efforts are sometimes only too successful, if such a thing be admitted to be possible. The temporary home

Home-like surroundings essential to comfort and happiness.

The Asylum as a permanent Home.

gradually comes to be preferred to the real home, or what ought at least to be, or to have been so, and the attachment to the Institution as a *permanent* abode becomes so strong, that recovered patients occasionally refuse to leave it, or do so with the greatest reluctance, to the no small astonishment of their relatives. We cannot quit this subject without expressing our conviction that we might, advantageously to ourselves, imitate certain Continental Asylums or Asylum colonies in the furnishing of the buildings and grounds of our new District Asylums. It is common in this country to depreciate Continental Asylums as being behind the age, and such an idea may be correctly based in regard to certain of the older ones, where progress on a level with the times could not reasonably be expected; but our own experience leads us to totally opposite conclusions, as we have already pointed out,* and as we need not therefore stop here to repeat.

Contrast between British and Continental Asylums.

In our last Annual Report (for 1859, p. 21), we had occasion to notice the fact, that a London "Society for Improving the Condition of the Insane," which has existed for nearly 20 years, and whose operations extend throughout the kingdom, had made award of its *first prize* for long and zealous service as an asylum attendant—a service extending over nearly 30 years—to one of our subordinate officers. This year, fortunately, a similar honour—again the *first prize*—has been conferred on a member of our staff—Mr James Gowenlock, gardener to the Institution,—whose faithful services have extended over a period of 25 years. These honours are gratifying no less to their recipients than to the superior officers of the Institution, who are better aware than strangers possibly can be of the extent to which such rewards are merited.

"Society for Improving the Condition of the Insane," and its Prizes.

Eight Lectures were delivered in the Institution during the winter, the lecturers and subjects being as follow :—

Lectures.

	Lecturer.	Subject.	Date.
1.	Hugh Barclay, LL.D., Sheriff-Substitute of Perthshire.	History of the times of James I., as taken from the old Statute Books.	Jan. 18, 1860.
2.	Rev. John Anderson, Forteviot.	Dr Livingstone and his Travels.	Jan. 30, ,,
3.	Dr J. B. Thomson, General Prison for Scotland, Perth.	Circulation of the Blood.	Feb. 13, ,,
4.	Rev. Alex. Burnett, Rhynd.	Macaulay and his Works.	Feb. 20, ,,
5.	Rev. Henry Stirling, Dunning.	Life in the interior of Africa.	March 2, ,,
6.	Mr C——, a patient.	The Clans of the Highlands.	March 9, ,,
7.	Thomas Miller, LL.D., Rector of the Perth Academy.	Physical Geography.	March 16, ,,
8.	Dr John Lyell, Newburgh.	A Gallery of Scotch Portraits in Scotch verse.	April 2, ,,

* "On Insanity and Lunatic Asylums in Norway: being the Narrative of a Visit made in the Summer of 1857." Journal of Psychological Medicine, April, 1858.

Readings. Two readings were also given—one by Sheriff Barclay, being miscellanies from Messrs Chambers's publications, the other by Dr Lorimer, being Professor Aytoun's story of the "Emerald Studs," from *Blackwood.*

Pic-nics. During the summer months, pic-nic parties visited the Trossachs and Loch Katrine, Crieff and Drummond Castle, Kinnaird Castle, Birnam Hill and Dunkeld, Campsie Linn and Stobhall, Glenfarg and Balvaird Castle, Kinfauns Castle and Kinnoull Hill. There were also frequent driving parties to Pitkeathly Wells and Bridge of Earn, Kinfauns Castle, Balthayock Tower, Stormontfield,Salmon Pond, Dunsinnane Hill, Moncrieffe Hill, Stobhall,' Huntingtower, Methven, Glencarse, Stanley, Redgorton, Forteviot, and Scone. A botanising party joined an excursion to Invermay by Professor Balfour, of Edinburgh, and his students. There were several cricket matches and fête champêtres, chiefly held on the Pitcullen grounds. About a dozen large tea-parties or soirées were given, either in the Institution or at Pitcullen Bank. One of these was a Handsel-Monday party, given by the ladies of the Murray gallery to the gentlemen of the Pinel and Esquirol galleries; another was a return party, given by the latter to the former; a third was a soirée of the Sabbath evening class, at which were present about 50 patients, who were addressed by the Chaplain in his capacity of our "Inspector of Schools;" others were in celebration of birth-days, or similarly interesting domestic events. There were four concerts during the winter, and one magic-lantern entertainment. In two of our concerts, the choirs of the East Church and Kinnoull Church offered their services, which were gratefully accepted—the resultant entertainments being most successful. The band of the Royal Perthshire Rifles proved a great acquisition at our Christmas festivities, as did the Kinnoull Boy's band at our celebration of the Queen's Birth-day. During the long-continued frosts of last winter, there were frequent curling or sliding parties to neighbouring ponds, and during the colder months throughout the year foot-ball has continued to be a greatly enjoyed and most useful game. During the year Perth has been visited by an unusual number of caterers for, or managers of, such public amusements or spectacles as concerts, circuses, and panoramas; while the Course of Literary and Scientific Lectures, commenced during the previous winter by the "Young Men's Christian Associations," has been followed by a second and equally successful course during the past session. Of all these sources of entertainment or instruction our patients have had a due share. Parties of them have been present at the following concerts in the City Hall:—Morrison Kyle's, Broussil Family, African Troupe, Mrs Baker's, Campbell's Minstrels, Infirmary, C. F. Hempel's, Sam Cowell's, and Lloyd's Diapologue; as well as the following lectures in the same Hall:—By Rev. W. H. Gray of Edinburgh, on "the Neglect and Idolatry of the Body;"

Carriage Drives.

Botanical excursion with Professor Balfour.

Cricket Matches.

Social reunions.

Soiree of Sabbath Evening Class.

Concerts.

Professional assistance.

Curling parties.

Public Amusements in Perth.

Public Concerts in Perth.

Public Lectures in Perth.

Rev. P. J. Stevenson of Coupar-Angus, on "the Electric Telegraph;" Rev. W. Arnot of Glasgow, on "the Earth Framed and Furnished as a Habitation for Man;" Rev. P. Hately Waddell of Girvan, on "Burns;" Principal Tulloch of St. Andrews, on "Cromwell;" Dr Lyell of Newburgh, on "Ventilation;" and Sheriff Barclay of Perth, on "Heathen Mythology." Parties have also been at or have visited Sinclair's Panorama in the City Hall; Sangers' Circus on the North Inch; the Perth Theatre Royal; Woodin's Entertainment; Bazaar for the East Church Mission Chapel; the annual Races; the various Flower Shows; and our late Chaplain's (the Rev. R. J. Craig's) Lectures in the Middle Church. Miscellaneous Entertainments in Perth.

The deaths during the year have amounted to 10—5 in male patients, and 5 in females. The ages at death were above 70 in 1 case, above 60 in 3, above 50 in 1, above 40 in 2, above 30 in 2, and between 20 and 30 only in 1. Mortality.

The causes of death in 5 patients were diseases of the lungs—Phthisis in 2 cases, acute Pneumonia in 2, and senile Bronchitis in 1. In 2 cases intestinal affections proved fatal—the special form of disease being Dysenteric Diarrhœa in the one case, and acute Gastro-enteritis in the other. 2 of the remaining patients died from acute Nervous Exhaustion; in one resulting from acute Mania, supervening in the course of General Paralysis; while the third case proved fatal under a combination of Bright's disease of the kidneys and valvular disease of the heart. In 7 of the deaths post-mortem examinations were obtained, and some of the latter present points of considerable interest as illustrative of the Pathology of Insanity. Causes of Death.

It is somewhat unfortunate for our pathological inquiries, that we cannot ensure necropsies in every case of death. We are entirely dependent on the permission or wishes of relatives or guardians, who frequently object to post-mortem examinations, from a variety of most absurd reasons—which objections, whether well founded or the reverse, we are bound to respect and obey. Necropsies.

The most interesting of the necropsies during the year revealed, in the same patient, the following lesions:—1, Abscess of the brain; 2, Bright's disease of the kidney; 3, Abscess of the kidney; 4, Mitral valvular disease [regurgitant] of the heart; 5, Atheromatous deposit in the cardiac valves; 6, Atrophy of the left lung as a result of old pleurisy; 7, Osseo-cartilaginous metamorphosis of pleuritic effusion; besides, 8, The presence of serious organic lesions of the brain, heart, and kidneys, without adequate attendant symptoms during life. Illustrations of rare Pathological Lesions in the Insane.

We do not find abscess of the brain, as a lesion occurring among the insane, at all referred to in Bucknill and Tuke's excellent "Manual of Psychological Medicine." Hence, we presume, it is at least rare in the insane. This is the only case in which we remember to have met with cerebral abscess in the insane; but in this case, we do not regard the lesion in question as having had any specific relation, Abscess of the Brain.

either to the insanity generally, or to the particular form or phase thereof. We have occasionally, however, found this lesion in general hospitals—in patients not dying of cerebral disease, and not exhibiting during life any marked head symptoms. Dr Bucknill observes, "the *kidneys* are remarkably free from disease in all the forms of insanity; and the changes which give rise to *albuminous urine* are especially rare in them. In the whole course of our practice we have never met with an instance of decided Bright's disease among the insane; and upon inquiry in other Asylums, we have found that the same observation has been made by others."* This case is a marked exception, therefore, to the foregoing statement; and in our remarks under the head of Albuminous Urine will be found another and still more conclusive case.

Bright's Disease.

Albuminuria.

Case illustrative of rare Pathological conditions.

History of case.

It may be well to preface the pathological details of the first case we have to record by a short account of the symptoms during life, and of circumstances in the patient's history of special interest in connection with these details. The case was one of chronic mania. The patient entertained a variety of delusions, chiefly as to his supposed wealth, which he believed immense. He was profuse in his proposals to spend his supposed fortune, and was extravagant in his schemes for increasing it at the same time. Years ago he had a severe attack on the left side of the chest of pleurisy, which nearly proved fatal: this had evidently led to atrophy of the corresponding lung, and to collapse of the walls of the chest on the side just mentioned. There was a marked flattening and depression of the walls of the chest, and angular distortion of the ribs over a space corresponding to the posterior thirds of the sixth, seventh, eighth, and ninth ribs. He had long been subject to intermittent headache, languor, stupor, palpitation, feelings of faintness or general malaise, and a tendency to syncope. A bruit with the first sound, loudest at the heart's base, had been observed long prior to death, and his relatives had been warned that the cardiac lesion might possibly prove a cause of death at no distant date. The heart's action was tumultuous, and its impulse at times very strong, contrasting strangely with which was his generally feeble or excitable pulse. Some six or eight months previous to death, the operation for fistula in ano had been performed; but from this disease, and the relative operation and its effects, he recovered speedily and well. During his fatal illness, he had been in the habit of placing his hand over his forehead, and occasionally complaining of heat there. But there was no symptom giving rise to belief in the existence of a specific organic cerebral lesion. His illness resembled the prostration of influenza or fever—he was feeble, languid, and apathetic. But he had often been similarly affected previously when exhausted by attacks of mania. He made no special complaints, and there was no evidence of the existence

* "Manual of Psychological Medicine" (p. 451).

of any special physical ailment. Death, however, was immediately preceded by a series of pseudo-convulsive attacks, which occurred every ten or fifteen minutes. Each attack was ushered in by a sudden apparent cessation of respiration: a struggle followed, as if for breath—the eyes meanwhile staring and fixed, the pupils unaffected by passing a variety of bright objects rapidly before them; then the whole frame became agitated by a tremor, which did not amount to a convulsion. The urine had not been specially examined during his illness, but that last passed before death contained in its sediment epithelial débris and pus.

Pathology of Case.

The chief pathological conditions revealed by the necropsy were the following:—The cortical substance of the middle lobe of the left hemisphere of the brain, in proximity to the petrous bone, and opposite the left ear, contained a series of small circumscribed abscesses full of thick, curdled, greenish pus. There was hyperæmia of the adjacent portion of the membranes, while the left ventricle contained injected capillaries and a small quantity of extravasated blood. In a corresponding position on the right side of the brain, the abscesses, originally separate, had coalesced, and become diffuse—the pus burrowing between the convolutions and beneath the membranes, the adjacent cerebral substance being soft and almost diffluent. It is now abundantly admitted that chronic abscesses of the brain may attain a great size or number without any attendant symptoms of cerebral disorder, or with symptoms so obscure and unintelligible as not to indicate, unless merely as a possibility, organic disease of the brain. Of the latter class of cases, that now being narrated is an instructive illustration. The left lung was shrunk to about a fourth of its natural size. It was confined to the upper part of the left cavity of the thorax, being fastened down firmly on all sides by old adhesions. The proper pulmonary texture was atrophied. An old abscess existed in the apex of the lung. Impacted in the left pleura, over a space corresponding to the depression and distortion of the left side of the chest formerly referred to, was a mass, partly osseous, partly cartilaginous, and partly putty-like or meally,—this substance being evidently the altered effusion of the old pleurisy also before adverted to. This mass was in the form of a hard dense plate, accurately fitting, and intimately attached to, the inner surface of the ribs. In contact with the latter it was osseous—in contact with the free pleural surface it was putty-like or granular—while the intermediate portion was cartilaginous. The ribs in contact with the mass in question were atrophied, granular, and brittle. There was dilatation of the right cavities of the heart, which had also thin, soft walls—the mitral valves were incompetent, and were studded with patches of atheroma;—the aortic valves were similarly atheromatous. Dr Bucknill speaks of heart disease as "very common in the insane;"* but this statement does not at all accord with our expe-

Abscess of Brain.

Atrophy of Lung.

Osseo-cartilaginous growth in the Pleura.

Mitral valve disease.

* "Manual of Psychological Medicine," p. 449.

rience. We have met with few cases of valvular disease; instances of hypertrophy or dilatation have been more common, though far from numerous; but cardiac bruits have occurred more frequently than any of the above lesions. Such bruits, however, as we shall immediately show, we do not hold at all conclusive as to the existence of valvular disease.

Abscess of Kidney.

The upper portion of the right kidney was excavated by a series of abscesses containing thick pus—the cortical substance had been removed by suppurative absorption, and was replaced by a dense fibrous tissue. The remaining part of the right kidney, as well as the whole of the left, presented all the appearances of one of the forms of Bright's disease—viz., the granular form. Under the microscope, the renal epithelium was partly granular, partly fatty. It is noteworthy in this case, that granular Bright's disease—that form in which minute yellow specks are usually scattered throughout the cortical substance of the kidney,—was associated with atheromatous deposit in the cardiac valves, a coincidence of by no means unfrequent occurrence.

Bright's disease.

Atheroma of Cerebral Arteries.

A second necropsy was interesting as presenting a good specimen of atheroma of the cerebral vessels, which at the base of the brain were profusely studded with patches thereof. In only one spot, in the course of the basilar artery, had the atheroma passed into an osseous condition. In this patient the atheroma was manifestly connected simply with his age (69), and not directly with his insanity. We have found atheromatous deposits in different parts of the body, especially in the basilar vessels of the brain—in the aorta, and on the cardiac valves—equally common in the insane and sane; and, in the former, this condition appears to bear no relation to the insanity—directly we mean,—for it is probable that every pathological condition, in whatever part of the body, influences, in however indirect or remote a way, and to some degree or extent, the brain.

Atheromatous Diathesis.

Gastro-Enteritis.

In the case fatal from acute gastro-enteritis, there was great hyperæmia of the mucous membrane throughout the intestinal tract from the stomach downwards, more especially of the ileum and duodenum. The stomach was full of bloody bile—the result partly of biliary regurgitation, partly of hæmorrhagic extravasation. For some time prior to death, transient jaundice had existed, with frequent and most obstinate bilious vomiting. From the pylorus downwards, the intestines were lined by a dark, slimy, meconium-like substance, increasing in consistence and amount in the lower parts of the canal, and being thickest and in greatest abundance in the cœcum and ascending colon. Patches of slaty discoloration occurred in the lower parts of the small intestines. Peyer's glands were elevated conspicuously above the general surface of the gut, and were much congested. The solitary glands were also turgid, and conspicuous from the contrast of their colour, resembling large sago-grains studded over the purple surface of the bowel. The appearances

altogether closely resembled those we have repeatedly seen in Typhoid Fever and in Cholera.*

Cardiac Bruits in Anæmia and Chlorosis.

One case, fatal by Phthisis, was interesting, in so far as a distinct anæmic bruit marked the heart's action during life, and because the said anæmic bruit serves as a text for a few remarks on the subject of similar *cardiac murmurs not depending on, or connected with, organic disease of the heart.* During life the action of the heart had been rapid, irritable, weak; and a prolonged blowing murmur, loudest at the apex, and accompanying the first sound of the heart, had long been distinctly audible. This murmur had been invariably ascribed by us to anæmia, and not to valvular disease; and the necropsy proved the correctness of our conclusions. The heart was found pale and flabby, but the valves were quite normal. The pericardial sac contained nearly half-a-pint of serum. The patient was much enfeebled, and attenuated by advanced Phthisis: the lungs were found riddled by vomicæ. Her colour was sallow, her appearance cachectic, and her general condition was that of chlorosis. Over the large vessels at the root of the neck, on the right side, was occasionally heard—what is also not unfrequent in this class of cases [chlorotic females]—a musical sound, synchronous with the ventricular systole of the heart.

Cardiac Bruits not necessarily indicative of organic disease of Heart.

We have long suspected the correctness of the prognostications of heart disease, so far as these are founded solely on bellows murmurs; and a series of cases observed during life, associated with their relative necropsies, have converted suspicions of correctness into proofs of incorrectness. What we mean is, that so many cases occur of undoubted cardiac murmurs, without the existence of any structural disease to account therefor, as should render the Physician extremely careful in founding his prognosis on such murmurs alone, or, perhaps, as should lead him, in the majority of cases, to give a very guarded opinion as to the nature of the case and its probable issue.

Prognosis in Heart disease.

For instance, in cases of chlorosis or anæmia, and in states resembling these conditions or cachexies, and resulting from the exhaustion of protracted and debilitating disease, there are frequently cardiac bruits of considerable intensity, unassociated with any structural lesion. Yet in such cases the action of the heart is often weak and irregular. There may be palpitation and dyspnœa to an alarming extent, and the general symptoms may lead erroneously to the belief in not only cardiac, but also in pulmonary, disease. "The mere intensity of a bellows sound is," says Dr Brinton, "[unless extreme] a bad guarantee for its valvular origin; which again is better suggested by a *long* [as during systole, diastole, and pause] and *unvarying* [as during sleep and excitement] character of the murmur." †

* "Clinical Notes on Cholera: its Pathology."—*Association Medical Journal* (p. 527), June 16, 1854.

† *Lancet* (p. 164), February 18, 1860.

Albuminuria

In our Report for 1858 (p. 15), we mentioned that we had never found Albuminuria in the insane; but we were of opinion that its apparent absence was due rather to defective observation than to its non-existence. We stated further, "We cannot, however, see, *à priori*, why Bright's disease should not be as common in the insane as in the sane, in proportion as the former are equally exposed to its causes with the latter." Since this sentence was published, we have given special attention to the subject of Albuminuria and Bright's disease in the insane, and the result is undoubted proofs of the occurrence of both—only as occasional or rare lesions or conditions, however. In one case the existence of Bright's disease was proved by necroscopical examination; in another by the necropsy, as well as by the use of the microscope and test-tube, and by the general symptoms, during life. Before, however, we met with the two cases in question, the results of repeated investigations were negative. For instance, a careful examination of the urine, specially with a view to the detection of albumen, was made in the following cases—209 patients, labouring under almost every form or phase of insanity—without its discovery in a single instance:—

Investigations.

Positive results.

Negative results.

Form of Disease.	Males.	Females.	Total.
1. Mania, acute,	5	11	16
2. „ chronic,	14	16	30
3. Monomania,	23	10	33
4. Melancholia,	9	17	26
5. Dementia,	50	50	100
6. General Paralysis,	4	0	4
	105	104	209

Albuminuria not necessarily indicative of organic disease of Kidney.

In one or two cases the urine was slightly albuminous; but this evidently depended on the presence of blood: and as this blood had its origin in the urethra or bladder, the cases here referred to proved no exception to the general rule that, in 209 patients, albuminuria did not exist in a single case. Our experience points to the improbability of finding albuminuria absent in a similar number of cases affected with ordinary physical ailments; for it is now admitted that it occurs in a great variety of diseases, where it is probably indicative merely of temporary renal congestion, and not of structural alteration. We have ourselves found it frequently in cholera and fevers, and in a variety, not only of diseased, but also of apparently healthy, states of the body. Moreover, along with albuminous urine, the granular casts, generally

Albuminuria in Cholera, &c.

supposed so characteristic of Bright's disease of the kidney, have been found in erysipelas, pyæmia, pneumonia, and other affections, as has been pointed out by Dr George Johnson in his "Clinical Lectures on Diseases of the Kidney."* One case in which Bright's disease was proved by necroscopical examination has been already detailed at page 20, and need not here be further referred to.

Two cases illustrative of Bright's disease in the Insane.

Another case, in which the microscopical and chemical characters of the urine, as well as the general symptoms during life, left no doubt as to the existence of Bright's disease—of the form otherwise known as "Acute Desquamative Nephritis"—remains still to be referred to. In it there was general anasarca, with mitral regurgitant disease of the heart, and hypertrophy of the ventricular walls thereof, associated with acute desquamative nephritis. In the earlier stages of the disease, the urine was passed in small quantity: its specific gravity was usually about 1020; it was very turbid, and there was a copious muco-granular sediment. Heat and nitric acid threw down a thick, curdy precipitate of albumen. The sediment abounded in casts of the renal tubules, entangling numerous epithelium cells, whose contents were mostly granular, sometimes slightly oily. Occasionally blood corpuscles occurred, and still more frequently crystals of uric acid. These microscopic characters of the urine-sediment all pointed to the existence of an acute form of disease, characterized mainly by the abundant desquamation of the renal gland cells. In this case, then, we found—1, The urine highly albuminous; 2, The presence of abundant casts of the renal tubules; and 3, Profuse shedding of the epithelium lining the said tubules, which epithelium was, further, the seat of increased granularity or of oily infiltration. In combination these three circumstances usually amount to a demonstration of the existence of Bright's disease. But one or two of them might exist without necessarily leading to the inference that there was structural alteration of the kidney; and, again, one or two of them might be absent without proving the non-existence of Bright's disease. We have already shown that albuminuria is common out of all proportion to cases of Bright's disease; that it occurs in a great variety of diseases; and that it may occur in health, simply from the introduction into the stomach of particular articles of food, or of particular medicines. Again, there is now no doubt that in many cases, where the necropsy reveals Bright's disease of the kidney, there has been during life no albumen in the urine; or casts have been absent, or the renal epithelium has not appeared in unusual quantity or presented unusual characters. Further, we would have it borne in mind "that the term *Bright's disease* is not strictly and exclusively applicable to any *single* morbid change in the kidney; but that, under this general term, are included several forms of acute and chronic disease, which are usually associated with an albuminous condi-

Bright's disease associated with Cardiac disease.

Chemistry & Microscopy of Urine in Bright's disease.

