1868.

NEW SOUTH WALES.

REPORT

ON

LUNATIC ASYLUMS,

BY

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By Authority:

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INTRODUCTION.

THE commission which this Report is intended to fulfil is thus expressed in the letter of instructions from the Honorable the Colonial Secretary :—

" You will visit the chief asylums in the United Kingdom, on the Continent, and in the United States. You will direct your inquiries in these visits to the principles on which the buildings have been erected, and the sanitary precautions adopted in their construction. You will carefully observe the different methods of treatment, and obtain statistical evidence of the results in separate cases, so far as is practicable. You will examine the working of different systems of management and discipline, and endeavour to ascertain the effects of the different forms of administrative organization on the condition of the patients, and in relation to efficient supervision and economy of expenditure. In all cases it will be desirable to obtain plans as well as accurate descriptions of the buildings, particulars of the number of inmates allotted to rooms of a given size, and the quantity of pure air considered as indispensable to a given space.

" You will obtain from the institutions you visit, copies of all regulations, dietary scales, and reports. It will also be within the compass of your duties to procure for the Government, copies of all recent and important statutes, state papers, and departmental reports relating to the treatment of lunatics" ; and the end to which all this information is to tend is " a re-organization of the lunatic asylums of the Colony on the basis of a correct knowledge of the improvements carried out under more favourable circumstances in other parts of the World."

The inquiries here indicated have a wide scope, and include an examination of the entire system of asylum construction and administration ; and, in addition to this, from " what asylums are" in Europe and America, is to be drawn the conclusion " what asylums should be" in New South Wales. Before proceeding to the Report itself, it seems advisable to state briefly the steps taken in fulfilling the commission thus set forth—a commission, the duties of which, the instructions further directed, were to be brought to a conclusion, if possible, " within the period of six months."

The English Commissioners in Lunacy were first waited upon, and such advice obtained as they could give concerning the asylums best worth visiting at home and abroad.

The following asylums in England were then visited :—

Middlesex County Asylum	Colney Hatch.
Essex do.	Brentwood.
Sussex do.	Hayward's Heath.
Surrey do.	Brookwood.
Three Counties (Beds, Herts, and Hunts) do.	Hitchin.
Gloucester do.	Gloucester.
Worcester do.	Powick.
Stafford do.	Stafford.
New Stafford do.	Lichfield.
Lancashire do.	Prestwich.
Derby County Asylum	Mickleover.
Lincoln do.	Lincoln.
Leicester do.	Leicester.
Bristol Borough Asylum	Stapleton.
The Coton Hill Lunatic Hospital	Stafford.
„ Northampton do.	Northampton.
„ Bethlehem do.	Southwark.
„ York do.	York.
„ Lincoln do.	Lincoln.
„ Friend's Retreat do.	York.
„ Broadmoor State Asylum	Near Wokingham.
„ Earlswood Idiot do.	Near Reigate.
„ Camberwell House Private do.	Camberwell.
„ Brislington House do.	Near Bristol.
„ Fisherton House do.	Near Salisbury.

The lunatic wards in the Poorhouses at Leicester, and Chorlton-on-the-Medlock; the Herbert Hospital Woolwich, and the Pauper Hospital at Chorlton-on-the-Medlock, near Manchester, were also inspected. Scotland was next visited; and, after an interview with the Scotch Commissioners—

The Fife District Asylum	Near Cupar,
„ Perth do.	Murthly,
„ Haddington do.	Near Haddington,
„ Dundee Royal Asylum	Dundee,
„ Edinburgh do.	Morningside,
„ Montrose do.	Near Montrose,
„ Glasgow do.	Gartnavel,
„ Perth do.	Perth,
„ Perth Criminal do.	Perth,—

and the lunatic wards in the Poorhouses of Edinburgh, Dundee, and Perth, were inspected. The limited time at disposal prevented a visit to Ireland; and after the necessary introductions from the Right Honorable the Secretary of State for Foreign

Affairs to Her Majesty's Representatives in Europe, and the United States of America, had been obtained, the following American Institutions, among which are the finest and best managed in the Eastern States, were examined :—

The New Jersey State Hospital for the Insane	.....	Trenton.
„ New York do.	.....	Utica.
„ Pennsylvania do.	.....	Harrisburg.
„ Massachusetts do.	.....	Northampton.
„ New York City Asylum	.....	Blackwell's Island.
„ Philadelphia City do.	.....	Philadelphia.
„ Government Hospital for the Insane	.....	Washington.
„ Hospital for the Insane	.....	Philadelphia.
„ M'Lean Hospital for the Insane	.....	Boston.
„ Criminal Asylum	.....	Auburn.
„ Asylum for Idiots	.....	Near Syracuse.
„ do.	.....	Boston.
„ Asylum for Inebriates	.....	Binghampton, N. Y.
„ Hudson's River Asylum (in course of erection)		Poughkeepsie.

Subsequently, the following Institutions for the Insane, on the Continent of Europe, were inspected :—

FRANCE :—

St. Yon	.....	Rouen.
Quatre Mares	.....	do.
Evreux	.....	Evreux.
Bicêtre	.....	Paris.
Charenton	.....	do.
St. Anne	.....	do.
Ville Evrard	.....	Near Paris.
Colonie de Fitz Jaques	.....	Clermont.
Maison de Santé	.....	Vanvres.

GERMANY :—

Illenau	.....	Baden.
Frankfort	.....	Prussia.
Hamburg	.....	do.
Göttingen	.....	do.

BELGIUM :—

Colonie de Gheel	.....	Near Antwerp.
Guislain's Asylum	.....	Near Ghent.
Asylum for Women	.....	Ghent.
Hospice St. Julien	.....	Brüges.
Maison de Santé, dite *Le Strop*	.....	Ghent.

HOLLAND :—

Meerenberg	.....	Near Haarlem.

Of all these institutions, reports more or less comprehensive have been drawn up, and such points in the construction and organization noted, as might be useful in remodelling the asylums of the Colony, and so fulfilling the main object of the commission. Copies of plans more or less elaborate were obtained of the—

New Surrey	Asylum	.....	Brookwood,
Sussex County	do.	.....	Hayward's Heath,
Middlesex do.	do.	.....	Colney Hatch,
Cheshire do.	do.	.....	Macclesfield,
Lancashire do.	do.	.....	Prestwich,
Essex do.	do.	.....	Brentwood,
Perth District	do.	.....	Murthly,
St. Anne's	do.	.....	Paris,
Ville Evrard	do.	.....	Near Paris,
Evreux	do.	.....	Evreux,
Illenau	do.	.....	Baden,
Hamburg	do.	.....	Prussia,
Göttingen	do.	.....	do.,
Osnabrück	do.	.....	do.,
Frankfort	do.	.....	do.,
Guislain's	do.	.....	Ghent,
Meerenberg	do.	.....	Haarlem,—

and most of the American Institutions which were visited, and also of the new Asylum at Auckland, New Zealand.

It is a matter of great regret, that some skilful architect, or some one at least educated as such, was not associated in the Commission, to note the many details which can be judged of only by an architect, by process of actual inspection. In lunatic asylums, as in hospitals, the association of the physician and architect is very requisite; but in the absence of such association, it can only be hoped that this report will not prove "an impracticable set of theories from a medical man's point of view," as has been predicted by an architect of eminence; or rival the but too stubborn facts in brick and mortar, which architects, when working alone, have in many cases erected, even of late years, as hospitals for the insane.

The papers and reports which have been collected, include—

The Lunacy Statutes of England, Scotland, and Ireland, complete;

The Lunacy Statutes of New York, New Jersey, and Massachusetts;

The Lunacy Statutes of France;

A complete set of Reports of the Scotch Lunacy Commissioners; the Massachusetts Board of State Charities; the Canadian Inspectors of Asylums and Prisons; and an almost complete set of Reports of the English Lunacy Commissioners;

The more recent Reports of the Irish Inspectors of Lunatics; the Belgian Lunacy Commissioners; and the New York Charity Commissioners;

Reports, with copies of rules and regulations, from almost every English and American asylum visited, as well as from several of those on the Continent;

Copies of the French and Belgian Government Regulations for the Administration of Asylums;

The French Statistics of Insanity;

The Report of the English Parliamentary Commissions on Lunatics;

and besides these, a large number of books, pamphlets, and papers on asylum construction and organization.

These materials having been collected, it became a matter for anxious consideration in what form the mass of information contained in them, digested and systematized, could be submitted to the Government of New South Wales, so as to carry out the special objects of the Commission. After mature deliberation, it appeared best to draw up a Report of British and Foreign Hospitals for the Insane, not according to mere geographical division, but according to the general principles of construction and organization; and to supplement this by a series of suggestions for the establishment of an asylum system, and the construction and management of asylums—with particular reference to local and other conditions existing in New South Wales, drawn from the above report, from books and papers, and, indeed, from all the sources of information to which travels and inquiries have given access.*

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* In this Report few comments are ventured, upon any want of order, arrangement, or cleanliness in the asylums visited, or comparisons made, which may seem invidious, between the different institutions. It is thought that the wishes of the New South Wales Government will be best carried out by noticing all that is worthy of imitation, and passing lightly over special faults dependent on management, and not on structure, except where such faults may illustrate a point in the Report, or afford evidence of value against a system of management. The Government of New South Wales is engaged in remodelling its own institutions on the excellences of those of the principal European and American establishments—not in discovering abuses and correcting errors in those less worthy of imitation.

17th July

My dear Sir

I'll attend to your request contained in your letter of 15th inst. and send you the result. with my fresh observations I may have made

Yours very Truly

William Macleod

REPORT.

"One of the first indications of a healthy moral feeling in a community, together with the security of private rights l the advance of property, is the provision made for the helpless poor; and where they are neglected, one of the best signs a hopeful social condition and of fitness for self-government, is wanting." Capt. Spratt: *Travels and Researches in Crete.*

"Hospitals are in some sort the measure of the civilization of a people." Sir Ranald Martin: *System of Surgery.*

"To my eyes, a Pauper Lunatic Asylum, such as may now be seen in our English Counties—with its pleasant grounds, airy and cleanly wards, its many comforts, and wise and kindly superintendence provided for those whose lot it is to bear double burden of poverty and mental derangement—I say, this sight is to me the most blessed manifestation of true ilization the world can present."—*The Harveian Oration*, 1866: By George Paget, M.D., Cantab.

EFORE proceeding to the question of asylum construction, it may be well to consider, briefly as possible, the various existing methods of providing for the insane; who may thus classified:—

1st. Indigent or pauper—supported almost, if not entirely, by the local or general Government.
2nd. Non-pauper—supported either by friends, or from their own estates.
3rd. Criminal.
4th. Idiots.
5th. Inebriates.

1st. Indigent or pauper. Provision has been made for this class in—*A*, Private wellings,—*B*, Farm Asylums,—*C*, Close Asylums.

A.—Private Dwellings.

A large number of the insane, supported by local authorities, are provided for in ivate dwellings in England, Scotland, France, Belgium, and other countries. In ngland 6,638 (or upwards of one-sixth of the entire number) of the chronic and rmless class of insane, are thus accommodated in the houses of their relatives, to hom a small weekly payment, varying in different cases, is made. The Poor Law edical Officers of the district are charged with the duties of visitation and report on is class. The visit is made once every three months; and the report, which is bmitted to the Board of Guardians, states whether the patient is well cared for, and ay or may not properly remain out of an asylum. The Reports are sent to the Commissioners in Lunacy; but, since this class of patients, though officially under their care, not come absolutely under their inspection, very little information upon the working the system can be obtained.

In France, in 1860, 53,167 of the insane were living in private dwellings, out of total number of 84,214, or 35·75 per cent. of the entire number of lunatics, and ·26 per cent. of the entire number of idiots; but since no special care is exercised by e State over the insane who are out of asylums, it is almost impossible to arrive at a nowledge of their general condition.

In Scotland, the insane accommodated in private dwellings have, since 1858, me under the guardianship of the Commissioners in Lunacy—the Deputy Commissioners siting every patient so accommodated once in six months in the nearer, and once in e or two years in the far-off districts. The working of the system and the condition the patients may be learned from an examination of the Annual Reports of the ottish Lunacy Board, and from a summary of the Reports of the first four years, which s been published by Dr. Arthur Mitchell, one of the Deputy Commissioners in Lunacy r Scotland.*

In 1862, the total number of pauper patients living in private dwellings was 741, of whom 1,338 were living with relatives, 334 with strangers, and 69 alone.

* *The Insane in Private Dwellings:* By Arthur Mitchell, M.D.—1864.

These—numbering 33 per cent. of the whole number of pauper insane in the country—all belonged to the so-called harmless and manageable class, and had been placed, or allowed to remain in private dwellings, under the sanction of the Board of Lunacy; those among them who were not boarded with relatives having been placed with their guardians under a warrant from the Sheriff. The Lunacy Board is invested by law with the all but complete control of the pauper lunatics of the country; it can withhold or withdraw its sanction to their residence in private dwellings, and take whatever steps may be necessary for the removal of patients to asylums. "It is directly responsible for their proper keeping, and accordingly their condition is personally examined and inquired into with as great regularity as possible; and, in addition to this, Parochial Surgeons are required to visit them at stated times, and the Inspectors of the Poor to make annual and other returns regarding them."*

From January, 1858, to the end of 1862, 4,922 visits were paid to the dwellings of these patients, and a separate report on each patient was forwarded to the Board. The object of these visits is stated, in the Second Annual Report of the Board of Lunacy for Scotland, to be—"First, to procure the removal to asylums of such patients as there were reasonable grounds for thinking were still capable of being restored to sanity, or, at all events, of being improved in mental health, under asylum treatment; secondly, the removal of those who, from the nature of their malady, or from the circumstances in which they are placed, there was reason to fear might prove dangerous to themselves or others; and lastly, the removal of those who, from their mental and bodily ailments, could not be properly cared for at home. Another equally important object was, as far as possible, to insure the proper treatment of those patients whose removal to asylums was dispensed with."

In short, as Dr. Mitchell† observes, "The object of these visits was to secure that removal had not been dispensed with in cases which were not suitable for management in private dwellings, and that a reasonable provision existed for the safe and comfortable keeping of those who were;" and, "excepting always those cases in which bodily infirmities and peculiarities of mental disease make extra comforts necessary, it has been thought satisfactory when these patients are found to be treated in all respects like the sane poor around about them, and among and with whom they live. In the vast majority of cases, it is enough if the patient is really treated as a member of the family in which he lives—if he is not half-naked and in rags, whilst they are warmly and sufficiently clothed—if he does not sleep in an out-house, or on the bare floor, while they have comfortable beds—if his meat is not thrown to him as if he were a dog, while theirs is decently served—if he is not unwashed and filthy, while they are clean; and so on, in other respects."

Under this system of visitation, carried out with great zeal by the Board of Lunacy, the condition of the insane in private dwellings has immensely improved, and at this time compares favourably, as far as their comfort and happiness are concerned, with that of the insane in the Poor Houses of Scotland—the wards of which are, as a rule, in their arrangements for the well-being of the patients, much in advance of those in England. The mortality is also less. Dr. Mitchell gives the following table:—‡

Mortality—Percentage on Annual Number Resident.

	Pauper Patients in Private Dwellings.	Patients in Lunatic Wards of Poor Houses licensed for Chronic Cases only.
1858	5·4	9·4
1859	4·6	9·5
1860	5·0	10·1
1861	4·5	13·1

and the cost is thus stated by the same authority:—

The Average Daily Rate of Maintenance, over 5 Years, has been—

The Public and Private Asylums	£0	1	3¾
In Lunatic Wards of Poor Houses	0	0	11¼
In Private Dwellings	0	0	5½

* *Op. Cit.*, p. 30. † *Op. Cit.*, p. 32. ‡ *Op. Cit.*, p. 90.

This system, as it exists in Scotland, is not without its evils. The number of pregnancies occurring in imbecile or insane patients, under such a system, is out of all proportion to that which is found in close asylums—where also, unhappily, such a thing is not totally unknown; and a momentary consideration of the life led by the parish fool or "softy," even under the best circumstances, will show that it is by no means a desirable one. It has, for these and other reasons, met with the sharpest criticism in England; and yet, on a study of the evidence which is adduced in its favour by Dr. Mitchell, and in the Reports of the Lunacy Board of Scotland, its marked advantages are apparent; and it is impossible to do other than admit that, under such a system, fairly and strictly worked, a certain proportion of the chronic insane may, in almost all countries, be provided for and kept in comfort, happiness, and health, at a cheaper rate than in county asylums or the wards of poor-houses. The number, however, can never be very large; and it is noteworthy that in Scotland, where the existence of a poor and scattered population—many of them of the cottier class—affords peculiar advantages for the carrying out of the system, the number of patients so accommodated is only one-third of the entire number of pauper insane, and has been slowly and steadily diminishing ever since the visitations of the Board commenced.

A new country must, however, form a complete exception. There can be little doubt that it would be impossible now, and for many years to come, to provide such accommodation as would be fitting, or to carry out this system to even the least extent in New South Wales, where the population is a changing one, the mass comparatively wealthy, and the class, with whom lodging and care is found for the patients in Scotland, does not exist.

In America the system has attracted much attention; but so far has been thought, and doubtless has been, impossible in the majority of the States of the American Union: but the Massachusetts Board of State Charities, impressed with what has been done in Scotland, has eloquently advocated a trial at least of it in Massachusetts, one of the oldest and most settled States of the American Union.

A considerable number of insane are provided for in private dwellings in Belgium, but instead of being scattered throughout the country they are collected in one District—the Colony of Gheel—a description of which, written on the spot, and free, it is hoped, from the bias of extreme opinion, will show the nature and peculiarity of this insane Colony, which, spite of cross railways and *diligences*, has been visited by a large number of physicians and others interested in the care and treatment of the insane.

The Colony of Gheel, has been described by many of its visitors, some of whom have vaunted it highly, whilst others have deprecated it with systematic hostility. French, German, Belgian, and English literature is voluminous on this subject, and around the Colony has arisen a storm of controversy. To M. Jules Duval* we owe the fullest description we have of the colony; but nothing but personal inspection can satisfy any one really interested in the subject, or enable him to realize Gheel as it exists. The colony is situated in the district called the Campine, in the Province of Antwerp, in Belgium. It may be reached either from Antwerp or Brussels: the railway going to the small town of Herenthals, and the remainder of the journey being made in a *diligence*. The colony includes an area of about 30,000 acres, and its population is 11,000, about a quarter of whom live in the town of Gheel, whilst the remainder are spread over the country around, in a total of 2,000 houses. In the town itself these houses are usually of brick or stone; but in the country around they are not uncommonly made of osiers, plastered with mud, and thatched with straw or reeds. They are the dwellings, in fact, of a poor peasantry. Among this population are scattered the large number of 1,040 insane, sent from every part of Belgium, who are in charge of 780 "hosts" or "nourriciers."† Of these, 100 are paid for by their friends, the remainder are paupers living at the cost of the commune to which they belong. They live in the

* Gheel, ou une Colonie D'Aliénés vivant en famille et en liberté: Par Jules Duval, Ancien Magistrat, Vice-Président de la Commission Centrale de la Societé de Géographie de Paris.—Paris, 1867.

† The term "nourricier" is applied to those receiving indigent patients paid for by the public; whilst "host" is applied to those receiving patients paid for at superior rates by their friends. The words, however, are used almost indiscriminately.

houses with the families of their hosts, work with them in the workshops or the field, and lead a life varying, in most respects, little from the ordinary life of the sane. The largest number of the insane accommodated in one house is four, but this number exists in one house only,—a house in the town in which good accommodation is provided for the patients, who pay well. In several houses three insane are accommodated, and in many two, but it is more common to find only one living in a house. The insane colony is under a Commission, comprising the Governor of the province and other officials, and a medical man appointed by the Government, who are the governing or administrative body corresponding to the usual board of asylum governors, and have drawn up a complete and stringent code of rules for the control of the colony. The board appoint the medical staff: a medical director who receives 4,500 francs a year and a house; and four physicians, one of whom is in medical charge of each of the four sections into which the colony is divided. There are also a secretary, an assistant secretary, and four "gardes" or supervisors of sections. The infirmary, which has been erected within the last five years, is placed at a short distance from the town. It contains rooms for the medical director and secretary, and store rooms for the entire colony; and is a small and complete asylum for forty patients. The rooms are lofty and of large size. The bedding and furniture are good, and the arrangements generally very complete. It contains rooms and airing courts,—1st, for quiet cases; 2nd, for violent cases; 3rd, for those under observation on admission. The rooms for patients under observation are 7; for violent, 2; for dirty, 1; the remainder are for quiet patients.

When visited it contained 26 inmates, 12 of whom were old and dirty demented cases, 2 only were violent. The infirmary is intended to accommodate—1st, all patients on arrival, so that they may be observed and relegated to such a part of the colony as may be best fitted for them; 2nd, all sick who, on the report of the physicians of sections or of the physician-in-chief, are removed to the infirmary, to receive there such care and treatment as are difficult to obtain in the cottiers' houses; and, 3rd, all who suffer from temporary acute attacks of insanity, and whose continuance at large might be dangerous or injurious to themselves or the inhabitants of the district.

The more quiet cases of the insane only are sent by the Government to Gheel. None requiring constant restraint—no known suicidal or homicidal patients are sent, or any who are likely to disturb the public peace or offend public decency. On arrival at the colony they are placed in observation rooms at the infirmary. In the course of a few days, if found to be quiet and manageable, they are sent to one of the houses kept by the nurses or hosts. Of these latter a list approved by the governing board is kept by the medical director. On this list are entered only the names of such people as are of good conduct, and have provided such accommodation for the insane in their homes as is required by the law regulating the colony. This accommodation is a room containing 500 cubic feet, or about 12 cubic metres, for each individual; with a boarded or paved floor, a window at least 50 centimetres square; with iron or wooden bedstead, and wool or hair mattress, straw palliasse, coverlet, blanket, sheets, &c. Names are removed from the list by the governing board for misconduct, for cruelty or ill treatment of patients, or for other reasons. The director is the sole judge of the fitness of the situation to which he sends the patient, and the person to whom he is entrusted. In the houses around the small town are placed, as far as possible, such of the insane whose physical or moral state renders more frequent and continuous attention necessary. In a separate quarter are to be found the imbecile and idiots. In another department, in which there is no stream of water, are placed, as far as convenient, the epileptic; whilst in the more remote houses, in the habitations on the moorland, hard by the woods, are the more violent, turbulent, and noisy.*

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* Of this class Dr. Bulckens writes as follows:—"Exercise is an instinctive craving of the maniacs; we isolate them, but we permit them to have free air for the unreserved use of every muscle, for their vociferations, for their gestures. Their excitement, meeting no obstacle, shows itself freely; but it is not long in exhausting itself. Having no other hearers than the woods, the moors, and the feeble report of the neighbouring echoes, the insane are but little encouraged to repeat their boisterous conduct,—so true is it that a man, in a state of reason as well as in a state of madness, often requires an audience for the production of certain bizarre actions and to find a stimulant to his eccentricities."

The patients from the Walloon Provinces are placed, as far as possible, together, in a section where the hosts speak the French language.

The hosts, or "nourriciers," number, as has been said, 780. The following table, from Dr. Bulckens' report for 1860, gives their various occupations at that time; the number has since increased :—

Husbandmen	372	Turner (wood)	1
Shopkeepers	25	Dyers	2
Shoemakers	17	Rope-makers	2
Tailors	14	Saddlers	2
Joiners and cabinet-makers	16	Tanners	2
Wheel-wrights	5	Millers	3
Gardeners	7	Braziers	3
Bakers	8	Carriers	4
Butchers	5	Canteen-keeper	1
Weavers	7	Employés connected with common affairs and the insane	10
Day-labourers	10	Justices of the Peace	2
Tavern-keepers	32	Teachers	5
Locksmiths and blacksmiths	7	Veterinary surgeons	2
Dressmakers	4	Apothecaries	2
Lace-makers	8	Doctor	1
Barbers	5	Manufacturer of tobacco	1
Sabot-makers	9	Householders	10
Masons	4		
Slater	1		643 *

It is important to note that the insane are not placed only with peasants, but among artisans and townspeople; that is to say, among every class of inhabitants. People, well-to-do as well as poor, receive the insane in their houses, and the prosperity of the colony depends mainly on the amount of money flowing to it as payment for the care bestowed on them. In selecting a host for a patient, the director is guided by the mental condition of the patient, and by the life to which he has before been accustomed. Patients pursuing trades are placed, as far as possible, with people of their trade in the town—shoemakers with shoemakers, and tailors with tailors; or, if used to agricultural work, they are sent into the country districts. If the patient and the host to whom he is confided get on well together—if the host and patient agree, and are equally satisfied with each other—the patient may remain for years in one house. But their lodgings are often changed by the director; and, on the register of such changes, kept in the director's office, the following are found to be the chief causes :—

1. "For continual discontent of patient";
2. "For want of care by nurse";
3. "At request of nurse";
4. "For sanitary reasons."

The patients live with their guardians as members of their families, and occupy themselves as their guardians direct. Not unfrequently the patients are induced to work for, or with, their guardians for slight wages, or an occasional present in money, clothes, tobacco, or some small luxury; and in many cases kind treatment has so attached patient to host, that he willingly labours for love. The recompense for work is a matter resting between patient and host, but all cruelty or compulsion to work is forbidden. On walking through the town or country, patients may be met everywhere, strolling about the town in idleness, engaged in doing errands for their hosts, or working at their trades or in the fields—some alone, and some with their hosts. Ordinary agricultural operations are to be seen in all the fields—weeding corn, planting potatoes, digging, carrying manure, &c. Some patients are to be seen nursing or rocking children; some engaged in cooking or other household avocations; some peeling potatoes, feeding cows, or churning. One insane woman is provided by her host with a small basket, containing needles, cotton,

* Rapport sur l'établissement d'Aliénés de Gheel: Par M. le Dr. Bulckens, 1860.

small household stores, &c.; with these she goes through the colony as a pedler, selling her stores, and bringing home the money. The work, in many cases, seems a great safety-valve; some, if interrupted in it, become at once excited and noisy; but in other cases it is by no means all work and no play, and those found seated at a shoemaker's bench in the morning, may be met going fishing in the afternoon. A few only refuse all work, and either wander about, or sit in the chimney-corner or their own rooms. The best possible understanding seems generally to exist between patient and host. It is to the interest of both that such should be the case. The patient, if kindly treated, will repay the kindness by work, whilst the host can indulge the patient in a variety of ways for diligence and good behaviour. In some cases they are most carefully and jealously watchful of the property of their nurses, and the attachment between them and the children of the family is frequently very strong.*

The nurses are forbidden to use any correction or restraint, except the camisole or belt, without being authorized to do so by the medical director, but in addition to the use of the camisole and belt, another instrument, which certainly comes under the head of restraint, is somewhat freely used. This is called an "*entrave*," and consists of leglets of iron, or leather, joined by a small chain. When on the legs it prevents the patients wandering far from home; they can walk with it, but only slowly. From fifteen to twenty patients are said to wear these affairs, either constantly or at times.

The payments made by the commune, or district, for their indigent insane, vary with the prices of provisions, and other necessaries; they are received by the Commission, or governing board. In 1867 the total sums paid were, for—

Quiet patients,	7½d.	a day
More noisy,	8d.	,,
Dirty, ...	8½d.	,,

and this was apportioned as follows:—

Centimes.	
53·78	to nourricier for food, care, and lodging;
7	for medical care;
10·22	for clothes;
4	for charges of administration.
75	centimes.

The extra sum, in the case of the more noisy and dirty, goes to the nurses. For patients paid for by their friends, the arrangement is a private one; but the Government fix a tariff to be paid for medical care by such lunatics, varying with the sum paid for their maintenance. The clothing is managed by the central administration, who buy materials, and hire tailors and seamstresses. Stores are kept at the infirmary, and from these, clothing is issued at stated times to the nurses, an entry being made of each article in a book kept by the nurse. This book contains the rules for the government of the colony issued by the Commission, and serves also to record the visits to the different cottages of the supervisors of sections and the medical officers, who enter their names at each visit. The clothing seems good and serviceable; and the insane are, in most cases, better clothed than their nurses. The accommodation provided for the paying patients varies with the rate of pay, and is in some instances excellent in every respect.

For indigent patients the accommodation provided in the town is, as a rule, fair; but the best that can be said for that in the country districts is, that it is, generally, better than that enjoyed by the families themselves. The Flemings of the cotter class are not a cleanly race. The common sitting-room of the family, which is often the bed-room also of some members of it, is generally extremely dirty: the room has frequently no flooring but the hard mud. From it opens directly the cow-shed; and a mingled odour of cows and manure fills the whole house. But in this the lunatic is in the same position

* The care with which the insane nurse the children is extreme; and in one house, when the "ceinture de force" was produced for inspection, a small child cried bitterly, because she imagined it was about to be applied to her lunatic friend who was standing by.

as the family whose house he shares, except that he often seems to appropriate the chimney corner. The food provided for the insane is the same as that eaten by the family: meat three or four times a week, rye and wheaten bread, potatoes, coffee, &c. In clothing, as before said, the lunatic is better off than his nurse. His sleeping room is almost always the best in the house. The bedding provided for him is sufficient, and, though wanting in cleanliness, cleaner than that of the nurse, which is not under inspection. In 13 years 5 suicides only have occurred: 4 by hanging and 1 by drowning. Open wells exist at almost all the houses, and near many of them are small streams. The ordinary house knives are constantly left about—indeed no precaution is taken in this matter; and although known suicides, homicides, and incendiaries are excluded from the colony, it is a matter for wonder that accidents are so few. In the same period 2 cases of illegitimate children have been born from insane women, whilst a third is *enceinte*. This is sad enough, but as before remarked such an event is not altogether unknown in close asylums. Police regulations are framed by the Government with special reference to the insane. They are not permitted to frequent wine shops or inns; and innkeepers are forbidden to sell them intoxicating liquor. Certain hours are fixed after which they are not allowed in the streets, and the pipes smoked by them must have covers, so as to prevent accident; but there is little or no restriction in their going and coming. They frequent the dancing and concert rooms, which are open two or three times a week, and join in the amusements to be there found; whilst the number of churches at Gheel serve to supply plentifully their religious wants. Looking at Gheel as a whole, it is easy to see that it is not a "paradise of fools," as represented by some of its visitors; neither does it merit the emphatic condemnation which has been bestowed on it by others. 1,000 insane, or almost one-fifth of the entire insane population of Belgium—the numbers of which are—

Indigent	3,886
Paying patients	1,560
	5,446

are here maintained; and it cannot be doubted that they are more happy and, in many respects, as comfortable as they would be if provided for in a close asylum, with its many appliances and its artificial life: as well washed, as well bedded, perhaps as well fed, they are not; they have not the constant medical care, and the varied amusements, of an asylum; but they are leading a life which is to them a natural one. There is a freedom, spite of camisole and leglet, which cannot be found in ordinary asylums; and the chances of cure are as great, if not more so. It must always be remembered that Gheel is intended, under present regulation, for the more quiet* and chronic cases only. The large mass are beyond all hope of cure when sent, so that the statistics of the place cannot be compared with those of ordinary asylums; but it cannot be doubted by all who carefully examine the subject, that the colony is good in principle, useful to the country and to the insane, and, in most respects, excellently managed. The existence of Gheel with its large number of insane living in private families, has undoubtedly greatly influenced the minds of thinking men in all countries, and had a great effect on the provision made for the chronic class of insane. The system of placing the insane in private dwellings as now pursued in Scotland; the cottages attached to large asylums, in which the insane are placed with the artisans and labourers at the asylum, are both steps in the same direction. But though Gheel is flourishing—though the number of people willing to receive patients and comply with the Government regulations has yearly increased—it has been found impossible, even in Belgium, to commence a new colony of a similar kind. Such an attempt in the Walloon Provinces—where the main requisites, a poor proprietory owning small patches of land, and a wide extent of country, existed—has signally failed. On referring to the list of nurses, it will be seen that a large proportion, 372 out of 643, are husbandmen. They are of the cotter class, owning the little plot of land,

* Many of the cases are indeed so "quiet" and manageable, that it seems strange that their friends (if friends they have) should ever have sent them from home.

generally from 2 to 3 acres, occasionally 6 or 7, on which their houses stand; the land being, as a rule, reclaimed from the unproductive moorland which exists to a great extent in the Campine. But, besides these two conditions—a cotter class in a large open district, not easy to find in any country—there is a peculiarity in the Gheeloise character which exists nowhere else. A fine race, vigorous and intelligent, distinguished for their native virtue, their simplicity, and their affectionate disposition. So far from having degenerated by constant contact with the unfortunate beings whom they receive with so much kindness, they have preserved intact both their moral conscience and their reason; and, by centuries of association with the insane, there has grown up and become ingrained in their minds a fixed idea of confidence in the generally inoffensive character of the insane, that they are to be won by kindness, and that harsh measures are unnecessary except for exceptional cases; and, in addition to this, a sense of public spirit, a belief in Gheel as a grand and good institution, the upholding of which is part of their duty in life. So that each inhabitant, whether occupying the position of nurse or not, feels himself responsible for the good treatment of the insane of the colony; and thus the total sane population of 11,000 is watching over the welfare of the 1,000 insane. This explains, in no small degree, how it is that liberty is possible to the insane, and why accidents are infrequent. The existence of Gheel is, in fact, an accident. Its origin is lost in the night of time among monkish legend and priestly exorcism. It is said that in the sixth century a young Irish princess, called Dymphne, converted by a priest named Gerebert, fled with him from the criminal love of her pagan father, who, however, pursued her, found her at Gheel, and decapitated her with his own hand. This young princess in process of time became Saint Dymphne. At her shrine the insane were cured of their malady, and she was soon considered by the population as the patron saint of these unfortunates. In the twelfth century a beautiful church was raised in her honour, and the history of the colony commences. Mad people were brought on a pilgrimage to the tomb of this saint: many, it is said, were cured. A small cottage was built near the church, as a residence for the insane during the time prayer for their cure was made; and this (which still exists, and is occasionally used for its original purpose) was the first beginning of what is called the Gheel System. Little by little those who were not cured—either lingering in the hope that the saintly intervention might yet come, or left without means of reaching home—were lodged in the houses of the peasantry near, who have in the course of long years grown to understand their peculiarities; and so a custom inspired by faith has been transformed into a permanent institution, which has of late years been placed under Government control. To make another Gheel is, then, impossible; but it is not impossible to learn the lesson which it teaches—that a large proportion of the quiet insane may be provided for safely and cheaply, with increased happiness to themselves, in private dwellings.

A mode of providing for the insane in private dwellings has of late years been to some extent put in practice, and found many advocates both in England and Scotland.

Dr. Bucknill some years ago placed, in labourers' and artisans' cottages near the Devon County Asylum, the limited number of patients of the chronic harmless class. The payments for their support were made from the asylum funds, and their clothes were also supplied from the same source. The distance from the asylum allowed of constant and effective supervision; and, at the same time, the amusements of the asylum were at the command of those of the patients for whom they were deemed suitable.

This experiment answered all the expectations of its promoter, and the example thus set has been followed in other asylums. At Montrose, a few patients are lodged with those servants of the institution who are already provided with houses, and the superintendent, Dr. Howden, is awaiting the erection of other cottages for the artisans of the institution, to carry out the system more fully.

At the new Surrey Asylum, some 30 quiet patients are accommodated in the houses of the farm bailiff and gardener; and at Gloucester, Mr. Toller, the superintendent, has filled two small cottages on the asylum estate with harmless patients, with the best results.

Dr. Lockhart Robertson, of the Sussex County Asylum, the Editor of *The Journal of Mental Science*, has warmly advocated a development of this system as preferable to that

existing in Scotland. It is suggested, that, as the ordinary asylums become full, the more chronic and quiet patients should be accommodated in cottages near—first with the gardener, gate-keeper, and other servants of the institution, and then in the cottages of the neighbouring villages; and that they should be under the supervision of the superintendent of the asylum, and removable to and from it as alteration in their symptoms might render necessary. The asylum would thus become the centre of a district more or less peopled with insane. It would supply the clothing, medicine, and minor comforts necessary; and, whilst the patients were enjoying the domesticity and individuality of life in private houses, and deriving pleasure from social intercourse, free from the monotony of ordinary asylum routine, they would still be under its protecting wing, and perhaps find it a "present help" in time of trouble.

This idea has received the assent of some of the most celebrated of asylum superintendents both in England and Scotland, and deserves the deepest consideration of all interested in asylum management.

B.—Farm Asylums.

The amount of land possessed by several of the English and Scotch Asylums, and cultivated by the inmates, is large. At Elgin, an asylum for 55 patients, there is an estate of 92 acres; at the Three Counties Asylum there are 216 acres under cultivation; at the Sussex County Asylum, 100; and at other English and Scottish Institutions, an almost equal amount. But this is in connection with a Close Asylum, and differs somewhat from what is known as the Farm Asylum, of which the best specimen is the Colony of Fitz James, at Clermont sur L'Oise, in France.

At *Clermont*, about 40 miles from Paris, on the Northern Railway, is the most noteworthy establishment for the care and treatment of the insane in France. It consists of three departments,—the "Asylum" proper, and the Colonies of Fitz James and Villiers. The institution is entirely a private enterprise of the three Brothers Labitte. Dr. Gustave Labitte is the Physician and Medical Director; he resides at the asylum and has an assistant medical officer, whilst there is a resident physician at Fitz James, who is responsible for the medical care of the patients there and at the branch establishment at Villiers. One of his brothers, M. Auguste, undertakes the general and financial management; and the other, M. Alexandre, superintends the vast agricultural operations which form the most distinctive feature of the establishment. Each of these is assisted by a staff of clerks, stewards, and supervisors. The total number of patients is about 1,400: and of these, 300 are "pensionnaires," paid for at various rates by their friends (the lowest rate is 700 hundred francs a year); and the rest (1,100) are paupers, paid for by the Governments of the four departments, from which they are received, at the rate of 1 franc a day, or 5s. 10d. a week. For this sum they are boarded, lodged, and clothed, and receive all necessary medical treatment and care.

The "Asylum," which is in the town of Clermont, contains 1,000 patients, and differs but little from ordinary proprietary asylums both in England and France. There are here workshops at which all the clothes and boots used by the paupers patients are made, and ordinary carpenters', painters', and glaziers' work is done; and there is also a large bakery at which bread is baked for the asylum and the colonies, and a vegetable garden, of 40 acres, in which all the vegetables necessary for the asylum are grown.

The colonies are two in number. At the first, situated at Fitz James, about two miles from the town of Clermont, 300 patients are accommodated and employed; and at the second, which is at the village of Villiers, some four miles distant, are 100 patients. A few of these are pensionnaires, but the majority are paupers. At Fitz James, a large building—not unlike a sea-side hotel or boarding house, nicely furnished, and containing billiard and reading rooms—affords accommodation for the male pensionnaires, and a plainer building near is occupied by the paupers. This building is of three stories: the ground floor is divided into dining and day rooms, and the upper two stories are used as associated dormitories. The buildings are all substantial, and fairly furnished. There are baths, lavatories, and all necessary fittings,—substantial, but of the plainest kind. The women are accommodated in separate buildings a little removed from those occupied by the men. That for the pensionnaires is a fair sample of a small French château,

surrounded by gardens and trees, and fitted with all the requirements of a modern house for ladies. At Fitz James and Villiers are placed all the quiet and manageable patients who can be drafted from the "asylum." The principle of the colonies is labour. The pensionnaires work if they choose, and a few do so; but, the paupers are expected to work, and the 1,000 acres—500 at Fitz James and 500 at Villiers—are cultivated by them, under the direction of a limited number of attendants and workmen. The system of work is as follows:—The patients go to their work in squads of a dozen or fifteen individuals, under the charge of an attendant or *chef d'escouade*, who directs their work and supervises them. Several squads are sometimes united together, according to the work to be done, but each squad is under the direction of its chief. The working hours differ in summer and in winter, but are on an average 6 daily. Each patient receives occasionally a small present from his earnings, according to the importance of his work, with an addition to the fixed allowance of food. The entire establishment of Fitz James is a large farm in the highest state of cultivation, with all the accessories of stables and barns for cattle, and sheep; steam flour mills and threshing machines, and excellent agricultural implements. 30 working bullocks and 20 horses are kept. The sheep number 500; 300 are kept in pens and fed. There are 30 cows, a large piggery, fowls, rabbits, pigeons, &c.; and, though the patients are employed from morning to night in every part of the farm and buildings, there are no walls or arrangements for security differing from any common dwellings, and the colony is as little like an ordinary asylum as possible. The women are not employed in field work, as it is found that much supervision is necessary when the sexes are mixed; they live in detached buildings, which are walled round, and are employed in laundry work. The washing is done with very little machinery,—two of the ordinary French steam pumps, and a centrifugal wringer, being all. The river Beronnelle traverses the length of the building, and is so walled in that the laundresses stand on either side at their scrubbing boards, as may be seen by the open river-sides all over France. The water, used as it flows, is constantly fresh and plentiful. For drying, there is a drying steam closet, and on an upper story a wooden building, with movable louvres, through which the air is constantly passing. Cooking in both male and female departments is done with coal, which is found cheaper than steam. The patients employed in farm work look wonderfully robust and well. The clothing supplied to them is rough, and less expensive than seen in most French and all English asylums, but it is serviceable and appears fitted for work. The women almost all wear sabots. There is a band; and concerts and other amusements are encouraged. The curé of the village of Fitz James is the chaplain to the colony; and the patients attend the village church, where special seats are appropriated to them.

The distinctive features of this establishment are well worth the attention of all interested in the treatment of the insane. They are,—

1. The large amount of land under cultivation;

2. The freedom from restraint in the shape of walls, &c., or "*l'air libre*," as Dr. Labitte himself calls it;

3. The care with which one part of the establishment is made to work with the other, so that the whole shall be as much as possible self-contained and self-supporting.

1st. Deducting the number of pensionnaires, who do little or no work, from the total asylum population of 1,400 we have, in the total establishment under the care of the Brothers Labitte, 1,100 indigent insane; and, by the more quiet and harmless patients from among this total number, we have 1,000 acres of land cultivated in the best manner—an average of almost 1 acre per patient; far in excess of the cultivation practised in any English asylum. The work is done almost entirely by the patients.

Dr. Labitte gives the following as the population of the colony, and the manner in which they are employed—

Indigent Patients	Men	170
	Women	87
Pensionnaires	Men	21
	Women	28
		306

The 170 indigent male patients are employed as follows :—

Field work	60	Steam-engine	1
Care of poultry yard and offices	15	Farrier	1
Cow-houses	8	Turner	1
Stables	6	Wheelwright	1
Piggeries	8	Painter	1
Sheep-folds	4	Butchers	2
Care of horses and implements	5	Boys, more or less occupied according to their ability	22
"*Hommes de peine*"	10		
Indoor work	20		170
Kitchen	3		
Millers	2		

The 87 indigent women are all employed, and some of the pensionnaires also. These latter pay only the lowest price at which pensionnaires are received, and are lodged in the female section and not at the little château. Dr. Labitte gives the following table :—

Washing	50	General indoor work	6
Ironing	4	Sewing	25
Folding	8		
Drying rooms	8		107
Carrying linen	6		

or 20 pensionnaires, and the whole number of indigents. There is a chief attendant *(surveillant en chef)* for the male, and another *(surveillante en chef)* for the female department. The attendants and workmen for the entire colony are,—

For male side—

8 domestics for house work	1 shepherd
7 chief attendants (*chefs d'escouade*)	1 miller
4 attendants	1 butcher
7 carters	1 engineer
2 cowherds	1 cook

For women—

4 domestics	3 attendants.
5 chief attendants *(chefs d'atelier)*	

The domestics are occupied entirely with the paying patients; so, there are 11 attendants—(7 chefs d'escouade, and 4 ordinary)—to 170 patients, or about 1 to 15, for the males; and 8 to 107—(87 indigent and 20 paying)—or 1 in 14, for the females. In considering the work done, it must be remembered that not all the quiet patients are employed in farming and washing, but only such whose prior occupation fits them for it, and such as are likely to be benefited in mental or bodily health. In addition to the farming and washing operations at the asylum proper, bread is made and baked for the asylum and its two colonies, clothes are made, and carpentering and other work done.

2. The freedom from restraint, in the shape of walls. The establishment for men has in no respect the aspect of an asylum. There are no walls, and the fences are those which ordinarily surround a farm; and yet, with this, escape and attempts at it are not more than ordinarily common, the number being about five a year, and no suicide has taken place in the colony. The plan adopted shows what amount of liberty may be allowed to the quiet classes of the insane, *i. e.*, in this case to almost one-fourth of the population resident in an asylum. Out of the entire asylum population of 1,400, 400 are here allowed to live under circumstances which approach as nearly as possible to those under which the sane exist, the sole care being to keep up an efficient staff of attendants.

The department for the women is surrounded by a wall, and entered through a gate the porteress of which is a lunatic. The wall is employed almost entirely to separate the sexes. It is found impossible to allow to the women at Fitz James the same liberty as is enjoyed by the men, solely because the admixture of the sexes is undesirable. If the male and female departments were placed at a greater distance from each other, the women's department would be also without walls, and some of the patients would be employed in field work, which is frequently done by women in all parts of France.

3. The next feature of the establishment is the care, well worthy of imitation in public institutions, with which one part is made to fit into and work with the other, so as to make the entire undertaking, as much as possible, self-contained and self-supporting. Vegetables and fruit required for the patients at the colony are grown at the farm, and a considerable quantity of corn also, though not enough for the entire supply. This is ground by steam at the farm, sent to the asylum at Clermont, and made into bread for the use of the entire institution. Cows are kept, and milk for the supply of all thus obtained; and no small part of the meat required for consumption is obtained from cattle, bred, reared, and fattened at the farm. Whilst the farm thus supplies food, the clothes for the patients are made and repaired almost entirely in the asylum proper; bedding is also made and repaired there, and all necessary carpenters' and painters' work is done; the washing for the entire establishment is done by the women at Fitz James.

The entire establishment is said to be extremely remunerative; whilst the price at which indigent patients are received, is less than the sum which they are found to cost in most of the departmental asylums of France.

Dr. Labitte, writing in 1861, says of the establishment of Fitz James—"The colony has now existed in its completeness for four years, and every day we note its success in the more prompt amelioration in the mental condition of the sick who are susceptible of cure, and in the facility which we find in directing and occupying those who at first were regarded as turbulent and incapable of rendering the least service."—"We are then convinced that this system of colonization is most efficacious to arrive at non-restraint and 'la vie à l'air libre', which are the subjects of so much discussion. All idea of restraint and seclusion tends to disappear in a place of residence which presents no character of seclusion, and where everyone pursues, with as great liberty as possible, his usual avocations, and meets in a life in common, wisely directed, an example of order and of work."

That the establishment has been a success since the time this was written may be seen from its present condition, and from the fact that another farm of equal extent has been lately added. A full examination of the system of Farm Asylums shows that it is economical, and calculated to promote the comfort and happiness, and be beneficial to the mental health, of the inmates. At the farm there are twenty-two idiot or imbecile boys, for whom the country air is considered beneficial. They have a day-room, a school, and a dormitory, completely separated from those occupied by the other patients. They spend four hours a day in school; and in the intervals of lessons, some occupy themselves on the farm or in cleaning the courts, and the remainder walk or play in the fields. When they have attained a certain age, they are sent, if sufficiently tractable, to the workshops at the asylum, and taught a trade. At the asylum there are, from among these children, two tailors, a shoemaker, a carpenter, and a joiner, usefully occupied.

There is a gradually growing belief in the wisdom of employing the insane in outdoor, and especially agricultural, avocations; and the Department of the Seine, lately engaged in remodelling its institutions for the insane, has endeavoured to adopt, to some extent, the principle of the Farm Asylum at the beautiful new asylums of Ville Evrard and Vaucluse, both situated immediately beyond the suburbs of Paris. Each of these asylums, intended for the more quiet class of the insane, and for such as are likely to be benefited by agricultural labour, has attached to it 700 acres of land. Excellent farm buildings have been erected; and it is intended to practise agriculture on a large scale, with all the accessories of good implements and machinery, by means of the inmates.

C.—Close Asylums.

By far the most common mode of providing for the insane is in the Close Asylum—the "Asile Fermé" of French writers—and under this designation come all State, Provincial, District, County, and Borough Asylums; all Hospitals for the Insane, and Proprietary Houses, as generally constituted, as well as Parochial Asylums and Special Wards in Poorhouses. The principle in all cases is the same. The asylum is arranged to accommodate a given number of insane, who are kept, more or less, under lock and key; isolated from the world and the ordinary life thereof; subjected to such medical or other treatment as is thought beneficial; made to conform to the routine necessary for the working of the machinery of asylum government; and superintended, watched, and ministered to by a staff of paid officers and servants. These asylums, alike in the main principle, differ in the form of government, in their structure and organization, and in various details of arrangement.

A very large number of the more chronic class of the indigent insane are accommodated in the poor-houses of the parishes and unions to which they belong; in England, Scotland, and the United States, separate wards, are, as a rule, set apart for their use, and these wards have, in some cases, grown into distinct asylums. In Scotland, the parochial asylums are simply a development of the poor-house ward; and the large asylums which exist in the cities of New York, Boston, and Philadelphia, are of the same character, and are under the immediate management and control of the parochial or town authorities. The poor-house wards for lunatics in England have been for many years, in only too many cases, modified prisons. The authorities have been content to maintain the unfortunate lunatics in security; their food has been of the poorest, their lodging of the roughest: whilst a minimum of cleanliness only was possible, and means of recreation and employment almost unknown. In the disclosures recently made by the Lancet Commission, the crying evils of the entire poor-house system were laid bare, and the condition of the lunatic, as well as that of his sane brother, revealed. It is true that the lunatic wards, being under the nominal supervision and the occasional visitation of the Commissioners of Lunacy, were, in most cases, much better in every particular than those occupied by the other inmates; but much was then, and still is, to be desired. It would be wrong not to add that, in a few of the English poor-houses, all the requirements of the insane have been attended to, and the arrangements have met with the approval of the Board of Lunacy. The lunatic wards in the Scotch poor-houses are in most respects much better appointed than those further south. The wards at Dundee contrast most favourably with those of the lunatic asylum of the same town; those at Perth are in almost all respects excellent; and at Edinburgh, even in the Old Darien House, there is cleanliness and comfort. Means are taken in most of the poor-houses in Scotland to give the insane such small amount of recreation as can be afforded by a few newspapers, and an occasional walk beyond the bounds of the airing-yard; and some employment is found for the majority of the inmates; but the "juvantia" of a well-organized asylum are wanting.

The condition of the lunatic wards in the poor-houses of the United States may be judged of from the following extracts from Dr. Willard's Report, on this subject, to the Legislature of the State of New York:—

"The investigation shows gross want of provision for the common necessities of physical health and comfort, in a large majority of poor-houses where pauper lunatics are kept. Cleanliness and ablution are not enforced; in a few instances the insane are not washed at all, and are unapproachably filthy, disgusting, and repulsive. In some of these buildings the insane are kept in cages and cells, dark and prison-like, as if they were convicts, instead of the life-weary deprived of reason. They are, in numerous instances, left to sleep on straw, like animals, without other bedding."

"Those confined in cells are extremely filthy, most of them not using vessels; and their excrements are mixed with the straw on which they lie. Their straw is changed only once a week; and those lunatics, besmeared with their own excrement, are not allowed to come daily to the open air, eat in the same filthy apartments, and are not washed from one year's end to another."

Dr. Willard eloquently remarks—"It is a painful thought that, among the poor patients, who, from the ills of life, suffer mental alienation—fathers depressed from losses and anxiety; mothers exhausted with child-bearing, and the rearing of a large family; the youth from vice or disappointed hopes; and the foreigner, among strangers, looking wistfully back to his native home—that these, all suffering from diseases which might have been stayed, should be thrust into miserable poor-houses, and almost compelled to suffer the miseries of incurable lunacy."*

The poor-house wards, grown into distinct asylums, contrast most painfully with the excellent State asylums of the country. The amount of restraint is excessive, the number of attendants small, the accommodation most defective (the division for violent patients at Blackwell's Island, New York, is sadly deficient in every asylum requirement), and the means of employment and recreation almost absent. The main cause impeding improvement in these institutions, is the system of government in which the "guardian" element, and this not altogether free from political spirit, is very apparent. The medical officer is not the superintendent of the institution; there is a divided authority, a vicious system in the appointment of servants, and, with all this, a parsimony which is happily a rare thing in the noble institutions for the insane in the United States. The New York City Asylum is, in most respects, vastly superior to that of Philadelphia.

The treatment of the insane poor, even of the most chronic and harmless class, in the wards of a poor-house, appears to be a great mistake. It has only one recommendation, that of economy; and it is worthy of note that, in Scotland, where the requirements of the insane are most attended to, and the character of the poor-house accomodation most satisfactory, the expense of maintenance approaches very nearly to that of the district asylums. Dr. Mitchell† gives the following as the average daily maintenance rate for pauper patients for 5 years—

	s.	d.
In public and private asylums	1	3¾
In lunatic wards of poor-houses	0	11¼

and if, as has long been threatened by the committees of the district asylums, a larger price for care and treatment is charged for the acute, and consequently more troublesome cases, from those parishes which provide for their chronic cases in poor-houses, the entire cost for pauper insane to these, will be about the same as to those parishes which now confide the whole of their insane—acute and chronic cases alike—to the care of the district asylum.

In those English poor-houses in which the most satisfactory and complete arrangements have been made, the weekly cost of maintenance is as follows:—

	s.	d.
City of London	6	7
Camberwell	7	6
Eagle House (St. Saviour's)	4	6
Bath	6	0
Chorlton-on-Medlock	6	11
Manchester New	5	9
Halifax	7	0

The lunatic hospitals of England, among which Bethlehem, St. Luke's, and those at York, Lincoln, and Northampton are best known; the Royal Asylums of Scotland; and the three institutions of a similar character in America: the M'Lean Asylum at Boston, the Bloomingdale Asylum at New York, and the Philadelphia Hospital for the Insane; accommodate only a small number of the indigent, but are devoted mainly to the insane of the great middle classes.

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* Report on the Insane in Poor-houses and Receptacles—made to the Legislature of the State of New York, by Dr. Sylvester D. Willard, 1865.

† *Op. Cit.*, p. 90.

All these institutions were founded either in the last century, or in times prior to that —in some cases by public subscription, in others by the munificence of one individual; and are now possessed of property to a greater or less amount. This property in most cases consists of the asylum building and estate; in some of the Royal Asylums of Scotland these are still encumbered with debt, but in others, there is a good annual income. The government is in the hands of trustees, governors, or directors; some being so *ex officio*, according to the charter obtained by the corporation at its foundation, some because elected to the office, and the remainder by payment of a qualifying subscription to the funds of the institution. These governors or trustees manage the affairs of the institution by a committee of their number who form a board of control, appoint all officers, and apply the income to the purposes designed by the founder or laid down in the charter of the institution. In the majority of instances, accommodation is afforded in these institutions for the insane of the great middle class, whom their malady has reduced to circumstances of comparative poverty, which prevent their paying largely for their support. These are admitted either at reduced rates of board, or absolutely without payment, and are maintained in the institution either for certain fixed periods during which the malady is considered curable, as at Bethlehem, St. Luke's, and the Philadelphia Hospital, or till cure or death arrive, as in the Royal Asylums in Scotland and others. In some of these institutions, accommodation is provided for the rich, who pay more or less handsomely for their maintenance, (the surplus of such payments accruing to the asylum funds); and for paupers, who are paid for by the parishes to which they belong. The entire pauper insane of the county of Northampton are thus accommodated in the Northampton Lunatic Hospital, and the insane of the Borough of York in the lunatic hospital of that place.

The county and borough asylums in England, the district asylums in Scotland, and the county asylums in America, are greatly alike in constitution and government; the basis on which all are established is the parish system, by which the poor and insane are supported by the more well-to-do of their fellow-parishioners. These asylums have been erected either by funds drawn at once from the county rates, or by borrowed money which is repaid by instalments from these rates. The government is in the hands of the Justices of the Peace of the county, who, by an executive committee or board of control, appoint all officers, and arrange for the admission and discharge of patients; and the payments for their support, by the different unions and parishes. The power of the Magistrates is accurately defined by the legislature, and the constitution of the asylum fully laid down in the same manner. The departmental asylums of France, and the provincial asylums of Belgium, Holland, and some of the German States, differ from the county asylums of England in some minor respects only; the chief of which is that the Central Government interferes more actively in their management. All financial and general control is, however, in the hands of the prefect or chief officer of the department or province. The State asylums of the United States and some of the German States, as Baden and Brunswick, &c., are more distinctly Government institutions; they are erected and kept in repair by the State, and are in all respects Government property; the officers are appointed by the State Executive, or by a Board of Control nominated by it; but the maintenance of the patients is made to fall to some extent on the parishes and townships from which they are sent, the payments being collected by the Government. In the State asylums of Germany and America, special provision is always made for patients able to pay for their maintenance.

In providing for the indigent insane, private enterprise has, in most countries, entered into competition with the Local or General Government; but it is in England that the system of proprietary houses has been most largely developed. Near London, and in other parts of the county are large asylums, owned and administered by private individuals, containing from 200 to 500 pauper patients, paid for by the parishes to which they belong.

Almost all these proprietary houses in England are close asylums, and are licensed by the Board of Lunacy, and visited at least once a year by the Commissioners. They are in many respects satisfactory refuges for the insane; and in more than one instance,

private enterprise is in advance of public charity, in its adoption of modern improvements, and in the minor economies of household management; but, taken as a whole, the accommodation to be found in proprietary houses, and the arrangements for the comfort and treatment of the patients, are less satisfactory than in county asylums. And it cannot but be admitted, that the principle which permits a private individual, to enter into a commercial speculation in the care and treatment of the insane, is at the bottom wrong; and that this sale of the insane to any one who will undertake to provide for them at the smallest cost, may, except under the strictest supervision, lead to abuses which, though not impossible in public establishments not managed for profit, are far less likely to occur in them than in private houses. It is somewhat remarkable that proprietary asylums for pauper patients are unknown in America.

It will now be necessary to describe the general construction and organization of asylums for the insane of the

INDIGENT OR PAUPER CLASS.

Site.

Under the head of site are to be considered:—

1st. The site itself, as regards elevation and soil;
2nd. The aspect;
3rd. Distance from town.

Elevation.—Almost the entire number of recently built hospitals for the insane are placed in elevated positions, and command extensive views, some of which are among the most beautiful in the countries to which the asylums belong. It is difficult to find buildings possessing greater advantages, as regards view, than the Coton Hill Asylum, near Stafford, which has a fine view of agricultural scenery in the one direction, and of the town of Stafford in the other; the Worcester County Asylum, which has a rich agricultural district near, and the Malvern Hills in the distance; and the Sussex, at Hayward's Heath, from which the South Downs are visible. The new Surrey Asylum stands on an open moor, and looks over a fine stretch of country; and these are a few only of English asylums which are placed in situations rich in natural beauty. The American asylums, as a rule, command views of singular beauty and extent; and some of the more recently built of the Continental asylums are finely placed. The summit of a hill has been generally chosen, and the slope in front is made to serve for airing grounds. In some instances,—as at the Criminal Asylum, Broadmoor, and at Cupar, in Fifeshire,—the slope is so rapid that a full view of the surrounding country is visible over the high walls at the lower extremity of the ground; and in other asylums, by placing the wall in a slightly sunken position, the view is easily obtained, and the airing grounds thus lose almost all their prison-like appearance.

Soil.—But little choice has been exercised as regards soil. In the list given below, we have asylums standing on clay, gravel, chalk, sand, and other strata :—

Sussex	Whealden clay,
Essex	gravel,
Worcester	clay,
Three Counties	clay—chalk subsoil,
New Surrey, Brookwood	sharp gravel,
Colney Hatch	clay,
Derby	sand,
Bristol City	millstone grit,
New Stafford	gravel,
Northampton	iron-stone ;

and abroad the nature of the subsoil is equally various.

Aspect.—The great majority of European and American asylums front the south or south-east. Occasionally, as at Prestwich near Manchester, the frontage is to the south-west ; and in other asylums a slight change in the aspect of the building has been made, because of peculiarities in the form of the ground on which it stands.

Distance from Town.—A few asylums—such as Bethlehem, and the Female Asylum at Ghent—were originally placed in towns ; but the greater number of those which now occupy urban or suburban positions, were formerly at a small distance from the town, which in its growth has encroached upon them. This has been the case at Leicester, Northampton, Stafford, Gloucester, and Prestwich, at St. Yon, Rouen, and Charenton, Paris, where the asylums are now in close proximity to the town. For the large majority of new asylums, country sites have been chosen at a distance ranging from one to five miles from the town. The following table will show the distance from town, with the railway communication, of a number of English asylums. The distances are approximate only ; it was almost impossible to obtain them with exactness :—

Name.	Place.	Nearest Large Town.	Distance.	Railway Station.
Gloucester County	Gloucester	Gloucester	Suburbs	1 mile.
Worcester "	Powick	Worcester	4 miles	4 "
Stafford "	Stafford	Stafford	Suburbs	1 "
New Stafford "	Burntwood	Lichfield	4 miles	2 "
Derby "	Mickleover	Derby	5 "	5 "
Lincoln "	Bracebridge	Lincoln	2 "	2 "
Leicester "	Leicester	Leicester	Suburbs	1 "
(1) Lancashire "	Prestwich	Manchester	4 miles	4 "
(2) Essex "	Brentwood	Brentwood	Suburbs	1 "
(2) Three Counties—Beds, Herts, and Hunts	Arlesly	Hitchin	4 miles	½ "
(2) Middlesex	Colney Hatch	London	5 "	At Asylum.
New Surrey	Brookwood	London	25 "	3 miles.
Sussex	Hayward's Heath	Brighton	12 "	1½ "
Bristol Borough	Stapleton	Bristol	4 "	4 "
Coton Hill L. Hospital	Coton Hill	Stafford	1 mile	2 "
Northampton L. "	Northampton	Northampton	1 "	2 "
York L. "	York	York	Suburbs	1 "
Leicester L. "	Lincoln	Lincoln	Suburbs	1 "
Friends' Retreat L. "	York	York	Suburbs	1 "
Criminal Asylum	Broadmoor	Wokingham London	5 miles 30 "	4 "
Idiot "	Eastwood	Reigate	3 "	2 "

REMARKS.—(1) Omnibus communication with Manchester. Suburbs extend almost to asylum.
(2) These asylums are within easy reach of London, and trains are frequent. A tramway runs from the nearest station to Colney Hatch and the Three Counties Asylums ; and coals, stores, and sometimes patients, are brought to the asylum by it.

An examination of this table will shew that with few exceptions, the English asylums are placed in close proximity to large towns—near, as a rule, the largest town of the district to which they belong—the distances ranging from 1 to 5 miles. Most are within easy railway communication, and two, Colney Hatch and the Three Counties, have stations close at hand, and tramways running into the asylum yards. The only three asylums which are removed any distance from large towns are the Sussex County, which is 12 miles from Brighton, with which, however, railway communication is easy; the New Surrey, at Brookwood, which is within easy reach of a railway station; and Broadmoor, which can be reached by two distinct lines of rail, and is only 5 miles from the town of Wokingham, which contains about 5,000 people. The price of land, and the fine estates to be acquired for a moderate sum, appear to have influenced the directors considerably as to the choice of site in all three cases; and other arguments, derived from the nature of the class of insane for whom Broadmoor was intended, had weight in the selection of a site for that institution.

The asylums in Scotland are, as a rule, even more easily reached than those in England. The Royal Asylums of Scotland are generally suburban. The beautiful new asylums of Montrose, the Fife District, near Cupar, and the Haddington District, near Haddington, are all within about 2 miles of the chief town of the district; and the Perth District Asylum, recently erected at Murthly, is only 6 miles from Perth, and has a station within 200 yards of the asylum, and a tramway into the asylum yard.

The American State Asylums are either suburban, or placed at a distance from the city which seldom or never exceeds 3 miles; and where they are thus far removed, they are either within a few hundred yards of a railway station, or within a mile of the terminus of one of the many lines of street cars. The greatest care appears to have been taken in the selection of a site as near the town as possible.

In France, the new Departmental Asylums are generally placed at a short distance only from the chief town of the department. The new asylum at Quatre Mares is about 2 miles from Rouen. The Asylum of Evreux is less than 3 miles from that town, whilst, of the three new asylums for the Department of the Seine, one, that of St. Anne, has been placed actually in the suburbs of Paris, where it is more or less surrounded by houses; and the two others, Vaucluse and Ville Evrard, are at a distance of some 7 miles, but within easy railway communication. Two railway stations are within an easy walk of the latter asylum.

The newest of the German asylums are placed in the immediate neighbourhood of large towns. At Frankfort, Hamburg, and Göttingen, the asylums are not more than a mile from the city; whilst the beautiful new asylum at Ghent, which bears the name, and was the crowning labour of the life of, the great Belgian psychologist, is within 1 mile of the city. The best of the Dutch institutions for the insane, Meerenberg, is about 3 miles from the large town of Haarlem.

Land.

The Table given below will show, as accurately as it was possible to ascertain, the amount of land possessed by various asylums in Europe and America, and the amounts under cultivation as farm and garden.

Asylum.	Population.	Pleasure Grounds, including Airing Courts.	Pasture.	Arable, including Garden.	Total.	Remarks.
Worcester County ...	570	20	30	50	100*	*40 acres are rented.
Sussex " ...	700	30*	70	100	200	*Includes plantation and wood.
Essex " ...	580	10	10	76	96	
Three Counties ...	528	20	16	216*	252	*Garden, 54 acres.
New Surrey	150	.....	.....	.....	150	Farm not yet formed.
Middlesex County ...	2,000	80	35	35	150	
Gloucester " ...	590	10	35	35	80	
Derby " ...	380	50*	.....	50	100	*Includes pasture.
Lancashire " ...	1,000	25	51	20	96	
Leicester " ...	400	15	14	51*	80	*Spade cultivation.
Stafford " New	520	.....	.....	.....	100	Farm not yet made.
Stafford " Old	520	17	40	20	77*	*40 acres rented.
Lincoln " ...	500	10	.....	30*	40	*Spade cultivation only.
Bristol Borough	200	14	6	12	32	
Coton Hill L. Hospital	140	10	40	30	80	
Northampton "	450	15	10	50*	75	*Spade cultivation only.
Retreat, York "	130	28*	.....	12*	30	*Spade cultivation only. Pleasure grounds include pasture.
Elgin District	80	12	.....	70*	92	*Spade cultivation only.
Perth "	220	.....	.....	.....	60	Farm not yet complete.
Haddington "	100	2	.....	10	12	
Fife "	213	7	10	40	57	
Montrose Royal	380	30	10	70	110	*30 acres rented annually.
Government Hospital, Washington.	380	105	100	25	230	*70 acres park and woodland; in treaty for 150 more.
Pennsylvania State ...	350	18	40	72*	130	*Farm under plough, 30 acres.
Northampton (Mass.) State.	417	.....	.....	.....	200	
New Jersey State.....	500	45	52	23	120	25 acres woodland.
New York.....	618	60	140*	.....	200	30 do *pasture & arable.
Evreux, Département Eure.	500	60	90*	.....	150	30 do * do
Quatre Mares, Département Seine Inferieure.	700	.....	.....	.....	100	
St. Anne, Dépt. Seine	600	.....	.....	.....	14	*
Ville Evrard, do.	600	.....	.....	.....	750	
Vaucluse, do.	600	.....	.....	.....	700	
Colony of Fitz James, at Clermont.	1,400	.....	.....	.....	1,000	
Meerenberg, Holland	600	20	.....	50	70	Lake, 1 acre.
Guislain's Asylum, Ghent.	468	15	.....	20	35	
Hamburg	350	20	.....	45	65	
Illenau	450	12	.....	30	42	5 acres woodland.
Frankfort	200	10	.....	30	40	
Göttingen	300	.....	.....	.....	20	

* These figures have been calculated from the amounts given in French hectares: 1 French hectare = 2·471 acres.

The proportion of land per patient varies greatly; but the advantages attending the possession of a good asylum estate, are evidently becoming more appreciated, since the newer asylums have, as a rule, larger grounds than those founded during the last

century, and there is an outcry from most of the older institutions for more land. In some cases, as at Stafford and Worcester, land for cultivation by the patients is rented. In some of the British asylums, as Northampton, Lincoln, Leicester, Elgin, and Haddington, cultivation is done entirely by the spade, and the results are gardens in which a large supply of vegetables is grown. In some cases the product is so large as to supply the institution completely; and at Leicester vegetables are sold to the amount of £300 annually. At other asylums, as at Montrose, and the Three Counties, horses are kept, cereal crops are grown, and all the ordinary agricultural operations are performed, sometimes by the aid of good machinery. At the Three Counties Asylum, onions (200 tons of which are sold) and other garden produce realize annually a sum of £1,000. The American State asylums have estates which are relatively larger than those of the British asylums. The comparatively small price of land has perhaps been an inducement to buy more. Agricultural operations are carried out with great completeness; but in several of the asylums patches of woodland have been left, which will eventually be cleared and cultivated, or cut into walks and ornamental grounds. At the Government institution at Washington, which is in every respect a model institution, the asylum estate now consists of 230 acres, and the governors are in treaty for a further tract of 150 acres.

The importance of a large estate is fully appreciated in France. In the Department of the Seine, in which three new asylums, calculated to contain 1,800 patients, have recently been erected, the attached estates are 1,450 acres in extent; and at Ville Evrard the large farm of 750 acres is worked entirely by the patients. Twenty horses and twelve working bullocks are kept; and a large number of agricultural operations are performed with excellent implements, chiefly of English make. Fifty cows are kept, besides sheep, pigs, fowls, &c. Large quantities of butter and cheese are made.

It is admitted on all hands, and the evidence to be obtained on the subject is convincing, that gardens and farms may be and are in most cases cultivated, not only with vast benefit to the patients, but with considerable profit to the asylum. Were it worth while to enter into calculations on this subject, statistics could be given which would undoubtedly prove this position. But the Colony of Fitz James, a large lunatic establishment conducted by private enterprise, is the best proof on this subject.

From an examination into the amount of land possessed by the German institutions in the above table, it would appear that in this country the value of land in connection with asylums is not fully appreciated; but it must be remembered that in two of the German institutions, Frankfort and Hamburg, the population is almost exclusively derived from towns, and consists of people unused to agricultural pursuits. At Göttingen, earnest application has been made by the Superintendent for a larger extent of land. At Guislain's Asylum, Ghent, the population is chiefly a manufacturing one, and a large number of the inmates are employed in weaving, so that land is not so necessary.

Before proceeding to the question of asylum construction, two points are to be considered,—1st, the separation of the acute and chronic cases; and, 2nd, the size of asylums.

Separation of the Acute and Chronic Cases.

In Germany, for many years past, the insane have been divided into acute and chronic—curable and incurable.

"In the mode of providing for the treatment of the two classes apart, two plans are pursued,—one termed that of 'absolute separation', and the other of 'relative connection'—the former consists of placing recent and chronic cases in buildings completely detached, each one having its own staff, organization and management; the latter, whilst keeping the chronic and recent cases apart, possesses a common medical and general administration, in a building composed of two principal sections, either forming part of the same structure (as at Illenau, in Baden), or detached but within the same area (as at Halle, in Saxon Prussia)." *

* The State of Lunacy: Dr. Arlidge, p. 141.

The system of "relative connection":—The separation of the hospital from the asylum—has always been more fanciful than real, and may now be regarded as abandoned. In the more lately built asylums of Germany, the system of mingling curable and incurable cases has again been adopted; and at the same time considerable doubts seem to have arisen in the minds of German psychologists as to the advantages of the "absolute separation" system—the formation of separate asylums for acute and chronic cases.

In Great Britain, France, and America, until recently, no division of cases founded on curability has been adopted; and every asylum has contained acute and chronic, curable and incurable, cases in varying proportions. The large accumulation of chronic insanity, and the urgent need of increased provision for the more acute cases, have, however, directed the minds of those interested in these matters to the German system of separate asylums for acute and chronic cases; and in several instances such separate asylums have been erected.

In the Department of the Seine, where three new asylums have been recently erected; one of these is set apart for the more curable cases in their recent stage; two for the same class in their more chronic condition; whilst the old asylums of Bicêtre and Salpetrière are appropriated to the incurable patients.

In the United States, the Tewksbury Asylum in Massachusetts has been specially provided for the chronic and harmless insane; and in the state of New York, a new asylum called after the late Dr. Willard, in recognition of his labours on behalf of the great class of incurably insane, is intended entirely for cases of this kind.

The Justices of the Peace for the County of Stafford, have recently erected a new asylum at Lichfield, to which the chronic and incurable cases from the old asylum at Stafford, are being drafted; and the Justices of the Peace for the Metropolitan Asylum District, have decided upon erecting asylums for the chronic insane of that district, near Watford and Croydon—each asylum to be built on the pavilion plan, and to contain 1,500 patients.

In Great Britain and America the liveliest discussion has arisen on this subject; and in both countries the majority of those interested in asylum management are decidedly averse to the separation of the curable and incurable insane.

The English Commissioners in Lunacy, (who condemn the use of the terms curable and incurable), consider that a general asylum to contain both acute and chronic cases, is on the whole best, and have until lately,—except in the cases of the more populous counties, such as Middlesex and Lancashire, where the erection of distinct asylums for the more chronic cases was sanctioned,—confined themselves to suggestions for the erection of buildings of an inexpensive and homely character, in connection with existing asylums for the accomodation of this class. In their annual report for 1867, page 72, however, the Commissioners thus state their more recent views on this subject:—

"In view of the evident tendency there is to convert workhouses into asylums, we think that the question of relieving the asylums in many counties of the harmless idiots, imbeciles, and epileptics, by the erection of establishments for these classes of a less expensive character than heretofore, and thus rendering the present asylums effective for the reception of curable cases, and such as require special care, can no longer be avoided."

"We are of opinion that for the classes above alluded to, buildings of a simple style, intermediate in character between the workhouse and the asylum, and consisting chiefly of cheerful, spacious, and well-ventilated day rooms and dormitories, might be constructed at a comparatively moderate cost. Without, also, any dimunition in the substantial comfort and well-being of the patients as respects clothing, diet, or care, we believe that the cost of maintenance would be less than in the county asylum, and need be little more than in the lunatic wards of the best regulated workhouses."

It will be seen that this recommendation is only "in view of the evident tendency there is to convert workhouses into asylums"—it is distinctly to meet an evil; it is an expedient mode of provision for the insane, and not an altogether satisfactory and good one.

The chief arguments for the maintenance of acute and chronic cases in one asylum, are,—

1. That when two asylums exist, although they may be designated Asylums for "Acute" and "Chronic" Cases—"Primary" and "Secondary" Asylums—the words "acute" and "chronic," and "primary" and "secondary," will never be used by the masses, who will at once recognize the true character of the institutions, and apply the terms "curable" and "incurable" to them.
2. That great pain may be given to the patients by their removal to an asylum for incurables; the greater part being quite sensible to the change. That they will feel doomed to utter hopelessness; and will lose, with hope, self-respect, and so sink into irretrievable degeneration, all the little chances of cure that still remain, vanishing.
3. That pain will be inflicted in many cases on relatives and friends, to whom the consignment to an "incurable" institution leaves no more to hope for; whilst, on the other hand, it will serve as an excuse for neglect by such, relatives as are glad to find a pretext for it.
4. That all institutions in which chronic or incurable cases alone are maintained are liable to degenerate in their character. The very nature of the cases tends to exert an unfavourable influence on the minds of all officers and attendants. The office of physician is a peculiarly ungrateful one, since he can have no recompense for his trouble in the recovery of his patients. Interest is thus gradually lost in all treatment, and the institution is conducted by mere routine. The safe and economical keeping of the patients soon becomes the ruling idea; and under this the patients will sink mentally and physically, and those in whom some chances of recovery still remained on admission, (and cases have been known to recover in asylums after a residence of fifteen or twenty years) will become utterly hopeless.
5. That the admixture of acute and chronic cases in an asylum, and the classification which such admixture allows, is useful as a part of moral treatment. That the quiet and chronic cases are often useful as companions for the more recent ones, while the change of patients, the going and coming of the curable cases, is useful to the so-called incurables, by keeping up hope, which should never be allowed to die, and affording change of companionship.
6. That when two asylums, one for acute and one for chronic cases, are placed in one district, the district is necessarily larger in area, and consequently the asylum for the acute is less easily accessible to the population generally, and so less useful; the usefulness of an asylum for the insane being greatly dependent upon its proximity to those who require its care.

In addition to these reasons, the extreme difficulty of classification in many instances, the impossibility of pronouncing any patient incurable, and the constant possibility of acute paroxysms in chronic cases are pointed out; and it is argued that, as far as cost goes, the chronic insane may be maintained in buildings of a simple character in connection with ordinary asylums, quite as cheaply as in distinct asylums; that good diet is as necessary for the chronic as the acute cases; and that the number of nurses and the amount of medical supervision may be regulated according to their needs.

Resting upon these arguments, the Scottish Commissioners in Lunacy, and the vast majority of the superintendents of asylums both in Great Britain, France, and America, consider that the separation of the insane into two classes, and their maintenance in distinct establishments, is wrong in principle, and calculated to be strongly prejudicial to their best interests; and this is also the opinion of the English Commissioners, though, yielding to the force of circumstances, they have given a general sanction to the establishment of asylums for chronic cases.

The arguments which are used by those who consider separation justifiable—arguments entitled to attentive consideration, since they are used by men who, though a minority in point of number, occupy a prominent position among those who have attentively considered the requirements of the insane,—are based rather upon considerations of expediency than upon the absolute right or wrong of the question.

These arguments are—

1st.—That the structural adaptations and the general organization of an ordinary asylum are unnecessary for a large number of the more chronic cases, and that they can be provided for, more economically in an asylum of simple construction, with a smaller proportionate staff of officers and attendants than are employed in ordinary asylums.

2nd.—That by separating the very chronic cases, greater opportunities are afforded for the proper treatment of the more curable, especially in the now crowded condition of the asylums of almost all countries.

3rd.—That provision in asylums, even with an incomplete organization, is preferable to such provision as is generally afforded in workhouse.

It is pointed out also that, as a rule, the patients feel little depression or despair when removed to asylums for chronic cases, and that not unfrequently the older patients, instead of acting beneficially on the new comers, stand to them in somewhat the position of Job's comforters, and are eloquent on the injustice of their own detention, and upon the miseries which are likely to befall their new acquaintances.

Among those who favour the general scheme of separating the acute and chronic cases, few are found to recommend their absolute division into two distinct classes. Even Dr. Arlidge, one of the most prominent supporters of the idea of the two classes of asylums, does not contemplate "the existence of a primary asylum without the presence of more or fewer chronic cases retained in it for the best medical or moral reasons," or a secondary asylum "exclusively the abode of incurables." And, upon the whole, it must be considered that the balance of argument is strongly in favour of one asylum, to contain both classes in such proportion as they occur in each district.

Size of Lunatic Asylums.