Bright's disease without usual signs.

What is Bright's disease?

* *Medical Times*, vol. 16 (1858), p. 365.

tion of the urine, and frequently with dropsy and various other secondary diseases."* In the case under consideration, dropsy began in the face; and it was always greater in the face, arms, and chest, than in the lower parts of the body. As there was here a combination of renal and cardiac disease, it was perhaps impossible to decide whether the dropsy was, in its cause or origin, renal or cardiac—the more so, as we believe the mere fact of dropsy beginning in the upper or lower parts of the body to be a most fallacious criterion for diagnosing between its renal and cardiac origin. The association of cardiac hypertrophy, especially of the left ventricle—with or without valvular disease—is a common feature of a large proportion of cases of *chronic* Bright's disease; and in such cases the cardiac disease is generally supposed to *succeed*, perhaps in the relation of an effect, the renal lesion. But in the case above narrated the Bright's disease appeared to be *acute*, and the cardiac lesion *preceded* the renal, or, at all events, it attracted attention for some time before proof of the existence of the other could be obtained, though not before its existence was suspected and watched for. The correctness of the diagnosis made during the patient's life in the case above referred to was abundantly established by the results of the necroscopical examination; for the case ultimately proved fatal. The principal lesions were the following:—The *Kidneys* were pale; there was irregularly distributed superficial congestion; the cortical substance was in progress of atrophy and fatty degeneration; the tubules contained almost no epithelium proper, but were gorged with fat globules and granular débris. On the surface of the left kidney there was a small cyst. The *Heart* was adherent throughout its whole extent to the pericardium by fibro-cellular tissue so dense that, in endeavouring to extract the organ, many of its muscular fibres were ruptured. The latter circumstance was also, however, partly due to apparent fatty degeneration of the said muscular fibres, which were pale and flabby. The ventricular walls generally, and the columnæ carneæ particularly, were much hypertrophied. The mitral valve was incompetent, two of its folds being occupied by dense nodular ossific deposit. There existed cartilaginous thickening of the aortic valves, and abnormal size of the right auriculo-ventricular orifice. With ventricular hypertrophy there was auricular dilatation. The *Lungs* were generally adherent to the thoracic walls by dense old pleuritic exudation, and the pulmonary tissue was in a state of incipient Pneumonia. It is interesting, in connection with the advanced fatty degeneration of the kidneys, to note that there was atrophy and fatty degeneration of the liver, and that a few seed-like osseous deposits existed in the margin of the Falx-cerebri. It is further noteworthy to mention that for some time, and immediately prior to

Renal and Cardiac Dropsy—their differential Diagnosis.

Cardiac Hypertrophy and Bright's disease.

* Dr George Johnson's "Clinical Lectures on Diseases of the Kidney."—*Medical Times*, vol. 16 (1858), p. 2.

death, the urine gave neither precipitate nor turbidity on the application of heat and addition of nitric acid, while it was frequently phosphatic, and of specific gravity about 1020–1025.

We have only to add, as a supplement to our remarks on Albuminuria, that it is now apparently being found in other Asylums. For instance, in the Fourth Annual Report of the Nottingham Asylum (for 1859), it is mentioned as the *cause* of one of the *deaths*. [?]* The patient was a female, æt. 25—single—of weakly habit of body when admitted, and labouring under Mania. Albuminuria in other Asylums.

We cannot in the present Report, however much it is desirable, enter on the subject of the Etiology of Insanity further than to give the illustrations which the following tables contain of hereditary transmission :— Etiology of Insanity.

I.—*Showing groups of Insane Relatives presently or during the past year resident in the Institution at the same time.* Hereditary predisposition.

	Number of Groups or Instances.		Number of Groups or Instances.
1. 3 Brothers,.....	1	5. A Mother & a Daughter,	1
2. 3 Sisters, ...	1	6. A Mother and a Son,. ...	1
3. 2 Sisters, ...	2	7. 2 Cousins, ...	2
4. A Brother and a Sister,...	4		

II.—*Showing the number of Patients, presently or during the past year resident in the Institution, who have or have had Insane Relatives,—the latter not residing in the Institution at all or at the same time.*

	M.	F.	To.		M.	F.	To.
Father, ...	1	2	3	Uncle, ...	2	1	3
„ and Brother,.....	1	...	1	„ Maternal, ...	1	...	1
„ and Uncle,.....	1	...	1	2 Uncles and Aunt, ...	...	2	2
„ Mother, and 2 Sisters, ...	...	1	1	Uncle and 4 Nephews,	...	1	1
Mother, ...	2	5	7	Uncle and Cousin,.....	1	...	1
„ and Aunt, ...	...	1	1	Aunt,.....	1	1	2
„ and Brother, ...	...	1	1	Grandmother, ...	...	1	1
„ and Sisters, ...	1	...	1	Mother's Aunt,.....	...	1	1
„ Uncle, & Sister,	1	...	1	„ Cousin,.....	...	1	1
Brother,.....	1	3	4	Grandfather's Cousin,...	...	1	1
3 Brothers,.....	...	1	1	Cousin, ...	1	2	3
Sister,.....	1	5	6	Relatives by Mother's side not stated,.....	1	...	1
2 Sisters,.....	1	...	1	Other Relatives not stated, ...	5	7	12
Sister and Son,.....	...	1	1				
Daughter, ...	...	2	2				

* Page 19, Table V.—Obituary.

Such tables, however, do not adequately represent the number of patients in whom there has been, or is, a hereditary tendency or liability to insanity. The actual number is probably much higher. The statistics given in Table II. are taken from the schedules of admission, which, in the majority of cases, give either deficient or erroneous information.

Deficiencies of Admission Schedules.

Before proceeding to illustrate, chiefly by means of statistical tables, the bearings of Phrenology and Meteorology on Psychopathy, we think it right to preface our creed as to the *place and value of statistics*. Of late years statistics have come so greatly into public favour, and are now so variously and extensively employed in every kind of inquiry that admits of illustration or elucidation by figures, that they may be said to constitute a department of knowledge—an art—by themselves. They have called into existence in Britain at least one Statistical Journal and one Statistical Society (with Lord John Russell as its president); besides an "International Statistical Congress" and an "International Statistical Society." Hundreds of men, learned especially in the applications of arithmetic and mathematics to what is called "social science," devote their time and talents to their exposition, the *cui bono* of their researches being made evident in the annual meetings of the "National Association for the Promotion of Social Science." We believe, however, statistics to be of equal power for good or evil according as they are understood and applied. When imperfectly understood and improperly applied, their deductions may be made to present, instead of mathematical accuracy, fallacies the most dangerous; logical rules may be altogether set aside, while the most glaring inconsistencies and contradictions may be brought out. There are innumerable sources of fallacy and difficulty connected with statistical inquiries; and as there are comparatively few persons fully acquainted with these fallacies and difficulties, and accustomed to meet and overcome them, so there are few persons really competent for statistical investigations. By so handling them, we believe it not altogether untrue—what the enemies of statistics have occasionally urged against them—viz., that they may be made to prove anything! We do not, therefore, pin our faith to statistics as affording necessarily and in all cases a demonstration of the truth, or equivalent to the truth. So important is it that the public should be made aware of the dangers and difficulties of statistical elaborations or results, that we make no apology for quoting the following illustration from Dr Farre, one of the ablest and most experienced of medical statists:—"The annual mortality in prison life being required, the statist takes the number of persons who have sojourned in a particular prison during the year, and also the number of deaths that have occurred. He then divides the former by the latter, and points to the result. Such logic is the same as if an innkeeper should boast of the healthiness of his house as compared to the rest of the town, on the ground that he had, during the year, enter-

Statistics—their use and abuse.

Illustrations of fallacies of Statistics.

Testimony of Dr Farre.

tained a thousand guests, of whom only one had died, whereas the mortality for the rest of the town had been at the rate of twelve per thousand. On this kind of logic, however, Dr Farre tells us that a French minister pronounced prisons to be the healthiest places in the world; and an English inspector gravely affirmed, that in very few situations in life is an adult less likely to die than in a well conducted prison!" *

Relations of Phrenology to Psychopathy.

Phrenology is somewhat profuse and confident in its promises of assistance in the diagnosis of insanity, and in the classification of psycopathies. With a view to test how far these promises have been fulfilled, or are capable of being fulfilled, and in continuation of the investigations on the size of the head in the insane, published in our Annual Report for 1858 [pp. 16, et seq.], we have caused a careful phrenological examination of the head to be made in the cases of 173 patients (84 males and 89 females) labouring under almost every form or phase of insanity [as appears from Phrenological Table VII. hereto appended]. Our standard of comparison was a bust, phrenologically mapped into "organs" in accordance with the seventh edition of Combe's "Elements of Phrenology" [1850], and procured from Alexander Stewart, Phrenological Museum, 1, Surgeon Square, Edinburgh. Our further guides were the "Principles of Phrenology," by Sidney Smith [Edinburgh, Tait, 1838]: the article "Phrenology," in the last edition of Chambers's "Information for the People:"—and the section on "Phrenology" in George Combe's "Constitution of Man" [Edinburgh, John Anderson, jun., 1828]. We have "nothing extenuate, nor set down aught in malice:" we have endeavoured simply to weigh Phrenology in the balance of rigorous investigation—to test its value as an adjuvant to Psycopathy by the recognized standards of phrenologists: we have investigated the subject patiently and laboriously, and as thoroughly as our opportunities have permitted. In order that bias or preconceived ideas [had they existed, which they did not] might not interfere with the honest carrying out of the inquiry, the phrenological examination or analysis of the head was confided to one of the medical officers of the Institution, while the statistics were elaborated and the general conclusions drawn up by another,—the one working altogether independently of the other, and neither having any conception of the general results of their individual or collective researches or calculations. We frankly admit that neither of us was a professed or experienced phrenologist; we do not claim perfection either in our mode of investigating or in our competency to investigate. But phrenologists themselves infom us--and, moreover, it is one of their boasts--that no special qualifications in the student are requisite to master the principles or practice of Phrenology; and we submit that, with the aid before specified, any

Investigations on "Phrenological development" of Heads.

Phrenological standards.

* Orr's "Circle of the Sciences," vol. i. p. 25.

person of ordinary or average intelligence can surely satisfy himself as to the comparative or approximative truth or value, at least, of the leading features of Phrenology. We do not presume to offer the remarks or statistics which follow as either conclusive or exhaustive, but simply as contributions to a subject the elucidation of which is attended with no little difficulty and labour, and which is hence not often attempted. Taking into consideration the tenor of our remarks on the place and value of statistics, it will not surprise us to be told that fallacies lurk, where we do not at present suspect them, in the results to which our inquiries have led us. Nor will it surprise us that many of the facts which appear to us either non-corroborative of, or opposed to, the doctrines of Phrenology, or the statements of phrenologists, are regarded by the latter as confirmatory or corroborative. If so, the facts in question are cordially placed at the service of phrenologists, equally with non-phrenologists and anti-phrenologists, our object being not to conceal or pervert, but to expiscate and expose, the truth. It is right here to mention that some of the illustrations which we anticipated would prove of considerable value and interest have been lost, in consequence of the patients refusing to permit their heads to be examined. The remarks which follow must, in great measure, merely bear reference to, or be abstracts of, our Statistical Tables; and the latter might have been greatly extended in number and minuteness were it not that the space at our command does not permit of this. Some of the tables, therefore, such as Table IV., contain only selected illustrations. In tabulating the relative size of the cerebral "organs" which are recognized by phrenologists, we have adopted a somewhat simpler standard than that generally made use of in treatises on Phrenology [and which is given in the article "Phrenology" in Chambers's "Information for the People," already referred to, p. 355]; inasmuch as, for our present purpose, it is unnecessary to be so minute and precise. The scale we have adopted consists of five terms—1, Very large; 2, Large; 3, Moderate; 4, Small; 5, Very small. *Moderate* is used when there is neither a marked prominence nor depression on the skull at the supposed or alleged site of a particular "organ;" *large* when there is a decided and visible prominence; and *small* when there is as decided or visible a depression. The "rather small" of phrenologists is included in our term *small;* the "rather full" in our *moderate;* "full and rather large" in our *large.*

Scale of size of "Organs."

There are certain fundamental propositions or principles laid down in phrenological treatises, which our own investigations do not altogether bear out or homologate as correct. But we do not feel warranted, on this account alone, in pronouncing them necessarily incorrect; for we are guaging the propositions of Phrenology by investigations which are on the one hand limited in extent, and on the other may be imperfect in

Fundamental propositions of Phrenology.

kind. There are certain other propositions with which we agree; but these, we are bound to confess, are few in number. And lastly, there are certain others, which are so totally opposed to our whole reading and experience—anatomical and physiological, psychopathic and psychological,—that we cannot hesitate to pronounce them erroneous, and frequently worse than erroneous—presumptuous and absurd.

Among statements, which our own experience does not bear out or corroborate, are the following:—

"The amount of power possessed by each mental faculty [is] modified by, and the result of, the size, structure, and quality of these encephalic divisions, and its energy indicated by certain *easily distinguished* convolutions of the brain, discoverable during life by parallel protuberances on its shield, the skull."—[Smith, p. 5].

"The size of the brain, in whatever direction developed, is the measure of general mental power. If it be in the direction of the propensities, the individual will manifest power of animal passion; if in that of the sentiments, the momentum will be of a moral kind; if in the anterior lobe, it will produce superiority of reflection; and if in all regions, it will result in universal greatness."—[Smith, p. 38].

"It being established [?] that the size of the brain is the measure of its power, it follows, upon the same principle, that the size of each organ in the encephalon is the measure of its power also."—[Smith, p. 71].

"It is a principle of Phrenology, that the largest organ in each head is that which craves for greatest excitement, and receives most gratification."—[Smith, p. 72].

"The brain consists of a congeries of organs, the instruments of a corresponding number of mental faculties, each possessing an individual and separate function."—[Smith, p. 31].

Phrenology is "based altogether upon the observation of a correspondence betwixt cerebral projection and mental manifestations, or absence of development and deficiency of relative psychological indications."—[Smith, p. 5].

It is obviously impossible for us to enter upon any disquisition or argumentative essay to show wherein and how far we differ from phrenologists in such statements as we have above given. It must suffice to point to our Statistical Tables, which, while they indicate many parallelisms or coincidences between phenomena or facts, which phrenologists assert stand in the relation of cause and effect, yet show a greater number either of contradictions, discrepancies, or non-corroborative circumstances. In a word, the *post hoc* and the *propter hoc* seem to us to have been in no small measure confounded.

Coincidences and contradictions in facts.

Among statements with which we are disposed to agree, and which

are mostly "saving clauses," inserted as a protection from the effects of too rash and sweeping assertions, are the following:—

"It does not always follow that the largest skull contains the greatest quantity of brain. . . . Size of brain is, therefore, not *altogether* measured by that of skull."—[Smith, p. 39].

"It is certain that the mere appearance of a fair and broad forehead is not the accurate criterion of intellectual endowment."—[Smith, p. 178].

"It will be perceived that a broad, or even a high forehead, will not alone be evidence of great intellectual capacity. . . . Neither will a forehead, which is somewhat narrow, be necessarily indicative of great intellectual deficiency."—[Smith, p. 76].

Cautions in investigation.

Other statements, with which we are inclined to agree, appear as cautions—and most useful and proper cautions—to students entering upon the study of the phenomena on which the science of Phrenology has been based.

"It ought never to be lost sight of, that, in estimating character from development, it is not legitimate to go out of the same head, and compare any organ with the same organ in another head."—[Chambers, p. 355].

"It will be found that *quality* of brain is a modifying circumstance; also *health* of brain and *exercise* of brain."—[Chambers, p. 354].

"When an organ in the centre of others appears depressed, it does not necessarily follow that it is *absolutely* deficient or small. Thus, for example, if the organs of Philoprogenitiveness, Adhesiveness, and Self-esteem be very large, they will of course project accordingly. The organ of Concentrativeness, which is situated between them, if it be 'very large' also, will of course have no hollow in the surface; but if it be only 'large,' or 'rather large,' it is, although absolutely considerable, relatively to the surrounding organs not so, and therefore there will be at that region a depression. Of course, if the hollow be very great, there will not only be a relative, but an absolute deficiency."—[Smith, p. 79].

Pathological or Psychopathic illustrations of Phrenology.

As a general rule, the illustrations contained in phrenological works drawn from the phenomena, or pathology, of insanity, are peculiarly unfortunate, and seem to us to betray a woful ignorance of "Psychological Medicine," as that term is now understood. To be sure, great allowance must be made for the fact that our chief phrenological works were published, and Phrenology was fashionable, some twenty years ago—a period during which Psycopathy and Cerebral Pathology have made great strides in progress; but the same errors that were originally propagated a quarter of a century ago, continue to be reiterated at the present day. A remark, which Smith makes in regard to Gall, we are disposed to repeat, or rather to quote, in regard to Smith himself, as

applicable generally to his remarks on the light which Phrenology throws on the study of Insanity. "We confess that we are inclined to distrust many of Gall's observations on the subject of the organs *in a state of disease*, because they appear to be *mere conjectures*."--[p.149]. Hypothesis or speculation versus fact.

"Partial insanity or madness on one point, with sanity on every other, proves the distinction of organs and their separate action."—[Chambers, p. 354].

Here is a *proof* depending upon an *assumption;* both proof and assumption being, in our opinion, equally erroneous. We demur at once to the whole statement. We are not prepared to admit that there is such a thing as "madness on *one* point with *sanity on every other*," believing, with Dr Bucknill, that "insanity on a single subject implicates *many* of the faculties."* This use of the term "Partial Insanity" leads us further to observe, that all Phrenological classifications of Insanity founded on such an analysis of the cerebral "organs" and their functions as is given in our Table I., hereto appended, though they have looked extremely attractive and satisfactory on paper, have been of no scientific value and of no practical usefulness, because the bases on which they were founded were not altogether and solely true. Various systems of classification have been proposed, as Dr Bucknill points out (p. 86), under a division of the faculties of the mind into, 1, Intellectual, and 2, Affective, with sub-divisions into *a*, Propensities, and *b*, Sentiments; or, under a triple division, into, 1, Intellectual faculties; 2, Moral sentiments; and 3, Propensities. But such classifications are unnatural and mischievous, simply because it never happens that any one faculty, or even group of faculties, is singly the seat of disease; or, in other words, because disease of one faculty, or group of faculties, implies and involves a certain amount of disease of another faculty or group. True it is, nevertheless, that disease may appear predominant, for the time being, in a particular faculty or organ, or set of faculties or organs; but this is only apparent, and not real. For instance, some of the intellectual faculties may appear alone diseased in certain cases of what is wrongly so-called *Mono*-mania, where one or a few delusions only exist, or, at all events, are made manifest; or some of the moral sentiments, as in Melancholia, or exultative Insanity connected with the development of religious ideas or belief, pride, ambition, &c.; or some of the propensities, as in Suicidal and Homicidal Insanity, in Kleptomania, Pyromania, Dipsomania, or Erotomania. But, in such cases, we do not find the Intellectual faculties, Sentiments, or Propensities singly and separately involved in disease; but, to a greater or less extent, *all* of them. And hence it is that Phrenology does not enable us to frame a useful or philosophical classification of mental diseases.

Monomania: What is it?

Phrenological classifications of Insanity.

Let us now proceed to a general analysis of our Statistical Tables.

* "Manual of Psychological Medicine," p. 326. London, 1858.

Relative "development" of individual "Organs" of the Brain.

We will contrast their results with the statements of phrenological writers, so as to bring prominently under the notice of our readers the points both of agreement and difference. Let us begin with a selection of the more important "organs" into which phrenologists divide the Brain.

Amativeness

1. *Amativeness.*—"There is no organ which is a more frequent cause of insanity than this,—none the excessive indulgence in which is so apt to superinduce idiocy, paralysis, epilepsy, and other nervous diseases, pulmonary and other complaints. . . . Besides the many forms of Mania produced by the excessive size and activity of this organ, some are the result of its necessary sympathy with other parts of the system. . . . They are all accompanied by undue excitement of those organs of Secretiveness, Combativeness, Destructiveness, and Alimentiveness, which we have remarked as being excited by this organ. This is manifested by sullen disobedience, the effect of Combativeness—an inclination to injure and even kill those around them; great suspicion especially relative to the subject of alimentiveness—that the food is poisoned; and the direction of the Destructiveness is to the neighbouring region of Philoprogenitiveness and Adhesiveness, the hatred being greatest toward husband and children."—[Smith, p. 87].

The first statement quoted from Smith, according to our experience, is, to say the least of it, greatly exaggerated, while the last is by no means borne out by our statistics. Table I. shows that Amativeness was *very large* in 3 patients of either sex; but 9 other "organs" were very large in a greater number of males, and 1 other in a greater number of females. It was *large* in a greater number of men than women, in the proportion of 54 to 84, as 45 to 89. But 2 "organs" were large in a greater number of males; 2 were large in a greater number, and 6 in an equal, or nearly equal number, of females. It was *small* in about an equal number of males and females (9 of the former and 10 of the latter), while it was *very small* in none. Table II. shows that, in 8 females labouring under Erotomania, it was *very large* only in 1 patient, large in 5, and very small in none. In 6 Masturbators (5 males and 1 female) it was very large or very small in none, but large in 5. In 5 females, who showed a marked partiality for dolls, it was very large and very small in none, but large in 4. Table III. shows that, of 6 patients (3 male and 3 female) in whom Amativeness was very large, the real character of the individual was found confirmatory in 3 only.

Philoprogenitiveness.

2. *Philoprogenitiveness.*—"It is more considerably developed in the female head, both of the human species and of the lower animals, than in the male."—[Smith, p. 88]. "While visiting a Lunatic Asylum, we observed in one of the female inmates, about 38 years of age, a very large development of this organ, and remarked to the Physician of the Establishment that she would manifest extreme solicitude about children. He mentioned that she had no children, but that it was certainly re-

markable that most of her time was occupied in dressing, undressing, and nursing *dolls*" (p. 90). "When in a state of disease, this organ produces great anxiety about children. Dr Andrew Combe's patient, who, during her illness, always imagined that fresh disasters were happening to her children, complained of pain at the site of this organ. At Vienna, Paris, and Amsterdam, Dr Gall saw young ladies who declared that they were pregnant, although no such thing was or could be the case. A man also declared that he was with child of twins. In these the organ was very large, and probably gave this turn to their hallucination" (p. 93). Table I. shows that Philoprogenitiveness was *very large* in 22 males and 18 females—that it was therefore most largely developed in *males*. This result, it will be observed, is contrary to the statement first quoted from Smith. It was large in 42 males and 57 females, small or very small in none. This "organ" was more largely developed than any other of the 35—nearly three times as largely as the next in point of size, which was Firmness. The number of cases in which it was very large, and the fact that in no patient of either sex was it ever small, would appear to show the predominance of animal propensities in our population. Table II. shows that, in 8 cases of Erotomania in females, Philoprogenitiveness was very large in 1, and large in 5; in 6 Masturbators (5 males and 1 female), it was large in 5, very large or very small in none: in 3 females, subjects of Puerperal Mania, it was large in all: in 6 females, who showed a marked anxiety about children, it was very large in 2, and large in 3; and in 5 females, who showed a great delight in fondling dolls, it was very large in 3, and large in 1. The latter statement would appear to accord with the anecdote quoted in the second place from Smith—the fondness for dolls in unmarried females often seeming to us to take the place of love of offspring in the married, and both affections depending on the same feminine instincts. Table III. shows that, of 40 cases in which Philoprogenitiveness was very large, the real character exhibited some kind of confirmation in 12 only. On the whole, however, there was more frequently a correspondence between the size of the organs of Amativeness and Philoprogenitiveness, or, generally speaking, of the organs situated at or below the occiput, and the real character of individuals, than can be asserted in regard to any of the other 35 "organs." In other words, in a considerable proportion of patients, there was both a fullness of the occipital and sub-occipital regions of the skull, and a manifestation of animal propensities. But that these two sets of phenomena did not necessarily or invariably stand in the relation of cause and effect, we hold to be proved by the facts, that it frequently happened there was occipital fullness without corresponding manifestation of the propensities, or a manifestation of propensities without corresponding occipital fullness.