In Great Britain the size of asylums varies immensely. In the City of Norwich, and the Caermarthen, Haddington, and Elgin Asylums, the number of patients is under 100, whilst the large asylums for the County of Middlesex—Hanwell and Colney Hatch—contain, respectively, 1,693 and 2,026 patients. The Lancashire Asylums are large also. The one at Lancaster contains 836, and the one at Prestwich 962 patients. The Asylum for the West Riding of Yorkshire contains 1,124, and the Old Surrey Asylum 914 patients. But by far the large majority of English asylums contain between 400 and 600 patients. The new institutions for the counties of Surrey, Stafford and Cheshire have been planned to contain 500 patients each; and the new Scotch District Asylums for Perth and Cupar 250 only. In America the State Asylums, almost without exception, were built to contain originally 250 patients; but all those in the Eastern States have gradually been added to till the numbers range between 400 and 600,—only one institution, the New York State Asylum, containing over that number.

On the Continent, many of the older institutions have grown gradually to a large size. The asylum at St. Yon, near Rouen, contains 900 patients; and the older Paris asylums of Salpetrière and Bicêtre considerably over that number.* But for the new institutions on the Continent, wherever placed, the maximum number is fixed at 600; and in many cases a much smaller size is preferred.

* The average population of the Departmental Asylums of France was, in 1860, 402.

In table No. 1, following, are shown the number of patients contained in the English county and borough asylums, and the weekly maintenance rate. In table No. 2 the number of patients contained in some of the best modern asylums in Scotland, America, France, Germany, &c., is given.

TABLE No. 1.

Showing NUMBER OF PATIENTS and MAINTENANCE RATE in English County and Borough Asylums, 1867.

Asylum.	Number of Inmates.	Weekly Maintenance Rate.	Asylum.	Number of Inmates.	Weekly Maintenance Rate.
		s. d.			s. d.
Caermarthen County ...	99	14 4	Oxford and Berks County	473	10 4
Hull	123	9 6	Cheshire ,, ...	474	9 1
Stafford (New) County ...	195	9 11	Somerset ,, ...	480	9 3
Bristol Borough	206	12 0	York—N. Riding ,, ...	490	10 6
Glamorgan County ...	227	11 5	Lincoln ,, ...	502	8 8
Cumberland ,, ...	239	10 0	Sussex ,, ...	510	9 4
Northumberland County...	275	10 2	Three Counties — Beds, Herts, and Hunts.	534	8 7
Cambridge ,, ...	299	9 2	Worcester County ...	540	8 0
Bucks ,, ...	301	9 6	Essex ,, ...	554	10 3
Denbigh ,, ...	311	8 6	Birmingham Borough ...	567	7 8
Nottingham ,, ...	338	8 8	Hants County	589	8 5
Derby ,, ...	342	9 11	Gloucester County ...	590	8 8
Suffolk ,, ...	373	8 8	Lancashire (Rainhill) County.	657	9 10
Norfolk ,, ...	382	8 8	Devon County	690	9 6
Durham ,, ...	383	9 8	Kent ,, ...	755	10 9
Leicester ,, ...	391	8 8	Lancaster (Moor) County	836	7 10
Cornwall ,, ...	400	8 9	Surrey (Old) ,,	914	9 4
Warwick ,, ...	401	8 10	Lancashire (Prestwich) County.	962	9 4
Dorset ,, ...	411	7 1	York (W. Riding) County	1,124	9 10
Wilts ,, ...	412	8 6	Hanwell	1,693	10 1
Salop ,, ...	422	9 7	Colney Hatch	2,026	10 2
Monmouth, Hereford, &c. County.	452	9 6			
Stafford (Old) County ...	469	8 11			

TABLE No. 2.

Asylum.	Number of Patients.	Asylum.	Number of Patients.
Perth District	220	Hamburg	350
Cupar do.	213	Frankfort	200
Montrose	380	Göttingen	300
Quatre Mares	715	Washington	380
St. Anne	600	New Jersey	500
Ville Evrard	600	Pennsylvania State	380
Evreux	500	Northampton	420
Guislain's Asylum, Ghent	450	New York State	608
Meerenberg	600		

CONSTRUCTION.

Under this head are to be considered—

1. The form of building.
2. The number of stories.
3. The material.
4. The architecture; and subsequently matters of detail must be examined under various headings.

The main forms of building which are found to exist, on an examination of European and American Asylums, are—

1. The corridor or ward form.
2. The house form.
3. The block or pavilion form.
4. The cottage.

1. The Corridor Form.—This, under various modifications, is the most general form adopted in asylum construction. The insane in almost all countries were originally housed in dilapidated prisons or unused monasteries; and these buildings have left their image on, and given a style to, the structures which were subsequently erected for the special accommodation of the insane.

The first asylums which were erected consisted of a central corridor with small rooms opening from it along each side; the corridor itself serving as dining and day room, and the small cells on each side serving as sleeping rooms for the inmates. Each floor was thus a complete asylum, and a number of such floors placed end to end and story above story—either in a linear, in some modification of the H form, or as a □—constituted the asylum, which was always under one continuous roof. This form may still be seen at the Bootham Asylum, York, and at St. Luke's, two of the earliest English institutions specially built for the accommodation of the insane; and it is the one which—though almost extinct in England—with certain minor modifications, is still adhered to in the large majority of American institutions. The best modern examples of this, the corridor plan with rooms on each side, are the Government Asylum at Washington, the Hospital for the Insane at Philadelphia, and the State Asylums of Utica, Trenton, and others. In Appendix *G*, No. 1, will be found a plan of the Washington Asylum, and from an examination of this plan the peculiarities of this form will be understood. In England the asylums so constructed were found dark and gloomy, whilst the ventilation was extremely imperfect. The modifications introduced by American architects have served to overcome these difficulties. Instead of appropriating all the rooms leading from the corridor to sleeping accommodation, some of large size have been made into cheerful dining and day rooms, which command views of the surrounding country. By means of end windows, and by occasionally doing away with the dividing wall between room and corridor, and so making the former, lighted by a large window, a recess from the latter, the corridors have been made fairly light; and by the employment of an elaborate and expensive system of artificial ventilation, the whole buildings are, as a rule, well ventilated and healthy. But, even with all the improvements, the corridors used as places for promenade are less cheerful than the corridors with rooms only on one side, most frequently seen in English asylums; and the cost of the system of ventilation is sufficient to destroy the chief argument in favor of the plan—that of diminished cost of construction in comparison with those asylums in which the corridor has rooms on one side only. In England and on the Continent, in all modern asylums in which the corridor plan is adopted, the small rooms are placed on one side only, whilst on the other are large windows which make the corridor remarkably light and cheerful. Recesses with bay windows are sometimes formed, in which the patients can sit and work. The Essex County Asylum (see Appendix *G*, Nos. 2 and 3)—is a fair example of this plan, the essentials of which are that each ward is a complete asylum—the corridor serving as day and dining room, and the sleeping rooms opening from it. The objections to this system are, that the asylum is spread over an immense area, is costly in construction from the immense length of corridor and consequent roofing required, and that there is in it "an absence of all those domestic and social arrangements and provision which exist in the homes of English people. The peculiar combination of day and night accommodation is without analogy in any house; whilst the sitting, working, reading, and taking meals in a corridor—a place used also for exercise, and for the passage of persons from one part of the asylum to another—represent conditions of life without parallel among the domestic arrangements of any class of the community."*

2. The House Plan—Is more modern in its idea; and whilst the asylum is still continued under one unbroken roof, and presents the outline of an ordinary corridor or

* *State of Lunacy:* Arlidge, p. 203.

ward asylum, the day and night accommodation are as far as possible separated from each other, by devoting the greater part of the ground floor to the purpose of day rooms, and using the floor or floors above entirely as sleeping rooms ; reserving only on the ground floor, accommodation for certain classes of patients, as the paralytic, aged, and infirm, who can with difficulty mount or descend stairs, and sometimes the violent and refractory, who, however, are frequently better accommodated in special buildings. In this plan, which has been adopted in several of the more recent British asylums,—at Murthly near Perth (for a plan of which see Appendix *G*, Nos. 4 and 5), at Cupar in Fifeshire, and in the modern Continental asylums at Evreux in France, Meerenberg in Holland, and the Hamburg City Asylum, (Appendix *G*, No. 15) the corridor becomes narrowed to a passage of communication only. The advantages of this plan are that the condition of the patient is assimilated to that of ordinary life, by the separation of the sleeping accommodation from that required for the duties and employments of the day—the supervision of the patients by the attendants is more complete—ventilation is more easy, since the windows and doors of the sleeping rooms from which the patients are removed can be kept fully open all day, and those of the day rooms all night; whilst the cleaning, always a matter of difficulty in the ward plan, is rendered easy from the fact that the floors are in use at different times.

3. The Block or Pavilion Plan—Of which the essential feature is "that of breaking up hospitals of any size into a number of separate detached parts, having a common administration but nothing else in common,"* is well known in its application to modern hospitals, of which the Herbert Hospital at Woolwich, the Lariboisière at Paris, and the Pauper Hospital at Chorlton, near Manchester, are the most conspicuous and well known examples. It is a still further development of the house plan. The asylum consists of a series of detached buildings or blocks, each of which resembles in construction a large house. The ground floor is used almost entirely for day accommodation, and the upper rooms are used solely as sleeping apartments. The general arrangement is more home-like—the separation of one class of insane form another is more complete—ventilation is rendered more perfect and easy—and should infectious disease make its appearance within an asylum, it is less likely to spread through the entire establishment than in the corridor or house plans.

This arrangement of asylum building is not uncommon in the form of addition to old asylums in England. It is to be seen at Prestwich and at the old Chester Asylum ; but the new Asylum for the County of Cheshire at Macclesfield is the only complete asylum which has been built on this plan (see Appendix *G*, Nos. 6 and 7) ; and in this the blocks, instead of being completely isolated, are connected by means of passages, from one side of which open all the dormitories intended for occupation by one patient only.

The Pavilion or Block Plan for asylums, carried out in its entirety, has been advocated by Dr. Lockhart Robertson†, and other distinguished alienist physicians ; and the greater number of the new asylums of France are on this plan. At Auxerre, in the Department of the Yonne, a beautiful asylum has been in working order for five or six years ; and the three magnificent asylums for the Department of the Seine—St. Anne at Paris (see Appendix *G*, No. 8), Ville Evrard (see Appendix *G*, No. 9) and Vaucluse—are on this plan.

4. The Cottage.—The Cottage System—in which a limited number, from twelve to twenty patients are accommodated in a building which is completely isolated, and which is in the cottage form—an aggregation of such buildings composing the asylum—has been ably advocated by several English alienist physicians. Mr. Toller, of the Gloucester County Asylum, has written an excellent paper on this subject‡, but so far as has been ascertained, no asylum has as yet been erected entirely on this system.

At Yarra Bend, near Melbourne, some 500 patients out of a total population of 1,000 are accommodated in cottages; and at the Devon County Asylum, the Gloucester Asylum, and others, a certain number of the more quiet cases are so accommodated with

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* *Notes on Hospitals:* By Florence Nightingale.

† *Pavilion Asylums.*—A paper read before the annual meeting of the Psychological Association, held in Edinburgh, 1866.

‡ *The Advantages of the Cottage Plan for the Accommodation and Treatment of the Insane:* By E. Toller, M.R.C.S.

great success, with increased comfort to the patients and relief to the asylum. At Montrose Asylum, a few quiet patients are accommodated with the workmen and artisans employed on the estate, and living in cottages near the asylum. Carried to this extent, and as supplementing an ordinary asylum, the cottage system has worked admirably, but when more fully employed, the system has not, on the whole, been found to answer. The inconveniences which have been felt in this arrangement have been chiefly from difficulties of supervision, owing to the large space over which the asylum extends.

The best form of cottages, whether for a complete asylum or as an adjunct to an existing institution, are the "conjoined cottages" designed by Mr. Stack and Dr. Campbell, at the Essex Asylum (see Appendix *G*, Nos. 10 and 11), which, though an addition to the existing institution, are in themselves a very beautiful and complete small asylum to contain seventy-five patients. There are three cottages joined together by a covered way; each is intended to hold twenty-five patients, and consists of two stories. On the ground floor are a day room, four single dormitories, a nurse's room, a scullery, water-closet, and bath; on the upper story is an associated dormitory for twenty-one patients, with nurse's room overlooking it, store-room, and closet. Provision is made for the erection of another cottage when necessary; the kitchen, dining-hall, and store-room, common to the three, being of larger size than at present needed.

This conjoined cottage plan, stands midway between the cottage plan pure and simple, and the block or pavilion plan, and is well worthy of imitation, whether for a complete asylum of small size, or as an addition to existing structures.

In this sketch have been mentioned the peculiarities of all the marked systems of asylum construction at present in use, so far as has been ascertained; but there remains to be noticed an English asylum in which the house, block, and cottage systems, are combined into a very satisfactory whole. The New Surrey Asylum at Brookwood (see Appendix *G*, Nos. 12, 13, and 14) was designed by Mr. C. H. Howell, after much study of English and Continental asylums. The main structure is chiefly on the house plan, and designed to contain rooms for administration, and divisions for the cases recently admitted, and the sick, which shall be near to and therefore more immediately under the superintendence of the resident physician. The convalescent and working patients are accommodated in four detached blocks,—the latter in connection with the workshops on the male, and the laundry on the female side; and the more quiet patients are accommodated in the houses of the gardener and farm bailiff, placed at some little distance from the asylum, each of which will contain about twenty patients, and be under the immediate supervision of those officials. In this plan some of the best points of each system are introduced, and the whole seems very complete and satisfactory.

The number of stories in asylums varies considerably. Some of the older institutions, as the old Stafford, have four stories. The modern French asylums, on the pavilion plan, have two only, but the majority of English and American institutions——and among these those working most satisfactorily and well—have three stories over part if not all the building. The more violent and refractory cases are usually accommodated in buildings of one story only, in British, French, German, and American asylums; and frequently, when the asylum is on the corridor or house plan, the buildings for the noisy are completely detached and isolated from the main building.

The material for asylum construction varies considerably, as might be expected. Out of nineteen English asylums visited, fifteen were of brick, some totally unornamented, some faced with white stone, and two or three of the more recent, as the New Surrey at Brookwood, and the New Stafford at Burntwood, of variously coloured brick. The former of these is roofed with blue tiles; but the large majority of English asylums have slate roofs.

The French asylums are more usually of stone, as St. Anne's, Ville Evrard, Evreux, and Charenton; some few, as Quatre Mares, are of brick. The American asylums are also more usually of stone, as are also the German, but the material which is most readily procurable, seems to have been usually selected.

The architectural style which prevails in asylums may be described as the "Old English" or Domestic Style. Occasionally in Great Britain we find a highly ornate structure, such as the Derby Asylum, which rejoices in tower and pinnacle, and is really a very

handsome building, in the perpendicular style, but the majority of English asylums are striking rather from their size than their beauty. In America the asylums are frequently ornamented by handsome classic fronts, as at Utica, Trenton, and Philadelphia. On the Continent the asylums do not markedly differ in style from those in Great Britain.

Water Supply.

This inquiry will include—

1. The source and mode of supply.
2. Quantity.
3. Storage.
4. Precaution against fire.

And subsequently, the arrangements for, and fittings in bath rooms and lavatories.

The sources are—

a. The ordinary town supply.
b. Wells.
c. Running streams.
d. Springs.
e. Surface drainage.

a. Town Supply.—The majority of asylums built near towns are supplied from the ordinary town water works, and the facility with which water is thus obtained, as well as the diminished cost, are strong arguments for placing an asylum as near a town as possible. Prestwich, Gloucester, Leicester, Montrose, St. Anne's Paris, Hamburg, Frankfort, and other asylums are thus supplied. With the supply from a town, either tanks may be entirely dispensed with, as at Hamburg and St. Anne's—or placed over the wards, as at Prestwich and Gloucester—or one large tank may be employed, as at Montrose, where the asylum is more than 2 miles from the town.

b. From Wells.—The majority of those asylums situated at a distance from town, and some of those, as Colney Hatch and Stafford, within the reach of town water, are supplied from wells, which are either artesian or of ordinary construction. Artesian wells are in use at Colney Hatch and the Sussex County. At the Three Counties there is a fine well with "headings," capable of containing a reserve supply of 60,000 gallons. The Cupar, Haddington, Derby, Ghent, Göttingen, Quatre Mares, and other asylums, also obtain their supplies from wells; and with two or three exceptions, to be presently mentioned, the supply is obtained by means of steam pumps. The water is raised to large tanks, placed either in towers distinct from or at the ends or over the centre of the building, and thus distributed by gravitation, either direct to pipes, as at Sussex, or through minor tanks placed over the wards, as at Colney Hatch. At Quatre Mares a windmill and hand pumps are used, and are far from effectual. At Guislain's Asylum there is a well in each court, and only small tanks; and pumping water is a constant, monotonous, and distasteful labour for the patients. At Haddington, a small asylum for 100 inmates, the pump is worked by a horse; and this method answers well.

c. From Running Streams.—This plan is adopted at the French asylums of Evreux and Ville Evrard; at the latter, the River Marne is the source. At Harrisburg, in the United States, and at Worcester, the water is in each case passed through filters, and raised to a general reservoir or water tower, and then distributed at once, or through minor tanks by gravitation. Steam power is used for raising the water, except at Evreux, where an extremely ingenious hydraulic pump, or "bélier hydraulique," is in use. The water is by this raised to a neighbouring hill, and passes through filters of sand, charcoal, and gravel, into a large tank, from which it flows to the house.

d. Springs.—This is the most usual source of supply in American institutions, and is the entire source also at the Essex and Bristol Asylums, and at Meerenberg in Holland, (where the water flows from the neighbouring sand hills), and it is the chief one at the New Surrey. Here, the water is first received into reservoirs, generally placed at some distance from the asylum, is pumped from them into tanks over or near the building, and so distributed by gravitation.

e. Surface Drainage.—This method is in use at Broadmoor, and for part of the supply at the New Surrey. The method of supply, and the appliances required, are the same as where the water is obtained from springs.

In the three methods last mentioned, it will be seen that the pump and steam-engine will, as a rule be placed at a distance from the asylum, and that thus the steam-engine will not be effective for turning washing or other machinery, or the boilers for the supply of steam to the kitchen, or for heating water for the laundry and bath rooms. But at the Worcester Asylum a deep tunnel has been cut, running with an incline from the stream to the asylum. The stream passes through filters and then along the tunnel to the asylum well, and is thence pumped up to the main tank. The steam-engine being near the main building, is thus available for other purposes beside pumping.

2. Quantity.—The quantity which can be obtained at by far the majority of asylums is unlimited. This is the case in most of the American, in many English, and some continental institutions. A few only, as Broadmoor, the New Surrey, Cupar, Bristol, &c., are straitened in this respect. The minimum amounts procurable are at Bristol and the New Surrey. At the former, about 25 gallons per head *per diem* are procurable; at the New Surrey, about 20; but every exertion is being made to increase the quantity.

At the French and German asylums, the amounts used are much smaller, since the closets have no water supply.

3. Storage.—The arrangement of tanks differs materially, and without obvious cause. At Hamburg and St. Anne's, supplied from the town, there are none. At Sussex and the Three Counties, supplied from a well—Montrose, supplied partly from town and partly from a well—and Evreux, supplied from a running stream—one large tank placed in the centre of the building supplies all needs. At Prestwich, Gloucester, and other asylums supplied from towns, small tanks over each ward are in use. But in many asylums, as Derby, Essex, and Worcester, there are both large or main, and smaller or ward, tanks. This is also the case at the New Surrey, where, however, the smaller tanks are placed over, and intended for the supply of each block.

4. Precautions against fire.—A few asylums, as Colney Hatch, Derby, and the Pennsylvania Hospital, have been made more or less fire-proof by the use of vaulted roofs of fire-proof brick to the corridors, iron doors, and other contrivances; but in the majority of asylums this has not been thought necessary, and reliance is usually placed, in case of fire, on hydrants, both in and around the building. At St. Anne's, Paris, and some other town asylums, the town fire-brigades are looked to for rescue; at Cupar, fire-buckets and the patent contrivance called "l'extincteur," are alone relied on; at the French and at some English institutions the ordinary fire-engines are kept; but at the vast mass of asylums a system of hydrants has been established in connection with the ordinary water supply. At Prestwich the supply from the town is sufficient to enable a hose to be played on or over the roof at all times; and the same is often the case from the tanks in other institutions; but in almost all the American, in the Bristol, Montrose, and other asylums, arrangements are made by which the pipes for the supply of the hydrants can be connected with the steam-engine. Generally the pipes for the hydrants are given off between the well or reservoir and the tanks, and are so worked by steam-power. At the New Jersey institution, in addition to hydrants inside and outside the building, three fire extinguishers are kept constantly charged with carbonic acid gas at a pressure of 75 lbs.

At several of the American, British, and Continental asylums, the patients and attendants are drilled at intervals of a fortnight, month, or longer, in the use of the hose, engines, or whatever apparatus against fire may be provided. At Prestwich the windows are sometimes cleaned outside by means of the hose.

At several asylums rain water is carefully collected from the buildings, stored in a tank over the laundry, and used for washing purposes with great saving to the institution.

As supplementary to the question of water supply, arrangements to promote the cleanliness of the patients may be considered under the heads of—

1, Baths,—2, Lavatories,—3, Sinks.

1. Baths. The questions of interest as regards baths are—1, the situation in which they are placed,—2, their material and fittings,—3, their number.

In the British Asylums the baths are generally placed in small rooms opening from each corridor, in number sufficient to serve for the patients of the ward or division; and this is also the general custom in America. But it is found that a bath-room in each division entails an expensive arrangement of both serving and discharge pipes; and that, as the majority of asylum inmates are well able to be removed from their wards, general bath-rooms, one for each sex, are cheaper, and, on the whole, fully as convenient.

There are general bath-rooms at the Sussex, Colney Hatch, and Montrose Asylums, established subsequent to the erection of the institutions, in which baths were provided and still exist in each ward; and at Perth and Cupar, where the general bath-rooms formed part of the original plan. The system of general bath-rooms seems almost universal on the Continent: they are in use at Evreux, Ville Evrard, St. Yon, St. Anne's, among the French Asylums, at Ghent also, and in the newer German institutions; and, where they have not been adopted,—as at Quatre Mares, Meerenberg, and Illenau,—instead of baths for each ward or corridor, each section of the asylum has been supplied with a small room containing two or three baths.

In most institutions in which general baths have been established, it has been considered necessary to make special provision for certain classes of the inmates—the sick and violent. In the French and German Asylums, and at Ghent and Meerenberg, there is a movable bath on wheels for the infirmary, whilst a fixed bath is placed in the division for the excited, or for patients on admission; and at Perth and Cupar a fixed bath is placed in both the infirmary and the division for excited patients.

The proportion of baths appears to be, in the English and American Institutions, about one to twenty patients; and in the Continental Asylums it is somewhat less.

The material varies. In America enamelled or painted iron is chiefly used because it is difficult to procure slate or earthenware. On the Continent, tin or copper seems usually employed; and the latter is used in England at the Three Counties, Worcester, and Essex; enamelled iron is also used in some English asylums; but the baths most commonly in use are the Stourbridge fireclay, which are in every respect excellent.

In some asylums the baths are so fitted that the hot and cold water mix before entering; in others they enter separately; but in almost all, the taps are so placed as to be under the command of an attendant's key.

In the French and Belgian, and in some German asylums, the baths have lids of wood or brass made to bolt on to the bath, and fitted so as to keep the patient in the water, a small opening being allowed for the neck. This contrivance is also in use in the "separate building" of the Morningside Asylum. At St. Anne's, Paris, a canvas cover is used instead of a wooden or brass one. The baths are almost invariably placed at such a distance from the walls as will allow the attendants to pass all round. In some asylums, as at Washington, they are raised on a small platform, so as to allow the attendants to reach the patient without unpleasant stooping; whilst at others, at Ghent and Göttingen, they are sunk about a foot in the ground, so as to give the attendants more command over the patient.

Bath-room floors are usually of cement; and in most asylums removable wooden gratings are placed upon this, so as to raise the attendants, and the patient on leaving the bath, from the wet floor.

Shower-baths exist in all British asylums, but are seldom used. At Cupar, rain shower-baths are fitted over the ordinary baths, and are found useful as tonics, the shock from them being small. The douche is seldom seen in British institutions.

In America, not a single shower-bath is to be seen in any asylum. The advantages resulting from its use are considered to be more than counterbalanced by the abuses to which it is liable, and the accidents which result from it; so that it has been agreed to banish it altogether.

In France, and in the asylums of Southern Germany, the shower-bath is much used as treatment; and every bath-room is fitted with the douche. Both douche and shower are administered, at intervals, to patients confined in the warm-bath, by means of the covers mentioned above. Plunge-baths exist in a few asylums only. At Illenau, in Baden, there is a stream running through the grounds; and excellent bathing-places have been made for both men and women.

At several English asylums, Turkish baths have been erected. At Sussex, where the building is a lean-to against the laundry, and was erected at a cost of £50, there is a hot-room, douche-room, and dressing-room. The douche-room is fitted with mild and severe douches, and can be used as a vapour-bath. The building, though small, answers every purpose, and has been found extremely useful. At Colney Hatch, a more elaborate and costly Turkish bath has been erected, and is in constant use.

The bath-houses which have been fitted in some of the new French asylums, at St. Anne's and Ville Evrard, are wonderfully complete in their arrangements. They are centrally placed, and consist of separate rooms for foot-bath, ordinary bath, Roman bath, shower-bath, special showers for head, spine, loins, and other parts of the body; a vapour-bath, in which vapour alone, or mixed with aromatic or resinous substances, can be given, and a sulphur-bath. In addition, there is a special room for fumigation, dressing-rooms, &c.

At Evreux, where the system is not quite so elaborate, the bath-house (*vide* Appendix *F*, Fig. 1) consists of a central passage, with rooms on each side. On one side are the boiler-room, in which water is heated for all the baths, two dressing-rooms, a Roman bath-room, and a pulverizing bath, in which the patient sits in a box, with his head out, and by an ingenious contrivance, water is thrown over him, in a fine spray, either alone or mixed with medicinal substances in solution. On the other side are a foot-bath room, fitted with hot and cold water, and containing eight pans; a bath-room, in which are five ordinary baths, with arrangements for the douche and shower to each; and a shower-bath room, in which shower-baths of three various degrees of force for the head, one for the spine, a circular or barrel shower, and a lumbar shower, are fitted.

Bath rules, issued by the English Commissioners, as well as those in use at several English institutions, will be found in Appendix *A*, No. 4. Printed rules do not exist in American or Continental institutions. In the majority of British and American asylums, a warm bath is given once a week, in some, as at Montrose, Prestwich, New Surrey, &c., clean water is used for each. At Prestwich each patient is allowed a given quantity only, which is gauged by the attendants; but in many institutions two, three, or four are bathed in the same water. At the Sussex Asylum, in addition to the baths, the patients are placed on stools, are well soaped, and have water thrown over them by means of bowls. Strong round towels are generally used in the bath-rooms.

In the Continental institutions the patients are, as a rule, bathed about once a fortnight. At Evreux, notwithstanding the magnificently arranged bath-house, the patients get hot baths only once a month, and have their feet washed every five days.

The lavatories in asylums are generally fitted with about one basin to ten patients, in addition to the basins placed in the dormitories. At the Prestwich Asylum, counting the entire number in the asylum, there is a basin to every 2½ patients. The lavatories are usually placed in the corridor, or in a small room leading from it, and as near the dormitories as possible; and one is usually placed on the ground-floor, in those asylums which have only day-room accommodation therein, for day use. In the new French asylums the lavatories are in a small recess off each ward.

Sometimes the basins are fixtures—porcelain, set in slate or lead, as at the Essex Asylum, and the new asylums at Ville Evrard, St. Anne's, and Evreux; or they are set on a pivot, and empty by tilting into a sink below, as at Derby, Meerenberg, Hamburg, &c.; but usually ordinary earthenware basins are used, set in a shallow leaden or slate trough, or in a hole cut in wood or slate; the channel for drainage being underneath, and basins being emptied through the hole in which they ordinarily stand.

In some English asylums both hot and cold water is laid on; but this is not, as a rule, considered necessary, cold water serving all purposes. At Quatre Mares and Ghent

the water is not laid on, but small tanks, over each lavatory, are filled by hand every morning; the consequence of which is, that the water supply at the lavatories is always extremely scanty.

Sometimes a tap is placed over each basin, at others one or two serve for all, the basins being filled at them. In some of the Scotch institutions, where the basins are fixed, they are filled and emptied by an opening at the bottom. This system is bad, since, on turning the tap to admit clean water, a small quantity of the dirty water last used re-enters. Plugs for basins are found either to stick or get lost, the chain attaching them invariably getting broken. At Evreux, Hamburg, Göttingen, and other institutions, the taps over the basins are quite simple; and the entire water supply can be cut off from the entire lavatory range by an attendant's key. By this arrangement it is not necessary to lock the lavatory every time after using it, as is done in some English asylums.

Sinks are usually placed near the bath and lavatories, and are fitted with hot and cold water for cleaning purposes.

Drainage.

This includes a consideration of—

1. The different systems of sewage which have been adopted in asylums.
2. The arrangement of pipes—(*a*) for lavatories, bath-room and kitchen, laundry and sinks; (*b*) urinals and closets where these are in use.
3. The ultimate disposal of sewage matters carried by these pipes.

The different systems of disposal of feculent matter which have been adopted in asylums, may be arranged under the heads of—

1. The Water-closet System.
2. The French or "Tinette" System.
3. The Dry Earth System.

In this report it will only be possible to describe these systems and their various modifications with the utmost brevity.

The Water-closet System is in universal use in British and American asylums, and in some Continental ones. The water is so arranged as to flow either when a plug or handle is pulled, when the person using the closet sits down on or rises from the seat, or when the door is opened or shut. The latter arrangement is the most simple, and most generally effective.

A modification of the ordinary closet has been made by the Messrs. Macfarlane of Glasgow, and called a Closet Range*; it is to be found in use in the airing courts of several English asylums, as at the Sussex, and in the wards of the Perth Asylum and the Asylum for Idiots at Earlswood. It consists of a common trough of iron, divided by partitions and wooden seats, so as to accomodate from two to a dozen persons according to its size. Three or four inches of water are kept in the trough, and into this the excreta drop. At fixed times, by a simple contrivance, the whole contents of the trough are emptied into the sewer pipes, and the trough is charged with fresh water. The range is not altogether free from smell, and requires frequent emptying; but the arrangement is perhaps the simplest and best for out door closets fitted with water, for public institutions of any kind.

In England, ordinary water-closets usually consist of a pan or bucket and a valve below, which opens by means of the same mechanical contrivance as controls the water supply, allows the excreta and water to escape, and afterwards closes more or less tightly, and acts in addition to the trap in preventing smell from the closet pipes and sewer. But in the majority of American asylums the closets consist of the pan only, the opening at the bottom of which is always patent to allow of the elaborate and excellent ventilating system which is in use in most of the best American asylums, and which, with a plentiful water supply, renders the American closet cleaner and sweeter than the vast

* This range is figured in the Report of the Commission on Barracks and Hospitals.

majority which are to be found in English asylums. The system in use may be understood on reference to Appendix *F*, Fig. 2, copied from the Report of the Government Hospital for the insane at Washington.

Each closet has a free water supply, generally flowing on opening the door, is well trapped, and, in addition, has a special ventilating tube passing off between the pan and the trap. This tube is carried to a general shaft, which either communicates with the main chimney of the boiler furnace, near its base, or passes upward to the roof, and is warmed by means of a row of gas jets; there is thus a strong upward current in the shaft, and consequently a downward current through the pan of the closet. On placing a piece of lighted paper in the closet-pan in some of the American asylums, the flame, and sometimes the paper, is drawn strongly downwards; and the closet thus, instead of contaminating the atmosphere, acts as a ventilator and purifier of the part of the house in which it is placed.

In some institutions, as at Utica, the ventilating pipes, instead of being carried to the main chimney or a general shaft, pass at once separately to the roof; in these the draft is not so strong, but the closets are perfectly sweet, without any warming apparatus.

At New Jersey, the trapping of the closets has been abolished, and the main sewer itself communicates by means of a shaft with the common chimney stack. In this asylum there is also a strong downward draught in each closet and urinal; but should the system at any time get out of order, the smell from the sewer might penetrate by means of the closet to the entire asylum; this accident is to some extent provided against by two special ventilating shafts to the sewers, which are carried up above the roof, and, fitted at the top with Archimedean screw ventilators, which are so arranged as to revolve with the slightest breeze above, or the pressure of warm air from below, and lift or pump out the air from the shaft by means of a screw projecting into it.

Second, the French or "Tinette" System—In this the closets and urinals are, as a rule, placed out of doors, either quite detached in the courts, or at the end of a block of building from which they can be entered. In each small building there are seats and urinals; and below there are placed small tins which receive the fæces and water. These closets are generally arranged to open from the back; and every morning or night the contents of the small tins are emptied into larger ones placed in a cart, and are then conveyed to some distance from the building, mixed with earth, and covered over for two, three, or four, years, when decomposition is more or less finished, and the mixture of earth and fæces, now solid, is used as a fertilizing compound for the land. There is no water supply to the closet. The advantages of this system are the ease with which the excreta unmixed with earth or water, and so, small in bulk, are removed; its subsequent utilization, the compound of earth and excreta being of the highest value; and the diminished cost of asylum construction, since the expensive arrangement of piping for water supply, and drains and sewers for subsequent removal, are not required. But these advantages are more than balanced by the constant stink which proceeds from all French closets so arranged. In most French asylums, closets with water supply are used in the houses for the officers, and in some of the rooms for better class patients; but sewers are not in use except at town asylums like St. Anne's, and there they are made to communicate with the town sewer. The usual arrangement, is that large tins are placed in the basement of the house, and form a very temporary cesspool, which receives excreta and water supply from the closet, and is removed every two or three days and replaced by others. At Guislain's Asylum, Ghent, a modification, and certainly an improvement on the French System is in use, but need not be described here.

In some of the German asylums, as Hamburg and Göttingen, a modification of the French system is employed. It is known as the "Systeme d'Arcet," and is in many respects similar to the Pneumatic System of Captain Liernur, which is now in use at the Hague and some other Continental cities.* In the "Systeme d'Arcet," the closets are

* In this system, "small iron reservoirs are placed under the pavement of all principal street crossings, each reservoir being connected by means of small iron pipes with the privies of the houses next to it, in such a manner that no offensive gases can escape; in other words, from every single privy a continuous air-tight passage leads into the next subterranean street reservoir, without the intervention of

fitted in the building, but no water is employed; and ventilation by means of a system which is very like that used in America, *in petto*, is intended to serve instead of water in removing smell. The rough sketch Appendix *F*, Fig. 3, may assist in explaining the principle.

The excreta descend into a cloaca in the basement, from which a ventilating shaft passes to the ordinary chimney of the ward or section. Fires are kept constantly alight, summer and winter, in one grate, which is used for minor or ward cookery; and the draught in the chimney so caused serves to ventilate the cloaca and closet.

The cloaca is cleaned out every two or three months; and the major part of its contents are removed two or three times a week by a pneumatic process. A strong zinc or iron vessel, fixed on wheels, is filled with steam and allowed to cool; it is then attached by a connecting pipe to the cloaca, and on a cock being opened, the contents of the cloaca pass into the vacuum in the iron vessel, the cock is then again shut, and the iron vessel disconnected and drawn away into the fields, where its contents, mixed with earth, serve for agricultural purposes.

The system is condemned strongly by both Dr. Reÿe, at Hamburg, and Dr. Ludwig Meyer, at Göttingen. The constant fire is found to be expensive, and the closets as might be expected, are extremely offensive.

At Hildesheim the Systeme d'Arcet is in use with the addition of water supply, and is found to answer much better.

The third system of sewage—that known as the Dry Earth System—is in use in the airing courts and farm buildings of one or two English Asylums, and has lately been fitted at the Special Asylum Hospital, Prestwich, and in some of the wards of the Criminal Asylum, Broadmoor, and found, as far as experience at present goes, to work admirably. At this latter institution the closets are placed in buildings which jut from the corridors and admit of cross ventilation. The earth is thrown on the excreta by a mechanical arrangement working from the seat. The divisions between the closets are of enamelled slate, and the vessels to receive the excreta are of zinc on wheels.

We have next to consider the arrangement of pipes leading—(*a*) from sinks, lavatories, bath-rooms, kitchens, and laundries; and (*b*) from urinals and closets, when these are in use.

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any cesspool. The pipes are provided each one with a valve, to be worked from the side-walks of the street, so that the communication between each privy and a street reservoir can be established and cut off at will. These valves remain always hermetically closed, except during a short moment when the privy contents are to be discharged into the street reservoir connected with it, which occurs during the night in the following manner:—A locomobile steam-engine, working an air-pump, is drawn near the small subterranean street reservoir, to exhaust the air out of it and out of the entire system of main and branch pipes, up to the hermetically closed house valves, which are then, one after the other, opened and shut again, thus discharging the privy contents, including its gases, into the street reservoir. If the vacuum made in the reservoir and pipe system is complete or nearly so, the mechanical force of the atmospheric column rushing in, the moment a house valve is open, equals that of some 30 hurricanes. In order to maintain this vacuum, while a number of privy pipes are discharged one after another, the air-pump standing near the reservoir is kept continaully in motion, creating a constant draught, which causes all discharges to fly just into the reservoir and nowhere else, like so many shots from air-guns. The urine, exceeding the solid *fæces* about eight or nine times in volume, affords sufficient moisture, not only to prevent the excrement from drying or caking, but also to keep the whole mass in so fluid a state that removal is easy, unfailing, and complete, especially under the abovementioned powerful blast operating upon it. All the privies and their pipes will thus be every day thoroughly cleaned of solids, fluids, and gases, and be filled with fresh air instead. After all the house valves have thus been successively opened and shut—an operation which practice has shown can hardly be done quick enough—the small reservoir itself is emptied by pneumatic pressure into a hermetically closed waggon reservoir attached as a sort of tender to the air-pump carriage. This done, the connecting pipes, by which the movable apparatus communicates with the stationary one under the pavement, are uncoupled, and the locomobile with its tender proceeds to the next reservoir, and then to another and another until the tender is filled. As the particular street where this will occur can by practice be pretty accurately known beforehand, arrangements are made that, when arriving there, the locomobile meets an empty tender drawn by two horses, which changes place with the full one, thus allowing the sewerage operation to go on without interruption, the filled tenders being always drawn away by the horses to a temporary depôt, where they are decanted by direct hydraulic pressure into air and water tight barrels, which are then at once sent like any other goods, by rail or steamboat to the lands requiring the excellent fertilizer thus collected."—*On Sewage*: By C. Krepp.

In some of the British Asylums the lavatory and bath-room pipes join at once with those from the closets and urinals, and pass to the sewers, the common pipe being trapped before entering. In others a much better arrangement exists, each set of pipes continuing separate and being trapped before entry; whilst in some, which have been more recently fitted, the closet-trap is placed close to it, and the pipes from bath-rooms, lavatories, and sinks are either trapped separately or after union, but before entering the sewer. At Meerenberg and Guislain's Asylum, Ghent, the closet and urinal, and the sink and lavatory, or lavatory and bath pipes are kept permanently distinct. The former are conducted to a tank, from which the sewage matters are pumped, and subsequently utilized; whilst the latter are allowed to empty themselves into neighbouring water-courses, and so drain away. Arrangements for ventilating either the closet or the lavatory and bath-room pipes do not appear to exist, and are not, as a rule, considered necessary.

In America, as has been seen above, the closets are almost all ventilated in front of the trap; and in some asylums great care is taken that the two sets of pipes should enter the sewer separately—those from the lavatories, sink, &c., being trapped before entry.

In the English and American asylums large sewers are required; and, as a rule, the asylums standing on high ground, the fall is great, and drainage rapid and complete.

In some asylums—as at Murthly and the Pennsylvania Hospital, to instance two among many—the rain-pipes from the roof pass into the drains, and serve to flush them; but at other institutions, as Lincoln and Broadmoor, arrangements have been made by which the whole quantity of water stored in the tanks over the asylum can be rapidly discharged through the sewers, and in this way they may be thoroughly cleansed. This is done at regular intervals. The sewers are ventilated at some institutions by openings communicating with the external air; but in one British institution, at Montrose, the main sewer is connected with the general boiler chimney by a shaft, and is so ventilated. In the majority of continental asylums, the sewers are very small. At Evreux the excreta from the officers' quarters, and the water from lavatories and sinks, are carried by a small sewer into the neighbouring river, and at Hamburg and St. Anne's into the town sewers. No arrangements appear to exist for flushing.

At Quatre Mares and Ville Evrard there are no sewers. The water from sinks, baths, lavatories, &c., is carried, in the former institution, by drain pipes, into small tanks in the garden, over which it is thrown to supply at once moisture and some fertilizing compound; and at the latter, the drains run into a long open trench at a little distance from the asylum, where the water evaporates or soaks away, and the salts and more solid matter left are dug out and applied to the land.

Under the third head is to be considered the ultimate disposal of the sewage matter.

In asylums situated in or near towns, the sewers from the building open at once into those of the town, and the sewage is lost; but the value of sewage matter is now generally understood, and some or all of it is in most asylums applied to the lands belonging to the institution with abundant results.

The methods employed vary somewhat, but the following are those most in vogue:—

1. Collection of the solids in tanks by deposition, whilst the fluids are allowed to escape.
2. Irrigation, with or without tanks.
3. Filtration.

Each of these will be shortly described.

By the first method, in use at Colney Hatch, the Bristol Asylum, the New Jersey State Asylum, and others, the entire sewage is received into two or more tanks, where it is, in some cases, mixed with carbolic acid. The solids are gradually deposited, and the fluids escape by overflow into neighbouring streams. At fixed periods the tanks are emptied, and the contents applied to the land. This, though a step in advance of that where the entire amount of sewage is wasted, is still a most imperfect system, since it is well known that the most valuable constituents of sewage are contained in solution, and these are the very parts which are allowed to escape to pollute streams into which they fall. This system is carried out in some asylums by choice, and defended

on hygienic grounds, on which something will be said further on; but in others it is more or less a matter of necessity, since the amount of land belonging to the institution is either too small to allow the entire amount of sewage to be used on it, or so situated as to make it extremely inconvenient to do so. At Colney Hatch the entire sewage from 2,500 people is collected in a multiple tank; and, after being mixed with carbolic acid and lime in small quantities, the solid part is all employed on the land belonging to the asylum, and a part of the fluid is also so utilized by a system of closed pipes: the remainder is allowed to escape into a small stream beneath the asylum.

Irrigation with tanks is the means most commonly employed, and may be seen at Worcester, Derby, Sussex, Broadmoor, the Government Asylum, Washington, and other institutions. It seems, on the whole, most simple, most effective, and most generally applicable. The tanks are generally placed at a distance of about a quarter of a mile from the house, and are constructed to hold only two or three days' supply. From them, either by overflow, or by means of pumping two or three times daily, the sewage, fluid and solid, is distributed over the land by gravitation, in trenches, or by open wooden troughs. The tanks are placed, if possible, sufficiently above the land to be irrigated to allow of ready fall; or, where this is impossible, the sewage is raised by hand or horse pump to troughs at a higher level, from which it can gradually be led on to the land, as at Montrose, Derby, and the Three Counties. In this system—unless in very close proximity to a town or the asylum itself—there seems to be no need of mixing disinfectants with the sewage; all experience proving that sewage matters are not obnoxious when used in their recent state, and before poisonous gases are disengaged by storing for a long time in tanks. The sewage is generally applied to a few acres of rye grass with such abundant results, that four or five crops are obtained in the course of a year; but there seems to be no good reason why arable land should not be treated in the same manner with an equally good result. At Leicester this is done; and the exact line at which irrigation commences is marked by the cabbages being at that spot almost twice as large as those on the ground immediately above it. The amount of solid matter deposited in the tanks is small, and they seldom need cleaning. Irrigation without tanks can be employed where the fall is good, and the land for irrigation of such an extent and so situated that the entire sewage may be applied to a part only, whilst the remainder is subjected to ordinary agricultural operations. Grazing land is peculiarly fitted for this; and, perhaps, the best example of the system to be found in British asylums is at the Old Stafford Asylum.

At this institution the sewage from the asylum itself and from the neighbouring prison—the two containing a population of about 1,400 people—is applied to a series of small meadows lying immediately beneath the asylum, and in close contiguity to the town of Stafford. Where the main sewer terminates is a small shed in which lime and carbolic acid are mixed with the sewage in the following simple way. Two casks are placed side by side; in the first, which stands some six inches above the other, is placed lime, and in the second carbolic acid. A small stream of water runs from a tap into the cask containing lime; the overflow from this runs into the carbolic acid cask: and this again overflowing drops immediately into the sewage flowing beneath. A little lime and carbolic acid are added to each cask daily; and two or three times a day the contents of each are well stirred. The total costs of disinfectants for the sewerage from 1,400 people is 1s. 3d. a day; and it appears to be quite sufficient, since no smell is perceptible in the asylum, or on the fields themselves under irrigation. No complaints have ever been made from the town since the above system has been in force; and no illness which could be in any way connected with the sewage has appeared in either the asylum or the neighbouring parts of the town. The sewage thus disinfected can be turned either to the right or left, and is distributed in open trenches and wooden troughs over the meadows, one-half being under irrigation at a time. Enormous crops of hay are grown, and abundant feed for cows obtained both in summer and winter. A honey-combed and blackened hay rick, which had taken fire in eight or ten places, and been a source of anxiety and trouble to all concerned for three or four weeks, whilst testifying to the firmness and strength of the grass grown in the meadows, suggested a caution in dealing with the hay obtained therefrom, which requires much more complete drying than when obtained from land less richly manured.

The third system is filtration—and this may be effected in two ways. In the first, ashes or earth are placed in a tank into which the sewage is admitted at the bottom—the filtration then takes place upwards, the more or less pure water running away by overflow from the top of the tank. This appears to be effective and simple, the only difficulty being the carting ashes and earth to the tank, and their subsequent removal, for application to the land, when saturated with sewage matter; and in this, it must be admitted, there is more trouble and expense than in the irrigation system. Its advocates consider the extra trouble and expense well compensated for by its superiority to the irrigation system in matters of hygiene—of this more presently. It is practised at Lincoln. The second method of filtration,—which is used at the Fife District Asylum, Cupar, and the Perth District Asylum at Murthly, and at the Northampton Asylum, Massachusetts, consists in collecting the sewage into a tank capable of holding two or three days' supply, and running it from this, either by natural fall or by means of a hand or horse pump, on to a mound of earth collected for the purpose, into which it is allowed slowly to filter. This earth is placed on a layer of large stones through which the water, clear and without smell, drains off; and the saturated earth is removed at intervals, to be replaced by a fresh supply. Both at Cupar and Murthly the filtration method is supplemented by a sewage cart, in which liquid sewage is received from the tank and distributed over the land by means of small openings in the pipe running along the back of the cart.

The advantages and disadvantages of this system are exactly those of the system of upward filtration mentioned above.

It must be remarked that, wherever tanks are employed, two at least are necessary, so as to allow of cleaning at certain intervals. At the Fife District Asylum this difficulty is to some extent obviated by the employment of a large iron stirrer or agitator, which is used for some minutes twice daily before running the sewage on to the earth, for which the natural fall is sufficient.

Of these three systems, then, there appears to be no doubt that that by irrigation, with or without tanks, is the cheapest, simplest, and most generally applicable. The question remains, if its use is calculated to induce fever, diarrhœa, &c., or to be in any way prejudicial to the inmates of the asylum itself or others in its immediate neighbourhood.

The system is in full work at Northampton, Leicester, Montrose, and Stafford, &c., often in close proximity to the asylum, and sometimes very near to the town; and though careful inquiries were made, it was not found that any evil results directly attributable to it had been noticed. At Leicester, where it is used within 200 yards of the buildings, some attacks of low fever and diarrhœa have been experienced, but never to any great extent, or beyond what might be fairly attributable to matters of diet or weather. At Montrose, during and before two attacks of diarrhœa, the wind blew almost constantly from exactly the opposite direction to the fields under irrigation; and the experience at Stafford speaks volumes for the healthiness of irrigation when employed without tanks, and with a small amount of disinfectants.

A valuable letter on this subject, by Mr. Rawlinson, the eminent civil engineer, is contained in the Twenty-first Report of the English Commissioners of Lunacy; in which it is clearly pointed out that where sewage is not collected in cesspools, but is used immediately by irrigation, no stench is caused or disease induced. After a thorough examination of this subject, he arrives at the conclusion that "a daily application of sewage to land in a fresh state is the only way in which sewage ought to be used."

As an appendix to the subject of sewage, an examination of the use to which the kitchen and other refuse is put in asylums,—and, subsequently, an inquiry into the number, situation, and fittings of urinals and closets,—may be useful.

In asylums, public and private, in Britain, the Continent, and America, almost without exception, the refuse from the kitchen and sculleries, the parings of potatoes, the refuse of other vegetables, and the scraps left at meal-times by the patients, are all

carefully collected, and are used for feeding pigs. The asylum piggery is, as at Broadmoor, Northampton, Gloucester and many other asylums, often excellently arranged, fitted with every new appliance in the shape of feeding troughs and kitchen for boiling and cooking the food, is carefully drained, and is not unfrequently a source of interest both to patients and officers. It is generally placed with the other farm buildings, and is often shown with pride. The number of pigs kept varies much with the size of the asylum, and with the provision which can be made for them from the asylum farm in addition to the refuse from the asylum itself. Sometimes from a dozen to twenty only are kept; but the number not unfrequently mounts much higher, even to sixty or seventy. There are in one American institution considerably upwards of a hundred, and it is considered profitable to buy and cart the refuse from a large city hotel to assist in feeding them. Pigs, when properly managed, are no doubt an important matter in asylum economy. The refuse, if sold, fetches a very small price, and yet alone will feed a fair number of pigs. At the Lincoln Lunatic Hospital—an institution chiefly for better-class patients, and with only a small amount of land and no farm—the refuse was for many years sold; when it was impossible to obtain for it the usual price, the administration decided on building piggeries; and the profits which accrued from buying, fattening and then selling the pigs—(which is not so profitable as killing them and using them in the asylum)—during one year were sufficient, after deducting the sum usually obtained by selling the refuse, and some other expenses, to pay entirely for the construction of the piggeries.

The refuse is generally supplemented largely by materials for food grown on the farm and garden. Sometimes the pigs are bought, fattened, and sold;—this is usually the case at private institutions receiving patients of a better social class, with whom pork is not a favourite food; but at other institutions the pigs are bred, fed, fattened, killed, and eaten in the asylum; and at several institutions, as at Stafford and Broadmoor, there are smoking houses for bacon. Pork forms an agreeable change of diet to the inmates, and, when thus home-fed, is usually much cheaper than other meat, and so an economy to the asylum.

To show how small economies are practised in some asylums, it may be well to mention that at the Pennsylvania Hospital for the Insane at Philadelphia, and at the State Asylum at Harrisburg, soap for the use of the laundry and for ordinary house cleaning, is made at the asylum from refuse fat obtained by skimming pots and pans and from the scraps left by the patients. At the former institution the entire amount of soft and hard soap required for washing, and for all except toilet purposes, is thus obtained. The apparatus is sufficiently simple.

Closets and Urinals.—The situation, number, and fittings of urinals and closets may be briefly noted here, although, as will be seen in a subsequent part of this Report, it is not proposed to adopt the usual water-closet system in almost universal use in English and American asylums.

In most asylums in which indoor closets are used, they open immediately from the corridor, generally at one end; but in several asylums a better arrangement has been adopted, and the closets are placed in buildings jutting and partially detached from the ward so as to afford better ventilation. In the new asylums at Murthly and Cupar, and the New Surrey, this arrangement has been adopted; but unfortunately the ventilation allowed is not a cross ventilation passing between the closets and the main building, which is the best form. (See Appendix *F*, Figs. 4 & 5.)

At the new building, and at the hospital for the Prestwich Asylum, (see Appendix *F*, Fig. 6), and at one or two other asylums, the buildings are partly detached, and free cross ventilation is allowed. In asylums where urinals are provided, they generally are made to adjoin the closets; but in several instances, instead of a special urinal, utensils of gutta-percha or other material are kept in the closets, and the contents after use emptied into the closet-pan.

At the New Stafford Asylum, a small passage running off at right angles from each ward, communicates with a semi-detached building in which are closets, urinal, bathroom, and a small scullery. At the Washington Asylum, each closet is contained in a fair-sized room opening from the ward; in this room are a closet, urinal, sink for washing

utensils, and a cupboard in which the ventilating and discharge pipes and the opening to the trap are placed. In the cupboard are kept during the day, all the chamber utensils of the wards, which are emptied every morning, remain in the cupboard all day, and are replaced under the beds at night. In almost all indoor closets, wherever placed, there is a window exactly over the seat to serve for light and ventilation.

The number of closets necessary, seems to be usually fixed at the rate of one for every fifteen or twenty patients. In some asylums this number is exceeded, but it appears to be sufficient. At the Sussex Asylum, the number averages one to twenty, two are placed in each ward, and two in each bed-room flat. The number of urinals is in about the same proportion.

In the airing courts, the closets and urinals are generally placed as far away from the buildings as possible, and the water supply to them is usually scanty. In some asylums rain water is trusted to alone for flushing the closets and urinals; and where water is supplied to the former, it is generally wanting in the latter, which are generally more or less offensive.

The means of water supply for the closets have been already mentioned. In the urinals the supply is sometimes arranged so as to drip or trickle constantly; but more usually they are flushed at intervals by means of a tap accessible only to an attendant's key.

In English institutions, glazed earthenware pans for the closets, (the pan and pipes being all boarded in), with wooden seats, are almost universal. Earthenware urinals are also generally used; but in America the pans and urinals are almost universally of cast-iron, enamelled. The pans are fitted with small wooden rims for the patient to sit on; but in all water-closets, urinals, bath-rooms, and sinks, nothing is boxed up; everything is left open and exposed to view, so there is no harbour for vermin, no confined spot for foul air, and no wood or other material to absorb moisture, except the floors, which are usually polished or painted. The general shape of the American hopper or pan will be understood by reference to the plate (Appendix *F*, Fig. 2). In the few institutions on the Continent in which water-closets and urinals are used, the arrangements do not differ materially from those in use in English institutions. At St. Anne's, Paris, they are all by an English maker. In those institutions in which other modes of removing excreta than that by means of water supply are in use, the number of closets and urinals is in about the same proportion to the number of patients. In the French asylums the closets are placed either in semi-detached or totally detached buildings, and no indoor closet exists except in the infirmary ward or in the quarters of the officers.

Warming.

The various modes of warming buildings are—

1. Open fires.
2. Hot air.
3. Hot water.
4. Steam.

Every one of these modes has been adopted in warming asylums, sometimes alone and sometimes in combination. In Great Britain the open fire-place prevails, but other methods are used as accessories.

At the Three Counties, Prestwich, Leicester, and Haddington Asylums, the warming is entirely by means of open fires without any accessories. At Murthly, the New Surrey, and the Sussex, air chambers are used in addition; and at Broadmoor, stoves are placed at the bottom of the staircases. In several asylums, Hayden's system of hot air is used, either alone, as at Bristol, where it is not a success, and where hot water has been fitted in the wards having an eastern aspect; or as an addition to, or in conjunction with open fires, as at the Old and New Stafford Asylums and Colney Hatch. At Derby the hot air is used on Sylvester's method, in addition to open fire-places in the day rooms. At Cupar and Worcester the hot air system is fitted, but not used; and it also exists, and is used, in three or four wards at the Gloucester Asylum.

At the Lincoln Asylum fires are used in the day rooms and dormitories, and hot water in single rooms and corridors. At the Sussex Asylum hot water is used in the infirmary and refractory wards. Hot water is used also in the new block at Broadmoor intended for violent women. Steam is not used in any English asylum visited.

It will be seen, then, that, with the exception of the Bristol Asylum, open fires, either alone or in combination with some other means, are used in all the English asylums mentioned above; and those asylums in which they exist either alone or with the addition of air chambers, the warming is every way satisfactory.

The hot air system, which is extremely expensive—the asylums of Colney Hatch, Bristol, and Derby, in which it is used throughout, being among the most expensive as regards construction among the English asylums,—is by no means always a success, and may be pronounced a decided failure as regards the Bristol Asylum.

Hot water seems a useful mode of warming for the rooms devoted to the sick, who are liable to feel changes of temperature with especial acuteness, and for whom, therefore, a more fixed and general warmth is necessary; and in the department for the violent class, where open fires are likely to lead to mischief, and their cheerful appearance is not appreciated by the patients.

Connected with the subject of open fire-places are the precautions which have been adopted to protect the inmates from fire. The heavy iron railing, completely covering the fire, and fastening by means of a lock, which is familiar to all who have visited Tarban Creek, has almost disappeared from English asylums. So far as has been ascertained, it is used only at the old and new Stafford Asylums, in the former of which some few years since a suicide from burning occurred, and induced the superintendent to replace the heavy locked guards which he had before removed. It is admitted by most English superintendents that open fire-places are chiefly dangerous, rather from accident than design; that guards are necessary rather to keep the clothes of careless patients from contact with the fire than to prevent their throwing themselves on it, or using it mischievously; and the light guards or railings which are now adopted in almost all English institutions, are quite sufficient to prevent accidents. They consist of either—(1) a high ordinary children's fender, made of wire, with strong upright pieces, on the top of which are brass knobs, such as are in use at the Three Counties, Gloucester, Worcester, and other asylums; (2) a light wire guard fitting exactly over and covering in the fire, and fastened with a catch, as at Cupar; or (3) a high iron rail, quite open, and either plain as at the New Surrey, or of a handsome gothic pattern as at Essex, Sussex, and Prestwich. At the latter, a small low fender is placed inside. At at least three asylums, Haddington, Montrose, and Murthly, simple ordinary fenders alone are used—there are no guards, and, as Dr. Howden of Montrose observes, no accidents.

In America there seems to be no diversity of opinion among those who have the charge of the hospitals for the insane, in reference to the proper mode of warming these institutions,—the Association of Medical Superintendents having unanimously resolved that "all hospitals should be warmed by passing abundance of fresh pure air from the external atmosphere over pipes or plates containing steam under low pressure, the temperature of which at the boiler, does not exceed 212 F., and placed in the basement or cellar of the building to be heated", whilst "the boiler for generating steam should be in a detached structure." The air is generally driven by a fan worked by a steam engine, over the steam pipes, and then through shafts in the basement which branch to the various wards and rooms. The hot air is made to enter the rooms in some cases near the floor, in others near the ceiling—the latter seeming to be the preferable method—and the whole building is kept thus at a sufficiently high temperature. This method, which is in common use in the United States in large hotels and other buildings—and in which either hot water as at Washington, or steam as at Northampton, New Jersey, New York State Asylum, and the Philadelphia Hospital, is used—has been almost universally adopted in the State asylums of America, and—considering the extreme cold of the American winter*—is perhaps the best which could be adopted.

* At the time several of the American asylums were visited, the thermometer stood at from 10 to 18 degrees below zero in the open air.

It is so manifestly unnecessary and unfitted for the climate of New South Wales, that a lengthened description of its arrangements is not requisite. It may be mentioned, however, that the steam or hot water pipes in the basement are in three series, so that one, two, or three can be used at a time, according to external temperature. Every part of this system of heating and ventilation has been fully elaborated, and works excellently.

In French asylums the methods vary considerably. In some asylums, as at Evreux,—where there are open fires guarded closely by wire guards in the lower story, and, in addition, an elaboration of the air chamber,—the air is admitted to a box round the fire-place and so warmed, and is then conveyed by openings into the ward, and by shafts into the adjoining rooms, and also upwards in a shaft alongside or around the chimney into the dormitories above. The seclusion rooms are warmed by a small hot air apparatus in the basement.

At St. Anne's, each pavilion is warmed by a separate small hot water apparatus placed in the basement. The air passes over the pipes placed in the basement, and then by shafts to each ward. There is no direct radiation. The same furnace supplies hot water for the use of the building.

At Quatre Mares the warming is done by stoves and open fire-places; at the Charenton by direct radiation from hot water pipes placed in a box in the centre of the larger rooms.

At Ville Evrard, under the centre of the basement of each block is a small furnace; the air is admitted through a wide opening, and having being warmed, is conveyed by tubes into each ward, the openings being wheel gratings in each floor. There is an ingenious arrangement near the furnace, by means of which the shafts leading to certain wards can be shut, and the wards left unwarmed. There are also fire-places in the day rooms.

At Guislain's Asylum, Ghent, the warming is entirely by stoves of a peculiar construction placed in the centre of each ward. The stove, in which coal is burnt, has an outer iron jacket with holes opening to the ward. The space between the stove and jacket communicates directly with the open air by means of a shaft in the floor leading to the side wall. The air enters at the wall, is warmed in the jacket, and escapes through openings in the jacket into the ward. Each stove has a small shelf for keeping warm, soup, &c.

At Meerenberg, the heating throughout is by means of steam, the pipes being laid in the floor of the lower wards, and the heat entering by direct radiation through gratings. The air warmed in the lower story is carried up through shafts in the walls into the upper ones.

In the German institutions the heating is chiefly by means of the German stove, placed in the corridors and rooms; but this is assisted in Göttingen by hot air, which is driven by a fan worked by a steam engine over iron plates, and carried by means of shafts to the small rooms—and at Frankfort the chapel, amusement room, and the rooms, both dining, day rooms, and cells, devoted to the excited class are warmed by means of air, which is driven by a fan over pipes filled with steam, and so through shafts into each room. In the rooms generally the German stove is in use. At Hamburg the German stove is in general use, but the corridors have steam pipes, with direct radiation in addition, and the block for the excited class is warmed by hot air.

Lighting.

Under this head must be considered—

1. Windows.
2. Gas and lamps.

In examining the Windows of Asylums, it will be necessary to note—

Their position and proportion to wall space,
Material and method of opening,
Size of panes,
Guards, and such accessories as shutters, blinds, and hangings.

1. Position and proportion to wall space.—In most asylums, both in Europe and America, the windows bear a proportion of about one-sixth to the wall space, but they vary in this respect considerably; almost all, however, are sufficient to make the room cheerful and light, and to assist materially in ventilation. In the vast majority of asylums, the windows are placed completely within reach of the patients, and they are usually so low in the day rooms as to enable the patients to see out of them when seated on a chair or form near. In some asylums, as at Derby, where a passage of communication for the service of the house is placed at the back of the ward, the windows of the dormitories are placed over it, and are thus high and out of reach of the patients, giving the rooms a very dismal appearance; this depends on structure,—but at Meerenberg nearly all the dormitory windows are purposely placed completely out of reach. In other asylums, as at Colney Hatch, the windows in the day rooms for the violent class of patients are placed high and out of reach; but this is not a common arrangement in day rooms, though common in the seclusion cells in both British and Continental asylums.

2. Material and mode of opening.—In the older British asylums the window frames are usually of iron, and open either by a sash (which, with iron frames, is singularly heavy and inconvenient), or on a pivot perpendicularly—the openings being merely narrow slits, as at Bethlehem, the form of which is well known; or wider, and less prison-like, as at Leicester (see Appendix *F*, Fig. 7), and in the violent wards of the Murthly Asylum,—or in sections outwards, either the upper third, or a portion of it, being usually made to open. In this form the iron frame is, almost always, continued over the opening, in the shape of bars. In all these forms the window can only be opened by an attendant's key. In the more recently built asylums, and in almost all the more recent additions to the older institutions, the windows for the ordinary wards are made either of wrought-iron cross pieces, set in wooden frames, or they are entirely of wood; and the mode of opening is usually by means of a double sash, chocked top and bottom to 4 inches, so as to prevent the windows being opened beyond that extent.

By some superintendents the iron cross pieces set in the wooden frame, are considered much the best form of window; but others object to it—first, on account of its expense; and, secondly, because of the breakage which is caused in all glass set in iron frames, through the shrinking of the metal in cold weather; and they consider the window frames entirely of wood—which have been fitted in several of the most recently built institutions, as the New Surrey, the New Stafford, and the Murthly and Cupar Asylums—as the best form. The advantages of the opening by means of the ordinary double hung sash, permanently chocked top and bottom, so as to prevent the window opening beyond the extent of 4 or 5 inches, are almost universally admitted in England; and this method is adopted in nearly all new institutions.

An improvement on the permanent chock has, however, been fitted to the windows in the additions to the Prestwich and old Chester Asylums, and in the New Surrey.

At the two former the upper sash is permanently chocked, so as to open to a distance of 5 inches only; but in the lower half there is no permanent wooden chock, but a strong lock is let into the window frame, and when the bolt is shot out it enters a slit in the window jamb, so that the window can be opened to 5½ inches, or closed at pleasure; but by shooting back the bolt, which is done by an attendant's key, the window can be opened to the full height. The slit in the jamb is guarded by a metal plate, like an ordinary bolt plate, except in being much longer. (See Appendix *F*, Fig. 9.) At the New Surrey both sashes are capable of being opened to the full extent, or chocked at a height of 5 inches, by means of locks fitted in the frames; but the superintendent, Dr. Brushfield, reports the arrangement of bolts as complicated, and liable to get out of order. He expresses his preference for the plan used at Chester, and invented by himself, which, he says, is simpler, cheaper, and more efficacious.

In the United States the double sash is in general use for asylum windows. The frames are sometimes entirely of wood, and open freely both at top and bottom, in which case there is a wrought iron grating (the bars of which correspond to the divisions of the windows, and are not seen when the window is shut) placed outside. Sometimes the upper half is of iron, and fixed, and the lower half of wood, opening freely.

In this case the grating is placed outside the lower half only. In a few instances both parts of the sash are of iron, balanced, and opening top and bottom to the extent of 5 inches only.

The Continental asylums are usually fitted with some modification of the French *croisée* in either wood or iron frames. The lower two-thirds of these windows open down the centre, and are placed under the regulation of an attendant's key. There are seldom any arrangements to prevent them opening to their full extent when once unlocked, and the consequence is that they are less frequently opened than the windows in English asylums. At Evreux there is a chain to prevent the window opening beyond 4 or 5 inches. At Hamburg a small portion of the upper third of the windows is made to open, and some ventilation is thus secured. At the new asylum, Ghent, there is a peculiar arrangement, invented by, and called after, Guislain. As seen from the inside it presents the appearance shown in Appendix *F*, Fig. 10. Below the window, which is of the ordinary French type, is an opening, closed with shutters on the inside. On opening these an ornamental iron guard is seen. The window is made to open, but is usually kept closed, and the small shutters below are opened for ventilation. This window is in use at the new infirmary, Gheel.

3. Size of Panes.—The date of erection of an English asylum may almost be judged by the size of the panes in the windows. In the older asylums the panes are almost all small; but in some of the more recent examples of asylums, the windows are not to be distinguished by the size of their panes from those of ordinary houses. At the Cupar Asylum the panes are about 2 feet square, and are considered by the superintendent much too large. In the American asylums the panes are usually about 6 inches by 12, and in the Continental ones they are similar in size, and, in all respects, like those most usually seen in private houses.

4. Guards.—The iron bars and wire guards, which were formerly so common over asylum windows, have all but disappeared. In no public English asylum, so far as has been ascertained, are bars fitted to the windows, except at the Criminal Asylum, Broadmoor, and there, on the men's side, the form is as ornamental and unprisonlike as possible. Wire guards were in use in the violent wards at Colney Hatch, and in the women's side at Murthly only, out of all the asylums visited. At the latter institution the windows in the violent ward are only 2½ feet from the ground, and the guards are used because the breakage was found to be great in the windows thus placed so unnecessarily low.

In the modern Continental asylums, even with the large *croisées* opening to their full extent, iron bar guards are not used. A few exist at Quatre Mares, but there are none at St. Anne's, Ville Evrard, or Evreux, and there are none at Hamburg; but at Frankfort and Göttingen there is an outside frame of iron—at the former of an ornamental Gothic pattern. The windows in most of the seclusion rooms have wire guards. In the American asylums bar guards are more used, and are fitted to all the windows except those having iron frames, and balanced so as only to open to 5 inches top and bottom. At some institutions simple bars are used, corresponding in their crossings to the divisions of the window; but at others an ornamental wrought-iron guard is used to fill in the space to which the windows open, and when painted white is not unsightly. Wire guards are placed over the windows in the rooms for violent patients, in several American institutions.

5. Shutters and Hangings.—Shutters of various forms may be seen in the British asylums; but they appear to be considered necessary only for the rooms occupied by single patients, who are, as a rule, of the more violent class; and, for purposes of decency, in associated dormitories placed on the ground floor.

For the single rooms the shutters are made either to fold back, and lock against the wall by the attendant's key; to slide sideways, out and in, of the adjoining thickness of the wall; or, what appears to be the best form, to slide up from a locked receptacle beneath the window. All these forms, both when closed and open, are under lock and key. At Prestwich the shutters slide up from below the window, and can be fastened by an attendant's key, either when three parts, or fully up; so as, in the former position, to allow of some light in the room, and of fuller ventilation by means of the window open at the top.

When shutters are used for associated dormitories they are generally ordinary folding shutters, fastened by a bar, as in use at Cupar and Bristol.

Shutters appear to be seldom used in Continental or American institutions except for single rooms, and then they are similar in fitting to those in use in England. The form most generally adopted in America is the one sliding from within the adjoining wall. At the M'Lean Asylum each shutter has two small panes of plate-glass in it, so as to allow light to the room. The windows of single rooms used for seclusion at St. Anne's, Ville Evrard, and Evreux, are fitted with shutters, which can be closed or opened by means of cords pulled from outside the door of the room.

Upon the blinds and hangings with which asylum windows are furnished, no small part of the cheerfulness and homelike appearance of the rooms depend.

Almost all British asylums have window blinds in the corridors, day-room, and dormitories, most usually white; sometimes yellow, as at Bristol; sometimes green, as at the Sussex; or Venetian pattern, as at Gloucester: and, in addition to these, in some asylums, hangings are placed over the windows, and serve to abolish the bareness which is only too common. At Bristol the hangings are variously coloured; at Lincoln, red and white; and at Prestwich, a gay red. The material is usually cheap. At Prestwich it is a red twilled calico, and, in addition to the ordinary hangings, it is placed as a fixed blind over the lower part of many of the windows, in corridors, day rooms, and large dormitories; and in the larger day and dining rooms there are curtains of the same colour, which are exceedingly pretty and effective. The windows of corridors and day rooms occupied by female patients are, in several institutions—Worcester, the Three Counties, Derby, Gloucester, and others—ornamented with white net curtains, made by the patients.

The Continental asylums are but little behind the English ones in their blinds and hangings. Blinds are almost universal. White hangings are not uncommon, especially for dormitories; and at Hamburg the hangings of red and brown are particularly homely and nice.

In the American institutions yellow calico, or Venetian blinds, are generally in use. Sometimes hangings are seen, but less commonly than in England, in the rooms inhabited by indigent patients.

In some institutions the windows for special wards differ from those ordinarily in use. In the infirmary ward at the New Sussex, windows similar in construction to those at the Leicester Asylum (see Appendix *F*, Fig. 7), but with wooden frames, serve excellently for ventilation; but the wards for violent cases, and the seclusion room, are more generally those in which special provision is made, either by placing the windows high and out of reach, which is almost always objectionable, or by making the windows stronger than those in the other parts of the institution. At Murthly the windows in the violent ward are in iron frames, and open like those in the infirmary wards at the Sussex. This appears to be the best form. In the American and Continental institutions the windows in the rooms for excited patients differ little from those in other parts, except from being sometimes placed high, and out of reach, or else guarded with wire. In the seclusion rooms in the new French asylums, the windows, which are on the sash principle, in wooden frames, can be opened or shut by cords which are pulled in the corridor, outside the door.

Gas.—Nearly all public asylums are now lighted throughout with gas, the only exceptions coming under observation being Guislain's Asylum, Ghent, and the asylum at Evreux, which are lighted by means of paraffine lamps, and Quatre Mares, near Rouen, which is at present lighted with oil, but to which gas is soon to be fitted. When asylums are situated near town, the gas is supplied from the town works; but in those at a distance, gas is made on the asylum estate with apparatus belonging to and worked under the superintendence of the asylum authorities. This is done in many institutions in Great Britain, on the Continent, and in America; and, in most instances, it is found that gas can be made at a price which, counting the cost of apparatus, differs very little from that charged by the gas companies. It is found that arrangements can generally be made with gas companies, to supply gas to a large public institution situate at any distance within 3 miles of the outskirts of a town; and it

is, as a rule, found desirable to obtain the supply in this way, if possible, so as to avoid multiplying the separate departments of an asylum, and so increasing the difficulties of management and superintendence, which, under any circumstances, must be great.

At the Sussex County, and at Stafford, the gas apparatus belonging to the asylum was disused as soon as gas could be obtained from local companies. At the former institution the cost is said to be somewhat increased, but the saving of trouble and responsibility to the management is very great; at Stafford it is obtained at a cheaper rate than it could be manufactured; and the same is the case at the New York State Asylum, where the manufacture was discontinued because it proved to be a nuisance to the institution.

At the State Asylum, Broadmoor, the gas works were erected and for some time worked under the asylum management; but it has been deemed advisable to deliver over the apparatus to a gas manufacturer, who keeps it in repair and, finding his own coals, supplies the asylum with gas at a fixed price per 1,000 feet.

The gas works at asylums are generally placed at some distance from the main building. In several asylums the site selected is near the farm buildings. One man is generally found able to manage the works and keep up a constant supply.

In some American institutions gas is made by very ingenious processes. At the Government Asylum, Washington, petroleum is used, and the apparatus is much smaller and more handy than usual.

At the New Jersey State Asylum, and at the New York Inebriate Asylum, gasoline or automatic gas is used, and is reported to answer well in every respect, and to be cheaper in its manufacture. The apparatus is described in the report of the asylum for 1866, as the "'Solar Gas Machine,' patented by O. P. Drake, of Boston, and furnished through the agency of Messrs. Ferris & Co., Philadelphia. By this arrangement the building has been successfully lighted at a considerably diminished cost as compared with the old system of lighting by gas made by the heat process. The fixtures consist of a wrought-iron tank for receiving the gasoline (which is a high proof naphtha), three close pans or vessels of cast-iron called evaporators, into which the liquid is drawn from the receiving tank, and a large meter wheel driven by weights which passes the air over the liquid. In its passage through the evaporators and over the naphtha the air becomes so charged with the vapour that it burns like gas. The only attention demanded by the apparatus is to supply the liquid and wind up the weights once in twenty-four hours, requiring from five to ten minutes time. These fixtures are placed in a room under the pavement outside of the foundation walls of the centre building, where they are considered quite as secure against accident as any form of gas works." The objections to the process are that it is liable to explosion. A fatal accident has occurred from the use of this form of gas at the Treasury Buildings, Washington; and a low temperature will cause the mixture of air and naphtha to separate, the naphtha being deposited in the gas pipes. It has, however, so far answered admirably at the New Jersey Asylum, and Dr. Buttolf, the superintendent, is enthusiastic in its praise.

Gas is used in most asylums for the chapels, amusement rooms, day rooms, corridors and associated dormitories, the burners being placed in the rooms. Where it is desirable to light single rooms, the burners are generally placed in the corridor outside, and made to light the room through a small pane of glass over the door. In some Continental asylums all the dormitories are lighted by burners placed in the corridors. The gas fittings which are in use in public asylums are usually of a simple kind, burners without glasses being used in many asylums for all the wards; whilst at others, in the rooms for quieter patients, glasses, simple or ornamental are used, and the result is a much steadier light and a more finished and homelike appearance. It has been the custom, and still is so in many asylums, to place all the gas burners out of reach of the patients; but in recently finished asylums the burners in the majority of the rooms are not placed higher than in private houses. In the American asylums, it is only in the wards for the most violent that the gas is placed out of reach; and in some wards for better class patients, chess and reading gas lamps are fitted to the burners by tubing, and allowed to stand on the tables.

At the Montrose Asylum the burners in the passages and staircases are fitted to short pipes about 6 inches long, placed high, and projecting from the wall at such a slope as to make it impossible for patients to hang anything, or themselves on them.

At the Murthly and other asylums, besides the ordinary tap, by means of which gas can be cut off from the entire establishment, separate taps, accessible only to the chief attendant of the ward by means of a key, exist in every ward and on each staircase; so that the gas is completely under command, and interference, either accidental or mischievous, with the ordinary tap near the burner will be almost powerless to cause accident.

At the New York State Asylum the gas supply of each division separately, can be cut off by a tap in the basement. At Ville Evrard no glasses are used; but every gas jet has a small metal cover so arranged as to throw down the rays of light, and is protected below by a gauze wire netting, so that it can only be lighted from above. No glasses are used, but the cover and net give the light a furnished effect. (See Appendix *F*, Fig. 8.)

In most asylums lights turned down to a candle size are kept burning in the corridors all night. It has been much debated whether similar lights should be kept burning in the associated dormitories also. It is considered essential for the preservation of good order by some superintendents, and is adopted throughout the asylum at Lincoln Hamburg and other institutions; but in the majority of asylums the dormitory lights are put out when the patients go to bed, except in the infirmary and the dormitories occupied by some of the noisier class. The lights in all the closets and urinals on the dormitory flats are usually kept in all night.

Ventilation.

The methods by which asylums are ventilated may be divided into—

1. Artificial, including—
   a. By propulsion.
   b. By extraction.
2. Natural—
   a. By means of doors, windows, and fire-places only.
   b. By means of openings in addition to these:

and under this head will be considered, as accessory to the subject, the amount of cubic space provided for patients.

It will not be considered necessary to discuss the subject of ventilation as a science or in its bearing on health, or to describe at length any of the various systems of artificial ventilation in use; but simply to note the various methods, and to inquire how far they answer the end proposed.

Natural Ventilation.—In one or two British asylums, as at Cupar, and in several Continental institutions, as at Ville Evrard, Quatre Mares, and Frankfort,* natural ventilation by means of open windows, doors, and fire-places is trusted to entirely, and seems completely to answer for the ordinary wards of asylums—but these are decidedly the minority; and in most instances some additional means of ventilation are in use, consisting of openings in the walls as accessories to the natural openings.

At the Essex and Three Counties Asylums, small openings are cut directly through the wall near the ceiling; these are grated, and serve for the exit of foul air. At Leicester, there are small openings for exit in communication with each chimney. At Sussex, there are openings both near the floor and near the ceiling of each room to serve for ingress and egress of air; these openings all communicate directly with the open air.

At Frankfort and Göttingen, there are small openings for exit in the walls of each room near the ceiling, which are carried up for a little distance in the wall, and then open to the air.

At Meerenberg, Murthly, and Lincoln,† in the wards for excited patients at Quatre Mares, and other institutions, shafts for the exit of foul air pass from each ward, and then, after uniting, to the roof; but no heat is applied to cause drafts in these, and no openings for the ingress of air except the natural ones exist.

At Evreux and the New Surrey there are similar shafts, and in addition special air chambers in connection with the grates serve for the entrance of fresh air; and at

* At Frankfort a somewhat elaborate system of ventilation by propulsion is in use in wards for the excited class; and at Quatre Mares there are in the wards for the same class special openings for exit leading to a shaft and so to the roof, but not artificially warmed.

† At Lincoln, an apparatus exists for warming these shafts, and so causing an upward current; but it is not found necessary, and is never used.

the latter, these are also grated openings, closable at will, near the floor of each room, for the same purpose.

All these asylums, then, and others which it is not necessary to mention, are ventilated by natural means—by windows or doors only, or by some openings for the ingress or egress of air, one or both, in addition to these; and in all, the ventilation is good and seems to serve every purpose. But it is noteworthy also that those with windows, doors, and fireplaces only, and those with the more simple accessories in addition to these, seem as well ventilated as those in which there is an elaborate arrangement of ventilating shafts.