Predominance of Animal propensities.

Occipital fullness as a measure of Animal propensities.

3. *Concentrativeness.*—Table I. shows that it was very large in 2

Concentrativeness.

males; very small in 3 cases (2 males and 1 female); large in 35 males and 45 females; and small in 21 males and 13 females. Table II. shows that, in 21 cases of Melancholia (5 males and 16 females), it was very large in 1 male; very small in none; large in 9 cases (2 males and 7 females); small in only 1 male. In 19 Suicides (7 males and 12 females), it was very large in 1 male; very small in none; large in 7 cases (2 males and 5 females); small in 2 males. In 14 Destructive patients (6 males and 8 females), it was very large and very small in none; large in 4 females; small in 5 cases (3 males and 2 females). In 56 patients having specific delusions (33 males and 23 females), it was very large in 2 males; very small in none; large in 24 cases (13 males and 11 females); small in 10 cases (6 males and 4 females). In 8 Erotic females, it was large in 4; small in 2; very large and very small in *none*. In 12 cases of Monomania of pride or vanity (7 males and 5 females), it was very large in none; very small in 1 male; large in 6 cases (2 males and 4 females); small in 1 male. In 25 cases of Monomania of suspicion (17 males and 8 females), it was very large or very small in none; large in 8 cases (5 males and 3 females); small in 5 cases (4 males and 1 female). In 4 cases of Religious Insanity (2 of either sex), it was very large or very small in none; large in 3 cases (1 male and 2 females); small in none. Table III. shows that, of 2 cases in which it was very large, the actual character was apparently corroborative in both; of 3 in which it was very small, the character furnished confirmatory evidence in 1, and opposed evidence in the other. These statistics do not bear out Combe's assertion (p. 35), that when there is a "morbid dwelling on internal emotions and ideas, to the neglect of external impressions," we should find, or expect to find, an abnormality of size in the organ of Concentrativeness.

Adhesiveness.

4. *Adhesiveness.*—Table I. shows that it was very large in 1 patient of either sex; large in 42 males and 45 females; and small in 6 patients of either sex. Its development was therefore about equal in the two sexes, though Combe remarks (p. 35), "It is generally large in women." Table III. shows that, of 2 cases in which it was very large, the real character was apparently confirmatory in both.

Combativeness.

5. *Combativeness.*—Table I. shows that it was very large or very small in no patient; large in 30 cases (16 males and 14 females); small in 23 cases (12 males aud 11 females). Table II. shows that, in 19 Suicides (7 males and 11 females), it was moderate in all the males; large in 2; moderate in 9; and small in 1 female. In 10 Homicides (5 of either sex), it was moderate in all the males; large in 3; and moderate in 2 females. Of 14 Destructive patients (6 males and 8 females), it was moderate in 5; and small in 1 male; large in 2, moderate in 5, and small in 1 female; very large or very small in none. Of 33 Contentious or quarrelsome cases (13 males and 20 females), it was very

large or very small in none; large in 3 cases (1 male and 2 females); and small in 2 females. Of 30 violent and noisy cases (16 males and 14 females), it was very large or very small in none; large in 5 cases (2 males and 3 females); small in 2 cases (1 of either sex). "When Combativeness is deranged, we have a violent and noisy, and often dangerous patient," says Chambers (p. 357): "love of contention, and tendency to provoke and assault," says Combe (p. 35). So far as "derangement" can be judged of by increase or diminution in the size of an "organ," these statements are not borne out by the foregoing statistics; for, in the first place, for instance, there was no case in which Combativeness was either very large or very small, and yet there were no less than 30 "violent and noisy" patients; and, in the second place, in these 30 patients, the organ in question was moderate in 23, large in 5, and small in 2.

Destructiveness.

6. *Destructiveness.*—Table I. shows that it was very large in 1 female; very small in no patient; large in 70 cases (39 males and 31 females); small in 10 cases (5 of either sex). Table II. shows that, in 19 Suicides (7 males and 12 females), it was very large or very small in none; large in 8 cases (3 males and 5 females); small in 1 female. In 10 Homicides (5 of either sex), it was very large or very small in none; large in 7 cases (4 males and 3 females); small in none. In 3 cases of Puerperal Mania, it was large in 1 only. Table III. shows that, in the only case in which it was very large, the patient's actual character was diametrically opposed. "In all murderers this organ is found large. In Gottfriede, who poisoned her husbands, children, mother, and friends, it is marked with great prominence and distinctness. In Suicides it is generally very conspicuous; and in the skull of a burglar, who signalised his many robberies by cruel violence, it is enormous."—[Smith, p. 110]. Derangement of this organ, says Combe (p. 35), is marked by "cruelty, desire to torment, tendency to passion, rage, harshness, and severity in speech and writing." These statements are not borne out by the foregoing or following statistics.

Alimentiveness and Love of Life.

7. *Alimentiveness and Love of Life*—Table I. shows that it was very large in 1 male; very small in no case; large in 26 cases (12 males and 14 females); small in 25 cases (19 males and 6 females). Table III. shows that the actual character of the only case in which it was very large furnishes no confirmatory evidence. "Observations," says Broussais, "have been made upon Suicides. It has been found that those, who kill themselves without hesitation, have this part of the Brain extremely depressed. M. Dumoustier has gathered a sufficient number of facts upon the subject to warrant him, as he thinks, in stating that the organ is feebly developed in gratuitous suicides, and remarkably protuberant in those, whose whole thoughts run upon self-preservation, who are profound egotists, and are occupied only with themselves."—[Smith, p. 118]. Our results may perhaps be held by

phrenologists to countenance this assertion, in so far as, of 19 Suicides, Alimentiveness was found neither prominent nor depressed in 15; while in 2 it was large, and in an equal number small.

Secretiveness. 8. *Secretiveness* was large in the only case of Kleptomania presently in the Institution. Table I. shows that it was very large or very small in no patient; large in 57 cases (35 males and 22 females); small in 7 cases (3 males and 4 females). Table II. shows that, in 25 cases of Monomania of suspicion (17 males and 8 females), it was very large or very small in none; large in 10 cases (7 males and 3 females); small in none. The latter facts may be held by phrenologists corroborative of the statement in Chambers (p. 358), that "the organ is subject to disease, and the cunning insane are difficult to deal with. Disease here leads to the belief in plots and conspiracies, formed against the patient, so common with the insane."

Acquisitiveness. 9. *Acquisitiveness.*—Table I. shows that it was very large in 5 males; very small in no case; large in 58 cases (43 males and 15 females); small in 16 cases (8 of either sex). Table III. shows that in none of the cases, in which it was very large, was there any evidence in the actual character of the individual of morbid acquisitiveness,—3 of the 5 cases being patients in advanced stages of Chronic Dementia, whose existence was in great measure vegetative. Like Secretiveness, it was large in the only case of Kleptomania presently in the Institution. Our data are insufficient to enable us either to confirm or contradict the following statement in Chambers (p. 358):—"The organ is often diseased; so that those who are insane in this faculty, without any temptation arising from their circumstances—which are often above want, and even prosperous,—pilfer everything of value, and often of no value, which comes in their way. Again, many incorrigible thieves in lower life, on whom the punishments of the law fail to have any effect, are diseased in this organ. Phrenology thus demonstrates that many supposed criminals are in truth *patients*, and ought to be treated as such."

Constructiveness. 10. *Constructiveness.*—Table I. shows that it was very large in no case; large in 18 cases (9 of either sex); small in 62 cases (31 of either sex); and very small in 2 males. Here the number of cases in which it was *small* was remarkable. Table III. shows that, in the 2 cases in which it was very small, the actual character of the patient afforded apparently confirmatory evidence.

Self-esteem. 11. *Self-esteem.*—Table I. shows that it was very large in 5 cases (4 males and 1 female); large in 56 cases (30 males and 26 females); small in 27 cases (9 males and 18 females); very small in no case. Table II. shows that, in 12 cases of Monomania of pride or vanity (7 males and 5 females), it was very large in 1 male; large in 7 cases (3 males and 4 females); small in 2 males. In 21 cases of Melancholia (5 males and 16 females), it was very large in 1 male; very small

in none; large in 4 patients (2 of either sex); small in 1 female. In 2 males labouring under General Paralysis, it was large in 1, and moderate in the other. Table III. shows that, of the 5 cases in which it was very large, the actual character was apparently confirmatory in 3. "Self-esteem," says Chambers, "is found in the insane perhaps more than any other faculty, and there shows itself in extravagant notions of self-importance. Such maniacs fancy themselves kings, emperors, and even the Supreme Being. The organ is generally larger in men than in women, and more men are insane from pride than women" (p. 359). The assertion first quoted, and similarly worded statements evidently proceed on the assumption that a single faculty may be diseased—a phenomenon which we have already shown (p. 33), never occurs. The assertion first quoted also appears somewhat antagonistic or contradictory to that quoted from Smith in regard to Amativeness.—[*Vide* p. 34]. This is one of many instances we might cite in illustration of the fact that phrenologists are not quite at one as to the propositions of their science, which is anything, therefore, rather than an *exact* one. Table I. shows that 4 other organs were very large in a greater number of cases than Self-esteem, and 4 in an equal number; also, that no less than 15 other organs were large in a greater number of cases. These statistics are, therefore, quite opposed to the statement of Chambers first quoted; and our whole experience contradicts the idea that patients, who imagine themselves kings, emperors, and Supreme Beings, are so common in the wards of Asylums as is here evidently implied. The last sentence quoted from Chambers, however, appears to agree with our statistics and experience alike.

12. *Love of Approbation.*—Table I. shows that it was very large in 1 patient of either sex; large in 96 cases (34 males and 62 females); small in 5 cases (3 males and 2 females); and very small in none. Table II. shows that, of 12 cases of Monomania of pride or vanity (7 males and 5 females), it was large in 7 (6 males and 1 female); very large, small, or very small in none. In 2 male General Paralytics, it was large in 1, and moderate in the other. Table III. shows that, in neither of the 2 cases in which it was very large, does the actual character of the patient afford decidedly positive or negative evidence. "The organ," says Chambers, "is oftener found insane in women than in men, as in women it is more active than in the other sex generally. The patients, whose love of approbation is diseased, are not solemn, haughty, and irascible, like the monarchs of self-esteem: they are generally in a bustle of display, overpowering the listener with details of their merits, their talents, their works, and even their beauty" (p. 359). A similar statement will be found in Smith (p. 141). Our statistics appear to bear out that this organ is more largely developed in women than in men. But this is not equivalent to saying it is more frequently insane or diseased in women

Love of Approbation.

than in men; for, of 84 males, there were 7 cases of Monomania of pride or vanity, while in 89 females there were only 5.

Cautiousness.

13. *Cautiousness.*—Table I. shows that it was very large in 5 males and in no females; large in 78 cases (42 males and 36 females); small in 9 cases (3 males and 6 females); and very small in none. Table II. shows that, of 21 cases of Melancholia (5 males and 16 females), it was very large in 1 male and no females; large in 10 cases (3 males and 7 females); small or very small in none. In 19 Suicides (7 males and 12 females), it was very large in 1 male and no female; large in 9 cases (4 males and 5 females); small or very small in none. In 25 cases of Monomania of suspicion (17 males and 8 females), it was very large or very small in none; large in 11 cases (8 males and 3 females); small in 1 male. Table III. shows that, of 5 males in whom it was very large, the actual character afforded confirmatory evidence in 2 only. "The organ," says Chambers (p. 360), "is often diseased, and then produces causeless dread of evil, despondency, and often suicide. In the heads of Suicides the organ is usually large, and Hope deficient, Destructiveness also being *of course* [?] large. The effect of fear, or sudden and violent excitement of Cautiousness, in producing mental derangement and all sorts of nervous disease, is well known. Practical jokes, harmlessly intended to frighten, have often fearfully overshot their aim, and produced lasting insanity." A similar statement will be found in Smith (p. 144), who says further of the organ of Cautiousness,—"It is much larger in the female than in the male head." The above statements, so far as they concern Melancholia, Suicide, and the relative size of the organ in males and females, are not borne out by our statistics. In Melancholia the organ was moderate in about as many cases as it was large; and the same holds good in regard to Suicides. Again, while it was large or very large in 47 males, it was so in only 36 females. Neither are the remarks anent Hope and Destructiveness—especially the latter—correct, according to our experience; while the expression *of course* seems to us most suspiciously to point at something like an adaptation of facts to suit theory.

Benevolence.

14. *Benevolence.*—Table I. shows that it was very large in 5 males; very small in no case; large in 72 cases (41 males and 31 females); small in 46 cases (20 males and 26 females). Table II. shows that, of 4 patients who were characterized by excessive liberality of disposition (3 males and 1 female), this organ was large in all; while in 45 patients, chiefly cases of Chronic Dementia, who were characterized by facility of disposition (29 males and 16 females), it was very large or very small in none; large in 20 cases (14 males and 6 females); and small in 16 cases (10 males and 6 females). Table III. shows that, of the 5 patients in whom it was very large, the actual character was confirmatory in only *one*. "In Insanity, Gall states, this organ is manifested by excessive liberality and profusion, and by

a desire to give away everything of which the individual is possessed. He observes that, in Idiocy, it produces good nature and harmlessness; while, where it is small, and Destructiveness large, the unfortunate is prone to fits of rage, and becomes dangerous. . . . He does not detail the evidence on which [his observations] proceed, and does not pretend that the cerebral parts, to whose action he attributes the phenomena, were examined or found diseased [!]. The profusion which he attributes to an over-action of Benevolence may proceed from general fatuity, from vanity, from small Acquisitiveness and Cautiousness, joined with general prostration of reflecting intellect; in short, from *a thousand* [!] sources, instead of that on which he founds his *conjectures*. We have the more reason to view, with the utmost distrust, Gall's observations upon this subject, when we find that he designated this organ the seat of the faculty of justice and moral obligation. While he does so, he very coolly details a great variety of facts relating to its function, totally at variance with his leading definition."—[Smith p. 149]. Here, again, phrenologists are at issue with a vengeance, and their statements are so confused and contradictory, that it need not detain us to say whether or not our statistics bear any of them out.

15. *Veneration.*—Table I. shows that it was very large in 4 males; very small in 4 cases (3 males and 1 female); large in 50 cases (24 males and 26 females); and small in 73 cases (34 males and 39 females). Here the large proportion of cases in which it was *small* is noteworthy. Table II. shows that, in 21 cases of Melancholia (5 males and 16 females), it was very large in none; very small in 1 male; large in 7 cases (2 males and 5 females); and small in 8 cases (1 male and 7 females). In 4 cases of Religious Insanity (2 of either sex), it was large in 3 (2 males and 1 female); and small in 1 female. In 56 patients having specific Delusions (33 males and 23 females), it was very large or very small in none; large in 17 cases (11 males and 6 females); and small in 26 cases (13 of either sex). Table III. shows that, of the 4 males in whom it was very large, the actual character appeared to be confirmatory in 1; and, of the 4 cases in which it was very small, no evidence of any kind was afforded by the patient's character. "So liable is the organ of Veneration to disease," says Chambers (p. 361), "that devotional exaltation is well known to be one of the *most common* forms of Insanity. The religiously insane *abound* in the Asylums. Drs Gall and Spurzheim adduce many examples, and in all of them the organ of Veneration was found large." The frequency of Religious Insanity is here, according to our experience, greatly exaggerated. Of 173 patients, only 4 could be classed in this category; and all of these even were certainly not cases of "devotional *exaltation*." Veneration.

16. *Firmness.*—Table I. shows that it was very large in 9 males; very small in no case; large in 78 cases (41 males and 37 females); and Firmness.

small in 7 cases (5 males and 2 females). Table II. shows that, in 21 cases of Melancholia (5 males and 16 females), it was very large or very small in none; large in 7 cases (3 males and 4 females); small in 2 patients (1 of either sex). Table III. shows that, of the 9 cases in which it was very large, the actual character of the patient afforded no distinct confirmatory evidence in any.

Conscientiousness.

17. *Conscientiousness.*—Table I. shows that it was very large or very small in no case; large in 22 patients (9 males and 13 females); small in 56 cases (27 males and 29 females). Table II. shows that, in 21 cases of Melancholia (5 males and 16 females), it was very large or very small in none; large in 3 females; small in 7 cases (2 males and 5 females). In 19 Suicides (7 males and 12 females), it was very large or very small in none; large in 2 females; small in 7 cases (3 males and 4 females). In 14 Destructive patients (6 males and 8 females), it was also very large or very small in none; large in 1 female; small in 3 cases (1 male and 2 females). "The organ is often found diseased," says Chambers [p. 361], "and the insanity consists in morbid self-reproach, imaginary debts, and unfounded belief in merited punishment." That Insanity, characterized as described, is not uncommon in Asylums, is a fact; but our statistics point to the organ having been *small* in the majority of patients, whereas Phrenology would imply that it should have been, or must have been, *large!*

Hope.

18. *Hope.*—Table I. shows that it was very large or very small in no case; large in 11 cases (6 males and 5 females); small in 81 cases (35 males and 46 females). The large proportion of cases in which it was *small* is here noteworthy. Table II. shows that, in 21 cases of Melancholia (5 males and 16 females), it was very large or very small in none; large in 2 females; small in 10 cases (4 males and 6 females). In 19 Suicides (7 males and 12 females), it was very large or very small in none; large in 3 cases (1 male and 2 females); small in 7 cases (3 males and 4 females). In 4 cases of Religious Insanity (2 of either sex), it was very large, large, or very small in none; small in 2 patients (1 of either sex). In 56 patients having specific Delusions (33 males and 23 females), it was very large or very small in none; large in 3 males; small in 22 cases (12 males and 10 females).

Wonder.

19. *Wonder.*—Table I. shows that it was very large in no case; very small in 1 male; large in 35 cases (12 males and 23 females); small in 51 cases (37 males and 14 females). The large proportion of cases in which it was *small* is here noteworthy. Table II. shows that, in 56 patients having specific Delusions (33 males and 23 females), it was very small in 1 male; very large in none; large in 12 cases (8 males and 4 females); small in 19 cases (14 males and 5 females). In 4 cases of Religious Insanity (2 of either sex), it was very large or very small in none; large in 1 female; and small in another female. In 2 General

Paralytic males, it was small. Table III. shows that the actual character of the only case, in which it was very small, furnishes apparently contradictory or opposed evidence. "Dr Gall," says Smith, "found, in persons addicted to the marvellous and subject to visions, a large development of that *region* of the head, *to which* he afterwards gave the name of Wonder. In the heads of Socrates, Tasso, Barry, Swedenborg, and others, who saw spectres, conversed with familiar spirits, and communed with angels, this region is of great size; and it is always to be found large in persons who are attended by spectres and the phantoms of men and other creatures or substances" (p. 163). "Veneration, Hope, and Wonder," says Combe (p. 37), "give the tendency to religion: their abuses produce superstition and belief in false miracles, in prodigies, magic, ghosts, and all supernatural absurdities." The above statistics, and especially the fact that, in a large proportion of the cases cited therefrom, the organ of Wonder was small, apparently contradict, in a measure, the aim of the quotations from Smith and Combe already given, as well as the following from Smith (p. 134):—"When Wonder is in a diseased state, how singular is it to find the Lunatic converting every circumstance to the aliment of his particular theory or hallucination, and, by some strange necromancy, turning all he touches into nutriment for the system which he has preconceived, and reconciling the most contradictory elements." That Lunatics so characterized are frequent in Asylums there is no douht; but that in them the organ of Wonder is diseased or abnormally large or small does not appear from our results.

20. *Ideality.*—Table I. shows that it was very large in no case; very small in 1 male; large in 30 patients (15 of either sex); small in 83 cases (42 males and 41 females). Here again, as is the case with the organs of Wonder, Hope, Veneration, and Constructiveness, the large number of cases in which it was *small* is remarkable. Table II. shows that, in 2 male General Paralytics, it was small: while in 8 Erotic females, it was very large or very small in none; large in 2; and small in 2. Table III. shows that the actual character of the only patient, in whom it was very small, furnishes apparently opposed evidence. If there is any truth in Phrenology, the statements of some phrenologists would incline us to predicate that, in their own heads, there ought to be a plus development of Ideality—at least, this would furnish an adequate explanation of the circumstance, which, as an accusation, not only *we* have to prefer against phrenologists generally, but which one phrenologist not unfrequently brings against another, that "*mere conjectures* are advanced sometimes as *matters of fact!*" "Gall and Vimont," says Smith (p. 170), "notice a number of cases where this organ is stated to have been only manifested when Mania had supervened; but we are not at all satisfied that the making of verses, upon

Ideality.

which they principally found, is indicative of a high endowment of Ideality." Nor are we. And it further appears to us, that the foundation of other organs and of other statements in phrenological treatises is sometimes similarly slender.

Wit or Mirthfulness.

21. *Wit or Mirthfulness.*—Table I. shows that it was very large or very small in no case; large in 42 patients (21 of either sex); small in 36 (22 males and 14 females). Table II. shows that, in 21 cases of Melancholia (5 males and 16 females), it was very large or very small in none; large in 8 cases (3 males and 5 females); small in 2 patients (1 of either sex). In 2 male General Paralytics it was large.

Individuality.

22. *Individuality.*—Table I. shows that it was very large in 7 males; very small in no case; large in 100 cases (58 males and 42 females); small in 10 cases (9 males and 1 female). The number of cases in which it was *large* is here remarkable. Table III. shows that the actual character furnished confirmatory evidence apparently in 4 out of the 7 males, in whom this organ was very large. Smith very properly mentions, as a caution in estimating the size of this organ, that it is the "chief seat of the frontal sinus in adults" (p. 186.) By external manipulation, how much of the size of the "organ" to refer to the sinus in question [which varies greatly in thickness and extent], and how much to the "easily distinguished" convolutions of the brain, which are limited to the manifestation of the phenomena of Individuality, it is for phrenologists, and not for us, to indicate!

Locality.

23. *Locality.*—Table I. shows that it was very large in 5 males; very small in no case; large in 108 cases (64 males and 44 females); small in three females. As in the case of Individuality, the number of patients in whom this organ was *large* is noteworthy. Table III. shows that, of the 5 patients in whom it was very large, the actual character yielded apparently confirmatory evidence in 4.