Artificial Ventilation.—Artificial ventilation is never employed alone in British asylums, but only as an accessory to the natural method. The most usual mode of employing it is that by extraction, heat being generally the agent. The principle of this is well known, and the system is used at Pentonville Prison and many other public institutions. In most instances Hayden's system, or some modification of it, is employed, and, as an accessory, is reported to be successful at Bristol, Colney Hatch, Worcester, Gloucester, the M'Lean Asylum, Boston, and other institutions; but it has been tried and abandoned as useless at the Leicester and Essex Asylums, and wherever used, is more or less expensive. At Guislain's Asylum, Ghent, the exit shafts are heated by small paraffine lamps. At some institutions, as at Montrose, the main shaft is heated by placing the hot water tanks in or near it; and at St. Anne's, the chimney of the furnace used for warming the wards passes through it and serves to cause an up-current. The expense is in these cases less than when special fires are lighted for this purpose. At the Derby Asylum, Sylvester's method is in use. At the Prestwich Asylum, a simple process of ventilation by extraction is in operation. The fresh air is admitted from the basement through openings in the floors closable at will. The vitiated air passes through openings placed near the ceilings in the lower, and in them in the upper wards, into shafts leading to the roof. On the top of these is fitted a revolving fan, working by the wind and turning a pumping screw in the shaft, by means of which the air is extracted from the wards. The apparatus, called an Archimedean screw ventilator, is so fitted that the slightest breeze suffices to turn it; and in very calm weather, the heated air from below forcing its way up is sufficient to set it in motion. This process of ventilation by extraction is inexpensive, and is reported to answer very well.

In the large majority of American institutions artificial ventilation by propulsion is used, and in winter is trusted to almost entirely; the windows at the New York State Asylum at Utica, for instance, being fastened down during the winter months. In this system, the air is in the winter driven by a large fan worked by machinery over steam pipes, and thus, warmed, enters the wards by openings, near the ceiling at the Utica Asylum, and near the floor in the majority of the institutions. The vitiated air leaves by other openings, generally near the ceiling, but at the Utica and New Jersey institutions near the floor, which pass into shafts opening in the roof.

At the New Jersey Asylum, for some wards, a sytem of extraction by means of heat is in use in addition to the system of propulsion. In summer the windows are opened, and the fan becomes only an accessory to natural ventilation. At Washington Asylum, the fan is used only in summer—in winter the double system of shafts, and the difference in temperature between the atmosphere inside and out, serving for the purposes of ventilation. At the Frankfort Asylum, the system of propulsion by means of a fan is in use in the wards devoted to the more excited patients. Artificial ventilation by propulsion seems in America to have succeeded more thoroughly than the same system when employed in Europe. At the Lariboisière Hospital, Paris, those wards in which this system is employed are far from sweet, and the system has been a total failure in other institutions. In the cold weather of America, when it is difficult to open windows without lowering too much the temperature of the room—and with the form of building adopted for American asylums, with its enclosed corridor and large number of single rooms—the system is undoubtedly successful, and perhaps the best method that could be employed; but it is costly, and quite unnecessary in buildings constructed on the pavilion, or even the single corridor or ward plan, in milder climates.

Cubic Space.—In dealing with asylums, it will, as a rule, be sufficient to calculate the cubic space only, without taking note of the superficial area; since the rooms, whether in

English or Foreign asylums, seldom, if ever, exceed a height of 12 or 14 feet, and the fallacy which arises from overlooking the fact that, to secure any given cubic space by simple loftiness of a room, does not imply that adequate superficial area is also given, is not here felt. With rooms under 15 feet high, if the cubic space is sufficient, the superficial area must be sufficient also. The English and Scotch Commissioners in their suggestions to architects (Appendix A, Nos. 1 and 2), direct that "the general height of each story should not be less than 11 feet," and proceed to fix, as the minimum dimensions—550 cubic feet for associated dormitories, 770 cubic feet for single dormitories, and 220 cubic feet for day-rooms; the latter exclusive of galleries or corridors. The dormitories appropriated to sick bed-ridden patients are to be of "somewhat larger dimensions."

The Association of Medical Superintendents of American Institutions for the Insane propose (Appendix A, No. 3) "that no chamber for the use of a single patient should ever be less than 8 by 10 feet, nor should the ceiling of any story occupied by patients be less than 12 feet in height"; dimensions which give 960 cubic feet for a single patient, or 260 in excess of that suggested by the English Commissioners.

The following table, in which the size of the rooms is given, as stated by the medical officers in charge of the various establishments, will show that the minimum given by the English and Scotch Commissioners, has, as a rule, been exceeded in Great Britain; whilst these dimensions are small, compared with those in some of the American and Continental institutions:—

Asylum.	Single Dormitories.	Associated Dormitories.	Day Rooms with Corridor.	Hospital.	Remarks.
Lancashire County Asylum, Prestwich.	900	650	750 males 620 females	2,000	
Surrey Asylum, Brookwood ...	800	600	.....	800	Hospital consists of single and associated rooms, averaging about 800.
Worcester Asylum	900	500	.....	1,150	
Sussex Asylum	800	500	.....	800	Associated rooms.
Three Counties—Beds, Herts, and Hunts.	700	500	.....	.....	
Gloucester County Asylum.....	500	400	.....	.....	
Essex " "	750	570	570	.....	
Bristol Borough Asylum	500	500	.....	500	
Middlesex County Asylum—Colney Hatch.	800	600	.....	1,000	
Stafford County, Burntwood ...	550 / 1,700 vary	580	360	.....	
Lincoln County	600	600	400	.....	The dormitories average 600; in some there is smaller, in others much larger cubic space.
Leicester County	800	550*	.....	.....	*The smallest; some contain a larger space.
Perth District Asylum, Murthly	750	725	.....	.....	
Montrose Royal	800	550	.....	550*	*Extra ventilation by means of plates in floor.
Fife and Kinross District Asylum, Cupar.	900	600	.....	.....	
New Jersey State Asylum	1,000	700	.....	.....	
Washington Government Asylum.	1,000	800	.....	.....	
New York State Asylum.....	1,200	1,000	.....	.....	
Pennsylvania State Asylum ...	900	700	.....	.....	
Pennsylvania Lunatic Hospital	1,000 to 3,000	1,000	.....	.....	
Guislain's Asylum, Ghent	1,000	.....	.....	.....	
Göttingen	1,500 to 2,000	600 to 800	.....	.....	Rooms vary in size.
Hamburg	1,500 to 2,000	600 to 800	.....	.....	
Meerenberg	900 to 1,500	500 to 700	.....	.....	
Quatre Mares	1,000	.....	.....	.....	
Evreux	1,200	800	.....	.....	
St. Anne's.....	1,000	800	.....	.....	
Ville Evrard.....	1,000	800	.....	.....	

In the new lunatic asylum, Madras, 1,500 cubic feet is the space fixed for European patients.

In the Perth Asylum, and in several other institutions, the number of cubic feet contained in each room is painted on the door; it is therefore known to every officer and servant; and a visitor by counting the beds can ascertain at once if the space allowed for each patient is sufficient.

Day and Night Accommodation.

Under this heading are to be considered—

1. Day or sitting rooms.
2. Dining-rooms.
3. Dormitories.
4. Airing grounds.

Day and Dining Rooms.—It need scarcely be said that in all modern asylums separate rooms are provided for the patients by day and night, and that they do not sleep in the rooms in which they live. In the corridor or ward system in its simplest form, as in some of the corridors at Colney Hatch, the corridor is used as sitting-room and dining-room; and in most of those asylums in which provision, other than the corridor, is made for sitting-room, the accommodation for dining and for sitting, is as much as possible separated, the patients dining in either the corridor or sitting-room, as may be most convenient. At the new asylum at Hamburg, the corridors, which are usually little more than passages of communication—the patients spending their time in the special day-rooms leading from them—are fitted with tables which fold flat against the wall, and at dinner time are pulled out and spread for use, and the corridor thus becomes a long dining-room. As asylum construction has advanced, there has been manifested—whatever the special form of the asylum—a desire to provide special dining-room accommodation. In the American asylums the day and dining rooms—both completely distinct, and used for the purposes indicated by their names—open from the corridor, a special dining-room being provided for each ward. At the new asylum at Ghent, at Frankfort, and at the new asylums for the Department of the Seine, the same plan of separating day and dining rooms has been followed; and so general has this become that it may be laid down as an established, and almost universally recognized principle of asylum construction. It is now the almost universal opinion in England, among those interested in asylum management, that a general dining-room, to which all the patients can go at meal hours, is much preferable to dining-rooms placed in connection with each ward; and both the English and Scotch Lunacy Boards have suggested this in their instructions to architects. (See Appendix *A*, Nos. 1 and 2, Sec. 9.)

Such dining-rooms are in use in several English and Scotch asylums,—having been added to asylums already in existence, as at the Sussex, Prestwich, Montrose, Stafford (for the male side), and part of Colney Hatch,—or having formed part of the original plan, as at Cupar, Fife, Murthly, Brentwood, Haddington, and Macclesfield. At the Sussex Asylum, Hayward Heath, the Prestwich Asylum, and Montrose, there are two dining-rooms, one for males and the other for females. At Lincoln 100 of each sex are accommodated in two large dining-rooms, but usually one room serves for both sexes, who use opposite sides. So far as has been ascertained, a common dining-hall for the patients does not exist in any asylum out of Great Britain, except the new asylum founded by Guislain at Ghent. It is entirely for males and receives 450 inmates; and of these upwards of 200 dine together in a common dining-hall. The violent, the dirty, and the idiots, of whom there is a large number, have each a dining-room.

Dormitories.—The dormitory accommodation provided in almost all asylums is both in single rooms and in associated dormitories; the proportion which the former bear to the latter varies considerably.

When asylums were first built, the large majority of the patients were accommodated in single rooms; the opinions then entertained as to the character and treatment of the insane, and the style of building of which the asylum was an elaboration—the monastery, or the prison—both tending to make the cellular system prevail. Whilst, however, all authorities on prison management, have, from year to year, advocated the more complete isolation of the prisoner from his fellows, the views of all the leading men on asylum construction, have gradually tended in an exactly opposite direction; and association is now almost as fully advocated for the insane, as isolation is for the criminal. Still, it is universally agreed, that certain classes of patients—the violent, the noisy, the dirty, and the demonstrative—should be accommodated in single rooms, for the benefit of themselves and the other inmates of the asylum; but it is by no means agreed what is the proportion which it is necessary to separate from the others, so that peace and quiet may reign throughout the asylum at night. The question is an important one, as influencing considerably the form of construction—it being much more expensive to build twelve single rooms, each to contain one patient, than one room to contain twelve; whilst the latter will be ventilated with much greater ease than the former.

The English and Scotch Boards in their instructions (see Appendix *A*, No. 1 and 2) state, that "the proportion of single rooms throughout the asylums need not exceed one-third", and that the "single rooms should be chiefly in the wards appropriated to the excited and sick", and "a few should be available for special cases in other wards"; but it is considered by most superintendents of English asylums, that the number here mentioned is unnecessarily large, and that an asylum may be conducted with quiet and order in which the proportion of single rooms is much less. In no British asylum for pauper patients—so far as is known—is the number so large. The following table will show the proportions which exist in some of the more recent institutions:—

Derby	1 to 4	—or four patients accommodated in associated rooms for every one in a single room.
Prestwich	1 to 6	
Bristol	1 to 5	
Three Counties	1 to 12	
Sussex	1 to 7	
Worcester	1 to 6	
Colney Hatch	1 to 6	
Essex	1 to 4	
Leicester	1 to 4	
New Surrey	1 to 11½	
Montrose	1 to 7	
Cupar	1 to 5½	
Murthly	1 to 4	
Broadmoor (criminal)	1 to 4 male. 1 to 2 female.	

Dr. Robertson, of the Sussex Asylum, thinks 1 to 7—the proportion at the institution under his care—a little too small, but believes that 1 to 6 would work well. Dr. Howden also considers 1 to 7, in the institution under his care at Montrose, as too small. But Dr. Brushfield of the New Surrey believes that the comparatively small proportion which exists in the asylum under his care, 1 to 11½, will be quite sufficient, even when the asylum is full, which it is not at present. At the Fisherton House Asylum, which contains upwards of 450 pauper patients, 200 of whom are criminals, there are no single rooms of any kind.

It is somewhat curious that the proportions considered necessary in France and in America should differ from that existing in Great Britain in opposite directions. In the American asylums these are—

New York State	6 to 1	—or six patients accommodated in single rooms to every one accommodated in associated rooms.
Northampton (Mass.) State	3 to 1	
New Jersey	3 to 1	
Pennsylvania	3 to 1	
Washington	4 to 1	

whilst at the new French asylums they are—

At St. Anne's	16 to 600
Ville Evrard	6 to 600
Evreux	8 to 500
Quatre Mares	8 to 400
St. Yon	15 to 800

proportions even more strikingly small, as compared with the English, than the American are large. Dr. Morel, one of the most eminent French alienist physicians, considers that any asylum may be properly managed with one single room for 50 patients. And M. Parchappe, late Inspector of Asylums in France, in his Treatise on Asylum Construction, states, that 1 single room for every 12 males, and 1 for every 11 female patients is ample. At Guislain's Asylum, Ghent, the proportion is 24 to 480, or 1 to 20; whilst in the Dutch and the new German asylums the relative numbers are—

Hamburg	8 to 600
Göttingen	1 to 12
Frankfort	1 to 4

In these numbers the proportion is given for indigent patients only: in all countries the proportion of single rooms for paying patients is much larger.

A larger or smaller proportion of single dormitories will be necessary, according as the asylum is intended to contain acute or chronic cases; and cases of a special class, like those for which the Broadmoor Asylum was erected, require a proportionately large number of single rooms: but all the asylums mentioned above, with this exception, are general asylums to accommodate all classes of cases, and as such are on one level in their requirements. The cause for such a difference in the proportion cannot be found altogether in the difference in temperament and character of the insane, as was suggested frequently in America; for, though the American insane are undoubtedly, as a rule, irritable as compared with those in Great Britain, and may so require more separation, whilst the French and Germans are more quiet and manageable, and may do well with less,—still, the difference in the proportion of single and associated dormitories is too great to be accounted for on this ground only. The habits of the lower class of the population of the different countries must be taken into account in any attempt at an explanation of this great difference.

In France and Germany the lower classes are much accustomed in their ordinary life to sleeping in association. The entire male members of the family, or several of them, occupy one dormitory; and the liking for privacy in bed-room accommodation, which is felt among all classes except the very lowest in England, does not exist in France; consequently a patient in a French asylum would accept the fact of accommodation in an associated dormitory as natural and right. On the other hand, associated dormitories are exceedingly uncommon in America. The mass of the population are better off, and able to procure for themselves better houses than in England; a great privacy in bed-room accommodation therefore exists; so that a bed in an associated dormitory would be considered in many cases as a degradation, and be the cause of irritability and perhaps violence. It must also be remembered that the American asylums contain many patients who, though paupers in reality, are by the kind laws of the States called by the name of indigent only, and are provided for with a liberality, even in the matter of bedroom accommodation, which is not accorded to the pauper class in England.

In some of the English asylums, as at Colney Hatch and Worcester, the associated dormitories, which are additions to the original building, are of large size. 86 patients are contained in one room at Colney Hatch, and 78 in two rooms at Worcester. At Prestwich 44 are accommodated in a single dormitory in the new block of buildings; but in the more recent asylums, as at Brookwood and Murthly, the number seldom exceeds 20, and from 8 to 12 appears to be the more usual number. In the new French and German asylums the dormitories are generally made to contain from 12 to 20; the small dormitories containing from 3 to 6 patients, which are frequently seen in English asylums, are not common abroad.

Airing Grounds.—In some of the older asylums the airing courts—small yards within high walls—were all the ground which it was thought necessary to possess for the exercise and amusement of the patients; and one small patch was allotted to the patients of every one, two, or three wards: but in later years, without discarding the courts, it has been thought necessary to modify greatly their character in many asylums, and to enclose an extensive amount of land as pleasure grounds and gardens for the patients, in which they may take walks accompanied by the attendants. In most English asylums the number of airing grounds is from two to four for each sex. In the large asylums only, as at Prestwich, four are found. At Colney Hatch the immense population renders a larger number absolutely necessary: there are seven on each side in this asylum. At the Sussex County Asylum there are three on each side,—one for the great mass of the patients, one for the more violent class, and one for the infirm and sick. The same arrangement exists at the Old Stafford Asylum, and at the Essex and Derby; and if the airing yards are sufficiently spacious, this number would appear to fulfil all requirements. In some recent asylums, as at Burntwood, Cupar, Murthly, and Montrose, a still smaller number—two only—have been provided on each side, one for the violent and one for the remaining population; but in the case of the two latter asylums extensive grounds for exercise have been also provided.

In the French asylums the patients are generally divided into six or seven classes, and for each of these an airing court is set apart. At Evreux there are seven for each sex, at Ville Evrard eight; and at the former, in addition, large general grounds exist. At Quatre Mares there are seven, at Frankfort and Hamburg four for each sex. At Meerenberg, in Holland, besides large general grounds, there are twelve airing courts for each sex, all beautifully planted and containing aviaries, &c., and what is very remarkable and, it is believed, unique, not one is walled: each has a wooden paling from 3 to 4 feet high separating it from the others and from the surrounding grounds. Dr. Ewerts reports that the escapes, and attempts to escape are not more frequent here, than in other institutions. It must be remembered that several of these courts are for paying patients. According to the experience of English asylum superintendents, such classification of the patients in airing courts is not necessary. The mixture of patients occupying different wards is found to act well, the change of face and companionship being beneficial to all classes; whilst the substitution of one large airing court for several small ones, affords room for exercise which was before impossible, and gives an idea of freedom which before was never felt. These reasons have led to the suggestion of the Commissioners for England and Scotland, that "the enclosed airing courts need not be more than two in number on each side, and should be of ample extent, so as to afford proper means for healthful exercise." (See Appendix *A*, Nos. 1 and 2.)

The airing grounds in most modern asylums are extremely cheerful, and are all planted with trees and laid out as gardens. In some cases gardens exist only in those devoted to the more quiet classes of patients; but in others, and especially on the Continent, even the courts set apart for the most violent are beautifully planted, as at Meerenberg and Quatre Mares. At Guislain's Asylum, Ghent, the airing yard for the most refractory class is perhaps the most beautiful and the best kept in the asylum. The borders, when this place was visited, were full of flowers, and these are seldom or never destroyed by the patients, who keep to the walks, and do not trample on the beds. At the Maison de Santé "Le Strop," near Ghent, the violent patients are kept from walking over the beautifully arranged flower beds by a piece of thin galvanized wire fixed at a height of about three feet to posts set at the corners of the beds. In some asylums, as at Broadmoor, small plots of ground are given to the patients, who cultivate them with interest and pleasure. The courts in many asylums, besides being well planted, and so furnishing gratification in themselves, afford, either from the slope on which they are placed, or by sinking the walls in a ha-ha, extensive views of the surrounding scenery. In almost all, either verandahs, summer-houses, or covered sheds are provided as a refuge from both sun and rain. At the Derby Asylum a tent is fixed in the large court, in the summer months; and at Sussex large canvas awnings are spread. There are fixed seats in plenty, pet animals and birds, and in many, skittle alleys, ball or racket courts, and croquet grounds.

In almost all English asylums, water-closets have been placed in the courts, with urinals for the men. These are generally in small buildings at the corner of the court furthest from the asylum, and are supplied with water from a separate tank placed over them. At the Gloucester Asylum, earth-closets are in use in the courts.

At the new asylums at Ville Evrard and Evreux, the tinette or French sewage tin is placed in small buildings at the extremities of the airing courts, and removed every morning through a hole in the wall of the court. A cart traverses a sunken road extending round the outer walls of the courts, and collects the tins from all the closets.

In America, the airing courts, as in English asylums, are only two or three in number on each side. At the Government asylum there are no special courts, but the general grounds are of large size and surrounded by a wall. They are very beautiful, and contain, besides deer, rabbits, &c., a menagerie in which there are bears, jaguars, raccoons, grey squirrels, &c; there is also an apiary. The patients are never allowed in the grounds without attendants.

The general airing grounds which exist in all the American State asylums,—which are surrounded by only slight fences, often of wood, contain generally grass and woodland, and are frequently beautifully kept,—are becoming common now in Europe. They may be seen at Hamburg and Frankfort, and at Meerenberg, (where the wood is extensive and singularly beautiful, and where the grounds are ornamented by a lake in which swim numerous water fowl). Such grounds exist also in England, at the Sussex, Essex, Bootham Asylum York, Friends' Retreat, Colney Hatch, Leicester, Northampton, New Surrey, and several other asylums. They are found to be of especial benefit to convalescent and quiet patients. In the American institutions, special small buildings used as reading rooms, summer house, and museums of natural history and curiosities for the amusement of the patients, are placed in the grounds.*

Flooring, Fittings, and Furniture of Rooms.

It is only possible in this report to note briefly the different particulars which come under this heading; and in doing so it will be best to mention such as are common to all the ordinary rooms of an asylum, and subsequently those which are to be found in dormitories, day, or dining rooms separately.

Wooden floors are almost universal in asylums, but at Quatre Mares and St. Yon the day and dining rooms are paved with brick, and are in consequence cheerless and cold. In the Derby Asylum, slate floors are used for the rooms for dirty patients; and for the same class, floors of cement are in use at Hamburg, but seem to possess no special advantages.

In a few of the older English asylums, as Stafford and Gloucester, the floors are of oak; but deal has been used in most modern English asylums, whilst pine is in common use in the American and in some Continental institutions. In almost all the American, in some of the French—Quatre Mares, St. Yon, and St. Anne's among the number—and in most of the more modern German institutions, the floors are waxed or oiled and subsequently polished. This is rare in English institutions, though it may be seen occasionally, as at Stafford, and seems to serve little purpose except in the rooms for the more dirty patients, where offensive matters are thus prevented from soaking into the wood, and the floors are more easily cleaned. The arguments which are used as to the advisability of polished floors in hospitals, have little application to asylums.

In many English institutions—among them Worcester, Sussex, Essex, Derby,—the walls are left unplastered; but in the newer Scotch asylums, some of the English, as Bristol, Prestwich, and the New Surrey, and the American and Continental asylums, the walls throughout are either plastered or cemented. The walls of almost every asylum, whether plastered or not, are coloured, painted, or papered. In Great Britain,

* In the Museum in the grounds of the New Jersey State Asylum at Trenton, is placed as a curiosity a specimen of the "English asylum knife." The peculiar shape of this well-known instrument—its utter dissimilarity to an ordinary table knife, and its sharp edge for about an inch contrasting strongly with the rounded bluntness of the remaining portion, are strongly likely to suggest self immolation to anyone sane or insane into whose hands it may fall.

the corridors and day rooms are generally painted over the lower third, and a coloured wash applied to the upper, a line of bright coloured paint dividing one from the other and serving for ornamentation. In some asylums the coloured wash is mixed with size before application, and is found to last much better; and in others it is thought better to paint the upper part as well as the lower, a different colour being generally chosen; this latter is the method most usually adopted in France. The colouring of the rooms in German asylums is generally very pretty and effective. In America, the walls are as a rule painted throughout of some light colour, a pale brown or drab. At Meerenberg the day rooms are painted and the dormitories washed white. The same mode of colouring is in some institutions used for dormitories as for day rooms; but in England it is not uncommon to see both single and associated dormitories papered with pretty neat patterns; and at the new asylums at Murthly, Cupar, and Montrose, every room is papered. At the two latter varnish is applied over the paper; it gives increased brightness to the pattern and allows of washing. At Cupar, for the closets, bath-rooms, corridors, and amusement rooms, a paper of a square encaustic tile pattern has been chosen, and is singularly ornamental. The general effect of the colouring is decidedly pleasing. It is usually considered advisable to use ordinary white limewash for the walls of rooms occupied by the dirty class of patients.

The mode of furnishing the day or sitting rooms of asylums varies very much in different countries and in different institutions. In most of the French institutions serviceable strong furniture—a fair supply of tables and chairs, the latter generally with rush seats, is placed in the rooms; and this is almost all. The same may be said to be the general character of the furniture in America and Germany; but in some institutions in both these countries, much more ornamentation and comfort are attempted. At Frankfort there is a plentiful supply of pictures for the walls, plants in the windows and in pendent baskets, and birds in ornamental cages, and the chairs and sofas are padded and made comfortable. At Göttingen, most of the seats, both chairs and sofas, are of cane, light and pretty, and the general furnishing is excellent. At Hamburg the walls are ornamented with pictures, the furniture is good and comfortable, and rush mats are placed along all the corridors. At each of these latter institutions there are clocks in the wards, which are much appreciated and seldom or never broken by the patients. At New Jersey and Utica, in the wards devoted to more quiet patients, there are comfortable chairs and sofas, and abundance of pictures, small statuary and plants; and considerable efforts are made to make the wards homely and cheerful. In most American asylums the rocking-chair is to be seen and is apparently liked. At Washington, especial care has been taken in furnishing the wards; each corridor is fitted and furnished with some special wood, cherry, oak, laurel, &c., and is named from this instead of being numbered as usual. The seats are handsome and good; there are many single and multiple arm-chairs; a plentiful supply of plants; well made book-cases for the ward libraries; aquaria; cages for birds, flying squirrels, and other pets; and, as at New Jersey, a little fountain constantly playing, in which swim gold and other fish. But it must be confessed that, on the whole, the sitting-rooms and corridors of English institutions have an air of homeliness and comfort which contrasts favourably with all, except such model asylums as that at Washington, and a few other American and Continental institutions.

The tables in English asylums are generally well polished, and sometimes, as at Leicester and Colney Hatch, covered with coloured cloths. The chairs are substantial and good, generally of the Windsor pattern, and with arms. There are sofas and chairs stuffed with hair, and covered with American cloth; multiple arm-chairs, or seats with divisions at intervals, which give to each patient his own place, and arms to support him, and prevent any one patient lying down and monopolizing the room of three or four; folding-chairs, fitted with sacking seats, as at Sussex; wicker-chairs, as at Leicester; and, in fact, every contrivance to make the patients comfortable. Along the centre of each corridor is a strip of matting or linoleum. In the windows there are a profusion of plants, either standing in smartly painted pots, or hanging in pendent flower-baskets, aquaria, fern cases, birds in aviaries or cages. Cases of stuffed birds, and cabinets for the ward-library, are placed in convenient places; and, in the majority of the women's wards are to be seen

net or other covers for small tables, anti-macassars, and other knicknacks, worked by the female patients. To keep up, both in winter and summer, a supply of plants for the wards, handsome green-houses have been erected at several of the English pauper asylums.

The supply of pictures is almost invariably good; and in many institutions there are high class prints, and good photographs and etchings, all framed with taste. Plaster statuary is an effective and common ornament; and, occasionally, as at Colney Hatch, a little coloured glass in the windows adds an extra effect. Looking glasses are generally to be seen, and are much appreciated; and maps seem almost always to interest the patients. Occasionally a small drinking fountain is fitted to the day-room or corridor wall, as at Cupar, and serves to allay the thirst which is often a prominent symptom in some forms of insanity.* In most asylums there are closets in the day-rooms, or one small store room is set apart for patients' extra clothes, men's caps and winter cloaks, and women's bonnets and shawls; and, in some asylums, a row of pegs for caps and bonnets is placed in each sitting-room or corridor, and found convenient and safe. By far the greater part of all asylum furniture is made, both in European and American institutions, in the asylum itself. The tables, sofas, and some forms of chairs,† as well as the stands for flowers, and the frames for pictures, are made in the carpenters' shops, frequently by the patients; and the sofas and chairs are stuffed and restuffed by the asylum upholsterer and his "patient" assistants.

The dormitory furniture is, in most English asylums, as good and well-fitted for its purpose as that placed in the day-rooms. In the best furnished asylum dormitories there is a bedstead with all its necessary belongings, a small box to serve as seat for the patient, and to contain his clothes at night; a washstand fitted with jug, basin, and pail; and a small slip of carpet by the bedside, to stand on when dressing. Sometimes chairs are placed both in the single and associated rooms. On the principle, which must be kept in mind in the furnishing as well as constructing an asylum, of making the patient as much at home and his surroundings as little exceptional as possible, simple wash-stands, fitted with ordinary crockery, are placed in all the single rooms occupied by patients to whom it would be safe to entrust them. In the associated dormitories, multiple wash-stands are generally placed in the centre of the room. In some asylums, as at Prestwich, Cupar, Murthly, special lavatories outside the rooms are provided. Brushes and combs, and looking-glasses are supplied, whether the patients wash in their rooms or in lavatories. In the majority of asylums the towels are used more or less in common; but in others, each patient is provided with a separate towel, which is hung by the side of his bed, as at the Parochial Asylum at Glasgow, or placed over the small box containing clothes as a cover, as at Meerenberg. Earthenware chamber utensils are generally used; the india-rubber and gutta-percha ones are found to wear out, and to be little necessary except for epileptics who drop those made of earthenware and break them by accident. The dormitories are seldom ornamented with pictures.

The dormitories in the American asylums have all the furniture which is considered necessary in the English institutions; and many are models of comfort and cleanliness. The washstand is almost always placed in the room, and this is thought preferable to separate lavatories. Earthenware utensils are almost universally used.

In France, the small boxes for clothes by the side of each bed are fitted also to contain the chamber utensil, which is often pewter, or some other metal. The dormitories in French asylums seldom have carpets by the side of the bed, and the patients in most of the newer asylums wash in special lavatories; and, instead of a small box placed by each bedside to contain the clothes of the patient, large boxes are placed in convenient positions in the dormitories, which serve as seats for, and contain the clothes of, from six to eight or ten patients.

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* In some French asylums, a tin of weak cocoa is placed at the entrance of each pavilion for the same purpose.

† Common wooden or Windsor chairs can, as a rule, be bought cheaper than they can be made in the institution.

The dormitories in German asylums, as a rule, have no furniture except the beds and tin or pewter chamber utensils, and look very bare. The washing is done in special lavatories, as at Hamburg and Frankfort; or in a row of basins standing on a wooden shelf, and supplied with water from a tap in the corner of the room, as at Göttingen. In some asylums, however, as at Frankfort and Illenau, the associated as well as the single dormitories have for each patient a small box for utensil and clothes, and a rush-bottomed chair.

The bedsteads and bedding in use in asylums may be discussed at greater length. In American institutions, almost without exception, the bedsteads are of polished wood, and fitted with removable wooden slabs or lath bottom pieces, which can be washed or scoured on becoming dirty.

In France and Belgium the bedsteads are almost invariably iron, and fitted with elaborate springs, made either of thin slips of wood strung by means of leather on galvanized iron wire, or of coils of wire of an hour-glass pattern.

In each country the form of bedstead in use is believed to be best fitted for its purpose.

In Germany the bedsteads are usually of painted wood, with removable slab bottoms; and the same form is in use at Meerenberg, in Holland, where all the bedsteads are painted white, the paint being thick and shining, and looking almost like white enamel.

In Great Britain several varieties of bedsteads are in use. At Derby, Bristol, Gloucester, the Three Counties, Cupar, Murthly, Colney Hatch, and other institutions, iron bedsteads are used; and at some institutions a decided preference is expressed for them as more cleanly; but in the majority of British asylums—Sussex, Essex, Worcester, Prestwich, Lincoln, Leicester, Stafford, and York Lunatic Hospital—wooden beds are to be seen, well and strongly made, and polished; and their appearance is decidedly in their favour. It is stated that if well made, they are more cleanly than those of iron; that no cracks and crannies exist in which vermin can harbour; that they are safer with violent patients than iron; that they require little repair or repolishing, whilst iron requires constant repainting; and, lastly, that they can be, as indeed they usually are, made in the asylum, and so new wards, or a new asylum, can be supplied from the asylum workshop.

The bedstead bottom is usually of sacking, occasionally laced, but more often fitted on iron bars, which are fixed to the bedstead by screws, and by means of which the sacking can be kept constantly tight. The sacking is easily removable for scrubbing, and can be fitted to either iron or wooden bedsteads. In some institutions webbing, crossed and screwed to a removable wooden frame, is used; in others removable wooden slabs only. The iron bedsteads have usually thin plates of iron at the bottom.

The bedsteads are in some wards in French and Belgian asylums fitted with curtains, and, in the female wards in some English asylums, have valances. For special cases, bedsteads of different patterns are made. For epileptics, low bedsteads, about a foot or less from the ground, are used, and seem to serve every purpose. Sometimes ordinary bedsteads are fitted with removable iron or wooden guards to the side, to prevent patients falling out during a fit; and in some institutions cribs, more or less padded, are used; but these do not, as a rule, seem to be considered necessary. At the Lincoln Asylum ordinary bedsteads, made low, are used for those whose fits generally take place during the day, and cribs for those who are attacked at night.

In English and American institutions, where the night attendants wake all wet and dirty cases at fixed times, and lead them to the closets, special bedsteads are seldom used for this class; but in French and Belgian asylums, the bedsteads for these patients are specially made with zinc or tin bottoms, sloping to a central hole, under which a pan is placed to receive the urine, which trickles through. This arrangement may occasionally be seen in British institutions; sometimes, as at Cupar, canvas, perforated with several holes, is nailed or otherwise fastened on to a removable wooden stretcher, and used instead of zinc.

It is rare to find beds fastened to the floor, even in the divisions for the most violent patients; but the practice is not altogether unknown in England. It is in use in some rooms at the New York State Asylum, Utica, and in the special seclusion rooms at Ville Evrard, and other French asylums. At Meerenberg, the beds for the dirty patients are fixtures.

The material for bedding is usually a hair mattress in British institutions,—alone when the bottom to the bedstead is of canvas, or on a straw palliasse when it is iron or wood. In the American and German institutions, there are usually both hair mattress and straw palliasse; and in French and Belgian asylums, flock beds, over straw palliasses, are used. Very few institutions use straw alone, and coir is very rarely employed, except for special cases. At Hamburg the beds are straw entirely, stuffed in a peculiar way so as to be elastic. At Montrose chaff is used; and some of the beds at the Three Counties are of straw only. For dirty cases the provision varies very much. Sometimes hair alone is used. The mattress is made in three pieces, and the middle piece when wet or dirty, is removed, the hair being washed and dried. Coir is used at Prestwich; sea grass, which can be bought for about 1d. a lb., at Worcester, Lincoln, Evreux, and Ville Evrard; colza seed husk, at Ghent; and straw bags, in most American asylums, and at Cupar.

In some asylums mackintosh covers are placed over the mattresses; or the mattress is covered in mackintosh, and subsequently in ticking, and made with a hole in the centre, through which all fluid may escape.

In some French asylums deep cribs are filled with sea grass, and tightly stuffed. This is simply covered with a sheet; the portion found wet is removed every morning, and the remainder smoothed, and again covered with the sheet and used.

The pillows in asylums are usually made of the same materials as the beds. At the New Jersey State Asylum, those for destructive patients are of coarse sponge, which is first cut into small pieces, soaked in glycerine, and squeezed almost dry by passing it between rollers; it afterwards remains soft. It is about as cheap as horse hair, and does not mat; and if the pillows are torn by the patients, and the stuffing scattered, it is very easily collected.

At the Lincoln Asylum the pillows for the epileptics are covered with open cheese cloth, and are loosely stuffed with horsehair, so that the patient turning on his face in a fit may be able to breathe through it.

Especial care seems to be taken that the counterpanes or coverlets should be coloured, and as bright and cheerful as possible. Scarlet and white, scarlet and black, in distinct patterns, blue and yellow, may all be found; but in some asylums plain white is preferred.

In some few institutions the bedding is folded for the day, in the usual military style, but this is by no means common; in most, the bedding is left as much exposed as possible for an hour or so, and then made for the night. In a few asylums the lower sheet is placed on the bed in its ordinary position, the upper being folded around the blankets and counterpane at the bottom of the bed. At Meerenberg both palliasse and mattress are set up edgeways on the bedstead, and the bedding folded in the usual barrack style.

In those asylums in which there are special dining-rooms, the walls are painted or coloured after the same fashion as the sitting-rooms. Plain tables, with benches, are generally considered sufficient furniture. In the vast majority of asylums, white table cloths are laid at dinner-time; and at Montrose small jars, in which natural or artificial flowers and evergreens are placed, are used to ornament the centres of the tables during meal-times. Dining-rooms are, as a rule, fitted with cupboards, in which the forks and spoons, as well as plates, cups, tumblers, &c., are kept. The knives are in most institutions collected immediately after meals, counted, and placed in a special box, which is locked by an attendant's key.

Some of the American asylum dining-rooms are fitted with small closets, in which coils of steam-piping are placed; and the plates are warmed in these, whilst the joints stand on a dish at the top, and so are kept warm. The order and neatness with which the cupboards for crockery, glass, &c., are kept, is remarkable.

In British asylums the meals are usually served on neat crockery. Mugs are used at dinner, and ordinary cups at tea; and sometimes the salt-cellars and pepper-casters are of crockery also. Occasionally a few wooden plates, or tin drinking cups, are to be seen; but these are the exception. In many of the asylums—Worcester, Three Counties, Bristol, &c.—the crockery is made specially for the institution, and bears the initials of its name. At Cupar, and one or two other places, the crockery

is all very thick and heavy, and made specially for asylum use by Donald and Co. of Edinburgh. The male and female departments have a different pattern.

The knives used in asylums in Great Britain are usually of a peculiar pattern, and sharp only for about one inch near, but not at, the point. Sometimes knives of some metal composition are used, which cannot be sharpened; but many asylum superintendents laugh at these precautions; and at the Sussex, New Surrey, and other institutions, steel knives, differing little or nothing from those in ordinary use, are given to the patients. The forks are generally three-pronged, and made of composition.

In America and France the crockery is almost always white. In the French institutions a few ordinary knives are used; but from the nature of French cookery, spoons and forks are generally all that is necessary.

In America the English "asylum knife" is laughed at, and the majority of the patients use ordinary table knives and forks. Common glass tumblers are used frequently, instead of mugs.

For those patients who cannot be trusted with knives, (generally a minority,) the food is cut by attendants, and spoons or forks are given to them.

In most asylums in which the dining-rooms are at a distance from the kitchen, care is taken to keep the food as hot as possible, whilst carrying it through the corridors and passages. In the American asylums there are steam-tables and closets in the kitchen, in which the food is placed and kept hot whilst being prepared for the wards. It is carried in bright, tightly-closed tins, fitted with shelves, and placed on a waggon running on a tramway in the basement, and ultimately raised, by means of lifts, to the wards. In some of the French asylums the dishes are placed in tin closets, made to close tightly, and set on wheels, and so taken to the wards.

In England special tins are provided, which patients or attendants carry; sometimes these are fitted with false bottoms for hot water, as at the New Surrey. The refuse is sent back to the kitchen from each dining-room in the tins.

Staircases and Stairs, Bells.

Stairs—In almost all English asylums the stairs are of stone. In America iron is used. The form of construction is in both the same. The flights are all short and straight, and the well is built up. Wooden handrails let into a groove in the wall are fitted to most stairs. At the New Surrey the handrail is iron. In some English asylums the well in the centre of the staircase is made use of as a ventilating shaft; and at Washington it is pierced with dust-tubes reaching from each landing place to the basement. Closets for clothes are also placed in it.

Passages—The passages leading from one part of an asylum to another are, in America, generally of stone. In England and the Continent brick, red and black, is more used, laid in patterns. In some asylums Minton's Unglazed Tiles are used for passages; they look well and are not expensive.

Bells—In the greater number of asylums there is no arrangement of bells throughout the establishment, but at a few they are used. At the Glasgow Royal Infirmary a dial telegraph in the entrance hall near the superintendent's office summons attendants from any ward required; and there is a similar arrangement at Worcester, near the door of the board room. At Murthly a bell and a speaking-tube pass from every corridor to and from the house surgeon's room. At Evreux an elaborate system of electric bells connects the superintendent's office with every part of the house; and at the New Surrey, the superintendent's house, placed at a distance, is connected with the asylum by an electric bell, which is only used on an emergency.

There are three classes of the insane for whom provision of a special kind is made. These are:—

1. The convalescent and more quiet patients.
2. The sick and infirm; and
3. The violent and excited.

1st.—Convalescents and more Quiet Patients.

In some countries special asylums have been erected for the more quiet class of the insane. The advisability of separating the different classes, and their treatment in different asylums, has already been discussed, so that it will be only necessary to examine here what provision is usually made for them when they are retained in an ordinary asylum.

In very many cases but little difference in accommodation is made for the quiet and chronic patients, but at several English asylums, rooms have been built specially for them. At the Worcester Asylum, a special block to contain 100 quiet patients has been erected. It consists of two stories. On the ground floor is a corridor with six single dormitories; at one end a day-room, and at the other a dining-room, with a small attached kitchen, scullery, store-rooms, &c., opening from it; and on the upper floor two large associated dormitories and six single ones, so that the block forms almost a complete asylum. The main part of the cookery is, however, done in the ordinary hospital kitchen. The rooms are nicely furnished, and are in every way comfortable. Of the 100 patients, 50 work in the laundry, 35 sew, 12 work in the kitchen and scullery, and 3 clean the rooms.

At the Prestwich Asylum new buildings for 500 patients of the more quiet class were erected at a cost of £60 per patient, exclusive of furnishing. They are connected with the old buildings by long corridors from which open single dormitories, and consist of two blocks, each containing 250 patients. On the ground floor are four day-rooms, two large and two small, opening one into the other; the other two stories above these consist of dormitories only, all being associated, and the largest containing 44 beds. The closets, lavatories, urinals, and bath-rooms, are semi-detached and well ventilated.

At the Old Chester Asylum similar additional buildings for quiet cases have been constructed for 200 patients, at a cost of £39 per head; and, at Colney Hatch, about 100 women have been similarly provided for, of whom 86 sleep in one dormitory.

At the New Surrey, special blocks and cottages have been devoted to the convalescents, in which the number of single rooms is much smaller than in the other parts of the asylum.

At Leicester a new wooden structure has been recently erected for 100 patients, 50 of each sex. It consists of two day-rooms on the ground floor, and dormitories above, is warmed by hot water, has all the necessary fittings in the shape of attendant's rooms, closets, &c., and has cost only £12 a head.

At the Gloucester Asylum a few quiet cases are accommodated in detached cottages.

The general character of the accommodation which is provided for this class of cases is that of simplicity of construction—large day-rooms and associated dormitories, built at a cost considerably less than that of the remaining parts of the asylum.

2nd.—The Sick and Infirm.

At Derby and Gloucester among English asylums, at the New Jersey and New York State Asylums, at Göttingen, and at some few others, the sick are treated in the ordinary wards. The reasons given for the absence of special provision are that it is as undesirable to associate different classes of insane when sick as at other times, and that the sick are better treated in their own wards, and under the attendants who know their mental peculiarities, and to whom they are accustomed, than when removed to a special infirmary or hospital ward. But these reasons are allowed in the majority of asylums to have little weight, and there are few in which special provision is not made for the sick and infirm. The ward, or section set apart as an infirmary, consists, when complete, of an associated dormitory, some single rooms, and a day-room; but sometimes one associated dormitory is alone provided. In the new French asylums a special block is devoted to this class; but in British institutions one ward in the main building, on the ground or first floor, and as near to the administrative department as possible, is usually selected. The cubic space allowed is generally greater than in other parts of the building. At Worcester it is 1,100 cubic feet, at Colney Hatch 1,000; and in some institutions special

contrivances for extra ventilation are adopted. At Montrose there are openings in the floor communicating with the basement and admitting a supply of fresh air; and at the Sussex a special form of window has been adopted. Usually additional fireplaces serve for warmth as well as ventilation; and occasionally the division for the sick is warmed by hot water, from which the heat is said to be more equable. In some cases, as at Cupar, all the floors are oiled or varnished and waxed. In many institutions a small kitchen is attached to the infirmary, or a gas stove, as at Washington and Meerenberg, serves to make or keep warm the small medical comforts necessary for the sick. A special closet is as a rule provided, and a bath, either fixed, as at Murthly and Cupar, or movable, as at Evreux and Ville Evrard. The furniture is of a more comfortable kind than that in the other rooms, arm-chairs and padded sofas and settees predominating.

The accommodation provided differs in amount, ranging from one-sixth at Cupar, the New Surrey, the Three Counties, and the modern French asylums, to one-fourteenth at Montrose, the Sussex County, and the Old Stafford; one-sixteenth at Colney Hatch; and one-twentieth at Prestwich. The more usual proportion is one-tenth of the whole, and this seems as a rule to be considered sufficient.

The cases treated in the infirmary are the sick, the paralytic, and extreme cases of epilepsy, and in many institutions a number of the old and infirm who require special attention.

At Evreux there are two divisions: in one, cases of bodily disease are treated; in the other, such of the patients whose mental peculiarities require special attention. At Guislain's Hospital, at Ghent, there are three rooms, in which the sick are divided into clean, dirty, and a middle class between the two.

In addition to ordinary infirmary wards, special hospitals for infectious diseases have been established at Colney Hatch and Prestwich; and there is also a cottage hospital at the Sussex Asylum. At Montrose, during an epidemic of cholera, a ward was built over an outhouse and fitted with closets and other conveniences; it is now used as an extra store-room, but is convertible into a hospital ward for infectious diseases at any moment. The hospitals at Colney Hatch and Prestwich, are, in times when no infectious disease exists in the asylum, used as rooms for quiet female patients; and the latter, which was erected for 50 patients at a cost of £60 per head, serves admirably for this purpose. (See Appendix *G*, Nos. 16 and 17.)

3rd.—The Violent and Excited.

The various provision which has been made in different asylums and in different countries for this class shows the diversity of opinion which exists as to what is necessary for their care and treatment.

In a few British asylums—notably at Lincoln and Montrose—no special provision for this class is made. The noisy and violent are associated with the ordinary patients, so that one or two are present in most wards, without special inconvenience or disturbance. At the former, no padded room has existed for ten years past; and at the latter, these rooms, as in other asylums, are used mainly for epileptics and general paralytics, who are likely to injure themselves by falling on the floor or against the wall. In the majority of British asylums a special ward in the main building is set apart for this class; and it differs little—except in the somewhat larger number of its single rooms, and in its ornamentation and the comfort of its furniture—from the other divisions. The windows are placed low; and guards are seldom used, except, as at Murthly, under special circumstances. The warming is generally by open fires, and for these small wire guards alone are used.

Certain special rooms are commonly provided. In many asylums one padded room for each sex is considered sufficient,—the padding being generally coir or horsehair, covered with painted canvas or strong mackintosh sheeting, fastened to the walls in distinct pieces, each about 18 in. or 2 ft. wide; whilst mattresses, similarly covered and raised on gratings, are placed on the floor. In others, a larger number of padded rooms is provided, besides one or two panelled to a height of 8 feet from the floor by smooth boards. At Colney Hatch, in addition to three or four half-padded rooms for epileptics, there are eleven padded rooms for the males and six for the females. In most of these there is a

padded seat in the corner next the corridor, under which a chamber utensil is placed and removed as necessary from the outside. In other asylums, besides padded rooms, special strong or seclusion rooms are provided,—the walls being cemented, the windows placed high, and capable of being covered with shutters, and the door strong. At Prestwich three such rooms are provided for each sex; at Bristol and other asylums, one. At Montrose and Cupar panelled rooms are used, in the former instead of, and in the latter in addition to, padded ones. In the American asylums, the division for the excited class is generally more markedly distinct in its character, than in the English institutions. The rooms are generally very unfurnished; the dormitories all single—a very large proportion fitted with wire or wooden gratings to the windows; and some of the beds and chairs are fixed by screws to the floor. Padded rooms are never used in the United States asylums; but there are usually two or three panelled-rooms, and special seclusion, or strong rooms. At Washington six, and at New Jersey and the Pennsylvania State Asylum four such rooms exist. The walls are cemented, the windows either placed high, or protected by strong guards or shutters, and the pan of a water-closet fixed in each room, the water supply of which is under lock and key from the corridor outside. At one or two of the American asylums the section for violent patients is in two or three divisions, in which they are classified,—the worst division consisting of rooms and a corridor for three or four patients only. At New York the patients are removed from one to the other, or from these to the other sections of the house, according to their conduct; and the classification is thus used, to some extent, as a disciplinary measure.

The Continental institutions make various kinds of provision for the violent class, which everywhere is distinguished, and more or less separated, from the rest. At Göttingen and Hamburg, there is a division, in which there are six seclusion rooms, cemented, and lighted by windows placed high up, and a panelled room. A similar arrangement exists at Illenau. At Hamburg there is a small special airing court for one violent patient at a time. Padded rooms are rarely seen in Continental asylums: there is one at Meerenberg, copied from those in England, the material being horsehair covered with leather.

At the Morningside Asylum, Edinburgh, the M'Lean Asylum, Boston, the new French asylums at St. Anne's, Ville Evrard, and Evreux, Guislain's Asylum, Ghent, and the Frankfort Asylum, the buildings for the violent class have certain marked characters, which it may be well briefly to note.

At Morningside a detached block of building for each sex contains the more excited of the patients. These, called the "separation buildings," are entirely of one story, and contain about 80 to 90 patients each. The accommodation consists of two corridors, two day-rooms, and dormitories. The corridor and day-rooms are panelled over the lower half, and painted or papered over the upper. The former are warmed with hot air; but the latter have open fires, which are without any protection, except an ordinary fender. All the bedsteads are iron, and fastened to the ground. There are two padded and four seclusion rooms for each sex; the seclusion rooms are panelled to a height of 8 feet, and, as well as the padded rooms, are very large, containing a cubic space of 1,800 to 2,000 feet. The windows are placed high, and are fitted with sliding shutters. The floors of the padded rooms are waxed and polished. On the male side there is a special strong room, which has cemented walls, and is lighted from the roof. There are two airing courts for each sex.

At the M'Lean Asylum, Boston, the blocks for noisy patients are also detached. Each will accommodate 17 patients; and is a small asylum complete in all except kitchen, and fitted with a somewhat elaborate warming and ventilating system. There are two stories corresponding in general arrangements; but the upper being for a somewhat less excited class of patients, the furniture is more comfortable, and some minor ornamentation exists. Each floor consists of a corridor, 93 feet by 14, with bay windows at each end, guarded by bars placed inside, and at a distance from the windows of 2 or 3 feet, the space so cut off being used for flowers, &c.

The rooms, which are all single, open from each side. Each has a cubic space of 1,000 feet. The walls throughout are plastered with a mixture of mortar and sand, and are rubbed smooth, but not painted or coloured. The floors are laid in patterns, the woods being of different colours, are all oiled and polished, and before oiling were Burnetized

(soaked in chloride of lime under hydraulic pressure). The room windows are ordinary double sashes in wooden frames, with bars outside.

Each window is fitted with a shutter, which slides out of the wall, can be locked when open or closed, and has in it plate glass panes, so as to prevent the rooms being extremely dark when the shutter is closed. The beds are all of wood, made very strong, have rounded tops, and are fixed in the centre of the room. In one corner of each room is a solid seat, and in another, one with a hole for use as a closet. Under this is introduced from the corridor an ordinary chamber utensil, which is emptied when necessary by an attendant. Each door has an inspection plate of plate glass in the form of a diamond; and there is an opening through the wall, so as to allow of food being passed from the corridor, if necessary, without opening the door. Two attendants for each floor have rooms opening from the corridor.

At Ville Evrard (see Appendix *G*, No. 9), and St. Anne's (see Appendix *G*, No. 8), the blocks for violent patients are completely detached, and are the same in general arrangement; three rooms for each sex being provided at the former asylum, which is intended for a more quiet class of cases than are admitted at St. Anne's. At the latter special rooms for nine are provided. These rooms open from a crescent shaped corridor; and immediately opposite the door is a second opening into a small airing court, which is planted, and has grass, turf, and a wall sunk in a ha-ha fence at the further extremity, so as to allow of view. The window of the room which looks out into the airing court is protected with wire netting. It is a double sash, and can be opened or shut by means of cords pulled from the corridor, and in the same way can be covered with a sliding shutter. Each room contains a strong fixed bedstead, and in the corner a self-acting water-closet, the zinc chamber utensil fitted to which, can be removed from the corridor. Between every two rooms, occupying the angle caused by their divergence, is a small court covered with glass, and having windows looking on to the airing court on each side. Here the patient is allowed to walk up and down while his room is being cleaned and aired, and when wet weather prevents his taking exercise in the court. One cell in each block has a panelled wall, the remainder are cemented.

At Evreux the same general arrangement, with a special airing court for each patient, exists; but there are two rooms for each patient, one for day and one for night use; and one extra room has no windows, and is kept permanently dark. The windows are high, and out of reach of the patients, and there are no closets in the corner. The doors at Evreux are all fitted with a little panel through which food can be given to the patient. In all three asylums the rooms contain from 1,000 to 1,200 cubic feet. They are warmed by means of hot water at Ville Evrard and St. Anne's, and ventilated by extraction by means of heat; and at Evreux warmed by hot air, and ventilated by shafts in the wall passing to the roof.

At Guislain's Asylum, Ghent, the quarter for violent patients is made to accommodate 46. It consists of a corridor and day-room for day use, two associated dormitories, each to hold 13 patients, and an attendant's, and 20 single rooms. These single rooms contain each 1,000 cubic feet, and are placed in the form of a crescent between two corridors, into one of which they have a door, and into the other a barred unglazed window. The windows in the two corridors are placed exactly opposite each other, and, by means of an opening over the door and the barred windows, admit of tolerably free ventilation. This plan of placing the rooms between two corridors is almost universal in Belgium, and has been adopted in the small new asylums at Gheel, but it is difficult to see its exact advantages.

The warming is by stoves in the corridor. There is one general airing court; and by means of doors the corridor can be divided into six portions, so as to give any one, two, or more patients a distinct piece, and allow of exercise without communication with other patients.

The special section for violent cases at Frankfort is on the double corridor system, and does not differ materially from that at Ghent, except that it is warmed by steam and ventilated by propulsion, and that each room has a closet, the pans in which are removable from one of the corridors.

The proportion of violent patients for whom provision is generally made, would appear to be about one-tenth. At Edinburgh the block for violent women will contain one-eighth of the entire number. At the M'Lean Asylum, Boston, and Guislain's Asylum, Ghent, about one-tenth are provided for; and this would appear to be about the usual number in the rooms for the violent class in British asylums. In the French asylums the number specially provided for is very much less.

Kitchens.

The points for consideration concerning asylum kitchens are, their number, their position, the modes of cooking, and the accessory rooms.

In most asylums the entire cooking for patients, attendants, and officers is done in one kitchen; and in all cases except where the asylum buildings are much scattered, or a separate building for paying patients exists, as at Meerenberg, Glasgow Royal, and Morningside Asylums, one properly fitted kitchen appears to be all that is necessary. In most English asylums the kitchen is a one-storied building, with a high open roof, well ventilated, and with windows in the roof or near it, situated immediately behind the centre or administrative block of the building, and accessible by means of covered ways from every part of the institution. In the newer German asylums at Hamburg, Frankfort, Göttingen, &c., the room is of this character and in this position. In the older German asylums, of which Illenau may be taken as a type, the kitchen is on the lower floor of a two-storied building, and is grimy from smoke, and perpetually more or less full of steam when cooking operations are going on. In most French institutions the room is on the ground floor, large and well ventilated, but other rooms are placed over it. This is the case at St. Anne's, Quatre Mares, and Ville Evrard; but at Evreux the English plan has been followed, and the asylum kitchen is a one-storied building with open roof. The kitchens at Meerenberg are also of this kind. In the American asylums the kitchen is placed on the basement, and is generally fairly ventilated. From it tramways are laid all over the basement, and the food is conveyed to the upper story by lifts.

The major part of the cooking in all asylums is done by steam, the meat, pudding, &c., being boiled by steam in jacketed boilers, and the potatoes steamed in large square boxes made of iron. In addition to this there is generally an open fire-range for roasting, fitted with such apparatus as is necessary for the minor cooking, requisite for the tables of officers. This range is occasionally large enough for roasting for the entire establishment, but more usually is small and intended only for officers, in which latter case the patients' dinners are baked in the ovens used for baking the bread.

At the Meerenberg Asylum, the entire cooking, boiling, and roasting is done by gas. At Colney Hatch, the Three Counties, the Stafford Asylum, the Lunatic Hospital, York, and the French asylums of Ville Evrard and St. Anne's, all roasting and frying is done by gas, both for officers and patients; and in all cases it is found clean, handy, and economical.

Special care is taken in some asylums to carry off the steam. At the Leicester Asylum the boilers are placed in a glass case with sash windows, and so, shut out from the kitchen; and at Hamburg, a hood is placed over the entire boiler-range, to receive the steam, and conduct it by a tube immediately to the open air.

The modern French and German kitchens are excellently arranged. As at Colney Hatch and some other English asylums, the entire cooking apparatus is placed in the centre of the kitchen, and benches or dressers round the outside, serve for the preparation of the food. The steam-boilers in the French asylums are hung on pillars, through which the steam passes to the jacket. The vessels are slung on pivots (see Appendix *F*, Fig. 11), and can be tilted so as to be emptied or cleaned; the lid lifts by means of a weight, and over each boiler is a tap from which it is filled with cold water. The whole arrangement is simple and handy, and admits of being kept beautifully clean. The German asylums at Hamburg and Göttingen are fitted in much the same manner, but the boilers are built in, and so do not tilt on a pivot; and the front of the brickwork is faced with white glazed tiles.

In all asylums there is a scullery, opening from, or placed near, the kitchen; and in many, an additional room in which the vegetables are washed and prepared, sometimes by hand and sometimes by ingenious machinery. The boilers are frequently placed in the scullery, so that all steaming is done there, and the kitchen left free for roasting and the preparation of food.

In eight out of every ten English public asylums, and in the majority of the American ones, the whole of the bread for the consumption of the house is made. Sometimes the kneading is done by hand, at others, as at the Sussex County Asylum, by Stevens' Kneading Machine; and the baking done in ordinary brick, or specially fitted, iron ovens. At the New Jersey State Asylum, a very complete apparatus is employed for making aerated bread, which is used by the entire establishment. It is sweet and palatable, and the officers and attendants and the constant residents do not tire of it, as is generally found to be the case in British institutions in which it is used,—the secret apparently lying in the fact that sufficient only for the day's supply is made, and that it is always eaten fresh. Stale aerated bread is dry and insipid. It is stated that it is cheaper to make aerated than ordinary bread, both processes having been tried in the same institution. It is found as a rule more economical to make bread in an asylum than to buy it; but this is only in institutions of a certain size, where the baker is kept constantly employed. At the Cupar, Murthly, and some of the smaller institutions it is found cheaper to buy it; and this is also the case at the Lunatic Asylum, York, and the Gloucester Asylum, which are near, or rather almost in, large towns. At Stafford the bread is supplied from a prison near. For Continental institutions the bread is generally bought; but at Ville Evrard, a bakehouse is about to be erected, and bread is made at Ghent, Illenau, and one or two other asylums. In many English asylums all the beer required for the establishment is brewed; and at some it is found economical to buy coffee green, and roast it.

In most asylums either a sausage machine or a patent mincer is in use, to chop small, all food required for patients suffering from general paralysis, and for those accustomed to swallow their food without mastication.

At Cupar, Murthly, and Ghent, ingenious machines are in use for cutting bread, so as to give a certain weight in each slice without weighing; and at New Jersey State Asylum and the Glasgow Royal Asylum, biscuits are made for the patients—at the former, by machinery.

In most American asylums there is an ice-house; and the ice, gathered by the patients in winter, is stored for summer use. It is sometimes extremely useful in medical treatment.

Patients generally assist the cooks and bakers in the asylum kitchens and bakeries, and almost all the vegetables are washed and prepared by them. A few superintendents, as Dr. Nichols, of Washington, object to patients as assistants in the kitchen, because they are frequently not cleanly in their habits.

Laundry.

Asylum laundries are, generally, either partially or wholly detached buildings. At Broadmoor, the New Jersey State Asylum, and the Pennsylvania Hospital for the Insane, they are at some distance from the asylum, and near the spring from which the water supply of the institution is derived. In most cases, the laundry consists of washing, drying, mangling and ironing rooms; but in addition to these there are at some asylums—as the Essex and Ville Evrard—a linen reception-room, (in which all linen is received from the wards as it becomes soiled), folding and mending-rooms. At some institutions there is either a separate laundry for the very dirty linen, as at Broadmoor and Sussex, or a room attached to the laundry, in which it is washed, as at Prestwich, Montrose and New Jersey.

The water in asylum laundries is almost universally warmed by steam. Sometimes the steam pipes are brought directly into the washing-trays, as at Murray's Asylum, Perth, and some of the American institutions; at others, hot water is laid on. The mode of washing differs materially in different countries. In the majority of American institutions machinery is used to a very great extent, whilst the patients either do not assist at all or only in a small degree. The machinery consists either of what is called the "shaker"

machine (invented and patented by a member of that sect); or the hydraulic clothes washer, made by a company in Cincinnati, for washing; a centrifugal wringer; and mangles worked by steam. In some of the English asylums, machinery is also largely used; there are few institutions in which some one of the many forms of Stamper, Dashwheel, or Dolly, does not exist; and the centrifugal wringer is universal. Occasionally, the mangles are also worked by machinery; but in almost every institution a considerable number of female patients assist at washing. In some English asylums, as Essex and Gloucester, the washing is, almost entirely, done by hand, such small machinery as exists for washing, wringing, or mangling, being turned by hand. In the Scotch asylums, the washing is more frequently done by hand than in English institutions; and the only machinery in use in the Cupar, Murthly, and Montrose Asylums is a centrifugal wringer, turned by hand, the patients, with two or three paid laundresses, doing the entire washing of the asylum.

The amount of machinery in use in Continental asylums is, as a rule, small. At St. Anne's, the French system of filtering the hot lye through the clothes is in use. The linen is placed in large tubs, with a compartment at the bottom, from which the lye is pumped up by machinery and allowed to flow over the top, it filters into the compartment, and is again raised by the machinery. At Göttingen and Meerenberg, there is a washing machine worked by steam, and a centrifugal wringer; but at Ville Evrard, St. Yon—at which the entire washing for 900 patients within its own walls, and 700 at Quatre Mares, is done—and at Ghent no machinery exists. The clothes are first boiled in huge coppers and then washed by hand. At Ghent and one or two other Continental asylums, clumsy movable wooden tubs are provided; but in all the British institutions, fixed square tubs, at which the women stand, are placed round the wash-house against the wall. These have a cold, and either a hot water or a steam supply. The boilers and machinery are placed in the centre. Drying is done mainly in closets warmed by steam, the clothes being placed either on wooden or zinc horses, or on wires fixed or made to revolve in the closet. A large drying and airing-ground is also attached to most institutions. At the Colony of Fitz James, at Meerenberg, and at the M'Lean Asylum, Boston, special arrangements are made for drying clothes in covered sheds, which are without artificial heat. These sheds are fitted with movable louvres, which exclude rain but admit air, such as may be seen in the drying-rooms of leather or paper manufactories. At Montrose, the drying-closet is used very little, the large open drying-yard serving all purposes, except in very bad weather.

The ironing, folding, mending, &c., are always done by patients. In the American asylums, and at Meerenberg, the irons are generally warmed at gas stoves. In several English and Scotch asylums, cap crimpers are fixed to a table and are heated by steam.

A special foul linen laundry is very useful in asylums. The linen of some patients is made so filthy that it is found desirable to wash it apart from the rest, and this is done either in a small detached laundry in which all the laundry operations are completed, or in a room for washing only; the remaining operations of drying, mangling, &c., being done in the ordinary laundry.

At the Worcester Asylum, instead of a room, the special foul linen laundry is a shed against the main building, quite open on both sides, so that all offensive smell at once escapes, and a similar building exists at the Jersey State Asylum. At this latter institution, all the dirty linen is placed first in a shallow tray with a hole in the centre, and well brushed while water is poured on to it; and at the Prestwich Asylum, a tank is constructed to hold the major part of the soap suds and dirty water which drain from the laundry in one day. In this the specially foul linen is placed every night. In the morning the tank is emptied, the water allowed to run into the ordinary drains, and the clothes taken out and washed in a special room by machinery. At Cupar, a tank for foul linen is placed in a small offshoot from the laundry. In this it is soaked for twenty-four hours before being washed in the ordinary manner. The soiled linen is in some asylums kept in a box in the scullery, and sent to the laundry every morning. In others, a basket is placed in the lavatory or storeroom. In some one or two, as at Colney Hatch, boxes are placed in the airing courts, to which the linen is taken from the nearest wards during the day, and removed to the laundry every morning, or two or three times a week; but at the Essex and Derby, and the female side of the Sussex, it is sent to a special room in the laundry at once.

Chapel.

A large room, in which religious services can be conducted, has become an essential part of an asylum; and such a room exists in every well-ordered establishment in great Britain, on the Continent, and in America.

In some of the Scotch and American asylums, this large room, generally handsomely decorated, is used also as an amusement room. In the Scotch asylums, all the public amusements are held in it; but in the American institutions, it is used only for lectures and magic-lantern exhibitions, whilst a separate room is used for dancing.

In all English and Continental institutions it has been deemed advisable to have a separate room for amusement, and the chapel is fitted specially for religious services. In the English and German asylums, the chapel is sometimes a room in the main building, but usually it is semi or totally detached. In all instances it is thoroughly ecclesiastical in its fittings and ornaments; and in not a few English asylums, is one of the prettiest churches in the district. At the Prestwich, Sussex, Worcester, and New Surrey Asylums, and at the Northampton and York Lunatic Hospitals it is a totally detached handsome gothic structure, fitted with excellent taste; and at the Essex Asylum is semi-detached, and radiant with gilding and stained glass. In the French asylums the chapels are always detached buildings and remarkable for their beauty; and fine, detached, ecclesiastical looking edifices, have been erected a Ghent, Meerenberg, and other places.

As a rule the chapel is used by one denomination only, that of the majority, the other paid or unpaid chaplains of the institution, performing service in rooms temporarily devoted to the purpose; but in Germany it is used for both Protestant and Catholic worship; the special ornaments and accessories necessary for the service of each sect being kept in small locked closets in the vestry, or the chapel itself.

The following table will show in round numbers, the average attendance of asylum inmates at divine service, in seventeen British and American institutions. In the French and German asylums it is generally stated, that about a half or rather more attend the religious services.

	Inmates.	Attendance.
Prestwich	962	600
Sussex	506	380
Gloucester	586	270
Worcester	540	290
Three Counties	534	250
Essex	554	270
Colney Hatch	2,026	700
Bristol	206	110
Derby	342	150
Stafford	469	320
Leicester	391	270
Murthly	220	180
Cupar	213	150
New Jersey State	500	260
New York State	608	300
Washington	380	240
Pennsylvania State	380	160

From this last it will be seen that the attendance is in only two cases less than half the entire asylum population (in these, the number is restricted by the small size of the chapel); whilst in several it is more than three-fourths of the entire number of inmates.

In some Asylums two services are held in the chapel on Sunday, and one or two week-day services in addition; in others, morning prayers are read daily, in addition to the Sunday services. The large majority of asylum chapels contain either harmoniums or organs, which are used in the services of the church. Choirs, composed of patients and attendants, have been formed; and the Protestant services in Great Britain and America, and those of the Catholic Church in France and Belgium, are performed with a reverence and decorum which are not surpassed in any of the ordinary churches.

Dead-house and Cemetery.

The only asylums in which special detached buildings do not exist for the reception of the dead, are some of the American institutions. At New Jersey and Washington, the dead are placed in rooms in the building and removed as soon as possible. In British, French, and German asylums, a dead-house is considered absolutely necessary. It is, as a rule, placed at some little distance from the asylum, as much out of sight as possible, with a door opening at once upon the road to the cemetery or nearest town. In some institutions the dead-house consists of one room only; but in the majority of British, and in most of the modern French and German asylums, there are two rooms, one for *post mortem* examinations, and the other for a reception room in which friends can view the body. At the New Surrey Asylum two small reception rooms have been built, one for males and the other for females, each sex attending to its own dead; and between the two is the room for *post mortem* examinations. In most Continental asylums, and in one or two English institutions, there is a mortuary chapel in connection with the dead-house.

When asylums are situated at a distance from a town, a special cemetery for the institution is generally made, and it is often planted and kept with extreme care. The little cemetery at Illenau, in Baden, under the shadow of the Swartz Mountains, bright with flowers, and ornamented with monuments of exquisite taste—among which the venerable and eminent medical director points out those belonging to some members of his own family—is one of the most peaceful and beautiful spots to be imagined.

Amusement Room.

Almost all modern asylums possess a room in which the inmates can be collected for concerts, dances, lectures, theatrical exhibitions, and other amusements, at which it is desirable that as many as possible should be present.

In some asylums, as at St. Yon in France and the New Surrey, some of the work-rooms, at the former a large room generally used for sewing, and at the latter two work-shops, separated ordinarily by a removable wooden partition, are used for this purpose. In the Scotch asylums the room in which religious service is held is used also for the associated amusements; but generally a special room is set apart for this purpose. This is frequently handsomely decorated, made brilliant with gilding and colour, and well lighted. A fixed stage or platform is usually placed at one end—sometimes there is a gallery for musicians or visitors; and, as a rule, a piano is a part of the furniture. At the Pennsylvanian Hospital for the Insane the room is beautifully coloured, and lighted from the roof by gas, below which glass is placed, so that the warm air does not enter it. At the Hamburg Asylum there is a suite of three rooms, in one of which minor refreshments, beer, &c., are served during the evening. In some of the English asylums, where the patients dine in a general hall, as at the Bristol, the Three Counties, and the Old and New Stafford, this is used as an amusement room.

It is found that from one-half to three-fourths of all inmates are capable of enjoying or are likely to be benefited by the ordinary amusements provided.

Library.

In a few asylums, as at Worcester, Colney Hatch, Hamburg, Montrose, and others, a special room is set apart for a library; and this, used as reading room also, is not uncommon in institutions which contain patients of the better classes; but in the majority of asylums for pauper patients the main store of books is kept in cases, either in the room allotted to the chaplain, the Board Room, or the room in which the friends of patients are received. In the British asylums generally, book-cases made to contain a small library, are placed in each corridor or day room. The libraries of many asylums are large. At Prestwich and Colney Hatch there are 2,000 volumes, at the Three Counties 1,700. The supply of newspapers and periodicals is also liberal. At Prestwich 13 or 14 (six or eight copies of some), at Montrose 21, at Worcester 25, and at Morningside 30 cheap serials, besides ordinary newspapers, are taken. At the Sussex Asylum a subscription is paid to Mudie's Library, and a most

liberal supply of newspapers is provided. The money for the supply of books and papers is either granted as an annual sum by the Governing Board, or given in small sums on application by the Superintendent or Chaplain, under whose direction the library is more usually placed. The American asylums possess, as a rule, excellent libraries, and, like the English institutions, are well supplied with newspapers and periodicals. At the New Jersey State Asylum the library is partly supported by fancy work made by the patients, and either sold at shops or kept in a case in the entrance hall and sold to visitors. At the New York State Asylum the exchange papers of several local journals are bought at small cost. The supply of newspapers and books is much smaller in the French than in the English and American institutions; and in none of the Continental asylums is it at all liberal.

At the Prestwich Asylum all the periodicals are bound by a bookbinder who is a patient, and who has a small room set apart for his work. At three asylums a small paper, written entirely by patients, men who are "mad, nor-nor-west" only, is published. These literary curiosities—*The Morningside Mirror*, *The York Star*, and *Murray's Royal Asylum Literary Gazette*—are sent forth to the world monthly or quarterly. *The Morningside Mirror* is printed in the asylum; and the profits derived from the sale of all go to the library funds of the asylums.

There remains to be considered the provision made for the accommodation of the officers, servants, and attendants; and in addition, the various rooms used for administration may be enumerated.

In the majority of asylums, both in Great Britain and on the Continent, the superintendent lives in a suite of rooms in the main building, and this is generally the case in America; but in several of the most recently established British and Continental institutions, as the New Surrey, the Montrose, Murthly, Cupar, Hamburg, Meerenberg, and others, the house for the superintendent is detached, and at a short distance from the asylum. At several of the older institutions, as Worcester, Gloucester, Morningside, &c., a new detached house has been built for the superintendent, and the rooms formerly occupied by him used for some other purpose. At the Pennsylvania Hospital for the Insane, the Bloomingdale Asylum at New York, the Retreat at Hartford, and other American institutions, the superintendent's residence is also detached. The chaplain, if resident, has usually either a detached house, or two rooms in the building. The remainder of the officers, the assistant physicians, the steward, the matron or housekeeper, the chief attendants or supervisors, and the attendants and servants, are as a rule accommodated in the building itself.

To each of the officers two rooms are usually allotted in the centre of the building, but in some of the newest British asylums, a sitting-room and two bed-rooms have been set apart for the assistant physician. The steward, when married, lives out of the asylum, a certain sum being allowed for rent, or a house built for him.

In the British asylums dinner is served for each of the officers in his own room. In America, the assistant physicians and chaplain (if resident) generally dine at the superintendent's table, and the matron and steward dine together; or some other arrangement is made, by means of which the number of separate meals provided is made as small as possible.

To the head attendants, two well-furnished rooms each are usually given—sometimes one room only with an additional room for a common dining-room.

The English system of asylum management gives special dormitories to all the attendants; sometimes two or three, but more usually one, being placed in a comfortable furnished room containing for each individual about 1,000 cubic feet. These rooms are distributed throughout the asylum, and are generally so placed as to overlook the associated dormitories and the day-rooms by means of windows.

In one or two English asylums, as at Gloucester and Lincoln, the junior attendants sleep in the associated dormitories with the patients, generally in a corner bed, the seniors having each a room; and this, though objected to by the attendants at first,

is found to work well. In the Scottish System no special dormitories are set apart for the attendants. In each ward is a room in which the attendants keep their clothes, and in some cases dine; but every attendant sleeps in associated rooms with the patients. This arrangement is supposed to prevent accidents. It is, however, to some extent, difficult to carry out, since the attendants very much prefer rooms to themselves. At the Gartnavel Asylum, Glasgow, especial difficulty has been found in inducing attendants to sleep in the dormitories with the patients—sometimes £2 a year has been given in addition to the ordinary wages to compensate for the want of privacy, but even this has not been found sufficient inducement, and good attendants have left when it has been insisted on; so that at that institution the attendants have now, as a rule, separate dormitories.

In America the attendants have invariably special sleeping rooms so placed as to overlook the few associated dormitories which exist in American asylums; and the same is the rule in French asylums.

At Quatre Mares, Meerenberg, Hamburg, Göttingen, and in most of the Belgian asylums, the attendants all sleep with the patients in the wards; their beds have usually curtains, and sometimes a chest of drawers and a chair are placed by the side of each. At Frankfort and Illenau a few have special rooms, but the remainder sleep in the patients' dormitories.

The further arrangements made for the comfort of the attendants vary considerably. The most usual plan is to provide a special dining-room for the attendants and house servants of each sex, which is used also as a sitting-room in the evenings after the patients are in bed.

Sometimes one large dining-room only is provided. Occasionally the attendants dine in the ward or common dinin-grooms after the patients. In some of the Scotch asylums they dine in a small room opening from their ward, and in America generally with the patients, taking the head of the table. For the house, the kitchen, and laundry servants, and for such men as bakers, storekeepers, and others, who live in the asylum, dormitories are provided, either near the departments in which they work, or in a special part of the building. The third story in the centre of the building is not unfrequently used as dormitories for the house and other servants; and in the new French institutions sleeping accommodation is provided for the kitchen, laundry, and other servants in the block containing the kitchen and store rooms.

Besides rooms for officers, servants, and attendants, rooms are provided for administration and for stores. A room for the meetings of the governing body, a superintendent's office, dispensary, steward's office, chaplain's office; store rooms for clothing and utensils, for meat, bread, and groceries; a cutting out and sewing room, a schoolroom, and rooms in which the friends of patients can visit them, are among those most usual and necessary.

In the French asylums, the dispensaries take up a large space, and the *pharmacien* is almost always an important member of the asylum staff.

The visitor's rooms, one for each sex, are usually comfortably furnished, ornamented with pictures, and made as homely and attractive as possible. At Ville Evrard there are four for each sex, so as to allow as much privacy as possible to patients in their interviews with their friends. At the Sussex Asylum, the visitor's room is used also as schoolroom and library, and there being fixed times for both school and visiting, serves all purposes admirably.

The farm buildings, piggeries, and stables at many asylums are excellently arranged. They are, as a rule, situate at a short distance from the asylum, and every improvement in structure and fittings has been adopted.

Organization.

Asylum Government and Inspection.—Asylum government is even of greater importance than asylum construction, and a consideration of the various forms which exist in older countries will, no doubt, be useful as a guide to that which is most fitted for a young and growing colony.

The public institutions for the insane in England are County and Borough Asylums, the State Asylum for Criminals at Broadmoor, and the Lunatic Hospitals, which, although in the hands of more or less close corporations, are not conducted for the profit of the corporation or of any individual.

The government of the county and borough asylums is in the hands of the Justices of the Peace of the county or borough, and that of the lunatic hospitals in the hands of a body composed of *ex officio* governors or subscribers, and by them is delegated under Act of Parliament to a committee of visitors, numbering not less than seven, elected annually, and entrusted with the entire government of the asylum, the making of all rules, the appointment, dismissal, and superannuation of all officers, and servants, and the general and financial management, so long as the additions, alterations, and improvements do not cost more than £400 in one year, in excess of the ordinary repairs.

This committee of visitors exercise a general control over the affairs of the institution, meet once a month, or as often as may seem fit, and delegate to the superintendent, the resident representative of the committee, such authority as they please, looking to him for the good government of the institution and estate. The committee make annually a financial and general report to the whole body of Justices, and improvements suggested by them are sanctioned at a general meeting, and provision made for extraordinary payments.

It is ordered by the Act of Parliament regulating the government of asylums, that not less than two members of each committee of visitors shall, together, once at least in every two months, inspect every part of the asylum of which they are visitors; see and examine every lunatic therein, and the order and certificate for the admission of every lunatic admitted since the last visitation, entering in a book kept for the purpose any remarks they may deem proper to make as to its condition and management; and any three visitors may order the discharge of any person, conditionally on trial, or absolutely.

The State Asylum at Broadmoor has been placed under the management of a council of supervision appointed by the Secretary of State for Home Affairs, with powers similar to those exercised by the committee of visitors of county asylums, some provisions being made for the discharge of special cases or their transfer to ordinary asylums, under the warrant of the Secretary of State. The general rules for the government of all public asylums, made by the committee of visitors, must be submitted to, and approved by, the Secretary of State, and when approved by him are printed and abided by, being only altered after like approbation; but regulations and orders for the management and conduct of the asylum, not inconsistent with such general rules, may be made or altered at any time without such approbation being necessary.

The Commissioners in Lunacy, a body specially appointed by the Crown, consisting of five honorary and six paid members,—three of whom are physicians and three barristers-at-law,—are charged with the visitation and inspection of all public asylums, once or oftener in every year. One physician and one barrister at least are charged with the visitation of every asylum—to inquire whether the provisions of the law have been carried out as to construction, visitation, and management, and also as to the regularity of the admissions and discharges of patients therein and therefrom—whether Divine service is performed, or coercion practised—as to the classification of patients, number of attendants, dietary, occupations, and amusements, and such other inquiries as shall seem to them meet. The general condition of all asylums is set forth in the annual report of the board to the Lord Chancellor. All plans for building, enlarging, or improving asylums, are to be submitted to the Commissioners in Lunacy, reported on by them to the Secretary of State, and approved by him before adoption.

The district asylums of Scotland are almost identical with the English county asylums, and the Royal asylums do not differ materially from the English lunatic hospitals.

Their general mode of government is also almost identical; the district asylums being governed by a district board selected from the commissioners of supply and the magistrates of boroughs in the district, and the Royal asylums by a board of governors consisting of subscribers and others.

The Commissioners in Lunacy for Scotland, two paid officers appointed by the Crown, who are assisted by two Deputy Commissioners, are charged with the inspection of

all asylums, their duties being similar to those of the English Commissioners. All rules and regulations for the government of asylums are made by them, and submitted to the Secretary of State for Home Affairs for approval before being carried into effect. They make an annual report on the condition of all asylums to the Secretary of State.

The parochial asylums of Scotland are merely developments of the lunatic wards which exist in almost all poorhouses. They are under the immediate government of the guardians or other parochial authorities, and subject to the inspection of the Commissioners in Lunacy.

In Ireland, the governors of all district or public asylums are appointed by the Lord-Lieutenant in Council, the number for each asylum not exceeding eight, and they are unpaid. They are charged with the erection, establishment, and regulation of asylums, and with the appointment, dismissal, and superannuation of all officers and servants; but the appointment of the superintendent is left in the hands of the Lord-Lieutenant, who determines also the staff of officers, defines their duties and salaries, and makes all rules and regulations for their guidance.

The Inspectors of Lunatic Asylums in Ireland, two in number, appointed by the Crown, are charged with duties of inspection and report, similar to those of the English and Scottish boards, and are, in addition, members of the boards of governors of all asylums.

The Central Criminal Asylum at Dundrum is placed immediately under the supervision and control of the Inspectors of Lunatic Asylums, who are at once the governing and inspecting body of the institution.

In the United States of America, the public asylums consist of Town and State Asylums; the Central Government Institution for Soldiers and Sailors, and for the District of Columbia, at Washington; and lunatic hospitals similar in character to those existing in England. The town asylums which exist at Boston, New York, and Philadelphia, are in connection with the poorhouses of those places, and correspond to the parochial asylums of Scotland in character. The governing body are either the city authorities, or commissioners appointed by them.

The State asylums are the property of the whole State, erected and maintained at the State expense by sums voted in Parliament, and, therefore, corresponding closely to the asylums in this Colony. The State Executive does not govern these institutions, but appoints a board of management for each asylum. The exact mode of appointment and the powers delegated to these boards vary somewhat in the different States, but they are universally unpaid, except as regards expenses. In the State of New Jersey, the managers are ten in number; they hold office for five years, two retiring each year, and being eligible for re-appointment; they have the entire control of all the property and concerns of the institution, appoint superintendents and determine the salaries of all officers, make all rules and regulations for the management of the asylum, visit and inspect it weekly, manage the general and financial affairs of the institution, and regulate the discharges of patients. An annual report of the general and financial condition of the asylums is made to the Governor, and by him presented to the Legislature with the estimates for the following year. Certain rules are laid down in the act regulating the asylum for the guidance of the superintendent, to whom is given the appointment of all officers subject to the approval of the managers.

In the State of Massachusetts, the government of each of the three State Lunatic Asylums is vested in a board of five managers or trustees, one of whom retires annually but is eligible for re-appointment; they manage the general and financial affairs of the institutions, make all laws, appoint officers, fix salaries, visit and inspect the asylums monthly, and present an annual report to the State Government. Two trustees can discharge a patient on the advice of the medical superintendent. In the other States the constitution and powers of the board of managers differ very little from those in New Jersey and Massachusetts. The Central Government Asylum at Washington is managed by a board with similar powers.

The lunatic hospitals of the United States, at Philadelphia, Boston, and New York, are governed by committees of the subscribers.

Except in the States of Massachusetts and Vermont, the lunatic asylums are under no inspecting board corresponding to the Commissioners in Lunacy; but in Massachusetts, the Board of State Charities, which consists of five unpaid members and a paid agent and secretary, are charged with duties of inspection of lunatic asylums among the other charities of the State, and include in their annual report a full account of the general condition of these institutions. And in Vermont there is a Commissioner in Lunacy charged with inspection. The appointment of a similar board to that of Massachusetts is contemplated in the State of New York.

In France the Departmental Asylums which correspond to the County Asylums of England,—the asylums belonging to the Hospices, similar in constitution to the Lunatic Hospitals of England—and the Charenton, which is a State institution—are the public institutions for the care and treatment of the insane.

The French Departmental Asylums are placed under the Minister of the Interior, and from his office, in accordance with that centralization which distinguishes all French Government institutions, are issued a dietary and general regulations for their management. The Minister also nominates all the directors, physicians, and assistant physicians, from a list of three furnished by the Prefect of the Department. The salaries of these officers are fixed according to length of service. There is however a general committee —"Commission de Surveillance"—consisting of five members, nominated by the Prefect of the Department, who meet once a month, are charged with the general and financial management of the institution, and the appointment of all officers except the director and medical staff.

There is a Board of Inspection for the French asylums consisting of three members, one of whom visits each asylum once a year. The inspectors are also charged with inquiry into the sanitary condition of prisons. Their reports are made to the Minister of the Interior but are not published. Once in about ten years an elaborate statistical report on lunacy is issued from the Bureau of the Minister of the Interior.

The asylums of the Department of the Seine are not under the inspection of the ordinary inspectors of asylums, but under a special inspector for the department. Charenton is under the management of a committee of five members appointed by the Minister of the Interior.

The Public asylums of Belgium are under the control of a committee of management for each province, nominated by Royal decree, composed of five, seven, or nine members, with the Commissioner of the District as president, who manage the general affairs of the institution, sign the certificates for the discharge of patients, appoint all officers, and control the finances of the institution. They direct their attention particularly to the circumstances of the patients on leaving the asylum, assist them in obtaining their livelihood, and report each year upon the general and financial condition of the institution under their charge, to the Minister of Justice, in whose department the asylums are placed.

There is also a board of inspectors appointed by the Minister; it consists of three members, one of whom is a physician. Every asylum in the kingdom is visited annually, and a report made to the Minister and subsequently published.

The public asylums of Holland are chiefly, if not entirely, provincial, and under nearly the same system of government as those of Belgium—a Provincial Board of Control and a Government Board of Inspection.

In Germany the public asylums are under very various forms of government. In the, till lately, free cities of Hamburg and Frankfort, the governing body, exercising all the ordinary functions of a board of control, are committees appointed by and from the members of the city council. In Baden there is no board of control. The Government appoint the superintendent, and exercise a direct control over the affairs of the institution, one of the Ministers visiting it himself or sending a special commissioner occasionally; and this would appear to be the more usual mode of government in the smaller German States. In Hanover, the asylums were formerly under the Minister of Education and Public Charity, who appointed all officers and exercised

general financial control over the institutions, paying them an occasional visit. The Government is now in a transition stage.

Superintendent.—In all British asylums, and in the vast majority of American and Continental institutions, the superintendent of the asylum is the medical chief. In a few French asylums the physician is charged with the merely medical duties of the institution, and the general management is in the hands of a director; but this system has been found to work badly, and in all the newly organized French asylums, the duties of general superintendence are placed in the hands of the chief physician. In the city asylums of the United States, the authority is divided, and the ill effects of divided responsibility are plainly visible in the condition of the institutions. In the City Asylum at Philadelphia, where the physician is that, and nothing more, and the warder is responsible to the governors for the general management of the institution, the wards are dirty, there is a marked absence of personal cleanliness among the inmates, the use of restraint is excessive, and the general condition of the asylum most unsatisfactory. The New York City Asylum is, owing to the energy of its medical officers and its governing board (The Commissioners of Public Charities and Correction), a useful institution, doing its work fairly if not in the best manner; but the evils resulting from divided responsibility are sufficiently apparent.

In the asylums of Colney Hatch and Hanwell there are two medical officers with equal power, the one in charge of the male and the other of the female department of the asylum; whilst the general government is exercised by the committee of visitors and the steward. The faulty condition of these two institutions is well known; and though the enormous size of the establishments, and the paucity of medical officers, may account to some extent for this condition, it cannot be doubted that no small share of it is due to the divided authority which exists.

The duties with which the superintendent is charged vary somewhat in different institutions. In the vast majority of asylums he is supreme, governing the asylum and estate, directing every department, and responsible for the condition of the asylum and all its belongings to the governing body; whilst in a few instances, as at the Three Counties Asylum, he is held responsible for the asylum only, and the management of the farm is undertaken by the committee of visitors themselves. The patronage entrusted to him also varies. In the American asylums, he, as a rule, nominates to the board of managers all the officers, and appoints and discharges all attendants and servants; but in the English, Scotch, and Irish Asylums, the appointment of officers and servants rests entirely with the committee of visitors, who, however, generally delegate their authority to him so far as attendants and servants are concerned, reserving to themselves the right, which is given them by act of Parliament, of the subsequent approval of the appointments or dismissals made by him. In the case of the officers he is generally consulted, though the Committee make the appointments.

On examining closely the general condition of asylums, those are almost always found to be best managed in which the physician is the superintendent, one, and supreme—in which the committee of visitors act only through him and with his advice—and in which the appointment and dismissal of all attendants are delegated to him: and those are found to be least satisfactory, in which the responsibility is divided—in which the committee of visitors or controlling board meddle in the internal management of the institution and direct, themselves or through other officers, any part of it, appoint and dismiss attendants, or clip in any way the authority of the medical superintendent.

The salaries attached to the office of superintendent in different British and Foreign asylums will, be seen from the following tables and the appended remarks:—

TABLE shewing the Salaries of eighteen Superintendents of British Asylums, with the number of Patients and the number of Assistant Medical Officers.

Asylum.	Number of Patients.	Number of Assistants.	Salary of Superintendent.	Remarks.
			£	
Bristol	206	.....	.....	In the majority of English asylums the superintendent is supplied with lodging, coals, candles, vegetables, and garden produce. Frequently washing for himself and family is done in the asylum laundry. At the Lincoln, Sussex, and Worcester Asylums, the superintendent's house is furnished throughout for his use.
Derby	342	1	.....	
Leicester	391	1	500	
Stafford	469	1	.....	
Lincoln	502	1	650	
Sussex	510	1	550	
Three Counties	534	1	550	
Worcester	540	1	600	
Essex	554	1	800	
Gloucester	590	2	500	
New Surrey	650	1	600	
Lancashire—Lancaster	836	2	600	
" Prestwich	962	2	750	
York—West Riding	1,124	2	.....	
Colney Hatch	2,026	2	{ 600 / 600 }	At Colney Hatch there are two physicians, each with an assistant.
Perth District	220	1	350	
Cupar	213	1	300	
Montrose	380	1	400	

TABLE showing the number of Patients and the number of Assistant Medical Officers in Foreign Asylums.

Asylum.	Number of Patients.	Number of Assistants.	Remarks.
Quatre Mares	715	1	At St. Anne's there are two physicians; every physician in the French and Belgian Asylums has, besides assistant medical officers, two pupils, or "internes," who have completed a part of their medical education, and are therefore useful to some extent as assistant medical officers.
St. Yon	950	2	
St. Anne	600	.....	
Ville Evrard	600	1	
Evreux	500	1	
Guislain's Asylum, Ghent	450	1	In the Dutch and German Asylums, the medical officers next in rank to the chief are usually distinguished as 2nd, 3rd, and 4th physicians; and the juniors are called assistants. The assistants, as in the English Asylums, all possess medical degrees, except at Göttingen, where the junior is a pupil only.
Meerenberg	600	4	
Hamburg	350	2	
Frankfort	200	1	
Göttingen	300	2	
Illenau	450	6	
Washington	380	3	
New Jersey State	500	2	
Pennsylvania State	380	2	
Northampton	420	1	
New York State	608	3	

In the French asylums there are five classes of physicians, receiving 3, 4, 5, 6, and 7 thousand francs a year respectively. The classification depends on length of service. When the physician is also director, he receives an additional salary, which varies in the different departments. The highest rate of pay, 7,000 francs, is equal to between £290

and £300 a year. In addition to this—house, coals, gas, vegetables, &c., are allowed; and in some cases a carriage and horses, which are bought and maintained for his special use.

In Germany, the salaries of superintendents range from about £160 to £350 a year; house, light, vegetables, &c., being also supplied. At Göttingen and Hamburg, the salary of the superintendent is £300, and at the latter place, a carriage and pair of horses are also kept for his use.

At Meerenberg, the salary of the superintendent is £450 a year, with house and board for himself and family.

In the American asylums, the salary paid ranges from about £300 to £600 a year, but house and board for both the superintendent and his family are also found, and carriage and horses are kept for his use. In the larger of the American asylums, the superintendents consider their appointments to be worth from 5,000 to 6,000 dollars, or £1,000 to £1,200 a year.

In almost all asylums, rules are drawn up by the Government for the general guidance of the superintendent.

Assistant Medical Officers.—The assistance which is given to the superintendents of asylums in the performance of their duties, by the appointment of junior medical officers, is less in England than in any other country. No English asylum containing less than 200 patients has an assistant medical officer, and none with less than 500 have two; whilst the enormous establishment at Colney Hatch has only two physicians and two assistants for a population of upwards of 2,000 patients.

In America the number of assistant medical officers is usually larger, in proportion to the number of patients, than in England; and the Pennsylvanian State Hospital for the Insane, and the Washington Asylum, each having 380 patients, have respectively two and three assistant medical officers.

The "internes" in the French asylums render efficient assistance to the superintendent; and yet without counting them the proportionate number of assistants is equal to that in English institutions.

In the German asylums, the number of medical officers is usually in the proportion of about 1 to every 100 patients; but at Illenau this number is even exceeded, and seven medical officers are occupied in the care and treatment of 450 patients, giving an average of between sixty and seventy to each—a proportion which is a striking contrast to Colney Hatch, where each medical officer has 500 patients under his care.

In the English and American asylums, the dispensing of medicines is, as a rule, the duty of the assistant medical officer; but in the Continental asylums, even at Illenau, there is a "pharmacien" specially charged with this duty.

The assistant medical officers invariably live in furnished rooms in the asylum, and receive board, and all necessary fires, lights, &c., in addition to their salaries.

The paucity of medical officers in such establishments as Colney Hatch and Hanwell, renders individual treatment absolutely impossible, since the superintendent must necessarily be much occupied in the non-medical duties of his office.

The multitude of medical officers at Illenau, where there is one to every sixty or seventy patients, is to some degree objectionable. The expenditure for medicines —surgical appliances, wine, beer, &c., not being included—in that institution, for three successive years, is—

1865.	1866.	1867.
6,113	5,578	5,762 florins,

an average of upwards of £480 a year, or more than £1 *per patient per annum*, which—considering that the cost for medicines in English asylums is, on an average, about 4s. 2d. per inmate—needs no comment.

Consulting Medical Officers.—In Ireland one or more consulting physicians, receiving generally an annual payment of from £100 to £150 a year, are attached to every asylum, and are charged with the duties of occasional visitation, and the treatment, in consultation with the medical superintendent, of all cases in which their opinion and advice may be deemed necessary. The same system exists in a few Scotch asylums—Aberdeen, Dumfries, Dundee, and Glasgow. To many of the French asylums there is attached a consulting surgeon, who receives about £50 a year; his duties being to visit

the asylum weekly, and give his advice concerning the treatment of all surgical cases upon which the medical superintendent may think it desirable to consult him. But such consulting medical officers are not attached to any of the English or American institutions, and their appointment is generally regarded as not only unnecessary, but objectionable. In the English asylums the medical superintendent is allowed to call in a physician or surgeon, when his opinion or advice is deemed necessary in any difficult medical or surgical case; and such physician or surgeon is paid his ordinary fees for his visits to the asylum inmates. In one or two cases, as at Gloucester and Leicester, the committee of visitors nominate the physician or surgeon whose assistance and advice shall be obtained, and he bears the title of Consulting Medical Officer to the Institution; but usually the selection is left entirely to the medical superintendent, and with him rests also the decision as to the cases, and the number of visits which shall be paid.

Chaplain.—In the asylums of almost all countries it is thought necessary to provide for the spiritual needs of the inmates. In all French asylums the chaplains are resident officers, and the same is the case in the majority of Belgian and German institutions. In British institutions a resident chaplain is the exception. In some few asylums, however, the chaplain is resident, a detached house being provided for him, as at Colney Hatch, Prestwich, and Essex. In other cases, though non-resident, as at Sussex and Worcester, he holds no other appointment, and devotes himself entirely to the duties of his office; but in the remaining instances, he is the vicar or incumbent of a neighbouring church.

The number of services, and the salary attached to the office, vary as the chaplain has other duties or not.

In those asylums in which the chaplain holds no other appointment, the salary attached to the office ranges from £200 to £250 a year. Two services are performed on Sunday, and morning prayer is read daily either in the chapel or the rooms of the asylum.

In one or two English asylums, and in the Pennsylvanian Hospital for the Insane, sittings are taken in the district church, and some few of the patients, whose behaviour is not likely to attract attention, are permitted to attend.

At the Colony of Fitz James at Clermont in France, a large part of the church is appropriated to the insane, who form the majority of the population of the village.

In most asylums, the paid chaplain belongs to the same religious denomination as the majority of the inmates; but every facility is given for the ministrations of clergy of other sects. In some of the German asylums, and at Meerenberg in Holland, there are two paid chaplains to the institution; and at Illenau both are resident officers, and officiate in the same chapel at different times.

In the United States, where no large majority of the inmates belong to any one religious denomination, the arrangements are somewhat peculiar. In the New York State Asylum the chaplain "happens" to be an Episcopalian, but his predecessor was a Presbyterian; and Wesleyan and Baptist ministers frequently officiate for him. At the Government Asylum, Washington, six chaplains are appointed, of the leading denominations of the district—Episcopalian, Methodist, Roman Catholic, Baptist, Lutheran, and one other; each is paid 100 dollars, or something over £20 annually, and performs the service for two months in the year in the asylum chapel, visiting all the sick, and burying all the dead, of his own denomination. The patients are curiously enough expected to attend the ministration of all the chaplains in succession.

At Northampton, Massachusetts, and other asylums, the religious services are provided for by the steward, clergy of different denominations being invited by him to come on Sundays in rotation, each being paid 5 dollars for the service.

Officers.—The staff of asylums varies much with the size of the institution; but in all certain heads of departments exist.

The commissariat and clothing department of an asylum, as well as the immediate management of the farm and garden, is usually placed under an officer, designated secretary, clerk, agent, steward, or storekeeper in English and American asylums, and *econome* in those of France and Belgium. To this officer are given such assistants as are necessary for the clerical or other duties of his office. In some institutions the steward

is also treasurer, and receives and disburses large sums of money under the direction of the board of governors; but in the French asylums there is always a special officer for this duty, called a "receiver," and in English and American institutions a treasurer is generally specially appointed. In some places, the superintendent undertakes the immediate direction of the agricultural and horticultural operations, and gives all orders to the farm bailiff and gardener; and this appears to be in most respects preferable to placing this department under the direction of the steward. Occasionally, as at the Three Counties, the Sussex, Montrose, and other asylums, the committee of visitors undertake the immediate management of the farm. At the Criminal Asylum at Auburn, U. S., the superintendent also undertakes the duties of steward; and the experiment has been tried in the three State asylums of Massachusetts, the superintendent being steward, and having under him a staff of servants for the more menial duties of his office; this, however, was found not to work well. At the Worcester Asylum a steward has been appointed. At Taunton, the duties of steward are performed by the housekeeper, and at Northampton, by a man who is nominally cook, but really steward, with superintendence of the kitchen. In the Government Asylum at Washington, the commissariat and clothing departments are under the management of a woman, who performs all the duties to the satisfaction of the governors.

In some of the Belgian asylums, where the institutions are generally for one sex only, the commissariat, as well as the nursing and general attendance of the patients, is undertaken by the members of a religious order. At Guislain's Asylum, Ghent, every officer, except the medical staff and the chaplain, and every servant and attendant, are members of a lay-brotherhood. To the superior of this fraternity is paid by the governing body of the asylum a sum of 90 centimes a day for each inmate; and for this are furnished diet, according to a certain scale, clothes, approved by the governors, and attendants and servants in the proportion of one to every ten patients.

A similar system exists in the asylums for women, the Sisters of Charity undertaking the entire commissariat and nursing of the institutions.

In many ways this system is a success; but it is open to grave objections, the first and greatest of which is that it is a speculation, meant of course to conduce, as far as possible, to the pecuniary advantage of the religious corporation. It is thus liable to lead to a constant antagonism between the medical superintendent, whose duty and whose interest it is, to see that the dieting and clothing of his patients are such as will conduce best to their comfort and recovery; and the superior of the order, whose interest lies in providing only such food and clothing as will fulfil the conditions of his contract. Another objection is the *esprit de corps* which exists among the entire staff, and makes it difficult for the medical superintendent to detect abuses, or carry out such orders as seem to him fitting.

In the majority of British asylums, the superintendence of the kitchen and laundry, and that of the female attendants and domestic servants, with a general supervision of the entire female side of the institution, are entrusted to the matron, who has such assistants as are necessary in carrying out the duties of her office; but in several asylums in Great Britain, and in the majority of American institutions, although the title has been retained, the duties of the matron are those of "housekeeper" only, and consist of the superintendence of the kitchen and laundry and domestic servants; whilst the supervision of the wards on the female side, and of the attendants engaged therein, is entrusted to the chief attendant or supervisor of the division. In some British institutions, as at Sussex, Montrose, and others, the title of "housekeeper" has been adopted; and there can be little doubt but that the division of duties, which is almost universal in America and Germany, and which is advocated by many asylum superintendents in Great Britain, will eventually become general, and that the asylum matron, both in position and in name, will soon be extinct. In the French asylums the general direction of the laundry and kitchen, as well as the supervision of the female patients, their nursing and general attendance, is confided to the members of a religious sisterhood, the superior of which is at once housekeeper and chief attendant, having charge of the kitchen, laundry, and officers, and the supervision of attendants and patients.

Attendants.—The attendants may be divided into—1st, Chief attendants; 2nd, Day attendants; and 3rd, Night attendants.

Chief attendants, charged with the special duties of supervision of the patients, the attendants, and the wards, and acting as the medium of communication between the ordinary attendants, and the superintendent, exist in the vast majority of asylums, though under different names. In English asylums, they are called Head or Chief Attendants; in America, Supervisors; in France and Belgium, *Surveillants* or *Surveillantes en Chef.* In some few English asylums the matron and steward, either by themselves or by assistants, are charged with the duties of supervision; and in others, as the Three Counties and Derby, though the chief attendant on the male side bears his proper title, and is not under the direction of the steward, the assistant matron, who is responsible to her superior, performs the duties of supervision on the female side of the establishment. The *surveillante en chef* in the French and Belgian asylums, is always the local superior of the religious sisterhood, performing the duties of attendance. One chief attendant seems to be generally considered sufficient for each division of the establishment; but at New York State Asylum, at Meerenberg, Evreux, and Illenau, there are three for each sex. The greatest care is taken in many institutions to place the chief attendants or supervisors in what is really their proper position, that of important officers of the institution. Good salaries are given; and in the Bristol, Worcester, Lincoln, Derby, and other asylums, two good rooms are set apart for each.

The Day attendants are employed in very varying numbers in different institutions. The following table will give their proportionate number to the inmates in some of the principal institutions, both in Europe and America:—

Asylum.	Proportionate Number of Attendants to Patients.	Remarks.
Derby County	1 to 15	
Bristol Borough	1 „ 16	
Middlesex County, Colney Hatch	1 „ 12	
Essex do.	1 „ 12	
New Surrey do.	1 „ 14	
Gloucester do.	1 „ 16	
Sussex do.	1 „ 15	
Three Counties (Beds, Herts, and Hunts)	1 „ 13	
Stafford County	1 „ 14	
Leicester do.	1 „ 14	
Lincoln do.	1 „ 13	
Worcester do.	1 „ 15	
Lancashire do. (Prestwich)	1 „ 12	The artisans, laundresses, &c., act as attendants, and are included in the number.
Murthly District	1 „ 10	
Edinburgh Royal	1 „ 10	
Cupar District	1 „ 13	
Montrose Royal	1 „ 16	
Glasgow Royal	1 „ 13	For indigent patients only; the proportion for paying patients is greater.
Massachusetts State Asylum, Northampton	1 „ 20	The majority of the patients in this institution are chronic cases.
New Jersey Asylum	1 „ 11	In the American asylums, a certain number of the patients are always of a better class, pay for their maintenance, and require a larger number of attendants.
New York do.	1 „ 8	
Pennsylvania do.	1 „ 10	
Washington Government Asylum	1 „ 10	
St. Yon, France	1 „ 10	
Evreux	1 „ 12	
Quatre Mares	1 „ 20	
Ville Evrard	1 „ 20	This asylum is intended mainly for quiet cases.
St. Anne, Paris	1 „ 10	
Hamburg	1 „ 11	
Göttingen	1 „ 10	This proportion is for the indigent patients only. The asylum is, however, chiefly for acute cases.
Illenau, Baden	1 „ 7	
Ghent (Guislain's Asylum)	1 „ 10	This includes artisans.
Meerenberg	1 „ 10	Proportion for indigent patients only.

In the English asylums reading and writing are considered indispensable qualifications for an attendant; and in some asylums a more general education is insisted on. The age at which attendants are taken ranges from 18 to 35; but in most asylums it is not deemed advisable that they should be younger than 21. In the French asylums the male attendants are much older than in the English institutions.

There is great difference of opinion among superintendents as to the desirability of placing the attendants in uniform. It is objected that it is expensive, especially when there is frequent change of attendants—a new comer can with difficulty be induced to wear an old uniform;—that it is apt to give a warder-like appearance to the attendants; that it leads to offensive nicknames given by the patients; and that it prevents the attendants (women especially) indulging their own taste, and so does away with what is to many a great pleasure.

The objections are met by the suggestions, that the uniform selected should be as little costly as possible, and should not be worn by attendants until they have been in the asylum some months, and can be regarded as more or less permanent servants of the institution; that it should be as little like the uniforms worn by the police or prison warders as possible; and, that the dress for the women should be made attractive in colour, shape, and minor ornamentation. The great advantages of uniform, as leading to the immediate recognition of the attendant by official and other visitors to the institution, and the help it renders to the superintendent in regulating the dress of the attendants, which is apt to run into extravagant ornamentation on the one hand, or untidiness on the other, are fully pointed out by those who consider uniform desirable.

Out of thirteen English County Asylums visited, the whole of the attendants were in uniform in seven, and the men in two others; in the remainder no uniform was worn.

The Scotch and American attendants object as a rule to uniform, and it is not worn in any of the asylums.

In the French and Belgian asylums, the women are generally members of a sisterhood, and wear the dress of their order. The men in the Belgian asylums are also members of religious orders; but in France such is not the case. The men, however, almost invariably wear uniform. At Evreux the patients and attendants are all dressed in a suit of grey cloth, and the attendants are distinguished by green bands to their caps. In the German asylums, uniform is not generally worn. At Meerenberg, a very becoming dress has been selected by the superintendent, and its adoption is left to the option of the attendants, the superintendent expressing his opinion in its favour. Partly in deference to his wish, partly because found to be becoming and not more expensive than ordinary dress, it has been, all but, universally adopted by the attendants. The keys are usually either worn on a band, strap, or ribbon at the waist, or carried in the pocket. In some of the English asylums the attendants are provided with whistles to summon assistance in case of need, but they are seldom used, and scarcely necessary. The payments made to attendants are regulated by the price of labour in the different countries, but it is almost universal to treat them with the utmost consideration.

In many institutions the supply of food is unstinted. At Prestwich, the joints are sent in, and the attendants help themselves; but there is a fixed allowance of 2 pints of beer; in others special dietaries are given, of which the following may stand as fair examples:—

Worcester County and City Asylum.

Male.		Female.
3 oz. tea	...Weekly...	3 oz. tea.
12 „ sugar		8 „ sugar.
12 „ fresh butter		8 „ fresh butter.
or,		or,
1 lb. salt butter ...		12 „ salt butter.
1½ „ cheese.....		1 lb. cheese
or,		or,
2 lbs. bacon.....		1¼ „ bacon.

Male.		Female.
½ pint milk	Daily ...	½ pint milk.
1 lb. bread		1 lb bread.
8 oz. cooked meat, free from bone		6 oz. cooked meat, free from bone.
4 pints beer.....		2 pints beer.
For night attendants.		For night attendants.
12 oz. meat & 1 egg		8 oz. meat & 1 egg.

Sussex County Asylum.

Attendants' and Servants' Diet.—Men 1 lb. uncooked meat; women, ¾ lb. meat; 1 lb. vegetables; 1 lb. bread; 2 pints beer, daily. 2 oz. tea; ¾ lb. sugar; ¼ lb. coffee; ½ lb. butter, 1 lb. Cheese, weekly. ¼ lb. meat may be exchanged for pudding or pie, at the discretion of the housekeeper.

Essex County Asylum.

Weekly		Daily	
Pepper	1 oz.	Beef without bone	1 lb.
Sugar	½ lb.	Bread	1 „
Tea	2½ oz.	Milk	½ pint.
Cheese	1 lb.	Beer	2 pints.
Butter	½ „	Vegetables	*ad libitum.*

ROYAL ASYLUM, MONTROSE.

Male Attendants and Servants Diet-table.

	Barley Broth.	Pease Soup.	Roast Beef.	Hash or Boiled Meat.	Irish Stew.	Beef Pie.	Fish.	Suet Dumpling.	Potatoes.	Bread.	Beer.	Boiled Meat.
	pints.	pints.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	pints.	ozs.
Sunday	1½	...	...	...	...	...	...	...	...	8	1	8
Monday	1½	...	...	8	...	...	...	...	...	8	1	...
Tuesday	1½	...	8	...	...	...	...	...	16	...	1	...
Wednesday ...	1½	...	...	...	...	...	6	6	...	8	1	...
Thursday	1½	...	...	...	8	...	...	...	16	...	1	...
Friday	1½	...	...	...	...	...	...	...		8	1	8
Saturday	...	1½	...	...	...	8	...	...		8	1	...
Female Attendants and Servants Diet-table.												
Sunday	1	...	...	...	...	...	...	...	...	6	...	6
Monday	1	...	...	6	...	...	...	...	...	6	...	...
Tuesday	1	...	6	...	...	...	...	...	16	...	...	...
Wednesday ...	1	...	...	...	...	...	5	5	...	6	...	...
Thursday ...	1	...	...	...	6	...	...	...	16	...	...	...
Friday	1	...	...	...	...	...	...	...	...	6	...	6
Saturday	1	1	...	...	...	6	...	...	...	6	...	...

A liberal allowance of leave is generally granted, the regulations differing in different asylums, but all being framed so as to allow the attendants recreation, and a change from the wearing duties of their position, at short intervals. The most usual arrangements for leave seem to be the following:—

One whole and two half days a month .....Colney Hatch.
One day and two evenings every three weeks .....Essex and Prestwich.
Three half days a fortnight .....Gloucester.
Two evenings a week, and every third Sunday .....Leicester.
One day a fortnight, and every third Sunday .....Cupar.
Every second Sunday .....Glasgow.
One day a month, and two evenings a week, one-third, one-half, and the whole of each Sunday, in rotation .....New York State.

In most institutions arrangements are made for allowing seven, ten, or fourteen days absence to each attendant in the year, board wages usually being given during the time of absence.

Special arrangements are made in some asylums, to allow the attendants leave on Sundays. At the Glasgow Royal Asylum, at Montrose, and at Meerenberg, the artisans who are not attendants do duty as such on Sundays, in rotation, and receive extra pay, so as to allow the attendants to be absent.

Married attendants are, as a rule, allowed to sleep out of the asylum. At the Leicester Asylum, where all the male attendants are married, each sleeps out of the asylum on two nights a week.

It is not generally considered advisable to provide special amusements for the attendants, apart from the patients. At some institutions an attendants' and servants' party is given annually, to which they have the privilege of inviting friends. The system of punishment for neglect of duty, varies. It is an almost universal rule, that, whenever a patient escapes through the negligence of an attendant, the whole or part of the expenses of the recapture, are stopped from his wages. In some asylums a series of fines, ranging in amount from 6d. to 5s., are inflicted for breaches of discipline, and the sum thus collected, is added to the amusement fund of the institution; in others, leave of absence is stopped as a punishment; whilst in the majority, warning, and dismissal on repetition of the offence, seem to be all that is necessary for good discipline.

The female attendants in asylums are, almost invariably, unmarried. In some asylums married male attendants are preferred. At Leicester all the male attendants are married, and at the Sussex Asylum, a large proportion. Marriage seems to act well in attaching attendants to the institution; no male attendant has left the Leicester Asylum for five years. At the Worcester and Washington Asylums, married couples are placed in charge of the male wards, and the plan seems to answer. In the male infirmary ward at the New Surrey Asylum, the attendants are a married couple.

The Sisters of Charity, who undertake the nursing and attendance in French asylums, belong generally to an order specially founded to care for the sick and insane, and are, in most cases, favourably reported of by the superintendents of asylums. They are obeyed better by the patients than ordinary attendants would be, since their religious character gives them additional influence. They are under excellent discipline; and, spending their lives in asylums, gain a special knowledge, and are most efficient assistants in the treatment of the insane The *esprit de corps*, however, which distinguishes them, makes the detection of abuses difficult, and the strong religious element which displays itself in all their surroundings, (and which, unless particular care is taken to prevent it, even extends to the ornamentation of the wards with pictures and images of a character far from cheerful), are objections to nursing by sisterhoods. At the Charenton at Paris, the nursing is superintended by sisters of a religious order, and the more menial duties performed by attendants under their direction.

Night attendants, to patrol the asylum during the night, attend to such patients as are sick or sleepless, and rouse those who are dirty and conduct them to the closets, are appointed in most asylums. In a few of the Scotch institutions, where the attendants sleep in the wards, there is no night watch; and in some of the French asylums there is a special attendant in the infirmary only. At Hamburg, Leicester, the male side of the Derby Asylum, and other institutions, the ordinary attendants do night duty in turn; but in the large majority of asylums the night attendants are specially appointed, and do no other duty. One for each sex is usually considered sufficient, but in large asylums, such as Colney Hatch and Prestwich, two or three are absolutely necessary. In some asylums, convalescent patients assist the night attendants. At the Glasgow Royal Asylum, three night attendants for each sex are on duty every night; every wet and dirty patient is raised; and so thoroughly is cleanliness enforced in this way, that on the occasion on which this asylum was visited, there had been but one wet bed among 563 patients for several nights previously. The Superintendent reports, that it is an advantage to employ a large staff of night attendants, if only to save labour in washing and cleaning.

Where one attendant only of each sex is employed, Dent's "tell-tale" Clock, placed in a ward as far distant as possible from the room set apart for the night attendant,

is a useful mode of checking the rounds; but where more than one is employed, it is of little use, since it is possible for one to press in the small pegs around the dial, and so record the rounds hourly, whilst the other is asleep. This clock is used in several English and Scotch institutions; and a much more elaborate instrument is in use in some American ones—wires pass from every ward to the clock, and the exact time at which each wire is pulled is registered on a small circle of paper marked with the hours, and fitting on to the clock dial.

In the majority of the asylums, the attention of the night attendant is ensured by frequent and irregular visitation on the part of the medical officer or supervisor, and by selecting trustworthy attendants. At the New York State Asylum, it is part of the duty of the night attendants, to empty the straw or hair made wet or dirty from the beds, and replace it with clean material; this, being more troublesome than waking the patients at fixed times, ensures the due performance of this part of the night attendants' duties.

Artisans and Servants.—Attached to and forming part of the establishment of every asylum is a staff of domestic servants and artisans. Those found most generally necessary are—

Laundress,	Gardener,
Laundrymaid,	Farm labourer,
Cook,	Tailor,
Kitchenmaid,	Shoemaker,
Dairymaid,	Carpenter,
Housemaid,	Blacksmith,
Band instructor,	Painter and glazier,
Engineer,	Plumber,
Gasman,	Upholsterer,
House-porter,	Matmaker,
Butcher,	Basketmaker,
Baker,	Printer,
Brewer,	Brushmaker.

The domestic servants are usually engaged by the year, and are boarded and lodged in the asylum, whilst different arrangements are made as regards the other servants and artisans. At Prestwich, Worcester, Morningside, and other asylums, all the artisans are attendants living in the asylum, employed with the patients in the workshops during the day, and returning with them to the day rooms after working hours, their position being just the same as that of the other attendants; but, as a rule, they are employed at weekly wages, and either live in cottages on the asylum estate, or in the neighbouring towns or villages, their work ceasing at the ordinary working hours.

The engineer, gardener, and farm labourers, are almost always provided with cottages on the asylum grounds.

The following lists give the establishments in the Sussex, Lincoln, and Worcester County Asylums, which contain 510, 502, and 540 patients, respectively:—

SUSSEX COUNTY ASYLUM.

ESTABLISHMENT.

Officers.

Medical Superintendent	£550	Furnished apartments, coals, gas, vegetables, and washing.
Chaplain	200	
Clerk to Visitors	60	
Assistant medical officer	100	Furnished apartments, board, lodging, and attendance.
Clerk and steward	120	ditto.
Housekeeper	50	ditto.
Head attendant (Male Department)	60	ditto.
Ditto (Female ditto)	50	ditto.

Attendants and Servants.

	Superintendent's clerk	£56	0	0	Without board or lodging.
1	Male attendant (Night)	57	0	0	ditto.
1	Male attendant	35	0	0	Board, lodging, and washing.
2	Ditto	33	0	0	ditto.
2	Ditto	32	0	0	ditto.
1	Ditto	31	0	0	ditto.
2	Ditto	30	0	0	ditto.
1	Ditto	27	0	0	ditto.
2	Ditto	25	0	0	ditto.
4	Ditto	24	0	0	ditto.
1	Ditto	18	0	0	ditto.
	House-porter	22	0	0	ditto.
1	Female attendant (Night)	24	0	0	ditto.
2	Ditto	22	0	0	ditto.
1	Ditto	21	0	0	ditto.
4	Ditto	20	0	0	ditto.
2	Ditto	18	0	0	ditto.
1	Ditto	17	0	0	ditto.
2	Ditto	16	0	0	ditto.
6	Ditto	15	0	0	ditto.
1	Ditto	12	0	0	ditto.
	Head Laundrymaid	24	0	0	ditto.
1	Laundrymaid	18	0	0	ditto.
1	Ditto	17	0	0	ditto.
	Cook	24	0	0	ditto.
	Dairymaid	17	0	0	ditto.
	Kitchenmaid	12	0	0	ditto.
2	Housemaids	12	0	0	ditto.

Engineer	£1	17	0	℔ week;	house, coals, and gas.
Bailiff	1	5	0	„	house, coals, vegetables, and milk.
Gardener	1	0	0	„	ditto.
Assistant ditto	0	16	0	„	
Farm attendant	26	0	0	℔ year;	board, lodging, and washing.

Tailor	1	3	0	℔ week.	Bricklayer's labourer	£0	15	0	℔ week.
Shoemaker	1	3	0	„	Painter and Glazier	1	5	0	„
Matmaker	1	1	0	„	Blacksmith	1	5	0	„
Basketmaker	1	1	0	„	Stoker	1	0	0	„
Upholsterer	1	7	0	„	Ditto	0	16	0	„
Baker	1	5	0	„	Cowman	9	17	0	„
Brewer	1	5	0	„	Cowboy	0	8	0	„
Store-porter	0	17	6	„	Carter	0	16	0	„
Carpenter	1	10	0	„	Carter's boy	0	8	0	„
Bricklayer	1	7	0	„	Ditto	0	5	0	„

LINCOLN COUNTY ASYLUM.

Establishhment.

Salaries and Wages.

Officers :—

Medical Superintendent	£650	Furnished house, coals, gas, vegetables, and washing.
Assistant medical officer	100	Furnished apartments, board, attendance, and washing.
Clerk and steward	100	Furnished cottage, board, and washing.
Housekeeper	35	Furnished apartments, board, attendance, and washing.

Head attendant (Male Department)	45	Furnished room, board, and washing.
Ditto (Female ditto)	35	ditto.
Chaplain	120	Without board and lodging.
Clerk to Visitors	80	ditto.

Attendants, Servants, and Workmen :—

21 Attendants (Male Department)	£20 to £30	Board, lodging, and washing.
25 ditto (Female ditto)	£12 to £20	ditto, with livery.
House-porter	16	ditto, ditto.
Cook, kitchenmaids, and housemaid	52	Board, lodging, and washing.
Laudress and laundrymaids	56	ditto.
Engineer	52	Furnished lodge, board, and washing.
Carter and stockmen	25	ditto.
Band instructor	£8 8s.	Without board or lodging.
Weekly wages :—		
Carpenter, mason, blacksmith, painter, 2 shoemakers, tailor, upholsterer, bailiff, gardener, 3 stokers, and mason's labourer	£14 9s.	ditto.
Brewer	£1 2s. 6d.	Partial board; not lodging.

WORCESTER COUNTY ASYLUM.

	Per Year.
*Medical Superintendent	£600
Assistant medical officer	100
†Chaplain	200
†Clerk to the Committee of Visitors	80
†Auditor	54
†Clerk of Asylum	105
Matron	60
*Bailiff	52
Storekeeper	35
*Engineer and gatekeeper	72
Head attendant	40
3 Male attendants	30 each
1 Ditto	29
1 Ditto	28
1 Ditto	26
2 Ditto	25 each
1 Night attendant	27
1 Farm servant	20
1 Ditto	17
1 Ditto	15
1 Groom	14
1 Mason attendant	30
1 Carpenter ditto	36 8s.
1 Band instructor	6
1 Painter and plumber	29
1 Stoker	28
1 Porter	10

	Per Year.
1 Gardener	£31 4s.
1 Tailor	36 8s.
1 Baker and brewer	36 8s.
1 Shoemaker	28
1 Female head attendant	25
1 Ditto attendant	20
2 Female attendants	19 each
3 ditto	18 „
1 ditto	16
1 ditto	15
3 ditto	14 each
4 ditto	13 „
3 ditto	12 „
1 Cook	20
1 Night nurse	16
1 Dressmaker	17
1 Housemaid	12
1 Laundress	20
1 Laundrymaid	16
2 Ditto	12 each
1 Kitchenmaid	10
	Per Week.
1 Cabinetmaker	15s.
1 Carpenter	15s.
†1 Cowman	12s.
1 Shoemaker	14s.
†2 Excavators	15s. each

(Those without a mark, have bed, board, and washing.)

Diet.—The dietaries of twelve English County Asylums, the Borough Asylum of Bristol, the Northampton Lunatic Hospital, the Royal Asylums of Montrose and Edinburgh, and the District Asylums of Fife and Kinross, as well as the diet table

* Have furnished house, gas, fire, vegetables, and washing. † Non-resident.

issued by the Commissioners in Lunacy for Scotland for the lunatic wards of poorhouses, and that fixed by the Inspectors of Lunatics for the Criminal Asylum at Dundrum in Ireland, will be found in Appendix *B*.

In the majority of American asylums there is no published diet scale. A list similar to the one given below, chiefly intended for the guidance of the steward and cook, is to be found in most asylum kitchens; but it is not adhered to with any exactness, and no quantities are given. All the patients receive an unstinted allowance of food. This system appears to have originated when food was almost as cheap as air. With the present prices of all articles of diet in America, such free dieting is extravagant in the extreme.

PENNSYLVANIA STATE LUNATIC HOSPITAL DIETARY.

Monday.

BREAKFAST.	DINNER.	SUPPER.
Tea and coffee, Bread and butter, Cold ham.	Vegetables, Soup, Rice.	Tea, Bread and butter.

Tuesday.

Tea and coffee, Bread and butter, Fried potatoes.	Vegetables, Roast meat, Bread.	Tea, Bread and butter, Mush.

Wednesday.

Tea and coffee, Bread and butter, Steak.	Vegetables, Fish, Bread.	Tea, Bread and butter, Gingerbread.

Thursday.

Tea and coffee, Bread and butter, Fried mush.	Vegetables, Soup, Rice.	Tea, Bread and butter, Rusk or rolls.

Friday.

Tea and coffee, Bread and butter, Fish.	Vegetables, Fish, Bread.	Tea, Bread and butter, Mush.

Saturday.

Tea and coffee, Bread and butter, Steak or hash.	Vegetables, Roast meat, Rice.	Tea, Bread and butter, Stewed peaches or apples.

Sunday.

Tea and coffee, Bread and butter.	Vegetables, Ham, Pie.	Tea, Bread and butter, Gingerbread.

Poultry, toast, warm cakes and corn bread, sausage, fresh fish and fruit (in season), rice and bread puddings, may be given occasionally, in place of some of the others mentioned above.

Cocoa may be substituted occasionally for tea.

A dietary for the use of the pauper asylums in France is published by the Minister of the Interior, and to this all the asylums are expected to adhere more or less closely. This dietary, with one slightly modified from it in use in the asylums of Quatre Mares and St. Yon, will be found in Appendix *B*.

The dietary which is in use for pauper patients at the Hamburg Asylum, and which is a fair sample of the dietaries for patients of this class in German Asylums, will also be found in Appendix *B*.

At the Meerenberg Asylum meat is given five days a week, and fish once; on the remaining day the dinner consists of bread and vegetables.

From an examination of the different dietaries, it will be seen that beer is given in almost all the English and Scotch asylums. In the German, Dutch, and Belgian asylums beer is given, and in those of France either wine or cider. In the United States no form of alcoholic drink is given, except as part of the medical treatment and under the special orders of the physician.

Clothing.—It does not appear to be considered advisable to clothe the patients in asylums, in one uniform style or colour. In some few French asylums a semi-military uniform is worn by the male patients; and, considering the military character of the French people, and the curious uniformity which may be noticed in the colour and shape of the clothes ordinarily worn by the French peasantry, it is perhaps less objectionable there, than elsewhere. In Great Britain or America a uniform would at once suggest a prison.

The patients are almost invariably clothed comfortably and well, and changes are made to meet the different temperatures of winter and summer. In Great Britain the dress for men usually consists of cord or fustian trowsers, and blue, gray, or brown cloth jackets and waistcoats, with felt wide-a-wake hats, or cloth caps, sometimes made like those usually worn by sailors, sometimes "glengarries."

In some asylums cord or fustian suits are given to the working patients. Special suits are almost invariably kept for Sunday, and these frequently differ in material from those ordinarily in use. In the summer months duck trowsers and blouses and straw hats are worn. The women are generally clad in prints or ginghams in summer, and in linseys in winter, and when out of doors wear woollen plaid shawls and straw bonnets.

The cloth for the men's dress is usually chosen of several colours and patterns, so as to give as much diversity of appearance as possible. Grays and browns of a sort of blanket tweed are reported to be more economical than, and certainly are preferable in appearance to, a blue cloth. Different patterns are chosen for the prints and linseys worn by the women, and all possible variety secured in the colours of their shawls and bonnet ribbons. All necessary under-clothes are allowed; and all the minor articles, such as neck-ties and handkerchiefs, as well as caps for the more elderly women, are given, and the wearing of them enforced.

The greatest possible care is taken to keep the clothes clean, neat, and free from holes. The destructive patients are clad in ticken, strong linen, or canvas dresses; and no patient is allowed to be without boots and shoes. It is rare to find a patient with a torn dress, or shoeless. For those who undress themselves, the dresses and boots are fastened with small locks, or by means of patent buttons, which can be undone only by an attendant's key. In the German, Dutch, and Belgian asylums, the clothing is, as a rule, neat, and the same care is taken to enforce tidiness, and to prevent the patients divesting themselves of their clothes, or tearing them, as in Great Britain.

In the French asylums the patients, as a rule, wear sabots; and it is no uncommon thing to find the clothes of the men ragged and dirty. They contrast in this respect very unfavourably with the patients in English institutions; but it is in America that the greatest want of care as regards dress is found. Good serviceable clothes are provided, but it is no unusual thing to find a number of patients more or less in rags; and almost invariably a certain proportion are without boots and shoes. The natural irritability of the Yankee seems to vent itself in destroying his clothing. A large number of the shoe-

less patients are found on inquiry to be Irish; not being accustomed to wear shoes, they find them uncomfortable and take them off—at least, such is the explanation given by the American superintendents of asylums. Ticken and canvas dresses are employed in some American asylums, but others are entirely without them; and locks and patent buttons to prevent the patients undressing themselves, or taking off their boots, are never used.

The strong dresses used in English asylums are made usually of ticken, derry, strong linen, or canvas, and are lined inside with flannel, and made as comfortable as possible. With care on the part of the attendants, the number of such dresses found necessary, is, however, very few. In some English asylums containing 400 or 500 patients, one, two, or three only are to be found in strong dresses. Sometimes, however, the number is larger.

For destructive patients, quilted bed coverlets are employed. One or two blankets are quilted between canvas or the material called ticken; and these are found to be warm and not uncomfortable.

In most asylums almost the entire clothing of the patients, as well as their boots and shoes, are made in the institution. The materials are bought, and all the cutting out and sewing, done by hired labour, or by the patients themselves. Hats, caps, and bonnets are, as a rule, bought. In some few institutions, where the population is more exclusively an agricultural one, it is found profitable to buy some of the clothes ready made, and in others boots, or the tops of them, are bought. The average annual cost for clothing in English Pauper Asylums is about £2 per patient.

In the English asylums the most scrupulous attention is paid to the cleanliness of the body and bed linen of the patients: the former is, as a rule, changed twice weekly, and the latter once. At Colney Hatch, and one or two other institutions, it is however considered sufficient to change the body linen of all except the working patients once a week only. At the Worcester, Lincoln, and other asylums, one sheet and a pillow-case a week are allowed to each patient, the upper sheet of one week serving as the under one of the next. In the American institutions it is, as a rule, considered sufficient to change everything once a week. In the Continental and Scotch institutions a weekly change of body linen is generally considered sufficient, whilst the bed linen is allowed to remain for a fortnight. In one institution in Scotland the bed linen for women is changed once a month only, whilst the men are indulged with one sheet and a pillow-case a fortnight.

Labour.—The occupations pursued by asylum inmates, vary with the amount of land possessed by the institution, and with the capacities and former avocations of the inmates. In districts in which the population is largely agricultural, this form of employment is encouraged, because more suited to the capacities of the inmates; and where the asylum population is drawn more distinctly from the manufacturing or artisan class, the workshops contain a larger number of those fitted for employment than in purely agricultural districts. In some few instances only, has it been deemed advisable to introduce special manufactures, and these chiefly where the large number of the inmates are already practised in the manufacture of some one staple commodity. At the Dundee Asylum a certain number of the patients are employed in hand-weaving, by means of which all the sheeting and towelling used in the asylum are made. At Ghent, flax is grown on the asylum farm, and a large number of patients are employed in preparing it for the looms, which, to the number of seven or eight, are constantly worked by patients, and at which bed-ticking, towelling, and sheeting are made.

The employment of the patients is generally directed to the manufacture of articles which are intended for use in, as well as for the benefit of, the asylum; and this is found more generally profitable than the manufacture of goods for sale, or for other public institutions. At some few cases the amount of garden and agricultural produce is so large that it cannot be consumed in the asylum, and is therefore sold, the sums realized being occasionally very large. The sale of other articles is very small. A few mats and baskets are made for sale at the Sussex Asylum, fishing nets at Montrose, mats and brushes at Colney Hatch, and straw and wicker work at Ghent. At the Sussex County, clothes are also made for the Eastwood Idiot Asylum, and at Hamburg, mats for the hospital of the same place; but these are exceptions to the general rule.

The employments at which most patients are occupied are agriculture, which always heads the list, tailoring, bootmaking, carpentering and upholsterer's work for the men, and laundry work, sewing, and knitting for the women. A certain number of both sexes are employed in the service of the house; and a few men usually assist in the kitchen. Occasionally labour of a special kind is performed in the asylum. At the Morningside Asylum a hired printer, with the assistance of patients, prints all the reports and returns of the institution; and some printing is also done in the Gloucester Asylum.

In some institutions, employment which is not in itself profitable to the institution, is encouraged for the benefit of the patients, to distract their thoughts and prevent their brooding over the miseries, real or imaginary, of their life, as well as to afford exercise to their muscles. At Meerenberg, a number of the feeble and imbecile patients are employed frequently in sawing wood; and at the Gartnavel Asylum the same class pick cotton or oakum with little or no profit to the institution, but, it is hoped, with benefit to themselves.

From an examination of the returns furnished by English asylums, it may be stated that an average of from 50 to 70 per cent. of the entire number of inmates are employed in work calculated to benefit the institution; whilst in Scotland the proportion is even a larger one.

The following returns for six English and four Scotch asylums will show the numbers employed, and the special occupations in which they are engaged:—

Lincolnshire County Asylum.

Number of Male patients employed—

On the Farm	62
In the Kitchen	3
„ Dispensary	1
„ Shoemaker's shop	3
„ Tailor's shop	5
„ Painter's shop	3
„ Engineer's department	2
„ Steward's „	6
Helping in the wards	58
Total	143

Number of Female patients employed—

Laundry	32
Kitchen	10
Linen-stores	1
Residences	2
Sewing-machine	1
Needlework, and helping in the wards	150
Total	196

Total number of patients in the asylum—Males	241
Females	280
	521

Worcestershire Asylum.

Return of Female patients employed during the year ending December 31st, 1866.

How employed.	No. of Days.
Sewing, &c.	25,067
Washing, &c.	18,840
Assisting the attendants	12,461
„ Housemaids	521
„ in the kitchen	4,311
Total number of days	61,200
Weekly average	1,177
Daily average	126
Employed 58 per cent. of the average number resident throughout the year.	

Return of Male patients employed during the year ending December 31st, 1866.

How employed.	No. of Days.
Tailors	2,603
Shoemakers	3,139
Carpenters	1,049
Smiths, &c.	1,981
Painters	1,118
Masons	737
Bakers	1,288
Clerks	742
Upholsterers	1,165
Assisting attendants	11,717
„ on farm	14,854
Total number of days	40,393
Weekly average	777
Daily average	130
Employed nearly 59 per cent. of the average number resident throughout the year.	

LEICESTERSHIRE AND RUTLANDSHIRE COUNTY ASYLUMS.

DAILY return of the House on particular days,—the last Wednesday in each Quarter.

	March 28th.	June 27th.	September 26th.	December 26th.
Male Department.				
Total number of patients in the house	192	191	192	191
Sick and in bed	7	3	3	3
Employed in farm and garden	45	46	50	41
Employed in house and kitchen	24	28	24	23
Employed in workrooms	6	7	8	6
Assisting in wards	11	11	11	11
Total number employed	86	92	93	81
Female Department.				
Total number of patients in the house	197	206	209	206
Sick and in bed	3	4	0	4
Employed in workrooms, and in sewing and mending	40	38	40	37
Employed in laundry and wash-house	37	39	38	39
Employed in housework and kitchen	4	15	9	19
Assisting in the wards	21	21	21	21
Total number employed	102	113	108	116

The patients in the Leicestershire Asylum include about 50 "paying patients," who do little or no work.

SUSSEX COUNTY ASYLUM.

COMPILED from the Daily State Book, which is made up from the Ward Returns.

Occupation or Trade.	Daily average number of Patients.
Male Patients.	
Working party: With the gardener and outdoor attendant	27
Working party: With the farm attendant	9
Working party: With the cowman	3
With the carpenter	2
" upholsterer	1
" basketmaker	3
" tailor	11
" shoemaker	15
" matmaker	10
" painter	3
" engineer	0
" baker	3
" house attendant	5
In brewhouse and steward's stores	3
In the wards	46
In reading and writing, &c.	46
Female Patients.	
In laundry and wash-house	36
In kitchen	7
Needlework in wards	102
Household work, &c.	40
Vegetable-room	7
Daily average number employed	379

Average number resident:—Males, 239; females, 296: total (mean annual population), 535.

Prestwich Asylum.

Extract from the Daily Account of the State of the Patients.

Employed.	Tuesday, July 17.		Friday, July 20.		Sunday, July 22.	
	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.
Men.						
Working in lands and gardens	88	97	87	100	...	...
Assisting joiner	12	12	12	12	...	...
" engineer and smith	10	10	10	10	2	2
" plumber and painter	7	7	7	7	...	...
" upholsterer	17	30	16	28	...	...
" shoemaker	11	11	10	10	...	...
" tailor	8	8	8	8	...	...
" in kitchen	8	8	8	8	8	8
" baker	3	3	3	3	...	...
" stonemason	1	1	1	1	...	...
" bricksetter	2	2	2	2	...	...
" brewer	2	2	2	2	...	...
" laundry	9	9	7	7	...	...
" office	1	1	1	1	...	...
" carrying coals	...	...	11	...	...	...
" cleaning wards	75	57	75	57	75	57
Total employed	254	258	260	256	85	67
Women.						
Cleaning wards	90	85	98	80	54	20
Assisting in kitchen	16	18	16	18	5	5
" laundry	43	43	42	42	...	...
Making men's clothing	...	...	...	...	...	...
Binding boots and shoes	...	...	...	...	...	...
Making hats and bonnets	...	...	...	...	...	...
Mending stockings	3	3	11	11	...	...
Knitting and netting	9	9	9	9	...	...
Sewing and quilting	153	155	156	158	...	...
Picking flocks	37	37	37	37	...	...
Total employed	351	350	369	355	59	25

Total number of patients, 986:—Males, 497; females, 499.

Bristol Borough Asylum.

Extracts from the "Daily Reports" of the State and Occupations of the Patients, 18th, 19th, and 20th March, 1866.

Employed in	Sunday.	Monday.	Tuesday.
Males.			
Garden	0	2	2
Farm	0	17	17
Stone shed	0	1	1
Piggery	0	1	1
Stores and cellars	2	2	2
Kitchen	1	1	1
Bakehouse	0	1	1
Wash-house	0	1	1
Tailors	0	2	2
Shoemakers	0	1	1
Carpenter	0	2	2
Painter	0	2	2
Coir mat-making	0	36	36
Ward helpers	14	11	11
Total employed	17	80	80
Females.			
Laundry	0	11	11
Kitchen	3	3	3
Dwelling-house	0	1	1
Dressmaking	0	6	6
General needlework	0	7	8
Fancy work	0	4	4
Stocking mending	0	17	15
Shoe binding	0	1	1
Ward helpers	8	8	8
Total employed	11	58	57

Total number of patients, 226:—Males, 115; females, 110.

Montrose Royal Asylum.

Return showing the Number of Patients employed on 10th January, 1868.

Males.		Females.	
Assisting attendants	7	Sewing	46
In grounds	82	Knitting	9
Tailors	4	Darning	3
Shoemakers	6	In laundry	24
Weavers	—	In kitchen	7
Blacksmiths and plumbers	—	On farm or garden	—
Bakers	1	Assisting servants	—
Joiners and glaziers	3	Mattress making	25
Upholsterers and painters	—		
Bookbinders and clerks	1		
Kitchen and laundry	4		
Net and mat makers	4		
Hair and oakum pickers	—		
In stable, &c.	1		
Total employed	113	Total employed	114

Total number of patients, 376:—Males, 174; females, 202.

Perth District Asylum.

Return of Patients employed on 13th January, 1868.

Males.		Females.	
Garden and farm	40	Sewing	31
With plumber	3	Knitting	26
With joiner	3	Laundry	23
With shoemaker	3	Kitchen	6
Tailor	4		
Housework	18		
	71		86

Total number of patients, 220:—Males, 103; females, 117.

Fife and Kinross District Asylum.

Return of Male patients employed, 8th January, 1868.

In garden and farm	48
House	11
Shops	6
Messenger	1
Special servant	1
Stoker	1
	68

Total number of Male patients, 110.

70 per cent. of the women were employed in sewing, and in laundry, kitchen, and housework.

Royal Asylum, Gartnavel, Glasgow.

Pauper patients employed, 10th February, 1868.

Gardening and field work	76
Housework	95
Trades	6
Cotton, woollen, and oakum picking	74
Assisting engineer, stoker, and coalman	18
Assisting in wash-house and laundry	18
Assisting in general kitchens	3
Sewing and knitting	57
	347

Total number of pauper patients, 376.

At the Elgin District Asylum, 55 out of 75, and at the Haddington District Asylum, 50 out of 65, inmates are employed, chiefly in outdoor labour.

In the Annual Report of the Inspectors of Lunatics in Ireland for 1867, the daily average number of patients in the public asylums employed is stated, as 2,977, out of a population of 5,070; and the following return of the different kinds of employment, and the numbers employed at each is given.

Males.		Females.	
Basket making	5	Spinning and carding flax	46
Pumping water	55	Needlework	438
Weaving	13	Knitting	262
Tailoring	36	Quilting	11
Shoemaking	81	Fancy needlework	29
Carpentry work	17	Assisting in laundry	270
Painting	6	Assisting in cleaning house, &c.	287
Assisting servants in cleaning house, &c.	280	Miscellaneous	223
Miscellaneous	360		
Garden and farm labour	608		
	1,411		1,566

Total, 2,977.

In the German, Belgian, and Dutch asylums, the number of patients employed is fully as large as in the British institutions.

At Ghent, 50 per cent. work six or seven hours a day, largely to the profit of the institution, and 25 per cent. in addition, do something in the shape of work. At Meerenberg, 70 per cent. are employed; at Hamburg, 65 to 70 per cent.; and at Göttingen, 60 per cent.

The number employed in the French asylums visited was markedly less than in those above mentioned. At St. Yon, near Rouen, out of 950 patients, of whom about one-eighth are pensionnaires, 300 patients only are employed; and at Quatre Mares 250, from a population of 715. But in the Statistics of Insanity published by the French Government in 1861, it is stated that during the previous six years, the average proportion of workers in the departmental asylums was 63 per cent.

The work done by the patients in American asylums is, as a rule, considerably less than in those of Great Britain and Germany, and in some cases less than those in France. In the Asylum of the State of Massachusetts, the system of work appears to be better organized than in most of the asylums of the United States; and yet in the Fourth Report of the Board of State Charities of Massachusetts it is stated, that "It is certain that in none of our hospitals (for the insane) are the patients so generally or so usefully employed at real work as they are in some of the foreign establishments, especially in the English, even making allowance for the difference in their previous habits."

In the American asylums the washing is done chiefly by machinery; very few patients are employed in the wash-house and laundry; and the employment of the insane in the kitchens is also objected to by some American superintendents. The total number of those employed does not average more than 25 per cent.

In the Twenty-third Annual Report of the New York State Asylum, the result of five years observation and registration of the number of workers, and the amount of work accomplished in the institution is recorded; and it appears that 22 to 25 per cent. is the highest estimate of six hours workers who could be depended upon.

In the British asylums, extra diet and such small luxuries as tobacco and snuff, are usually given as a remuneration for work; and attached to most asylum dietaries are the fixed allowances given as extras to working patients. Special indulgences as regards clothes are also granted to some; a new bonnet or coat, or one of peculiar material, being the reward for diligent labour.

At the Broadmoor Criminal Asylum, and at Fisherton House Private Asylum, as well as some other English institutions, the patients receive fixed sums of money for all work done after certain hours; and this money they are allowed to spend in minor luxuries through the attendants.

In some of the French asylums there is an elaborate system of remuneration for work. In 1860, the sum of £3,800 was expended in the departmental asylums of France, to recompense patients who worked. It is one of the rules of the institution at Quatre Mares, that every patient shall receive the sum of 15 francs on his discharge from the

asylum; and this sum is made up by the work of the patient himself. To every patient who works, 10 centimes a day, 5 centimes for half a day, and 2½ centimes for a quarter, are accredited in the asylum accounts. These sums are allowed to accumulate till they reach the amount of 15 francs, which is reserved till the departure of the patient. All sums over this are either paid to the patients at fixed times, and spent by them through the attendants, or accumulate in the asylum treasury, to be paid to him on his discharge. All sums revert to the asylum in case of death, and some of the money is employed in making up deficiencies for those patients who obtain their discharge before their earnings amount to 15 francs. In addition to this system of remuneration, the workers are allowed better diet than the remainder of the patients.

At Ghent, small pecuniary payments are made for work; and both there and at Meerenberg small presents, such as pipes, snuff boxes, tobacco, &c., are given, as well as extra diet, to the industrious patients.

Amusements.—There is a more organized system of amusement, with greater variety in its form, in the asylums of Great Britain, than in those of any other country.

In the day-rooms, chess, draughts, bagatelle, cards, cardboard skittles, and other games are always accessible to the patients; and the bagatelle and chess boards, and other necessary implements, are at the same time plentiful in number, and excellent in construction and finish. Billiard tables are seldom to be found in British asylums devoted only to pauper patients.

The outdoor games most in vogue are croquet, for which excellent grounds have been made in several institutions, fives, bat and ball, and cricket, at which the asylum "eleven" are frequently sufficiently expert to play successfully, both on their own ground and elsewhere, the members of neighbouring clubs. Quoits are played at Prestwich, Worcester, and other asylums; athletics are practised at the Three Counties and at Murthly; and football and archery are both recognized amusements in British asylums. In Scotland several asylums possess "curling" ponds, which in summer serve the purpose of ornamental water, whilst in winter they afford the patients an opportunity of enjoying a national game.

In English asylums, the system of labour has been so developed, that but little time is left during the day for amusement, all the patients capable of playing at the various games, being usefully employed. In some institutions special times are allowed for amusement, and the Saturday half-holiday movement, has found its way into more than one asylum; but it is in the evening, after working hours, that the ordinary amusements are most practised, and that patients sit down to cards or chess. At this time, too, take place the specially organized associated entertainments. At fixed times, generally at intervals of a week or so, but sometimes much more frequently; the whole of the inmates capable of enjoying themselves, or of deriving benefit from the association, and the amusement provided; meet in the amusement room or dining-hall of the institution, for a dance, concert, lecture, or reading, a magic lantern exhibition, or a conjuring or theatrical performance. The arrangements vary in different asylums, but the dances, concerts, and lectures, are usually held weekly or oftener, and the theatrical performances are reserved for Christmas and other high festivals. Both sexes are allowed to associate at the dances.

These associated amusements are generally organized within the asylum. The listeners and performers at concerts, lectures, readings, or theatricals, are asylum inmates, patients, attendants, or officers; but in many cases extraneous assistance is obtained, and entertainments are given by either amateur or professional musicians, singers, lecturers, &c., sometimes entirely without remuneration, and at others on payment by the asylum authorities of all necessary expenses. Many asylums possess magic lanterns; at others they are hired for the evening.

The programmes selected from a large number of those obtained in British asylums, which are printed in Appendix *C*, will show some of the forms of amusement, by means of which it is endeavoured to lessen the monotony of asylum life.

Music enters largely into asylum amusement. The large majority of asylums have bands formed by officers, attendants, and patients. In some (as the Three Counties, Lincoln, and Prestwich), the musicians play both string and wind instruments. At the Prestwich Asylum the band is composed of forty performers, of whom the medical

superintendent is one, and it is superior in all respects to the bands of many regiments. The band is always an important aid to asylum concerts, and other amusements, and frequently plays in the airing grounds on summer evenings. Pianos exist in most asylums, either in the wards, or the amusement room; and singing classes for the practice of both sacred and secular music are common, and render important aid in the service of the church and the evening entertainments.

In the American asylums dances are less practised than in the English ones. In some few, association of the sexes at this amusement is not allowed. The general character of the associated entertainments differs also somewhat from that of those in use in English institutions, and instruction rather than amusement is its leading feature. The American lecture system, wonderful in its organization and eminently characteristic of the people, has found its way into the asylums, and takes a prominent position among the "amusements" therein. The assistant medical officers, people of learning and position in the neighbourhood, and itinerant lecturers, take part in the courses of lectures which are given in every asylum, on subjects more or less scientific and abstruse. Almost every asylum possesses a collection of philosophical instruments, air-pumps, electrical machines, &c., to illustrate these lectures; and the patients seem to enjoy what would be but very dry bread indeed to any but an American lecture-loving audience. Magic lanterns form a standing amusement in American asylums; the slides are in most cases photographic, and are shown by the aid of the oxy-hydrogen light.

At the Pennsylvania Lunatic Hospital, Philadelphia, light gymnastics have been introduced for the female patients, and whilst serving as amusement, are an important aid in treatment. These gymnastics, which are now in use in many American schools, were introduced by Dr. Dio Lewis. They are performed in a light loose uniform, which permits great freedom of motion, and, when thoroughly carried out, seem to exercise almost every muscle in the body. With these exercises, and roll skates the patients pass two or three hours, on one or two evenings a week very pleasantly.

In the Continental asylums indoor amusements are similar in character to those in use in England and America; but, in addition, dominoes and billiards are to be found in every asylum. Billiards, being much more played among the lower classes on the Continent than in England, are a more necessary and fitting amusement than they would be in English institutions. There is, however, a marked want of outdoor games. In the majority of Continental asylums music serves as the chief mode of amusement. When dances are permitted, the sexes are not, as a rule, allowed to meet.

In some asylums a fixed sum is voted annually for the amusement of the patients. At Prestwich £50, and at Worcester, £10 are voted by the governing body for the support of the band. At Colney Hatch and other institutions, small sums are voted as needed. At the Essex Asylum the sums obtained by the sale of rags, bones, and old iron are devoted to purposes of amusement, and all fines incurred by attendants are generally devoted to the same purpose. At Montrose there is a special fund to which donations to the amount of £200 have been made. At Utica the patients make fancy work for sale, and occasionally a theatrical performance is given by the asylum dramatic company, to which the public are admitted at a charge of 50 cents. per head, the proceeds being handed over to the amusement fund of the institution.

The asylum library ranks high among the amusements of most institutions.

The amusements are not confined to the asylum boundaries; large numbers of the patients frequently go for picnics and tea parties in the neighbouring country. A favourite amusement at Quatre Mares, near Rouen, is a military march into the country, the column being headed by the asylum band. Visits to the public gardens, concerts, penny readings, and theatrical and other performances, are permitted to the quieter patients, under the charge of attendants; and it is no uncommon thing to see an omnibus or waggon load of the patients, on an English racecourse, amused spectators of all that is to be there seen.

School.—A school in which ordinary elementary education is given to asylum inmates—not only to the idiotic and feeble-minded children, but to all such as are without elementary education and considered capable of receiving it—has been organized at Sussex, Lincoln, Stafford, Montrose, Gloucester, Perth, Morningside, Illenau, Quatre

Mares, and other institutions. The school is sometimes under the care of paid teachers, sometimes under the steward, matron, or chief attendants, and occasionally is more immediately the work of the chaplain.

By some superintendents it is spoken of as "a good moral and mental measure." The English Commissioners in Lunacy have more than once written in its favour, and visitors to asylums have grown eloquent in praise of "this noble and philosophical attempt to build the mind anew on the ruins of outraged feeling, or enfeebled judgment, or whatever may be the form of injury sustained, by conveying new ideas to the perceptive powers, and by calling up, by means of education, faculties which were previously unknown or dormant, or which may prove to be healthy or antagonistic to those diseased."*

But some among the ablest of asylum superintendents state at once that it is useless, or "not much good;" whilst others speak of it rather as a pastime than as yielding any beneficial results. In some asylums the time spent in school is employed by the patients chiefly in writing letters to their friends, in which they are assisted by the teachers. At Stafford Asylum, when the school-room was visited, nearly half the patients were discovered sitting with their books wrong side up; and on making inquiry concerning the ability of the patients to read, it was found that all who possessed that accomplishment, owed it to other than asylum teaching.

Classification of Patients.—The insane are divided into two great classes, acute and chronic; and as has been already seen, these are in some places accommodated in separate asylums under totally distinct government; whilst in others, the plan known in Germany as that of "relative connection" (relativ-verbindung) is pursued,—the acute and chronic cases being kept apart, whilst the general and medical administration is one, and the same.

The blocks recently built in connection with some English asylums (as at Prestwich, Chester, Devon, and Wakefield)—and the "detached day-rooms and associated dormitories near the wash-houses on the women's side, and the workshops and farm buildings on the men's," recommended in the Tenth Report of the Commissioners in Lunacy, for the more quiet patients, and which are to be seen in the New Surrey Asylum—approach in principle to the "relative connection" system of Germany; but no absolute separation of the acute and chronic cases is made, and the exact character of the residents in these is a matter of medical classification. The acute and chronic cases are mixed, as in the distinct sections of the modern French asylums, or in the asylum wards of the English and American institutions; the quietness of behaviour, and the capacity for work—not the curable or incurable nature of the case—being considered in the classification made.

The principle which is adopted in classifying the inmates in the majority of asylums in Great Britain, America, France, and Belgium, (and in Germany also, subsequently to the division into curable and incurable,) is that of similarity in the more marked phases of their malady. The quiet, the violent, the epileptic, the dirty, the demented, are separated one from another for convenience of treatment on the one hand, and for their own comfort on the other.

The exact classification adopted differs in almost every asylum, partly owing to its structure, and partly to the peculiar views on this subject which are held by the superintendent; but that in use in some of the best managed institutions in Europe and America is as follows:—

Worcester:—In 7 wards for each sex—1, sick and infirm; 2, imbecile and idiotic; 3, convalescent; 4, excited and violent. The remaining 3 wards are occupied by patients varying between the convalescent and violent classes.

Sussex:—1, sick and infirm; 2, epileptic and idiotic; 3, recent cases; 4, convalescent; 5, violent. Further divisions by wards.

Three Counties:—1, sick and infirm; 2, epileptic; 3, imbecile and idiotic; 4, convalescent; 5, violent.

* Wendt's "*Account of Asylums in the North of Europe,*" quoted by Pritchard in "*Annales d' Hygiène,* 1836," and by Dr. W. A. F. Brown, in "*What Asylums were, are, and should be.*"

Derby:—1, old and infirm; 2, epileptic and paralytic; 3, workers; 4, quiet chronic cases; 6, convalescent; 7, violent.

Leicester:—1, old and infirm; 2, epileptic; 3, well-behaved; 4, excited.

Prestwich—in 4 blocks:—1, sick and infirm; 2, quiet and feeble; 3, convalescent and workers; 4, excited. Further divisions by wards.

Colney Hatch:—1, infirm and sick; 2, idiots and imbeciles; 3, convalescent; 4, quiet; 5, dirty; 6, refractory. There are various sub-divisions, as the males are in 24, and the females in 22 wards.

Bristol:—1, infirm; 2, epileptic; 3, convalescent; 4, violent.

New Surrey:—1, sick; 2, recent cases; 3, workers; 4, rough and noisy. Dr. Brushfield does not advocate elaborate classification, and thinks even noisy patients, when divided and placed one or two in each ward, are quieter and do better, without annoying hurtfully the quieter patients, than when placed with others of a similar class in a violent or excited ward.

Essex:—2 galleries on each side for more excited and noisy patients; beyond this no special classification.

Lincoln:—A separate class is made of epileptics; but for the remainder very little classification is attempted, or thought desirable. One ward may contain worse cases than another, but nothing like a violent or excited ward is made. The cases are associated so as to act beneficially on each other.

Cupar and Murthly:—1, sick and infirm; 2, ordinary cases; 3, violent.

Montrose:—Little or no classification is attempted. The cases are mixed as much as possible, so that bad cases are placed in each ward. There is a special infirmary ward.

New Jersey:—1, recent; 2, demented; 3, convalescent; 4, excited. The total number of wards is 16, and 9 are considered indispensable. The remaining classification is founded partly on mental and partly on social status, congenial people being placed together. No special epileptic ward or infirmary.

Washington:—10 wards:—3 chief divisions: quiet, somewhat violent, and violent. No epileptic or infirmary ward.

Pennsylvania State:—Quiet, somewhat violent, and violent. There are 10 wards for subdivision.

New York State Asylum:—There are 12 wards for each sex; and the classification is founded entirely upon the behaviour and self-control of the patients. Even social position is very little taken into account. The patients range from convalescence to violence, and removal from a ward to the one below it in class, is made to serve for purposes of discipline. There is a special ward for demented cases.

St. Anne:—In 7 sections: 1, sick; 2, quiet; 3, excited. The other 4 are occupied by those ranging between quietness and violence.

Ville Evrard:—In 7 sections: 1, infirm; 2, dirty; 3 and 4, tranquil; 5, excited. The other sections are occupied by patients varying between the more tranquil and excited classes.

Evreux:—1, idiots; 2, old and infirm; 3, sick; 4, dirty; 5, convalescent; 6, workers; 7, excited; 8, violent.

Charenton:—1, sick; 2, epileptic; 3, paralytic; 4, dirty; 5, chronic and tranquil; 6, violent.

Quatre Mares:—1, sick; 2, idiotic; 3, epileptic; 4, demented; 5, dirty; 6, convalescent; 7, working; 8, violent.

St. Yon:—1, sick; 2, idiotic; 3, dirty; 4, demented; 5, quiet and convalescent; 6, violent.

Guislain's Asylum, Ghent:—1, sick; 2, idiots; 3, dirty; 4, demented; 5, quiet and convalescent; 6, violent.

Meerenberg:—1, quiet; 2, infirm and old; 3, epileptic; 4, idiots; 5, quiet; 6, violent.

Göttingen:—1, recent; 2, epileptic and dirty; 3, quiet; 4, violent and noisy.

Hamburg:—1, recent; 2, dirty; 3, workers; 4, noisy; 5, violent.

In the majority of these asylums, the number of wards gives opportunities for minor subdivision.

It will be seen that the classification in the French asylums, is more elaborate than in those of Great Britain and the United States, in which there is a marked and increasing inclination to abolish minute classification, and to substitute for it an arrangement of cases, founded on individuality of character.

In the American and Continental asylums, as almost every institution contains accommodation for patients of different social grades, the classification is necessarily to some extent modified by this circumstance. In some English pauper asylums care is taken to separate those who have formerly moved in different social positions—and who, through adverse circumstances, (the chief of which has been in many cases the nature of their malady,) have been brought to poverty,—as far as possible from those who have always belonged to the indigent classes.

At the Essex County Asylum, a certain number of those of superior education are placed in a small separate cottage; and at Leicester, those of this class, though entering the asylum as paupers, and paid for by the parishes to which they belong, are placed in the division occupied by the paying patients, with whom their social position more accords.

Animals.—The animals kept in an asylum are of two kinds, those for the amusement of the patients, and those for the profit of the institution. The latter however may, and do often serve, as means both of employment for, and interest to, the patients.

The animals kept for amusement are, deer, goats, rabbits, guinea pigs, &c.; and to these may be added birds of many kinds, peacocks, pheasants, guinea fowl, pigeons, singing birds of almost all kinds, jays, magpies, ravens, jackdaws, starlings, parrots, ducks, fancy fowls, &c.

At the Washington Asylum a small menagerie is kept in the airing grounds, in which there are bears, jaguars, raccoons, grey squirrels, &c.

The animals kept for profit are pigs, cows, horses, sheep, &c. The profit to be derived from pigs has already been mentioned in treating of the disposal of refuse. Cows are generally found in both British and Foreign asylums to more than pay all expenses, and are kept in sufficient number to supply the entire institution with milk. In one or two English institutions (as at Essex) placed in grazing counties, a good supply of milk is obtained from farmers in the neighbourhood; and this is thought to be more economical than keeping cows, but is decidedly opposed to the general experience. At Murthly the quantity of land under cultivation is not yet sufficient to start a dairy, and milk is obtained by contract. In these cases the milk supplied is carefully tested by the lactometer, and the standard of purity rigidly enforced.