Relative "development" of the Propensities, Sentiments, and Intellectual Faculties.

The abstract of Table I. shows that the group of Propensities was *very large* and *large* in the greatest number of cases; the Sentiments standing next in point of development, and the Intellectual Faculties being lowest in the scale. There was a *moderate* development of the Intellectual Faculties in the largest number of cases, the Propensities coming next, and the Sentiments being lowest. As a group, the Sentiments were *small* in the greatest number of cases; the Propensities next, and the Intellectual Faculties lowest. There was a *very small* development of the Propensities in the largest number of cases; the Sentiments coming next, and the Intellectual Faculties standing lowest—being very small in no instance. While the Propensities were very large in 2·59 cases, and very small in 0·36; the Sentiments very large in 1·15, and very small in 0·22; the Intellectual Faculties were very large in 0·53, and very small *in none*. There was therefore apparently a more equable development of the Intellectual Faculties than of either the Propensities

or Sentiments,—the first-named faculties being moderate in 60·57 cases, while the Propensities were so in 44·99 cases, and the Sentimenst in 41·53. As regards the difference of the sexes, both Propensities, Sentiments, and Intellectual Faculties, were *very large* and *very small* in a greater number of males, both absolutely and relatively, than of females. The Propensities were also *large* in a greater number of males; the Sentiments slightly so; while the Intellectual Faculties were in numbers equal in the sexes, but relatively greater in the males. All three groups were *moderate* in a greater number of females than males; while all three were *small* in a greater number of males than females. These statistics would appear to point to a more equable development of the cerebral organs in the female than the male head.

"Development" of "Organs" in particular forms of Insanity.

From the abstract of Table II. it would appear that, taking the mean of the first 12 special phases or forms of Insanity, the groups of "organs," which we should expect to have been more or less implicated, were *moderate* in the greatest number of cases; *large* in the next greatest number; then *small*, *very large*, and *very small*. Taking the mean of the second section of six organs, as developed in the same phases or forms of Insanity above referred to [section 1], they were almost equally *moderate* and *large* in the sexes; in the next greatest number of cases they were *small*, then *very large*, and lastly *very small*. The general conclusion arrived at is that, in the majority of cases referred to in Table II., the organs were neither markedly *large* nor *small*; and that there was therefore no relation between the size of the said organs and the said phases or forms of Insanity. As to the different development of organs in the two sexes, in the first section the organs were *very large* in an equal number of cases; *large* in more males than females; *moderate* in about an equal number; *small* in more males than females; and *very small* in more males than females, in whom, indeed, the organs were never *very small*. In the second section, the organs were *very large*, *large*, and *moderate* in more females than males; and *small* and *very small* in more males than females, in whom, indeed, as has been already stated, no organs were *very small*.

Correspondence or non-correspondence between Phrenological analysis of Head and actual character of individual.

From the abstract of Table III. it appears that, while apparently the actual character of the patient, in some of its features more generally than as a whole, confirmed the phrenological analysis in 36 cases out of a total of 117, and the evidence which the said character furnished was seemingly directly opposed to the same analysis in 14 cases, either no evidence at all, or insufficient evidence, was yielded in 67 cases. In other words, the evidence was either opposed, absent, or insufficient more than twice as often as it was confirmatory—that is, in the proportion of 81 to 36 cases. This again points to a decided want of correspondence between the phrenological analysis and the actual character; and, like the preceding, as well as the following tables, such

results indicate the absence of any specific or constant relationship between the external size of "organs" and Insanity, either in its special features, phases, or forms, or as a whole.

Contrast between "development" of "Organs" and actual character.

Table IV. has been introduced to meet an objection that may possibly be brought against our statistics, viz.,—that by isolating the particular "organs," and giving results dependent on their absolute or actual size, very unfair deductions may be drawn. Accordingly here, in a series of cases, selected on account of their characters presenting certain peculiarities readily recognized and remembered, is given the size of *all* the organs, or at least *all* the more important or more conspicuous and easily measured "organs;" whereby phrenologists or others may judge for themselves of the relative size or "development" of the said organs, and of the connection (if any) between such size or development and the actual character of the patients. In *not one* of the 20 cases selected (10 of either sex) did the actual character correspond with what the phrenological examination of the head would have led us to expect.

Discrepant or contradictory results.

Conformation of Head.

Table V. shows that, while the head was *apparently* large in 26 cases, it was *apparently* small in 40. These figures are, however, of little value, unless compared with the actual measurements of the head given in our Report for 1858 (pp. 17, et seq.) In regard to *shape*, there are a few noteworthy points, viz.,—that the head was well formed in 39 cases, and narrow laterally in 40. The latter peculiarity does not necessarily imply diminution in size, such heads being generally longer in the antero-posterior diameter. The *forehead* was prominent, high, broad, or square, in 17 cases; low in 32; narrow in 43; sloping or receding in 36. A low, narrow, sloping forehead seems, therefore, to have predominated; but that such a conformational peculiarity does not necessarily indicate deficient mentalization is admitted by some phrenologists themselves, and is, to a certain extent, supported by the comparatively average development of the intellectual faculties, as is shown in the abstract of Table I. The *coronal* region was shallow or flattened in 57 cases, high in 25: the region of the sentiments was, therefore, more than twice as often low as high. It is supposed by some phrenologists "that when the coronal surface of the cranium is high, the individual is exalted in his morality; and that when the forehead is low, and the skull small, he is unreflecting or idiotic."—[Smith, p. 25]. None of these statements does our experience enable us to corroborate except to a very limited extent. The *occiput* was prominent, broad, or projecting, in 43 cases; narrow in 4. On the whole, it was prominent or well marked in the majority of cases. The *basal* region, lastly, or that immediately above the ears, was broad in 28 cases, and narrow in only 1.

General form.

Frontal region.

Coronal region.

Occipital region.

Basal region.

Peculiarites of conformation.

The conformational peculiarities mentioned in Table VI. are few, and

by no means remarkable: it is noteworthy, however, that they all occurred in males. The observations given in this table are corroborative, and in continuation, of those given in our Report for 1858 (pp. 16, 17, 20). In none of the 10 cases herein narrated does the conformational peculiarity throw any light upon, or exhibit any decided correspondence with, the actual character of the patient.

General results of Phrenological investigations.

The general conclusions, to which our Phrenological investigations have led us, are the following:—

1. That, while there is apparently much truth in Phrenology, especially in regard to some of its general laws or doctrines, there is unquestionably more error.
2. That, while protuberances or depressions on the skull at the site of what are pointed out by phrenologists as the "organs" of which the human brain is composed, sometimes co-exist with the manifestation or non-manifestation of the propensities, sentiments, or intellectual powers, ascribed as the functions of such "organs," there is, at least, as frequently, and probably more frequently, no confirmatory evidence; or discrepancies or contradictions abound to such an extent, that the exceptions are more numerous than the rules.
3. That the size or development of the protuberances and depressions —in other words, of the "organs" above referred to—throws no light on our knowledge of the forms and phases of Insanity.
4. That hence the confident predictions of phrenologists, as to the value of Phrenology in the diagnosis of Insanity and the classification of Psycopathies, have not been fulfilled: and
5. That, on the whole, the reporter is not yet prepared to recommend to his brother Alienistes the use of a

> . . . . . "Geometric scale
> To measure heads like casks of ale;
> All for to find out the intentions,
> Capacities, plots, and inventions,
> Of lawyers, doctors, quacks, and jugglers,
> Of soldiers, sailors, cheats, and smugglers."

Relations of Meteorology to Psycopathy.

There has long been a vague impression (for it scarcely seems to have amounted to anything more) that some degree or kind of relationship subsisted between sudden changes in the phases of Insanity and certain atmospheric conditions or changes. Epileptic fits, for instance, have been supposed to be connected (as indeed Insanity generally formerly was) with lunar changes, and paroxysms of Mania to be determined by, or dependent upon, other äerial phenomena. With a view to determine by approximation the effect or non-effect of atmospheric conditions or vicissitudes in the production of sudden changes in the phases of Insanity, daily observations were made during 127 days, or

Meteorological observations in connection with changes in phases of Insanity.

about four months, from January to May, 1859. The changes in question were noted in connection with the state of the Barometer, Thermometer, Winds, and Rain. The instances of sudden changes in the phase of disease amounted to 209 (94 in males and 115 in females). These instances, however, do not represent the number of patients affected, inasmuch as several instances repeatedly occurred in the same patient. The actual number of patients affected was 70 (25 males and 45 females); so that, taking an average, or dividing the number of instances by the number of patients, each of the latter would appear, during the first four months of 1859, to have been in an unusual state of excitement or depression nearly three times. This affords, however, an illustration of the fallacy of statistics; for this average does not represent the truth—inasmuch as some patients were only once affected, while others were much more frequently than 3 times. The greatest number of instances of change occurring in a day was 6; this happened 3 times: 5 occurred also 3 times; 4, 6 times; 3, 12 times; 2, 35 times; 1, 46 times; and none, 21 times. The average daily number was 1·645 instances. The changes herein above and after referred to consisted chiefly of paroxysmal or periodical excitement; but they include or embrace, in general terms, all marked, sudden, and apparently causeless alterations in the phases of disease, whether in the direction of exaltation or depression. The conditions or phenomena of character included in these changes will be found fully enumerated in Meteorological Table II. In addition to our own tables of observation, we have thought it right to give an additional table, reduced from the monthly returns of the Registrar-General for Scotland of Births, Marriages, and Deaths, which table shows the state of the atmosphere, with regard to pressure, temperature, humidity, and winds, in and around Perth, as well as the general state of the weather throughout Scotland, during each of the first five months of 1859. This table will be found useful, as furnishing a standard of contrast or comparison. The state of the atmosphere in regard to Ozone we have not noted,—because experiments made in 1854* have convinced us of the fallacious mode then and presently in use of testing for this body, and because we do not think the knowledge possessed by chemists of its chemical character, or of the part it plays in the economy of nature, yet sufficiently precise to render observations on its presence or absence in the atmosphere of importance to our present inquiry.

Fallacies in observations on Ozone.

Barometrical changes.

The greatest number of instances of change in the phase of disease occurred when the barometer stood between "Rain"=29°, and "Change"=29·50, viz., 80; the next largest number when between "Much Rain"=28·50, and "Rain"=29°, viz., 77; and the smallest

* *Association Medical Journal*, September 15, 1854 (p. 839), "Clinical Notes on Cholera: Meteorological Observations."

number when between "Change"=29·50, and "Fair"=30°, viz., 52. From these figures, however, it must not at once be concluded that the changes in question were most numerous and frequent in rainy weather—the contrary being the fact. Such a deduction, and similar deductions, illustrate well the fallacies and dangers of statistics; for our results elsewhere show that the greatest number of changes happened during fair, clear, bright weather.

Thermometrical changes.

The greatest number of changes occurred with a thermometer between 40° and 50°, viz., 124 cases; when it stood between 50° and 60°, there were 73 cases; while there were only 3 cases when it was below 40°, and 9 when above 60°. Neither do these figures throw any light on the subject under investigation, inasmuch as the Registrar-General's tables show that the mean temperature of the first four months of 1850 was between 40° and 50°.

Anemometrical changes.

The greatest number of cases happened with a W. wind, viz., 98—more than three times as many as during any other direction of the wind. The next largest number was with a SE. wind, viz., 32; while the numbers with a NW. and SW. wind were nearly equal, being 26 with the former, and 28 with the latter. Of the remaining instances, 11 occurred with a N. wind; 8 with an E.; 6 with a NE.; and none with a S. wind. Again, 147 cases occurred when the wind was moderate or imperceptible, and 62 when it was so great as to cause breezes, gusts, or storms. Here, as before, the Registrar's tables are of some service: they show us that, while on 37 days the wind was W. in or about Perth,—on 14 it was SE.; on 6, N.; on 9, S.; on 25, SW.; on 20, NW.; on 1, NE.; on 2, E.; and on 37 calm or variable. The same tables point out—1. That there was a considerable *amount* of wind throughout Scotland during the first four months of 1859,—its prevalent direction in January being S.SW.; in February and March W.; in April NE. and SW.; and in May SE. 2. That, with the exception of April, the mean temperature throughout Scotland was above the average during the four months in question—January, February, and March being particularly mild: and 3. That, throughout Scotland, the barometer was low in February and March.

Changes in regard to Moisture.

Seventy-eight instances of change occurred in clear, fair, or bright weather—the largest number considerably; 60 when it was dull, lowering, or cloudy, but not actually raining; 16 when it was alternately wet and fair, or changeable; and 55 when there was rain, snow, sleet, or hail. If we leave out of our calculations the number of cases during *changeable* weather, we find that 138 cases happened during *fair* weather, or nearly three times as many as during *rain* in some of its forms. Now, during the first five months of 1859, about Perth, the mean humidity was 73·60 (saturation being 100), and the average number of rainy days 13·60; while, throughout Scotland, during the first

four months (for the fifth was altogether exceptional), the rain-fall was much above the average. Bearing these facts in view—especially the preponderance of wet weather during what are generally the severest months of the winter—it would appear that our statistics point at the occurrence of the greatest number of instances of sudden change in the type or phase of Insanity during fine or fair weather—a conclusion which would certainly be at variance with our preconceived notions.

Cautions in observations on the bearings of Meteorology on Psycopathy.

In forming any estimate of the effect of atmospheric conditions or changes on the insane, it is right to bring under notice the fact that, in Asylums, in bad weather, the patients are mainly confined *in-doors*. The effect of this is, that many patients who, when constantly engaged in vigorous physical exercise in the open air in fine weather, are quite quiet and inoffensive, industrious and happy—when confined within narrow galleries, or in small day-rooms, idle, and, having no proper vent for their superabundant physical or cerebral activity, become excitable and quarrelsome, and not unfrequently, according to the nature or form of their insanity, dangerous to themselves or others. But such results have nothing directly or necessarily to do with the weather: they are due manifestly to the want of sufficient physical exercise or of suitable occupation; to compulsory association in too intimate a relationship or proximity with their fellows; and to similar circumstances. Many

Anæsthesia and Analgesia in the Insane.

cases of Chronic Dementia or Chronic Mania seem quite unaffected by, and indifferent to, all kinds of weather; cold and heat, summer sunshine or winter storm are equally unheeded. But in such patients there is generally a certain torpor of the cutaneous and other bodily functions, as well as an inertia of the faculties of the mind. In connection with this indifference to cold or heat, it is well to bear in mind the analgesia and anæsthesia, so common in certain classes or individuals of the insane. On the other hand, many of the insane—just as is the case in the sane—are extremely susceptible of atmospheric changes; and in them this susceptibility would appear connected with, or dependent on, their most sensitive nervous organization.

General results of Meteorological investigations.

The general conclusions, to which our limited Meteorological observations point, are shortly:—

1. That the insane, as a class, and *quoad* their insanity, are not more affected by atmospheric conditions or vicissitudes than the sane.
2. That certain individuals, and sometimes groups, however, who are *inter alia* characterized mostly by deficient or errant action of the functions of the skin and general nervous system, may be little or scarcely at all so affected.
3. That there is no necessary connection or constant and decided relationship between conditions of particular elements of the weather, or between particular qualities or contents of the atmosphere, and particular forms or phases of Insanity.

4. That, generally speaking, dull, rainy weather has a similar effect in depressing, and fine, sunny weather in exhilarating, the spirits in the insane as in the sane; such effect, however, being frequently indirect rather than direct, and liable to modification, from the forms or phases of mental disease.

Necessity for establishment of public Asylums for the non-pauper classes.

The past year has been fertile in evidence of the wisdom of the Directors of this Institution, in proposing to set it apart entirely for non-pauper patients.* Their enterprise and liberality will at once provide for Scotland a public Asylum or Institution for the indigent equally with the affluent insane of all classes of the community above the rank of paupers. The want of such institutions, especially for the indigent of the artizan and middle classes of society, is at present being most urgently felt and publicly expressed in England, where great efforts are being made for their establishment, either by the levying of public rates, by private subscriptions, or otherwise. In Scotland such a want is at present, and has been hitherto, little felt, because its seven chartered Asylums virtually serve all the purposes of such establishments as it is now proposed to institute in England; but the state of matters will be materially altered when six of the seven chartered Asylums in question are converted, as in all likelihood they will be in the course of a very few years, into District Pauper Asylums, of a character similar to the present County Asylums of England, or District Asylums of Ireland. We entertain little doubt that the want now so urgently felt and complained of in England will then be felt and complained of in Scotland, and perhaps, proportionally, to even a greater extent—inasmuch as there are fewer private Asylums for patients of the middle class in Scotland than in England; and we have equally little doubt that the pecuniary and other obstacles in the way of establishing public Asylums for the middle classes will not be less in Scotland than in the sister country. It is not our purpose here to add anything to the arguments already adduced by ourselves in support of the decision of the Directors as to the future mission or use of this Institution. Let us rather cite the testimony of some of the highest authorities in Britain on the management of Asylums and the treatment of the insane—testimony which materially strengthens the directorial decision above referred to.

Prospective wants of Scotland.

Murray's Royal Institution an Asylum for the non-pauper classes.

Testimony of the Earl of Shaftesbury.

The Earl of Shaftesbury, chairman of the English Lunacy Board, in his minutes of evidence before the Select Committee of the House of Commons on Lunatics, given in March, 1859,† testifies as follows:—

"That brings me to the great point, viz.,—the establishment, I will not say of public asylums, but hospitals or asylums at the public cost, for the reception of all classes of lunatic patients. I now speak with reference to that large *class of society which begins just above pauperism, and goes on to the highest in the land.* All

* *Vide* our Report for last year, p. 28, et seq.

† "Journal of Mental Science" (p. 525, et seq). July, 1859.

the difficulties in legislation arise out of that particular class [p. 525]. . . . . If you had establishments of that kind, asylums or public hospitals—I should like to say chartered asylums—you would find that they would be precisely the reverse of those I have mentioned. First of all, there would be a total absence of that motive which constitutes the vicious principle of the present licensed houses; there would be no desire or view to profit of any sort [p. 526]. . . . . It is the result of very long experience in these matters, that a large proportion of the difficulties in legislation, and almost all the complications that we have to contend with, or to obviate, arise from the principle on which these licensed houses are founded. The licensed houses are founded upon the principle of profit to the proprietor; and the consequence is, that any speculator who undertakes them, having a view to profit, is always eager to obtain patients, and unwilling to discharge them; and he has the largest motive to stint them in every possible way during the time they are under his care [p. 524]. . . . . The example which I principally should follow would be the example of Scotland. In Scotland the chartered asylums have existed for a certain number of years, and *they have been productive of the very greatest benefit* [p. 526]. . . . . I would give in the bill a permissive clause to counties for the purpose of founding these asylums, entirely for the reception of the middle class patients [p. 526]. . . . . I am quite sure that the whole system would be self-supporting, *and infinitely to the advantage of the community;* and I am certain by the establishment of such asylums as these, and by the appointment of medical men of a proper description, you will introduce that which some gentleman mentioned at the beginning of the day, an effective school of lunacy; you will have a body of persons who really will be able to devote their time and attention, uninfluenced by any of those motives which have been referred to, to look into the root of the whole thing, and establish a school of lunacy [p. 527]. . . . . Unless, in the management of lunatics, you have what the Germans call the *individualising system*, viz., that the medical man should know every patient, and see every patient, and constantly direct his attention to him, you cannot effect any great or permanent cure [p. 537]."

Principle of private speculation as applied to residences for the Insane.

Individualising system.

Testimony of Dr Conolly.

The veteran Dr. Conolly, late President of the "Association of Medical Officers of Asylums and Hospitals for the Insane,"—whose name is justly celebrated in connection with his reforms in the Hanwell Asylum, near London,—in a paper on "Residences for the Insane," * read before the "Association for the Promotion of Social Science," remarks,—The situation of persons of the class above the poor when insane,

"If their resources are very limited, is indeed pitiable. The public asylums [of England], with a few happy exceptions—[Bethlehem Hospital, St Luke's, the Hospital for the Insane near Northampton, and the Coton Hill Asylum, near Stafford],—and the private asylums where the terms are not more than can be afforded, do not offer the advantages enjoyed in the county asylums by the more fortunate pauper. *Institutions adapted to the insane of the poorer of the middle and educated classes are yet unhappily wanted* [p. 413]. . . . . As there are very few public asylums, even for persons of moderate circumstances, yet above pauperism, and none at all for the rich, those who take a sincere interest in the proper treatment of the insane, still wishing to avoid private asylums, become captivated by suggestions for richer patients being treated in detached residences, where no other

The "rich" versus the "poor" Insane.

* "Journal of Mental Science" (p. 411). April, 1859.

patient is received. The evils incurred by such arrangements are many and great, *and such indeed as to make the position of the lunatics of wealthy families inferior to that of the lunatic pauper*" [p. 415].

Dr. Bucknill, the editor of the "Journal of Mental Science," and the author of what is at once the most recent and best "Manual of Psychological Medicine," states— Testimony of Dr Bucknill.

"It is, however, my firm conviction, that, if asylums for what may be called the poor of the middle classes, and the well-to-do of the artizan classes were established, the relief that would be afforded to the overcrowded pauper asylums would be considerable. . . . . The need of asylums for the treatment of patients of small means is indeed so urgent, that, on some plea or other, there can be little doubt it will sooner or later be supplied. . . . . The difficulty of treating different classes of society under the same roof, which has led to the exclusion of private patients from every county asylum in which the experiment has been tried, and which has this year led the Visitors of the Essex Asylum to record their opinion, that 'the admission of private patients was inconvenient and inconsistent with the quiet, and with the good management of the great body of pauper lunatics,' does not appear to have been less felt in the hospitals for the insane founded for charitable purposes. If, therefore, the different classes of society do not advantageously amalgamate in asylums, it would seem to be most desirable, that all public institutions for the insane should, in practice, be devoted as exclusively as possible to the use of the class for which they are founded." * Association of "private" and "pauper" Insane.

Similar complaints and suggestions are daily "cropping out" from others of the English County Asylums. For instance, Dr Boyd, of the Somerset County Asylum, states— Testimony of Dr Boyd.

"Numerous applications have been made since the opening of this asylum, by persons of the middle class, for the reception of friends unable to pay the charges of private asylums, and for others possessing small means of their own. . . . . There is very little doubt that, if a house for private patients should be established by the Visitors in this county, it would soon become self-supporting. . . . . The intercourse of private with pauper lunatics in an asylum is not desirable: the private patient becomes discontented and renders the others so."†

Commissioner Gaskell, of the English Board of Lunacy—"whose knowledge on the whole subject of lunacy is unsurpassed" [says Dr Bucknill]—in a paper on "The Want of Better Provision for the Labouring and Middle Classes, when Attacked or Threatened with Insanity,"‡ says—for insane persons, Testimony of Commissioner Gaskell.

"Not included in the list of paupers, there is a lamentable want of proper means of care and treatment in this portion of the United Kingdom. Benevolent individuals have indeed, from time to time, endeavoured to supply the deficiency: nevertheless, the few charitable institutions scattered over the country are quite inadequate, the amount of hospital accommodation for mental affections being far below the demands made for succour and relief, presenting, as it does, a striking contrast to the Hospitals for the Insane contrasted with infirmaries and Dispensaries.