Cattle breeding at the Derby Asylum is a subject of much interest to both officers and patients. The asylum possesses a beautiful breed of Durham cattle, and more than once prizes have been carried off at the agricultural shows held in the district.

The number and character of the horses kept, depend on the wants of the establishment, and range from one small pony, employed to cart the refuse from the house to the farm and bring back vegetables, to a number of cart and carriage horses. Horses are required for pumping, carting, and for farm labour when anything more than spade husbandry is attempted.

Asylum farms being chiefly arable, sheep are not generally kept; but at Broadmoor there is always a small number, and at Prestwich, Sussex, and other asylums there are generally a few awaiting slaughter.

It is a moot question whether poultry farming is profitable in asylums, or not. Sometimes the poultry yard is said to pay well, whilst at others it has been entirely abolished as asylum property, and the superintendent or farm bailiff keeps a few fowls for his own use. There seems to be no question that poultry farming is generally profitable, even without the important help of a farm yard, and that it is doubly so when so helped; under such circumstances it is difficult to understand why asylum poultry yards should be less profitable than others, if properly conducted. The secret would appear to lie in the honesty or dishonesty of those in charge of them.

System of Supply.—In the majority of asylums the commissariat is supplied almost entirely by contract; but at the criminal asylum, Broadmoor, the Prestwich and Sussex Asylums, the Pennsylvania Lunatic Hospital, the New York State Asylum, and the Government Asylum at Washington, different systems are pursued.

At the Criminal Asylum, Broadmoor, all the provisions and stores are bought in the market; and this is considered better, and less likely to place temptation in the way of officers having charge of the commissariat department, than the contract system. At Prestwich, Sussex, the New York State, and the Washington Asylums, cattle and sheep are bought in the market by the steward, kept on the asylum farm, and slaughtered as required; and the same system is pursued to a minor extent at the Northampton Lunatic Hospital. At Prestwich the saving by this method is said to be very large, amounting to £600 during the first year, after the system of contract was given up; and in other institutions this system of supply is most favourably reported of.

In the proprietary houses in England, from which public institutions may often take a lesson in household economy, the stores and food are usually bought in the market, and not contracted for.

Provision for Relief of Patients on Discharge.—At Hanwell, Colney Hatch, Gloucester, Leicester, and other asylums, special funds, called in memory of, and intended to serve as a monument to, the late Queen Dowager, exist, out of which the immediate necessities of patients on discharge from the asylum are defrayed. At the Three Counties Asylum a sum of money was left for a similar purpose by a Mr. Rowe. Dr. Campbell of the Essex Asylum some time since addressed a letter to the noblemen and gentlemen of the county, asking for contributions for the establishment of a special fund for this purpose; and the result was a sum sufficient for all the needs of the patients. These funds are all at the disposal of the managing committee of the institution. At Stafford, two legacies lately left to the asylum are about to be applied as the nucleus of a similar fund. So generally is the need of some such provision felt, that advantage is taken in many asylums of the 38th section, 25 and 26th Vict., c. III., which directs that any two of the Committee of Governors may permit a patient to be absent on trial, an allowance being made to him not exceeding his charge in the asylum. Almost all patients in indigent circumstances are thus discharged on trial, and receive an allowance from the asylum for certain fixed times after they have left its walls. At Prestwich, the offertory made by officers, attendants, and visitors, at the Communion in the asylum chapel, are devoted to the relief of necessitous patients on discharge. In some of the French asylums, as has been already mentioned, fixed sums accruing from the accumulations of remuneration for labour are paid to each patient on leaving the asylum; and the Committees of Management of the Belgian Asylums, are specially charged in their instructions with the placing of patients in situations after their discharge.

Asylum Reports.—Asylum reports are of three kinds:—

1st. Those made by attendants and chief attendants to the Medical Superintendent, showing the daily working of the asylum.

2nd. Those made at fixed times by the Board of Control, which include reports from the Medical Chief, Chaplain, and other officers, showing the financial and general working of the asylum.

3rd. Those made by the Inspectors on the condition and further requirements of the institutions.

In the Asylums of Great Britain these three kinds of reports are made with great regularity. The senior attendant of every ward makes a daily report, showing the total number of patients; the number admitted, discharged, or dead; employed, with the kind of employment; secluded; having fits; attending amusements; escaped, or attempting escape;—with various other particulars. Selections of the forms for these reports, in use in British asylums, will be found in Appendix *D*, Nos. 1, 2, 3, 4, 5. In some asylums these reports are summarized. The form for the weekly summary used at the Bootham Asylum, York, will be found in Appendix *D*, No. 6. The night attendant of each division of the house makes a morning report, showing the number of patients specially

visited; and the number wet, dirty, noisy, having fits, or receiving medicine. Forms for these reports will be found in Appendix *D*, Nos. 7 and 8; and a form for a weekly summary of night attendants' reports which is in use at the Essex County Asylum, in the same Appendix, No. 9.

These reports of both the day and night attendants are placed in the hands of the chief attendant of each division, who draws up a summary of them and submits it to the medical superintendent either before or at his morning visit. Forms for these reports will be found in Appendix *D*, Nos. 10, 11, and 12; and for a weekly summary of them, see Appendix *D*, No. 13. In Appendix *D*, No. 14, is a form of weekly report by chief attendant, furnished by a Commissioner in Lunacy for the Report on Colonial Hospitals and Lunatic Asylums drawn up by the Colonial Office. In Appendix *D*, Nos. 15, 16, 17, 18, 19, and 20, will be found forms for the use of attendants, showing the number of articles made or repaired by patients; sent to, or received from the laundry; ward inventories; and stores and bedding requirement lists; which have been selected from those in use in British asylums.

All these various reports are kept for the examination of the Boards of Control and Inspection, and serve to assist the medical superintendent and other officers in their reports of the working of the institutions.

The Board of Control of almost every public asylum in Great Britain issues an annual report, which includes reports of the working of the institution by the medical superintendent, chaplain, and other officers, a financial statement, and such medical and other statistics as it may be deemed fit to publish. This report is printed, and more or less widely distributed.

Annual reports on the condition and requirements of all public and private asylums are made either to the Lord Chancellor or the Secretary of State for Home Affairs by the separate Boards of Commissioners or Inspectors of England and Wales, Scotland and Ireland. These reports comprise a general statement of the condition of the asylums, drawn from the observations of the Commissioners at their visits to the different institutions, and from the statistical and other returns furnished to them; and the requirements of the various institutions are more or less fully pointed out. In no other countries have such complete systems of asylum reports been established.

In the United States printed forms for chief attendants' reports are in use in a few institutions only; in the majority they are either written or made verbally. The ordinary attendants are not expected to make reports, and the night attendants' reports are either verbal ones, or made in such written form as may seem most convenient. At the Pennsylvania Hospital only is there a special form for night attendant's report. The Board of Control of all Asylums in the United States issues an annual report, which includes that of the superintendent, and is at once general, financial, and statistical. This report is made to the Governor of the State, and is printed for general distribution. The Board of State Charities of Massachusetts publishes a report of the condition of the establishments for the insane, in its annual volume of reports; and the Inspector of Asylums for the State of Vermont also publishes an annual report.

In the large majority of the Continental asylums no system of attendants' reports has been instituted, all communications between the chief attendant and medical superintendent being verbal, and made usually before the morning visit to the wards. At Meerenberg, however, the Superintendent, Dr. Ewerts, was so much struck, during a visit to England, with the excellence of the English system, that he established on his return a similar system of reports, which has ever since been continued; and at Hamburg the chief attendant of each division makes a written report.

The medical directors of the departmental asylums of France make annual reports to the members of the commission of superintendence or board of control, which include accounts of the financial, general, and medical service of the institutions, but these reports are not regularly published by the boards; and the reports of the Inspectors of Asylums, which are made annually to the Minister of the Interior, are never published by that officer. Once in six or eight years or so, an elaborate volume of statistics on lunacy matters, drawn up with extreme care, from returns made from the various asylums, is published by the French Government. The last volume comprises the period between 1854 and 1860, and is a work of unusual interest and value.

The Board of Control of the City Asylums of Germany publish annual financial statements, but general reports of the condition of these and other German asylums are only made at uncertain intervals, and none of the reports of the inspecting officers, where such exist, are ever published.

The Belgian inspectors report annually upon the condition of the asylums of the kingdom to the Minister of Justice; these reports are published, and are of considerable value.

Statistics.

In the Letter of Instructions, accompanying the Commission which this Report is intended to fulfil, is the following passage, which presents especial difficulties—"You will carefully observe different methods of treatment, and obtain statistical evidence of the results so far as is practicable."

The whole question of Asylum Statistics is in a most unsatisfactory state. The superintendents of asylums publish statistical tables more or less elaborate, and containing a large amount of valuable information. "While, however, the facts recorded may be identical in many, if not in most of the reports, the form in which they are recorded varies so greatly, that it becomes impossible to tabulate them for the purpose of showing general results."* Calculations have been made on totally different bases, rendering a comparison of the results simply impossible; and evidence the most unsatisfactory and loose has been admitted. Even from Dr. Thurnam's book on this subject,† which shows abundant knowledge, and abounds in elaborate calculation, little having a practical value is to be gained, except on some special points.

The English Commissioners in Lunacy, having been pressed by the Home Secretary to examine some statistics referring to rates of mortality and proportions of alleged recovery, thus record the results of their examination:—"The result was, in all respects to confirm us in the distrust with which we have found reason always to regard such returns as at the best of doubtful accuracy, and, even when reliable in that respect, very unsafe in determining practical questions. We pointed out to the Secretary of State that the observations on which calculations of that kind are necessarily founded, are, for the most part, too imperfect to justify general inferences; and that, when even the best observation has been employed as the basis of such statistics, there is no general conclusion to be drawn that the special circumstances in almost every case will not modify."

On the subject of the proportion of insane to population,—a point, it would be imagined, on which satisfactory data might be soon obtained,—little trustworthy evidence exists. It is only in Massachusetts, where a special commission of inquiry on this subject has presented to the Legislature a most painstaking report; in some of the smaller German States, where German perseverance has attained trustworthy results; in England, Scotland, and France, where special care is taken to work out statistics on almost every subject; and in the colonies, where the population is as yet comparatively small, and the entire number of insane, with few exceptions, come under the cognizance and care of the Government; that the proportion can be stated with anything like exactness.

Dr. Griesinger, in his treatise on insanity‡, quotes the following remark of his learned countryman, Dr. Fleming, on this subject:—"It is, at the present time, satisfactorily demonstrated that, with respect to mental diseases, no statistics exist whereon conclusions may be founded regarding the curability of these diseases, or the efficacy of the remedial means employed"; and adds, "I quite agree with him in the latter point; but I cannot at all endorse his statements regarding the curability of insanity"; and he subsequently points out the fact that the statistics furnished by various asylums, where the methods of treatment are essentially different, are almost precisely similar.

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* *Twentieth Report of the Commissioners in Lunacy*, 1866.
† *The Statistics of Insanity.*
‡ *Mental Pathology and Therapeutics:* By W. Griesinger, M.D.—p. 456.

On this point there can be little or no doubt. At Illenau, where £480 worth of medicine is administered annually by seven physicians to 450 patients; and at Göttingen, where £50 worth of drugs serve for 240 patients, and reliance is placed mainly on good feeding, wine, &c., the percentage of recoveries is not markedly different. In English asylums, where the opiate, the stimulant, or the expective treatment is most in vogue, no marked difference in the percentage of recoveries can be discovered, beyond what may be traceable to other causes than treatment alone; and in France and Southern Germany, where the shower-bath is largely employed, and in America, where it is never used, the proportion of recoveries is almost the same. In the Bicêtre two directly opposite methods of treatment were at one time followed in different sections; and the results as to recovery were then exactly similar.

In fact in the best asylums of all countries, where order, system, and care are fully carried out, the average percentage of recoveries is almost identical, whatever may be the prevailing mode of medical treatment. Under these circumstances, it may be seen that statistical evidence as to the results of treatment is practically unattainable.

There are several points on which statistics of greater or less value have been obtained, and these, as being of interest to the Colony, will be briefly noted here.

They are—

1st. The proportion of insane to population.
2nd. The maintenance rate in different asylums.
3rd. The cost of asylum construction.
4th. The curability of patients sent at different periods.

1st.—The proportion of insane to population.—Of scarcely any country in the world do we possess quite trustworthy statistics. In some cases the number of those in public asylums have been given, whilst the large mass in private asylums and workhouses has been omitted. In others, insanity proper has been taken into account, whilst idiocy and cretinism have not been reckoned; whilst in a few cases only has care been taken to make a searching inquiry into the number of lunatics under all the different provisions made for them; and to estimate together the lunatic, the idiot, and the cretin in public and private asylums, in poorhouses, and in private families. It will be well, therefore, to accept almost all statements on this subject with some reservation. The statistics from Massachusetts, Scotland, England, and France, and from some of the smaller German States, are, however, among the most satisfactory, and approach nearest to the truth.

In Massachusetts, a special commission was appointed by the Legislature in 1854, to inquire into the number and condition of the lunatics within the state. The most searching inquiries were made, the entire number of physicians in the state being asked to assist in the investigation; and in 1855, a report was issued, in which the number of insane, including lunatics and idiots, was stated to be 1 in 302 of the population.

In Scotland, where the insane residing in private dwellings come under the immediate visitation of the Board of Lunacy, the number of insane is ascertained with tolerable though not absolute accuracy. In 1866, the number under official cognizance in asylums, poorhouses, and private houses, was 6,616; whilst about 1,900 were known to the Commissioners as resident in private dwellings, maintained from private resources, and not under statutory control, and 46 were in the Criminal Asylum, Perth,—making a total of 8,562. The estimated population* at that time was 3,153,413, giving a proportion of 1 in 368.

In England, the double machinery of the Poor Law Board and the Board of Lunacy are employed to ascertain the number of insane; but still the returns are known to be more or less imperfect. In 1866, the total number known to the Commissioners in Lunacy was 49,082. The estimated population,* 21,210,020, giving a ratio of 1 in 432.

In Ireland, the returns of the Inspectors of Lunacy, which do not include any patients living in private dwellings, give, for 1866, a total of 8,962 insane in asylums,

* *Twenty-ninth Annual Report of the Registrar General*, 1866.

gaols, poorhouses, &c.; the constabulary returns give a number of 8,200, with friends, or at large—making a total of 17,162. The estimated population* was at that time 5,582,625; and the ratio therefore 1 in 325.

In France, the elaborate statistics published by the French Government show that the ratio of insane to total population was, in 1861, 1 in 444.

In some of the small States of Germany, (Brunswick, and Holstein,) accurate statistics have shown the ratio to vary from 1 in 300 or 350.

The only other European countries, in which anything approaching to accurate returns have been made, are Belgium and Norway.

The ratio of insane to population in the neighbouring colonies† at the present time, as kindly given by the superintendents of the asylums, is—

Tasmania: Estimated population, 98,455; number of insane 267, or 1 in 368.

South Australia: Estimated population, 172,860; number of insane 231, or 1 in 748.

In New South Wales, the estimated population is now 447,620; the number of insane, including idiots, 1,156, or 1 in 387 of population.

A full consideration of this subject must inevitably lead to the conclusion that the ratio of insane to population has been almost invariably understated. In Massachusetts alone has the proportion been ascertained with absolute accuracy, and there it is 1 in 302. In England and Scotland, the double machinery of the Boards of Lunacy and Poor Law, and, in the latter country the special visitations of the Deputy Commissioners in Lunacy, have avowedly failed to give more than an approach to accuracy; and these boards in their construction and powers, possess such means of obtaining information as is possessed by scarcely any public bodies in other countries. All foreign statistics, then, on these subjects must be received as guesses at truth rather than truth itself. It is the opinion of authorities, that, could accurate statistics be obtained, the ratio of insane to population would in all countries approach if not equal that in Massachusetts.

Dr. Nicholls and other American physicians express a decided opinion that accurate statistics in all the more eastern and settled states would show the proportion to be quite equal to that in Massachusetts.

Dr. Morel in France, and Dr. Ludwig Meyer in Germany, express the same opinion as regards the number in these two countries; and Dr. Tuke states that he has little doubt that the proportion in Scotland is still higher than that already given.

In the Australian Colonies, although the total number of insane in asylums come under the special cognizance of the Government, the returns do not show a correct ratio to population. A certain number both of lunatics and idiots reside with their friends; and in up-country districts are to be seen occasionally half-witted individuals, who would undoubtedly come under certificate of lunacy, and help to swell the number of insane provided for by Government, if kind-hearted men did not accept their fitful labour as equivalent to their board and lodging, and stand towards them in the relation of protectors and friends; but their numbers are on the whole small, and the statistics in the colonies present a nearer approach to truth on this point than those furnished by most older countries. The ratio in the older settled colonies of Tasmania and New South Wales differs very little. In the newer colonies, the mass of chronic insanity with which all older countries are burdened has not had time to accumulate. At least fifty years are necessary for such accumulation, and not until after that time can the number of insane in a country be looked upon as being of any value for purposes of comparison.

In the Colony of New South Wales there are causes of insanity, special and peculiar, beyond those operating in European countries, in America, or even in some of the other colonies:—

1st. A large number of the early population came under exceptional circumstances, and the relations of crime and insanity are very intimate.

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* *Twenty-ninth Annual Report of the Registrar General*, 1866.

† Returns asked for from Victoria have not been forwarded.

The number of insane in a criminal population is always large. In New South Wales, in 1846, according to statistics prepared by Dr. Campbell, there was 1 insane in 450 of the bond, and 1 in 1,780 of the free, population—a vast and striking difference.

2nd. The changes of early colonial life—its ups and downs—and the mental tension which accompany the excitement of soon-got wealth, and the depression caused by its frequent and rapid loss—cannot but be largely productive of insanity. Under this head may be reckoned the influences of the gold diggings in this and neighbouring colonies.

3rd. The lonely life of the shepherd, alternating with prolonged periods of debauchery.

4th. The abuse of ardent spirits in a warm climate.

On the other hand, some causes potent in the production of insanity, exist here in much less force than in other countries. The grinding poverty—the struggle for existence, taxing both mind and body, and so acting as a predisposing and exciting cause of insanity, is here almost unknown; whilst a "pre-eminent salubrity" of climate and outdoor habits of life are strongly calculated to diminish the amount of mental disease.

The proportion of insane to population has undoubtedly increased during the last twenty years.

In 1846, according to tables prepared by Dr. Campbell, there was 1 insane person in 1,115. At the next census, the proportion had risen to 1 in 400. At the present time it is 1 in 387.

This increase is to a great extent accounted for by the growth of a large mass of chronic insanity; which perhaps even yet has scarcely reached its full limits. In the earlier emigrant days of the Colony, notwithstanding, as has been said by an authority on this subject, that every emigrant ship brought one or two either insane or soon to become so, the vast mass of the population came in the prime of mental and bodily health. Their insane had been left behind with their sick in their fatherland. It would necessarily take some years for those becoming insane and remaining incurable to grow old within the asylum walls, and reach by accumulation to that number of old, chronic, and incurable cases, with which all other countries are burdened. It may be fairly estimated that, if the full extent of increase from this cause has not already been reached, it must soon be so and that the number of removals by death will equal the proportionate number of yearly entries on this great chronic list, and so a balance will be effected.

Upon the whole, then, though the contemplation of this mass of suffering humanity must occasion deep sorrow; the Colony of New South Wales has cause for a feeling of satisfaction on estimating the number of its lunatic population. With some special causes in addition to those existing elsewhere, the ratio of its insane to population is not now markedly above that in most of those countries where the number has been ascertained with even tolerable exactness. These special causes will, it is to be expected, gradually disappear; the convict element will become fainter; the excitements of life will diminish; it may fairly be hoped that the use of poisonous alcoholic compounds will diminish, also, with the increase in quantity and the diminution in price of wholesome colonial wine and beer; as well as under the better moral feelings of the future. With the diminution of these; the special causes of insanity in older countries may make their appearance; but it can scarcely be supposed that the ratio of insanity will rise higher than at present. A ratio equal to this, though the burden is great, is borne cheerfully by states not more wealthy than New South Wales, both in the old world and the new.

2nd.—The maintenance rate in different asylums.—The maintenance rate in the entire number of English County and Borough Asylums is given in a former part of this report.

In the Scotch District and Royal Asylums the sums charged for maintenance by the governing boards are :—

	s.	d.
At Perth District Asylum	9	4
„ Fife and Kinross do.	9	4
„ Haddington do.	9	6
„ Montrose Royal Asylum	8	6

The average maintenance rate for pauper patients in the Public and District Asylums of Scotland for 1865 was 9s. 2d. a week, and in the Public Asylums of Ireland for 1866, 9s. a week.

In the French Departmental Asylums, the average weekly cost of patients for the seven years from 1854 to 1860 was 7s. 9d. In the asylums visited it was in 1866—

	s.	d.
At Quatre Mares	7	3
„ St. Yon ...	7	0
„ St. Anne's	12	0
„ Ville Evrard	7	6
„ Evreux ..	7	1

At St. Anne's the number of acute cases is large, and the cost of maintenance consequently greater.

In the American asylums the weekly maintenance rate is larger than in the European institutions :—

	s.	d.
At Washington	20	10
„ New Jersey State Asylum	16	8
„ Massachusetts do (Northampton)	15	0
„ New York State Asylum	18	8
„ Pennsylvania do	15	0

In the German asylums it is—

	s.	d.
At Hamburg	7	0
„ Frankfort	11	8
„ Göttingen	8	0

At Meerenberg it is 8s. 8d., and at Guislain's Asylum 5s. 3d., exclusive of the salaries of the medical officers and chaplain.

In the Australian Asylums the maintenance rate is—

	s.	d.
At Adelaide	15	3½
„ New Norfolk	11	8

The cost of maintenance in the Asylums of New South Wales :—

	s.	d.
Tarban	7	8
Parramatta	8	5

exclusive of clothing, which, according to calculations made by Mr. Statham, senr., some years since at Parramatta, may be reckoned at from 2s. 8d. to 3s. a head weekly.

3rd.—Cost of asylum construction.—The following table will show the cost of construction of thirty among the most modern of the British and Foreign asylums, intended mainly for indigent patients, and of three—Coton Hill, Cheadle, and the Pennsylvanian Hospital—for patients of a better class. The cost per head, as will be seen, ranges from £88 to upwards of £400. The new French asylums for the Department of the Seine, St. Anne's, Ville Evrard, and Vaucluse, will cost, when completed, £720,000 for 1,800 patients, or £400 a patient ; their structure and

fittings are all very extravagant. The more modern English asylums have cost about £150 a head, including furniture and land. The proposed new asylum for Victoria is estimated to cost £373 per patient. The architect, Mr. Vivian, considers it could be built in England for £138 per patient.

Asylum.	No. of Patients originally built for.	Total cost of Building.	Cost of Building per head.	Cost of Furniture per head.	Total cost of Land.	Remarks.
Derby	300	76,179	254	23	7,928	
Essex	450	65,855	146	.....	8,000	
Prestwich	514	69,531	135	14	11,412	
Lincolnshire	266	41,448	156	16	4,378	
Colney Hatch	1,258	193,286	154	59*	19,432	*Includes gas, water, warming, & ventilation, as well as clothing.
Worcester	200	44,829	224	26	6,152	
North and East Riding	318	34,786	109	17	10,070	
Cumberland	200	31,000*	155†	.....	8,000	*Includes fencing, &c. †Includes furniture.
Durham	312	27,480	88*	.....	4,000	* Do. do.
Caermarthen	270	42,000	159*	.....	3,835	* Do. do.
Sussex	400	44,923	112	.....	6,923	
Cambridge	250	45,000	140*	.....	4,670	* Do. do.
Three Counties—(Beds, Herts, Hunts).	504	79,920	158*	.....	15,080	* Do. do.
Northumberland	200	42,427	212*	.....	7,572	* Do. do.
New Surrey	650	78,000	120*	.....	.....	
Bristol Borough	200	37,440	188	19	3,538	
Fife and Kinross District	200	28,000	140*	.....	3,000	*Includes furniture.
Montrose Royal	380	36,000	94	.....	.....	
Perth District	220	24,200	110	20	3,880	
Haddington District	100	10,800	108	.....	.....	
Elgin District	.....	.....	136*	.....	.....	*Includes cost of land and furniture.
Pennsylvania State Hospital	350	.....	100*	.....	Land presented	*Includes furniture.
Massachusetts Do. (Northampton).	250	.....	200*	.....	.....	* Do. do.
Washington	380	.....	220	15	5,400	
Ville Evrard	600	.....	280*	.....	50,000	*Including furnishing.
Evreux	500	.....	300*	.....	.....	*Includes furniture and land.
St. Anne's	600	249,600	416*	.....	.....	*Includes furniture.
Quatre Mares	500	.....	120*	.....	.....	* Do. do. and land
Hamburg	350	.....	160	20	3,600	
Göttingen	300	.....	150*	.....	.....	* Do. do. do.
Coton Hill Lunatic Hospital	.....	.....	285*	.....	.....	*Includes 30 acres of land, and furniture.
Manchester Do. (Cheadle).	.....	.....	300*	.....	.....	*Includes 52 acres of land, and furniture.
Pennsylvania Hospital	250	.....	300*	20	.....	*Includes furniture.

4th.—The curability of patients sent at different periods.—The importance of the early treatment of lunacy can scarcely be over-estimated; and the following extracts from the published works of authorities on this subject may fairly find a place here:—

"TABLE showing the average proportion of recoveries in cases of recent and longer duration when admitted to the Friends' Retreat, York, from 1796 to 1867, inclusive.*

Duration of Disorder when admitted.	Proportion of Recoveries per cent. of the Admissions.		
	Male.	Female.	Mean.
First Class.—First attack, and within 3 months	71·428	72·330	71·910
Second Class.—First attack, above 3 and within 12 months	45·833	47·143	46·308
Third Class.—Not first attack, and within 12 months	58·484	68·055	64·000
Fourth Class.—First or not first attack, and more than 12 months	12·766	20·982	17·233
Average	41·749	48·772	45·601

From the above it will be seen that, when the disease was taken in time, and treated within 3 months, above 71 per cent. of the patients admitted into the Retreat, up to the present year, have been cured."

"At Winnenthal, the number discharged recovered—of those admitted within the first 6 months of the disease—amounted to 68 per cent.; after 2 years' illness, 18 per cent.; and after a duration of 4½ years, 11 per cent."†

"In cases which come under proper treatment within the earlier months of the disease, the proportion of recoveries may be estimated at 70 per cent."†

"It is a well established fact that 70, if not 80, per cent. of cases of insanity admit of easy and speedy cure, if treated in the early stage, provided there be no strong constitutional predisposition to cerebral and mental affections; and even when an hereditary taint exists, derangement of mind generally yields to the steady and persevering administration of therapeutic agents, combined with judicious moral measures, provided the first scintillations of the malady are fully recognized, and without loss of time grappled with, by remedial treatment. A vast and frightful amount of chronic and incurable insanity exists at this moment within the precincts of our county and private asylums, which can be clearly traced to the criminal neglect of the disease in the first or incipient stage."‡

"The evidence that comes from our own and from many other hospitals shows that the diseases classed under the general term insanity, are among the most curable of maladies of their severity, provided they are taken in season, and the proper remedies applied and continued. In recent cases the recoveries amount to the proportion of 75 to 90 per cent. of all that are submitted to the restorative process; yet, it is an equally well established fact that these disorders of the brain tend to fix themselves permanently in the organization, and that they become more and more difficult to be removed with the lapse of time. Although three-fourths to nine-tenths may be healed if taken within a year after the first manifestations of the disorder, yet, if this measure be delayed another year and the diseases are from one to two years standing, the cures would probably be less than one-half of that proportion."§

* *The Seventy-first Report of the Friends' Retreat, near York.*

† *Mental Pathology and Therapeutics:* By W. Griesinger, M.D., 1867, p. 451.

‡ *Obscure Diseases of the Mind and Brain:* By Forbes Winslow, M.D., p. 9.

§ *Report on Insanity and Idiocy in Massachusetts:* By The Commission on Lunacy, 1855.

"Oneida County sends all her insane here *at once*, and the result is a large percentage of cures and a very slow increase of incurables. From January 1843, the opening of the asylum, to January 1865, Oneida County sent 796 patients—489 at public, and 307 at private charge. Of these 796 patients, there were, January 1st, 1865—

In this asylum at public charge	32
Do. at private charge	10
In Oneida County Asylum	50
	92
Since recovered, or now convalescent	7
	85

"Of the 85 who remained uncured, 9 were epileptic, 1 paralytic, 18 were chronic cases, and 12 were demented imbeciles when admitted, and were received only for custodial care."

"Thus, it appears that of all the insane of this county during 23 years, but 10 per cent. remains to be permanently provided for. This exhibit fully justifies the opinion of Dr. Edward Jarvis, that, under favourable conditions of early treatment, but 10 per cent. will be left among the constant insane population."*

All these extracts, which might be supplemented by many others, tend to show the vast importance of early treatment. No effort should be spared to place all patients under treatment as soon as possible. The English Lunacy Acts are framed to compel the early sending of all pauper lunatics, and provide that, after an asylum shall be established in any county or borough, "no pauper who shall have *lately* become lunatic, shall be received, or lodged, or detained in any house or place other than a county or borough asylum, or public hospital, or licensed house, for a longer period than shall be requisite for obtaining an order for his removal to such asylum", and "that every person wilfully detaining in any workhouse any such lunatic, insane person, or idiot, for more than fourteen days shall be deemed guilty of misdemeanour."

These enactments and others to the same effect, if fairly carried out, may accelerate the sending of insane paupers, and all others coming immediately under the charge of the authorities; but the majority of all insane patients are, primarily at least, under the charge and authority of their friends, and therefore not amenable to any laws to compel early sending. In some of the States of the American Union an inducement is offered to the friends of patients—a premium awarded to them for lodging their insane in the public hospitals during the early stages of their malady—by enactments which direct that when a person in indigent circumstances, not a pauper, becomes insane, and satisfactory proof is adduced that his estate is insufficient to support him and his family, or, if he has no family, himself under the visitation of insanity, he shall be admitted into the asylum and supported at the expense of the freeholders of his county, for one, two, or three years, without being placed on the list of paupers. Under this law, all artisans, small farmers, and other persons of small estate, seek at once a refuge in the asylum, where they are supported free of expense, and their property remains for the benefit of their families; instead of waiting, hoping for a cure, and trusting to treatment outside the asylum walls, whilst their estate is being gradually dissipated, and they are brought nearer, and nearer, and at last into, pauperism.

This enactment seems worthy of all imitation for its humanity and wisdom; and it is by such means—by excellently constructed and well managed institutions; by the employment of officers of high character; by the adoption of a proper nomenclature, in which the intents of the institutions are set forth; and by affording every facility for visitation and inspection—that the American state hospitals for the insane have obtained a high place in the estimation of the American people, and that the insane are committed to them much more readily, and at earlier stages of their malady, than is the case in England; whilst, at the same time, private asylums find little favour, and exist only in small numbers.

* *Annual Report of the New York State Asylum, Utica*, 1866.

Restraint and Seclusion.

No report on insanity can be considered satisfactory which does not include some consideration of the use of restraint in the treatment of the insane; and this subject, as well as the use made of shower and warm baths in the various countries visited, will be here considered.

No mechanical restraint was in use in any of the institutions visited in Great Britain; and, from an examination of the reports of the Commissioners in Lunacy for England and Scotland, it would appear that the "non-restraint system" is now in almost universal use in England, and that restraint is employed only in rare and exceptional cases in public and district asylums in Scotland. In the parochial and private institutions of that country recourse is more frequently had to it.

In 1853, the English Commissioners in Lunacy addressed a circular letter to the superintendents and medical proprietors of all the lunatic asylums, registered hospitals, and licensed houses in England and Wales, requesting a statement of their views on the subject of seclusion and restraint. The answers to this circular are published in the Eighth Report of the Commissioners; and the following, from Dr. Bucknill, at that time superintendent of the Devon County Asylum, and now Commissioner for the Visitation of Chancery Lunatics, is one of the fullest statements of opinion on the subject:—

"In the Devon County Asylum, restraint is never employed, except in surgical cases; in these, of course, the same principles must be adopted for the insane as are necessary for the sane, to insure that absolute quietude of parts which is essential for the advantageous conduct of the healing process. It is not denied that cases have occasionally arisen in which it has been difficult in the extreme to avoid the imposition of restraint; for instance, those of suicidal patients who have endeavoured to effect their purpose by thrusting articles of clothing and other substances down the throat, by beating the head against the wall, and by other means which are scarcely capable of being obviated by any watchfulness on the part of the attendants.

"A patient is still resident in this asylum, who endeavoured to commit suicide by lacerating the veins of the fore-arm with his teeth, and who bit out from his arm large pieces of flesh in the attempt. Had these efforts continued, it would not have been possible to have avoided the imposition of restraint, except by defending the arm by hard leather sleeves—by restraining the teeth, in fact, instead of the limbs.

"The occurrence of such cases, however unfrequent they may be, renders it impossible to deny that the imposition of mechanical restraint may, in rare instances, be necessary for the safety of the patient.

"Mechanical restraint in the treatment of the insane is, like the actual cautery in the treatment of wounds, a barbarous remedy, which has become obsolete from the introduction of more skilful and humane methods, but which may still be called for in exceptional and desperate cases. It may be said, that as these cases are so rare—that as large asylums are conducted for many years without one of them being met with—that as they do not appear, they may be considered as if they did not exist.

"The abolition of restraint was an indispensable starting point for efficient reform, since its employment was combined with a multitude of evils which its removal rendered intolerable. Under restraint, the management of the insane could be conducted by a small number of attendants, without calling upon them to exercise either self-control, intelligence, or humanity; there was little need of medical skill, or employment, or recreation; it was found that the easiest plan of controlling the lunatic was by appeals to his lowest motives, especially to the most debasing of all motives, to fear.

"Without restraint, these conditions were reversed, and, above all, it became necessary to influence and control the insane by higher and better motives. In my opinion, the essential point of difference between the old and new systems consists in this, that under the old system the insane were controlled by appeals to the lowest and basest of the motives of human action, and under the new system they are controlled by the highest motive which in each individual case it is possible to evoke.

"The lunatic is unable, without assistance, to control his actions so that they may tend to his own well-being and to that of society. He is, therefore, placed under care

and treatment, that he may be restored to the power of self-control; under care, that while this power remains impaired, he may be assisted in its exercise. This assistance may come in the shape of a strait waistcoat, or in the fear of one; or it may come in the sense of duty imposed in the operation of a gentle but effective discipline, of honest pride, desire of approbation or personal regard, or the still nobler sentiments of religion. The first motive, that of fear, belongs to man and the animals, and its exercise is degrading and brutalizing; the latter motives are human, and humanizing in their influence, and their development is the true touchstone of progress in the moral treatment of mental disease. It was the brutalizing influence of fear, and the degrading sense of shame, which constituted the true *virus* of mechanical restraints.

"In repudiating the use of mechanical restraints in the Devon Asylum, the above principle has been kept in view with a jealous anxiety, lest the moral effects of restraint should present themselves in some other form. It would seem that it is more easy, or at least more consistent with our nature, to rule by fear than by love. And the annoyances caused by the insane on their immediate attendants, are hard to be endured without exciting a spirit of retaliation. For this reason, the plan of manutension, or holding violent patients for a long time by the hands of attendants, scarcely deserved the name of a reform; and seclusion injudiciously and harshly employed is liable to the same objection. If a patient is to be ignominiously thrust into a dark and comfortless cell, and detained there for an indefinite period, on the occasion of any outburst of temper or irritability, it may well be doubted whether mechanical restraint does not possess some advantages over such a system; and the French physicians may be perfectly justified in preferring the *qilet* to their own *cellules de force*. But, in my opinion, seclusion differs widely from restraint in its capacity for beneficial employment. Restraint, except in cases so rare that they may be left out of consideration, is always an unmitigated evil. Seclusion, wisely employed, is frequently an important and valuable remedy. The character of seclusion as a remedy, has never recovered from the attacks made upon it by the advocates of mechanical restraint. They represented, truly enough, that a patient walking about pleasure-grounds with his arms tied to his sides, was capable of more enjoyment than he would be if shut up in a dark and narrow cell with all his limbs at liberty. In this objection, the fundamental principle of the new system was overlooked —that neither by restraint, seclusion, nor any other means, was it permissible to inflict upon the insane any unnecessary or avoidable suffering, or any indignity or degrading coercion, whether of a physical or moral kind. But the possible abuse of a thing is no valid argument against its use; otherwise there is no important remedy, medical or moral, which might not be equally objected to.

"That seclusion should not be resorted to merely as a punishment for improper conduct, or as a means of getting rid of a troublesome patient, I readily allow; but the extreme irritability of some insane patients, the uncontrollable fearfulness of others, and the reckless violence of a few during periods of epileptic excitement, are such that a removal from the society of their fellow-patients cannot be withheld from them without sacrificing their interests and safety. In the employment of seclusion everything depends upon its method. In the Devon Asylum, the padded room is rarely used except as a sleeping room for feeble patients who are liable to get out of bed and to fall against the walls at night. Its principal use, therefore, is not for seclusion. The attendants should have the power to impose seclusion only under the most pressing emergencies, for brief periods, and until the medical officer can arrive. Seclusion, being a remedy, should be directed solely by the medical man, whose care it should be to abstract from it every punitive characteristic. The easiest mode of doing this is to invest it with a medical character—to speak of it as necessary for health, and even to add some other remedy more purely medical. In numerous instances I have observed the most beneficial effects result to the mental condition of patients, from the confinement to bed which had become necessary from some not very serious bodily disorders—a sore leg, for instance —and have derived therefrom on this subject hints which I have found not without value.

"It is not, however, often possible to confine a patient to bed for the sake of mental quietude. The relaxation so produced might increase the nervous irritability

which it was desirable to obviate. On this account, it is found an excellent plan to seclude irritable patients in the open air—to place them alone in an airing court, where they can be kept under observation, and where, by solitary exercise, they can walk off their excitability. On this account, also, seclusion rooms should be light and cheerful sitting-rooms, furnished with means of occupation and amusement—the very reverse of *cellules de force*. Where such rooms are not attainable, a vacant corridor, gallery, or day-room should always be preferred to the cramped space of a single sleeping-room. Seclusion, used as a remedy, should be made as agreeable as possible. It is thought of some importance that patients should, in many cases, have the power of ingress and egress to and from their rooms. At the opening of this asylum, the bed-room doors of one whole ward were supplied with ordinary door-handles on the outside, so that the patients might enter their rooms without the aid of the attendant's key. In each ward where seclusions are not prevalent, single room doors have been prepared with ordinary door-handles and latches within and without, in order that the seclusion may as frequently as possible be robbed of its coercive character. Used in this manner as a remedial agent, seclusion as little deserves the opprobrium of being coupled with restraint as the warm bath, or any other means of allaying nervous irritability. When possible, the patient is persuaded to submit to separation before excitement has developed into violence, and the employment of force has become requisite. If seclusion is always looked upon as an evil, it becomes an evil by being postponed until it is needful to enforce it by superior physical strength.

"There is, however, another aspect under which seclusion must be considered, wherein it is not remedial—wherein it is acknowledged to be an evil, by its use being justified as the least of two evils of which the annoyance and danger of the patients in general is the greater. It can not be denied that insanity frequently displays itself by excitement of the malignant passions, and that some of the most depraved of mankind terminate their career in asylums. Towards these, seclusion must occasionally be employed in its harsher form, as a coercive means to prevent the welfare of the many from being sacrificed to the passions of a few. But, under a well-developed system of industrial employment, aided by medical remedies, this repressive kind of seclusion is rarely necessary, and, in this asylum, certainly forms by far the least frequent reason of its employment. Habits of industry, propriety, and order are inculcated with so strict a surveillance as to leave to the ill-disposed but little opportunity for the indulgence of vicious propensities. By these means habits of self-control are gradually established; and frequently, in the end, self-respect is so far awakened that it becomes both prudent and just to withdraw surveillance.

"Finally, I think that a marked distinction should be drawn between seclusion used as a remedy, and seclusion used as a means of coercion. It has, in my opinion, been too exclusively viewed in the latter light; and, while I feel that it is essential to reduce to a minimum this and every means of coercion, I am convinced that it is unwise to brand with an opprobrious character an important means of comfort and of relief to many of the greatest sufferers from mental disease."

In the second edition of the Manual of Psycological Medicine by Drs. Bucknill and Tuke, this Report is republished, Dr. Bucknill prefacing it with the statement, "We entertain privately the same opinions on the employment of restraint and seclusion as those which six years ago we expressed to the Commissioners in Lunacy."

On examining the reports of other asylum superintendents it will be found that they agree in the main with the opinions expressed by Dr. Bucknill. The opinion, however, is in many cases expressed that restraint is never necessary, never justifiable, and always injurious. By some few there is a more distinct advocacy for restraint in certain cases. "With every disposition to advocate the disuse of restraint to the utmost extent, I am compelled to admit that the results of my experience in this asylum up to the present time, lead me to the conclusion that cases may occur in which its temporary employment may be both necessary and justifiable", writes Dr. Wilkes, at that time medical superintendent of the Stafford County Asylum, and now a Commissioner in Lunacy; and Dr. Sutherland gives a similar opinion.

During the last few years there has been a certain reaction in the feelings of superintendents of asylums on this subject; in quite half of the asylums visited, although restraint was not practised, its advantage in certain cases was distinctly admitted; and it does not now meet with the all but wholesale condemnation which was accorded to it some few years ago.

In Northern Germany, Belgium and Holland, the non-restraint system is in use in a few institutions. Dr. Ewert, of the Meerenberg Asylum, visited England in 1854, and was so much struck with the absence of restraint that he determined on adopting it on his return. The number restrained at Meerenberg has been since this date.

	Males.	Females.
1854	1	1
1855–6–7	0	0
1858	2	3
1859	1	3
1860	2	2
1861	2	2
1862	2	1
1863	2	2
1864	1	1
1865	1	0
1866	0	1
1867	0	1

The camisole has been the only means of restraint employed. It was used in each case once only, and generally for some special cause—to keep on dressings in cases of carbuncle, &c., or to prevent accident in the treatment of surgical affections.

Dr. Ewerts regards it as an unmixed success, and speaks with pride of having been the first to carry out the non-restraint system on the Continent. His example has not been followed by other Dutch physicians; but the prominent members of the modern school of psychological medicine in Northern Germany have taken up this question warmly, and "non-restraint" is carried out fully by Griesinger at Berlin, Reye at Hamburg, and Ludwig Meyer at Göttingen. At Hamburg, after six years' experience, the system is pronounced in every way successful.

Dr. Meyer, at Göttingen, speaks of it as a decided success, although from a deficiency of asylum accommodation, the number of acute cases is greater in German than in English institutions; and adds, that although he does not doubt for a moment that a limited number of cases are best treated by restraint, still an asylum can be worked smoothly and well without it, and where it is allowed, it is always liable to be abused. The restraining apparatus is said to be kept under lock and key, and never used without the physician's order; but this never is really carried out. Again, the knowledge that restraining apparatus exists, has a baneful influence on the more sane of the patients: it gives them a feeling of insecurity when they see it used on others—a sort of feeling that their turn may come, and so the asylum becomes to them a prison-house and not a hospital. The adoption of the non-restraint system has not been found to increase the amount of seclusion in those German asylums where it has been tried.

At Guislain's Asylum, Ghent, restraint is very rarely used. When visited, no person was subjected to it, and only one was in seclusion.

Great as has been the success attending the trial of complete non-restraint in these Continental institutions, in the vast majority of institutions for the insane on the Continent, restraint is still used.

In the French asylums the camisole or strait waistcoat is the only means employed, but it was found in use in every asylum visited, except at Evreux, where it was said to be used occasionally. The number, however, found in restraint was, as a rule, small. At St. Yon, out of upwards of 900 patients, three only were in the camisole; at Charenton, four; at Ville Evrard, one. At Quatre Mares, with 700 patients, the morning report showed four under restraint. At the Bicêtre the number restrained was larger than in the majority of French asylums, and one child of seven years old was wearing the camisole.

At St. Anne's, where the number of acute cases is large, the total number in restraint was twelve, six of each sex.

There would appear to be in France a growing desire to lessen the amount, if not entirely to abolish the use, of restraint. In 1858, Dr. Morel of St. Yon visited England for the special purpose of inquiring into the system of "non-restraint" as there practised, and returned fully convinced of its advantages, and of the possibility of carrying it out completely. His work on this subject,* published in Paris in 1860, contains the most valuable testimony to the advantages of the system; but, owing to the greatly over-crowded state of the St. Yon Asylum, Dr. Morel has found it impossible to carry out the system fully, though his belief in its advantages has not diminished.

In the German asylums in which restraint is employed, bed-straps, and sometimes the chair, are used, as well as the camisole. At Illenau, four out of 450, and at Frankfort five patients out of a total number of 160, were found in restraint; but in one of these there was fracture of the leg, and the bed-straps were absolutely necessary to keep the patient quiet, and so allow of union of the bones.

In America restraint is even more largely used than on the Continent.† At the Criminal Asylum, Auburn, U.S., there is a liberal use of handcuffs, besides other means; and in the City Asylum of Philadelphia men are also to be seen with heavy wristlets fastened to a chain passed round the waist; but these are exceptional cases. In the State asylums and lunatic hospitals, the camisole, muff, wristbands, and bed-straps form the chief means of restraint; but in some cases chair-straps and crib beds are used:

At the New Jersey State Asylum, three patients were found in restraint, and four in seclusion.

At the New York, six patients on the female side were restrained; and though none were absolutely in seclusion, since the doors of the rooms were open, one was strapped to her chair, and another was in a crib bed.

At Washington two patients were found in restraint, and seven in seclusion;

At the M'Lean Asylum, Boston, three in restraint, and two in seclusion;

At Northampton, four in restraint and three in seclusion;

At the Pennsylvania State Asylum, one in restraint and two in seclusion;

At the Pennsylvania Lunatic Hospital, one in restraint, and none in seclusion.

The bed-straps and crib beds are used in those cases in which a horizontal position is deemed necessary, owing to the weakness of the patient; and the general use of restraint is justified by statements that the patients in America are, as a rule, more violent, that they possess larger ideas of personal freedom, with a greater want of discipline, than in Europe. In personal communications and written reports, the opinion is always expressed that restraint is absolutely necessary for the proper treatment of a certain number of the insane.

Dr. Kirkbride, one of the best known of asylum superintendents, thus writes on this subject, in the Report of the Pennsylvania Hospital for 1852:—

"Restraint is necessary in every hospital for the insane."—"It is no advance to give up restraining apparatus and substitute frequent and long-continued seclusion. An individual may really be more comfortable and much better off in the open air with some mild kind of restraining apparatus on his person, than he would be confined to his chamber without it."—"Although fully impressed with the conviction that the frequent use of restraining apparatus is a great evil in any hospital for the insane, it has not been deemed necessary to resolve that it should never be used in this institution."

During a personal interview, he said—"It is very useful in a few cases: in a minor number it is the best form of treatment. Patients sometimes ask for it, and to cease altogether to use it, in obedience to popular clamour, is to cut yourself off from a useful, and indeed valuable means of treatment—the best indeed for a limited number of cases.

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* *Le Non-Restraint, ou de l'abolition des moyens coercitifs dans le traitement de la folie:* Par M. le Docteur Morel.

† In the poorhouses of Pennsylvania and other States, where there is no system of inspection, restraint in some of its worst forms is practised. In some instances the patients are placed in square boxes, of a coffin shape, with a hole for the head, and fastened up against the wall.

All restraint is an evil if it can be done without; so is laudanum; still a judicious physician will not banish narcotics from his armoury, but will use them with discretion. In many cases it seems better to confine a patient's hands in wrist-straps or camisole, and turn him into a corridor or court, than to shut him up alone. Seclusion is always bad; no teaching by means of the senses is going on the while, and patients who have bad habits almost always practise them when in seclusion. Some patients seem less humiliated by mechanical than by personal restraint."

Dr. Gray, the Superintendent of the New York State Asylum, and the Editor of the *American Journal of Insanity*, in the Twenty-first Annual Report of the Utica Asylum, states his belief, that the English system is founded on a false theory of the treatment of insanity, and details the practice pursued in that asylum, so that the public may have "just and distinct views in what the necessity and extent of restraint consists, and appreciate the nature and importance of its use in certain cases."—"It is resorted to in controlling for given periods cases of great restlessness or high excitement, with a view of husbanding the general strength and promoting calmness. Many cases, especially in the acute stage of mania, if left to themselves, or given the freedom of the ward, would soon exhaust their vital powers by excessive muscular action. Excitable, noisy persons thus restrained during paroxysms, are more tranquil, and are able to remain in association with others in the wards or sitting-rooms, instead of being secluded; and their personal comfort is really promoted by this partial restraint. We are of opinion, also, that the moral as well as the medical effect of this treatment is much better than that of seclusion."

The greater violence of the American patients over those in European asylums, which is given as one reason for the use of restraint, is certainly not apparent to a casual visitor. The prevailing characteristics of American insanity, as seen in the Eastern States, are irritability and fidget, not violence. The patients are restless and tear their clothes—(is it that they want tobacco to chew or a stick to whittle?)—but they are not more violent than the patients in English asylums. In all the arguments for restraint used by American physicians the evils of seclusion are pointed out, but there is, as a rule, more seclusion, notwithstanding the restraint, in American than in English asylums. In two American asylums only was no person found in seclusion—the Philadelphia Lunatic Hospital and the New York State Asylum—whilst in several British asylums, as Stafford, Leicester, Bootham, York, Montrose, and Murthly, it is never practised; and in those institutions in which seclusion is used, the proportion is decidedly less than in American institutions.

In some British asylums seclusion is practised more or less as a disciplinary measure; in others, simply as treatment in those cases where quiet and absence from light are necessary. It has been completely abolished in a certain number of British institutions, because it is liable to abuse; but its occasional use for short periods, and purely as a matter of treatment in cases of violent mania, is generally considered beneficial.

The amount of seclusion in Continental asylums is, as a rule, not large; but wherever the amount of restraint was found to be larger than ordinary, the amount of seclusion was large also. At Illenau and Frankfort the amount is larger than at Hamburg, Göttingen, and Meerenberg. Dr. Morel, in his efforts to introduce "non-restraint," has not increased the amount of seclusion. At St. Yon, with a population of over 900, not one was found in seclusion.

The shower-bath, once one of the most common agents in the treatment of insanity, is falling greatly into disuse. In very few British asylums is it now used systematically as a depressant in acute cases of insanity; and where used, it is seldom prolonged beyond two or three minutes. In some asylums it is used as a tonic, as a stimulant in some cases of dementia, and as a means of correcting faulty habits; but for these purposes the shock only is required, and a few seconds serve all purposes. At Montrose it is used only at the patients' own request; and at more than one English institution its use is altogether forbidden. At the Cupar Asylum a rain shower-bath is fitted over the ordinary baths, and this is found quite sufficient to act as a tonic and stimulant. In almost all English institutions the shower-bath is kept locked, the keys being entrusted to the assistant medical officer or chief attendant.

In the Continental institutions the shower-bath is somewhat more used than in those of Great Britain; but its use is not more frequent at Hamburg, Göttingen, Meerenberg, and Ghent than in English asylums. At Illenau, and in some French asylums, it is used in connection with the warm bath as a depressant.

In America its use has been totally abandoned, owing to the strong prejudice felt against it by the public, and its liability to abuse.

The warm bath is employed medically in most British and American asylums; but in many it is only used very occasionally, and in none is it prolonged much beyond half-an-hour. In most Continental asylums, it is a prominent and much used remedial agent, and is continued for periods varying from half-an-hour to three hours. During its use cold cloths are applied to the head, or the douche, or shower-bath used at intervals; and to judge by the writhings and contortions of the patient, and his frantic yells as he rolls over and over in the bath in which he is restrained by a locked lid, leaving his head only free, this treatment is in the highest degree painful.

It is not a little curious that, owing more or less to popular clamour, and to a fear of the abuses to which they are liable; mechanical restraint has been virtually abandoned in Great Britain, and the shower bath has ceased to be used in America, and so a mode of treatment, useful in a certain number of cases, is lost to the physician in each country.

ACCOMMODATION FOR PATIENTS PAYING FOR THEIR MAINTENANCE.

England, which has provided with a marked liberality for her insane poor, has also made some public provision for those of the insane who are able to pay for their maintenance, but this has been left mainly to private enterprise, and the large number of private or proprietary asylums attest at once the want which exists and the efforts which have been made to meet it.

A certain number of patients paid for by their friends are to be found in almost all county and city asylums, but they live with, receive the same diet and treatment, and are often in social degree little above, the pauper class.

The noble charities of St. Luke's and Bethlehem founded in times gone by, and the Lunatic Hospitals at York, Northampton, Lincoln, Exeter, Manchester, Leicester, Norwich, Liverpool, Gloucester, Nottingham, Oxford, Coton Hill, and the Retreat for the Society of Friends, vary in their origin and constitution, but have one general end. In them are maintained at low rates of payment, patients belonging to the poor and middle classes, who can ill afford to defray the expense incurred in a private asylum. In some, no charge whatever is made for care and treatment; in others a portion of the income is set apart as a fund destined for the relief of the poorest inmates; whilst, in a third class, patients of all ranks are received at varying rates of pay, and the larger payments from the rich serve to assist in the support of those who can pay but little.

They are all governed by committees selected from the contributors, and are public institutions in the sense that no individual has any direct pecuniary interest in them.

In the lunatic hospitals are maintained a total of 1,842 non-pauper insane, whilst the large number of 3,228 are accommodated in licensed houses.

In general arrangements the lunatic hospitals differ from the asylums in the following particulars:—

The number of patients is as a rule less. Bethlehem, which is the largest, contains 277 inmates.

A larger number of the patients are accommodated in single rooms. At Cheadle, almost all the dormitories are associated, each containing four beds, three for patients and one for an attendant; but at Northampton, Lincoln, Coton Hill, and the Friends' Retreat, there is one single room for every two or three patients at least. The single rooms are generally given to those paying higher rates of board and are much preferred by the patients.

The rooms are more or less comfortably furnished according to the rates of payment. The single rooms contain chests of drawers and ordinary washstand, where

from the form of insanity it is possible to allow them, the majority of the rooms are carpeted, and the general fittings assimilated as closely as possible to those with which the patients are surrounded in their ordinary life. The patients generally have one room only, but where a sufficient sum is paid, a sitting-room and bed-room are allowed.

The patients generally dine in small parties in association.

Besides the ordinary officers, a special *companion* is found useful for the females to assist in amusing them and directing their needle and other work. The attendants at the Retreat number 1 to 6 patients, at Coton Hill 1 to 4, at Northampton 1 to 7, at Bethlehem 1 to 6, at Lincoln 1 to 5. They vary greatly in number with the different classes of patients, and with those paying high rates have more the character of servants than attendants. Frequently patients pay for a special attendant. The attendants sometimes wear ordinary clothes, sometimes a neat uniform or livery. The dress of the patients is either found by the friends or made in the institution by paid labour, and charged to the friends. The patients are dressed as much as possible in accordance with their social position.

The amusements for this class of patients invariably include a billiard-room and a good library, and the usual associated amusements are encouraged, the patients frequently assisting in both musical and theatrical performances. Carriages and horses are either kept or hired for the use of the patients, and a certain number taken for long drives almost daily. It is found difficult to find employment for male patients. They are removed altogether from the labouring class, and will do very little manual work. Some few find amusement and occupation in gardening, and others pursue mechanical occupations of various kinds, carpentering, painting, &c. It is thought advisable to encourage literary occupation, and discussion classes are found to be generally beneficial. in exciting mental activity and relieving the monotony of asylum life.
The diet is varied and every care is taken to serve it as nicely as possible.

The rates of payment vary considerably.

The general maintenance rates in these institutions range from 11s. 2d., to £1 10s. 4d. weekly.

	£	s.	d.
At the Lincoln Lunatic Hospital it is	0	16	11
Colon Hill	1	5	0
Bethlehem	1	2	10
York	1	1	0
The Retreat	1	1	3

At Coton Hill, the rates of payments by the patients range from 2s. 6d. to 6 guineas weekly.

There are three classes :—

1st. Those paying 4 guineas a week and upwards, who have a bed-room and sitting-room and a special attendant.

2nd. Those paying sums ranging from 25s. to 4 guineas, who sleep generally in single rooms, and dine at one of three common tables according to their mental condition.

3rd. Those who pay less than 25s., the maintenance rate of the institution, and are therefore recipients of its charity. These sleep for the most part in associated dormitories and dine at one of three common tables.

At the Friend's Retreat, York, the general payments range from 8s. to 30s., and there is a limited number of patients who pay sums varying from 2 to 5 guineas a week, and receive better accomodation accordingly.

At the Bootham Asylum, York, the rates of payment range from 4s. to 5 guineas.

The farms which belong to these institutions are worked chiefly by means of paid labour.

Pauper patients are received into the Lunatic Hospitals of York and Northampton and the Leicester Lunatic Hospital is in connection (as the Coton Hill and Manchester institutions were formerly) with the county asylum, but the paying and pauper patients are kept in separate wards.

The Royal asylums of Scotland differ only from the English lunatic hospitals, in the fact that into all are admitted pauper patients, who are paid for by the parishes to which they belong. The paying patients are kept in special wards (sometimes, as at Glasgow and Edinburgh, in detached buildings), and the arrangements for the patients are in most respects similar to those in the English hospitals.

The number of paying patients in the Royal Asylums, of Scotland, is 853, whilst 252 are in private asylums.

In France, a large number of paying patients are accommodated in private asylums, the property either of individuals or of religious houses. Some find a home in the hospices, and the noble state institution, the Charenton, serves to contain a large number; but provision is made in the greater number of the departmental asylums for patients of this class—sometimes in rooms in the main building, at other times in detached houses, as at Quatre Mares. They are usually divided into three or four classes.

At the asylum of St. Yon, the rates of payment are,—1st class, 6 francs a day, which entitles the patient to a sitting room and a special attendant; 2nd class, 4 francs; 3rd class, 2 francs 50 centimes; 4th class, 1 franc 50 centimes; 4th class receive the same diet as paupers, and the rooms set apart for them are furnished in a similar manner to those of the pauper class.

The number of attendants for the paying patients in French asylums is generally about 1 to 6.

In the United States, every State asylum affords accommodation to patients of all classes, and there are also institutions corresponding in character to the English lunatic hospitals.

In the majority of the State institutions separate galleries are set apart for the paying patients; but at the New York State Asylum the sole classification is founded on the power of self-control of the patient, and social distinctions are levelled.

The rates of pay range from 5 to 12 dollars a week.

The number of private asylums in the United States is very small owing to the general popularity of the state asylums.

The union of pauper and paying asylums is almost universal in Germany, Belgium, and Holland. At all the asylums visited certain rooms were set apart for patients paying for their maintenance. These are usually divided into three classes according to the rate of payments. At Hamburg the paying patients are placed in a detached building.

CRIMINAL LUNATICS.

The term Criminal Lunatic is applied, with not the strictest propriety, to two distinct classes.

1st. Those, who whilst insane, commit criminal acts, are, in fact, insane first, and criminal, so far as the *act* is concerned, afterward;

2nd. Those who become insane whilst undergoing imprisonment, are criminal first, and insane subsequently.

The first class, those who are insane, and who, under the influence of insanity, commit crimes, which, when sane, they would, in many cases, regard with horror,—are, when brought to trial, either found insane on arraignment, or acquitted on the ground of insanity, and are absolved from all responsibility; but, for the safety of mankind in general, are maintained in safe keeping.

The second class, who, whilst in prison for crimes committed when in a presumed state of sanity, are attacked with mental disease, are maintained in safe keeping, because their insanity does not absolve them from the consequences of their former acts.

It may be well to see how these two classes are provided for in those countries, which have instituted special provision for the criminal insane.

In England, the State Asylum for Criminals at Broadmoor, was originally intended to receive all classes of the criminal insane—those found insane on arraignment, or acquitted on the ground of insanity before the superior courts—and those who become insane whilst undergoing imprisonment, whether in Government prisons or county gaols,

but the accommodation was found to be wholly insufficient, and it has been deemed advisable to restrict its use to—

1. Those found insane on arraignment, or acquitted on the ground of insanity and confined during Her Majesty's pleasure;
2. Those who become insane whilst undergoing sentence in Government prisons, and so belong to what is ordinarily known as the convict class:

thus leaving a large mass of people—all those becoming insane while undergoing sentence in minor prisons, and such as are found insane when brought up for trial, and acquitted on the ground of insanity in minor courts—who come under the general definition of criminal lunatics to be provided for in county asylums. In many asylums the insane of these classes are found so little objectionable that they are maintained in the ordinary wards, their prior history being kept as secret as possible: but in other asylums they are sent by the asylum authorities to Fisherton House, Salisbury, an establishment conducted by private enterprise, in which insane of the criminal class are received and specially provided for. To this establishment are sent also by the county asylum authorities almost all of the insane belonging to the convict class, who, on the expiration of their sentence are discharged from Broadmoor, and sent to the county asylums.

The convict class of the insane are discharged from Broadmoor, either on becoming sane, their sentence of imprisonment being unexpired, when they are returned to prison; or at the expiration of their sentence, when they are delivered to friends, who promise to see them safely provided for; or, these being wanting, as they usually are, they are sent to county asylums, whence, as stated above, they are often removed to Fisherton House, as being objectionable in ordinary asylum wards. Those who are confined during Her Majesty's pleasure, are, on becoming sane, either liberated on a special warrant from the Secretary which, in some cases, imposes certain conditions, or kept in confinement for the remainder of their days.

The greatest care is exercised in selecting cases for discharge: the milder non-murder cases, or such as have committed murder under the influence of puerperal mania, and whose subsequent type of insanity has not been homicidal, are set at liberty; but all cases in which marked homicidal propensities have been exhibited, and in which it is probable that, should a second attack occur, the type of insanity would be similar to that before exhibited, are kept in confinement.

At the Criminal Lunatic Asylum for Scotland, which is in connection with the General Prison at Perth, the same classes are received as at Broadmoor—those found insane on arraignment or on trial, and detained during Her Majesty's pleasure, and persons becoming insane in Government prisons whilst undergoing sentences of penal servitude; but the line is not drawn rigidly here as at Broadmoor. Prisoners undergoing sentence in minor prisons are sometimes received; these are, however, few in number, and each case is admitted on special application from the prison in which the individual is confined. The application is considered by the surgeon to the general prison, who is also superintendent of the criminal lunatic asylum, and the patient is sent to the criminal or district asylum according to his decision. Cases in which prisoners have shown homicidal or very malicious propensities, and which are thus unfit for ordinary asylum wards, are, as a rule, admitted.

The rules for discharge differ somewhat from those at Broadmoor. Patients becoming sane with sentence unexpired, are sent back to prison; but if the sentence expires, and the insanity continues, either they are sent to a pauper asylum, or their cases are specially reported on by the medical officer as fit subjects—because either of the original nature of their offence, as rape, aggravated assault, &c., or of their propensities since becoming insane—for detention in a criminal rather than a general asylum.

It will be seen that, although in the main, the same classes are accommodated in the Scotch Criminal Asylum, as at Broadmoor; yet, instead of being confined absolutely to those classes, others are admitted on a principle of careful selection. The peculiar character of each case as regards its *criminal disposition* being considered. On the same principle cases, admitted from general or local prisons are selected for further residence in the asylum after the date of expiry of their sentence. The system adopted in Scotland is

decidedly broader in principle than the one which is followed in England; and its success may be judged of by the fact that no private institution to receive cases discharged from or refused by the state asylums, is wanted in Scotland—at all events, none exists; and provision is made for all criminal lunatics, except those received by the state institution, in the district asylums.

In the Irish State Asylum at Dundrum the principle of selection is carried even further. The asylum was established mainly for the reception of lunatics charged with offences in Ireland, but acquitted on the plea of insanity; but it was made lawful for the Lord Lieutenant to send also persons becoming insane in both Government and local prisons, whilst undergoing sentence.

From the first, the principle of selection would appear to have been adopted; and from a total number of 178 cases which were found in asylums and prisons, on the opening of the establishment at Dundrum, 84 only were selected for confinement in the state asylum, the cases in which the transgression had been trivial, being ordered for detention in ordinary asylums. The following table, from the Report of the Irish Commisioners in Lunacy for 1865, will show that the principle of selection is still fully carried out:—

	Males.	Females.	Total.
Homicides	29	7	36
Assaults on the person	32	10	42
Attempts to destroy property, and minor offences of all kinds, the parties being dangerously inclined	22	20	42
	83	37	120

The patients accommodated at Dundrum are therefore the most violent of both the two classes into which criminal lunatics are divided—those acquitted on the ground of insanity, and those becoming insane whilst undergoing imprisonment—the nature of the original offence, and the *criminal disposition* of the individual, being the basis of selection.

The discharges appear to be regulated in much the same manner as in the Scotch asylum. In every case a minute examination into the antecedents of the individual is made before liberation is granted. Patients becoming fatuous and decrepit are removed to their respective district hospitals, under order from the Lord Lieutenant.

In the United States, the State of New York alone has established an asylum for criminals; and this is close to, though not immediately in connection with the State Prison at Auburn. In this asylum, which is exclusively for men, are confined only such prisoners as become insane whilst undergoing sentence in the state prisons, and therefore belong to the convict class; all those acquitted on the ground of insanity, or found insane on arraignment, whatever may have been the offence committed, being sent to the ordinary asylums. In the other States of the Union, as no asylum specially for criminals exists, the convict insane are accommodated in special wards in the state prison, as are women in the State of New York; but in no state is it considered necessary to provide special accommodation for those who are acquitted on the ground of insanity. These cases are sent to the ordinary asylums,—and maintained in the same wards and under the same treatment as those in a similar mental condition,—under special warrants from the Governor of the State; and on recovery are reported sane, and discharged or not, according to circumstances. In the State of New Jersey all cases of this kind are, when cured, sent back to the prisons with certificates of recovery; the majority are set free at once, but certain cases, are maintained for observation in the prison, especially if the original crime has been of a peculiarly brutal kind. From the New York Criminal Asylum the convicts, if still insane at the expiration of their sentence, are not sent to the ordinary asylums, but are kept in the criminal asylum, unless their friends give security that they will be provided for by private means, and not become burdensome to the state in some other asylum.

In France and Belgium, and in Germany* generally, the criminal insane of all classes are placed in the departmental, provincial, or town asylums. In the Department of the Seine accommodation was provided some years since, for the convict class in a building fitted especially for violent patients, in connection with the Bicêtre at Paris. It is of a circular form, in appearance something between a small model prison and a menagerie; and is still used for the accommodation of insane of the criminal class; but their number has long since outgrown its capabilities. Public and professional opinion in France is so decidedly in favour of treating the criminal insane in ordinary asylum wards, that no new building is in contemplation.

In Holland, the convict class of criminal insane are maintained in special buildings in one of the provincial asylums, the managing committee of which has made a contract with the Government to receive them; but no special provision is made for the class acquitted on the grounds of insanity, who are placed in the wards of ordinary asylums.

The almost complete absence of special provision for the criminal insane of all classes, which exists on the Continent of Europe, is very remarkable; but it is in accordance with the opinions of the public and of many of the most distinguished alienist physicians—opinions which have found expression in various pamphlets, and in papers and journals devoted to matters psychological. It is held that insanity should level all distinctions; that the great gulf which separates the convict from the honest man is bridged over by insanity; and that the bondsman should be as the free—that, when sick in body, the prisoner should still be kept within his prison and treated for his malady; but when sick in mind, the prison should be opened, and the badge of the convict forgotten. The few foreign authors (among whom M. Brierre de Boismont is the best known) who have advocated the establishment of special asylums, have recommended them only for those insane persons who have committed murder or are peculiarly dangerous.

From a brief consideration of the classes for whom special provision is made in various countries, it will be well to proceed to a description of what that provision consists.

The State Asylum for Criminals at Broadmoor is about 30 miles from London, and 5 from Wokingham in Berkshire. It stands on an eminence on a large open moor, and commands a singularly fine view. It fronts the south, and in that direction the land slopes so rapidly that the whole extent of farm and garden belonging to the asylum, as well as the view beyond, are visible from the airing courts over the high walls. The soil is gravel; the buildings of brick with stone facing, and for the most part of three stories. The divisions for male and female patients are totally distinct, each surrounded by a high prison-like wall, &c. When complete, there will be accommodation for 370 males and 150 females. The present number of inmates is 330 males and 70 females—a total of 400.

The asylum estate is 300 acres—of this the buildings occupy a large portion, but 70 acres are under cultivation as farm and garden, and 20 as pasture; the farm is being gradually enlarged. The farm buildings are placed in front of, and at a short distance only from the asylum; they are substantial and good. 6 horses, 18 cows and heifers, 120 sheep, and 90 pigs form the farm stock, and there are 60 head of poultry in the farm yard. The farming is not done entirely by hand labour, since the number of patients who can be safely employed outside the asylum wall is small; but implements of various kinds are used.

The cubic space is, for single and associated dormitories and day-rooms, between seven and eight hundred cubic feet.

One-half the patients in the female division, and one-fourth on the male side, are accommodated in single rooms. There is no special infirmary.

The warming is done by open fire-places, and by stoves placed in the corridors at the foot of the stairs. In a block, recently erected for women of the most excited class, hot water is used for warming, and is found cheaper than open fires. The stoves are caged in wire; the fire-places have simple high open railings in front.

* A special asylum for the criminal insane exists at Königsberg.

A system of ventilation by extraction was tried, but not found to answer. Ventilation is now entirely by open windows, doors, and fire-places, except in the new block for women, in which there are accessories in the shape of perforated bricks for the inlet, and shafts opening near the ceiling and leading to the roof for the outlet, of air; and in the No. 6 block for men, in which perforated zinc panes are placed in the upper window sashes.

The entire asylum is lighted with gas. The buildings and gas making apparatus belong to Government, but are let to a contractor, who supplies gas to the establishment at so much per foot, and is bound to keep buildings and apparatus in repair. This is found to be more economical than working the apparatus by paid servants of the institution. A light is kept in each corridor all night.

The windows are in wooden frames, and open at the bottom by an ordinary sash. The open part is covered with an ornamental iron screen, which has nothing prisonlike in its appearance. In a new block for excited women, and in the block for the worst class of males, there are iron gratings over the entire windows, which are in wooden sashes and open top and bottom. There are shutters to the corridor and dormitory windows, locking when both open and shut.

The water supply is from surface drainage over the estate, and is considered somewhat scanty. It is, however, 30 gallons per head per diem, and is pumped by a steam engine from reservoirs at the bottom of the hill to tanks in the centre of the building. The surface draining is still in progress, and the supply will soon be increased. There are fire hydrants round the building, and the attendants practice fire drill occasionally.

The drainage is rapid and easy, because of the great slope of the land. About half-way down the hill are covered tanks for sewage; in these the more solid sewage matters subside, and are mixed with earth and used as manure, whilst the fluid portion is conveyed over the ground below in pipes. The entire amount of water in the tanks can be rapidly discharged through the drains; and ventilating tubes pass from the sewers to a level higher than the roof. The refuse is used to feed pigs, which are bred, fed, killed, and eaten in the asylum. The bacon is cured, and there is a smoking room at the farm.

There is a general bath-room, containing ten baths, which, however, is almost useless, since it is not deemed advisable to allow patients of the criminal class to be removed from their special section of the asylum. There is also a bath-room in every corridor, in the proportion of one to every twenty-five patients; the baths are copper. Lavatories are placed in each corridor, and consist of a leaden trough in which stand four or five wooden basins; hot and cold water are laid on.

There are two kitchens, one for each division, partly detached and open to the roof. The boiling is all done by steam in jacketed boilers; and on the male side the roasting is by gas in iron ovens.

The washing is done chiefly by steam machinery in two laundries, one of which is in the female division. In this all the lighter work is done. The other, for dirty clothes and rough materials, is at the bottom of the grounds, near the water reservoir. The steam engine turns the machinery for the laundry, as well as pumps water for the supply of the house. The engines for the female division are placed above the laundry, so that the straps for the machinery come down through the ceiling. The washing is done by stamping machines; the wringing by a centrifugal wringer, and by squeezing between two rollers; the drying is done in closets; and the mangle is worked by steam.

Water-closets exist in each ward in the proportion of one to every twenty-five patients. The water supply is by pulling a plug. Earth closets have been introduced in the airing courts, and work satisfactorily. The earth is contained in a box at the back of the seat; and a certain quantity discharged as the weight is taken off the seat by the rising of the person using it. These closets are only emptied once in about two months, and were quite sweet and clean. Earth closets have been substituted also for water-closets in some of the corridors. They are placed in small projections from the corridor, so as to ensure cross ventilation; a window is placed over each seat. The divisions are of enamelled slate and partial only. The walls are cemented, the closets self-acting, and the receptacles, of galvanized iron or zinc on wheels, can be removed by opening the front of the seat. There are no urinals in the house; in the airing courts they are of slate without constant water supply.

The male division consists of six blocks, and the female of two, besides the building for administration. The corridors are as a rule narrow, and used chiefly as passages of communication. For each division there are day and dining-rooms opening from the corridors; and in the block for quieter patients is a reading room in addition. The day and dining-rooms are substantially and comfortably furnished. The floors are all of deal, except in one block, where they are polished oak. The walls are cemented; the lower half of each is painted, roughly grained, and varnished; above this is a bright coloured line, and the upper part is washed with light colouring. There are a few pictures in the day-rooms, and some other minor ornaments; and the corridors have a strip of linoleum in the centre.

The dormitories are coloured throughout. The bedsteads are of polished wood, strong and well made, the bottom being canvas stretched on iron bars and tightened with a screw. Beside each bed is a small box for clothes, with a drawer underneath. There are wooden washstands with basin and ewer, carpet at the bedside, and earthenware chamber utensil, for the majority of the patients. In the rooms for the worst class there are bedstead and small box only, and the utensil is of gutta-percha or india-rubber. The beds are horsehair, the bedding plentiful and good, and each patient is provided with and made to wear a nightshirt. The bedding is all folded for the day in barrack fashion. The dirty patients are few; and for these hair beds, covered with mackintosh sheeting, and with a hole in the centre, are used. There are two padded rooms in the male, and one in the female division. The padding is kamptulicon, a compound of gutta-percha, and costs £50 per room. It is in slabs, about 2 feet wide, screwed to the wall.

The stairs are of stone, without handrails; the centre well is bricked up. The flooring of the passages is of asphalte.

The dinner is brought from the kitchen to the dining rooms in large tins, and is served on ordinary crockery. The plates and drinking vessels, even for the worst cases, are earthenware. The ordinary asylum knives are given to some of the patients, but to the more violent class bone knives and forks only are allowed.

There are two rooms set apart for amusements, one for males and one for females. The former, a large handsome room, is fitted with a stage for theatrical performances, and contains a billiard room—the latter is furnished with piano, bagatelle board, &c.

The chapel is placed above the amusement room on the male side, and is fitted specially for the service of the church. It is the only room in which male and female patients are permitted to meet. Morning prayers for the females are always read in the amusement room of their division.

The airing courts are four in number on the male, and two on the female side; and, though surrounded by high walls, command extensive views, because of the rapid slope of the ground. They contain fixed and movable seats, and are nicely planted, even that for the most violent class being laid out in flower patches. In the airing grounds small patches are given up to individual patients, for cultivation as flower and vegetable gardens, with the happiest results; patients who take interest in little else, occupying themselves with their special patches. Each airing court contains a verandah and covered walk.

The asylum is under the management of a council of supervision (the members of which are reimbursed any expenses they may incur) appointed by the Home Secretary. The general financial management and control is entrusted to this board; but when large sums of money are required, special requisition is made by the board to the Home Secretary. The board inspect all books and the house and farm accounts. All hiring and dismissal of servants by the superintendent is reported to them; and they engage and dismiss all officers, taking the superintendent's advice on the subject. The board meets once in every five weeks.

The asylum is under the inspection of the Commissioners in Lunacy, who visit it annually.

The superintendent is supreme within the institution, and is responsible for its internal management. He lives in a detached house, has a separate garden, is supplied with coals, candles, &c., and receives a salary of £800 a year. He is assisted in his duties by a deputy-superintendent, who also has a detached house, and £400 a year; and

a resident medical officer, who receives £150 per annum, board and lodging; and who acts as dispenser.

The remaining officers are chaplain, who is a clergyman of the Church of England, living in a detached house near; steward, with storekeeper and clerk as assistants; and matron.

There is one chief attendant for each division; six principal attendants for the male side, one for each block; and two for the female; and these, with the ordinary attendants, make a total of one to between five and six patients. In the block for violent cases the proportion is one attendant to four patients.

The chief attendant for the male division receives a salary of £140, with a house, but without board.

The attendants are, as a rule, young, and are admitted after the examination prescribed by the Civil Service Commission. They wear uniforms, marked with badges to denote the rank of assistant, ordinary, principal or chief attendant. The men have a grey morning coat, and a blue one for other occasions; the women wear print dresses in the morning, and a black merino dress, white apron and cap, when the morning cleaning is finished. They carry their keys from a leathern belt. The attendants sleeping in the house have each a separate bedroom; and there are separate special dining rooms for the males and females. The regulation for holidays is that each attendant shall have one whole day in every ten; and additional days are granted at the discretion of the superintendent. Two attendants on the female, and six on the male side, one for each block, are told off for night duty, which they enter on at 10 p.m., leaving at 6 a.m. They change every month, and are visited occasionally during the night by the medical officers, but no other mode of checking their rounds is adopted. Dr. Meyer thus describes the care which is taken to make the attendants comfortable, in the report of the asylum for 1867:—

"As the question is of some importance I may perhaps be allowed to state the wages given to the attendants, and the other advantages placed here at their disposal.

Rank.	Wages.	
	Male.	Female.
Principal Attendant	£60 to £70	£40 to £50
Attendant	£40 to £45	£25 to £30
Assistant Attendant	£35 to £40	£18 to £21

The married men are provided with board and uniform; the single men with board, lodging, and uniform. The female attendants are provided with board, lodging, washing, and uniform. Comfortable cottages are provided on the estate for married men, at a reasonable rent; a day school for the children has existed from the opening of the establishment, a weekly payment in the shape of school pence is made by the parents, but the amount thus contributed covers but a small portion of the expense. A Sunday school established in 1863 has been continued with great regularity. The single men and the female attendants occupy well furnished rooms in the asylum. A comfortable reading room with a library, smoking room, and bagatelle room has been provided on the estate, outside the asylum walls, to the support of which the male attendants and servants contribute by a payment of 1s. on joining the service, and a monthly subscription of 6d. The female attendants and servants pay 6d. on joining, and 3d. monthly. In the reading room a dance is held every six weeks, and this winter penny readings have been established and most creditably supported."

"Those who are willing to exercise a little self-denial in endeavouring to provide to some extent for their families, have had the means brought within their reach by Mr. Gladstone's Act, passed in 1865. A policy can be issued through the superintendent here to any servant for a sum not exceeding £100, without prepayment of premium, which is covered by a weekly deduction from the wages."