* Fourteenth Annual Report of the Devon Lunatic Asylum (pp. 6 & 7). Exeter, 1860.
† Twelfth Report of the Somerset County Lunatic Asylum (p. 16). Wells, 1860.
‡ "Journal of Mental Science" (p. 321). April, 1860.

abundant provisions made for *bodily* ailments in every district. The question naturally arises—How are the unfortunate individuals who belong to the labouring and middle classes accommodated and treated? It is too notorious that many are detained at home, causing sad disasters, confirmation of the malady, and reduction of the family to pauperism, by the expense incurred: others, again, are sent to private asylums, where, the cost of maintenance being necessarily great, a like pauperising result ensues; and, in numerous instances, admission is obtained into the county asylum, which, being strictly instituted for the reception of paupers, involves an evasion or infraction of the law. . . . . In order, therefore, to supply a great want—to diminish the number of the insane by affording available means of cure—to prevent sad disasters—to keep the independent labourer off the pauper list—to ward off permanent expense to parishes,—and to check evasion of the law, it appears incumbent on the State to supply the needed accommodation."

Certain modes of Pauperisation.

Nor is the public press silent on the same important subject. The *Saturday Review*,* in a notice of the Thirteenth Report of the English Commissioners in Lunacy, remarks—

Testimony of the public Press.

"It is upon the poorer members of the middle classes, as we pointed out in a former paper, that the burthen of mental disease weighs most heavily. . . . . We do not find, in the Report before us, any evidence that the crying want of more lunatic hospitals for the middle classes is in the way to be supplied. . . . . We have already expressed an opinion adverse to the mixing up of paying and pauper patients, and we are glad to find it shared by most of the competent witnesses examined before the Select Committee of the House of Commons, in the Blue-book of evidence lately published. But undoubtedly it is better to bring together different classes of the mentally afflicted, than to leave those who are too well off for public charity, and too poor for the ordinary private asylums, without any suitable retreats."

Example of the County of Gloucester.

The county of Gloucester has lately shown an example to the rest of England by the opening of Barnwood House, near the town of Gloucester, as a Public Asylum for non-pauper patients. We close our quotations by the following excerpt from the prospectus issued by its Managers, and from the relative letter of their Chairman†:—

"It is a *Public* Institution, for *Private* Lunatic Patients, to be conducted on the principles of treatment which have been found so successful in our county asylums—to comprise two classes.

Remunerative and Non-remunerative classes of Patients.

1. "Persons in easy circumstances, for whom superior accommodation will be afforded, for which they will be charged something less than at private asylums.

2. "Educated persons, of moderate means, who will be received at low rates, proportional to their means, by the aid of the surplus payment over cost from class 1.

"Both these classes of insane are, in fact, at present in a much worse position than the poor, who can *claim* admission to county asylums; for it is now fully ascertained, that whatever may be the comforts and luxuries which wealth can obtain for the insane in their own homes, their chances of cure there are much less than in well-managed asylums; while, where such comforts are wanting, those chances are infinitely diminished. Nor do private licensed houses, according to the opinions of those, who have the best opportunity of forming a sound judgment, afford to such

Public versus Private Asylums.

* April 14, 1860 (p. 465).

† Contained in the *Times* of 20th December, 1859.

patients all the security which is required. The principle of a speculation for private profit, applied to the care of lunatics, is in itself objectionable. . . . . The evidence before Mr Walpole's Committee on Lunatics, in the last session of Parliament, points exactly to such institutions as among the special and urgent wants of the day."—(*Prospectus*). . . . . "In the association too, in one institution, of persons afflicted by the same malady, and requiring similar treatment, whose character and habits are sufficiently on a par to render social intercourse practicable and desirable, another great principle of social good is evolved. The wealth of the rich may be made subservient to the wants of their poorer brethren, to the mutual benefit of all, and the diminution of the demands on public charity. The first step in a successful war against insanity, is to procure the early scientific treatment of the patient; and no better weapon can be offered than a well-conducted asylum, which shall prove attractive to the wealthy by its medical resources and domestic comforts, and to persons of limited means by its economy and well-considered charity, the expansiveness of which, recruited by the benefits it confers on wealth, may at once meet every case where there is a reasonable prospect of cure. . . . . In the county of Stafford, Coton Hill is a very large and successful asylum, the operations of which are conducted on the principle to which I have alluded, viz.—wealthy patients pay for their treatment and living a sum, leaving a margin of profit, which is applied to the benevolent purpose of admitting other patients at *rates reduced in proportion to their limited means.* The chartered asylums of Scotland are conducted on the same principle, and are in most successful operation."—(*Chairman's Letter*).

Association of wealthy and indigent Insane.

Minimum rates of Board.

W. LAUDER LINDSAY, M.D.

APPENDIX

TO

REPORT OF PHYSICIAN,

CONSISTING OF

STATISTICAL TABLES.

I.—GENERAL RESULTS OF THE YEAR 1859-60.

	Males.	Females	Total.
Patients admitted from 1827 to 1859, ...	601	608	1209
Males. Females. Total.			
Of these Recovered, ... 216 296 512			
„ Removed improved, ... 74 62 136			
„ „ unimproved,... 75 63 138			
„ Died, ... 138 84 222			
	503	505	1008
Patients remaining, June, 1859, ...	98	103	201
„ admitted during the year from June 1859, to June 1860, ...	24	33	57
Total number of Patients under treatment during 1859-60, ...	122	136	258
Males. Females. Total.			
Of these Recovered, ... 6 16 22			
„ Removed improved, ... 3 4 7			
„ „ unimproved, 8 6 14			
„ Died, ... 5 5 10			
	22	31	53
Patients remaining, June, 1860, ...	100	105	205

Mean daily number of Patients under treatment during 1859-60, 196·007.

II.—ADMISSIONS DURING 1859-60.

	Males. 24	Females 33	Total. 57
1.—*Age of Patients admitted.*			
Between 10 and 15 years, ...	0	1	1
„ 15 „ 20 „	2	0	2
„ 20 „ 30 „	5	7	12
„ 30 „ 40 „	8	9	17
„ 40 „ 50 „	5	5	10
„ 50 „ 60 „	3	5	8
„ 60 „ 70 „	1	6	7
2.—*Condition as to Marriage.*			
Married, ...	7	14	21
Single, ...	17	14	31
Widowed, ...	0	5	5
3.—*Occupation or position in life.*			
Book-canvasser, ...	1	0	1
Clergyman, wife of a, ...	0	1	1
Clerk in a bank, ...	1	0	1
Compositor, ...	1	0	1
Dressmaker, ...	0	1	1
Engineer, ...	1	0	1
„ , wife of an, ...	0	1	1
Farmer, wife of a, ...	0	1	1
Farm-servants or field labourers, ...	5	5	10
„ „ , wives of,	0	2	2
Gamekeepers, ...	2	0	2
Gardener, ...	1	0	1
Housekeepers, ...	0	2	2
Lodging-house keeper, ...	0	1	1
Mason, ...	1	0	1
Miller, wife of a, ...	0	1	1
Miner, wife of a, ...	0	1	1
None, ...	2	6	8
Printer, ...	1	0	1
Saddler, wife of a, ...	0	1	1
Servant, domestic, ...	0	1	1
Shoemakers, ...	3	0	3
Shopkeeper, ...	0	1	1
Smith, ...	1	0	1
Staymaker, ...	0	1	1
Tailor, ...	1	0	1
„ , wife of a, ...	0	1	1
Teacher, ...	0	1	1

II.—ADMISSIONS—[CONTINUED].

	Males.	Females	Total.
Upholsterer, wife of an, ...	0	1	1
Victual-dealer, wife of a, ...	0	1	1
Weavers, ...	2	2	4
Weaver, wife of a, ...	0	1	1
Woolspinner, ...	1	0	1
4.—Form of Insanity.			
Dementia, ...	4	2	6
Mania, Acute, ...	5	9	14
„ Chronic, ...	0	1	1
„ Kleptomania, ...	0	1	1
„ Nymphomania, ...	0	1	1
„ Puerperal Mania, ...	0	2	2
General Paralysis, ...	1	1	2
Melancholia, ...	9	12	21
Monomania, ...	5	4	9
*5.—Causes assigned.**			
Anxiety about state of wife's health, ...	1	0	1
„ family concerns, ...	0	1	1
Catamenial irregularities, ...	0	2	2
Cold, exposure to, ...	1	0	1
Congenital, ...	0	1	1
Disappointment in marriage, ...	0	1	1
Domestic unhappiness, ...	1	0	1
Excessive study, ...	1	0	1
Family leaving for America, ...	0	1	1
Fright, ...	0	2	2
Grief after death of sister, ...	0	1	1
Hereditary, ...	0	1	1
Intemperance in the use of alcoholic liquors,	1	1	2
„ „ snuff or tobacco,	0	1	1
Jealousy on part of husband, ...	0	1	1
Loss of hand by a machinery accident, ...	0	1	1
Love affairs, ...	1	0	1
Marriage of a fellow-workman, ...	1	0	1
Masturbation, ...	1	0	1
Miscarriage, and family afflictions, ...	0	1	1
None assigned or known, ...	10	9	19
Parturition, ...	0	4	4

* In Schedules of Admission. But very seldom indeed do the causes *assigned* appear to be the *real* causes of Insanity: the latter are more remote, indirect, and general, and hence come less immediately under the observation of relatives or guardians.

II.—ADMISSIONS—[Continued].

	Males.	Females	Total.
Religious excitement, ...	4	3	7
Remorse after birth of an illegitimate child,	0	1	1
Sequelæ of Cystitis, ...	1	0	1
,, Fever, ...	0	1	1
,, Small Pox, ...	1	0	1
6.—*Co-existent Physical Diseases or Deformities, &c.*			
Amputation of right hand, ...	0	1	1
Biliary derangement, ...	1	0	1
Cataract, ...	2	0	2
Cystitis, Chronic, ...	1	0	1
Debility from Abstinence from food, ...	1	3	4
,, Parturition and Lactation, ...	0	2	2
,, other causes, ...	4	3	7
Ecchymoses, ...	0	1	1
Hæmorrhoids, ...	0	1	1
Lesions of the senses of hearing, sight, & speech,	0	1	1
None, ...	14	19	33
Paralysis, ...	0	1	1
Synovitis, Chronic, ...	1	0	1
Ulcers on legs, ...	0	1	1
7.—*Duration of Insanity prior to admission.*			
Under a week, ...	2	0	2
Between 1 week and 1 month, ...	7	13	20
,, 1 and 6 months, ...	5	9	14
,, 6 ,, 12 ,, ...	1	2	3
,, 1 ,, 2 years, ...	0	2	2
,, 2 ,, 5 ,, ...	0	3	3
,, 5 ,, 10 ,, ...	3	2	5
,, 10 ,, 20 ,, ...	2	0	2
,, 20 ,, 30 ,, ...	1	0	1
,, 30 ,, 40 ,, ...	0	1	1
Congenital, ...	1	1	2
Duration unknown, ...	2	0	2
8.—*Re-admissions:* a. Frequency.*			
For Second time, ...	6	5	11
,, Third ,, ...	1	3	4

* Re-admissions into *this Asylum*. The number of relapses, or of separate attacks of Insanity, is generally, however, much greater than is here stated, the patients having been either treated at home or in other Asylums during former illnesses.

II.—ADMISSIONS—[Continued].

	Males.	Females	Total.
b. Intervals between Discharge and Re-admission.			
Between 1 and 6 months, ...	2	3	5
„ 6 „ 12 „	1	0	1
„ 1 „ 5 years, ...	2	1	3
„ 5 „ 10 „	1	3	4
„ 20 „ 30 „	1	1	2
9.—*Suicidal and Homicidal propensities.*			
Homicidal, ...	2	2	4
Suicidal, ...	3	6	9

III.—RECOVERIES DURING 1859-60.

	Males. 6	Females 16	Total. 22
1.—*Age.*			
Between 20 and 30 years, ...	1	4	5
„ 30 „ 40 „	I	5	6
„ 40 „ 50 „	2	3	5
„ 50 „ 60 „	2	3	5
„ 60 „ 70 „	0	1	1
2.—*Condition as to marriage.*			
Married, ...	3	5	8
Single, ...	3	9	12
Widowed, ...	0	2	2
3.—*Form of Insanity.*			
Mania, Acute, ...	1	3	4
„ „ , with Epilepsy, ...	0	1	1
„ â Potu, ...	1	1	2
„ , Puerperal, ...	0	2	2
Melancholia, ...	2	6	8
Monomania, ...	2	3	5
4.—*Duration of Insanity prior to admission.*			
1 week or under, ...	2	6	8
Between 1 week and 1 month, ...	1	1	2

III.—RECOVERIES—[Continued].

	Males.	Females	Total.
Between 1 and 3 months, ...	2	5	7
„ 3 „ 12 „	1	0	1
„ 1 „ 2 years, ...	0	3	3
„ 2 „ 10 „	0	1	1
5.—*Duration of treatment in Asylum.*			
3 months or under, ...	1	3	4
Between 3 and 6 months, ...	1	0	1
„ 6 „ 12 „	2	10	12
„ 1 „ 2 years, ...	1	1	2
„ 2 „ 5 „	1	2	3

The Recoveries constitute 41·50 per cent. of the Discharges [including deaths].
38·59 per cent. of the Admissions.
11·22 per cent. of the mean daily number of patients under treatment.
8.52 per cent. of the total number under treatment during the year.

IV.—DEATHS DURING 1859-60.

	Males. 5	Females 5	Total. 10
1.—*Age.*			
Between 20 and 30 years, ...	0	1	1
„ 30 „ 40 „	2	0	2
„ 40 „ 50 „	1	1	2
„ 50 „ 60 „	0	1	1
„ 60 „ 70 „	2	1	3
„ 70 „ 80 „	0	1	1
2.—*Cause of Death.*			
Bright's disease of kidneys, associated with heart disease, ...	1	0	1
Bronchitis, Senile, ...	0	1	1
Dysenteric Diarrhœa, ...	0	1	1
Gastro-enteritis, Acute, ...	1	0	1
Nervous Exhaustion, Acute, simple, ...	1	0	1

IV.—DEATHS—[Continued].

	Males.	Females	Total.
Nervous Exhaustion from Acute Mania supervening in course of General Paralysis,	1	0	1
Phthisis Pulmonalis, ...	0	2	2
Pneumonia, Acute, ...	1	1	2
3.—Duration of Residence in Asylum.			
Between 1 and 6 months, ...	0	1	1
„ 6 months and 1 year, ...	0	1	1
„ 1 and 5 years, ...	3	2	5
„ 10 „ 20 „	1	0	1
„ 20 „ 30 „	1	1	2
4.—Form of Insanity.			
Dementia, ...	3	0	3
General Paralysis, ...	2	0	2
Mania, Chronic, ...	0	3	3
Melancholia, ...	0	2	2

The Deaths constitute 18·86 per cent. of the Discharges.
17·54 „ of the Admissions.
5·10 „ of the mean daily number of patients under treatment.
3·87 „ of the total number under treatment during the year.

PHRENOLOGICAL TABLES.

I.—*Showing the external size or "development" of the several Cerebral "organs," recognized by Phrenologists, in* 173 *Patients (*84 *males and* 89 *females).*

		84 Males.					89 Females.				
		Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
	1.—*Propensities common to man and the lower animals.*										
Animal Nature.	Amativeness,	3	54	18	9	...	3	45	31	10	...
	Philoprogenitiveness,	22	42	20	...	...	18	57	14	...	...
	Concentrativeness,	2	35	24	21	2	...	45	30	13	1
	Inhabitiveness,	...	4	67	11	2	...	...	87	1	1
	Adhesiveness,	1	42	35	6	...	1	45	37	6	...
	Combativeness,	...	16	56	12	...	...	14	64	11	...
	Destructiveness,	...	39	40	5	...	1	31	52	5	...
	Alimentiveness and love of life,	1	12	52	19	...	...	14	69	6	...
	Secretiveness,	...	35	46	3	...	...	22	63	4	...
	Acquisitiveness,	5	43	28	8	...	...	15	66	8	...
	Constructiveness,	...	9	42	31	2	...	9	49	31	...
	2.—*Sentiments—a. common to man and the lower animals.*										
Moral Nature.	Self-esteem,	4	30	41	9	...	1	26	44	18	...
	Love of Approbation,	1	34	46	3	...	1	62	24	2	...
	Cautiousness,	5	42	34	3	...	...	36	47	6	...
	b. Peculiar to man.										
	Benevolence,	5	41	18	20	...	...	31	32	26	...
	Veneration,	4	24	19	34	3	...	26	23	39	1
	Firmness,	9	41	29	5	...	...	37	50	2	...
	Conscientiousness,	...	9	48	27	...	...	13	47	29	...
	Hope,	...	6	43	35	...	...	5	38	46	...
	Wonder,	...	12	34	37	1	...	23	52	14	...
	Ideality,	...	15	26	42	1	...	15	33	41	...
	Sentiment of the Beautiful in the fine arts,	...	6	71	7	...	...	1	87	1	...
	Wit or Mirthfulness,	...	21	41	22	...	...	21	54	14	...
	Imitation,	...	19	45	20	...	...	27	54	8	...

TABLE I.—[Continued].

	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
3.—*Intellectual Faculties—* *a. Perceptive.*										
Intellectual Nature. Individuality	7	58	10	9	...	...	42	46	1	...
Form,	...	4	80	...	...	...	1	88	...	...
Size,	...	1	82	1	...	...	1	88	...	...
Weight or Resistance,	...	1	83	...	...	...	...	88	1	...
Colouring,	...	1	83	...	...	...	1	88	...	...
Locality,	5	64	15	...	...	...	44	42	3	...
Number,	...	5	77	2	...	...	6	83	...	...
Order,	...	20	62	2	...	...	28	61	...	...
Eventuality,	...	9	41	34	...	...	28	51	10	...
Time,	1	26	43	14	...	...	16	57	16	...
Tune,	1	26	40	16	1	...	42	37	10	...
Language,	...	1	83	...	...	...	1	88	...	...
b. Reflective.										
Comparison,	...	20	48	16	...	...	19	52	18	...
Causality,	1	38	39	6	...	...	45	39	5	...

ABSTRACT OF TABLE I.

	Males.					Females.					Mean of both Sexes.				
	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
1. Propensities,	3·09	30·09	38·90	11·36	0·54	2·09	27·00	51·09	8·63	0·18	2·59	28·54	44·99	9·99	0·36
2. Sentiments,..	2·15	23·07	38·07	20·30	0·38	0·15	24·08	45·00	16·92	0·07	1·15	23·57	41·53	18·61	0·22
3. Intellectual Faculties,	1·07	19·57	56·14	7·14	0·07	0·00	19·57	65·00	4·78	0·00	0·53	19·57	60·57	5·96	0·00

II.—*Showing the size or "development" of certain Cerebral "organs" in particular phases or forms of Insanity.*

	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
SECTION I.										
1.—*Melancholia*—21 cases (5 males and 16 females).										
Hope,	...	...	1	4	...	...	2	8	6	...
Concentrativeness,	1	2	1	1	...	...	7	9	...	...
Conscientiousness,	...	...	3	2	...	...	3	8	5	...
Alimentiveness and love of life,	...	...	4	1	...	...	2	13	1	...
Veneration,	...	2	1	1	1	...	5	4	7	...
Firmness,	...	3	1	1	...	...	4	11	1	...
Cautiousness,	1	3	1	...	...	...	7	9	...	...
Wit or Mirthfulness,	...	3	1	1	...	...	5	10	1	...
Self-esteem,	1	2	2	...	...	...	2	13	1	...
2.—*Suicides*—19 cases (7 males and 12 females).										
Alimentiveness and love of life,	...	...	6	1	...	...	2	9	1	...
Destructiveness,	...	3	4	...	...	...	5	5	2	...
Conscientiousness,	...	...	4	3	...	...	2	6	4	...
Cautiousness,	1	4	2	...	...	...	5	7	...	...
Combativeness,	...	...	7	...	...	...	2	9	1	...
Concentrativeness,	1	2	2	2	...	...	5	7	...	...
Hope,	...	1	3	3	...	...	2	6	4	...
3.—*Homicides*—10 cases (5 of either sex).										
Destructiveness,	...	4	1	...	...	...	3	2	...	...
Combativeness,	...	...	5	...	...	...	3	2	...	...
4.—*Monomania of Suspicion* 25 cases (17 males and 8 females).										
Secretiveness,	...	7	10	...	...	...	3	5	...	...
Concentrativeness,	...	5	8	4	...	...	3	4	1	...
Cautiousness,	...	8	8	1	...	...	3	5	...	...
5.—*Monomania of Pride or Vanity*—12 cases (7 males and 5 females).										
Self-esteem,	1	3	1	2	...	...	4	1	...	...
Love of Approbation,	...	6	1	...	...	...	1	4	...	...
Concentrativeness,	...	2	3	1	1	...	4	1	...	...
6.—*Insanity marked by exaltation or depression of the Religious Sentiments*—4 cases (2 of either sex).										
Veneration,	...	2	...	...	...	...	1	...	1	...
Concentrativeness,	...	1	1	...	...	...	2	...	...	...
Hope,	...	...	1	1	...	...	...	1	1	...
Wonder,	...	...	2	...	...	...	1	...	1	...

TABLE II.—[Continued].

	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
7.—*General Paralysis*—(2 males).										
Self-esteem,	...	1	1	...	...	...	...	...	...	...
Love of Approbation,	...	1	1	...	...	...	...	...	...	...
Ideality,	...	...	...	2	...	...	...	...	...	...
Wonder,	...	...	...	2	...	...	...	...	...	...
Wit or Mirthfulness,	...	2	...	...	...	...	...	...	...	...
Comparison,	...	1	1	...	...	...	...	...	...	...
Causality,	...	1	1	...	...	...	...	...	...	...
8.—*Insanity marked by the existence of Specific Delusions*—56 cases (33 males and 23 females).										
Wonder,	...	8	10	14	1	...	4	14	5	...
Concentrativeness,	2	13	11	6	1	...	11	8	4	...
Hope,	...	3	18	12	...	...	...	13	10	...
Veneration,	...	11	9	13	...	...	6	4	13	...
9.—*Puerperal Mania*—(3 females).										
Philoprogenitiveness,	..	..	..	..	..	..	3	..	..	..
Adhesiveness,	..	..	..	..	..	..	3	..	..	..
Secretiveness,	..	..	..	..	..	..	2	1	..	..
Alimentiveness and love of life,	..	..	..	..	..	..	..	3	..	..
Combativeness,	..	..	..	..	..	..	2	1	..	..
Destructiveness,	..	..	..	..	..	..	1	2	..	..
10.—*Insanity marked by great destructiveness of clothing, furniture, glass, &c.*—14 cases (6 males and 8 females).										
Destructiveness,	..	2	3	1	..	..	3	4	1	..
Combativeness,	..	..	5	1	..	..	2	5	1	..
Concentrativeness,	..	..	3	3	..	..	4	2	2	..
Conscientiousness,	..	..	5	1	..	..	1	5	2	..
11.—*Erotomania*—(8 females).										
Amativeness,	..	..	..	..	..	1	5	1	1	..
Philoprogenitiveness,	..	..	..	..	..	1	5	2	..	..
Ideality,	..	..	..	..	..	..	2	4	2	..
Concentrativeness,	..	..	..	..	..	..	4	2	2	..
12.—5 *Females who show a marked partiality for Dolls.*										
Amativeness,	..	..	..	..	..	..	4	1	..	..
Philoprogenitiveness,	..	..	..	..	..	3	1	1	..	..
13.—*Masturbators*—6 cases (5 males and 1 female).										
Amativeness,	..	4	1	..	..	..	1	..	..	..
Philoprogenitiveness,	..	5	..	..	..	..	..	1	..	..

TABLE II.—[Continued].

	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
Section II.										
1.—*Amativeness.*										
In Erotomania (8 females),....	..	..	..	..	..	1	5	1	1	..
In Masturbators — 6 cases (5 males and 1 female), ...	..	4	1	..	..	..	1	..	..	..
In 5 Females who show a marked partiality for Dolls, ...	..	..	..	..	..	..	4	1	..	..
2.—*Philoprogenitiveness.*										
In Erotomania (8 females),....	..	..	..	..	..	1	5	2	..	..
In Masturbators — 6 cases (5 males and 1 female),.....	..	5	..	..	..	..	..	1	..	..
In 5 Females who show a marked partiality for Dolls, ...	..	..	..	..	..	3	1	1	..	..
In 6 Females who show a marked anxiety about their own or other people's Children, ...	..	..	..	..	..	2	3	1	..	..
In Puerperal Mania (3 females),	..	..	..	..	..	..	3	..	..	..
3.—*Concentrativeness.*										
In Melancholia — 21 cases (5 males and 16 females),.....	1	2	1	1	..	..	7	9	..	..
In Suicides—19 cases (7 males and 12 females),.....	1	2	2	2	..	..	5	7	..	..
In Destructive Patients — 14 cases (6 males and 8 females),	..	..	3	3	..	..	4	2	2	..
In Patients having Specific Delusions—56 cases (33 males and 23 females), ...	2	13	11	6	1	..	11	8	4	..
In Erotomania (8 females),....	..	..	..	..	..	..	4	2	2	..
In Monomania of Pride or Vanity —12 cases (7 males and 5 females), ...	..	2	3	1	1	..	4	1	..	..
In Monomania of Suspicion—25 cases (17 males and 8 females),	..	5	8	4	..	..	3	4	1	..
In Religious Insanity—4 cases (2 males and 2 females),....	..	1	1	..	..	..	2	..	..	..
4.—*Combativeness.*										
In 33 Contentious or Quarrelsome Patients (13 males and 20 females), ...	..	1	12	..	..	..	2	16	2	..
In 30 Violent or Noisy Patients (16 males and 14 females), ..	..	2	13	1	..	..	3	10	1	..
In 14 Destructive Patients (6 males and 8 females), ...	..	..	5	1	..	..	2	5	1	..
In 19 Suicidal Patients (7 males and 12 females), ...	..	..	7	..	..	..	2	9	1	..
In 10 Homicidal Patients (5 males and 5 females), ...	..	..	5	..	..	..	3	2	..	..

TABLE II.—[Continued].

	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
5.—Destructiveness.										
In 19 Suicidal Patients (7 males and 12 females), ...	..	3	4	..	..	..	5	5	2	..
In 10 Homicidal Patients (5 males and 5 females), ...	..	4	1	..	..	..	3	2	..	..
In Puerperal Mania (3 females),	..	..	..	..	..	..	1	2	..	..
6.—Benevolence.										
In 4 Patients characterized by excessive liberality (3 males and 1 female), ...	..	3	..	..	..	..	1	..	..	..
In 45 Patients characterized by facility of temper, chiefly cases of Chronic Dementia (29 males and 16 females), ...	..	14	5	10	..	..	6	4	6	..

ABSTRACT OF TABLE II.

	Males.					Females.					Mean of both Sexes.				
	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.	Very Large.	Large.	Moderate.	Small.	Very Small.
Section I.															
1. Melancholia, ...	0·33	1·66	1·66	1·22	0·11	0·00	4·11	9·44	2·44	0·00	0·16	2·88	5·55	1·27	0.00
2. Suicides, ...	0·28	1·42	4·00	1·28	0·00	0·00	3·14	7·00	1·57	0·00	0·14	2·28	5·50	1·42	...
3. Homicides, ...	0·00	2·00	3·00	0·00	0·00	0·00	3·00	2·00	...	...	...	2·50	2·50	...	...
4. Monomania of Suspicion, ...	...	6·66	8·66	1·66	...	...	3·00	4·66	0·33	...	...	4·83	6·66	0·99	...
5. Monomania of Pride or Vanity, ...	0·33	3·66	1·66	1·00	0·33	...	3·00	2·00	...	...	0·16	3·33	1·83	0·50	0·16
6. Religious Insanity, ...	...	0·75	1·00	0·25	...	...	1·00	0·25	0·75	...	...	0·87	0·62	0·50	...
7. General Paralysis (*only in Males*), ...	...	0·85	0·57	0·57	...	...	...	...	...	...	...	...	...	...	...
8. Delusionists, ...	0·75	8.75	12·00	11·25	...	...	5·25	9·75	8·00	...	0·37	7·00	10·87	9·62	...
9. Puerperal Mania (*only in Females*), ...	...	...	...	...	...	...	1·83	1·66	...	...	...	...	...	...	...
10. Destructives, ...	...	0·50	4·00	1·50	...	...	2·50	4·00	1·50	...	...	1·50	4·00	1·50	...
11. Erotomania (*only in Females*), ...	...	...	...	...	...	0·50	4·00	2·25	1·25	...	...	...	...	...	...
12. Patients showing a marked partiality for Dolls (*only in Females*), ...	...	...	...	...	...	1·50	2·50	1·00	...	...	...	...	...	...	...
13. Masturbators, ...	...	4·50	0·50	...	...	...	0·50	0·50	...	...	...	2·50	0·50	...	...
Section II.															
1. Amativeness, ...	...	1·33	0·33	...	...	0·33	2·00	0·33	0·33	...	0·16	1·66	0·33	0·16	...
2. Philoprogenitiveness, ...	...	1·00	...	...	...	1·20	2·00	1·00	...	...	0·60	1·50	0·50	...	...
3. Concentrativeness, ...	0·50	3·12	3·62	2·12	0·25	...	5·00	4·12	1·12	...	0·25	4·60	3·87	1·62	0·12
4. Combativeness, ...	...	0·60	8·20	0·40	...	...	2·40	8·40	1·00	...	...	1·50	8·30	0·70	...
5. Destructiveness, ...	...	2·33	1·66	...	...	...	3·00	3·00	0·33	...	...	2·66	2·33	0·16	...
6. Benevolence, ...	...	8·50	2·50	5·00	...	...	3·50	2·00	3·00	...	...	6·00	2·25	4·00	...
1. Mean of the first 13 groups, ...	0·16	3·07	3·70	1·87	0·04	0·16	2·82	3·71	1·32	0·00	0·09	3·07	4·22	1·75	0·01
2. Mean of the second 6 groups, ...	0·08	2·81	2·72	1·26	0·04	0·25	2·93	3·14	0·96	0·00	0·16	2·98	2·93	1·10	0·02

III.—*Showing the actual character of the Patients, in whom certain Cerebral "organs" were found either "very large" or "very small."*

Form of Insanity.	M.	F.	Actual Character.
			I.—*Amativeness*—very large in 6 cases (3 males and 3 females).
1. Chronic Dementia.	s.		Was originally sent to the Asylum in consequence of having forced his way into a nobleman's mansion in order to abduct the said nobleman's daughter, for whom he had conceived a passion. A soliloquizer: it is supposed that his mutterings have reference to his "sweetheart," of whom he occasionally speaks, but they are mostly in Gaelic, and unintelligible to the Reporter.
2. Do.	m.		Pays marked attention to the fair sex, being always ready to do kindly little offices for them. Has children, but never speaks of them unless disparagingly.—*Vide* II. 15.
3. Do.	s.		Existence vegetative; taciturn, indolent, and apathetic; expresses no desires; shows no wants.
4. Do.		s.	Was engaged in some liaison before admission; is of facile disposition; and, were she at large, would probably allow her animal propensities to predominate over her moral and intellectual nature.—*Vide* VI. 1.
5. Erotomania.		s.	Believes herself engaged to a clergyman; lascivious in look and conduct.
6. Chronic Mania.		m.	Has a daughter in the Asylum, but, though associating with her daily, generally takes no notice of her.
			II.—*Philoprogenitiveness*—very large in 40 cases (22 males and 18 females).
1. Monomania of Suspicion.	m.		Has delusions as to his wife's fidelity, and hence has threatened violence towards her.—*Vide* XIII. 3.
2. General Paralysis.	m.		Is affected by the occasional visits of his wife and children, but seldom refers to them in absence.

TABLE III.—[Continued].

Form of Insanity.	M.	F.	Actual Character.
3. Suicidal Melancholia.	m.		Maintains an affectionate and regular correspondence with his wife.—*Vide* XI. 1.
4. Monomania of Vanity.	m.		Most indifferent to his wife and children, who are extremely attentive to him.—*Vide* III. 3, IV. 2.
5. Chronic Dementia.	s.		Existence vegetative; childish, taciturn, indolent, and apathetic; shows neither wants nor wishes.—*Vide* XII. 3
6. Do.	s.		Do. *Vide* XII. 4.
7. Do.	s.		Do. *Vide* XIV. 3.
8. Do.	s.		Do. *Vide* XIV. 4.
9. Do.	s.		Do.
10. Do.	s.		Do.
11. Chronic Mania.	s.		No evidence of the existence of animal propensities.—*Vide* III. 2, V. 1.
12. Chronic Dementia.	s.		Do. *Vide* IX. 2.
13. Do.	s.		Do.
14. Do.	s.		Do.
15. Do.	m.		*Vide* I. 2, XVIII. 2.
16. Do.	s.		No evidence of the existence of animal propensities.
17. Do.	s.		Do.
18. Do.	m.		Do.
19. Do.	s.		Do.
20. Suicidal Melancholia.	s.		Do. *Vide* X. 2.
21. Monomania of Pride.	s.		Do. *Vide* XIII. 2.
22. Acute Mania.	s.		Do. *Vide* III. 4, IV. 1.
23. Chronic Dementia.		m.	Conduct and conversation obscene; fond of dolls and childrens' playthings; has children, of whom she never speaks; totally indifferent to the news of her husband's death.
24. Chronic Mania.		m.	Conduct and conversation obscene; fond of dolls and playthings.
25. Do.		m.	Made frequent and anxious inquiries for her children, from whom she had been long separated; at variance with her husband, from whom she had been long estranged.
26. Melancholia—Chronic Dementia.		w.	Corresponds regularly and affectionately with her children.—*Vide* XI. 2.

TABLE III.—[Continued].

Form of Insanity.	M.	F.	Actual Character.
27. Erotomania—Chronic Dementia.		s.	Greatly attached to a doll, which she fondles most carefully night and day; believes it would become alive did she only know how to feed it.
28. Do.		s.	Conduct and conversation obscene.
29. Chronic Dementia.		s.	No evidence of the predominance of animal propensities.
30. Do.		s.	Do.
31. Do.		s.	Do.
32. Melancholia.		s.	Do.
33. Acute Mania.		s.	Do.
34. Melancholia.		s.	Do.
35. Do.		m.	Much affected by the occasional visits of her husband and children.
36. Chronic Mania.		w.	Never alludes to her children; utterly indifferent to the news of her husband's death.
37. Suicidal Melancholia.		w.	Has a son in the Asylum, whom she occasionally expresses a desire to see. Her illness was said to have been brought on by the intelligence of the death of a daughter in another Asylum, and by her not being permitted to go to minister to her comforts during her latter moments.
38. Chronic Mania.		w.	Never speaks of her children; and, though she recognized her son on the occasion of a visit by him, she took no further notice of him.
39. Do.		w.	Has numerous delusions regarding a favourite daughter, believing that she is confined in dungeons in this Asylum for the most infamous purposes—that she is frequently tortured, ravished, &c.
40. Chronic Dementia.		s.	Writes occasionally and affectionately to a son.
			III.—*Concentrativeness—a.* very large in 2 males.
1. Suicidal Melancholia.	s.		A good workman, but unstable and capricious, seldom working more than two days consecutively; has repeatedly attempted both suicide and escape. In these attempts he has been quiet, cun-

TABLE III.—[CONTINUED].

Form of Insanity.	M.	F.	Actual Character.
			ning, patient, and persevering; has been found furtively sharpening tools, apparently for suicidal purposes: the form of disease is now passing into *Mania*.—*Vide* VIII. 2.
2. Chronic Mania.	s.		Has most persistent delusions regarding several of the officers and his fellow-patients, as well as regarding several articles of furniture in the Institution.—*Vide* II. 11, V. 1.
			b. very small in 3 cases (2 males and 1 female).
3. Monomania of Vanity.	m.		Has devoted himself for a series of years to the composition of what he regards a most important literary undertaking, which will extend over several bulky volumes; takes no pleasure in any other species of occupation.—*Vide* II. 4, IV. 2.
4. Acute Mania.	s.		A good workman, but unstable and capricious.—*Vide* II. 22, IV. 1.
5. Chronic Dementia.		s.	No evidence; existence vegetative.—*Vide* IV. 3.
			IV.—*Inhabitiveness*—very small in 3 cases (2 males and 1 female).
1. Acute Mania.	s.		Left his native village, where he was engaged in a comfortable handicraft, to enlist as a soldier.—*Vide* II. 22, III. 4.
2. Monomania of Vanity.	m.		Has no desire to return home or to leave the Asylum, but frequently gives his wife the most absurd advices as to her changes of residence.—*V*. II. 4, III. 3, XIII. 1.
3. Chronic Dementia.		s.	No evidence; existence vegetative.—*Vide* III. 5, XIV. 8.
			V.—*Adhesiveness*—very large in 2 cases (1 male and 1 female).
1. Chronic Mania.	s.		Has a variety of peculiarities of conduct, connected apparently with delusions which are less conspicuous—such as breathing continuously on pieces of coal, constantly carrying pieces of bread or cold meat in his hands, &c.—*Vide* II. 11, III. 2.

TABLE III.—[CONTINUED].

Form of Insanity.	M.	F.	Actual Character.
2. Erotomania—Chronic Dementia.		s.	Appears to labour under delusions connected with her animal propensities, which are markedly strong.
			VI.—*Destructiveness*—very large in 1 female.
1. Chronic Dementia.		s.	Benevolent, obliging, childish, and harmless; makes a most attentive nurse to her sick companions; takes a great interest in all her fellows; formerly kept a childrens' school, and was apparently much esteemed.—*Vide* I. 4.
			VII.—*Alimentiveness.*—very large in 1 male.
1. Chronic Mania—Kleptomania.	s.		Fond of the good things of the table, but by no means a glutton.—*Vide* XVI. 1.
			VIII.—*Acquisitiveness*—very large in 5 males.
1. General Paralysis.	m.		Amassed some money as a merchant.
2. Suicidal Melancholia.	s.		*Vide* III. 1.
3. Chronic Dementia.	s.		Existence vegetative.—*Vide* XV. 8.
4. Do.	s.		Do.
5. Do.	s.		Do.
			IX.—*Constructiveness*—very small in 2 males.
1. Monomania of Vanity.	m.		A mason, but by no means a skilful one; can do such simple work as pointing walls comparatively well; undertook the construction of some pig-styes, which, when finished, were found to be in opposition to all rules of the plummet and of perspective; childishly fond of playthings—adorning his hair and beard with ribbons, pieces of metal, buttons, or trinketry.—*Vide* X. 1.
2. Chronic Dementia.	m.		Was at one time a tradesman in good employ; neglected his business for politics; is now suited only for the simplest mechanical work in the garden or at the

TABLE III.—[CONTINUED].

Form of Insanity.	M.	F.	Actual Character.
			pump; is devoid of all ingenuity.—*Vide* II. 12, XIX. 4.
			X.—*Self-esteem*—very large in 5 cases (4 males and 1 female).
1. Monomania of Vanity.	m.		Thanks God that he is not as other men; holds aloof from his fellows, whom he corrects, chastises, and despises; boasts of his superior sanctity, and devotes a large portion of his time to private Bible reading and prayer; but is not himself exempt from the weaknesses, faults, or crimes, which in others he sternly rebukes.—*Vide* IX. 1, XXI. 2.
2. Suicidal Melancholia.	s.		Somewhat haughty and proud; but no other evidence.—*Vide* II. 20, XIII. 5.
3. Monomania of Suspicion.	m.		No evidence.
4. Chronic Mania.	s.		Do. *Vide* XV. 4.
5. Do.		s.	Imperious, haughty, and turbulent; believes herself to be a clergyman's wife [she being really a pauper], and becomes most indignant and outrageous when addressed by her maiden name.
			XI.—*Love of Approbation*—very large in 2 cases (1 male and 1 female).
1. Suicidal Melancholia.	m.		No evidence.—*Vide* II. 3, XII. 1.
2. Melancholia—Chronic Dementia.		w.	Existence almost vegetative; childish in her conduct and conversation. No evidence.—*Vide* II. 26.
			XII.—*Cautiousness*—very large in 5 males.
1. Suicidal Melancholia.	m.		Has an extreme dread of committing suicide, and feels safe only within the walls of an Asylum.—*Vide* XI. 1, XIII. 4.
2. Acute Mania.	m.		Suspicious of the designs of his friends; believes he sees ghosts, spirits, and visions.
3. Chronic Dementia.	s.		Existence vegetative. No evidence.—*Vide* II. 5, XIV. 6.

TABLE III.—[CONTINUED].

Form of Insanity.	M.	F.	Actual Character.
4. Chronic Dementia.	s.		Existence vegetative. No evidence.—*Vide* II. 6, XV. 7.
5. Do.	s.		Do.
			XIII.—*Benevolence*—very large in 5 males.
1. Monomania of Vanity.	m.		Believes that the great literary undertaking, on which he is engaged, is for the everlasting benefit of man; unsocial in his habits.—*Vide* IV. 2, XIV. 1.
2. Monomania of Pride.	s.		Has an exalted opinion of his rank and status; unsocial and uncommunicative; countenance generally marked by a pleasant smile, as if he were highly gratified by his own thoughts.—*Vide* II. 21.
3. Monomania of Suspicion.	m.		*Vide* II. 1. Evidence opposed.
4. Suicidal Melancholia.	m.		*Vide* XII. 1, XIV. 5. No evidence.
5. Do.	s.		*Vide* X. 2. Has bitter antipathies to the Sheriff and others connected with his confinement.
			XIV.—*Veneration—a.* very large in 4 males.
1. Monomania of Vanity.	m.		His very voluminous writings are all on religious topics; his delusions also are mostly connected with religious subjects; his Bible is scribbled over with notes.—*Vide* XIII. 1, XV. 3.
2. Chronic Dementia.	s.		No evidence.—*Vide* XV. 6.
3. Do.	s.		No evidence; existence vegetative.—*Vide* II. 7.
4. Do.	s.		No evidence; existence vegetative.—*Vide* II. 8.
			b. Very small in 4 cases (3 males and 1 female).
5. Suicidal Melancholia.	m.		*Vide* XIII. 4, XXII. 1. No evidence.
6. Chronic Dementia.	s.		Existence vegetative; no evidence.—*Vide* XII. 3.
7. Do.	s.		Do. do.

TABLE III.—[CONTINUED].

Form of Insanity.	M.	F.	Actual Character.
8. Chronic Dementia.		s.	Existence vegetative; no evidence.—*Vide* IV. 3.
			XV.—*Firmness*—very large in 9 males.
1. Do.	s.		A bullying, domineering, tyrannical disposition; but withal cowardly, cunning, mendacious: devotes himself assiduously to certain departments of work, in which he excels.
2. Monomania of Suspicion.	s.		Likewise a combination of the bully and coward; incapable of applying himself for any length of time to any one occupation or amusement: a soliloquizer: unsocial: universally disliked by his associates.—*Vide* XIX. 2.
3. Monomania of Vanity.	m.		*Vide* XIV. 1. No evidence.
4. Chronic Mania.	s.		No present evidence; was at one time regarded as a dangerous poacher; is now indolent, apathetic, and childish.—*V.* X. 4.
5. Chronic Dementia.	s.		No evidence; existence almost vegetative; indolent, apathetic, and childish.
6. Do.	s.		Do. *Vide* XIV. 2.
7. Do.	s.		Do. *Vide* XII. 4.
8. Do.	s.		No evidence; existence almost vegetative; occupies himself in the most mechanical and simplest garden work.—*Vide* VIII. 3.
9. Do.	s.		Do.
			XVI.—*Wonder*—very small in 1 male.
1. Chronic Mania.	s.		Indolent, taciturn, depressed, and apathetic; used to be frequently engaged in "affaires du cœur" with female attendants or patients; apparently has no specific delusions, except that he could readily support himself by his labour were he at large.—*Vide* VII. 1.
			XVII.—*Ideality*—very small in 1 male.
1. Do.	s.		An unsocial soliloquizer: apparently labours under specific delusions; but regarding these he maintains an obstinate silence.

TABLE III.—[CONTINUED].

Form of Insanity.	M.	F.	Actual Character.
			XVIII.—*Individuality*—very large in 7 males.
1. Chronic Mania.	s.		Formerly a sailor, and has all a sailor's outward characteristics; has a variety of specific, persistent delusions.
2. Chronic Dementia.	m.		Has been by turns an excellent gallery-assistant, sick-nurse, and groom; takes a great interest in the welfare of his fellows, and shows great shrewdness and tact in their management; had delusions of suspicion prior to admission, and showed homicidal tendencies.—*Vide* II. 15, XIX. 3.
3. Acute Mania.	s.		No evidence.
4. Chronic Dementia.	w.		Was at one time held in great esteem as an elder of the church to which he adhered; his character was marked by its Nathanael-like guilelessness; he was admitted in a state of Suicidal Melancholia; existence now vegetative, passing his time dozing over the fire; childish, indolent, and apathetic.—*Vide* XIX. 5.
5. Do.	w.		Was at one time well known as a manufacturer and seller of wooden toys at one of our most celebrated watering-places; admitted in a state of Suicidal Melancholia; existence now vegetative; indolent, taciturn, and apathetic.
6. Do.	s.		A quiet and industrious, but by no means skilful, garden worker; has little or nothing to say; his daily work appears to afford him a passive pleasure; existence almost vegetative.
7. Do.	s.		Do.
			XIX.—*Locality*—very large in 5 males.
1. Monomania of Suspicion.	m.		Long meditated escape, and at length effected it; he made at once for his home, where he was found amid his wife and children.
2. Do.	s.		Made his escape at one time from another Asylum; has here never expressed any desire to leave this Asylum, and seems to regard it as a home.—*Vide* XV. 2.

TABLE III.—[Continued].