"The families of attendants and servants resident on the estate are attended professionally by the medical officers of the asylum, and further assistance in suitable cases of sickness is given from the offertory fund; but, notwithstanding all these considerations, some married attendants in receipt of the lower rate of wages, find it difficult enough to keep their families in ordinary comfort."

Notwithstanding all these advantages, however, the attendants cannot, as a rule, be induced to remain long at the asylum, and resignations are very frequent. The class of patients with whom they have to do seems to be very little the cause of this, but it would appear to be owing in great measure to the distance of the asylum from London or any large town. The railway fare from the nearest station, about 5 miles from the asylum, is 5s. to London, and 2s. 6d. to Reading; and the time spent in going and returning makes a serious inroad in the holiday allowed them.

Besides attendants, there are employed at the asylum, or on the estate, a clerk of the works, land steward, laundresses, cooks, and house servants, a carpenter, blacksmith, tinman, gasfitter, mason, plumber, tailor, bootmaker, upholsterer, &c., who are on the permanent staff of the institution, and qualifying for pensions. Besides these, are journeymen at weekly wages.

The artisans are charged with the care of those of the insane who work with them, but do no other duty as attendants.

The classification at Broadmoor is somewhat elaborate. On the male side, the Queen's pleasure men are separated as much as possible from the convicts, the larger number of them being kept in a distinct block in which no convict is placed; a few of the more violent are placed with the violent convicts.

The divisions are into—1, quiet (Queen's pleasure men); 2, invalids and workers; 3, quiet (convicts); 4, ordinary cases; 5, refractory. Each division is in a separate block; and the 6th block is at present unoccupied.

There are thirteen wards in the five blocks. In the refractory block are three wards, containing forty-five patients, under the charge of eleven attendants; and to this are attached two airing courts with high walls, so as to completely separate this class from the remainder. One man, a dangerous impulsive homicide, is kept constantly in a barred room at one end of the gallery.

It is deemed advisable to prevent the patients, especially the more violent class, associating in large numbers. They frequently combine for mischief, although insane; their old convict habits still remaining.

On the female side, one of the two blocks is used for quiet, and the other for violent patients; and in one ward in the former the women detained during Her Majesty's pleasure are kept. The total number of wards on the female side is five. The amount of work done by the patients is small compared with that in some other asylums, because only a few patients can be trusted to work on the farm outside the walls—(the garden is within the walls)—for fear of escape. Some cannot be trusted with tools, because of their propensities; and a certain number of the Queen's pleasure men are from the class who are unused to manual labour. The number employed is, however, considerable, as may be seen from the following table. The major part of the boots and clothes required by the inmates are made in the institution. All the ordinary sewing is done; and the value of the work done by patients in the workshops alone, without reckoning the laundry, agricultural work and gardening, is upwards of £500 a year.

TABLE showing the daily Average Number of Patients employed during the Month of December, 1867.

Description of Employment.	Male.	Female.	Total.
In the garden and farm	18	—	18
" wards	52	30	82
" laundries	9	12	21
" kitchens	4	2	6
" store room	1	—	1
Carrying coals	16	—	16
Shoemakers	5	—	5
Tailors	5	—	5
Carpenter	1	—	1
Gasfitter	1	—	1
Painter	1	—	1
Baker	1	—	1
Upholsterers	4	—	4
Needle and fancy work	—	24	24
Sundry work	5	—	5
Whitesmith	1	—	1
Total	124	68	192

	Male.	Female.	Total.
Average number attending chapel during the month of December, 1867	50	32	82

Some of the women patients work at sewing, &c., and the men knit gloves and curtains, after ordinary working hours; for this they are paid small sums, which they are allowed to spend on minor luxuries, through the attendants. The women thus earn about £30 a year. All the working patients get extra diet, as will be seen from the diet table.

The dress of the patients is varied as much as possible, the class and social status of the patients being considered. Some of the better class are allowed to be dressed by their friends. The dress for the lower classes is usually cord trowsers with blue cloth jacket and waistcoat. The day shirts and socks are all changed twice a week; night-shirts, drawers, and guernseys, once a week; sheets and pillow-cases, once a fortnight. For the amusement of the patients there is a good general library; and a small library is kept in each ward, the books being changed at intervals. £150 a year are spent in books and periodicals. There is a bagatelle-board in each block, and cards, dominoes, draughts, &c. In the courts are croquet and bowls; and a band composed of the attendants plays regularly twice a week. There are, in addition, occasional theatrical performances, six or eight times a year, on the male side—the actors being patients and attendants—and dances about as often for the women. A schoolmaster is employed, under the superintendence of the chaplain, to give elementary education to such of the patients as are uneducated.

The diet-tables for patients and for attendants and servants, are given below:—

BROADMOOR ASYLUM Diet-table—Male and Female Patients.

Breakfast.						Dinner.								Supper.					
Males.			Females.			Males.				Females.				Males.			Females.		
Bread.	Butter.	Tea.	Bread.	Butter.	Tea.	Hot Cooked Meat.	Bread.	Vegetables.	Beer.	Hot Cooked Meat.	Bread.	Vegetables.	Beer.	Bread.	Butter.	Tea.	Bread.	Butter.	Tea.
ozs.	oz.	pt.	ozs.	oz.	pt.	ozs.		ozs.	pt.	ozs.		ozs.	pt.	ozs.	oz.	pt.	ozs.	oz.	pt.
8	½	1	7	½	1	7	As required.	12	¾	5½	As required.	12	½	8	½	1	7	½	1

Dinner.	
This Rota is varied by the substitution of pork from the farm. Fish and fruit pies as circumstances allow.	
Sunday	Boiled beef.
Monday	Roast mutton.
Tuesday	Boiled mutton.
Wednesday	Roast beef.
Thursday	Roast mutton.
Friday	Boiled mutton.
Saturday	Roast mutton.

Each patient is allowed 1½ oz. tea, 7 ozs. sugar, and 2 pints milk, weekly. Salt, pepper, mustard, &c., as required.

Working patients are allowed, in addition to the above, 4 ozs. bread, 1 oz. cheese, and ¾ pint beer for luncheon, and ½ pint beer at 4 o'clock p.m.

The dinners are also varied by fish, fruit pies, meat pies and Irish stew.

The sick and special cases to be dieted at the discretion of the superintendent.

There is in reality no fixed allowance of bread, as the patients are allowed as much as they can eat. Average consumption per head: males, 1lb.; females, 12 ozs.

BROADMOOR CRIMINAL LUNATIC ASYLUM—Attendants and Servants Diet-scale.

	Males.	Females.	
Cooked meat	10 ozs.	9 ozs.	Issued Daily.
Bacon, raw	3 "	2 "	
Bread	16 "	16 "	
Potatoes, or other vegetables	16 "	16 "	
Beer	2 pints.	1½ pint.	
Milk	½ "	½ pint.	
Cheese	16 ozs.	8 ozs.	Issued Weekly.
Butter	8 "	8 "	
Tea or	3 "	3 "	
Coffee	6 "	6 "	
Sugar	12 "	12 "	
Flour for puddings	6 "	6 "	
Suet do.	2 "	2 "	
Currants do.	4 "	4 "	
Mustard, pepper, salt, &c.	As required.	As required.	
Soap	2 ozs.	2 ozs.	
Candles	1 lb. When required.	1 lb When required.	

There are printed regulations for the guidance of all officers and attendants.

Three systems of reports are carried out,—

1st. Daily reports of attendants to superintendent.

2nd. Annual report of superintendent to the Council of Supervision, which is accompanied by statistical and other tables, and printed for general circulation.

3rd. Annual report of the Commissioners in Lunacy to the Lord Chancellor.

The system of supply is not by contract; but each article is bought in the market by the steward.

The weekly cost of maintenance per head is about 25s.

The building is reported to have cost between £300 and £400 per inmate; but no accurate information can be obtained on the subject.

The treatment of the patients is on the non-restraint system, but Dr. Meyer considers a strait waistcoat absolutely necessary in some cases; no other mechanical

restraint is ever used, and this only very rarely indeed. Shower-baths are very little used, except as tonics. Seclusion is practised for treatment; and as discipline, for refractory conduct, filthy conversation, &c.; and tobacco and other privileges are stopped in cases of misconduct.

It will be seen from the above description of Broadmoor that, though surrounded by walls and possessing some of the characters of a prison, it differs in the main very little from an ordinary asylum, and is made as cheerful and agreeable a residence for the patients as is possible, safety being however as much a consideration as cure. Its distance from London, or a large town, render supply costly, and visiting by friends almost impossible, and prevents attendants staying any length of time in the asylum. The separation between the Queen's pleasure men and the convict class is carried as far as possible, and it is in fact only the more violent of each class, that come in any way in contact with each other, except at the asylum amusements and religious services.

THE following Table gives the Classification of Crimes and Sentences of the 515 Patients in the Asylum, during the Year 1867.

Crimes.	Total Number.			Classed under three heads.								
				Found Insane on Arraignment.			Acquitted on the ground of Insanity.			Convicted and Certified to be Insane after Sentence.		
	Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Murder	92	43	135	25	14	39	60	26	86	7	3	10
Attempt to murder, maim, &c.	79	14	93	20	2	22	46	10	56	13	2	15
Concealing birth, and infanticide	...	4	4	...	3	3	...	...	.....	...	1	1
Manslaughter	7	3	10	1	2	3	1	1	2	5	...	5
Rape	5	...	5	...	...	.....	...	...	.....	5	...	5
Assault with intent to ravish	7	...	7	3	...	3	4	...	4	...	...	.....
Unnatural offences	9	...	9	1	...	1	3	...	3	5	...	5
Treasonable and seditious offences	4	...	4	3	...	3	1	...	1	...	...	.....
Assaults	8	2	10	1	...	1	5	...	5	2	2	4
Burglary and housebreaking	29	2	31	4	...	4	2	...	2	23	2	25
Robbery on the highway	4	1	5	...	...	.....	...	...	.....	4	1	5
Sheepstealing	5	...	5	...	...	.....	2	...	2	3	...	3
Horsestealing	3	...	3	1	...	1	...	...	.....	2	...	2
Larceny and petty thefts	48	39	87	4	2	6	5	...	5	39	37	76
Fraud and embezzlement	2	...	2	...	...	.....	...	...	.....	2	...	2
Receiving stolen goods	2	1	3	...	...	.....	...	...	.....	2	1	3
Arson	37	3	40	9	2	11	14	...	14	14	1	15
Wilful damage	3	3	6	...	1	1	2	...	2	1	2	3
Forgery	1	...	1	...	...	.....	...	...	.....	1	...	1
Uttering counterfeit coin	4	...	4	...	...	.....	...	...	.....	4	...	4
Riot and breach of the peace	...	1	1	...	...	.....	...	...	.....	...	1	1
Under vagrant laws	1	...	1	...	...	.....	...	...	.....	1	...	1
Deserters from Army and Navy	3	...	3	...	...	.....	...	...	.....	3	...	3
Want of sureties	1	3	4	...	...	.....	...	...	.....	1	3	4
Felony	18	5	23	1	...	1	3	...	3	14	5	19
Sending threatening letters	4	1	5	2	...	2	2	...	2	...	1	1
Misdemeanour	1	1	2	1	...	1	...	...	.....	...	1	1
Night poaching, being armed	1	...	1	...	...	.....	...	...	.....	1	...	1
Insubordination	9	...	9	...	...	.....	...	...	.....	9	...	9
Attempting self-murder	2	...	2	...	...	.....	2	...	2	...	...	.....
	389	126	515	76	26	102	152	37	189	161	63	224

Fisherton House, near Salisbury, is a proprietary institution for the insane, containing 540 patients, of whom 250 are paupers, paid for by the counties to which they belong; 90 are private patients, paid for by their friends; and the remaining 200 are criminals. Of these, 140 are cases either found insane on arraignment, or those who have become insane whilst undergoing sentences passed by superior courts; and so Government cases, paid for at the rate of 17s. a week, and awaiting removal to Broadmoor.

The remaining 60 consist chiefly of those found insane when brought up before minor courts, or those becoming insane whilst undergoing sentences of imprisonment passed by those courts; a few insane are of the convict class, who, their time of sentence having expired, have been sent from Broadmoor to county asylums. The whole of these are paid for at the rate of 15s. 6d. a week—the lower price being fixed because they are, as a class, less dangerous, and so require less care—by the counties to which they belong, and would be treated in the public asylums, as the same class are in many counties, if their presence were not thought objectionable by the asylum authorities, who thus farm them out to a proprietary house.

The buildings at Fisherton House consist of irregular, sometimes one-storied, blocks, standing on a large extent of ground. Many of the houses differ little in appearance from private residences. The criminals are kept apart as much as possible, only the more violent of the pauper class being associated with them. The part of the asylum devoted to them differs little or nothing in arrangement from that occupied by the pauper class. There are dining-rooms and day-rooms below, and dormitories above. The latter are all associated, not a single pauper or criminal patient having a private room—an arrangement which exists in no other institution for the insane, but which is reported to work without inconvenience. In the dormitories, which generally contain from ten to twenty patients, attendants always sleep; and in the rooms occupied by criminals the attendants' beds are placed in a strong wooden cage, through which they can see everything that occurs in the ward, but which prevents attack, from patients during sleep. The attendants dine in the same rooms, but after the patients; and are, for criminals, in the proportion of one to five patients. No mechanical restraint is employed; there is no seclusion, no gloves, no ticken dresses, no padded room, and no shower-bath in the asylum, and not a window is barred. Work is given to as many of the criminals as can be entrusted with it; and those who work overtime receive 6d. a day, which they are allowed to spend in anything except beer or spirits, through the attendants.

The criminal class are found to combine for mischief, and require close watching. Some few years since four of them took out a grate, knocked down part of the back of a chimney, and escaped from one of the dormitories, whilst the attendant and other patients slept. These men were all undoubtedly insane.

There is a chaplain belonging to the Church of England, who officiates in a small chapel belonging to the asylum. There is also a large amusement room, in which concerts are held and lectures given; and the more quiet of the criminal class are taken to the amusements, as well as to religious service. Not more than twenty-five criminals are placed in one ward, so that classification is carried out among them as much as possible, and association for evil purposes at the same time prevented.

Criminal Lunatic Asylum, Perth, Scotland.—This is the only asylum for criminals in Scotland. It adjoins, and is part of the general prison for Scotland, and is under the rule of the governor. There is a special superintendent, and the surgeon of the prison is the medical officer. It was formerly a prison for boys; but is totally unprisonlike in appearance. The rooms are large and well lighted by large windows, and the general airing grounds very cheerful.

The number of patients is 46—males, 31; females, 15. There has always been this disproportion in numbers.

The two sexes are separated, but no attempt at classification is made. The accommodation consists of two rooms on the ground floor—one used as day and the other as dining-room—and a series of rooms for single dormitories at the back of these. The remaining dormitories are on the first floor.

The day and dining rooms are fine, light rooms, with deal floors. The walls are all plastered, painted over the lower and papered over the upper half, and ornamented with pictures, statuettes, plants, birds, &c. The furniture is remarkably good—mahogany tables, and stuffed sofas and chairs covered with American cloth. The seats in the dining room are substantial padded forms with backs. Cocoa-nut matting is laid down around the tables. Of the dormitories nine are single on the male and ten on the female side, the remainder being associated; but the associated rooms contain only three or four

each, except one on the male side, where twelve sleep: all are papered. The bedsteads are iron; the beds hair, with a straw palliasse underneath. There are chairs in all the dormitories, and carpets by the bedside in the women's rooms.

The cubic space throughout is 700 feet per patient.

The windows of the rooms are large, and are all barred outside; but the bars are not offensively heavy. Gas is fitted in all the rooms.

There are bath-rooms in each division.

On the male side are two ordinary padded rooms, and on the female side a boarded room; besides this, three or four other rooms are boarded to a height of 6 or 7 feet. Seclusion is not unfrequently practised. Restraint is also used occasionally by means of locked gloves and canvas jackets for men, and polkas for women. As a punishment, the usual allowance of tobacco and the privilege of exercising in the general grounds is stopped, and parts of the diet are checked for the same purpose.

The women clean the wards and knit and sew, but really do little work, whilst the men do less. They clean the wards, and occasionally tease Manilla rope or hair, and keep the garden and grounds in order. The chief obstacle to work is, that the patients cannot be trusted with tools, which might be used as lethal weapons.

The amusements provided are bagatelle, cards, dominoes, draughts, and bowls. A good supply of newspapers and periodicals is also allowed.

Once a year there is a grand new year's entertainment, when both sexes associate at a dance.

The airing courts consist of two small gravelled yards, one for each sex; and what is called "The Park," which is a grass lawn of 6 acres. This is used by males and females alternately, is nicely planted, has in it seats, flower gardens, and verandahs; a bowling green, tame birds, &c. It is surrounded by a high wall, but the ground falls rapidly, and there is an extensive view over the wall at the lower end.

The officers consist of Governor of the Prison, who visits the asylum four times a week, and receives a salary of £50 specially for the asylum; surgeon, who visits four times a week, and also gets £50; and superintendent, who is responsible for the good government of the lunatic wards—salary, £150. There are head attendants for each side, ordinary attendants, and a night watch, who are in the proportion of 1 to 5 females and 1 to 6 males. They are dressed as prison warders, and are subject to general prison regulations.

The diet scale for the patients is—

On four days of the week.		
Breakfast.	Dinner.	Supper.
8 oz. of wheaten bread, with ½ pint of tea.	6 oz. of meat, with 1½ oz. of cheese; and either 6 oz. of wheaten bread, and 1 lb. of potatoes, or 12 of wheaten bread.	The same as breakfast.
On two days of the week.		
6 oz. of oatmeal made into porridge, with ¾ pint of milk.	2 pints of barley broth, with 8 oz. of wheaten bread.	The same as breakfast.
On one day of the week.		
The same as on two, except that the barley broth is to be 1½ pint instead of two.		

Table-cloths are laid at meals, and the food is served on neat crockery. Knives are not allowed, the food being eaten with forks and spoons.

The weekly cost per inmate has not been calculated apart from the ordinary prison, from which clothes and food are supplied. The washing and cooking are all done in the prison.

Asylum for Insane Criminals, Auburn, New York State.—This is the only asylum for insane criminals in the United States. The patients are all of the convict class, sent from the state prisons; prisoners becoming insane in the district gaols are not admitted. The asylum contains at present men only, but preparations are being made to receive women, under a recent Act of the State Legislature. The total accommodation is for sixty-four, but by crowding, the number in the asylum is now eighty.

The asylum is situated close to the celebrated Auburn State Prison, and like it, is under the control of the Inspectors of State Prisons; but it has no other connection with it. Its officers do not hold appointments in the prison, and its commissariat is quite distinct.

The building consists of a centre, containing the dwelling-house of the superintendent, and the administrative offices, kitchens, and store rooms; and two wings, with small cross-pieces at the ends. It stands on a small plot of 6 acres, which is partly planted as airing grounds, but the major part of which is under cultivation as garden, in which all the vegetables required by the institution, except potatoes, are grown. About half-an-acre is boarded round and used specially as an exercising court, for the worst class of patients. The entire estate is surrounded by a high wall, except 2 acres which have lately been acquired, and in which only the more quiet of the patients are allowed to work. Contrary to the general arrangement of American asylums, the single corridor plan has been adopted.

The cubic space of the dormitories is 1,000 feet, and there are no associated rooms. The warming is done by steam pipes in the basement, over which the air passes and ascends to the wards through shafts opening near the ceiling of each room. The shafts for ventilation open near the floor, and pass in the walls to the roof; there is no machinery.

Gas is used for lighting every part. The windows are very large, and are in double-hung wooden sashes, the lower of which opens fully. Each window has strong iron bars on the outside; several have locked wire guards inside, and two have strong wooden shutters. The water supply comes from the prison wells, and is received in tanks in the roof.

The corridors are wide, and have large cheerful windows and wooden floors, but are simply whitewashed, and nothing in the shape of ornamentation is attempted. They are used as day-rooms, and are furnished with a few chairs, benches, tables, &c. In each corridor is a can containing cold water and a cup. For the four wards of which the asylum consists there are two dining-rooms, in which are plain wood tables and seats.

The dormitories have generally stone or brick floors. The walls are cemented and rubbed smooth, and the cement is washed and kept clean. The bedsteads are of wood; the beds of straw; and there is no other furniture in the dormitories. Opening from each ward are a bath-room, closet and lavatory, and an attendant's room, the window of which overlooks the corridor. Two attendants are accommodated in each room, which contains about 2,000 feet of cubic space.

The dinner-service is all crockery, and ordinary knives and forks are given to the majority of the patients.

The officers are, superintendent, who is a physician, and who performs also the duties of steward; assistant superintendent, who performs also all the clerical duties; and chaplain, who officiates once a week in a small chapel in the asylum.

The servants are, baker, cook, laundress, gardener, and some house-servants. The attendants number six only—one to thirteen patients. They receive wages of 20 dollars, or 83s. a month, with their board, and get every other evening as a holiday; the patients being locked in their rooms after 7 p.m. A night watchman patrols the building inside and out.

From the small number of wards the classification cannot be great. Three classes are made—convalescents, demented, and violent; all the patients being placed in three corridors during the day, so as to be under two attendants in each.

The labour done is chiefly gardening. Two patients assist the baker (all the bread is made in the house); two assist the cook; six work in laundry; one feeds the cow and horse belonging to superintendent; and one mends clothes, &c.

The amusements consist of cards, draughts, and dominoes, in the corridors; as well as nine-pins, which are small, and played at with india-rubber balls. Out of doors, skittles and ball are provided.

There are no associated amusements. The library is a small one; and since the beginning of the war no newspapers have been provided, as "the intelligence was too exciting." Before that time there was a fair newspaper supply.

The patients are all remarkably well dressed in grey cloth, all the materials being bought and made up in the house by a paid seamstress, who uses a machine for the greater part of the work.

The diet list is given below. The patients, as is the case in almost all American asylums and in the gaols, are unstinted as to quantity:—

DIETARY OF ASYLUM FOR INSANE CONVICTS, AUBURN, N. Y.

Breakfast.

Sunday .....Picked up fish, bread, and coffee.
Monday.....Warmed beans, bread, and coffee.
Tuesday.....Hashed meat, potatoes, brown bread, and coffee.
Wednesday .....Fried Indian pudding, pickd. fish, coffee, and potatoes.
Thursday .....Hash, brown bread, and coffee.
Friday .....Pork, with milk, gravy, boiled potatoes, brown bread, and coffee.
Saturday .....Fried pudding, stewed potatoes, and coffee.

Dinner.

Sunday .....Baked beans, brown bread, and pickles.
Monday.....Soup, brown bread, and pickles.
Tuesday.....Stew and brown bread.
Wednesday .....Corned beef, with vegetables and brown bread.
Thursday .....Bean soup, brown bread, and bread pudding.
Friday .....Fish and potatoes, brown bread, and pickles.
Saturday .....Corned beef, potatoes and cabbage, and bread.

Supper.

Sunday .....Bread and butter and tea.
Monday.....Bread and syrup and tea.
Tuesday.....Indian pudding, and syrup and tea.
Wednesday .....Bread and butter, and gingerbread and tea.
Thursday .....Bread and stewed apples and tea.
Friday .....Indian pudding, and syrup and tea.
Saturday .....Bread and stewed apples and tea.

Most of the refuse is sold, but the fat is picked out and used for making soap. The cost per week, including clothes, is 18s. 2d. per head.

Each patient has a warm bath once a week, three or four using the same water; and the linen is all changed weekly. There is no shower-bath in the asylum. Restraint is somewhat liberally used. When visited, three patients were wearing the muff; four, iron handcuffs with chains round the waist; three, wrist straps; one had on a muff, and was strapped into his chair in addition. Three were in seclusion: one was simply placed in his room for a few hours; one was fastened in a crib bedstead—a sort of cage fitting on and tightly strapped or locked to an ordinary bedstead, which prevents the patient sitting up in bed—and had on wrist straps in addition; the third, a dangerous homicide, was kept in permanent seclusion, with straps on his wrists, which were chained to the waist. The attendants are allowed to place the patients in seclusion or restraint, but are ordered to report it immediately after to the superintendent. Dr. Van Anden is of opinion that restraint is absolutely necessary in many cases, and points out that the irons and other forms of restraint have no bad moral effect, since every man has had them on before.

ASYLUMS FOR IDIOTS.

Institutions for the care and training of idiots and feeble-minded children have, since the undertaking of Guggenbuhl on the Abenberg in 1841, gradually sprung up in Europe and America. There are now special asylums for idiots at Mariaberg and Winterbach in Wurtemburg, at Ecksberg in Bavaria, Hubertusberg in Saxony, at Berlin, Vienna, Coblenz and the Hague; but it is in Great Britain and the United States that the care and treatment of the idiotic and feeble-minded has been most developed as a special study. The noble institutions which now exist in both countries for the special training of the feeble-minded, and the learned treatises which have been written by Dr. Seguin and by other authors, attest the interest which has been taken, and the knowledge which has been gained on this subject.

A large proportion of the idiotic and feeble-minded live with their friends in all countries, supported by them entirely or by payments from the parochial or local authorities. A certain number of the more violent and mischievous, as well as those afflicted with epilepsy, are to be found in most asylums; and in some of these institutions both at home and abroad, a complete separation of the insane and idiotic is made. At the Bicêtre and Salpetrière in France, at Guislain's Asylum Ghent, at Meerenberg, and at the Gloucester and other English asylums, the dormitories and day-rooms are distinct; and gymnasia, school-rooms, and special teachers have been provided for the physical and intellectual education of the idiotic.

The large majority of the idiot population of Great Britain are to be found residing with friends or in workhouses—in the former case either not legally acknowledged as of unsound mind, or under certificate and subject to the visitation once in three months of the parochial medical officer; and in the latter, usually accommodated in the ordinary wards of the poorhouse. A certain number, and these generally of the worst and most hopeless class, whose idiocy is complicated with severe epilepsy or some form of mental irritation, find a home in the wards of ordinary asylums. Here, the action of the state ceases, and it has been left to private philanthropy to erect and organize special institutions for the care of the idiot, where he may not only be fed, lodged, and clothed, provided with medical attendance, and kept in a state of cleanliness and comfort; but where in addition he may be trained and taught, his moral, mental, and physical powers improved; and his capacity for amusement and employment developed. These institutions, of which the one at Earlswood near Reigate is the largest and best known, now number five in England. They are situated at—

Star Cross, near Exeter,
Bath,
Lancaster,
Colchester,
Earlswood.

The first stone of an Idiot Asylum for the Four Northern Counties was laid by the Earl of Zetland in June, 1868, and the erection of another institution at Northampton, for the Midland Counties, is under contemplation. In Scotland, there are two, the Baldovan and Larbert Institutions.

In the United States, the Idiot Asylums,—or, to use the name which much better expresses their intention, the Schools for Feeble-minded Children,—are, as a rule, state institutions. There is one in the State of Massachusetts, at Boston; two in New York State, at Syracuse and Randal's Island; one in Pennsylvania, at Medea; and similar institutions have been recently established in Ohio, Connecticut, Kentucky, and Illinois. There is also a private school at Barre in Massachusetts.

All these, both in Great Britain and America, are chiefly and essentially educational establishments; the majority are entirely so, and are not intended for the permanent residence of the idiotic.

In the American institutions the age for admission is fixed at from 6 to 14, though special cases are admitted earlier or later; and the age for discharge is regulated entirely by the nature of the case, and the benefit which is derived from the course

of teaching pursued. The pupils are seldom retained beyond 18 or 19, and generally by that time have received all the benefit which the institution is capable of affording to them.

At the Western Counties Idiotic Asylum at Star Cross, near Exeter, and at the Bath Institution, the pupils are kept till the age of 15 only. At Earlswood, the first period of admission is for five years; but, subsequently, arrangements may be made for the permanent residence of the pupil.

From the following description of the Asylums at Syracuse, New York State, and at Earlswood, near Reigate, the general character and working of these and similar institutions may be gathered:—

Asylum for Idiots, Syracuse, New York State.—This institution was founded in 1851, under an Act of the Legislature, and is supported almost entirely by annual grants from the state.

The government is vested in a board of trustees appointed by the state, who manage the general and financial affairs of the institution, appoint the superintendent, and report annually to the Governor. It is much more an educational establishment than a hospital. The inmates are pupils, not patients; and though the superintendent is a physician, the greater part of his time is occupied in superintending their physical and mental education.

The number of pupils is 140, of whom 20 are paid for by friends, and the remainder by the state. The pay pupils are not wanted or encouraged, since all the room in the institution is required by the state. The payment varies from 210 to 250 dollars a year.

The state patients are chiefly from the lower middle class, and are not, as a rule, paupers. When a family is, perhaps, able to keep a child at home, and yet not able to pay for its board in the hospital, a certificate of indigence is required, and the patient admitted at the expense of the state. The state grants an annual appropriation, which covers all the expenses of the building, officers' salaries, and maintenance, at the rate of 210 dollars for each patient annually; this does not include clothes, which are paid for by the county to which the child belongs, at the rate of 30 dollars per inmate annually.

The building stands on a hill immediately outside the town of Syracuse, is of three stories with a basement, and built of stone. The lower story is used almost entirely as class-rooms; the two upper as dormitories; the basement serves for kitchen and offices; and under this are placed all the furnaces for heating in fire-proof chambers. The superintendent's and officers' rooms are in a central block of building which rises to four stories.

The building is surrounded by fine ornamental grounds, and has a farm attached to it. The amount of land belonging to the institution is 54 acres, and an additional 18 is rented. Of this total amount of 72 acres,—

57 are farm, garden, and orchard; and
15 are occupied by building and ornamental grounds.

The farm is cultivated by a farm-bailiff and one or two men (one a former pupil), and by the older of the pupils, ten or twelve of whom always reside in the farmer's house, dine with him and his wife, and do not come to the asylum except for lessons.

The farm stock consists of seven cows, five horses, and eighteen or twenty pigs.

The institution being mainly educational, only teachable idiots are taken; those insane, epileptic, or greatly deformed, are excluded. The general arrangements of the house are not remarkable. The heating is by hot air, which is considered by the superintendent as less satisfactory than steam. The ventilation is by shafts in the walls, the openings being in or near the ceilings. The water and gas are from the town, and the supply of the former is very defective, so much so, that reliance has been placed mainly on springs on the asylum estate, for some months; it is pumped from these to a reservoir on high ground near the house. Hydrants and hose are placed within the building, to serve in case of fire. The bed-rooms are all associated, holding from four to ten beds; and in each an attendant sleeps. They are ornamented with pictures and toys, and fitted with

ordinary windows. The basins, jugs, and other conveniences for washing, are placed in all the rooms. There is one closet for every ten persons in the institution, and a bath for about every fifteen; those for females are placed in the upper stories near the dormitories; but the boys have a large bath-room containing three baths, and a lavatory in the basement. The bedsteads are all iron; the beds either hair or straw, with a cotton layer at the top.

The patients dine in four rooms, in each of which are two or three tables, so that classification is made at meals, according to the mental status and behaviour of the patients. The better classes have table-cloths, the worse none. Most have knives, forks, and ordinary white crockery. The diet is good and varied. The meal hours are—breakfast, 7; lunch, 11; dinner, 1; supper, 5. The patients are all bodily as well as mentally weak; they require good diet and beer in the winter, and yet—from want of out-of-door air and fruit—get into a condition closely resembling scurvy. Their circulation is very feeble, 70 is almost a necessary temperature, and all cuts and wounds heal with extreme difficulty, and leave large marks. Nevertheless, cases requiring removal to a small special hospital connected with the institution, are not common.

The officers of the institution are—

Superintendent, who is supreme,—appointing servants, and nominating all officers;
Assistant Physician, who dines with the superintendent's family;
Matron, who is the mother of the house, and—as the superintendent thinks—the most important officer of the institution;
Steward;
Housekeeper;
5 Teachers.

The latter are young ladies of good education, and often good family; two or three are quite removed from the necessities of teaching, but do so from choice. They receive 300 dollars a year and their board. Each has a separate room. A horse is kept for them to ride and drive, and they have nothing whatever to do with the pupils, except in school-hours, which are from 9 to 12·30, with a short interval for lunch, and from 3 to 4·30. Their rate of pay is fixed at about that received by competent school teachers in the States. They stay a long time, and generally leave only on marriage. They are allowed to punish patients for inattention to lessons, but such punishment is extremely rare.

The remainder of the staff consists of attendants, male and female, in the proportion of 1 to every 10 or 12 patients. Some of the worst class require one attendant to four or five patients. The attendants have entire charge of the pupils, except during school hours. They attend them at meals, and sleep in the dormitories with them, but the school hours are a relaxation for them. They dine in a separate room. Punishment is not practised by them. They report misconduct to the superintendent, who inflicts corporal punishment with a cane, and gives warning and advice, as he sees fit. Dr. Wilbur, the superintendent believes himself to stand in *loco parentis*, and thinks some are best punished through their skins. Other punishments are, stopping dessert at dinner, &c.; but solitary confinement, as tempting to bad habits, is never employed.

There are, besides attendants, house-servants, who clean rooms and corridors on both sides of the house—female pupils assisting on their own side; three laundresses, who have two pupils to assist; cook; baker; three seamstresses; farmer, and out-door labourers.

All washing and bread-making is done in the institution. The material for clothes is bought and made up in the establishment.

The patients remain generally about seven years in the house, and as their residence is intended to fit them for use and life in the world, all teaching has this in view. It consists of two parts—1st, purely educational, and 2nd, practical,—both being so taught as to rouse in every way the patient's attention.

The boys are brought up chiefly to farm work, which Dr. Wilbur considers the most useful employment for idiots as a class. "An idiot ought to live in the country. His physical health requires it; and frequently his moral health too, since his power of

resisting temptation is small. Besides, too, at any trade he would rarely become so proficient as to earn good wages under an ordinary foreman, and it would necessitate his living in town." Dr. Wilbur tried shoe-making, mat-making, &c.; but as the boys were only kept for a few years, and could only work at a trade during the last two or three of these at the most, they did not become very proficient, and were not profitable to the institution.

The girls are chiefly educated for household work—sewing and knitting, cleaning rooms, washing plates and dishes, &c. Three assist in the laundry.

The special education is devoted to both mind and muscle. The latter is educated by handling and lifting things; by catching and throwing bags full of beans; by walking over and between the rounds of ladders specially made for the purpose, which teaches them to raise the feet; by climbing ladders also; and finally by a system of light gymnastics, at which some have become proficient. This is done under the care of a gymnast; and Miss Wilbur, the daughter of the superintendent, has a class who perform gymnastics to music. No very active or strong muscular efforts are attempted.

The mental education begins in the nursery (so called), where the attendants have entire charge of the patients; they are dressed and taught to dress themselves, and, as they progress, some of the lower instructions given in the first-class room are attempted. The difference between light and darkness, and colours, are also taught, or shown by means of shutters of peculiar construction.

The class rooms are 5 in number:—

In No. 1, or the lowest, the lessons are intended first to awaken the attention, and then to teach position, form, size, colour, and form and colour combined, making marks on a slate, and telling names of common objects. In this class many of the children are speechless; some say a few words; one repeats both the words and tune of a song, but, parrot-like, without at all understanding them.

In classes 2 and 3 diagrams in form and colour are shown. Form and colour being somewhat learnt, the lesson is continued into pattern and picture. The names of the things shown, are given and repeated by pupil. Words printed and written are shown and are named by the pupils; these are the conventional signs or representatives of the objects, and are used first instead of beginning with the alphabet. Curiously enough the pupils recognize the words when upside down as well as when placed properly, just as they would know a chair or any other object. Afterwards the composition of the word is shown by single letters, which, a word being given as a copy, they have to build up and put together for themselves. Language is learnt by pronouncing the names of the pictures and the words. It is at first very imperfect.

In class 4 lessons in articulation are given. The lessons in form, pattern, and colour are continued, and copies of more or less geometrical or other figures are set on a slate, and the art of writing is commenced. The drawing is carried from simple patterns on a slate to very pretty pencil sketches.

Class 5 is a large one. Here reading, writing, mental and ordinary arithmetic are taught, with geography, advanced drawing, &c. There is a cabinet of objects, and good representations of animals and different kinds of trees as object lessons. The reading is highly creditable. Sums are done in multiplication and fractions. Some of the drawings show both skill and taste, with considerable precision of eye and hand. One of the lessons in this room consists of spelling words. The letters are given mixed up, and they arrange them, and are themselves able to give others in return.

Singing is taught to the more advanced pupils. In the classes both sexes unite and are taught together, but, except at school and meal times, they are kept perfectly distinct. Each lesson lasts about half-an-hour, and the teachers frequently change classes, which is a great relief to them as also to pupils.

There is no Chaplain. The attendants take a few of the most advanced to church, and on Sunday there is a Sabbath school. Prayers are also taught them to say at night. As a rule, Dr. Wilbur objects to their learning anything by rote; he would have them think over each thing as they do it or say it.

The apparatus employed is by no means costly or large. In the nursery, to show light and darkness, are shutters which open in parts. A large square can be opened, or a ray of light let in of almost any shape by special openings. For colour, these openings are filled with pieces of coloured glass.

The first things used to excite and fix attention, are small wooden boxes or raised trays, with holes into which as a lesson iron pegs are placed; then wooden buttons or dice with a centre hole, and one plain and one convex surface; these are first threaded any way, then the plain surfaces facing each other. Position is taught by means of a wooden block with holes cut in it, into which pieces of wood fit, all the holes are of one shape and size, but the position is different. (See Appendix *F*, Fig. 12.)
For teaching size, a similar block is used with circular holes of varying size, and bits of wood to fit them. (See Appendix *F*, Fig. 13.)
For teaching form, a similar block with the holes and pieces of wood cut into different patterns. (See Appendix *F*, Fig. 14.)

For colour, cups and balls of five or six colours are used, and the pupil must place the ball in the cup of the same colour; for form and colour combined, coloured cards of bright colours and many shapes are arranged in patterns as a lesson.

In the more advanced rooms liberal use is made of chalk on slates fixed to the walls. Writing commences by the teacher making two dots : which the pupil is directed to join by a line thus ⁝, and this is at first so difficult to many that the dots must be edged in |:| so as to prevent straying. In the upper classes words printed on cards, a plentiful supply of single letters, pictures, &c., are used; and finally writing and sketching on books, slates, &c. Counting is taught by means of balls on wires. Numbers are the last and most difficult thing to teach—their relation to each other being a great puzzle.

Asylum for Idiots, Earlswood, Redhill.—This asylum—the existence of which is mainly owing to the exertions of Dr. Andrew Reed—differs in many important particulars from the ordinary institutions for the care and treatment of the insane. In its main features it is a school for the education of idiot children; but it is not a school only, since some of its inmates are permanent residents.

It is situated on a clay soil on a slight elevation. The building is of stone, of the H form, and consists of three stories along the front, and two in other parts; it fronts the south, and commands a fair view of more than usually well-wooded farm land, chiefly the property of, and cultivated by, the patients in the institution. The number of these is 420, of whom about 300 are males, and the remainder females. The disproportion in numbers is accounted for to some extent, by the fact that girls, when idiots, are frequently kept at home, and are found useful in minor household work, when boys are quite unable to obtain employment. The asylum estate consists of 140 acres: the house and office stand on 12; 17 are laid out as pleasure ground, play ground, and garden; 50 are pasture, and 47 under cultivation. The distance from London is 25 miles. The small towns of Redhill and Reigate are each about 2 miles off. The inmates consist of two classes: those paid for by their friends, according to a scale regulated by the governing body (the highest rate of payment being £100 per annum), and those elected by the votes of subscribers; and the accommodation provided is in accordance with the scale of payment. Single rooms are only three or four in number, and are appropriated to paying patients; the remainder of the patients sleep in associated dormitories, containing from seven to twenty beds. The percentage of hospital accommodation is one-twentieth, and the hospital is at the top of the building in the third story, where the windows are small and the roof low. The cubic space is 1,000 feet in the single, and 700 or 800 in the associated rooms for each patient. The warming is effected by open fires in the corridors, but chiefly by stoves placed in the basement story, the pipes from which are of iron and pass up the stair-cases to the top of the building. Coke is burned, and the heat given out is sufficient to warm a very large area. The stoves are made by Kinnard & Co., 67 Upper Thames-street, and are called Gurney's Patent. The ventilation is entirely natural. The lighting throughout is by gas, made on the premises at a much cheaper rate than is supplied by the gas company near. The windows open like ordinary

house windows, and the panes are very large. The water supply is about 16,000 gallons a day; that for drinking is drawn from a well in the centre of building; that for washing is obtained from a small brook, received into reservoirs and filtered, and then pumped to tanks at the top of the building. For the laundry, rain water is collected from the buildings. L'Extincteur, fire hydrants, and engines, are the precautions against fire. The drainage is easy, owing to the situation of the asylum, the sewage all runs into a large tank where the sediment is deposited; what is necessary for the farm is carried over it by means of pipes, and the remainder is allowed to escape. There is a plunge-bath in the basement story, and bath-rooms throughout the house. Lavatories are only placed in the workshops; ordinary basins being used in all the dormitories. Most of the washing is done by steam machinery; centrifugal machines are used for wringing, and the drying is done in hot closets. The water-closets in the main building are so fitted that water flows on rising from the seat. In the workshop block is one on a new principle; it consists of a large iron trough pierced for six seats, and kept half full of water; by means of a cock this can be emptied and flushed as requisite, and it appears to be very effective. It is by Macfarlane, Saracen Works, Glasgow. The corridors are merely passages to the dormitories. The walls are cemented, painted, and ornamented with pictures; fern cases stand in the windows, and there is cocoa-nut matting on the floor. One large room is used as dining-room, amusement-room, and chapel. All the patients, who can behave well, dine together; those, who cannot, are kept in smaller dining rooms. The boys occupy one side of the dining-room, and the girls the other. The dinner is served with nicety and decorum, and grace is sung by the patients. Ordinary crockery and knives and forks are allowed to all. No smoking by the patients is allowed. Most of the nurses and attendants sleep in the associated dormitories; and over the laundry are large associated dormitories for the laundry women, servants, &c. They all dine in the central hall after the patients; but males and females have each a room for sitting in at night. No billiard-room or other amusements are provided for the attendants; but those who like, can subscribe a penny a week to the library fund, and so receive books and papers, the chief cost of which are defrayed by the institution. There is a large play-ground and gymnasium on each side, and the rooms in each wing employed as school-rooms, are play-rooms out of school hours. The play-grounds have some grass patches, but no flower beds. The visitors' rooms are large and comfortably furnished. The officers' houses all form part of the building.

The superintendent is supreme in the institution; he hires and dismisses servants, merely reporting that he has done so to the committee, and manages the institution entirely. The officers are appointed by the committee, at his recommendation. There is an assistant medical officer, steward, farm bailiff, clerk, schoolmaster and staff, and workmen to superintend the various trades carried on; on the female side are matron, governess and staff. There are two head attendants—one for each side. The ordinary attendants are all fairly educated, and are taken from 21 to 30 years of age. They are punished for minor offences by fines, which range from 6d. to 2s. 6d., and are taken from a gratuity given to each attendant, after about six months service, in addition to salary. They can leave the institution from 8 to 10 every evening, except a certain number detained on duty, and are allowed fifteen days a year, which they may take all together, or as separate days. The women wear a print dress, white cap, collars, and cuffs; the men a plain livery, with jackets instead of coats. No keys are carried. There are two night attendants on each side, whose rounds are checked by Dent's Clock. The number of attendants to patients varies in the different divisions. The infants have one nurse to six; the girls average one to twelve; the boys one to fifteen. The private cases have either one to one (first class) or one to six (second class). No uniform dress is provided for the patients, the majority of whom are dressed by their friends. The clothes for those dressed by the institution are made in it, as are the shoes also.

The cost of construction per inmate was £90, exclusive of the cost of land.

The institution is entirely supported by public subscriptions and donations, and the payments made for pupils by their friends; and is managed by a committee of the subscribers.

The following extracts from the reports of the schoolmaster and mistress in the general report of the institution for 1866, will show the nature of the education which the pupils receive :—

"The average number of pupils attending from the 1st of April, 1865, to the 31st March, 1866, has been—

Whole time (both morning and afternoon).....	19
Half time (morning one week, afternoon the next) ...	130
Occasionally (two half days each week)	2
Average total number	151

"The subjects taught have been reading, writing, arithmetic, writing from dictation, shopkeeping, drawing, telling the time, collective object lessons, drilling, speaking, dressing; religious truths and moral sentiments are brought before them as opportunities occur. The duration of the lessons on each subject varies from half an hour to three-quarters. Three of these lessons, differing as much as possible in their nature, are given in each class, both in the morning and afternoon school. Between each of these lessons the pupils are collected in one room, and sing exercises, combining information, such as the multiplication and money tables, &c., and, at the same time, move the head, arms, or legs, to the time of the music. This combination of singing and physical and mental exercise is found very beneficial in awakening their attention, and promoting a cheerful attention to the other subjects.

"Of the 144 pupils now in school :—

15 can read with tolerable fluency in the Gospel of St. John,
11 can read slowly in ditto,
18 can read slowly from lesson boards,
17 know all the letters,
43 know a few letters,
40 know none of the letters.

144

"*Writing*—

21 can write sentences in copy-books,
23 can write words in copy-books,
14 can write easy words on the slate,
59 can make strokes or the letter O on the slate,
27 can only scribble.

144

"*Arithmetic*—This is mostly taught with the assistance of the black-board, the tables being learned as a singing lesson. The counting is taught with the assistance of beads on wire :—

11 can do sums individually,
22 can do addition collectively from black board, and count above 100,
10 can count above 50,
22 can count above 25,
48 can count a little,
31 cannot count at all.

144

"*Shop Lesson*—This lesson, originated by our superintendent, Dr. Down, and explained by him in the Report for 1862, although considered play by the pupils, is very instructive. A shop, supplied with groceries, stationery, crockery, toys, &c., also counter, scales, weights, and money, is fitted up in the schoolroom. The pupils are taught to purchase articles in ordinary use. They act as shopkeeper in turn, weighing out articles required, and endeavouring to calculate the price, which is then counted out and paid for by the pupil acting as purchaser. The following statement will give some idea of the results:—

28 know all the coins and weights, and calculate the price a little,
27 know all the coins, and two or three weights,
15 know a few coins and weights,
38 know two or three coins,
36 know none.

144

"*Telling the Time*—

8 can tell the time to a minute,
7 can tell the hours, quarters, and some the five minutes,
30 can tell some of the hours,
99 not at all.

144

"The Bible class on the Sunday morning, and the Sunday evening service, continue to produce good results; the answers to questions put on the above occasions often showing that the pupils take an interest in what is brought before them,—that they have a tolerable knowledge of Bible history, and some little idea of the saving truths of Christianity."

"The present number is 130 (102 girls and 28 boys)—

Of these, 60 attend the Sunday morning Bible class,
60 attend the Sunday evening lecture, and
54 attend regularly morning and evening prayers,
12 girls, who attend school in the afternoon, are engaged in the morning in domestic duties,
5 in the workroom all day,
3 in the wardrobes,
2 in the kitchen.

"The following is a statement of the capabilities of the children:—

"*Reading and Spelling*—

13 can read the Bible,
7 can read simple lessons,
17 can read words of three letters,
14 can point out the letters,
5 repeat them when told,
9 make a sound, and
33 are dumb.

"*Writing*—

12 write text, round, and small hand very fairly,
5 all round hand,
9 words of one syllable,
20 letters on their slates,
30 make strokes and pothooks.

Of the above, 7 write letters once a month, and take great delight in doing so.

"*Arithmetic*—

1 in compound addition,
1 in compound long division,
1 in multiplication (simple),
1 in addition (simple),
2 can say to six times in the tables,
2 can say the whole of the tables,
5 can count to 100,
8 can count to 40,
3 can count to 24,
9 can count to 6.

"*Plain Work*—

30 can work well,
14 hem and sew very fairly,
9 fairly,
12 indifferently,
9 can only thread their needles,
4 have learnt bed-making as lessons in school, and
3 scrubbing."

The education is however not limited to the subjects here indicated; the whole routine of the institution is educational. The greatest attention is paid to physical education by gymnastics. Attention is constantly given to behaviour at table, checking bad propensities, and inculcating habits of propriety; and the entire system of amusement and occupation are also educational.

The number of patients employed in industrial pursuits is as follows:—

Males.

Carpenters	30
Shoemakers	15
Mat-weavers and helpers in mat-shops W	80
Basket maker	1
Tailors	28
Farm and garden	16
Plumber	1
Baker	1
Household work	26
Laundry	8
	189

Females.

Household work	21
Needlework	9
Repairing clothes	2
Assistant nurses	2
	34

From this it will be seen that, though a certain number are employed in agricultural operations, the majority are taught trades. The greater part of the articles made are used in the institution, but mats and a few other things are sold. It is proposed to add brush-making, printing, and upholstering, to the trades taught and practised in the institution, and additional workshops have already been erected.

Children's games of all kinds are encouraged, and associated amusements of various kinds—pantomimes, charades, "Punch and Judy" shows—are given weekly. Music is largely employed at the associated amusements, and the attendants form a really good band; singing is taught to all the more advanced pupils.

Parties are formed for visiting places of amusement. In 1866, 150 of the patients spent a day at the Crystal Palace, and every year there is an annual fete at the asylum, when the grounds of the institution are made gay with tents and flags, amusements of many kinds are provided, and the relatives of the patients are invited to witness, and add to, their happiness.

The following is the dietary for the patients :—

	Breakfast.	*Dinner.*	*Tea.*
Ordinary diet ...	6 ozs. bread. $\frac{1}{3}$ oz. butter. $\frac{1}{2}$ pt. cocoa.	4 ozs. cooked meat. 8 ozs. potatoes. 2 ozs. green vegetables. 6 ozs. pudding.	6 ozs. bread. $\frac{1}{3}$ oz. butter. $\frac{1}{2}$ pt. milk and water.
Full diet	8 ozs. bread. $\frac{1}{2}$ oz. butter. $\frac{3}{4}$ pt. cocoa.	5 ozs. cooked meat. 8 ozs. potatoes. 2 ozs. green vegetables. 8 ozs. pudding.	8 ozs. bread. $\frac{1}{2}$ oz. butter. $\frac{3}{4}$ pt. milk and water.
Middle diet	5 ozs. bread. $\frac{1}{3}$ oz. butter. $\frac{1}{2}$ pt. cocoa.	3 ozs. cooked meat. 6 ozs. potatoes. 1 oz. green vegetables. 4 ozs. pudding.	5 ozs. bread. $\frac{1}{3}$ oz. butter. $\frac{1}{2}$ pt. milk and water.
Milk diet	4 ozs. bread. $\frac{1}{2}$ pt. milk.	4 ozs. bread. $\frac{1}{2}$ pt. milk.	4 ozs. bread. $\frac{1}{2}$ pt. milk.

The benefits to be derived, even in cases apparently hopeless, from persevering endeavours to develop the dormant physical and intellectual powers, are now so fully established that any argument upon the subject would be superfluous. How abundantly successful such endeavours have been in the institutions of Great Britain and America—how fully all time, all care, and all money, which have been spent in the education of the idiot have been repaid—how fully the position which has been taken upon this subject is justified, may be gathered from the various reports of these institutions. Many entering them in a state of almost complete idiocy have gone out to do useful work in the world—cleanly, decorous, and industrious. The large mass of the inmates have been vastly improved; and the number who have been found unteachable and unimprovable is small.

Some difference of opinion exists as to the form of occupation which it is advisable to teach to boys in idiot schools; the main object being to enable them to earn a living when out of the asylum.

Dr. Wilbur, of the New York State Asylum, at Syracuse, thinks ordinary agricultural occupation preferable, because it is easily taught; is best in a sanitary point of view; and keeps the idiot from the temptations of a town, in which it is almost necessary he should live if he is to maintain himself by means of a trade.

Dr. Howe, of the School for Feeble Minded Children at Boston, who is President also of the Massachusetts Board of State Charities, objects altogether to field work, because of its variety, and because idiots employed at it require more or less constant supervision. He considers that the occupation should be as simple and mechanical in its character as possible; and that coir plaiting, mat and broom-making, are preferable to field work. At Earlswood the majority are employed in the various workshops, and a few only on the farm; the cases are specially selected by the superintendent for each kind of labour; and as the patients generally stay a longer time at Earlswood than in the American institutions, they become more proficient in the various trades which are taught to them.

ASYLUMS FOR INEBRIATES.

By an Act passed in 1866, to amend the Acts relating to lunacy in Scotland, it is made lawful "for the superintendent of any asylum, with the previous assent in writing of one of the Commissioners in Lunacy (which assent shall not be given without written application by the patient), to entertain and keep in such asylum, as a boarder, any person who is desirous of submitting himself to treatment, but whose mental condition is not such as to render it legal to grant a certificate of insanity in his case."

Advantage is taken of this Act for the admission, cure, and treatment of dipsomaniacs in the ordinary asylums. But the patients are found to submit very badly to the ordinary discipline of an asylum, and their admission is, as a rule, much objected to by the superintendents. A special retreat for the intemperate is attached to the House of Refuge in Edinburgh.

In England, the Commissioners in Lunacy "having reason to know that there were many persons not insane, who, being conscious of want of power of self-control, or an addiction to intemperate habits, or fearing an attack or a recurrence of mental malady, and being free agents in all respects, were desirous of residing as voluntary boarders in an institution for the insane, with a view to mental treatment and supervision," consulted counsel on this subject in 1863, and were advised that there was nothing in the statutes to prevent the admission of such persons as voluntary boarders in the registered lunatic hospitals. Since that date, some few such patients have been received into the hospitals for the insane. The law forbids such patients to be received into licensed houses, unless they have previously been the inmates of some asylum or licensed house, and under certificate as insane.

Dipsomania, or methylomania, as a form of mental disease, though thoroughly recognized by physicians, has not yet been practically discriminated by the public in England or the Continent of Europe, from "what may be termed a mere physiological condition, in which the human animal chooses to indulge in alcoholic beverages to excess." But it is otherwise in America, where the Asylums for Inebriates at Binghampton, New York State, and at Medea in Pennsylvania, and the Washingtonian Home, Boston, attest the full recognition of this condition as a disease.

The New York State Asylum for Inebriates, Binghampton, was first established about nine years ago by a number of philanthropic gentlemen, and has had a somewhat chequered history.

A charter was granted by the state, a number of trustees appointed, a large amount of money subscribed, and a grant voted by the Legislature. Subsequently one-tenth of the amount derived from the sums paid for licenses to sell spirituous liquors was given by the state for the benefit of the institution for a term of ten years. A Dr. Turner was appointed superintendent, and, under his immediate directions, a very handsome perpendicular Gothic building was erected, capable of holding 100 patients. Patients were received, and, during four or five years, a series of reports was issued by the trustees, in which the condition of the institution was represented as extremely flourishing, and its general fittings and accommodation of an almost palatial description.

The superintendent, in these reports, described at length his many qualifications for the office which he held; stated that he had dissected 342 bodies of people who had died from the effects of intemperance; had made *post mortem* examinations of some thousands of others; had treated a prodigious number of cases of *delirium tremens;* and had travelled over almost innumerable miles by steam-boat and railway, as well as on foot, to gather information on the subject of the treatment of the inebriate. The numbers of applications for admission to the asylum were stated to be from 2,000 to 3,000 annually; and the size and number of the rooms for patients and for officers, as well as the fittings of kitchen and offices, and the means of heating and ventilation, were minutely described.

Scandals of various kinds were by degrees heard of in connection with the institution, and such information regarding its general management reached the public ear as to destroy all confidence. A fire at this time completely gutted one wing of the building, and evidence was forthcoming which induced the trustees to dismiss the superintendent and prosecute him on a charge of arson. Of this he was acquitted; but an examination of the system of management showed every species of abuse. It was found to be extremely doubtful if the superintendent had ever possessed a medical degree; and an examination of the building showed that the descriptions in the report of the superintendent had been the purest fiction. There was a handsome house and a gigantic conservatory, both of which looked well from a railway passing near, but the latter was quite empty even of fittings; and many of the rooms, the dimensions of which had been minutely described in the reports—the offices, warming and ventilating

apparatus absolutely did not exist. The establishment was, in fact, in some respects almost as mythical as the City of Eden.*

After this exposure, the State Legislature threatened to withdraw the grant and extinguish the institution. It was saved by the exertions of its friends, closed for some months, and re-opened under its present management; and although it had to fight its way against a bad reputation, it is succeeding, and promises to be a very useful institution. The building stands on a bold hill, near the Susquehanna River, and overlooks the large valley and thriving town of Binghampton. It now contains fifty-six patients, all males, accommodated in separate rooms. The rooms are all comfortably furnished, and are arranged on opposite sides of the four corridors, which form the one wing of the institution now in use. The centre is occupied by the superintendent's quarters and the administrative offices; and the other wing, which was burnt, has not yet been repaired. Gas and water are laid on to each room, and there is a well-furnished drawing-room for general use, a large common dining-hall, a billiard-room with three tables, debating and amusement room, chapel, library and reading-room, gymnasium, skittle-alleys, &c. Each corridor has in it bath-rooms, closets, &c.

Of the fifty-six patients, six have been admitted by the trustees free of payment, in accordance with the rules of the institution, which provide that "any inebriate having a permanent home within the state whose circumstances render it necessary, may be admitted to a free bed at the discretion of the committee of management. The applicant or his friends giving satisfactory proof of the inability of the applicant or of his family to remunerate the institution for his support during his stay." The remainder pay sums varying from 5 to 20 dollars a week, the average sum being 12 dollars. The payment varies somewhat with the accommodation provided, and the committee sometimes take into consideration the circumstances of the patients in fixing the rate. All these patients are voluntarily in the asylum, and are not under lunacy certificate. The majority are young men, few being over 35 years of age. In 1865 the State Legislature passed an Act for the better regulation and discipline of the New York State Inebriate Asylum, which provides as follows:—"Any Justice of the Supreme Court, or the County Judge of the county in which any inebriate may reside, shall have power to commit such inebriate to the New York State Inebriate Asylum, upon the production and filling of an affidavit or affidavits, by two respectable practising physicians and two respectable citizens, freeholders of such county, to the effect that such inebriate is lost to self-control, unable from such inebriation to attend to business, or is thereby dangerous to remain at large. But such commitment shall be only until the examination now provided by law shall have been held and in no case for a longer period than one year."—But there were no "committed" patients in the asylum when visited. The mass of the patients are not insane; a few, however, are more or less mentally unsound, and some have epileptiform fits.

The superintendent reports most favourably of their general good behaviour, and of their endeavours to assist in their rescue from the degrading thraldom under which they have fallen. A few have broken all rules, and have either left or been discharged from the institution; but the majority stay for such times as are recommended by the superintendent, and submit to all the rules of the place. The chief of these rules are total abstinence from intoxicating liquors, and confinement to the grounds of the institution.

There are no walls to these grounds, and the patients are placed on their parole in both these respects. At first they are expected to remain entirely in the asylum grounds, but after a residence of some months receive permission to visit the town occasionally. The institution is, in many respects, like a good American hotel, con-

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* "Hey day," said Martin, as his eye rested on a great plan which occupied one whole side of the office. "Hey day, what's that?"

"That's Eden," said Scadder, picking his teeth with a sort of young bayonet that flew out of his knife when he touched a spring.

"Why I had no idea it was a city."

"Hadn't you? Oh, it is a city." A flourishing city too! An architectural city!

There were banks, churches, cathedrals, market places, factories, hotels, stores, mansions, wharves, an exchange, a theatre, public buildings of all kinds down to the office of the *Eden Stinger*, a daily journal, all faithfully depicted on the plan before them.—*Martin Chuzzlewit:* By Charles Dickens.

ducted on temperance principles. The patients dine in the common dining-room, at a number of small tables. The superintendent and his family take a separate table in the same room. The staff of servants is just such as would be required in a good hotel, with the addition of two "wardsmen," who have rooms in the corridors, and are entrusted with the special care and general supervision of the patients, attending to them when sick or requiring medical treatment.

The medical treatment, which as a rule is only necessary on the admission of the patient, seems to consist in administering soups, broths, and good diet with such sedatives as may be necessary. Opiates are very little used, and when employed are given by subcutaneous injection. Digitalis and conium are seldom or never employed, and the main reliance for sedative purposes is placed on bromide of potassium, which is administered in doses of from 30 to 60 grains, in cases of delirium tremens and nervous excitement consequent on the excessive use of alcohol. So closely is the principle of total abstinence carried out, that no wine or spirit is allowed even as a part of medical treatment, and the watery extracts and infusions of drugs are given instead of tinctures. After the nervous excitement has subsided, reliance is placed on good diet. Milk is much used, tea is drank at each meal, and there is always an abundant supply of iced water. The general dietary, like that in use in America, comprises more saccharine and starchy materials than the ordinary diet of English people.

The remainder of the treatment consists in carrying out the routine of a well-ordered household, making the asylum as pleasant a residence as possible, and exciting the inmates to mental and bodily activity. Prayers are read morning and evening, and there is a complete religious service on Sunday. The amusements consist of billiards, cards, chess, draughts, and music within doors, and skating, boating, skittles, and gymnastics. Gardening is encouraged, and some of the patients thus occupy themselves. The evenings are devoted to temperance meetings at which "experiences" are related, and to literary work. Essays on various subjects are read and form the subject of discussion, and recitation is practised. The library is a good one, and the supply of newspapers and periodicals abundant.

Smoking and chewing tobacco are allowed, though discouraged as much as possible.

The officers of the institution are the superintendent (who is a physician), steward, housekeeper, clerk, and chaplain.

The asylum estate consists of 500 acres—300 of these form a fine farm. Twenty cows, besides sheep, pigs, and horses are kept.

A number of patients have been discharged, under the present management, well, and apparently weaned from their vicious propensities, to do their work in the world. Some few have come back again, having relapsed into a state of more or less constant inebriety; but no statistics have as yet been published.

The following extract is from the report of the Superintendent of the Washingtonian Home, an institution for inebriates, capable of containing thirty-five patients, at Boston, Massachusetts:—

"Much care has been bestowed upon the following tables, and, I am well satisfied they are nearly correct. Of course, a part of the statements must involve mere conjecture, at least, as far as the standing of the patients who have left the "Home" is concerned. Yet my knowledge of their standing is quite extensive, and the annexed statement is based upon that knowledge.

There have been admitted to the institution during the year ending December 31, 1865	270
Returned second time	26
Returned third time	10
Returned fourth time	8
Returned fifth time	4
Natives of Massachusetts	149
Of other States	74
Of foreign countries	47
Residents of Massachusetts at time of admission	220

Of other States	39
Of foreign Countries	11
Residents of Boston	132
Of other parts of the State	127
There are now doing well and regarded as reformed, of whom I have certain knowledge, the number of	184
There are greatly improved, with the hope of ultimate cure	42
I have no information from	33
The number I regard as incurable, and not fit to be at large	10
The number of married men	134
The number of single men	136
Average number of days which each patient has remained in the institution	24
Average cost of sustaining each patient while at the Home	$36 68
Whole number of paying patients	124
Whole number of non-paying patients	146

Of those admitted there have been—

Merchants	44
Clerks	55
Lawyers	8
Physicians	2
Clergyman	1

Balance "comprising artists, mechanics, and one or more from almost every trade and calling, from the learned and scientific professions to the common day labourer."

Reception-houses.

In England, the poorhouses of the various parishes are the only "reception-houses" for the indigent insane; and for those in better worldly circumstances, no provision of this kind is made—the accessibility of asylums of one kind or another rendering it almost unnecessary. In the United States, "reception-houses" at one time existed in connection with most of the large gaols, and were intended for the temporary accommodation of lunatics waiting transport to the distant State Asylums. They, in course of time however, degenerated into small asylums of the worst type, in which patients were kept for indefinite periods; and have now been almost universally abolished, or else enlarged, modified, and used as asylums for the more chronic classes of the insane. The poorhouses now serve for the temporary accommodation of all insane on their passage to an asylum.

The Belgian Lunacy Law distinctly directs that the authorities in every district shall provide a place of lodgment for the insane waiting removal to asylums, either in the hospitals or *hospices* of the locality, or in some other convenient place; and it expressly forbids their temporary accommodation in prisons, or their association with criminals.

These provisional asylums or reception-houses are placed under strict regulation, and the sojourn of the patients in them is limited to the time necessary for their repose when travelling to, or for the carrying out of the formalities which are necessary before the patient is placed in, the asylum for which he is destined; and they are intended for the benefit of people in good circumstances as well as for the indigent, but the former are charged with the expenses which their stay occasions.

In France and other countries, many of the insane reach the asylums through the hands of the police, and are temporarily confined in gaol; but, in the Department of the Seine, a reception-house forms part of the excellent scheme of provision for the insane which the authorities of the department have organized and placed under the general direction of M. Gerard de Cailleux.

This reception-house is within the boundary wall of, and is attached to, the New Asylum of St. Anne. It is provided for by the same Commissariat, and the Chaplain of St. Anne's visits such patients as need his services, but the medical staff is distinct, and consists of two physicians, whose status and emoluments correspond with those of the junior physicians in French asylums.

The building—for a plan of which, see Appendix *G*, No. 8—consists of a central part and two wings. In the centre are rooms for the physicians and their servants, as well as the chief attendants; and at the back, cells for the isolation of patients—two for each sex. The wings, which consist of two stories (except at the extreme end of each, where a small third story contains a small two-bedded room for patients who are admitted with infectious diseases) contain each the necessary rooms for twenty patients and their attendants. These rooms are in five divisions, one of which is the infirmary. Each division consists of a day-room on the ground floor, and sleeping accommodation above, for four patients. Each day-room has attached to it a small airing court, which is planted and turfed, and which has the lower wall sunk in a ha-ha, so as to permit a view of the kitchen-garden and houses beyond.

The day-room of the infirmary division is used as a consulting-room by the medical officers; the patients are all seen separately every morning, and notes taken of each case.

The dormitories have, as a rule, four beds, but one is divided into two single and one double-bedded room, each of which is overlooked by a window from the attendants' room. The entire establishment—which is known as the "Bureau d'Admission"—is comfortably furnished, and has all the accessories of a small asylum.

Each of the two rooms for isolation contains about 1,200 cubic feet, and has a small garden opening from it. One room is cemented, the other panelled. One physician takes charge of the patients of each sex, and is assisted by a chief attendant, seven day, and one night attendant—giving the large number of eight day attendants for a maximum of twenty-four patients.

All the insane of the Department of the Seine, who come under the cognizance of the public authorities, are brought to the reception-house from gaols, hospitals, and private residences; and after a period of observation—which is fixed at three days, but which may be shortened or prolonged at the discretion of the Director of Asylums—are sent to the asylum which is considered to be most fitted for them. If the case is an acute one, it is sent to St. Anne's; if the patient is likely to be benefited by agricultural work and country air, to Ville Evrard or Vaucluse; if old, idiotic, or epileptic, to the Bicêtre or Salpetrière. If, on examination, the case is one of delirium tremens, it is usually sent at once to one of the general hospitals; and in cases of a medico-legal character, or of supposed malingering from gaols or the public services, the patients are retained under observation till a satisfactory diagnosis is established. The reception-house is for temporary residence only—for diagnosis and classification, and not for treatment; and no patients now enter any of the public asylums of the department except through it. The number of admissions is from eight to ten daily.

Lunacy Law, and Rules for Asylum Government.

An examination of the laws relating to the insane in different countries does not come within the scope of this Report. In compliance with the instructions furnished by the Colonial Secretary, copies of "recent and important Statutes, State Papers, and Department Reports," have been procured, as well as Reports, Rules, and Regulations, of the various asylums visited; and these materials will serve as guides in framing Amendments to the present Lunacy Laws of the Colony, and Rules and Regulations for the Internal Government of the Asylums.

SUGGESTIONS.

"Every day adds conviction to the impression that the less the insane are treated as exceptional beings, the better it is both for their interests and for those who superintend them. In other words, the grand object to be kept in view when providing for the accommodation of the insanc, is to assimilate their condition and the circumstances surrounding them as closely as possible to those of ordinary life."—Dr. Arlidge : *On the State of Lunacy.*

THE moral and material advantages which follow the system of provision for the insane in private dwellings are undoubted. One-third of the insane population are thus provided for in Scotland, one-fifth in Belgium, and one-sixth in England—with, in the majority of cases, increased comfort and happiness to the patients themselves, and at a diminished cost to the State; but such a system is only possible in an old and settled country. It is necessary that population should so increase as not only to form aggregate bodies, towns, and villages, but to form a united, related, fixed, and settled people, and that the masses shall have received a certain education on lunatic matters, by public papers, and by the existence of well-conducted asylums, before the separate system is adopted. An attempt to place any large number of the insane in private dwellings must necessarily fail in a new Country, Colony, or State. Neither the Belgium system nor the Scotch is possible in New South Wales at present; but the advantages of these should be ever kept in view, and the whole asylum organization should tend towards the development of such systems in the maturer age of the Colony. No effort should be spared to educate the public mind on the subject of insanity, by providing such asylums as are necessary for the care and treatment of the insane, built and organized after the most approved models in older countries—by throwing them freely open to the inspection of the public, and by a publication of all papers and reports concerning them; and every effort should be made to induce families to receive back again their insane members,—who have passed into a stage of chronic and incurable insanity, and who are harmless and inoffensive,—by appeals to their feelings of sympathy and of kindred, and by pecuniary assistance where their circumstances render such assistance desirable. The first committal to an asylum was, in some cases, asked for with pain, and only because the straitened means of the family absolutely demanded it; and when skill, and learning, and care, within the asylum, have done their all, and science is at fault, there is no reason why the patient should not return to his home, where he can be fed, lodged, clothed, and watched over, by those near and dear to him, provided an allowance for his support is made to his family, equal to, or even smaller than, that which he costs in the asylum itself. By this means, relief would be given to the asylums, and comfort to the patient and his friends, whilst, at the same time, the unity and integrity of families, which are threatened by poverty and the misfortune of one of their number, may be preserved, and one step taken in the education of the people in this matter of insanity, concerning which the profoundest ignorance—the greatest misapprehension, and the grossest prejudices exist. In all cases in which the insane are taken care of by their friends, some supervision should be maintained, and at least a quarterly visit paid by a medical practitioner, who should report on the condition of the patient, and the provisions for his good treatment, to the central authority.

The Close Asylum, however, has been, in long years past, and must be in the years yet to come, the chief method in which the insane of all countries, in the acute stages of their malady, are provided for. This method has long been employed in this Colony, and, as affording on the whole the best, safest, and most satisfactory results, will doubtless be continued; but, it is to be hoped, in asylum construction, every modern improvement, and, in asylum organization, every measure calculated to assist in the restoration of the patients, will be adopted. That "hospitals for the treatment of diseased brains, and not cemeteries for the burial of disordered intellect," will be erected

and organized, and that the Close Asylum, instead of standing alone, will be combined with, and supplemented by, some modification of the Farm Asylum and the system of accommodation in private dwellings.

A certain number of the insane might be lodged in the houses on the Asylum Estate provided for the artisans and workmen of the institution, or in separate cottages, which may be under less marked routine than that necessary in an asylum; and this would form the germ of a system of provision for the insane in private dwellings, which might be extended as the colony increased in population, and the people became more settled and united.

Before proceeding to offer suggestions for the establishment of an Asylum System, and for the construction and management of Asylums in New South Wales, it may be well to examine the evidence given before, and the suggestions which have been made by, the various Committees and Boards appointed by the Government to inquire into the questions of Asylum construction and management in this Colony; for, in the various papers on this subject, which have, from time to time, been published by the Government of New South Wales, is to be found a mass of information and of valuable suggestion.

In 1855 a Commission of Inquiry on the Lunatic Asylums of New South Wales was appointed. The Members of the Commission were—Drs. Macfarlane and M'Ewan, and Messrs. Nathan, Murray, and Kemp. A mass of valuable evidence was collected, and a comprehensive report made, in which the condition of the asylums was minutely described. The inadequate means placed at the disposal of the superintendent, the want of accommodation and appliances, owing to the inherent defects of the building, the impossibility of proper classification, and the absence of all provision for healthy employment or recreation at Tarban Creek, were fully pointed out; whilst the general arrangements at the Parramatta Asylum for chronic and incurable cases met with the qualified approval of the Commission. Finding that, at this time, a considerable sum of money had already been spent at Tarban Creek in repairs and additions still in progress, and having in view the economizing of public expenditure, the Commission at first endeavoured to devise a mode of extending and improving the existing asylum, so as to remedy some of its deficiencies, as well as to provide accommodation for a superior class of patients. The total estimated cost of the improvements was £50,000. It could not be doubted that this was, at best, to use the words of the Commissioners, "a very unsatisfactory suggestion"; and on more mature deliberation, the erection of an entirely new asylum in which the several results of home experience might be combined, was recommended as best for the permanent interests of the Colony. The Commission next proceeded to the question of the proper site for such an asylum, the accommodation to be afforded for the indigent, the provision to be made for patients of a superior class, and the remuneration to be assigned to the medical officers. The following extracts contain the pith of their opinion and advice on these subjects:—

"The extent and position of the land at Tarban Creek undoubtedly afford accommodation for a new asylum, upon a more convenient site than that of the existing one; but there appear to us to be serious objections to such a selection. The locality is isolated, and difficult of access to all persons visiting the institution. All necessary supplies are consequently enhanced in expense; and moreover, the cost of erecting a new building would be considerably increased. Again, although privacy is desirable for such an establishment, absolute isolation is, for many obvious reasons, objectionable.

"In all these respects, the position of Parramatta would be decidedly preferable; and it appears to us that a favourable opportunity arises of placing the new institution upon some part of the Government Domain, now that it is contemplated to relinquish the Government House there as an occasional residence. Such a selection would afford the amplest means of providing all the comforts and appliances of a lunatic establishment upon one of the most improved modern plans. Materials would be easier of conveyance, and labour obtainable at less cost; and it appears to us, from the evidence we have received as to the steadiness and order with which many of the patients in the present establishment at Parramatta are found to work in parties, that some part of the expense might be saved by applying their labour to this important purpose.

"We are of opinion that, in the original design, the means of accommodating 500 patients should be contemplated, although the building might, in the first instance, be completed for half that number only; the subsequent extension being gradual, so as to keep pace with the growing population, and with that proportionate increase in the number of lunatic patients which our experience too painfully teaches us to expect.

"With this and further occasional relief (the transference of the criminal, and a selection of chronic cases, to Parramatta) we trust that the Tarban Asylum may meet the exigencies of the Colony as the curative establishment, during the progress of the new building, without any other outlay than that which may be found absolutely necessary for keeping up repairs.

"The final destination of Tarban Creek would, of course, be matter for future deliberation; and we are not without hope that it may ultimately be made in some way available, so as to compensate for a portion of the new expenditure.

"At present there is no provision in any asylum for patients of a superior class, with a view to that treatment which, by assimilating itself as nearly as possible to their habits of life, would most conduce to their comfort, and best promote their recovery. As occasional instances must occur of families of high respectability being visited with this calamity in the person of some one of their members, and as in almost all such cases an absolute separation from home is desirable, and not unfrequently essential to recovery, we are of opinion that, in the design of a new public asylum, especial attention should be paid to this point, and an express reservation made for the reception of such patients.

"We desire to express our opinion, that prompt and energetic measures should be taken to place the treatment of lunacy, in this Colony, upon the same footing of high and liberal philanthropy on which it now stands at home. The first great step towards the attainment of this object will be the providing an asylum, built, as we have suggested, upon the most approved modern system, with all the necessary appliances for the classification, recreation, amusement, and occupation of the inmates; and the next and equally important care should be taken to secure, from time to time, for the superintendence and management of such an asylum, the highest medical talent, the largest amount of experience, and the greatest benevolence. And we hesitate not to advise that, as the best means towards ensuring a fair combination of these qualities, a liberal remuneration should be assigned to the head officer of the establishment. We think he should be provided for in all domestic particulars at the public expense, and should have an independent salary of at least £750 a year. We are also of opinion that he should have a duly qualified medical assistant holding a diploma in surgery, who might not only give regular daily aid in preparing medicines and superintending patients, but be competent, on an emergency arising from illness or temporary absence, effectually to represent his principal; and we think that for such qualifications and duties, a salary should be assigned of not less than £250 a year, independently of domestic provision."

The Commission next recommend the appointment of a board of supervision. "A mixed board of non-medical and medical members, with such powers of visiting and regulating as would apply not only to public but to any proprietary asylums which may be hereafter opened, and also to any private house in which it shall be judicially known that a person of unsound mind is detained." Such board of supervision "to resemble in its constitution and duties the English board, as nearly as the circumstances of the Colony will admit."

The Commission then proceed, in their report, to a consideration of the law as applicable to lunatics; and after several remarks on its unsatisfactory nature, make the important suggestion that "if the relatives are willing to take charge of the patients themselves, they should be put under recognizances for good and humane treatment; the place of their residence should be noted, and they should be compelled to give information of any change in the destination or state of the lunatic; and moreover, the place where such lunatic is kept, should be liable at all times to visits of the board the appointment of which we have suggested."

Among the evidence taken before this Commission is much deserving of the fullest attention; and the following extracts from the evidence given by Dr. Campbell and Mr. D. Forbes, are so much to the point, that their quotation is right and necessary here.

Dr. Campbell, speaking of Tarban Creek, says:—"The asylum, enlarge it as you will, can never extend to the cemetery of the establishment. All beyond that might be sold in lots to form a township, or anything the purchaser might choose; and the proceeds would not only purchase a small useful farm, but go far to either enlarge the present building, or what is better, erect a new one, as the present is a mere model or idea of what a lunatic asylum should be, and can never, by any art of man or expense, be made a useful large asylum. It was originally designed to accommodate sixty patients. It ought to be sold and converted into a convent or nunnery. It will never be an asylum commensurate with the wants of this magnificent Colony. Besides, its distance from a market is an insuperable objection to its present position. I believe, on my conscience, that one half of the expense it costs the Colony might be saved by a more convenient situation."

Mr. Forbes says:—"With reference to the asylum at Tarban Creek, my idea is, it is in a very bad situation. I think it was a complete mistake to place the asylum there—I think the building at Parramatta is large enough to hold 500 patients, and possesses, with very little alteration, every means of classification.

"The drawbacks to Tarban are very great. It is an inaccessible out-of-the-way place—nobody goes there. The fact of its being such a distance from any town renders it very expensive to make any improvements there. Then, with respect to the medical man, a high salary must be paid to induce him to isolate himself in such a position. There is a plentiful supply of water at Parramatta—they have better water at the lunatic establishment than in the town, and its general salubrity is unobjectionable."

In 1863, Dr. Willson, the Catholic Bishop of Hobartown, addressed a letter to the Colonial Secretary, respecting the lunatic asylums of the Colony, in which, after commenting on the gloomy, ill-constructed building at Tarban Creek, and "its peculiarly ill-chosen" situation, the "sterile nature of the adjoining ground," causing a "want of out-door employment in gardening and farming operations,"—on the want of classification,—the deficient hospital arrangements,—the "woefully wrong" yards,—and the absence of a chapel and amusement room,—he offers the following suggestions:—

"That an asylum capable of affording ample accommodation for 500 patients, should be erected in the neighbourhood of Sydney, not more than two or three miles from it. That this house should be constructed for three classes of patients:—1st. The most numerous, namely, those in humble rank of life, who would be chiefly supported out of public funds. 2nd. A middle class paying (say) 20s. to 30s. a week; and a 3rd class paying according to the comforts they received up to any extent." "I have witnessed" the Bishop adds "for many years the working of such a system, especially in a sanatory point of view, and I believe cures will sometimes be effected in persons in higher ranks in life in such mixed public establishments far better than in private houses for the infirm in mind."