Form of Insanity.	M.	F.	Actual Character.
3. Chronic Dementia.	w.		Though Perth is his former place of residence, and though he is frequently in it at public amusements, he seldom or never speaks of home, and appears to regard the Asylum in that light.—*Vide* XVIII. 2, XX. 1.
4. Do.	m.		Has for many years regarded the Asylum as his home; or, at all events, his present existence appears to him to leave nothing to be desired.—*Vide* IX. 2.
5. Do.	w.		Do. *Vide* XVIII. 4.
			XX.—*Time*—very large in 1 male.
1. Do.	w.		No evidence.—*Vide* XIX. 3, XXI. 1.
			XXI.—*Tune*—*a.* very large in 1 male.
1. Do.	w.		No evidence.—*Vide* XX. 1.
			b. very small in 1 male.
2. Monomania of Vanity.	m.		Is in the habit of chaunting Hymns and Psalms to and by himself; and his voice is also conspicuous at Chapel or at the Sabbath evening classes, when he pleases to attend them; the voice, however, is harsh and far from melodious, indicating apparently a very inferior ear for music. —*Vide* X. 1.
			XXII.—*Causality*—very large in 1 male.
1. Suicidal Melancholia.	m.		No evidence.—*Vide* XIV. 5.

ABSTRACT OF TABLE III.

	Number of Cases.	Character of Patient apparently confirmatory.	Evidence opposed.	No sufficient evidence.
1. Amativeness,	6	4	1	1
2. Philoprogenitiveness,	40	13	3	24
3. Concentrativeness,	5	2	2	1
4. Inhabitiveness,	3	...	2	1
5. Adhesiveness,	2	2	...	...
6. Destructiveness,	1	...	1	...
7. Alimentiveness and love of life,	1	...	...	1
8. Acquisitiveness,	5	1	...	4
9. Constructiveness,	2	2	...	...
10. Self-esteem,	5	2	...	3
11. Love of Approbation,	2	...	...	2
12. Cautiousness,	5	2	...	3
13. Benevolence,	5	2	2	1
14. Veneration,	8	1	...	7
15. Firmness,	9	...	2	7
16. Wonder,	1	...	...	1
17. Ideality,	1	...	...	1
18. Individuality,	7	4	...	3
19. Locality,	5	1	...	4
20. Time,	1	...	...	1
21. Tune,	2	...	1	1
22. Causality,	1	...	...	1
Total,	117	36	14	67
Mean,	5·32	1·63	0·63	3·04

IV.—*Showing the Phrenological "development," as contrasted with the actual disposition and habits, in a few Patients whose character was marked by one or more specific peculiarities.*

Form of Insanity.	External size of Cerebral "Organs."	Actual Character.
1.—Chronic Dementia (male—single).	1.—*Very large.* Firmness. 2.—*Large.* Amativeness, Philoprogenitiveness, Concentrativeness, Adhesiveness, Constructiveness, Alimentiveness, Cautiousness, Benevolence, Individuality, Locality, Time, Tune. 3.—*Moderate.* Combativeness, Destructiveness, Secretiveness, Acquisitiveness, Self-esteem, Love of Approbation, Conscientiousness, Wonder, Imitation, Eventuality, Comparison, Causality. 4.—*Small.* Veneration, Hope, Ideality, Wit.	Inordinate vanity is the key to his character; has a penchant for one of the lady-officers, to whom he has been most devoted in his attentions for many years; a skilful amanuensis, book-keeper, and accountant, and most exact and attentive in and to any work entrusted to his care; cannot, however, brook any rival in his own peculiar departments of excellence; has been in the habit of collecting in an album testimonials to the excellence of his penmanship, &c., and delights to exhibit these to all visitors; affects great literary excellence and scholarly attainments, and boasts of association with the first intellects, not only of the present age, but of a former one; has announced himself the author of works for which Sir Walter Scott and other celebrated authors, he affirms, unjustly received credit; affects great sanctity, and is most devout "before men" in his religious observances, but is most inconsistent in his private walk and conversation; hypocrisy and dissimulation also exhibit themselves in the feigning of disease, with a view to obtaining stimulants; notoriously "draws the long bow," mendacious, and untrustworthy; shows the utmost facility in fabricating stories intended either to further his own selfish ends or to embroil his fellows in quarrels; cunning, quarrelsome, irritable, and vicious; delights in involving his fellows in "scrapes," and is universally disliked on account of his unamiable qualities of temper; if permitted, would be tyrannical and imperious, but, like most tyrants, is cowardly and deceitful; is excessively careful as to his personal

TABLE IV.—[CONTINUED].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
1.—(Continued).		safety in cricket, football, and other games; fond of the good things of the table, and particularly so of alcoholic stimulants; has studied and taught music; is acquainted with musical notation, but his voice is very bad, indicating feeble power both of time and tune; affects to be a musical composer, and also occasionally attempts a little versification, which is of the most wretched kind; fond of drollery, especially of a coarse sort; is a good comic actor; is contented and happy in a sphere where he believes his genius appreciated, and where he has resided for many years; is, in a measure, the "Caleb Balderston" of the community.
2.—Moral Insanity—Dipsomania (male—single).	1.—*Large.* Philoprogenitiveness, Concentrativeness, Secretiveness, Acquisitiveness, Self-esteem, Veneration, Firmness, Locality. 2.—*Moderate.* Amativeness, Adhesiveness, Combativeness, Destructiveness, Alimentiveness, Constructiveness, Love of Approbation, Cautiousness, Benevolence, Conscientiousness, Hope, Wonder, Wit, Imitation, Individuality, Eventuality, Time, Tune, Comparison, Causality. 3.—*Small.* Ideality.	Obscene, gross, or sensual in his language and conduct; fond of coarse, indelicate jokes; vulgar and unrefined in his habits; long entertained a passion for one of the lady-officers, and, when he fancied her indifferent to his approaches, endeavoured to revenge himself upon her; at one time devoted himself to business till he realized a competency and could retire; though quite in a position to do so, has never married, but has ever shown himself a devotee of the fair sex; habitually quarrelsome; involved in frequent misunderstandings with his nearest relatives; his spirit of opposiveness and contradiction develops itself in frequent rebellions against constituted authority in the Asylum,—nothing giving him greater gratification than to engender broils among his fellows, or between the attendants and their superiors: the same qualities have led to his being frequently in the hands of the police prior to admission: fond of the good things of the table, and formerly

TABLE IV.—[CONTINUED].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
2.—(Continued).		addicted to periodical fits of intemperance; has left the town where he was formerly established in business, and wanders about from place to place visiting his relatives or otherwise.
3.—Chronic Dementia—Monomania of Vanity (male—single).	1.—*Large.* Amativeness, Philoprogenitiveness, Adhesiveness, Acquisitiveness, Cautiousness, Benevolence, Individuality, Locality, Order, Eventuality, Comparison, Causality. 2.—*Moderate.* Concentrativeness, Combativeness, Self-esteem, Love of Approbation, Imitation, Constructiveness. 3.—*Small.* Veneration, Wonder.	When admitted, believed he was married, and insisted on his supposed wife (a female relative) accompanying him to his gallery; now exhibits a penchant for one of the lady-officers of the Institution; long a masturbator; announces himself as a noble earl and a knight; claims to be the designer of some of the largest and most successful engineering undertakings of the day; was at one time a most ingenious mechanician and accurate draughtsman; is naturally shy, diffident, and reserved; when excited, is quarrelsome, turbulent, and noisy.
4.—Chronic Mania (male—married).	1.—*Large.* Concentrativeness, Adhesiveness, Combativeness, Acquisitiveness, Love of Approbation, Benevolence, Individuality, Locality, Order, Tune, Comparison, Causality. 2.—*Moderate.* Amativeness, Philoprogenitiveness, Destructiveness, Alimentiveness, Secretiveness, Constructiveness, Self-esteem, Cautiousness, Veneration, Firmness, Conscientiousness, Hope, Wit. 3.—*Small.* Wonder, Ideality, Eventuality, Time.	Obscene, gross, or sensual in his ideas and conversation in private; in society behaves as a polished gentleman; appears to entertain no affection for his wife; speaks of her in the most disparaging way, but seems gratified passively by her occasional visits; fancies himself possessed of great wealth, which he is disposed to distribute most lavishly; thinks nothing of offering one of the officers a pension of a thousand pounds a-year, and others pensions amounting in all to several thousands per annum, and this without any services tendered to him, or other return adequate or inadequate; boasts of his connection with wealthy families, and with large works throughout Scotland; believes he has discovered the key to a great variety of circumstances which ordinary mortals do not suppose connected by any common cause; fickle and capricious in his occu-

TABLE IV.—[CONTINUED].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
4.—(Continued).		pations and amusements; incapable of sustained exertion of any kind; was formerly, when excited during the night, addicted to ringing bells, tearing bed-clothes, knocking at doors, smashing windows, and other acts of violence; has always regarded the Asylum as his home, and never speaks of returning to his wife and friends; his habits and tastes altogether are childish; is an excellent dancer, and has a good ear for time, but has no musical voice.
5.—Chronic Mania (male—single).	1.—*Very large.* Philoprogenitiveness. 2.—*Large.* Amativeness, Alimentiveness, Secretiveness, Acquisitiveness, Destructiveness, Benevolence, Firmness, Conscientiousness, Wit, Individuality, Locality, Eventuality, Time, Tune, Comparison, Causality. 3.—*Moderate.* Adhesiveness, Constructiveness, Self-esteem, Love of Approbation, Cautiousness, Hope, Wonder, Imitation. 4.—*Small.* Concentrativeness, Combativeness, Veneration, Ideality.	At school was distinguished for his attainments especially in Greek and Latin, carrying off the first prizes; is a most attentive gallery-assistant, but is quite incapable of anything higher than mere mechanical work; a noted mimic and buffoon; fond of gesticulation and every species of drollery; most imaginative, telling, with the greatest ease and pleasure, the most extravagant stories; fond of the good things of the table, but not selfish, often hoarding portions of food to give to the birds or to his companions; is harmless, childish, kind, and obliging; a general favourite among his fellows, who regard him as quite a "character;" no evidence of strong animal propensities, but he has the short, thick neck so common where these predominate.
6.—Chronic Mania (male—single).	1.—*Large.* Amativeness, Philoprogenitiveness, Concentrativeness, Destructiveness, Cautiousness, Benevolence, Veneration, Firmness, Wonder, Imitation, Individuality, Locality, Time, Tune, Causality.	A masturbator; imperious, capricious, and turbulent; believes himself to be the Christ, and labours under a variety of delusions, all of a religious character; a soliloquizer, and much given to religious meditation; sees visions, and has disturbing dreams; in his youth went abroad, and amassed some money as a

TABLE IV.—[CONTINUED].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
6.—(Continued).	2.—*Moderate.* Adhesiveness, Combativeness, Alimentiveness, Secretiveness, Acquisitiveness, Constructiveness, Self-esteem, Love of Approbation, Conscientiousness, Eventuality. 3.—*Small.* Hope, Ideality, Wit, Comparison.	merchant; a good singer, and fond of music; aspires to verse, but this is far inferior to his songs; now indolent, restless, and unsociable; seldom or never refers to home or friends, and seems wholly absorbed in his supposed persecutions and crucifixion.
7.—General Paralysis, first stage, with Paroxysmal Mania (male—married).	1.—*Very large.* Philoprogenitiveness. 2.—*Large.* Amativeness, Destructiveness, Secretiveness, Acquisitiveness, Cautiousness, Benevolence, Veneration, Firmness, Wit, Locality, Time, Tune, Comparison. 3.—*Moderate.* Concentrativeness, Self-esteem. 4.—*Small.* Conscientiousness, Hope, Wonder, Ideality, Individuality, Eventuality.	Affected by the occasional visits of his wife and children, but never speaks of them in their absence; prior to his admission, had long devoted his energies to the discovery of perpetual motion, which he fancied he had at length achieved; continues to be absorbed in supposed important inventions; is certainly ingenious as a mechanician; believes himself to be "first-rate" at more than one handicraft, as well as at violin playing, &c.; is greatly excited if his companions in any way or in any thing excel him; gathers carefully and hoards materials for his ingenuity to operate upon, such as pieces of wood, lead and iron, nails, slates, stones, &c.; is most hopeful of making "lots of money" by his inventions and first-class mechanical skill were he only at large; has a good ear, and plays the violin well.
8.—Chronic Mania—Kleptomania (male—single).	1.—*Very large.* Alimentiveness. 2.—*Large.* Amativeness, Philoprogenitiveness, Adhesiveness, Secretiveness, Acquisitiveness, Self-esteem, Love of Approbation, Cautiousness, Veneration, Firmness, Individuality, Eventuality.	Used to be constantly involved in love affairs with female officers or attendants, but was withal fickle in his attachments; had his favourite partners at the balls, and was always obsequious in his attentions to the fair sex; was long employed as a workman, but he could only attempt the simplest and easiest work; has, however, an inordinate idea of his own workmanship, de-

TABLE IV.—[Continued].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
8.—(Continued).	3.—*Moderate.* Benevolence, Ideality, Combativeness, Constructiveness. 4.—*Small.* Concentrativeness, Destructiveness, Conscientiousness, Hope, Wit, Imitation, Comparison. 5.— *Very small.* Wonder.	manding a high wage therefor, and asserting confidently his opinion that, were he at large, he could live comfortably on the produce of his own labour; on the occasion of clearing out his workshop during his absence from a paroxysm of Mania, it was found that he had for years hoarded in hidden corners every conceivable article which he could steal —spoons, knives, forks, pieces of coal, bread, string, old envelopes, torn letters, books and newspapers, &c.: this most heterogeneous collection, however, was most carefully classified: he was formerly most pugnacious and vicious when excited; is now taciturn, indolent, apathetic, and childish; was always fond of a "good feed," but by no means a glutton.
9.—Chronic Dementia (male—single).	1.—*Large.* Adhesiveness, Secretiveness, Acquisitiveness, Love of Approbation, Cautiousness, Benevolence, Veneration, Firmness, Individuality. 2.—*Moderate.* Combativeness, Philoprogenitiveness, Self-esteem, Conscientiousness, Hope, Wonder, Ideality, Imitation, Wit, Locality, Time, Tune, Causality. 3—*Small.* Amativeness, Destructiveness, Alimentiveness.	Existence almost vegetative; constantly mutters to himself, quite unintelligibly to others; indolent, childish, and harmless, though fierce-looking and a huge, powerful man; voracity notorious; has a large allowance of food for himself, but is always ready to eat that of his neighbours; is cunning and stealthy, and has more than once managed to escape from his gallery to the private rooms of the officers, and in a few minutes to swallow a meal of several courses, intended for several people; in summer, in addition to large quantities of ordinary food, he loses no opportunity of consuming enormous quantities of grass — in short, he appears able to eat and digest anything, and from similar unusual meals his health has never suffered, he being one of the most healthy men in the Institution; very destructive to clothing, chiefly, however, from negligence and untidiness in taking care thereof; does not recognize his father

TABLE IV.—[CONTINUED].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
9.—(Continued).		when he visits him; is cowardly and timorous, being easily mastered by the weakest of his fellows, if the latter only assume authority.
10.—Monomania of Vanity (male—married).	1.—*Very large.* Self-esteem. 2.—*Large.* Amativeness, Philoprogenitiveness, Destructiveness, Secretiveness, Acquisitiveness, Love of Approbation, Cautiousness, Benevolence, Veneration, Sentiment of the Beautiful in the Fine Arts, Ideality, Individuality, Form, Locality, Number, Order, Eventuality, Time, Causality. 3.—*Moderate.* Concentrativeness, Inhabitiveness, Adhesiveness, Combativeness, Firmness, Hope, Wonder, Wit, Imitation, Comparison. 4.—*Small.* Alimentiveness, Constructiveness, Conscientiousness. 5.—*Very small.* Tune.	Was a tradesman, but is evidently not very skilful or capable of the higher departments of his handicraft; he believes himself, however, to be a first-class workman, and is very proud of being engaged as such in work about the Asylum; affects superior sanctity; is much given to religious reading, to chaunting Psalms, and to prayer; sternly rebukes his companions for swearing, irreligion, and other breaches of the Ten Commandments, which, however, he does not scruple to infringe himself, if he can only do so quietly, and not "seen of men;" has a bitter antipathy to clergymen, whom he evidently regards as his inferiors both in piety and learning, and a variety of delusions is connected with his religious beliefs; is obliging to officiousness; cunning and timid; childishly fond of ornaments, decking his hair and beard with scraps of ribbons, pieces of wire, buttons, or jewellery; is attached to the Asylum as a home, and seldom speaks of home and friends except in a tone of anger or rebuke; makes an attentive sick-nurse, and is generally careful of such of his fellow-patients as require protection and sympathy; on the other hand, never tires of unveiling or exposing what he regards the iniquities of others; his voice is extremely harsh, and his ideas of music are of a very primitive kind.

TABLE IV.—[Continued].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
11.—Chronic Dementia (female—widow).	1.—*Very large.* Philoprogenitiveness. 2.—*Large.* Amativeness, Adhesiveness, Destructiveness, Alimentiveness, Benevolence, Wonder, Imitation, Order, Comparison, Causality. 3.—*Moderate.* Combativeness, Secretiveness, Acquisitiveness, Constructiveness, Cautiousness, Wit, Individuality, Eventuality, Time, Comparison. 4.—*Small.* Concentrativeness, Self-esteem, Love of Approbation, Veneration, Firmness, Conscientiousness, Hope, Ideality.	Conduct and language lascivious and obscene; no sense of delicacy or decency, though a lady by birth and breeding; has several children, of whom she never speaks, and all remembrance of whom she seems to have lost; was utterly indifferent to the intelligence of her husband's death; is very fond of dolls and of children's playthings; habits and disposition childish, but is subject to sudden paroxysms of anger or fury; incapable of any kind of useful occupation; extremely mischievous, disarranging furniture, scattering about bed-clothes, playing off tricks on her fellows, denuding herself, or destroying her clothing; an excellent mimic; most imaginative, making use of the strongest similes and expressions in her conversation; sings to herself occasionally in a low, sweet tone; frequently exhibits considerable childish affection for her companions; is most capricious, wayward, and restless.
12.—Monomania of Suspicion (female—widow).	1.—*Large.* Amativeness, Philoprogenitiveness, Concentrativeness, Adhesiveness, Self-esteem, Love of Approbation, Veneration, Wonder, Imitation, Individuality, Locality, Time, Tune. 2.—*Moderate.* Destructiveness, Alimentiveness, Secretiveness, Acquisitiveness, Cautiousness, Firmness. 3.—*Small.* Combativeness, Constructiveness, Benevolence, Conscientiousness, Hope, Ideality, Wit, Eventuality, Comparison, Causality.	Gross and sensual in her ideas and expressions; has no children; appears to entertain an affectionate remembrance of her husband; naturally indolent, and would spend her time lounging over the fire reading the newspapers, but is withal an excellent workwoman when she applies herself; has a variety of delusions connected with Scripture subjects, such as the millenium and the fulfilment of prophecy generally; is given to religious reading, particularly of the Revelations and similar books, and also to the reading of "shocking murders" and police cases in the public prints, in which she believes she can foresee the "signs of the times;" does not, nevertheless, attend chapel, and refuses the conversation of clergymen; freely criti-

TABLE IV.—[CONTINUED].

Form of Insanity.	External size of Cerebral "Organs."	Actual Character.
12.—(Continued).		cises the religious opinions and behaviour of her fellows; is most imaginative, ingenious, and argumentative, theorising and speculating on very slender bases; a good mimic, comic actress, and singer; fond of coarse drollery; satirical, occasionally pugnacious, and turbulent, even assaulting the officers or some of her fellows; generally, however, of a kindly, sympathising disposition towards her companions; though seldom expressing it in their absence, the presence of her relatives generally produces a longing for home; has been comparatively happy and contented here for some years.
13.—Chronic Dementia (female—single).	1.—*Very large.* Amativeness, Destructiveness. 2.—*Large.* Concentrativeness, Adhesiveness, Secretiveness, Self-esteem, Cautiousness, Benevolence, Individuality, Locality, Tune, Causality. 3.—*Moderate.* Philoprogenitiveness, Combativeness, Acquisitiveness, Constructiveness, Alimentiveness, Love of Approbation, Veneration, Firmness, Conscientiousness, Wonder, Wit, Imitation, Eventuality, Time. 4.—*Small.* Hope, Ideality, Comparison.	Of facile disposition, childish, happy, contented, and obliging; kind and careful to her suffering companions, making an excellent nurse or companion; was engaged in some liaison prior to admission; still shows a decided preference for the opposite sex; is industrious at needlework and in the making of wax flowers and similar ornaments, but is not very skilful thereat; is, however, very vain of her accomplishments, fancying herself unrivalled (locally) in her particular departments of excellence; boasts of the high families, with which she supposes herself to have been on terms of intimacy; treasures up compliments on her personal appearance; declares that at many a ball and rout she has been the cynosure of admiring eyes; affects considerable acquaintance with some of the sciences, and would fain make herself out to be a "blue-stocking;" though a tall, powerful woman, she is very timid and shy; does not attempt to sing; has been known to secrete and send off surreptitiously let-

TABLE IV.—[Continued].