"The advantages of having an hospital near a large city (he continues) are incalculable. Here are a few:—The securing judicious visitation of a properly selected board of commissioners for the general management of so important an institution—a measure absolutely necessary for its permanent well-working. 2nd. The means of procuring the best medical and surgical assistance when required. 3rd. The opportunity afforded, almost daily, to convalescent, quiet, and orderly patients, of visiting the city for amusement, going through the markets, sometimes strolling through the public pleasure grounds, and obtaining that change so beneficial to them, both mentally and physically. 4th. Affording facility to humane and well qualified persons, of gratifying in the asylum, not unfrequently of an evening, patients whose minds are in a state to profit by such kind offices, with music, instrumental and vocal, recitations of short and cheerful pieces, or appropriate readings, and such like friendly acts. 5th. Of affording patients likely to profit by such visits, the means of attending such public exhibitions in the city as offer from time to time suitable for them. Many other advantages might be mentioned."

The further suggestions include "an ample quantity of land so as to afford abundant opportunity for all who could be judiciously occupied in gardening or in cultivating the soil for the commencement of a farm. An ample supply of fresh water from the public

works. A spacious chapel, properly arranged and fitted up for each religious community, for divine congregational 'service'; and a large room or hall for recreation."

In a postscript the Bishop mentions, incidentally, "the frightful old factory prison at Parramatta, with its doleful cells and iron bar doors, even for females," and begs leave "most earnestly to differ," for reasons given above, from the recommendations of the commissioners of 1855, as regard the selection of Parramatta as the site of the new building." "I believe" he says "it would be a great error to place it there—in fact, quite a calamity of an irreparable kind."

In July, 1863, a Select Committee of the Legislative Assembly inquired into the present state and management of Lunatic Asylums, and subsequently presented to the House a voluminous progress report. The Right Rev. Dr. Willson, Drs. Campbell, Douglass, and Boyd, and Mr. Alloway, among others, gave evidence before this Committee, and the following extracts are interesting and important.

Dr. Willson repeats several of the suggestions contained in his letter; and when asked, if he recommends that there should be three asylums, one near the city and two in the country, said, "I did recommend that in Victoria, and I apprehend the reasons are the same here." Dr. Willson is emphatic in his approval of a board of control, such as exists in Tasmania, where, as he asserts, the system works admirably. Dr. Campbell's evidence is chiefly of value where it relates to the future of lunatic asylums in New South Wales. He says "Tarban Creek is an excellent asylum as far as it goes." "All we want, to make it equal to any asylum in England, is a suitable piece of land for a small farm or amusement ground. A small chapel could easily be built, and would not be very expensive." "There is plenty of land in the neighbourhood belonging to Government, but I have always advocated the selling of that and the purchasing of more suitable land close to the asylum—a beautiful piece of level ground of 12 or 14 acres, that could be brought under the plough with little trouble."

"I do not think seriously you could mend the asylum as it stands, in any additions to it. There is one angle, however (the south-west), that must be completed to give us a little more room. When that is completed, the asylum will be a very perfect little asylum, and quite capable of holding 400 individuals without inconvenience."

"I think it would be a great pity to move the asylum to some other place. I would prefer that other small asylums should be built in different parts of the country, to relieve this to some extent, rather than that it should be abandoned altogether for a new and larger asylum."

"I think we ought to have several asylums in different parts of the Colony. I have a well-founded dislike to large asylums, and I believe it is the prevailing opinion in England, that small asylums are the best. Those of Colney Hatch and Hanwell are a great mistake. I would recommend to build an asylum at Maitland, which would contain about 200; another at Goulburn, to hold 150 or 200; another at Bathurst; and there are large Government buildings at Port Macquarie, which might be converted into a very useful establishment for all the incurables. Three or four other asylums would keep us going forty or fifty years, which is looking a long way forward. I would have them built on the best models, but not very large, so that one well trained medical man could manage one himself, with a proper staff of officers and warders."

"I might recapitulate, as we are on the subject, the places where I have recommended there should be asylums—one at Maitland, one at Goulburn, one at Bathurst, and one in the precincts of Sydney, supposing the present to be abandoned.

"I think there ought to be one asylum in the vicinity, within 3 or 4 miles of a large town, but not in it."

On the subject of inspection, Dr. Campbell says—"If such a course (the creation of three or four asylums) were adopted by the Government, it would be almost necessary that there should be a supervisor or inspector over these hospitals; but whoever was appointed inspector ought to be a man whose knowledge of mental diseases would enable him to carry out the best modes of treatment, upon the broad principles of humanity. I have long wished for such an officer, but seeing that there have been so few asylums in the Colony, I have never advocated the appointment. I would extend the supervision to private houses for lunatics."

Dr. Douglass and Mr. Alloway appear to concur more or less fully in the suggestions of Dr. Campbell, concerning the building of asylums in up-country districts; and Dr. Boyd says—"Of the necessity for an additional asylum there can, I think, be no doubt; and this being the case, it will be well for it to be erected in the immediate neighbourhood of Sydney."

In September, 1865, Dr. Greenup, the Medical Adviser to the Government, addressed two letters to the Colonial Secretary, on the subject of the Lunatic Asylums of the Colony. In the first, he points out the increasing number of lunatics, and the deficiency of accommodation; and in the second, makes some suggestions for the temporary relief of the overcrowded asylums; and after recommending the purchase of "The vineyard property," consisting of 40 acres at Parramatta, for the purpose of erecting temporary buildings, advises the erection of a new asylum for women only, to contain three or four hundred patients on the present asylum farm. "My reasons (he says) for recommending the building to be appropriated to females is, that the range of buildings appropriated to them at Parramatta is not suitable for women, but is well adapted for the refractory class of men. When the female asylum is built, all the women in the present Parramatta Asylum should be removed to the new place, and the present Parramatta Asylum entirely filled up with men."

"I consider the supply of water inexhaustible for the two asylums, and also the gaol."

"On the vineyard property many detached dwellings might be erected for the better class of patients who could pay for the privilege, and also for any patients of refinement or education whom it might be considered right to remove from the mass."

The papers published by the Government enable us to calculate the annual rate of increase in the number of the insane during the last thirteen years.

In 1855, the number of lunatics in the Government Asylums was as follows:—

Tarban.....	197	120 males 77 females.	307 males 169 females	= 476.
Parramatta ...	279	187 males 92 females		
	476			

At the present time (1868) there are, exclusive of invalids—

Tarban.....	620	397 males 223 females.	744 males 412 females	= 1,156.
Parramatta ...	536	347 males 189 females		
	1,156			

or, an increase of 680 in 13 years. Giving an annual increase of 52·4.

The proportion of males to females has remained at about 7 to 4.

In round numbers, then, there has been an annual increase of 52 insane in the Colony during the last twelve years, and this fact deserves the most attentive consideration.

The population of the Colony is still yearly increasing. With increase of population comes, as a natural result, increase of insanity—the number of insane in all countries bearing a certain proportion to population; and it is only fair to assume that the increase, which has been at the rate of fifty per annum for thirteen years past, will continue at that, if not a larger rate. Assuming the annual increase to be fifty only —and on a lower number than this it is not safe to calculate—there will be, at the end of thirty years, the enormous number of 2,500 insane, dependent on the Government for protection and support.

There is, then, an actual and present want of accommodation for 1,156 lunatics, and a prospective want for a much larger number; and to meet these Tarban Creek is capable of containing 300, and Parramatta 400, without crowding.

Before proceeding further, it may be well to examine the fitness of both these asylums for the occupation of people of unsound mind; and the opinions which have been placed on record, by men interested in the welfare, and employed in the treatment of the insane within the Colony, which are given in the extracts above quoted, are here of value. The Commission of 1855 gave a qualified approval of Parramatta as an asylum for incurables to the number of 300; and, after mature deliberation, they, with a wisdom which it is impossible not to admire, recommended the abandonment of Tarban as a hospital for the insane.

Mr. Forbes was emphatic in his condemnation of Tarban, whilst he approved of Parramatta, which he considered large enough, with some alterations, to hold 500 patients.

Dr. Wilson denounced unsparingly both Tarban and the "frightful old factory prison" at Parramatta.

Dr. Greenup, writing in 1865, considers the range of buildings appropriated to females, at Parramatta, as unsuitable for them, though adapted for the refractory class of men, and the remainder of the buildings as fairly suitable for the purposes to which they are applied.

Dr. Campbell, it will be seen, condemned Tarban Asylum, in no measured terms, in 1855, but speaks of it in 1863, when it had undergone considerable enlargement, as an excellent asylum, as far as it goes, and quite capable of holding 400 patients, without inconvenience; but in his scheme for an asylum system he nowhere mentions Parramatta, and so leaves it to be inferred that he does not consider it fitted for the occupation of the insane.

These opinions are in some measure contradictory; but from them can be gathered a general idea, that almost all who have written and spoken on the subject, consider the lunatic establishments of the Colony as unfitted for the purpose to which they are applied. Both establishments meet with more or less condemnation.

After special and close examination of Parramatta and Tarban—both before and since an inspection of the asylums of Europe and America—the conclusion has been arrived at, that the buildings at Parramatta are utterly and completely unfit for the purpose for which they are at present employed. And in this condemnation are included the convict factory, now occupied by the women,—the various buildings occupied by the insane non-criminal men,—and the small prison, which has been somewhat recently erected to serve as an asylum for criminal lunatics. In such buildings the proper care and treatment of the insane is simply impossible. It needs no special knowledge on this subject to see how completely unfitted the old factory, with its gloomy, ill-ventilated cells, with their iron-barred doors, is, as a residence for those mentally afflicted. Let any one who has any doubt upon the subject allow himself to be shut up in one of these dens for one hour only. The new building for criminals seems to have been built solely with a view to the safe keeping of its inmates—a prison within an asylum—a prison, and nothing more—in which treatment, in its full sense, is impossible—and differs, in almost every particular, from the buildings used as hospitals for insane criminals at Broadmoor, Perth, and Auburn, U.S. A prisoner who is suffering from bodily ailment is universally held to be entitled to all the care and treatment which medical skill can afford, whilst a due regard is had to his safe keeping; and it is unfair and wrong to place him who is suffering from mental diseases, in any but the same position. The remainder of the buildings, as may be seen from an examination of the report on European asylums, are wanting in almost every essential of the modern hospital for the insane.

No amount of money or skill can avail to render Parramatta Asylum a fit residence for the insane, or equal even to the lunatic wards in many of the poor-houses in England; and its early abandonment is unhesitatingly advised. No outlay should be made, except such as is absolutely necessary to keep up repairs whilst other provision for its inmates is being made.

Tarban Creek, originally erected for sixty patients, has been of late years considerably enlarged, and various improvements have been made, at a very great expense to the Colony; but still the question whether it is a good asylum, fitted for the curative treatment of the insane, must be at once answered in the negative. Notwithstanding the beautiful views to be obtained from it, it is, from its inherent structure, the smallness of its windows, the confined nature of its airing courts (which, notwithstanding the open space in front recently enclosed, and converted into airing grounds, must be used occasionally by many, and constantly by a few, for purposes of recreation) extremely gloomy and prison-like. It is, besides, wanting in some of the most marked requirements of a modern hospital for the insane. It has neither amusement hall, chapel, workshops, farm, or proper rooms for attendants; its kitchen lacks almost all modern appliances and fittings, and will not bear comparison with even the poorest appointed of the asylums of Great Britain and the north of Europe. It is extremely difficult of access, so that the cost of victualling and stores is much increased. Visiting is difficult, and it is equally impossible to take the patients to visit the minor amusements which may always be found in Sydney, or any other large town, and to induce such people as would readily, in all charity, contribute to the amusement of the inmates if close at hand, to visit them there.

The great essential for the proper working of an asylum—land for cultivation—is wanting; and though a small amount might perhaps be obtained, it would seem almost impossible to secure 20 or 30 acres—the smallest amount which can be considered satisfactory. Still, though almost all that has been said in disparagement of Tarban may be fully assented to, it must be admitted that its site is eminently satisfactory, in a sanatory point of view; that the buildings are strongly costructed and in good repair, and that it has in it yet a capacity for usefulness. If a fair quantity of cultivatable land can be obtained, and certain alterations and additions are made, it may do good service to the Colony for a few years to come.

It should, however, be clearly understood, that it is doomed at no very distant date, and no very large sum of money should be expended in alterations. Any land purchased might fairly be expected to realize the same, if not a greater sum, in a few years.

If Tarban Creek can be put to some useful purpose, as a Destitute or Benevolent Asylum, the sooner it ceases to be a residence for the insane the better.

In considering the future of asylums in New South Wales, no scheme can be deemed satisfactory which does not bear in mind, if not include, the requirements and necessities of the next thirty years, as well as those of the time now present. It has been seen that the number of insane in the Colony is annually increasing, and that in thirty years, 2,500 is the minimum number which can be calculated on. All hospital provision for the insane must be made with these data in remembrance. It may be objected that this generation should not be burdened with the wants of the next—that sufficient, and more than sufficient, for the day is the evil thereof; but a little consideration will shew that it will be for the good of this generation and the next, and for the permanent interests of the Colony, if the foundation of a system is now laid on which the structures may be reared in time to come; and the cost even may be divided between the present and the future, so that each may bear its share, by borrowing the money required, and repaying it in a given term of years. Bishop Willson says, in his letter above quoted:—"If ever it be reasonable to borrow money on the public security, it must be for such a purpose as I am now advocating. But it would only be fair that the responsibility of paying it should extend over a number of years. The erection of a proper hospital for the insane would not be for the present generation only, but of course for those which are to follow. It would, therefore, only be equitable that those who would derive benefit from it should bear a reasonable share in its original cost." The Royal Asylums of Scotland, established in the last century, and the District Asylums of the same country in this, were built to a large extent with borrowed money, which has since been more or less gradually repaid. The District Asylums are bound to repay money so borrowed, within a period generally fixed at thirty years. The Royal Asylums are not so limited as to time. Some English asylums have been established in

the same way, and an Act of Parliament prescribes that money so borrowed shall be completely repaid within thirty years.

Why should not the same method be adopted in New South Wales, and asylums built, of which the central and general offices should serve for the time present, and be large enough to allow of additions to the habitable parts of the asylum at a future time? To build asylums simply for the present, cannot but be a narrow and short-sighted policy.

Before the Committee of the Legislative Assembly, in 1863, Dr. Campbell sketched a scheme of asylum construction; and if this scheme is carried out, and supplemented by the recommendations which have been made by others interested in this subject in the Colony, there will be little left to be desired. After advocating the maintenance of Tarban as an asylum for 400 inmates, he adds—" I think we ought to have several asylums in different parts of the Colony. I would recommend to build an asylum at Maitland which would contain 200, another at Goulburn to hold 150 or 200, another at Bathurst." Dr. Campbell suggests also that the Government buildings at Port Macquarie should be used as an establishment for incurables.

By this scheme about 1,400 insane would be provided for—400 at Tarban, 400 at Port Macquarie, and 600 in the up-country asylums. The buildings at Port Macquarie have since been devoted to other purposes, happily so, since their conversion into fit residences for the insane would have been attended by considerable expense, and the result be eminently unsatisfactory. It is impossible to make even a fair asylum by such conversion. There is then provision for 400 insane, still wanted. Dr. Willson, in his letter in 1863, advocated the building of an asylum for 500 patients in the neighbourhood of Sydney, two or three miles from it.

Dr. Boyd, in his evidence in 1863, suggested the " immediate neighbourhood" of Sydney, for a new asylum.

Dr. Greenup, who wrote in 1865, recommended a new asylum for 300 or 400 at Parramatta.

If we add this asylum for 300, 400, or 500 patients at Parramatta, or near Sydney, to Dr. Campbell's suggestions, we have a complete scheme for the future of asylums in New South Wales.

After an attentive consideration of all the opinions which have been given on this subject, a close examination of the present establishments at Tarban Creek and Parramatta, and an inspection of the asylums of Europe and America, the following are the suggestions offered for the consideration of the Government:—

1st. That Parramatta should be abandoned as an asylum as soon as possible, such outlay only being made as will keep it in repair during the erection of new buildings.

2nd. That Tarban Creek should be so altered as to bring it more into harmony with institutions for the insane in the mother country, but that no alterations which would demand an extravagant outlay should be made. The chief question of importance as regards this institution is, the possibility of the acquisition of land for agricultural purposes. Failing this, the institution should, like Parramatta, be abandoned as a lunatic asylum. Altered in various particulars, and re-organized after European models; it may serve as an asylum for from 300 to 350 insane (not more) for some few years, but it should never be regarded in any way as one of the permanent institutions of the Colony.

3rd. That three new asylums should be erected in such up-country districts as seem most suitable; that these asylums should be near the chief town of the district—Goulburn, Bathurst, Maitland, or wherever else may be selected; that each should be erected to contain at once 200 patients, and so arranged as to be capable of enlargement, by means of blocks, large cottages, or other appropriate buildings, so as ultimately to hold 400 patients; and that the kitchens, laundry, central, and administrative offices, should be built with this end distinctly in view, so that they may either be sufficiently large from the first, or so arranged as to admit of subsequent enlargement.

The practice of distributing the insane throughout the country, possesses many advantages and recommendations, and is now very generally adopted in England and Scotland. The majority of the counties now possess lunatic asylums of their own. The counties of Elgin and Haddington, though possessing only seventy or eighty insane each, have erected their own asylums, instead of placing their insane in the more or less distant asylum of another county, or joining with one or more in the erection of a large building. In those counties where the number of insane has so much increased, as to necessitate the erection of a second or third asylum (as Lancashire, Yorkshire, Surrey, Stafford, and Chester), care has been invariably taken to place the second asylum at a distance from the old one, though as near a large town as possible. Yorkshire possesses asylums at Wakefield and York, and a third has been determined on. The new Stafford Asylum is at Lichfield, whilst the old one is at Stafford; and the new Chester Asylum at Macclesfield, whilst the old one is at Chester. In the United States the same principle of distribution has been followed. Each State possesses its own asylum, and where more than one is necessary, different districts have been chosen, so that the asylums may be at hand, and among the chief centres of population. The same system has been adopted on the Continent. The three asylums of Hanover are placed at Göttingen, Hildesheim, and Osnabrück; and the majority of the French departments * and Dutch Provinces have their own asylums.

Some of the reasons for distributing asylums, and placing them within easy access of the people, are pointed out in the following extracts from American reports:—

"From a careful examination of the number of patients sent from the several counties to all the State hospitals in the United States, which kept and published such a record, and a comparison of those with the average number of people in these counties through all the recorded periods of the operations of the institutions, it is shewn that the ratio of patients to the population, sent to the hospital, diminishes constantly with the increase of distance from it."

"The difference of the use made of the hospital by near and remote counties, is not to be explained by the corresponding difference in their necessity, for several of the distant counties, both in Massachusetts and other States, had a larger proportion of lunatics, and yet sent less, and some less than half as many patients to their hospitals."

"This difference is probably due to the difference in the facilities of access, and in the labour and cost of travel. And it must be admitted as an established principle, that a hospital cannot diffuse its advantages equally to the people of any large district."

"Admitting this, then, it must follow that no large central hospital for any considerable extent of territory should be established; but on the contrary, hospitals of a proper size should be scattered as much as possible, and their advantages brought near to the people who ought to use them." †

"Remote counties, having a population about equal to that of Oneida, have sent a much smaller number of patients to the asylum. The difference is not to be accounted for by the supposition that one part of the State is more subject to insanity than others—it is simply owing to the vicinity of an asylum." ‡

"Oneida County sends all her insane at once, and the result is a large percentage of cures, and a very slow increase of incurables. I would here add, that of the acute cases admitted from Oneida County, in some years *all* recovered; and this in a county with a population of over 100,000." §

The importance of early treatment is pointed out more fully in a prior part of this report.

By distributing asylums, not only will the patients be sooner sent and so sooner cured, but the long journeys which are always extremely detrimental to the insane, and the expense and difficulty to their friends, will be spared. They will remain among,

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* Of the eighty-six departments into which France is divided, sixty are provided with asylum accommodation, though in thirty-four only does the asylum belong absolutely to the department.

† Report on Insanity and Idiocy in Massachusetts by the Commission on Lunacy, under Resolve of the Legislature, 1855.

‡ Annual Report of the Managers of the State Lunatic Asylum, New York, 1865.

§ Do Do. Do. 1866.

and accessible to, the visits of their friends—a thing much to be desired for both parties; since, under proper regulation, and with the concurrence of the physician, the visits of friends are frequently most useful to those mentally afflicted; whilst, on the other hand, the feeling of affection for the afflicted one is much more likely to be maintained in a household where he is seen occasionally. People are too much accustomed to "hide" their insane out of their sight, instead of having them always with them, in thought, if not actually.

Asylums in up-country districts will serve also another purpose. Properly managed, they will teach a lesson to all near, and have an influence which no distant asylum, the subject of exaggeration or enchantment, can exercise. They will serve to spread abroad that feeling of charity "which suffereth long and is kind," till the asylum is properly understood, and regarded as a hospital where care and skill are employed in the treatment of those most to be pitied on this earth; not, as is now too often the case, as a prison in which beings, little better than wild beasts, are shut from the gaze of mankind.

It is scarcely necessary to add, that these asylums should be built on the best models, and fitted with the best appliances that can be procured. A qualified medical man should be placed at their head, with such a staff as will enable him to carry out all that is best in asylum organization and treatment.

The districts from which the insane of the Colony now come, and the proportion of the entire number who are sent from country districts to the Sydney asylums, may be, to some extent, gathered from the following list, where the districts from which 313 out of 625 of the present inmates of Tarban Creek Asylum are given.

This list has been most carefully prepared by Mr. Wardley, from papers existing at the asylum. It will be seen that one-half of the inmates only are accounted for. In many of the remaining instances, Mr. Wardley says—"There is no record of the district—the name of some insignificant station has been specified, without any reference to the district where situated, or the nearest post town—many come from distant parts of the country, and are transferred from one constable to another, until all traces of their real homes are lost, and they are often in a condition which renders them unable to supply the information themselves."

			M.	F.		
Sydney District		Sydney	98	80		
		Parramatta	12	5		
		Windsor	6	3		
		Liverpool	4	2		
		Hawkesbury River	3	1		
		Shoalhaven	3	2		
		Campbelltown	1	2		
		Kiama	2	1		
			129	96	Total...	225
Up-country Districts	Bathurst	Bathurst	10	7		
		Burrowa and Young	4	0		
		Hartley	2	2		
		Sofala	2	1		
						28
	Maitland	Maitland	6	5		
		Newcastle	5	4		
		Muswellbrook	2	0		
		Murrurundi	3	2		
		Armidale	1	1		
						29
	Goulburn	Goulburn	7	6		
		Albury	2	0		
		Braidwood	4	1		
		Yass	2	1		
		Murrumbidgee	5	3		
						31
			55	33	Total...	88

In the numbers given there are then 88, out of 313 from up-country Districts; and it is only fair to assume that a much larger proportion of the remaining half of the present inmates of Tarban Creek come from the country. Since the name of "some insignificant station has been specified," and the patients have been "transferred from constable to constable, till all traces of their real homes are lost," clearly these real homes are not in or near Sydney. What is true of Tarban is likely to be true also of Parramatta; and it may be safely stated, that at least one-third of the present population of the asylums has come from up-country Districts.

4th. That a new asylum should be erected in the neighbourhood af Sydney, to contain 500 patients. That it should consist of—(1st) an asylum for the indigent, to accommodate 400—(2nd) an asylum in a detached building, for better class patients, able to pay for their accommodation and support, to contain fifty, and—(3rd) an asylum in a second detached building, for idiots and feeble-minded children, to contain fifty. That each of these should be built according to the best plans to be found, and all placed under the superintendence of one physician with a competent staff.

The exact site for such an asylum is a matter of the greatest importance. Parramatta has been several times proposed, but though it has many advantages, among which may be mentioned its cultivatable land, its excellent water supply, the railway communication with Sydney, and the proximity of a small town,—still, the objection of its distance from Sydney outweighs all that can be said in its favour; and the suggestions of the Right Rev. Dr. Willson—that the new asylum should be in the neighbourhood of Sydney, not more than two or three miles from it—backed as it is, by the recommendation of Dr. Campbell, who speaks of the "precincts" of Sydney, and that also of Dr. Boyd, who speaks of the "immediate neighbourhood,"—should be most carefully considered.

To the reasons for such a site given by Bishop Willson—the securing judicious visitation—the procuring medical and surgical assistance—the opportunity afforded to convalescent and other patients for participating in the minor amusements of the city—the facilities for humane and well-qualified persons of gratifying (in the asylum itself) the inmates by vocal and instrumental music, and other means of distraction (all reasons of weight and wisdom)—many others may be added, among which are, the diminished expense of carriage for all stores—the greater ease with which good attendants can be procured, and the increased length of time they will, as a rule, remain in institutions near large towns.

These and others which will be found set forth at greater length in the section devoted to the question of the most advantageous site for asylums generally, make the immediate neighbourhood of Sydney (if a suitable spot can be obtained with the necessary quantity of land) much preferable to Parramatta. It need hardly be said that railway communication is of immense advantage, especially if a branch line for coals, stores, &c., can be brought into the asylum grounds, as at Colney Hatch, the Three Counties, Murthly, and other British asylums.

The land on the Parramatta Road, in the immediate neighbourhood of Sydney, at Petersham, or Ashfield, would appear to be the site most worthy of the attention of the Government or of any commissioners appointed to consider this subject.

5th. That an asylum for criminal insane should be established at Parramatta, to contain eighty patients, and capable of subsequent enlargement.

The special provision to be made for the paying patients, for idiots, and criminals, will be discussed when treating of these classes, separately.

This scheme in its entirety, will give—

	Indigent.	Paying.	Idiots.	Criminals.
Tarban Creek	300	.....	.....	.....
Up-country Asylums	600	.....	.....	.....
New Asylum, near Sydney	400	50	50	.....
Criminal Asylum.....	.....	.....	.....	80
	1,300	50	50	80

or a total of 1,480,—a little more than 300 in excess of the present number of insane—who, it must be remembered, are increasing at the rate of fifty-two annually.

Site.—The site to be chosen for an asylum is a matter of primary importance. On it must depend in no small degree the comfort, happiness, and health, both mental and bodily, of the inmates, as well as the cost of the institution and the whole working of its internal economy.

An elevated position is desirable, because more healthy, commanding, as a rule, more extended views both from the rooms and airing grounds, and affording greater facilities for drainage and ventilation. An elevated site has, for these reasons, been chosen with almost curious unanimity for modern asylums in Europe and America, and it is equally advisable in New South Wales. In the suggestions and instructions to architects issued by the Commissioners for England and Scotland,* it is suggested that "it should not be near to any nuisances, such as steam-engines, shafts of mines, noisy trades, and offensive manufactories, neither should it be surrounded or overlooked, or intersected by public roads or footpaths"; "that the site of the building should be elevated as respects the surrounding country, and, if to be obtained, undulating in its surface and having a fall to the south."

The sub-soil should, if possible, be calcareous, gravelly, or rocky, but if the position is elevated, and drainage good, a clayey sub-soil, such as is occupied by more than one of the best English asylums, is not objectionable.

The aspect, which, in the cold climate of Northern Europe, or in the still colder one of America, is a matter of considerable importance, is one of only secondary consideration in New South Wales, where the seasons are more equable. The southerly and easterly winds are, however, the freshest and most healthy in this Colony, and where the nature of the land will admit, an aspect ranging between south and east should be chosen, and the buildings placed in the northern and western extremity of the land, so as to allow the south and east for the use of the patients. But a site, otherwise good, should not be rejected, simply because such an aspect for the building cannot be obtained upon it.

The question of the distance from town at which an asylum should be placed is one which has been much discussed. The Scottish Commissioners in Lunacy, in their suggestions and instructions* say, that "the asylum should be as central as possible to the mass of population in the country or district for which it is to be erected, and should be convenient with respect to its easy access by railway or other public conveyance, in order to facilitate the visit, of friends or the supply of stores. It should be within such distance of a town as to command the introduction of gas, water, &c., and of sufficient size to afford the means of recreation and amusement of the medical staff, the attendants, and such of the patients as might derive benefit from a change in the asylum routine."

The advantages to be derived from proximity to a large town are,—

1. Facility of access for patients and their friends, commissioners, inspectors, and Government officials generally, visiting medical officers, &c.
2. Diminished cost of conveyance of coals, stores, and provisions.
3. Facility for amusement of patients—1st. In the asylum itself, by means of exhibitions, concerts, lectures, &c., for which assistance may always be obtained in a large town, either by paying those who make such amusement a profession, or by appeals to amateurs benevolently disposed. In many cases, a distance of three or four miles will present no serious difficulties, but it would be almost impossible to induce an amateur, or professional lecturer, or musician, to travel six, eight, or ten miles without heavy payment—2nd. In the town, by the attendance of fit patients at the public promenades and gardens, lectures, concerts, and exhibitions, and all the minor amusements which a town affords.
4. Supply of gas and water; the former of which, in most instances, and the latter in many, may be obtained much cheaper from the town supply than by any other means.
5. Increased facilities for procuring good attendants, and for inducing them to remain for a longer period in their situations. The importance of a good class of attendants, and these trained to their work, cannot be overestimated; and that such a class may be induced to take service, and remain

* See Appendix *A*.

for a long time at their work, when the asylum is situated near a large town, is undoubted; whereas, they either refuse service altogether, or having accepted it, stay only very short periods in an asylum removed from a town. This is constantly found to be the case, notwithstanding all the counteracting influences of high pay, excellent regulations, holidays, and kindly treatment at the hands of officials; and it may be safely calculated that a superior class of attendants will be found at all the asylums which are situated near large towns. It is also found that the length of service of attendants is almost always greater in town than in country asylums. Thus, at Leicester, Stafford, Prestwich, and other asylums near large towns, the length of service ranges from one to fifteen years; while at Broadmoor, under the most kind treatment, more liberal pay than is given at any county asylum, with a good library and special amusements for their gratification, they cannot be induced to remain, and the changes are extremely frequent. Whilst advertisements for attendants at Broadmoor are not unfrequently seen in general and special papers, there is little necessity for other asylums, differently placed, to advertise.

Perhaps an objection to the criminal class of which the inmates of Broadmoor are solely composed, may act as a deterrent; but the testimony of one of the attendants may be quoted as the more likely cause of its unpopularity. "What is the good" said he, "of high wages—we have to give it all to a railway"; five shillings to London; half-a-crown to Reading (the nearest large town), is to say nothing of time, an important matter to an attendant out on a holiday? Amusement and change are necessary to an asylum attendant, and amusement and change he will have, no matter what entertainments are concocted within the asylum walls. However "self-contained" is the asylum organization. something beyond, and away from it, he craves after; and if he is to remain fit for his situation, this change he should have. A very little consideration of what asylum life is,—its constant worry and irritation,—the vexing influence of constant association with crooked people and crooked actions,—are felt often too severely by the asylum physicians, who are only a part of the day with the patients. The attendant has the insane always with him; and if he is to retain that health, that evenness of temper, that mental and bodily spring, that combined firmness and suavity of manner, which are necessary to make him an effective and useful servant, he must escape occasionally from the asylum walls and from the depressing influences of asylum life, and lose all thought of his work, by associating with the sane, either in the quiet of home life, or—what is and always must be attractive to the young, and to the majority of asylum servants—the minor excitements of town life.

If the married attendant cannot have his family within easy access, and the unmarried find rational amusement close to the scene of his work, so that he may lose no time in journeying to and fro, he, in too many instances, will not remain in his place, or remaining, will lose, as the months roll on, health and vigour both of mind and body —that mental and bodily serenity without which an attendant is useless—and will be constantly liable to dismissal as unfitted for his work.

Some asylum superintendents, among whom is Dr. Lockhart Robertson, of the Sussex County Asylum, the Editor of the *Journal of Mental Science*, prefer married attendants for the male wards of the asylum. If such attendants are to be procured and induced to stay, their houses must be near, so as to enable them to enjoy in the evenings the comforts of home life. Such houses will always be more readily obtained in a large town than in any small town or village.

That an asylum should be easy of access is most important for those mentally afflicted, both before and after they have entered its walls. The nearer the asylum to the patient's house the sooner he is likely to be sent to it; and the sooner sent, the sooner likely to return sane to his friends. Delay in submitting the patient to treatment is, in only too many cases, caused by the inconvenience and expenses of a long journey, which are much increased when the traveller is insane. Every mile is an obstacle when the patient may rave as he travels, and require two or three people to restrain his violence or his vagaries. Facility of access is also no less important to the insane, when an asylum

inmate, than before his entry. The visits of friends are in many cases good for the mental health, and such visits will be few if distance be great. Then, again, the greater the facility of access, the more thoroughly an asylum is under inspection; and such inspection, whether it be that which an intelligent public accords to all institutions in which it is interested, or those more methodical visits paid by appointed authorities, is useful, both for the asylum itself, its inmates, and all concerned.

The cost of supplies for 300 or 400 people must be greatly increased by the expense of carriage. At the Worcester Asylum, which is situate in a small village four miles from the town of Worcester, Dr. Sherlock states that his calculations prove that 2d. per head per week would be saved, in the maintenance of the patients, if the asylum were 2 miles nearer the town. The same opinions are held by other asylum superintendents.

It is said by some authorities on asylum government, that they should be "self-contained," that is, that they should depend as much as possible on their own resources for amusement, as well as for supplies. Admitting the general advantage of this, and also the excellent organization of amusements which exist in many of the British and American asylums, it must be allowed that important auxiliaries in this matter may be obtained from without, and that no trouble should be spared to induce, at certain periods, amateur or professional lecturers, musicians, and performers, to give, either for pay or as a free donation, entertainments within the walls, to those who cannot be permitted to go beyond. There is a freshness about these entertainments which asylum amusements, however varied, conducted by the same people, cannot have, and they are often relished by the inmates much more than those which are furnished by their constant associates. It may be, and often is easy to induce professional entertainers and amateurs, benevolently disposed to give their services, when the asylum is within a convenient distance; but if the institution were six or eight miles distant, the difficulties would be almost impossible to surmount. Facility of access is therefore necessary for this end, and is not less desirable in order that patients who can safely be trusted may enjoy the public promenades, and gardens, and the other minor amusements of the city.

With reference to the fourth head—the supply of gas and water—it will be found in most cases to be of great advantage, that the asylum should be sufficiently near to a town to render the established supplies available. Gas will be obtained cheaper from the ordinary town supply than it could be manufactured in the asylum itself, and with less probability of derangement of the works. The town supply of water also is likely to be cheaper, and obviates the necessity of the machinery and plant required where the water is obtained from wells on the premises. In the Sussex County Asylum, gas was at first made in the institution, but it was found unprofitable, in consequence of the constant breakage and want of repair of pipes, &c. It is now obtained from a gas company, and the asylum works are disused.

Dr. Greisinger in his Treatise on Mental Diseases, page 514, thus expresses his opinions on this subject—"In the foremost rank is *facility of access* to the patients, and the capability of constantly receiving fresh cases"—"and further, as a result from this, in all large countries the asylums would be more distributed in different districts."—"The institution must, moreover, be situated in a healthy locality, and where it is possible, in a neighbourhood rich in natural beauties. It may be well to have it in the vicinity of a small town, where the necessary provisions may be had, and intercourse conveniently maintained with the inhabitants. It is needful, also, to have asylums in proximity to large cities. Under no circumstances, however, should an asylum be built within the precincts of a city."

Land.—The instructions and suggestions of the English and Scotch Commissioners in Lunacy are very definite as regards the amount of land necessary for an asylum.

"The land belonging to the asylum should, when practicable, be in the proportion of not less than one acre to four patients, so as to afford ample means for agricultural employment, exercise, and recreation; and should be so situate as to offer facilities for any extension which may be deemed necessary at a future period."*

* See Appendix *A*, Nos. 1 and 2.

The Association of Medical Superintendents of American Institutions for the Insane* have unanimously proposed "that no hospital for the insane, however limited its capacity, should have less than 50 acres of land devoted to gardens and pleasure grounds for its patients. At least 100 acres ought to be possessed by every State hospital or other institution for 200 patients."

This proportion of one acre to every two patients is recommended for adoption in this Colony, instead of the minimum of one acre to every four patients, suggested by the British Commissioners.

Taking into consideration the comparatively low price of land in New South Wales, and the immense advantage accruing to an asylum from extensive grounds, which, if not under cultivation, may serve for recreative purposes,—and also the desirability of possessing woodlands, to furnish shade in summer and opportunities of tasteful improvement,—it will be apparent that less than two acres per patient will not suffice.

The full amount which will be required for the institution according to its estimated eventual extent, should, if possible, be acquired at once. It might either be cultivated by the patients in the institution, if sufficiently numerous for the purpose, partly cultivated by hired labour, or let on short lease till the number of patients was sufficient to work it; but as much as possible of it should be brought under cultivation, and vegetables, fruits, root or cereal crops, grown according to the nature of the soil, the wants of the institution, and the capabilities of the inmates. The more an asylum is self-supporting in this respect, the greater will be the economy of expenditure.

By means of a farm in connection with the asylum, the vegetables, fruit, and milk required, may be obtained at a less cost than they could otherwise be procured; and although growing for sale is seldom found so profitable as growing for consumption, the labour of the inmates may sometimes be profitably employed in the production of supplies for the market, and thus contribute materially to defray the expenses of the institution. All authorities are agreed as to the beneficial effects of field and out-door labour, upon almost every form of mental disease; not only is the bodily health of the patients improved by constant occupation in the open air, but the life opens to them a wider portion of the world, with freer movement and more active employment of the faculties. Agricultural work is, in fact, in many cases, a necessary part of treatment, and, as such, may be justifiably carried on to some extent if no profit results, or all the labour employed ends in some loss. Experience has shewn that many patients who have been previously unaccustomed to country avocations, engage in them with pleasure and advantage.

It has been calculated that the labour of the insane is only equal to one-fifth of that of the sane, so that 100 patients are equivalent only in 20 healthy field labourers. In most asylums there will be found 1 inmate in every 5 suitable for field labour, so that in an asylum of 500 patients there will be about 100 inmates capable of such employment. But if it is supposed that only half this number can be so employed, it will be equivalent to the constant labour of 10 healthy men; and what these are capable of effecting in agriculture and horticulture, can be estimated by all those conversant with the matter.

Separation of Acute and Chronic Cases.—The question whether it is better to erect asylums which shall contain both acute and chronic cases, or whether a distinct asylum shall be erected for each class, cannot be answered in a general way. The solution of this, like many other practical questions regarding asylums, depends very much upon the population of the district, upon the nature of the existing buildings, and upon the special aims which it is intended to combine with their erection, (*e.g.*, clinical instruction).

It has been proposed, in a prior part of this Report, that, under certain conditions, Tarban Creek should be temporarily retained as a residence for the insane; and if so retained, the nature of the building is unquestionably more fitted for chronic cases than for those demanding active treatment. But this is only a more or less temporary

* See Appendix *A*, No. 3.

expedient, and should not be allowed to interfere with the arrangement for the future asylums of the Colony.

Where a large medical school exists, and clinical instruction is given upon mental disease, it may occasionally be advisable to erect a small asylum, mainly devoted to acute cases as affording better illustration for the teacher, in connection with or within easy access of the general hospital of the district. But the study of mental disease is at present so far a specialty that chairs of psychological medicine exist only in a few of the larger medical schools in Great Britain, and such a chair must be so very far in the dim future in this Colony, as to place it altogether out of consideration.

The question of population has an important bearing on this subject. Wherever a large population is crowded within a small space, and two asylums can be made fairly accessible to the whole population of the district, the greatest argument against the separation of acute and chronic cases ceases to exist.

The population of London or Paris, as well as some of the more populous parts of Lancashire and Yorkshire, furnishes a greater number of insane than can with advantage be placed in one asylum. Two asylums are therefore necessary, and, as each of these can be placed within easy reach of the entire population to which they belong, one may be constructed mainly for chronic, and the other for acute cases, if it is found advantageous on general and pecuniary grounds to do so, instead of making each fitted to contain both classes. The Commissioners in Lunacy long since recommended separate asylums for each class for the London Metropolitan Districts.

In New South Wales the population is a remarkably scattered one. Even the district in which Sydney is situated cannot be considered as thickly populated; and any asylum established in Sydney, even should up-country asylums be instituted, must serve for a very large extent of country—an extent so large that it would be on the whole advisable to divide it into two, and place an asylum in each, rather than to establish two asylums, one for acute and one for chronic cases, near Sydney itself.

It will be seen that neither the nature of existing buildings, the requirements of clinical teaching, or the population of the district, necessitate the establishment of separate asylums for acute or chronic cases; and the balance of the argument, as has been already seen in a prior part of this Report, is so strongly in favour of asylums to contain both classes of the insane, that any separate provision cannot be recommended. Every asylum should be erected to contain both acute and chronic cases—and the nature of the buildings, the staff of attendants, and the general arrangements, should be such as to meet the needs of each class

Size of Asylums.—The limits to be fixed on the size of asylums, the number of inmates who should be kept in one institution, under one medical supervision and treatment, and fed by one commissariat, is a question to be settled before the construction is resolved upon.

The recorded opinions of commissioners, superintendents, and inspectors, long practised in the management and arrangement of these institutions, will help to furnish a reliable opinion in this matter.

The English Commissioners of Lunacy are of opinion that an asylum to contain 400 to 500 patients is the best size; but that, on an emergency, they may be enlarged to contain 600 to 700 patients, without sacrificing the special characters which all modern asylums should possess. When there are more than 700 patients, the expenses increase, and all individual treatment vanishes. The superintendent can only know the patients *en masse*, and not individually, and the establishment grows out of effective supervision, although the number of attendants may be increased. This opinion may be found in the reports of the Commissioners, again and again stated during the last ten years. Thus, in 1857, they state—

"It has always been the opinion of this Board that asylums beyond a certain size are objectionable. They forfeit the advantage, which nothing can replace, whether in general management or the treatment of disease, of individual and responsible supervision. To the cure and alleviation of insanity, few aids are so important as those which may be derived from vigilant observation of individual peculiarities; but where the patients are so numerous that no medical officer can bring them within the range of his

personal examination and judgment, such opportunities are altogether lost, and amid the workings of a great machine, the physician, as well as the patient, loses his individuality. When to this also is added, what experience has of late years shewn, that the absence of a single and undivided responsibility is equally injurious to the general management, and the rate of maintenance for the patients in the large buildings has a tendency to run higher than in buildings of a smaller size, it would seem as if the only tenable plea for erecting them ought to be abandoned. To the patients, undoubtedly, they bring no corresponding benefit. The more extended they are, the more abridged become their means of cure; and this, which should be the first object of an asylum, and by which alone any check can be given to the present gradual and steady increase in the number of pauper lunatics requiring accommodation, is unhappily no longer the leading characteristic of Colney Hatch or Hanwell."

In 1863 they write—"The difficulties attending the management of asylums containing large numbers of patients, has been repeatedly stated by us, and they continue to be matters of constant experience. In such asylums the careful treatment of individual patients is next to impossible, a proper supervision of attendants is extremely difficult, and the working expenses are generally increased." And again, in 1867—"For every instance of an asylum above the middle size challenging praise, there are, unfortunately, several instances of the opposite kind to be adduced."

The Scottish Commissioners are equally opposed to large asylums. They consider that no asylum should contain more than 350 patients; that the individual treatment of a larger number is impossible; and that cost increases with anything above that number. These opinions they repeatedly express in their various reports.

In 1852 the Association of Medical Superintendents of American Institutions for the Insane unanimously agreed, that "the highest number that can with propriety be treated in one building is 250, while 200 patients is a preferable maximum"; but as the principal asylums in the Eastern States were gradually increased in size to meet the wants of the population, no marked inconvenience was found to result from the congregation of a larger number in one building; and a further expression of the opinion of a majority of the members of the Association on this subject is to be found in a resolution passed at the meeting of the Association, held at Washington in 1866, rescinding that above stated, which is as follows:—

"The enlargement of a City, County, or State Institution for the Insane, which, in the extent and character of the district in which it is situated is conveniently accessible to all the people of such district, may be properly carried to the extent of accommodating 600 patients, embracing the usual proportions of curable and incurable insane in a particular community."*

The opinions of authors, both English and Foreign, are at accord on this subject. M. Ferrus, one of the Inspectors of Asylums in France, says, in his book entitled "Des Aliénés,"—which is quoted at second-hand from Dr. Arlidge's work,†—"An asylum for the treatment of mental disorder ought not to contain above 150, or, at most, 250 patients; but one having a mixed population of cases requiring treatment, of incurables and idiots, may receive 400 or 500 such inmates, provided the physician is afforded sufficient medical assistance."

M. Parchappe, lately Inspector of Asylums in France, says—"After taking every consideration into account, I think the minimum of patients ought to be fixed at 200, and the maximum at 400. Below 200 the economical advantages rapidly decline, without compensatory benefit; about 400, although the economical advantages augment, it is at the detriment of the utility of the institution in its medical character."‡

M. Guislain, the eminent Belgian authority, in his large work on insanity, which is quoted by Dr. Arlidge, says—"It would be absurd to bring together, in the same place, a very large population; it would tend to foster an injurious degree of excitement, would render the management difficult or impossible, would destroy the unity of plan

* See Appendix *A*, No. 3.

† *On the State of Lunacy:* By J. T. Arlidge, M.D., A.B. London, 1859.

‡ *Des Principes à suivre dans le Fondation et la Construction des Asiles d'Aliénés.* Paris, 1853.

and neutralize all scientific effort. The maximum number ought not to exceed 300 or 350 insane persons."

Dr. Jacobi, in his Treatise on Asylums, which has been translated into English by Dr. Kitching, of the York Retreat, says—"I am convinced that the number of patients should never exceed 200." He is, however, speaking of asylums for acute cases only.

Dr. Arlidge, in his work on the State of Lunacy, mentions the opinions of Roller and Damerow—two of the most eminent of German alienist physicians—on this subject, both of whom consider that asylums for acute cases should be limited to 250, but that those for both acute and chronic cases may admit from 450 to 500 inmates, but no more, and at p. 118 states his own opinion that 600 "represents the maximum which can economically, and with just regard to efficient government and supervision, and to the interests of the patients, be brought together in one establishment."

These authoritative expressions of opinion might, were it necessary, be supplemented by others from different sources. It will be seen that all agree in condemning large asylums, but that some difference of opinion exists as regards the preferable number for maintenance in one establishment. The English and Scotch Boards of Commissioners, and the Association of American Superintendents, all of whom must be understood as speaking of ordinary asylums to which all the insane (curable and incurable) of a district are to be sent, name respectively 500, 350, and 600 as a limit to which the size of asylums may extend. And the eminent Continental authorities, whose opinions have been cited, mention from 350 to 500 as the size for an asylum into which both acute and chronic cases are admitted; and 150 to 250 as the preferable number for an asylum which shall admit acute cases only. The opinions of the superintendents now in charge of both British and Continental asylums vary as regards the exact size to be adopted, but agree in the main with those expressed above—in a few instances only is a different opinion expressed. Dr. Robertson, a man of abundant energy, who unites the joint editorship of the *English Journal of Mental Science* with the most admirable management of a county asylum for 600 patients, considers that an asylum for mixed cases, in such proportion of acute and chronic as is generally found in English county asylums, may be enlarged so as to contain 700 or 800 patients and yet work economically, smoothly, and well, with every necessary care for the medical and moral treatment of the patients; and Mr. Holland, of the Prestwich Asylum, Manchester, and Dr. Howden, of the Montrose Royal Asylum hold the same opinion.

The admirable order and system which pervades everything in the Prestwich Asylum, which itself contains 1,000 patients, entitles Mr. Holland's opinion to every weight and consideration; and all who have seen the Montrose Royal Asylum, and talked on asylum management with its superintendent, will feel that his opinion is one well worth earnest thought; but it may be doubted if these opinions are not the expressions of individual and self-conscious power. The talent and powers of administration possessed by a few individuals are no argument in considering the general question of asylum system, and of little value in fixing a limit to the proper size of asylums.

Weighing well all the opinions of eminent men on this subject, and the arguments with which they are backed, and judging from personal inspection of existing asylums, the opinion may be expressed that from 400 to 500 is the preferable size for an asylum, and that 600 should never be exceeded. The asylums which are working smoothly and well, with every care for the treatment of patients, and effective supervision, are, as a rule, below this number; and the table in a prior part of this Report in which the population and weekly maintenance rate of the English institutions is given, will shew that, for economical reasons, from four to five or six hundred is the preferable number. The maintenance rate generally increases when the population is below or above it.

One argument alone exists for large asylums in England. Where the officers are not appointed and paid by the Central Government, the salaries of superintendents and other officers will always bear a certain proportion to the number of inmates, on the broad principle of increased remuneration for increased work. If all asylums were of fixed size, the salaries of officers would be about equal, and afford no temptation to the best men in the medical profession to undertake the special study of psychological medicine. At present some variation in size exists, and to the larger ones are attached salaries which

serve as the prizes of the profession, to be bestowed on men of special energy and talent. In a large asylum system, such as exists in England, such men will always be found; and such appointments in greater or less number, should await them, if psychological medicine is to hold its ground, and enlist in its service the master minds of the medical profession. The Commissionerships in Lunacy are too few to meet the requirements of this sort, and half of them are open to a sister profession.

This argument, however, has little weight where the asylums are under the immediate direction of the State and the superintendent is an officer of the Civil Service, since advance of salary may be made to depend on length of service and other conditions, and promotion consist, not in removal from a small to a large asylum, but from one rate of pay to another.

Construction.

To make the lunatic as much "at home" as possible,—to make the household arrangements of an asylum resemble those of a large private dwelling-house, so far as is consistent with salubrity of structure, economy of expenditure, and facility of supervision and management,—should be the leading principle in the construction and internal arrangements of asylums.

The corridor plan, with its enforced imitation of the old monastic life, utterly foreign to that pursued by all classes in our day, might on that account alone be fairly rejected, but it has other disadvantages which make it strongly objectionable as a form of asylum construction. The building being closely massed, and the wards and corridors opening one into another, the air of one ward will, however perfect be the ventilation, mix with that of others, and, in the event of infectious diseases attacking any of the patients, the whole number will thus be rendered liable to infection. Ventilation is difficult, for although the windows may be placed opposite to each other, the walls dividing the small rooms from the corridor prevent free currents of air, even when every possible arrangement is made for its ready passage. Elaborate systems of artificial ventilation are therefore necessary, and with this the air is often stagnant. The expense of construction, if the corridor has rooms on one side only, is great, from the long stretch of roofing, &c., which is necessary; and it is fully equalled by the expense attending the artificial ventilation which is absolutely essential, when the rooms open from both sides of the corridor.

The "house" plan, from the fact that the buildings are all under one roof, possesses some of the disadvantages of the corridor plan, but its superiority in most respects to it has been already pointed out. For small asylums, which are not intended to contain more than 200 patients, this plan may be adopted with advantage, and for the central or main building of a large asylum is, perhaps, better than any other; but a large asylum, built entirely on this plan is decidedly objectionable, as bringing too many individuals under one roof, and exposing them to chances of infection, as well as for other reasons.

The cottage plan is the mode of provision for the insane which approaches in its arrangements the nearest to the ordinary home life of the sane; but there are objections to it for a large asylum, which are almost insuperable. These objections are—

1st.—The space over which such an asylum must extend, rendering the supervision extremely difficult.

2nd.—The difficulties of serving the food to buildings, some of which must necessarily be distant from a central kitchen. (The proposal made by one of the advocates of this system, to do away with the main kitchen, and place small kitchens in every cottage, can scarcely be seriously entertained; and the collection of the patients in a central dining-hall would be attended with some difficulties, owing to the scattered nature of the buildings.)

3rd.—The increase in the number of attendants necessary, since it is indispensable for proper asylum management that a number of patients should, except in some special cases, be under the charge of two attendants, one of whom should be always with them. If two attendants are to be placed in each cottage, the number of attendants must be very large, or the cottages made large enough to contain from twenty to thirty patients, and so lose much of their character.

The cottage plan is then not suitable for a large asylum, but should always have a place in an asylum system. What that place is will be subsequently indicated.

The modification of the cottage system which has been adopted at the Essex Asylum is, in most respects, admirably suited for a small asylum for from 100 to 200 patients; but it is not fitted for an asylum to contain more than that number. The size of the cottages, and their communication by a covered way, do away with some of the most cogent objections to the cottage system, and the facilities for the gradual enlargement of an asylum composed of such cottages, according to the growing requirement of a city or district, render it peculiarly well-suited for places increasing in population.

The pavilion, or block plan, is more calculated to fulfil all the requirements necessary for the care and treatment of a large number of the insane in one asylum than any other. The principles of hospital construction which have been laid down by Miss Nightingale, and which are subscribed to by the most eminent authorities on this subject, apply, though with diminished force, to hospitals for mental diseases. The pavilion plan is avowedly the best in a sanatory point of view. The ventilation is comparatively easy, and the facilities for future enlargement great, and that it can be made to serve for the peculiar requirements of the insane, is proved by the asylums of Auxerre, St. Anne, and Ville Evrard in France, which appear to work smoothly and well. The general quiet of these asylums seems much promoted by the complete detachment of the various sections. Objections have been raised to the pavilion or block plan on the score of expense: 1st, in the additional amount of land required, from the fact that the buildings are spread over a larger area; and 2nd, in inherent costliness of structure. The first objection can have little weight in New South Wales; the second is more or less groundless. The Herbert Hospital at Woolwich has certainly cost upwards of £400 per patient; the Lariboisière at Paris has been equally, if not more costly; and the three new asylums for the Department of the Seine, St. Anne, Ville Evrard, and Vaucluse, have cost on an average £300 per patient; but at these institutions no expense has been spared, and there has been a lavish expenditure on matters of detail. That it is possible to erect a building on the pavilion principle at a moderate cost, which shall fulfil all the requirements of a good hospital, is proved by the existence of the Pauper Hospital at Chorlton-on-the-Medlock, which has cost less than £60 per head; and there is no reason to believe that a similar building, with all the accessories necessary for the treatment of the insane, would be very much more costly.

The objection made to the pavilion plan,—that the buildings would be so distant one from another as to render supervision difficult if the asylum is large—has more weight. In a linear arrangement of the pavilions, this would be specially the case, but with the buildings placed in echelon or square, they may all be brought within convenient distance, and the difficulties of supervision rendered little more than in an ordinary asylum on the corridor plan. These difficulties may be still further diminished, by placing the accommodation for recent cases close to the administrative or central block, maintaining the principle of isolation by an arcade of two or three arches, and attaching the block for the sick to this in the same manner. These two divisions should be as close to the rooms occupied by the resident physician as possible.

Asylum construction must depend somewhat on the classification of the patients which is considered necessary, and this subject is discussed in a subsequent part of this Report. The classification there recommended is into—

1st.—Recent cases.
2nd.—Sick and infirm.
3rd.—Violent and noisy.
4th.—Ordinary patients.

Whilst the idiots are completely separated from the other inmates, and form a 5th class.

The number of divisions which are necessary in an asylum varies with its size. In an asylum for 500 patients, at least six divisions for each sex are necessary; and in this case, the "ordinary" patients may be placed in two divisions; but with a smaller number, three or four will suffice; the "recent" and "ordinary" cases, being amalgamated or not. Thirty to forty patients are a sufficient average number for each division.

For a small asylum, the maximum population of which is never to exceed 200, the modified cottage plan (which may be understood by a reference to Appendix *G*, Nos. 10 & 11), is the one to be most recommended.

For an asylum built originally for 150 or 200 patients, but intended for enlargement, so as eventually to contain 400, the "house" plan (see Appendix *G*, Nos. 4 and 5) or the pavilion plan are most fitted for the original structure. If the pavilion plan is adopted, the pavilions should be placed close to the administrative block, and connected with it by a short arcade. All subsequent enlargements should be on the pavilion principle, and consist of detached blocks; and the original building which at first contained all the patients, will serve to contain the recent cases and sick only, with perhaps a few others as the asylum grows in size.

For an asylum built originally to contain 500 patients in six divisions, the pavilion or block plan may be mainly adopted, and supplemented by cottages; or plans may be so modified as to embrace the "house," pavilion, and cottage plan, blended into one harmonious whole, as in the New Surrey Asylum (see Appendix *G*, Nos. 12, 13, & 14).

If the three plans are combined to form one asylum, the two classes who require most constant care and attention (the sick and the acute cases recently admitted), should be placed in the part built on the "house" plan, which will be under one roof with the administrative department, and so within easy access of the resident physician.

The ordinary patients and the violent class may be placed in detached blocks, two or three in number for each sex; and the small asylum town thus built, be supplemented by cottages for the idiotic and convalescent patients. The reasons for separating the idiots as a class from the other patients are mentioned in the section of this Report treating particularly of this class.

The cottage plan is particularly fitted for patients of good education, who are superior to the ordinary inmates of the asylum wards, though reduced by poverty, either prior to or as a consequence of their malady, to the same level. It adds vastly to their comfort to separate them from the other inmates, and the cottages serve also for convalescent and quiet patients, for whom the more strict discipline of an asylum is not necessary. For convalescent patients also, the association with sane people is very beneficial, and they by this means are allowed greater liberty, and are enabled to resume gradually their accustomed life, instead of passing at once from the asylum ward and its artificial existence to the realities of actual life abroad.

The special block for violent and noisy patients, which should be the smallest division of the house, should have connected with it and opening from it, a one-storied building, capable of containing four or five patients. It should consist of corridor and single rooms, and should have one or more small airing courts, opening either from the corridor or the rooms.

Number of Floors.—It has been laid down as a principle of hospital construction, that a pavilion should consist of two floors only. How far this is really important as regards hospitals it is difficult to determine, but the reasons which are assigned for such an arrangement have little or no weight in the question of asylum construction; and the experience of English and Foreign asylums shows that, if the upper stories are used as sleeping-rooms only—if the patients leave them in the morning and return to them at night—a third story may be both healthy and convenient, and the cost of construction will certainly be less. Both the English and Scotch Boards of Lunacy have decided that three stories may be used, if the uppermost story be devoted to sleeping accommodation. For many reasons, it is undesirable to add a fourth; and so far as is known no modern building with a fourth story has been erected. With two stories only, ventilation is more easy, since the upper room containing the sleeping accommodation can always be more or less effectively ventilated through the roof, by means of some one of the contrivances for this purpose; but the question as regards the number of stories in an asylum must depend chiefly on the uses to which the rooms on the ground-floor are applied. If the ground-floor is to be divided into day-room and dining-rooms, and so the patients occupy only half of it at once, the number for which it will serve will not be greater than can be contained in one dormitory floor; but if the dining-room accommodation is provided elsewhere, as is advocated in a subsequent part of this Report, the space for sitting or day-room

accommodation will be doubled, and made sufficient for the number of patients who can be accommodated in two floors built over it. The space required for sitting and day room accommodation in asylums is reckoned to be about half that required for the night, because the patients are seldom all within doors except at meal times, when they occupy the special dining-rooms, and in the evening, when the common amusement room is frequently in use and relieves the day-room, which might without it be too crowded.

The material to be selected for asylum construction may fairly be that which is most readily procurable, so long as it is durable and not porous. The driving rain which is common in New South Wales tends to make all buildings constructed of porous material damp and unhealthy. Brick or stone equally serve the purpose, but the latter is capable of more architectural effect; and, as asylums should be made as pleasing as possible in appearance, should certainly be selected where there is little or no difference in the cost. The sandstone upon which Sydney stands—which is procured without great expense and worked with ease, and of which almost all the buildings in the city having any architectural pretensions are built, would be an excellent material for an asylum; but there can be no objection to variegated brick, the effect of which is often extremely pleasing. So long as the windows are of large size, the particular style may fairly be left to the architect entrusted with the planning of the building.

Water Supply.—A full supply of pure water is an important requisite in an asylum, and no site should be chosen where this cannot be obtained.

If the asylum be near the town, the town supply will be found cheaper, and altogether more convenient than any other arrangement; but when at a distance, the supply from a well or spring, especially if this is close to the buildings, is the best method; since the steam-engine, which will always be necessary to pump and fill tanks, may be made to serve other purposes also, as turning machinery, either at the laundry or farm buildings; whilst the boilers which supply it may be used also for heating hot water for baths and lavatories, the kitchen and laundry*.

No supply from a running stream should be used without careful filtration; and if water is procurable in any other way, surface drainage should not be resorted to, since with this method in use, high farming is almost impossible, without running risk of dire illness to the inmates, from animal poison contained in the water.

The quantity required for the use of an asylum, even when earth-closets are used, is not less than 15 to 25 gallons per head, per diem†.

Professor Parkes, in his treatise on Hygiene, states that 16 gallons per head per diem, at least, are required for cleanliness by people who are in good health, and 38 gallons per head for hospital use—and gives the following tables :—

" From Professor Rankine (*Civil Engineering*, 1862, page 731) :—

	Gallons per head, per diem.		
	Least.	Greatest.	Average.
Water supply in towns—			
Used for domestic purposes	7	15	10
Washing streets, extinguishing fires, supplying fountains, &c.	3	3	3
Allowance for trade and waste	7	7	7
Total in manufacturing towns	17	25	20
Additional demand in manufacturing towns	10	10	10
	27	35	30 "

* At the Montrose Asylum two large steam-boilers are placed in a detached building; they serve to heat the air for warming the house, and the water for kitchen, laundry, and general house use, as well as drive two engines, one at the asylum, and the other at the farm buildings close by. One engine pumps water from a well, sewage from a tank, and hot water to the top of the ventilating towers, and can also be made to send water through hydrants in case of fire. The engine at the farm drives thrashing-machine, chaff-cutter, &c.

† At the Gloucester Asylum, where water is from the town supply, 15 gallons per head serves all purposes; at the Leicester Asylum it is under 10; at the Prestwich and Montrose it is about 40.

	Gallons.
"Hospital supply—	
For cooking, including cleansing of kitchen	2 — 4
For personal washing and baths	18 — 20
For laundry washing	5 — 6
Washing and cleansing of hospital and utensils	3 — 6
Water-closets	10
	38 — 46"

The instructions of the English Commissioners on the subject are (see Appendix *A*), "that there should be a constant and ample supply of good water, of which a careful analysis should be made, with a view to determine the proper materials for pipes and reservoirs, and also in order to ascertain its fitness for the purposes of drinking and washing. The quantity, exclusive of rain-water, should at the driest season be not less than 25 gallons per patient, per diem, and the amount should be accurately gauged."

On this particular, the Scotch Commissioners are not in accord with their English brethren, and suggest 40 gallons per diem as the allowance for each patient, exclusive of rain-water.

The Association of American Superintendents suggest (see Appendix *A*) 10,000 gallons for 250 patients, or 48 gallons per diem each.

Any unnecessary number of tanks should be avoided. If the supply is from the town they may be done entirely without; but in any other case, one or two large tanks will be necessary, and these may be placed, either separate from, or in the roof of, the building. If the building is on the block plan, a separate tank may be provided for each block; but if not, the experience of some of the best of English asylums seems to shew that minor tanks are unnecessary.

Rain-water should be carefully collected, especially in New South Wales, where water is scarce, and carefully stored in a separate tank placed over or near the laundry. If good-sized underground tanks are made, and the rain-water carefully collected from all the buildings, no small part of the amount necessary for the asylum supply may thus be obtained.

The expense attending the erection of fireproof arches, iron doors, and other contrivances to render asylums fireproof, has led to their almost universal disuse; and considering that they are at best only a doubtful expedient, their use cannot be recommended. Reliance should be placed mainly on hydrants, for which proper hose should be kept always at hand, placed both outside in the grounds and inside on the staircases. These should be connected both with the ordinary water supply and with the tank; and where a steam-engine exists, the pipes should be so arranged that the water may be played by steam power.

Fire drill, at which attendants and patients should assist, should be practised at fixed intervals, and the hose and other appliances kept always in order.

In asylums in which force of water sufficient to play the hose cannot be obtained, ordinary hand fire-engines should be kept at the asylum, and the patent contrivance called "L'Extincteur" may be also kept at hand.

In a central and convenient position, in both the male and female sections of an asylum, should be placed a general bath-house. In this there should be such bathing arrangements as will serve for all purposes of cleanliness and treatment. For cleanliness, something much simpler and cheaper, and quite as effective as the ordinary baths with their expensive fittings, may be arranged. A fair-sized room, with slate or cement floor, fitted with stools for the patients to sit on, and foot-pans, supplied with water of different degrees of heat, will serve all purposes. The patients can use the foot-pans, sit on the stools and be well soaped, and finally washed by the attendants, by means of hose of small size fixed to the water-taps. This plan of washing is used to some extent at the Sussex Asylum, the water being dashed over the patients by means of bowls; and in a new bath house at the New York City Asylum, it is proposed to fit up a room for this purpose. It is certainly more cleanly than the ordinary bath, where the same water is used for several in succession, and will take less water than it, if fresh water is used for each one.

For treatment, ordinary baths will be necessary, but one or two will suffice in the general bath-room, instead of one to twenty or every thirty patients, which is the necessary proportion when they are used for purposes of cleanliness as well. A shower-bath is useful in certain cases, but one for each sex will be sufficient. The Turkish-bath has been found extremely useful in the treatment of various forms of insanity. Both these should be placed in the bath-house.* A fixed bath will be necessary in the division for the more excited class of cases, since it is frequently undesirable to move them from their special section of the asylum; and one, either fixed or movable, for use in the infirmary.

The ordinary bath-rooms should have cemented floors, over which gratings should be placed for the attendants and patients to stand on. The baths should be fixed in such a position as will allow the attendants to walk all round. The best material appears to be Rufford's Stourbridge fire-clay, which is used in most English asylums recently erected and in numerous public baths, is comparatively cheap, lasts longer than metal or slate baths, and requires no repair. The chief points as regards fittings are, that the taps should be so placed that they may always be under lock and key, and an arrangement by which the openings for the admission and discharge of the water vary slightly in their level, is preferable to one which allows one opening to serve both purposes, for in the latter case, the deposits which take place in the pipe are pretty sure to be returned in to the tub when the next bath is drawn. By drawing a little cold water in each bath before the hot is admitted, vapour is prevented in the room. Covers for the baths are unnecessary. If a movable bath is used for the infirmary, it should be of galvanized iron or zinc, on wheels.

The lavatories should be placed on each story; one on the ground-floor, for day use; and one on each upper story, for use in the morning. The basins, exclusive of those in the dormitory wash-stands, should be in the proportion of about 1 to every 10 patients; but if wash-stands, are not provided in the dormitories, the proportion should not be less than 1 to 4 or 5. The simpler the lavatory fittings can be made, the better. Earthenware basins set in holes in wood or slate slabs, (the basins to be emptied into a trough beneath, through the hole in which they stand, or some such simple arrangement,) are all that is needful or desirable for the quieter wards. For the more excited patients, the basins should be fixed, and the pivot plan, in which the basin cannot be removed, and can be readily emptied, is perhaps the best. Cold water should be laid on to each lavatory. Hot water is certainly not necessary in the climate of New South Wales. The taps over the basins should be as simple and inexpensive as possible; and the entire water supply to each lavatory range should be under the commad of an attendant's key, so as to prevent waste of water, or the use of the lavatories by the patients except at fixed times.

A sink should be placed in a small closet near each lavatory, and water should be laid on. In this closet should be kept all brushes, &c., used for cleaning the rooms.

In this arrangement, hot water will be required for the common bath-room, and for the baths in the division for excited and the sick and dirty patients; and it should also be laid on to the sinks in these divisions, since it will be necessary for cleaning purposes in both. The way in which this can best be supplied will depend very much upon the position of the buildings. For the common bath-house, the furnace may be placed in or near it, as in the French asylum; and for the baths and sinks for the excited and infirmary division, small separate boilers may be fitted in each, as at Meerenberg, where the water is heated by gas, which serves also in the infirmary for minor cookery; or all may be supplied by pipes from the kitchen or laundry. It will be seen that, by the use of general baths, the amount of piping both for supply and discharge of water is much lessened.

Drainage.—In reviewing the systems of sewage which are used in Europe and American institutions, and in considering which is most applicable to the Colony of New South Wales, one is led irresistibly to the conclusion that the dry-earth system is that most calculated to answer in this country, where the climate is hot, the water supply is

* For a plan of a general bath-house to serve both for purposes of cleanliness and treatment, see Appendix *F*, Fig. 15. On one side of a central passage, is a dressing-room, and a washing-room fitted with foot-pans, douches, and a shower-bath; on the other, a dressing-room, an ordinary bath-room containing two baths, and two rooms fitted for the Turkish-bath.

scanty,* and such fittings as are required for a complete system of water-closets costly. The experience which has already been gained of the dry-earth system at the Parramatta Asylum is entirely in its favour. It has, so far, answered admirably in the institutions in which it has been tried in England; and the opinion of authorities on sanatory matters in India is strongly in its favour, as applicable to barracks, hospitals, and public institutions, as the following extract from an elaborate report on the dry-earth system of sewage, made to the Madras Government by the Sanatory Commissioner of Madras, will shew. "The Quartermaster General, in a letter to the Secretary to Government, dated October 19, 1864, says,—'The efficiency of the system, after being largely tried in hospitals and gaols, is reported to be attested by, it may be said, the whole service, there being scarcely a dissentient voice.'"

The Sanatory Commissioner, Madras, in May, 1867, expressed to Government an opinion that "It is no exaggeration to say that, wherever large numbers *under control* are congregated, Mr. Moule's system of conservancy has been entirely successful, and that it is so far a great public benefit," and "as in many stations in India a good system of drainage and water supply are both deficient, Mr. Moule's system of dry-earth sewage is the best means available for our barracks, hospitals, gaols, and other public institutions."

The following additional opinion is from the proceedings of the Sanatory Commissioner for Bengal, August, 1867:—

"When properly carried out, it (the dry-earth system) may be considered as near perfection as any form of conservancy as can be."

The dry-earth system is extensively used for private houses in country situations in England, with the greatest success. With this evidence, and with a full consideration of the climate and water supply of New South Wales, there need be no hesitation in suggesting that the dry-earth system should be adopted for the entire sewage of asylums, including the rooms occupied by the officers of the institution. The closets should be, as a rule, placed outside the buildings, and detached from them, but reached by a covered walk, and so arranged that the excreta can be easily removed by means of a cart brought close to the back of the closet; but for the infirmary, and for each dormitory flat, there should be one or two placed in a projection, admitting of cross ventilation; and a window should be placed over each seat. These closets should be, on the ground-floor, in number about 1 to every 15 or 20 patients. The walls should be cemented, and made as non-absorbent as possible. The divisions between them should be of slate; and the pavement of asphalte or stone, oiled or waxed boards, or some other material which will not absorb moisture. The seat should be of wood, and the closet self-acting; the earth being discharged into the pan on the person using it rising from the seat. The pans should be of porcelain or iron, and of moderate sectional area. No water should be used. The privy pans must be cleaned and scoured with dry earth; the floor dusted with dry earth, and swept. Upon these conditions being complied with, and upon an attention to a number of minor details not necessary to mention here, the success of the dry earth system depends.

The mixture of earth and excreta, called "poudrette," may be either stored at some distance from the building, for future use, or used at once, so long as it is not applied as surface dressing, but ploughed in and covered with a few inches of soil. If applied as top dressing, the sun exhausts its fertilizing properties. Water causes decomposition.

The earth system should be also, if possible, applied to urinals; but the amount of earth required to saturate the urine passed daily by each individual, which has been estimated by the Sanatory Commissioner for Madras at 30 ounces, is very large—not less than 7 lbs.† The labour of digging this quantity of earth, bringing it to, and removing it from the urinals each day, would be enormous, and such as is considered "practically to amount to a prohibition of its use."

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* At Netley Hospital, Jenning's Closets, which require a good deal of water, take 10 gallons per head, daily. Professor Parkes, *Practical Hygiene.*

† The quantity required for deodorizing the excreta passed in the closet is found to be 2½ lbs. per individual per day.

As, however, by using the dry-earth for the more solid excreta, there will be no system of drainage-pipes established in the institution, it is impossible to think of introducing it for urine only; and it remains either to apply the dry-earth system to urinals, notwithstanding the labour it will entail (a matter which is not so immediately important in asylums as in other institutions), as has been done in the military male orphan asylum Madras, or adopt some other system.

In the Report of the Sanatory Commissioner for Madras, before quoted, large tins—metal vessels capable of being screwed up and made air and water tight—are recommended to receive the urine, which should be deodorized by the admixture of 6 per cent. of M'Dougall's disinfecting powder, which contains carbolic acid in association with sulphurous acid, lime, and magnesia, or by 3 per cent. of carbolic acid itself. These tins may be fairly tried as an experiment. They should be placed under a porcelain urinal pan, fitted in a separate compartment, built in the same manner, and adjoining both the outdoor and indoor closets. Into the one placed indoors the contents of the bedroom utensils, both of the male and female side, should be emptied; and the tins, tightly screwed down, should be removed daily in carts, and replaced by others, in which a fixed proportion of disinfecting material should be placed prior to use. The urine, carted to some little distance from the asylum, should subsequently be mixed with earth and utilized. Urinals should be provided in the proportion of 1 to every 15 or 20 male patients on the ground floor.

It is essential that all closets and urinals should be lighted with gas.

If the dry-earth system is used for closets, and either this or the metal vessels with disinfectants mentioned above for urine, the entire system of pipes to convey water to the closets and urinals, as well as the sewers to carry off the mingled water and excreta, will not be needed, and the structure of the building, and the arrangement for drainage, much simplified.

There will still remain, however, the pipes and drains necessary to carry off the water from bath-rooms and lavatories, kitchen, sinks, and laundry. These various pipes may, according to the nature and level of the ground, or the position of the land under cultivation, all be made to converge to and enter one tank, placed at some little distance from the asylums, or several, placed in various parts of the garden and grounds, as at Quatre Mares, from which, after an admixture of deodorizing material or not, as may be found requisite, the contents may be distributed, either by a system of pipes or by other means, over the garden and farm of the asylum, and so every particle of water, with the fertilizing contents derived from laundry, sink or kitchen, will be utilized. On referring to a prior part of this Report, it will be seen that it is considered essential that all drainage matters should be used for irrigation at once, and not allowed to decompose in tanks or cesspools before being applied to the land. The pipes from the various sinks, lavatories, &c., should be trapped, either at once or before entering the main drain; and ventilating pipes for the drains may be fitted, as at the Herbert Hospital at Woolwich, where iron pipes pass outside the wall, from the bottom of each drain-pipe to above the roof of the building, and are there left open, so as to carry off all obnoxious gases high into the air; but the double-trapping, before entering the main drain, and close to the sink or bath, which is in use at this institution, is clearly not necessary, as the main drain will contain no ordinary sewage matters. Arrangements should be made by which the drains can be flushed at intervals. This is especially necessary in a warm climate; and the best method is that adopted at Broadmoor and other asylums, in which the contents of the tanks placed over the house can be rapidly started through the drains. With the arrangements for collecting all drainage in tanks mentioned above, the water so used will not be wasted; it will merely be discharged from one place and collected in another, and in its passage will have performed a useful service. Every care should be taken that the ground on which the asylum stands is fully drained; and if the site chosen be elevated, this will be sufficiently easy.

Lighting.—The requisites for an asylum window are—that it should light the room perfectly, that it should be the main agent in ventilation, that it should be safe, so as to prevent accidents to the patients or allow them to make their escape, and that this safety should be independent of bars or guards, which are quite inadmissible. After an

attentive consideration of the various forms of windows in use in asylums, the double hung sash, with framework entirely of wood, made to open top and bottom, and chocked to 5 or 6 inches, seems to be on the whole the best form. Experience has proved its safety; it is one of the simplest and most inexpensive forms of window, and in several English asylums has answered every purpose. In a climate like New South Wales, where a very free opening of windows is necessary—the form of window in use at the Chester and Prestwich Asylums (see Appendix *F*, Fig. 9), in which the lower sash is made to open freely, but is fitted with a bolt by means of which it can be prevented opening beyond 5 or 6 inches, will be a decided improvement upon those permanently chocked top and bottom. And even freer ventilation, without any diminution in point of safety, may be secured by dividing the window into two parts, and fitting the lower three-fourths or four-fifths as a double sash, whilst the remaining part is made to open on a pivot horizontally. The French windows, when without bars, are decidedly less safe than the double sash, and are difficult to manage so as to regulate the amount of air admitted. The unchocked sash used in some American asylums necessitates bars or guards, and the special windows at Guislain's Asylum, though ingenious, are more complicated and less efficient for ventilation than the double sash. The size of the window and the proportion to wall space are more important in reference to ventilation than light, in a bright climate like New South Wales. If the windows occupy one-fourth of the wall space, they will be large enough for all purposes.* They should, as far as possible, be placed opposite to each other, and extend to within a short distance of the ceiling, so as to ventilate the whole space of the ward. They should extend to within such a distance of the floor, in the day-rooms, as will allow of the view from them being seen by any one in a sitting position; and, as a general rule, in dormitories and single rooms, should not be placed more than 4 feet from the floor. The panes should be of medium, size, not so large as to suggest to a patient the idea of escape through them when broken, or so small as to give a prison-like appearance to the room. Iron bars are quite unnecessary, and wire guards may also be dispensed with. The wall below the window, instead of being sloped or splayed, may be recessed to admit a seat, as suggested by the English and Scotch Commissioners.

If any associated dormitories are placed on the ground-floor, they should, for reasons of decency, be fitted with ordinary shutters, which may be made to fold against the wall when open, and fasten by a spring catch when shut. It will be necessary to provide shutters for the majority of single rooms wherever they are placed, and for these the best form appears to be that sliding from below, and made to lock, both when fully closed, or only three-parts so, so as to admit of some light and ventilation in the room.

Blinds will be necessary for almost all windows in this sunny climate, and it would be well if these were green or yellow, and if hangings of bright colour, which have an immense effect in making the room cheerful and homelike, were provided for all day-rooms.

The arrangement of windows for the infirmary need not differ from those in the other wards. The sash is one of the best forms, and if found insufficient alone, should be accompanied by some special ventilation. The form of window in use at the infirmary of the Sussex Asylum (see Appendix *F*, Fig. 7) is a very good one. For the rooms devoted to the more violent class of patients, the windows may be still of the sash form, the cross-bars of iron being set in a wooden frame; or the form in use at Murthly may be adopted.

In the two or three rooms used for temporary seclusion, the windows may either be placed high and out of the patient's reach, in the roof or wall, or at the ordinary level and protected by wooden shutters, sliding from below or from the wall at the side. A wooden shutter, perforated for light, may be used, or one fitted with windows of strong

* The opening for the windows at the additions to the Chester Asylum is 7 ft. x 3 ft. 9 in., and the panes 12 in. x 7¾ in. Dr. Kirkbride, in his treatise on Hospitals for the Insane, suggests 5 ft. 6 in. x 3 ft. as a convenient size; it will give two sashes, each containing ten lights 5½ in. x 16 in.; and adds, that glazing should be done from the inside, especially in the upper stories, for facility of repair.

plate glass, which will permit the patient to see out.* In all rooms used for seclusion, the windows should be made so that they can be opened or closed by means of cords pulled from the corridor outside the seclusion room. Wire guards and bars should be avoided, even in the room for the most violent patients.