Form of Insanity.	External size of Cerebral "Organs."	Actual Character.
13.—(Continued).		ters to acquaintances; though she has been here now many years, and is seldom visited by relatives or guardians, is still very sanguine of removal home, expecting it at the end of every quarter.
14.—Chronic Mania—Erotomania (female—single).	1.—*Very large.* Adhesiveness. 2.—*Large.* Philoprogenitiveness, Concentrativeness, Alimentiveness, Love of Approbation, Cautiousness, Firmness, Wonder, Ideality, Wit, Individuality, Locality. 3.—*Moderate.* Amativeness, Combativeness, Destructiveness, Secretiveness, Acquisitiveness, Constructiveness, Self-esteem, Veneration, Conscientiousness, Hope, Imitation, Eventuality, Time, Tune, Comparison, Causality. 4.—*Small.* Benevolence.	Sensual propensities very strong and predominant, exhibited alike in thought, word, and deed; prior to admission, had an inordinate fondness for dress, apparently with a view to captivate the affections of persons of the opposite sex; but this extravagance it was out of the power of her relatives to satisfy or gratify; is disposed to be indolent, and is capricious and restless; irritable and easily excited; when excited, is extremely violent and destructive, assaulting officers, attendants, or fellow-patients alike most viciously, breaking windows and destroying clothes; is proud and vain, evidently believing herself fitted to adorn a superior station in life; never speaks of home or friends, but seems happy here or anywhere could she only gratify her lusts.
15.—Chronic Mania—Erotomania (female—widow).	1.—*Large.* Amativeness, Adhesiveness, Combativeness, Destructiveness, Secretiveness, Benevolence, Firmness, Imitation, Order, Tune. 2.—*Moderate.* Philoprogenitiveness, Concentrativeness, Alimentiveness, Acquisitiveness, Constructiveness, Self-esteem, Love of Approbation, Cautiousness, Conscientiousness, Wonder, Ideality, Individuality, Locality, Time, Causality.	Gross and sensual in thought, word, and deed; frequently shows little sense of either decency or delicacy; is a persevering and excellent stocking-knitter; kind and attentive to sick companions, making a careful nurse; a keen discerner of character, and equally able and willing to expose what she believes to be the "shams" or iniquities of her fellows; most clean, tidy, and methodical in all her arrangements; irritable, quarrelsome, and pugnacious, and when excited, which she is very liable to be, is extremely violent and dangerous; headstrong and determined in her resistance

TABLE IV.—[CONTINUED].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
15.—(Continued).	3.—*Small.* Veneration, Hope, Wit, Eventuality, Comparison.	to constituted authority occasionally; devout in her religious observances; attends chapel regularly, and reads her Bible most attentively; looks upon the Asylum as her home, in which she is quite happy; never alludes to home or friends; a good mimic; sarcastic; fond of all kinds of coarse drollery; of exuberant animal spirits.
16.—Chronic Dementia (female—single).	1.—*Large.* Philoprogenitiveness, Love of Approbation, Benevolence, Veneration, Wit, Individuality, Locality, Order. 2.—*Moderate.* Amativeness, Combativeness, Destructiveness, Alimentiveness, Secretiveness, Acquisitiveness, Constructiveness, Self-esteem, Firmness, Conscientiousness, Hope, Wonder, Ideality, Imitation, Eventuality, Time. 3.—*Small.* Concentrativeness, Adhesiveness, Cautiousness, Tune, Comparison, Causality.	Though well up in years, is quite childish in her habits and disposition; delighted with a pat on the head, a little praise, or a small souvenir or gift of any kind; happy and quite at home, though when out of humour she speaks of going to a "home," which does not exist; shows a decided favour for persons of the opposite sex, and for her favourites delights to be allowed to do washing and dressing of clothes; is free and profuse in her offers of marriage; frequently jokes about her "lads," and is fond of jokes and fun of all kinds; with strangers, is timid, diffident, and reserved; is a good washerwoman, but is capable of no higher kinds of work; is totally destitute of musical ear or voice; is sociable and kind to her companions.
17.—Chronic Mania—Erotomania (female—single).	1.—*Large.* Amativeness, Philoprogenitiveness, Concentrativeness, Adhesiveness, Acquisitiveness, Love of Approbation, Benevolence, Conscientiousness, Wonder, Imitation, Individuality, Locality, Eventuality, Time, Comparison, Causality. 2.—*Moderate.* Combativeness, Alimentiveness, Secretiveness, Con-	Has strong and predominant sensual and sexual tendencies; though born and bred a lady, shows little regard for either decency or delicacy; language frequently most obscene; has a variety of delusions, mostly bearing on sensual subjects; has always been capricious, wayward, and difficult to manage; most irritable and easily excited; subject to paroxysms of fury, independent of any appreciable outward exciting cause; when excited, is a most violent, destructive, and dangerous patient, viciously

TABLE IV.—[Continued].

Form of Insanity.	External Size of Cerebral "Organs."	Actual Character.
17.—(Continued).	structiveness, Self-esteem, Cautiousness, Firmness, Wit, Order. 3.—*Small.* Destructiveness, Veneration, Hope, Ideality, Tune.	assaulting all and sundry, breaking windows, and tearing up clothing; withal dirty and degraded in her habits; utterly indolent, taking no pleasure in any kind of amusement or occupation; never speaks of home or friends, and appears to have no desire to leave this Asylum; has long ago given up piano practice, and seems to have no special love for, or proficiency in, music.
18.—Chronic Dementia—Erotomania (female—single).	1.—*Very large.* Philoprogenitiveness. 2.—*Large.* Amativeness, Adhesiveness, Love of Approbation, Cautiousness, Wit, Locality, Comparison, Causality. 3.—*Moderate.* Combativeness, Destructiveness, Alimentiveness, Secretiveness, Acquisitiveness, Veneration, Firmness, Hope, Wonder, Ideality, Imitation, Individuality, Order, Time, Tune. 4.—*Small.* Concentrativeness, Constructiveness, Self-esteem, Benevolence, Conscientiousness, Eventuality.	Though well up in years, is most childish in her habits; carries a doll in her arms day and night, and is as fondly attached to it as if it had been her own child; is constantly falling in love with gentlemen, whose good qualities she eulogises in the most rhapsodical strains, but her affections are most capricious, and readily transferable; extremely indolent, not making even her own clothes; is exceedingly proud and haughty, despising her companions as unfit associates, she herself being altogether dependent on public charity for her maintenance; is querulous, jealous, and selfish in the extreme; becomes frequently violently excited by attentions being shown to her companions, which she supposes should be confined to herself; a habitual grumbler, restless, and unhappy, constantly wishing out of the Asylum, but having no home to go to; has the strongest possible reasons for being grateful for her present circumstances of comfort; sings and plays the piano a little, but is not progressive in her accomplishments, for though she has been here now many years, she has not learned a single new song or piece, and this with abundant facilities for educating herself or being educated; shy, taciturn, and reserved to strangers.

TABLE IV.—[Continued].

Form of Insanity.	External size of Cerebral "Organs."	Actual Character.
19.—Suicidal Melancholia (female—single).	1.—*Large.* Amativeness, Philoprogenitiveness, Concentrativeness, Destructiveness, Love of Approbation, Benevolence, Firmness, Wonder, Imitation, Individuality, Locality, Order, Time, Tune, Causality. 2.—*Moderate.* Combativeness, Secretiveness, Acquisitiveness, Cautiousness, Veneration, Conscientiousness, Ideality, Eventuality. 3.—*Small.* Adhesiveness, Alimentiveness, Constructiveness, Self-esteem, Hope, Comparison.	Most intelligent and ingenious; well read; acute in argument; clever in repartee; inclined to indolence, and extremely capricious and changeable at any kind of work, seldom finishing what she begins; negligé in her dress; dirty and degraded in her habits; on account of these habits, and of her obstinacy of temper, was long tended as a child, doing nothing unless under compulsion; much attached to the other members of her family and to home, piteously beseeching permission to return to home and friends; occasionally dressed dolls as playthings for her fellows, but no evidence of inordinate animal propensities; appeared to have little taste for, and no acquirements in, music.
20.—Melancholia, alternating with Mania (female—married).	1.—*Very large.* Philoprogenitiveness. 2.—*Large.* Concentrativeness, Adhesiveness, Destructiveness, Love of Approbation, Cautiousness, Wit, Imitation, Locality, Order, Eventuality, Comparison, Causality. 3.—*Moderate.* Alimentiveness, Secretiveness, Self-esteem, Benevolence, Veneration, Firmness, Conscientiousness, Wonder, Individuality, Time, Tune. 4.—*Small.* Amativeness, Combativeness, Acquisitiveness, Constructiveness, Hope, Ideality.	Intelligent, well read, ingenious and fertile in argument; has a high opinion of her literary powers, attempting prose essays and versification, in neither of which is she very successful; capricious and changeable in all her occupations; always busy, but never finishing the work she begins; full of schemes, but unable to carry them to completion; affects great philanthropy, and would take a part, and a leading one if possible, in all public measures for the common weal; is fondly attached to her children, whom she has not seen for many years; never speaks of her husband, nor of other relatives than a sister; frequently requests her liberation, but her's is a confirmed and hopeless case; disposed to be sociable, making friends or confidantes of particular patients or attendants, but showing implacable enmity to others; subject to paroxysms of Mania, and is then outrageous in conduct, obscene or degraded

TABLE IV.—[Continued].

Form of Insanity.		Actual Character.
20.—(Continued).		in language, dirty in her personal habits, destroying clothing, and breaking windows; insubordinate and turbulent; fond of drollery; is satirical and vivacious; sings, and plays on the piano, but overrates her musical acquirements, and often "bores" her companions or visitors by a display of her powers; is cunning and deceitful, though pretending to great sanctity, often secreting articles of clothing, &c.

V.—*Showing the general Conformation of the Head in* 173 *Patients (*84 *males and* 89 *females).*

	M.	F.	Total.
1.—*Head as a whole—a. Size.*			
*Apparently** large and voluminous in	11	15	26
,, small, ...	17	23	40
b. Shape.			
Well formed: rounded or arched, with few or no irregularities, ...	20	19	39
Bullet-shaped, ...	2	1	3
Conoid: 1, Base below; pyramidal or sugar-loaf shaped,	1	...	1
2, Base above; invertedly conoid, ...	1	...	1
Contracted, or narrow, laterally, ...	16	24	40
Elongated antero-posteriorly, ...	3	...	3
Square or oblong, ...	7	2	9
2.—*Frontal region.*			
Prominent, full, large, ...	6	...	6
High, ...	2	2	4
Low, ...	9	23	32
Broad, massive, ...	1	...	1
Narrow, ...	12	31	43
Sloping or receding, ...	24	12	36
Rounded, ...	1	...	1
Square or rectangular, ...	5	1	6
3.—*Coronal region.*			
Shallow, contracted, or compressed from above downwards, ...	10	17	27
Flattened, ...	17	13	30
High, arched, conoid, tapering, ...	13	12	25
4.—*Occipital region.*			
Prominent, full, ...	14	26	40
Broad, ...	1	...	1
Narrow, ...	3	1	4
High or projecting, rising gradually from Coronal region,	1	1	2
5.—*Basal region.*			
Broad, or full, above ears, ...	21	7	28
Narrow, or shallow, do., ...	1	...	1

* The *absolute* sizes of cranium will be found in our Report for 1858, p. 17, *et seq.*

VI.—*Showing certain Peculiarities of Conformation of Head, in connection with the actual character of the Patients, in whom such peculiarities occur.*

Form of Insanity.	M.	F.	Conformational Peculiarities.	Actual Character.
1.—Chronic Mania.	s*		Head pyramidal or sugar-loaf-like. Self-esteem and Firmness *very large;* Destructiveness, Secretiveness, Acquisitiveness, and Conscientiousness, *large;* Combativeness *moderate.*	Tall, muscular man, with a superabundance of muscular power and of animal spirits; vent is given freely to these in pump labour; is said at one time to have been a noted poacher, and to have been much dreaded as such; is prone to sing, dance, and gesticulate; existence, in great measure, otherwise vegetative.—*Vide* Table III., sec. X. 4, sec. XV. 4.
2.—Monomania of Vanity.	m.		Occiput prominently tilted upwards and backwards, as if the upper portion of the cranium were dislocated on the lower. Forehead square, massive. Prominent fullness behind ears. Philoprogenitiveness, Benevolence, Veneration, Firmness, *very large;* Concentrativeness, Inhabitiveness, *very small;* Self-esteem, Love of Approbation, Ideality, Individuality, *large.*	Prior to admission, squandered considerable sums of money, that he could ill afford, on the merest trifles, which he did not require and could not use.—*Vide* Table III., sec. II. 4, sec. III. 3, sec. IV. 2, sec. XIII. 1, sec. XIV. 1, sec. XV. 3.
3.—Chronic Dementia.	s.		Coronal suture open. Well-formed head; broad at base. Acquisitiveness *very large.*	Existence, in great measure, vegetative; unsocial, never speaking; passes his time wandering aimlessly about the gallery, imitating the sound of the bagpipe or the noises of children at school [was at one time engaged in teaching in the Highlands]; habits dirty and degraded; harmless and docile as a child.—*Vide* Table III., sec. VIII. 4.
4.—Chronic Dementia, originally Monomania of Suspicion.	m.		Frontal region very prominent, and as if dislocated forwards; coronal region flat and low; head long antero-posteriorly, broad above the ears. Amativeness, Philoprogenitiveness, Individuality, Locality, Time, and Tune, all *very large.*	Prior to admission, believed that certain parties conspired against him, and threatened to shoot them, going about with a loaded gun for that purpose; frequently complains of a dull, cerebral pain, particularly in the coronal region.—*Vide* Table III., sec. I. 2, sec. II. 15, sec. XVIII. 2, sec. XIX. 3, sec. XX. 1, sec. XXI. 1.

* Condition as to marriage: *s.* single, *m.* married.

TABLE VI.—[Continued].

Form of Insanity.	M.	F.	Conformational Peculiarities.	Actual Character.
5.—Chronic Mania.	s.		Head oblong; forehead high; occiput full. Philoprogenitiveness, Concentrativeness, Adhesiveness, all *very large*. Benevolence, Wonder, and Wit, *large;* Acquisitiveness *moderate;* Secretiveness, Veneration, *small.*	At one time appears to have suffered from *Coup de Soleil* in a tropical climate; is in the habit of hoarding pieces of bread, string, glass, wood, &c., which he constantly carries about in his hands, preserving them most tenaciously; used to prostrate himself before one officer, whom he believed to be Mahomet—before another, whom he believed to be Queen Mary—and before a fellow-patient, whom he fancied was Christ; has a variety of other delusions of an equally absurd character; fond of a joke and of childish amusements; is kind and playful, though subject to paroxysms of irritability; given to chaunting the Old C. and other Psalms, which he remembers perfectly.—*Vide* Table III., sec. II. 11, sec. III. 2, sec. V. 1.
6.—Chronic Mania.	s.		Head has the form of a cone, the base being above the ears, where it is especially broad. Destructiveness and Combativeness *moderate.*	Tall, powerful man, with great muscular energy and of exuberant animal spirits; vent is given to these at severe manual labour; otherwise he is most destructive to clothing, and shows a strong propensity to pugilism and assault.
7.—Chronic Dementia.	s.		Head low anteriorly, and generally small; towers in the position of Veneration and Firmness, both of which organs are prominent, the latter particularly so.	Existence almost vegetative; taciturn, childish, and contented, expressing neither wants nor wishes of any kind; the only occupation for which he has ever been fitted is that of feeding pigs. —*Vide* Table III., sec. XV. 9.
8.—Monomania of Suspicion and Vanity.	s.		Head low, shallow, and sloping; contracted or narrow laterally; high and tilted up posteriorly. Self-esteem and Individuality *large;* Love of Approbation *moderate;* Constructiveness and Ideality *small.*	Vain, imperious, and turbulent; has delusions as to the existence in his body of a certain form of organic disease, and as to his food being poisoned; is a good workman, but works only by fits and starts; subject to periodical excitement, marked by his being indolent, obstinate, impertinent, and insubordinate; during the intervals of excitement is comparatively industrious and docile.
9.—Chronic Dementia.	s.		Base broad; head long antero-posteriorly; somewhat flattened superiorly; sagittal suture open.	Existence almost vegetative; harmless, childish, playful, garrulous, incoherent in speech, self-willed, and irritable; fitted only for the most mechanical occupations, such as herding cows.

TABLE VI.—[Continued].

Form of Insanity.	M.	F.	Conformational Peculiarities.	Actual Character.
10.—Monomania of Vanity.	m.		Head marked by considerable lateral bulging in the anterior part of the frontal region, which becomes gradually narrower behind; occiput prominent; forehead square, flat.	Happy, garrulous, childish, querulous, and irritable; frequently involved in quarrels with his fellows or the attendants; memory excellent—can repeat psalms and passages from Scripture with utmost facility and correctness.—*Vide* Table IV. 10, Table III., sec. IX. 1, sec. X. 1, sec. XXI. 2.

VII.—*Showing the form of Insanity in the Patients referred to in the foregoing Tables.*

	M.	F.	Total.
Mania, Acute, ...	4	6	10
„ „ Puerperal, ...	...	3	3
„ Chronic, ...	13	19	32
„ „ Erotomania, ...	...	8	8
Monomania, ...	16	9	25
Dipsomania, ...	1	...	1
Melancholia, ...	5	16	21
Dementia, ...	43	28	71
General Paralysis, ...	2	...	2
Total, ...	84	89	173

METEOROLOGICAL TABLES.

I.—*Showing the number of instances of sudden changes in the phases of Insanity—in relation to the state of—*

a. The Barometer.

Between 28·40 and 28·50		3 cases,	28·50 = Much Rain.	
„ 28·50 „ 28·60		5 „		
„ 28·60 „ 28·70	77	26 „		
„ 28·70 „ 28·80		30 „		
„ 28·80 „ 28·90		10 „		
„ 28·90 „ 29·00		3 „	29·00 = Rain.	
„ 29·00 „ 29·10		36 „		
„ 29·10 „ 29·20		6 „		
„ 29·20 „ 29·30	80	12 „		
„ 29·30 „ 29·40		8 „		
„ 29·40 „ 29·50		18 „	29·50 = Change.	
„ 29·50 „ 29·60		17 „		
„ 29·60 „ 29·70		21 „		
„ 29·70 „ 29·80	52	7 „		
„ 29·80 „ 29·90		6 „		
„ 29·90 „ 30·00		1 „		
			30·00 = Fair.	
Total, ...		209 „		
Lowest marking of Barometer, ...			28·43	
Highest do. do.			30·00	

b. The Thermometer.

Between 38° and 39°	3	3 cases.	Between 60° and 61°	1
„ 39° „ 40°	0		„ 61° „ 62°	1
„ 40° „ 41°	7		„ 62° „ 63°	3 — 9 cases.
„ 41° „ 42°	1		„ 63° „ 64°	2
„ 42° „ 43°	18		„ 64° „ 65°	2
„ 43° „ 44°	3			
„ 44° „ 45°	14	124 cases.	Total, ...	209 cases.
„ 45° „ 46°	9			
„ 46° „ 47°	22		Lowest actual marking, ...	33°.15
„ 47° „ 48°	26		Highest do., ...	73°.42
„ 48° „ 49°	13			
„ 49° „ 50°	11		Lowest mean daily marking,	38°.57
„ 50° „ 51°	14		Highest do.,	64°.71
„ 51° „ 52°	15			
„ 52° „ 53°	13			
„ 53° „ 54°	10			
„ 54° „ 55°	8	73 cases.		
„ 55° „ 56°	4			
„ 56° „ 57°	1			
„ 57° „ 58°	3			
„ 58° „ 59°	4			
„ 59° „ 60°	1			

TABLE I.—[CONTINUED].—*c. Moisture.*

Weather bright, clear, fair, ...	78 cases.
„ dull, lowering, cloudy, ...	60 „
„ variable, ...	16 „
Rain, snow, sleet, or hail, ...	55 „
Total, ...	209 „

d. Winds.

North, ...	11 cases.	South-west, ...	28 cases.
North-west, ...	26 „	South-east, ...	32 „
North-east, ...	6 „	West, ...	98 „
East, ...	8 „		

Wind moderate in ... ... 147 cases.
„ considerable or great, causing gusty, breezy, or stormy weather, in ... ... 62 „

II.—*Showing the nature of the sudden changes in the phases of Insanity referred to in the foregoing Table.*

1.—*Excitement*, chiefly in regard to—*a. Conduct.*

Assaulting fellow-patients, attendants, or officers; pugilistic, bullying, threatening with fists; extreme irritability; insubordination; imperious, overbearing, and haughty; biting, kicking, and scratching; breaking glass or furniture; destroying clothing or bedding; denuding; propensity to dance, attitudinize, or gesticulate; fits of laughter; swallowing unusual food—*e.g.*, pieces of carpet, combs, grass, &c.; fugitive; erotic.

b. Language.

Noisy; loquacious; garrulous; argumentative; vituperative; obscene; swearing; satire; declamation; disrespectful; imitative; shouting; screaming.

c. Ideas.

Development of transient and unusual delusions.

d. Muscular exercise.

Incessant hard walking or running; rubbing head; slapping cheek; stamping feet.

2.—*Depression*, chiefly in regard to—*a. Conduct.*

Obstinate abstinence from food; suicidal attempts; persistent remaining in bed or in seclusion; passionate weeping; sullenness; antipathy; peevishness; querulousness; indolence.

b. Language.

Taciturnity; nostalgia.

III.—*Showing the state of the Weather at Perth and throughout Scotland during the first five months of* 1859: *abstracted from the Monthly Returns of the Registrar-General* [*for Scotland*] *of Births, Deaths, and Marriages* [*meteorological observations*].

a. State of the Weather at and around Perth.

	Jan.	Feb.	March.	April.	May.
1. Barometer, mean marking, ...	29·82	29·67	29·65	29·69	29·99
2. Thermometer, „ ...	42· 5	42· 6	47· 4	45· 8	...
3. Humidity, ...	67	60	82	87	72
4. Rain, ...	3·94	2·37	2·86	3·55	0·35
Number of days rain fell,	17	15	17	14	5
5. Winds, number of days—					
North, ...	2	1	2	1	...
South-east, ...	1	1	1	5	6
South, ...	2	2	1	2	2
South-west, ...	7	7	6	4	1
West, ...	10	6	16	5	...
North-west, ...	5	6	3	6	...
Calm or variable, ...	4	5	2	4	22
North-east, ...	...	...	...	1	...
East, ...	...	...	...	2	...

b. State of the Weather throughout Scotland.

1. January,.....Unusually warm, rainy, and windy, the wind coming from the south south-west.

2. February,...Unusual amount of west wind, bringing with it a low barometer, high temperature, and much rain.

3. March,.....Characterized even more intensely than last month by an unusual amount of west wind, a low barometer, and high temperature.

4. April,.....Characterized signally over the preceding months by east wind replacing a large proportion of west wind and north wind the south, causing north-east and south-west winds to have been severely felt, thereby lowering the mean temperature,—making the month altogether a most trying time and a severe check on the advancing vegetation of the previous very mild season. Rain above the average.

TABLE III.—[Continued].

b. State of the Weather throughout Scotland.

5. May, ...	In many respects unusual and even unprecedented. Barometric *height* above average of May for several years, as well as of the previous months of 1850; while barometric *range* less than during the years 1856-7-8. Mean temperature also above average, both of previous months of 1859 and of previous Mays. *Humidity* less than ever before noted [we presume since the Registration Act came into operation in January, 1855]. Also *rain* deficient beyond precedent. *Wind* with an abnormal tendency south-east, and strikingly wanting in *ozone*.

IV.—*Showing the form of Insanity in the instances referred to in Tables I. and II.*

Mania, Acute, mostly first attacks and recent cases, in	36	instances.
„ Puerperal, ...	10	„
„ Chronic, recurrent or paroxysmal, ...	80	„
Monomania, ...	20	„
Dipsomania, ...	4	„
Melancholia, ...	40	„
Dementia, with Paroxysmal Mania, ...	8	„
General Paralysis, ...	11	„
	209	„

CHAPLAIN'S REPORT.

THE Chaplain's term of office having been but of a few months' duration, and his time having been of late more fully occupied than usual, he is not prepared to submit a long or full Report. It is with much pleasure, however, that he presents the following :—

The services on week-days have been regularly performed at the usual hour. Through the kindness of Dr Lindsay, the exertions of the resident officials and attendants, and the co-operation of the patients, Divine service has been performed from half-past nine to half-past ten on Sabbaths, to suit the Chaplain's other arrangements. The attendance at these is very good ; larger, however, on Sabbath than on the week-days, and on the male than on the female side. On no occasion has anything occurred to interrupt the service. One and all have conducted themselves with the utmost propriety, and taken apparently the liveliest interest in the several exercises.

The Sabbath evening class continues to be very numerously attended by both males and females, and to be very ably conducted by Miss Shearer and one of the patients. It is very gratifying to observe so many present without an attendant, repeating a few verses of a Psalm, and reading a portion of Scripture with extraordinary fluency and apparent apprehension of its meaning.

The Chaplain's private ministrations are of a peculiarly difficult nature ; but on these he has entered with a humble trust on God's promised aid, and, he would hope, to the profiting of the patients.

In the discharge of his duties, the Chaplain has uniformly received the most ready and willing attention from all the officials.