Every asylum should be lighted throughout with gas, which is at once the safest, cheapest, and most effective mode of lighting. At all times of the year there are two or three hours during which the asylum wards must be lighted, since it is impossible to send the patients to bed at sunset, to pass a long and wearisome night in their dormitories; and every other mode of lighting an asylum is more or less inefficient and unsafe. The thorough lighting of an asylum has really a remedial effect. The few evening hours spent in well-lighted rooms, after the work of the day, are to most asylum inmates its happiest part, as they not unfrequently are in private homes. Any one conversant with asylum life knows that it is then that the indoor games provided—the chess, draughts, and cards—are chiefly played; and it is then that is heard music and singing, either in the day-rooms or in the special amusement room of the place.

If gas cannot be conveniently obtained from a company's works, it may be made on the premises without difficulty, at a cost which will render it cheaper than any other kind of illumination such as it is necessary to have in an asylum.

Some modifications of the ordinary modes of fittings will be necessary in the introduction of gas into an asylum. It appears advisable that pipes should be so arranged that the gas in each staircase and each set of rooms should be capable of being turned off separately, either by a tap in the basement of each division, as at New York Asylum, or by taps accessible only by a special key in the wards and staircases themselves, as at Murthly.

The lights should for the most part be placed so high as to be out of the ordinary reach of the patients. This may not be necessary in all the wards, and is to be avoided when consistent with safety—since a certain amount of light must be lost when the position of the burner is high. In the rooms used by quiet and convalescent patients, the lights may be placed at an ordinary height. The lights in passages and on staircases should be all placed high, and the projecting pipes may be short and droop from the wall, as at the Montrose Asylum, so as to prevent them being used for suicidal purposes. These lights may fairly be left naked, but the lights in day-rooms have an unfurnished look without glasses, and the light will frequently be flickering and bad. A naked light, too, is a constant temptation to mischievous patients. It will be well, therefore, to fix glasses of simple form to all sitting-room lights, especially as the cost is small, and (with care) the amount of breakage trifling; or the lights may be fitted with the cover and gauze which are in use at Ville Evrard. (see Appendix *F*, Fig. 8.) Lights of candle size should be kept in in all passages and corridors at night, and are useful in rooms occupied by the sick, the epileptic, and the violent and noisy; but the weight of opinion is against their use in ordinary dormitories.

Warming.—Upon an examination of the different systems of warming in use in the various European and American asylums, it is impossible to arrive at a conclusion other than that open fire-places, especially when built with air-chambers, as in use in British asylums, form the best, simplest, and cheapest mode of warming asylums in a moderately cold climate. In America, with a temperature standing for some months in the year, at or below the freezing-point, open fire-places would scarcely fulfil the purpose; and the elaborate system of heating by steam, which has been almost universally adopted, is perhaps the best which could be used. The German stoves which are in use on the continent, are cumbrous, and as a rule unsightly. The English Commissioners have suggested (Appendix *A*) that in English asylums "all the galleries and day-rooms should be warmed by means of open fire-places or open fire-stoves, and in large rooms two fires should be provided. Fire-places should also be built in all associated dormitories." They have added to their suggestion that, "in large rooms, such as the chapel and dining-hall, and in the corridor, further provision for warming may be necessary, by means of some simple system of hot-water pipes in connection with the open fire-stoves or fires."

* This plan is adopted at the Maclean Asylum, Boston, and seems to answer admirably.

It is well known that the insane, often badly nourished, and with weak circulations, feel the cold acutely; and it is found by experience in the asylums of the Colony, that fires are necessary in the day-rooms for at least four months in the year; but the temperature is seldom or never so low as to make fires in dormitories desirable, and ordinary fire-places would be quite sufficient to warm the larger rooms, such as the chapel and dining-hall. It is therefore suggested that open fire-places should be placed in the day-rooms, and in the chapel and dining-halls, and that they should be fitted with air chambers such as are recommended in the Report of the Commission on Barracks and Hospitals. Fire-places so fitted are in use at the Chorlton Pauper Hospital, and the New Surrey Asylum, and are found more economical than ordinary grates. In some English and Foreign asylums, it has been thought necessary to make special provision for warming some parts of the asylum, such as the infirmary and the rooms devoted to violent cases. The most efficient way of so doing is by means of some simple hot-water apparatus, such as has been adopted at the Sussex County Asylum, and in the department for violent women at Broadmoor; but it can scarcely be doubted that all necessary warmth for the rooms devoted to the sick can be obtained from open fires placed in the dormitories as well as day-rooms, and that a stove, or fire-place properly protected, may serve every purpose in the rooms for the violent. Elaborate, and in every way excellent, as are the schemes for warming and ventilation adopted for the rooms devoted to the violent class, in the Frankfort and other Asylums, they are not necessary in this climate.

When open fire-places are employed, either small guards as used at Cupar, or else high fenders, or a simple guard, should be used to prevent accident; but the heavy locked iron guards, which are prison-like and offensive in appearance, should not be used.

Ventilation.—Natural ventilation, with such accessories as may be deemed expedient, and the simpler these are the better, can alone be recommended for an asylum in a temperate climate.

The first necessity is to secure a sufficient amount of air, by apportioning a fair amount of cubic space to each patient; and the second, to allow such constant change of this air as is necessary for health, by means of doors, windows, fire-places, and other openings.

Each room should, so far as possible, be made independent of every other in respect of ventilation; and if the windows are placed opposite to each other, and the space between them left unimpeded—if they are made to go up to within a short distance of the ceiling—if they are of the common sash form, opening top and bottom, and kept almost constantly open—and if there is an open fire-place, no accessories whatever are necessary, and the rooms may be kept perfectly sweet and wholesome. But in so much as these requirements, one or more fail, accessory openings for the inlet and outlet of fresh air, will be, more or less, necessary. The best form of accessory openings for the inlet of air are those in connection with chambers around the fire-place, communicating with the outer air, and with the ward, and by means of which pure air is admitted directly from without, and in winter warmed in its passage to the room; perforated zinc panes to the upper windows; small openings in the walls near the ceiling, of perforated brick or iron, so arranged as not to cause draughts; or the well-known contrivance known as Sherringham's Ventilator, which consists of an air-brick inserted in the wall near the ceiling, and affording a direct communication with the open air, draughts being prevented by a valve to direct the air towards the ceiling. For outlet, a ventilating shaft such as recommended by the Commission for improving the sanitary condition of barracks and hospitals, placed in the opposite side of the room to the accessory inlets opening near the ceiling, and passing in the thickness of the wall to 3 or 4 feet above the roof, where it is protected by louvres to prevent the rain beating down, is applicable to all rooms. Mackinnel's Ventilator, consisting of two tubes, one within the other; the inner of which serves as outlet, and the outer as inlet, is applicable to buildings of one story, and to the upper rooms of those having more than one, and is perhaps the best form for this purpose which has yet been invented.

The size of the outlet and inlet should be apportioned to each other, and depend on the cubic space of the room. The Commission on Barracks and Hospitals, after a series of experiments, have recommended an average sectional area of 1 inch to every 55 cubic feet

of room space, as the size of the opening for outlet, and 1 square inch for every 60 cubic feet of contents for inlet, as necessary for perfect ventilation; but here, the doors and windows do not seem to be taken into consideration, though the chimney is reckoned as an additional outlet.

The best, simplest, and least expensive form of apparatus for artificial ventilation is the archimedean or revolving screw-ventilator, which is in use at the Prestwich, New Jersey, and other asylums; and for the top wards of the Chorlton Pauper Hospital. Where special difficulties present themselves in ventilating the single rooms of an asylum, this apparatus may be used, and can be fitted to the top of an ordinary shaft communicating with one or more rooms.

The ventilation in the wards at the Pauper Hospital at Chorlton-on-the-Medlock—one of the most perfect as well as the least expensive of modern hospitals—is thus described by the architect of that institution, and, though more elaborate than is necessary for an asylum, will show how completely natural ventilation with certain accessories may be made to answer almost every purpose. Artificial ventilation is employed only in the top wards, which are faulty in construction.

"In the east and west walls, or the long sides of the wards, are placed a series of large windows, 4 ft. 8 in. wide, and extending from 2 ft. 9 in. above the floor to the ceiling. These windows are in all cases facing one another, and are divided in their entire height into three subdivisions.

"The lower portion, for about three-fourths of their whole opening, consists of an ordinary double-hung sash; the upper fourth is pivoted, and works in a swivel with cords, to open at any desired inclination. On the top of this swivel light, and in fact forming a portion of it, is a continuous hopper-shaped frame, made of cast-iron. This frame extends the entire width of the window. It is glazed at the front and ends, but a space at the top is left open about two inches wide, and the full length of the frame. This long narrow opening is covered with fine wire gauze, and admits a constant but imperceptible stream of the outer air, which is continually passing across the ward close to the ceiling, towards the corresponding opening in the opposite window. A slightly upward direction is given by the sloping form of the hopper, in order that the air may be thrown towards the centre of the apartment, and be so distributed as to avoid diverse currents.

"Any or all of the three divisions may be opened, more or less, at the discretion of the attendant; but when all are opened to their full extent, the ward will in a very short time be flooded with fresh air.

"Besides this, however, there is the opportunity of obtaining a current from the two extreme ends of the ward, and flushing the upper part with fresh air without opening the doors.

"This is effected by means of a glazed louvre, about 6 ft. high and 4 ft. wide, placed at the entrance end, over the door from the staircase, and at the other or balcony end, by means of a large swivel window, similar in arrangement to those already described. The louvre, which is worked by a very simple mechanical contrivance with lever and screw, may be adjusted to admit more or less air as required, but practically they are very rarely closed.

"There are also, at various points in the walls, air shafts or flues, discharging above the roof level; and the ventilation is further assisted by a considerable number of small air grids or channels, built in the walls, at short intervals, close to the ceiling. These grids have a sloping lip on the inside, projecting about five inches from the wall, with an inclination of about 45° to prevent the air falling at once in a cold volume to the lower part of the ward. A corresponding grid is placed in the opposite wall in each case, and the air appears to take a direction generally across the ward, near to the ceiling. The air being thus admitted in very small quantities, and at very numerous places, diffuses itself without perceptible draughts, and displaces the gaseous portion of the contained air, which naturally rises to the top.

"The form of the small air channels is such that they would hardly be observed if not pointed out, and are therefore not likely to be wilfully obstructed, especially as they are close to the ceiling, and therefore out of reach.

"In the floor of each ward, at a distance of six feet from the outer walls, are a number of hit-and-miss gratings, with galvanized iron horizontal tubes or flues, to conduct the fresh air to the foot of the beds, should it be required in foul cases, or when it may not be desirable to open the windows."

"On the ridge of the roof are revolving ventilators of large dimensions, to promote the ventilation of the top wards, which are partly in the roof so that the windows do not reach to the highest part of the ceiling."

"Each ward is lit at night by three suspended rings of gas-burners over which a funnel-shaped cowl is suspended, which terminates in an iron flue communicating with a shaft in the wall, by means of which the products of the gas are carried off, whilst at the same time an upward current is caused, and a further impulse given to the ventilation during the night, when the windows are usually closed."*

In the climate of New South Wales, the cubic space allotted to each patient should somewhat exceed that which is fixed for English institutions, and approach more nearly to the space allowed in some American and Continental asylums. The space for single rooms, should not be less than 1,000 cubic feet, and the associated dormitories should average from 700 to 800. For the day-room accommodation it seems probable that 500 or 600 cubic feet will be sufficient, since the patients will spend by far the larger part of the day in the open air. The rooms, both for the infirmary and for temporary seclusion, should contain certainly not less than 1,500 cubic feet.

The height of 12 feet, proposed by the American Association of Medical Superintendents, seems ample for all the purposes of an asylum room.

Every room should have its cubical contents painted on its door.

Day and Night Accommodation.—In all asylums, separate day and dining-room accommodation should be provided. If the same rooms are used for both purposes, it will be found almost impossible to lay the dining-table whilst the patients, frequently mischievous and misconducted, are present, and to conduct the dining arrangements with such order as is requisite. A smell of dinner will also remain in the rooms which the patients are to occupy during the remainder of the day. This is as objectionable in an asylum as in a private house. Besides this, the absence of the patients for two or three hours, at certain times during the day, from the day room will give an opportunity for opening windows, and completely changing the atmosphere of the apartment, and so be conducive to health.

This being granted, it remains to be seen how far it is advisable to substitute a common dining-hall for small dining-rooms in connection with each ward; and the

* On the subject of artificial ventilation, the remarks of Dr. Bristow and Mr. Holmes, in a report on the hospitals of the United Kingdom—published in the Appendix to the Sixth Report of the Medical Officer of the Privy Council—are so pointed, and so fully in record with all recent experience on this subject, that they are quoted here.

"We have no hesitation whatever in expressing our opinion, founded in all cases on observation and such an examination of recorded facts as we have been able to make, that every pound (and they have unfortunately been many thousands) which has been expended on these costly and elaborate machines has been wasted. The example of Guy's Hospital is familiar to all medical men in London, and the superiority of the old wards, with natural ventilation, to the new ones connected with the artificial system, is an admitted fact. The utter failure of the very ingenious machinery in use at Lariboisière and other hospitals in Paris, to keep the wards in a healthy or even a sweet condition, proves the inefficiency of such contrivances. These systems (at least, those on the principle "par injection") do no doubt keep up a constant supply of air to the wards, yet they do not ventilate them. No amount of cubic feet of space, no plan of building, no artificial system, no combination of all these adjuncts to a good ventilation, has ever been found to replace open doors, windows, and fire-places; while, provided with the latter, which are the essentials of good ventilation, many old, crowded, defective hospitals have maintained, for a long series of years, an amount of success which the most eminent examples of scientific structure have never found practicable.

"Considering then, the utter failure of artificial systems, and the perfect success of the natural system of ventilation, is it going too far to say, that to expend money in the construction, and in the maintenance and working of such machinery, would, after our present experience, be wantonly to waste and misapply the funds contributed for the benefit of the poor? The experiment was a natural and a most justifiable one, but it has had a fair trial and failed; any further repetition would be culpable."

arguments which have led to the adoption of this system in Great Britain seem valid here. They are,—

First, that the change from the asylum ward, the small journey to and fro, and the meeting with other faces, are useful mentally to the patients.

Second, that the formality which dining in a general hall involves, the routine with which it is accompanied, the grace before and after meat, said by the chaplain or the chief attendant, and the good order which is more likely to prevail where the meal can be under the immediate superintendence of the chief officers of the institution, than when it is conducted under the inspection of the attendant only, in the ward, are useful as drill and organization, whilst the example afforded by the good conduct of the more quiet patients acts beneficially on the more unruly.

Third, that by the substitution of a common dining-hall for a number of small ones with their attached sculleries, asylum construction is facilitated, and ventilation is made more perfect and easy. The ward scullery, unless well ventilated and kept with scrupulous care, must always be more or less a nuisance; and the smell of dinner spread through the asylum is neither wholesome nor pleasant.

Fourth, the dinner can be served better, hotter, and with less labour, in dining-hall attached to the kitchen than in separate dining-rooms at a distance from it.

The English and Scotch Commissioners do not appear to consider separation of the sexes at meal-times important, but there are various reasons why separation should, in an asylum, be as complete as possible; and if the building can be so arranged, it will be well that one dining-room should be provided for each sex, and that they should be placed on each side of the kitchen.

It must, however, be remembered that all English asylums in which the common dining-hall system has been adopted are on the continuous-roof plan, and that therefore the patients, in going to and from the dining-hall, traverse only the corridors or special close corridors of communication, and so do not go into the open air. The block plan of construction has been recommended for this Colony, and in this the patients would have to pass from their special blocks to the dining-hall, under verandahs or covered arcades. This, which on account of the climate is felt to be objectionable in England, and appears to have militated against the adoption of the general dining-hall system in France, in the new asylums on the block principle erected there, need not be an objection here, where the cold is never sufficient to be much felt, and rain is by no means frequent.

It will be advisable, then—1st, that day-room accommodation should be provided for each section of the asylum, at the minimum rate of 500 cubic feet for each person. That a general dining-hall, or two dining-halls, one for each sex, should be built conveniently situate with reference to the kitchen, capable of containing three-fourths of the entire number of inmates. Experience has shown in English asylums, that this number may with safety and advantage be allowed to dine in common. At the Sussex Asylum, the number dining together when visited was upwards of 200 males, out of 240, and upwards of 250 females, out of 320. At Stafford, 200 men out of the total number of 240; and at Murthly, 190 out of 320.

2nd. That the day-rooms should be used for all the ordinary purposes of living-rooms.

3rd. That all meals should be served in the dining-hall, and that all patients who can safely be trusted should attend, under the charge of one or more attendants. One attendant should always be left in the ward, to look after any patients who may not be able to dine with the rest, and also to see that the day-room is properly ventilated in their absence.

With the information on dormitory accommodation which is to be found in a prior part of this Report, it may not be difficult to suggest a proportion which will be suited for asylums in this Colony. The mass of the population may be taken as in most respects English in their habits and tastes, and privacy, as regards bed-room accommodation, is not considered more necessary than in England.

English asylums, from which the more quiet cases are drafted to the poorhouses, seem to work well if one-fifth to one-seventh of the patients are accommodated in single rooms. Since the quiet cases are all kept in the asylums, in this Colony, a smaller proportionate number will suffice; and if one-tenth to one-twelfth of the patients are accommodated in single rooms, the provision will be ample, supposing the asylums to contain both acute and chronic cases in ordinary proportion. The suggestions of the British Commissioners, that "the single rooms should be chiefly in the wards appropriated to the excited, the sick, and the patients of dirty habits," and that "a few should be available for special cases in other parts," should be closely followed.

The remainder should be placed in associated rooms, the number of beds in which is a matter for further consideration.

That two patients, especially of the male sex, should never be allowed to sleep together in one room is certain, but the exact number which it is most convenient to accommodate in the associated rooms is somewhat doubtful.*

The English Commissioners (see Appendix *A*) content themselves with suggesting that "no associated dormitory should be designed to contain less than three beds," whilst the Scotch Commissioners fix the minimum at six, and the maximum at fourteen. It is doubtful if it is ever desirable to make the rooms smaller than to contain six patients; but there are, in several English asylums, rooms made to contain from twenty to thirty or even more patients, which answer admirably. A larger number (such as is contained in some asylums, as for instance, the monster dormitories of Colney Hatch, where one for women, contains eighty-six beds) is not desirable.

It is therefore suggested that the associated dormitories should range in size so as to contain not less than six or more than thirty beds—from six to twenty being the preferable number.

Airing Courts.—Two airing courts for each sex are all that are absolutely necessary for an asylum. One of large size should be devoted to the general body of the inmates, and the other smaller will serve for the small proportion of noisy and violent patients. If a third is added for the use of the sick, infirm, and for special cases such as epilepsy, it will be found frequently useful. It may save the more feeble among the patients from accidents which might happen to them in the large general court.

These courts should be outside the asylum, in front, if possible, of the special wards for whose inmates they are intended, and easy of access from them.

They should be planted with trees to afford shade and ornament, and laid out in gardens, and thus made attractive in themselves. In addition, they should if possible command a view of the surrounding scenery.

If the court is on a rapid slope, the upper part of it will command a view over the lower wall, but even when the ground has only a gentle slope, or is altogether flat, by setting the lower and outer side walls in a ha-ha, a view of the surrounding country may be obtained.

The top of the wall should be on a level with the ground inside, and the slope of the ground towards its base should be gradual, so as to prevent accidents by patients falling or rolling down it.

At the Derby Asylum the top of the slope has been cut into a seat, (see Appendix *F*, Fig. 16), and here the patients sit in a row, and look out on the fine agricultural country beyond.

In every airing court there should be a sun-shed, and a verandah or covered walk, to afford shade and allow patients so inclined to take exercise in wet weather.

The courts should be walled completely round, for it must be remembered that they are used by all classes. If the male and female courts adjoin, the wall separating them should be so high as to preclude all view of one sex by the other; but the remaining walls should be as little prison-like as possible, and should rather be to prevent straying

* Not long since, in an asylum the name of which it is not necessary to mention, two patients, one recently from hospital and wearing a blue uniform hospital dress, and the other who had been for some time in the asylum, were placed in one room in the evening and locked in. The older patient became envious of the blue uniform of his companion, killed him, tore up the boards of the room, squeezed in the body, and was found in the morning alone and arrayed in the coveted garments.

than escape, since the courts will never be left without one or more attendants, who would observe all attempts at escape by climbing, and immediately prevent them.

At the Murthly Asylum, the large yards for male and female patients are guarded only by an ornamental wire fence, and at the Three Counties Asylum, by a handsome iron railing. The patients have thus an uninterrupted view of the country beyond, with a sense of freedom which is seldom felt in an asylum.

A skittle-alley on the male side, and a croquet ground on the female, are also desirable additions to the airing yards.

In the females' airing yard, rocking horses and swings are useful. There should be also a good supply of seats fixed in convenient positions. Pet animals and birds should be encouraged, and an aviary or pigeon cote* may be made ornamental, and both by itself, and its occupants, afford gratification to the patients. In every court there should be a drinking fountain placed in the shade of the verandah. In short, no effort should be spared to make the airing courts a desirable lounge for the patients, to which they will gladly resort to escape from the monotony of indoor life.

In the courts occupied by the more violent and noisy patients, games are useless, the mental condition of the patients precluding them from the use of them, and they might be dangerous as affording weapons of offence. But even these courts should be planted, and laid out in flower-beds, and efforts made to keep them in good order. That much may be done in this way is evident from the beautifully kept garden in the airing court set apart for violent patients at Guislain's Asylum at Ghent. The walks may be asphalted with advantage, as at the Worcester County Asylum.

In all the courts, earth-closets should be provided for both sexes, and urinals for the males. Besides the airing courts, there should be attached to every asylum some general pleasure grounds, in which the patients, especially those of the quiet class, may take longer and more varied walks than are possible in the courts, under the care of the attendants. These grounds should be fenced in with wooden palings, if they are liable to be encroached upon by the general public, but all fencing should be rather to ensure privacy than to prevent escape. They should consist partly of grass-land on which such games as cricket or foot-ball may be played, and which when not in use, may serve as pasture for cows; and if possible, of wood-land in which walks may be cut.

Airing grounds of this kind are useful in asylums entirely devoted to indigent patients; the more quiet of whom, however, get exercise, and some degree of freedom, in working on the farm and garden; but they are indispensable in asylums in which the better class of patients are received.

The paying class of patients are found to chafe exceedingly, when confined within the limits of an airing court; and grounds in which a more prolonged walk can be obtained are for them an especial necessity.

Fittings and Furniture for Rooms.—The flooring of all the day and dining-rooms and dormitories in asylums should be of wood. The boards should be tongued; and the English and Scotch Commissioners in Lunacy suggest (see Appendix *A*) that there should be a disconnection of the floor and joists at all internal doorways by means of a stone sill. In all cases where a fire-proof construction is not adopted, similar separations, at not greater distances apart than 50 feet, should be made in the floor and ceilings.

There is but little necessity for oiling or polishing the floor, except in rooms devoted to dirty patients.

The walls should be plastered or cemented, and subsequently painted or coloured, so as to make the rooms as cheerful and bright as possible. If the walls are painted to a height of about 4 feet, and a coloured wash applied to the upper part, a dark line or pattern border marking the separation, the effect, (if the colours are well chosen) is remarkably good. The lower part, which is more liable to get dirty, can be always washed with soap and water. The upper half can be recoloured at intervals. This plan is cheaper than papering, and, as a rule, serves every purpose.

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* At the Leicester Asylum, the aviaries for pheasants, &c., in the courts, are made out of the old wire guards formerly over the windows. Thus swords have been converted into ploughshares.

This mode of colouring may be applied to all the walls, or those in the dormitories may be coloured throughout, or simply whitewashed. All rooms devoted to dirty patients should be whitewashed.

The doors of all single rooms should open outwards, and be so hung as to fold back close to the wall. Most asylum doors may be fitted outside with ordinary handles. These are in use in several American institutions, at Meerenberg, Hamburg, and one or two English asylums. The rooms look less prison-like, and no accident has been found to result.

The locks to all asylum doors should be made without springs, and they should move without sound. Spring locks are at once dangerous and inconvenient. The "creaking of locks" is one of the most objectionable things in an asylum, and a multitude of keys is to be avoided. The keys for the male and female side of the house should be different, and each attendant provided with one key which will unlock all the doors on his or her side of the house. A simple railway key will serve for each attendant to turn on or off water, gas, or to chock the window sashes, close or open shutters, &c., so that each attendant will have two keys only.

The medical officers and chief attendants should have keys which will open and lock all doors, and, by means of extra wards, double lock them. Those for the male and female sides may be made at each end of a single shaft. Additional safety is secured if all the central offices have special locks, in addition to the ordinary ones, of which the officers and chief attendants only carry keys.

The furniture of all day-rooms should be substantial, and made as comfortable as possible. Good polished tables,—Windsor chairs, with and without arms,—multiple arm chairs—should be the chief articles. Sofas and stuffed chairs should be provided for the sick and infirm. Rocking chairs of simple construction are useful; and no effort should be spared to make the room cheerful, by means of plants, in standing or pendent pots; aquaria and fern cases; cases of stuffed birds; singing and other birds, and small animals in cages; pictures and maps for the walls; plaster figures, looking-glasses, and clocks. A small drinking fountain in the day-room or corridor, may be simply contrived, will be much used by the patients, and save trouble.

The day-rooms should be, in fact, as far as possible, the patients' homes; and though in this climate they will be less used than in England, still on wet days and after working hours they will be in requisition, and should be as cheerful and bright as possible. In the day-rooms, or in the passages leading to them, there should be closets for women's shawls, &c., and rows of pegs for bonnets and caps.

The dormitory furniture should consist of bedstead, bed, and such clothes as the temperature renders necessary; a small box for clothes, which will serve as a seat; a washstand and basin, can, and chamber utensil. Wooden bedsteads well polished look smarter and better, and on the whole are preferable for an asylum. If properly made, they present fewer crevices into which vermin can get than iron ones. They can be made or repaired in the asylum, and they are safer for violent patients.

Sacking bottoms are preferable to wood, since with them no palliasse is necessary. The plan most used in England is to have the sacking fixed to iron bars which can be tightened by means of screws. The arrangement is simple, and allows of easy cleaning.

For epileptics it is not necessary, as a rule, to provide beds of special form; ordinary beds made low seem to be the best, since, if the patients roll from them on to the floor they are not injured. For extreme cases, cribs or bedsteads with movable iron or wood sides may be necessary. For dirty cases, webbing screwed to, or sacking screwed or nailed to, a movable wooden frame, for the bottom of the bed, is simplest and best, and with proper night watching few or no special bedsteads need be used.

For beds and pillows, hair is in the main cheapest and best. The original outlay is large, but hair will last for years and require only occasional picking. Next to hair, coir mattresses are best, and in barracks in India have been found durable, cheap, and in all respects preferable to straw. The coir is not injured by washing, and will last eight or ten years, and if sufficiently often teased, is reported to be equal to horse-hair in comfort.

For dirty and wet patients, the mattresses may be made in three pieces, and the centre piece removed when necessary. All three may be made of horse hair or coir, or the centre of sea-grass or straw. Bags filled with sea grass or straw may be used instead of mattresses for this class of cases. The hair, coir, or sea grass can all be washed and dried, and again used. Every wet or dirty patient should be roused at stated times by the night attendant and conducted to the closet. The number of wet beds will be by this means much lessened, and the cleanliness and comfort of the patients much promoted. Mackintosh covers are too costly for ordinary use.

The general cheerfulness of all dormitories is much increased by brightly coloured counterpanes.

The bedding should, after the patient has left the bed, be as much exposed to the air as possible, and may either be folded in barrack fashion, or what is preferable the bed made as far as the under sheet, and the upper sheet then turned down over the blanket and coverlet.

A small box to serve as a seat and to hold spare, or Sunday, and ordinary clothes during the night, should be provided, and placed at the bedside of each patient. The simpler it is in construction and the more easily cleaned, the better.

On the principle that an asylum should be made to differ as little as possible from an ordinary house, washstands with ordinary basins should be placed in all the rooms for the more quiet class of patients. For the associated rooms, multiple stands, placed in the centre of the room, are best. For the more violent patients, lavatories should be provided close to, and easily accessible from, the dormitories. Common earthenware chamber utensils, made without handles, are best; gutta-percha and India-rubber ones soon wear out, but a few should be provided for epileptic patients who break earthenware ones by accident. Metal utensils are difficult to clean and unsightly.

Brushes, combs, and looking-glasses should be provided at each washstand, and lavatory; and, so far as is practicable, every patient should have his or her own towel, which should be kept by the bedside.

In the corridor or passage leading to, or in the dormitories themselves, should be placed a closet for the dormitory stores, extra bedding, spare clothes for patients, &c. One of these will be sufficient for each division of the asylum. A small room may with advantage be set apart for this purpose.

For the common dining-rooms neat plain wooden tables and forms only are necessary. Table-cloths should be laid, and crockery (plates, mugs, cups, &c.) provided. Tin utensils should be as little used as possible. Ordinary knives, not too sharp, and three-pronged forks, of some common metal, should be allowed, for the majority of the patients, whilst the food for the remainder should be cut into small pieces by the attendants, and spoons or forks given to the patients to eat it with.

Immediately after each meal, all the knives should be collected, counted, and locked up.

If the dining-rooms are close to, and served directly from the kitchen, no tins to keep warm the food will be required.

All possible decorum should be observed at meals.

It might be imagined that the amount of breakage would be large if the patients were supplied with crockery plates, mugs, cups, &c., but such does not appear, as a rule, to be the case. At Murthly, tin drinking cups have been substituted for mugs, owing to the great breakage, but usually no complaints of this sort are heard, and crockery is almost universally used.

All the furniture and the minor articles for ward ornamentation, should as far as possible, be made in the workshops of the asylum.

Staircases and Stairs.—Asylum stairs should be of stone or iron. The flights short and straight. With winding, or long flights of straight stairs accidents are liable to occur. The well in the centre should be built up, and if possible, utilized as linen closets or as linen or dust tubes, by means of which the dirty linen or dust may be quickly transmitted from the upper stories to the basement. Wooden or iron handrails should be provided for all stairs, and let into a groove in the wall.

The passages leading from one part of an asylum to another may be of stone or brick; or Minton's unglazed tiles, which are comparatively cheap, may be used.

Bells.—Bells to connect one part of an asylum with another are objected to by the majority of superintendents. By means of them, an attendant may be summoned from a ward when his presence is most needed in it, owing to the absence of his associate or some particular disturbance among the patients. When electric bells are placed in the wards to communicate with the central office, they are liable to be sounded by the patients if placed in an accessible position. They can, however, be so protected as to be reached only by an attendant's key. On the whole, with a well organized institution bells are not much needed. The only bell to be strongly recommended is one to connect the superintendent's house (which should be placed at some little distance from the asylum) with the building. This should only be used in case of emergency.

Special provision for Sick, Violent, and Convalescent Patients.—Special provision should be made for three classes.

1st. The convalescent and more quiet patients.
2nd. The sick and infirm.
3rd. The violent and excited.

1st. The convalescent and more quiet patients may be, to some extent, accommodated in cottages, as already suggested, or in detached buildings or blocks. These buildings should be of a cheap, simple, and inexpensive character, and consist mainly of associated dormitories and day-rooms, fitted with the necessary offices, and conveniently situated with reference to the wash-house and laundry on the female, and to the workshops and farm buildings on the male side, since the majority of the patients who occupy them will be able to work in some way or other. These buildings need not be costly. The additions to the Prestwich Asylum cost £60 per patient, and to the Old Chester Asylum £39 per patient, whilst wooden buildings of a more temporary character, yet fulfilling all the purposes for which they are intended, have been built at Leicester, at a cost of £12 per patient.

2nd. The proportion of sick and infirm requiring special care in the European institutions is about 10 per cent. of the entire population. The English and Scotch Commissioners (*see* Appendix *A*) suggest that "suitable infirmaries, in the proportion of at least one-tenth, should be provided, in which the cubical contents of the sleeping-rooms, should be greater than in other parts of the building, and every room, including the sleeping-rooms, should have an open fire-place."

The sick and infirm in the asylums of New South Wales are, as a rule, considerably less than is found in European countries, and if special provision is made for 7 per cent. it will meet all requirements. These infirmaries should be placed near to the administrative department, and to be complete, should consist of one or more associated dormitories—a few single rooms and a day-room. The cubic space should be 1,500 feet to each patient, and special care should be taken that the ventilation is good. There should be a ward closet, a fixed or movable bath, and a gas stove, at which invalid comforts may be made, or kept hot. The floors may be oiled or polished, so as to be non-absorbent and easily cleaned, and the more comfortable the furniture is made, the more it will conduce to the happiness, if not to the recovery of the patients.

The cases to be treated in the infirmary are the sick, the paralytic, and the extreme cases of epilepsy; and to these may be added such of the old and infirm as require special attention.

3rd. On an examination of the different modes of provision for the insane of the more violent class, it is impossible to recommend any of them for adoption as a whole, though there are points in each from which useful hints may be drawn. The practice adopted at Lincoln, Montrose, and other asylums, of distributing the noisy and violent cases as much as possible in the other wards, and which seems, to be eminently successful in these institutions, is worthy of the greatest consideration, and should undoubtedly be carried out whenever practicable; but the practice of separating a certain proportion of the more noisy and violent patients, is adopted in the majority of asylums, and indicates that the opinion of the authorities on this subject is, at present, in favour of separation.

The buildings, however, need possess little of a special character. There should a full proportion of single rooms, and one of these may be panelled (for, with the experience of American and Continental Asylums as a guide, padded rooms cannot be considered necessary in any asylum) and another cemented. These will serve for the necessary short isolations, and sometimes also for the sojourn of a whole night.

These rooms, with one or two others, should be placed in a small building of one story opening from the main division for this class of patients, and a corridor and one or two small airing courts should be provided in connection therewith, for exercise and isolation in wet weather. These small airing yards should be turfed and planted, and command a view of the neighbouring country, and should not be mere "air tanks" surrounded by high walls.

The single rooms should all possess shutters sliding from below, and capable of being locked, so as partially or totally to cover the windows. In the two special rooms, which should have a cubic space of 1,500 feet each at least, the windows may be made to open and shut by means of cords from the corridors. The floors of these rooms should be waxed and polished, so as to admit of easy cleaning. The panelling and cement will both allow of cleansing the walls; and closets or pan-seats in these rooms are scarcely necessary. There should be an inspection-plate in the door, to allow of observation without disturbing the patient.

The entire number of the more violent class, for whom special provision is made in institutions generally, is, as has been seen, about one-tenth of the whole, but this can scarcely be considered necessary; and if the plans of classification subsequently advocated are adopted, and the more violent patients mingled as much as possible with the quieter ones, one-twentieth of the whole will be all, for whom anything like special provision need be made.

Kitchen, &c.—One kitchen, in a central position, is all that is required for an asylum, and in it, if properly arranged, all the food for patients, officers, and attendants, can be cooked. A central position is important, so that it may be within as easy reach as possible of all parts of the establishment. A one-storied building, with high roof (in or near which the windows are placed), and reached by covered ways from the centre or administrative block, is, in most respects, preferable to a basement room, in which ventilation will generally be imperfect. In the kitchen itself all the food except vegetables may be cooked. These are best prepared in the scullery adjoining, in which all the washing of plates and dishes is done.

The kitchen should contain a general range, at which the food for patients and attendants is cooked, and a minor range for the officers. The main cooking apparatus should be placed in the centre of the building, the sides being fitted with dressers and shelves. The greater part of the cookery in asylums is best done by steam, which is found to be cheaper and simpler than boiling by ordinary fires. Meat should be cooked in jacketed boilers, but the steam may be admitted direct to the vegetables. Gas stoves are to be preferred to ordinary open coal fires, as simpler, cleaner, and, whenever the price of gas bears the same relation to the price of coal as it does in England, more economical. The evidence on this point, which has been obtained from those asylums in which gas is used, places this question beyond a doubt.

At the Stafford Asylum it was found by experiment that—

50 lbs. of meat cooked by coal cost ..... 1s. 3d.
50 lbs. do. by gas cost ..... 0s. 8d.

whilst the dripping obtained from the gas-cooking was worth almost twice as much as that obtained when coal is used. The cost of cooking by gas, therefore, was about one-half of that of cooking by coal. The asylum authorities were so convinced of the superiority of gas cooking in every respect, that all roasting, baking, and frying for officers and patients is now done by gas, and the water for making tea and coffee is also boiled by it.

With respect to this mode of cooking, the following particulars are given in the Annual Report of the Lunatic Hospital at York, in 1865:—

"The gas stove for cooking, which, at the date of my last report, had been too short a time in operation to afford any very conclusive data upon which to form an

accurate opinion, has fully satisfied our requirements for a useful and economical mode of cooking. The meat has been uniformly well cooked, and its flavour excellent; and there has been a considerable saving, both of trouble and fuel. In the latter, upwards of £25 have been saved.

"The quantity of gas required to cook between six and seven cwt. of meat, and about twenty large meat pies, per week, has been about 1,600 feet, at a cost of 5s. 7d., or not quite 10d. a day.

"The following experiment was also tried:—Two 12½ lb. joints of beef, identical in all respects, were cooked, the one before an ordinary open fire, the other in the gas stove. Both were thoroughly done; but while the former actually lost in weight 3 lbs, the latter only lost 1 lb.; a result obtained subsequently with four joints of mutton. These facts speak for themselves, and they agree very much with the results obtained in an experiment conducted at the Royal Naval School at Greenwich, before the authorities of that institution, and under the direction of M. Soyer:—

"'(A.) 184 lbs. of mutton were roasted by gas, and cost 10½d. (gas being at 4s.) Weight, when cooked, 146 lbs.; dripping, 19 lbs.; gravy, 2¾ lbs.; actual loss, 8¾ lbs.

"'(B.) 184 lbs. of mutton were cooked by Rumford's stove, (the most economical way known). Weight, when cooked, 132 lbs.; dripping, 18 lbs.; gravy, none; actual loss, 34 lbs. (Coke, 102 lbs.; coals, 32 lbs., for oven.) Saving by gas—13 lbs. meat, 1 lb. dripping, and 2¾ lbs. gravy. In each case the meat consisted of 23 joints of mutton.'

"The following paragraph appeared some time since in the *Builder*:—

"'In a large London establishment, in which 200 of the persons employed were boarded, in 1840, the butcher's meat consumed was 400 lbs per head per year, and it cost £12 11s. 10d.; in 1850 the quantity consumed was 369 lbs., the cost £9 11s. 7d.; whilst in 1860 the quantity was only 271 lbs., the cost being £8 12s. 0d.

"'The explanation afforded is this:—In 1840 the butcher's meat consisted of second-rate joints, containing a large quantity of bone. When roasted, it was placed before a large fire, fixed on spits running through the joints, occasioning great waste, and producing indifferent results in the cooking, the outside being generally burnt and the inside not sufficiently done.

"'The inferior joints were abolished, and meat only of the best quality, free from bone, was purchased; the spits were laid aside, and the bottle-jack substituted in their place. The open fire for roasting was still retained.

"'The balance sheet for this period shows a decrease of 98 lbs. per head of butcher's meat, and a saving of £3 0s. 3d.

"'Another ten years passed, during which the open-fire system was abandoned, and the plan of cooking by gas introduced; this caused a further saving of 98 lbs. per head of butcher's meat, and of money £1 0s. 4d., although the price of meat was higher by nearly 3d. per lb.'"

Bunsen's Burner, in which air is mixed with the gas before combustion, is found to be best for the gas stoves. Owing to grease and dirt getting into the burners, the holes require cleaning every two or three months, but this is easily done by the gas-man belonging to the establishment.

Asylum kitchens should be supplied with all implements and machinery necessary for the proper preparation of the food for the inmates—large tins for infusing tea, which should never be boiled; mincers, or sausage machines, to mince the food for paralytics and other patients, &c. The steam boilers, which are fitted on pivots, and supplied with water from a tap placed over them, as in the French asylums (see Appendix *F*, Fig. 11) are in every way to be recommended. The kitchens in the modern French asylums at Ville Evrard and St. Anne's, are, in all respects, models.

Adjoining the kitchen should be placed a properly fitted scullery; and a second room for cleaning vegetables is also useful.

Whenever an asylum contains upwards of 400 patients, bread may be economically made in the establishment, one baker being employed, and all assistance necessary being rendered by the patients. It is thought to be economical to make bread in some institutions below this size, but this is doubtful, especially when they are so situated as to render supply from a town easy.

It is worth further inquiry how far aerated bread can be supplied to, or made in an establishment, at a cheaper rate than ordinary fermented bread. That it is cleanly, wholesome, and, when eaten in its fresh state, palatable, there can be no doubt; but further evidence is necessary before it can be recommended for general use. It is supplied by a company to several of the London hospitals, and the report upon it from St. George's is very satisfactory, but so far as it was possible to ascertain it is not made or consumed in any English institution for the insane.

Asylum Laundries.—All the dirty linen of an asylum should be washed by the inmates under the direction of one or more paid laundresses.

The laundry should be detached from the main building, and may be placed at some little distance if water supply is thus made more easy, since the patients employed in it and the paid laundresses will all be in good bodily health, and able to walk backwards and forwards at meal and other times.

It should consist of one large room for washing, a receiving room for dirty linen (since soiled clothes should never be kept in the wards of the asylum), mangling, ironing, and folding rooms; and attached should be a special room or shed for very dirty linen, which it is undesirable to wash with the rest. There should, in addition, be a large drying ground.

The washing room should be of one story, with a high open roof with free openings to allow of the exit of steam and foul air. The walls should be of bare stone or brick, any plaster or cement will peel off from the constant moisture and heat. The coppers and machinery should be placed in the centre, and around should be square washing trays, fixed against the wall, and supplied with hot and cold water from taps over them. The water for laundry use should be heated by steam, and the steam pipes may be brought at once to the bottom of each washing tray, and the water so warmed instead of bringing warm water in pipes.

If steam machinery is used, the bands to turn the machines should come up through the floor, and be boxed in as in the Morningside Asylum. This arrangement is safer than that usually adopted in which they come from above.

Drying closets with artificial heat, in which the clothes are dried on wooden or line horses, are necessary in European asylums, since, without them, prolonged wet weather may cause great inconvenience. But in a comparatively dry climate like New South Wales they will not be necessary. With a large drying yard, and a covered shed fitted with movable louvres at the side, such as are used at leather and paper manufactories, the clothes may all be dried in the open air, which is much preferable to a close closet.

Every precaution to prevent accident from fire should be taken in the laundry, and all crimping machines, may, for this reason, be heated by steam, as at Murthly and Montrose. The irons may be warmed at a small gas stove.

In an asylum, the patients should always be kept as fully occupied as possible, and for the majority of female patients there is no better occupation than washing, as giving muscular exercise, and as being a change from the asylum ward. The entire washing, therefore, of the asylum should be done by the inmates, under the superintendence of one or more paid laundresses; the females should do all the ordinary work, whilst the men should turn mangles and wringers, and do other heavy work. No machinery should be used except such as is absolutely necessary.

In the French asylum of St. Yon, fifty or sixty women are kept constantly employed, and the linen for 1,600 people is washed without any machinery. At the Sussex and Gloucester among English, and at Cupar, Montrose, and Murthly among Scotch asylums, a minimum amount of machinery is used, and these examples should be closely followed. The centrifugal wringer has been found so universally useful that an exception may be made in its favour; but the many contrivances for washing, many of which are excellent in idea and in practice, should as far as possible be done without.

The specially dirty linen should be soaked all night in a small tank made to contain the soap-suds and water from the ordinary laundry. It should be washed the next day in a machine of some simple form, in a special washing-room. In this room should also be washed all the hair or coir from beds wetted or soiled by dirty patients.

Every care should be taken that the soiled linen is kept as little as possible in the wards or rooms. If the laundry is at such a distance as to make it difficult to send the linen to it as soon as dirty, boxes to receive it should be placed somewhere near the wards but outside the building. In the airing courts or grounds is the preferable position.

Chapel.—The arguments for a special chapel in connection with every asylum need not be repeated here. The best argument is the existence of such a chapel in the well-ordered institutions of all countries.

It is, however, a matter of debate whether the room appropriated for dancing and amusement should be used as a chapel also, or whether a room should be specially set apart for religious service only; and, if set apart, whether it should be in the main building or detached. The only countries in which the same room is used for purposes of religion and amusement are Scotland and the United States. To some religious denominations a ball-room or a theatre is, in the absence of a building specially provided for the purpose, a fitting house of prayer; but to others, and, perhaps, to the majority, there is something incongruous in this local association of amusement and religion. It is to many, almost impossible to feel reverence in a place which has lately echoed with laughter, caused by some absurd representation on the stage, and in which, perhaps, the scenic decorations still remain; while the ornaments and accessories of religious service are equally out of place in a room given up for the time to merriment.

It is therefore recommended that two rooms should be provided, one fitted for purposes of amusement, and the other consecrated to religious uses only; and with this arrangement the former may serve also as a general dining-room, and save a multiplication of buildings.

For a chapel within the building, the arguments are, that it can be easily reached by all the inmates in all weathers, that the infirm can attend as well as the hale and strong, and that in consequence it is at all times at the service of a greater number. But the arguments to be derived from weather have scarcely any weight in this Colony; and if the block plan of construction is followed, it will be as easy for the majority of the more weakly patients to reach a centrally placed detached chapel, as one in any of the blocks.

For a detached building the arguments are many. It can be made more ecclesiastical in style, the walk to and fro will afford a change from asylum rooms, and the "going to church" is much more assimilated to the condition of ordinary life, when that church is a detached building, to reach which, it is necessary to put on bonnet and hat, and pass beyond the bounds of the ordinary dwelling-house, and the detached chapel or church is more likely to impress its frequenters with reverential feelings, and bring back the thoughts of other years, than a room within the building, however fitted and ornamented.

For these and other reasons a detached church, ecclesiastical in style, is to be recommended. "It should be of easy access, and capable of comfortably accommodating at least three-fourths of the patients; it should have the usual character and arrangements of a church, and contain no special or peculiar provision for the separation of the sexes"—(Suggestions of Scotch Commissioners, Appendix *A*). The chapel should always have an organ or harmonium as part of its furniture, and the patients and attendants should be trained and practised in choral music. The services should be held at the ordinary times, and in the ordinary manner on Sundays, shortened possibly to accommodate the restlessness of body and mind of many of the insane, but performed with all decorum. Whatever may be the effect on individual patients (and it will probably be as different as in the members of an ordinary congregation) the general impression is almost sure to be that of reverence and order. In some British asylums the Lord's Supper is administered to certain of the patients, and special religious teaching is given. On this an eminent authority remarks,* "How far any physician is justified in countenancing such measures as these appears to be very doubtful. I am inclined to think that when patients have advanced so far towards restoration as to be entrusted with such high and holy privileges, they should no longer be detained in an asylum,

* Dr. Brown on "*What asylums were, are, and ought to be.*"

but should be reinstated in society, and in the possession of rights and discharge of duties of an important but less exciting character."

How far one chapel may be used by the members of two different denominations is a question for consideration; such an arrangement seems to work well in the German Asylums, and is not altogether unknown in the ordinary churches of this and other countries; under proper arrangements, and with a conciliatory spirit, it is doubtful if any valid objection can be raised to such a course.

Amusement Room.—For minor amusements the day rooms of the institution are sufficient, but a room where the majority of the inmates can be collected for dances, concerts, theatrical performances, gymnastics, lectures, &c., is absolutely necessary in an asylum.

The reasons why the chapel of the institution should not be used for purposes of this kind have already been stated. Either a special room should be provided, or, what will serve all purposes, the common dining-room should be so fitted as to serve as an amusement room also.

The dining tables can always be removed. The seats will be useful, and a permanent stage or platform can be erected at one end. A cheerful well-lighted room is adapted for both purposes. It should occupy a central position, and should be large enough to contain three-fourths of the inmates.

A piano should form part of the furniture of the amusement room.

Library.—It is scarcely necessary to provide a special room for a library. The main stock of books may be kept in cases in the board room, chaplain's room, or amusement room, or, better still, in a room which will serve for purposes of instruction, and be at once library and schoolroom. A good stock of books is almost necessary in an asylum, and there should be a liberal supply of newspapers, small serials, magazines, &c. These are much read, and are always most acceptable to the patients.

Dead-house and Cemetery.—The building for the reception of the dead should consist of two rooms at least. One of these should be the reception room, fitted with shelves for the dead, in which they may be seen by their friends. The other, a room for *post mortem* examinations, in which every convenience for the purpose should be supplied,—a central table, hot and cold water, &c. Both rooms should be well ventilated, and lighted entirely from the top so as to prevent overlooking; and the entire building should be placed in a retired position, as much out of sight as possible, with a door opening at once to the road, so that funerals may take place without attracting notice from the asylum inmates.

It is desirable that the dead should be buried in the ordinary cemetery of the town or district, unless the distance is so great as to make it very inconvenient. Special asylum cemeteries are objectionable, as continuing in death, a separation which has only too often, been a long sorrow already. If a special cemetery is made it should be prettily planted and kept, and be thrown open by the authorities for the use of the district in which the asylum is placed, as is done at Ville Evrard in France.

Accommodation for Officers and Servants, &c.—For the superintendent himself, and for his wife and family, a residence apart from the asylum is much to be preferred to one within the building. With an assistant physician resident in the asylum, and an efficient and trustworthy staff of attendants, the constant presence of the superintendent is not necessary.

The superintendent's house may be placed sufficiently removed to give it a certain amount of privacy, and yet be within easy reach of the asylum. It is desirable also that a certain extent of kitchen garden should be set apart for the use of the superintendent; since, if fruit and vegetables are taken from the ordinary asylum garden for his use, it is possible to lead to jealousy and misrepresentation.

The chaplain, if resident, should also be provided with a detached house; and the steward or secretary, if married, is fairly entitled to a house, or to a certain allowance in lieu thereof.

The assistant physician, the housekeeper, and the chief attendants should reside in the building. For the assistant physician, housekeeper, and chief attendants, two

rooms each should be provided; or, following the liberality which has been adopted in the more recently erected asylums in Great Britain, there may be an additional bedroom.

For the attendants the English system in which they are, as a rule, provided with special dormitories, seems preferable to that adopted in Scotland. It is extremely important to secure in an asylum the services of a good class of attendants, and to such a class a certain amount of comfort and privacy is necessary. The Scotch system, where the attendants sleep in the dormitories with the patients, undoubtedly has advantage in securing the safety of the patients; and in some Continental institutions there appears to be no difficulty in carrying it out. But the innate love of privacy which characterizes people of the British race has interposed difficulties, even in Scotch asylums, in this respect, and the superintendents of these asylums readily admit that a better class of attendants might be secured if separate dormitories were provided for them.

Considering the wearing nature of the attendant's duties, and the consequent necessity to him of sound sleep, and the general safe working of the English system, it seems desirable that, for the majority at least of the attendants, special dormitories should be provided. A few of the junior attendants may sleep in the rooms where such patients as require special care and attention are placed, but the safety of the patients during the night should be mainly intrusted to efficient night attendants.

The dormitories of the attendants should be placed in various parts of the establishment, and so arranged as to command by a window, a view of the associated dormitories. Each room may be made to contain two attendants, giving to each a cubic space of 1,000 feet, and should be comfortably furnished.

The attendants will be occupied almost entirely during the day in the rooms with the patients, but a common room should be provided for the use of such of each sex as are off duty in the evening. This room, if placed near the kitchen, may be used as a dining-room for the attendants and domestic servants. The comfort of the attendant will be much increased by taking his meals in a common room, instead of in the ward after or with the patients, and no difficulty need arise if half take their meals at once, leaving the other half with the patients. The dormitories of the house-servants, laundresses, and cooks, should be so arranged as to be under the supervision of the housekeeper and steward.

The Scotch Commissioners give the following suggestion for officers' and servants' rooms. (See Appendix *A*.) "A residence should be provided for the medical superintendent, with kitchen and other necessary domestic offices. Apartments of moderate extent should also be provided for the assistant medical officer and pupils, the steward, and the matron, but for these officers a separate kitchen is not required. There should also be appropriate accommodation for the domestic servants of the institution."

The rooms absolutely necessary for the administration of an asylum are, a board room in which the commissioners or board of control hold their meetings; offices for the superintendent, chaplain, steward, and housekeeper (the latter of which may be used also as a cutting-out room for clothing); dispensary; store-rooms for bedding and clothing, utensils, groceries, meat, and bread; and rooms in which the friends of the patients can see them without going into the ordinary day rooms.

It is extremely important that the latter rooms should be of large size (one or two for each sex), so as to receive without crowding any number of visitors—that they should be as comfortably furnished as the ordinary day-rooms, and ornamented like them, so that the friends may gather, from seeing them, a general and fair idea of the internal fittings of the institution, and that the patient may feel at home in them, and not associate the visit of his friends with discomfort and a bare barn-like room.

The rooms for visitors may be made further useful as school-rooms, and as libraries or book stores of the institution.

The workshops of the asylum should be in detached buildings, well-ventilated, and of sufficient size to accommodate all the inmates who can be employed in them. Rooms in the basement of a building are objectionable for this purpose, because usually dark, gloomy, and ill-ventilated. The workshops may be built in connection with the blocks occupied by the more quiet class of patients, those likely to be employed in them.

The farm buildings and piggeries should be so far removed from the asylum as not to prove in any way objectionable on sanitary grounds.

Organization.

Asylum Government and Inspection.—In dealing with the question of asylum government it will be well to consider, first, what are the powers which individuals or boards entrusted with such government have to exercise, and then endeavour so to apportion these powers as to render the government simple and effective. In the *Report on Colonial Hospitals and Lunatic Asylums* issued by the Secretary of State for the Colonies in 1864, these powers are divided into four classes:—1st, making rules or regulations; 2nd, financial administration; 3rd, patronage of (*a*) officers, (*b*) attendants and servants; 4th, inspection and supervision; and to these may be added—5th, general management and superintendence.

It will be seen at once that these powers are various in their nature, and that they require very different qualifications for their proper exercise.

In the simplest form of asylum government—a form which exists in some of the minor German states, and in some of the British colonies—the whole of those powers are divided between the superintendent of the asylum and the general Government. The superintendent is intrusted with the management and the patronage, so far as attendants and servants are concerned, whilst the general Government appoint the officers, and undertake the management of the finances, the legislation and the duties of inspection, where such are performed. But such a division is only possible in states possessing a small population.

In the next form of asylum government, the general Government—feeling themselves incompetent to perform the various duties of legislation, finance, patronage, and inspection—have called to their assistance special officers to undertake the latter of these duties. These officers are either appointed to make an annual visit, and report on the general condition of the institution to the Government, as in Baden, Hanover, and other German states, or are charged with more frequent visitation, and with powers of regulating the admission and discharge of patients, as in the colonies of New South Wales, Victoria, &c. The other powers are divided between the superintendent and Government as in the first-mentioned form.

In another form of asylum government, the Executive retains only a general power of legislation, and hands over to a board of control appointed by it and more or less variously constituted, the powers of patronage and finance, and the minutiæ of legislation. The powers of inspection are either retained by the Executive or handed over to the board of control.

This form of asylum government exists in the state asylums of America, the city asylums of Germany (Frankfort, Hanover, &c.,) and the Colonies of Canada and Tasmania.

In a fourth form of government, which exists under various modifications in England, Scotland, France, Belgium, and Holland, there is—

1st. A superintendent of the asylum, who is the chief medical officer charged with the management of the internal economy of the institution and the estate, and with the appointment and dismissal, subject to the approval of the Government, of all attendants and servants.

2nd. A board of control, consisting of from five to nine members, men of standing and position, who exercise the power of patronage as regards officers, fix the amount of all salaries, and manage the finances, visit the institution at fixed times, examine into the admission of all patients, order all discharges, and report annually upon the general and financial condition of the asylum.

3rd. A board of commissioners or inspectors—mainly professional men, physicians and barristers—who inspect the institution at fixed periods, inquire whether the provisions of the law have been properly carried out as to the construction, visitation, and management, whether the admission and discharge of patients is regulated according to law, whether divine service is performed, or coercion practised, &c.—reporting annually upon every asylum to the central government.

4th. The central Government itself, which either makes all rules for the guidance of the officers and the general conduct of the asylum, or approves rules made by the board of control (without which approval they are not legal), approves or vetoes all plans for the building, enlarging, or improving of asylums, and appoints the inspectors.

In France and Belgium, where centralization is more in force than in Great Britain, the Government issues dietary scales, appoints the superintendent, and also nominates the assistant physician from a list of three furnished by the board of control; all other officers are appointed by the board.

This form of government is by far the most perfect; and, to judge from the general condition of the asylums of those countries where it exists, altogether the best in its general working. The more closely it is followed in New South Wales, the more satisfactory is likely to be the condition of the asylums.

The first step in the adoption of this system is the appointment of a board of control, and such a board has been already advocated by those interested in asylum management in the colony. Drs. Cox, and Brereton, who were in 1865 Visitors to the Asylums, advised the appointment of such a board in a letter to the Colonial Secretary, and the Rt. Rev. Dr. Willson speaks of a board of commissioners for the general management as "absolutely necessary for the permanent well-working of the asylums of the colony." The evidence to be derived from an examination of asylum government in other countries points conclusively to the necessity of a board of control; such a board existing almost universally in European countries and in the United States of America, and having already been found a success in Canada and Tasmania.*

It has been objected that, in a colony, the Chief Secretary, the Finance Minister, and the Auditor General, are the proper board of control, and perform with ease and simplicity all the functions of such a board; and that boards of control are only necessary in institutions, which, like the English county asylums, are not state institutions, and so do not come immediately under the direction of the central Government. But the state asylums of America are essentially and entirely Government institutions, as is also the State Asylum for Criminals at Broadmoor; and it has been deemed advisable to place all these under boards of control, appointed by, and responsible to, the central Government. The chief arguments for the appointment of a board of control are, the gradually increasing business which must beset the members of the Government in a large colony, and which may induce or oblige them to place in the hands of subordinates that which should properly be done by themselves, or to postpone indefinitely the settlement of questions which need immediate consideration; and the fact that the Chief Secretary and Finance Minister are not permanent officials, so that a change of ministry may transfer the asylum government from those interested in and possessing considerable special and practical knowledge on the subject, to others who have never given direct and special consideration to it, and with whom the greatest activity can scarcely compensate for want of specific knowledge. However smoothly and easily the asylums in a small colony may be managed directly by the Government, in a large one, proper and prompt asylum management is scarcely possible without committing to the superintendent a very large general direction, and some share in the financial management, which would largely increase his labours and his responsibility, or appointing a board of control; and in all respects this latter seems preferable.

A board of control should be appointed by the Government for each asylum, or for each district, and should consist of not less than five members, one or two of whom should be medical men, and the remainder men of high social standing residing in the district in which the asylum is situated. The necessary expenses of the board should be paid, and such remuneration made to the professional members as may be deemed fair, but the other members should not receive salaries, the position being entirely an honorary one.

The members of the board may either retain their seats permanently, or one or two members may retire annually, and be eligible for re-appointment.

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* In the *Report on Colonial Hospitals and Lunatic Asylums*, the Asylum in Tasmania is mentioned as "apparently the best in the Colonies."

The duties of the board should be :—

1st. The control of the finances of the institution, and the preparation of the necessary estimates for the consideration of the Government.

2nd. The appointment and dismissal of all officers, viz., superintendent, assistant medical officers, secretary, chaplain, and housekeeper, subject to the approval of the Government.

3rd. The visitation of the asylum, and inquiry into its management and the general conduct of officers and attendants.

4th. The inspection of the forms of admission sent with all patients, and the ordering of the discharge of all such as are recovered or for whom their friends promise to make provision. One medical member of the board, being always present to examine the patient and affix his signature to the certificate of discharge.

The board should also be charged with the presentation of an annual report to the Government, in which the general and financial condition of the institution under its care is set forth.

On the appointment of a board of control, asylum government will be thus divided :—

Superintendence and Management.—The whole internal economy of the asylum will be under the control of the superintendent, and with him should rest the patronage so far as the appointment of attendants and servants is concerned.*

Legislation.—The making of all general laws, for the conduct of the asylum and for the guidance of all officers and attendants, will be the duty of the Government. A general code of laws will serve for the government of all the asylums of the country; and all marked alteration in such laws should be made, or at least approved, by the general Government; whilst minor alterations which are not contrary to their general spirit may be made by the superintendent or board of control.

Financial Administration—will be under the board of control, exact accounts of the financial condition of the asylum being submitted to the Government with the estimates for each year. The estimates should include a sum for incidental expenses, to be spent at the discretion of the board and not exceeded. (The sum placed under the control of the board is fixed, in the case of the English county asylums and the State Asylum, Broadmoor, at £400 for each year).

Patronage.—The appointment of the board of control (and the board of inspection, to be hereafter considered,) will rest with the Government. The board of control will appoint all the officers who are immediately responsible to it, the Government approval being necessary to ratify the appointment. The superintendent will appoint the attendants and servants who come immediately under his directions.

There remain to be considered the duties of *Inspection and Supervision.*—In the United States of America, with the exception of Massachusetts and Vermont; in the city asylums of Germany; in Canada and Tasmania, these duties are undertaken by the board of control, and in some of the German asylums by the central Government; but they are duties which require a special knowledge not likely to be possessed by the ordinary members of a Government—even did their own duties allow the necessary time to be devoted to the subject. They are more or less inconsistent with the functions of a board of control, upon whom indeed, as well as upon the superintendent and other officers, the inspection will be to some extent a check. This check is necessary, since abuses may and do exist even under good forms of Government, and these are much more likely to be detected by inspectors unconnected with the institution, than by those who already hold office in it and are therefore not likely to detect deficiencies in the character of officials, which they have failed to discover as a governing board.

Boards of inspection exist, as has been seen, in Great Britain and Ireland, France, Belgium, and Holland. The State of Massachusetts has appointed a board charged, among other duties, with the inspection of asylums; and the State of New York is now

* The position and duties of superintendent will subsequently be discussed at greater length.

meditating a similar step, whilst in Vermont there is a special commissioner charged with the inspection of asylums. For some years past a board charged with the duties of inspection and report has existed in this Colony; but with the institution of asylums in up-country towns, some change in its constitution will be necessary. It is a question for the consideration of the Government how far the existing board may be changed into a board of control for the asylums of the Sydney District, by an addition to its numbers and an alteration in its powers; whilst another board for general inspection is appointed.

The duties of such a board of inspection should be:—

1st. The inspection of all asylums public and private at fixed periods, not less than twice a year; at such inspections inquiry should be made as to their management, as to the regularity of admissions and discharges, the number of attendants, the dietary, and the general conduct of the institution.

2nd. The frequent inspection of the criminal asylum, which, it is recommended in a subsequent part of this report, should remain under the immediate control of the Government without the intervention of a board of control.

3rd. The frequent inspection of the Reception House at Darlinghurst, and the relegation of all patients confined therein to the asylums most fitted to receive them.

4th. The examination of all criminal lunatics, either acquitted on the ground of insanity or found to be insane in prison; and the direction as to their maintenance in the prison for observation, or their transfer to an ordinary or criminal asylum.

5th. The transference of patients from one asylum to another for any reasons that may be considered good.

6th. The registration, visitation, and official guardianship of all lunatics under certificate, residing with friends or with persons paid for their maintenance, with power of inquiry in all cases of detention and ill-treatment by relatives of any insane person, whether under lunacy certificate or not.

7th. The examination of all certificates in lunacy, to see that they are in proper form and that all necessary particulars concerning the history, circumstances, social and mental condition of the patient are given.

8th. Inquiry into all cases of complaints in asylums, and all cases in which the Lunacy Acts have been infringed.

The inspectors should be required to report annually to the legislature upon the condition of all asylums, and should make such special reports and suggestions as may seem fitting. The annual reports should be printed for the information of the people, who may thus, and by means of the reports of the board of control, become acquainted with the condition of what are not the least important of the public institutions.

It will be seen that other duties, beyond mere asylum inspection, are here assigned to the inspectors.

Special reasons, showing the necessity for the performance of the duties mentioned in the 4th and 5th paragraphs, are given in the section in which the provision for criminal lunatics is treated of, and for those mentioned in paragraph 3 in the section on Reception Houses.

The importance of the visitation of all lunatics under certificate residing with friends or persons paid for their maintenance, is fully recognized by the English and Scotch Law. The commissioners in both countries are charged with this duty. By a recent statute for Scotland the commissioners are empowered to visit any lunatic or person treated as a lunatic, not under certificate, who may have resided under private care more than a year, and who has been subjected to compulsory confinement to the house, or restraint or coercion of any kind. The want of inspectors to visit lunatics in private houses and poorhouses, has been lately keenly felt in some of the states of the American Union. Whilst the state asylums are in every respect model institutions, managed with a liberality and an enlightened philanthropy, which leaves little or nothing to be desired, the condition of many of the lunatic wards of poorhouses are a disgrace

to humanity, and such cases as that described in the following paragraph are unhappily only too true :—

"The *Philadelphia Medical Reporter* describes the case of a son of a clergyman who has just died insane at the age of 81, having become insane at college at the age of 21. According to this astounding statement, for nearly two years he was not confined, until his father's life had been repeatedly endangered by his violence, when he was restrained with chains for a couple of years, and then was placed in a strong cage in the garret of the house, whence he never came forth while he lived. No clothing could be kept on him; but in severe weather he would allow himself to be covered with a blanket, which lasted only till his propensity for destruction became stronger than his fear of the cold. His cage was not high enough for him to stand erect, and he remained constantly in a sitting posture, leaning back against the timber when he slept. His limbs could not be straightened, his hair was never trimmed, and for cleanliness he received only the attention given to a poorly kept animal. In fact, he had lost all appearance of a human being, and had nearly lost his faculty of speech. No official or legal investigation of his case, or his class of cases, has ever been made by the Government, but he was left in this pitiable but unpitied state, in the midst of a highly enlightened and Christian people, to howl and shriek and groan, and suffer the unutterable horrors of mental madness for sixty years."*

The exact constitution of the board of inspectors remains for consideration. In the present condition and number of the asylums of New South Wales, the propriety of appointing a special inspector or inspectors of lunatics may be doubtful from financial and other reasons, and whilst the asylums of the country are within easy reach of each other, as at present, the superintendence of one asylum may be combined with the inspection of others; although such an arrangement can never be altogether satisfactory. It will be for the consideration of the Government how far it may be advisable to appoint a special inspector, to follow the example of the Belgian and Canadian Governments, and combine the inspection of the sanitary condition of prisons with that of the general inspection of lunatics, under one individual or board, or to place all state charities—the hospitals and asylums as well as the prisons and reformatories—under one board of inspection, as is done in Massachusetts.

The Massachusetts board is composed of five honorary members, a paid agent, who is medical man, and a paid secretary. The duties of the Board are to "investigate and supervise the whole system of the public, charitable, and correctional institutions of the Commonwealth, and recommend such changes and additional provisions as they may deem necessary for their economical and efficient administration."

The agent and secretary perform the chief duties of inspection, and are assisted by a large staff of clerks.

The scheme of government which has been sketched approaches, as nearly as possible, to that in practice in England, Scotland, Ireland, France, Belgium, and one or two of the foremost states of the American Union. Such a scheme—in which the duties of each individual or board are clearly defined, and there is no theoretical complication of powers—is likely to work smoothly and well; but if one board unites the duties of control and inspection, or the Government continues to exercise the immediate control of the asylums, confusion and mismanagement are to be anticipated.

Superintendent.—The physician of every asylum should be superintendent and chief executive officer of the establishment. He should have entire control of the medical, moral, and dietetic treatment of the patients—the power of appointment and discharge of all attendants and servants—and exercise a general supervision and direction of every department of the institution. He alone should be responsible to the governing body for the state and condition of every part of the institution, and he should be the recipient of all their orders. The importance of an undivided authority can scarcely be over-rated. The medical, moral, and general treatment of the patients are so intermingled that it is impossible to separate one from the other. The ordering of work—and work, too, of a particular kind—is frequently of as much importance as the ordering of medicine to the inmates; and the physician must feel his hands tied, when the direction of such work, as well as the mere medical remedies, are not immediately under his direction.

Every asylum is, and should be, one great whole. Its attendants and servants—its farm and gardens—its pleasure grounds—its means of amusement—even its furniture

* *British Medical Journal.*

its table service, and its food—are all part and parcel of one system of treatment; and to secure harmony, economy, and successful results, every one of these must be under the same general control. Everything has some direct or indirect connection with the patients, and should tend, in some way, to their restoration to health.

The whole arrangement of the institution being under the superintendence of the physician, its success will be a matter of pride and interest; and if anything should go wrong, on him will be placed the responsibility.

The salary attached to the office of superintendent should be such as to induce a man of education and of standing in the profession to take upon himself this vast charge and its varied and arduous duties. It should approach, if not equal, income obtained by medical men in the highest rank of their profession in the country where the asylum is situate. This will be, at all times, a fairer standard at which to fix the salaries of the medical superintendents of asylums, than a consideration of the sums paid in other countries, where the cost of living, the customs of the country, and the rate of professional remuneration vary considerably. The salaries and allowances of superintendents in England, America, and some of the Continental asylums may not, however, be without interest in this particular, and details on this subject will be found in a prior part of this report.

The rules drawn up by the Government for the guidance of the superintendent, should be liberal in tone, and should not do more than fix the powers and general duties of the office. The rules which exist in some English asylums concerning temporary leave of absence, are an insult to any superintendent really interested in his work. An almost universal rule, which precludes him from the general practice of his profession, is in the main good. At the Gartnavel Asylum, Glasgow, the superintendent is allowed to practise as a consulting physician in cases of mental disease; and in the rules which have recently been drawn up for the government of the Madras Asylum, the superintendent is directed "to abstain from engaging in general practice, except when called on to visit persons afflicted with insanity." Such an exception might, with advantage, be adopted in this Colony; and, if the words "mental disease" be substituted for "insanity," the latitude allowed will be beneficially greater.

The permission to engage in consulting practice of this kind, would act for the benefit of the public, rather than the superintendent. The sum arising from such practice, even in the great city of Glasgow, is very small, in comparison with the salary attached to the position of superintendent. But it is important that the public—in places where "mental disease" is not studied or practised as "a specialty" by physicians unconnected with public asylums—should be able to obtain the advice and assistance of physicians, who have made such cases their particular study, and whose opinion is, therefore, likely to be valuable.

Assistant Medical Officers.—The assistant medical officers of asylums should be qualified medical practitioners, whose duty consists in assisting the superintendent in the medical and general duties of his office, and representing him in his absence.

Authorities in asylum administrations have fixed the number of medical officers which are necessary for one establishment. Dr. Kirkbride* says, that "Where there are 250 patients, especially if there is a large proportion of recent cases, two assistant physicians will be required, one of whom should perform all the duties of an apothecary. In some instances one assistant physician and an apothecary will be sufficient."

Dr. Arlidge†, after quoting the opinions of French and German physicians on this subject, thus sums up the question:—"Allowing the opinions and practice of the eminent men quoted (Jacob, Parchappe, Roller, &c.), and which, in truth, are shared in by every asylum superintendent, their due weight, it would seem not an extravagant arrangement to allot to an asylum accommodating from 150 to 200 patients (recent and chronic cases together) a physician superintendent, and an assistant, and a similar medical staff to an institution for 300 or 350 inmates all in a state of confirmed chronic insanity, imbecility, and dementia. If the population in an asylum for chronic cases is

* *Hospitals for the Insane*, p. 44.
† *State of Lunacy*, p. 118.

further augmented from 450 to 600—the latter number we hold to represent the maximum, which can economically, and with a just regard to efficient government and supervision, and to the interests of the patients, be brought together in one establishment. The medical superintendent will require the aid of two assistants and a dispenser."

It will be seen that the number considered necessary by the authorities is greatly in excess of that which exists in the majority of English institutions, where it must at once be admitted the medical staff is greatly deficient in number. It may be safely stated, after a consideration of the opinions of authorities, and an examination of the working of existing asylums both in Europe and America, that the medical staff of an asylum containing acute and chronic cases in the usual proportion, should never consist of less than 1 to every 250 patients; that whenever the asylum population exceeds 250, an assistant physician should be appointed; and that when the number of 500 is reached, an additional assistant is necessary. With this proportion, the dispensing of medicine can be undertaken by the junior assistant, and the services of a dispenser will not be requisite.

The paucity of medical officers at Colney Hatch, which makes individual treatment impossible, and the excessive number at Illenau, which leads to over medication, are almost equally objectionable.

Consulting Medical Officers.—With a medical superintendent of education and standing in his profession, and with properly qualified assistant medical officers, the consulting or visiting physician can never be necessary in an asylum.

The medical treatment of patients suffering from mental disease is best entrusted to medical officers residing in the asylum, and watching the ever varying condition of its inmates. It is not possible for any one who sees insane patients only at long intervals, to prescribe properly for them. The regular visits of a non-resident medical officer are calculated to be strongly objectionable to the superintendent, whose fitness for some of the most important duties of his office, are, by the appointment of such a medical officer, directly called in question.

The opinion and assistance of a consulting physician or surgeon is occasionally desirable in an asylum, in difficult cases of accident or disease; and in such cases, it may fairly be left to the superintendent to call to his assistance any physician or surgeon whose advice he deems most worth having; the remuneration for such advice being made according to the usual scale of medical fees, from the asylum funds.

Chaplain.—A chaplain is a necessary officer in every hospital for the insane, and where the institution is of large size, and a majority of the inmates of one religious denomination, the chaplain should undoubtedly be resident, holding no other benefice, and devoting himself exclusively to the religious instruction and comfort of the patients.

In smaller institutions, however, the incumbent of a neighbouring church may fulfil all the requisite duties, in addition to those of his parish. In asylums where there are large numbers of other than one sect, paid chaplains, of two or more religious denominations, should be appointed, and every care taken that the services of each are performed with all possible completeness and decorum.

The utmost facilities should be given for the ministration of clergymen of different denominations, who are not paid chaplains of the institution, and the patients of each particular sect should be permitted to attend.

As regards the position of the chaplain, it may be sufficient to quote the language adopted by the Association of Medical Superintendents of American Institutions for the Insane (Appendix *A*):—"If a chaplain is deemed desirable as a permanent officer, he shall, like all others engaged in the cure of the patients, be entirely under the direction of the medical superintendent."

It is desirable that two services should be held in the chapel of the asylum each Sunday, and on such other days as may be convenient. A certain number of the patients may be sent to the district church, under the care of attendants.

The duties of the chaplain should include the visitation of all the sick of his denomination, and the burial of the dead, so long as the friends of the patient consent to the interment taking place in the asylum cemetery, or in the churchyard or cemetery of the nearest town.

Officers.—An officer charged with the immediate direction of the commissariat and clothing department, a secretary, steward, clerk or agent, is necessary in every asylum; and it seems advisable that such officer should be made also the treasurer or receiver of the institution, and be charged with the receipt and disbursement of all minor sums of money, under the orders of the board of control.

This officer should receive such assistance as may be found necessary in the clerical and general duties of his office, and should either reside in the institution, or at some short distance from it. The salary attached to the office should be such as to induce a man of intelligence and character to accept the varied and responsible duties of the position.

The farm and garden should be under the care of a farm bailiff or gardener, receiving orders immediately from the medical superintendent. In some instances the board of control may interest themselves with great advantage in this department of the asylum, but it is advisable that they should do so in junction with the superintendent, and not independently of him.

The kitchen, laundry, domestic offices, and the supervision of the house servants, should be placed in the hands of a "housekeeper," whose duties shall not extend to a supervision of the wards or female servants. The housekeeper should reside in the asylum, and not less than two rooms should be appropriated to her use.

Attendants.—One chief attendant or supervisor should be appointed for each sex, to exercise a general oversight of all the patients and their attendants, and form a medium of communication between them and the medical and other officers of the institution. Their duties will be to ascertain how far the general directions and prescriptions of the superintendent are carried out and the patients' comfort and general treatment attended to. Their supervision will extend to all the apartments and airing grounds, to the bedding and utensils, and to the distribution of food and medicine. Care should be taken to secure the services of persons possessing tact, intelligence, and, above all, a special acquaintance with the insane; and they should receive liberal remuneration and good treatment. The position of the chief attendants should be that of officers of the institution, and two rooms within the building should be set apart for the use of each.

Upon the ordinary attendants of an asylum will depend no small part of the success of the institution, and every care should be taken, to secure the services of young, active, and intelligent persons, to instruct them in the duties of their office, and to induce them to remain in it. A fair education is indispensable. Every attendant should be able to read and write, and possess some knowledge of figures. Careful instruction should be given, not only by definite rules for their guidance, but by personal communication by the superintendent and other officers. "Your first attempt ought to be to cure your keepers; you need not proceed to your patients till you have done so," was the advice given to, and recorded by, an eminent asylum superintendent, now Commissioner of Lunacy for Scotland. With all the supervison that can be given, the comfort of the patients must, in every asylum, be mainly dependent on the attendants, and no exertion should be spared in training them for the duties of their office; and when trained and accustomed to these duties, and to the presence and peculiarities of the insane, it is of the utmost importance to retain their services.

Their dietaries should be good, their bed-rooms comfortably furnished, and sufficient leave of absence should be given at short intervals. Relief from the monotonous and wearisome nature of their duties is an absolute necessity, if health of body and elasticity of mind (both of which are essential for the performance of their duty) are to be preserved. The example of securing to the attendant the Sunday to himself, which is set in European and American institutions, may be usefully followed, and marriage should be encouraged if it tends to make the attendant settle to his work. A man and his wife may be employed with advantage in the male wards of an asylum, especially in those devoted to the sick and epileptic.

With every attention to the comfort and well-being of the attendants, strict discipline is necessary. When a patient escapes from an asylum through the negligence of an attendant, he should be made to bear part, if not all, the expense of recapture. Leave-breaking should be met by fine and reprimand, but a system of fines, carried out

fully and enforced for minor offences, is liable to prove irritating to the attendant; whilst stopping leave of absence cannot be recommended, because calculated to prove detrimental to mental, if not bodily health. In several British asylums strict discipline is maintained by reprimand and dismissal only.

The proportion of one attendant to ten patients is fixed by almost all authorities on asylum government. The by-laws for the government of the State Asylum at Washington fix this number. By the Association of Superintendents of American Institutions for the Insane, this proportion is regarded as the minimum at all advisable; and in the rules and regulations for the establishment of asylums by the Belgian Government, it is ordered that "there shall be at least one attendant for every ten patients, except in exceptional cases where the Government may recognize that the number may be reduced without inconvenience." Where the asylum contains acute and chronic cases in the proportion usual in Great Britain, the number of attendants should not be less than one to ten or twelve; but in New South Wales, since the asylums contain all the quiet cases which in Great Britain are sent to poorhouses, one to twelve or fourteen will probably suffice.

The staff of attendants should be quite independent of the artisans and servants of the institution. The system of making artisans attendants is for several reasons objectionable. If an artisan is at all a good workman he must be paid higher wages than an attendant, and will be more profitably employed, therefore, at his trade, than in looking after the patients. When he is content to accept the wages of an attendant, it may be stated, with tolerable certainty, that the work which he will do when employed as an artisan will not be such as to greatly profit the institution. The artisans should be only charged with the care of such patients as work with them during working hours.

Although there are objections to dressing attendants in uniform, the advantages are such as to render them of little weight. The smart appearance of the attendants, the care with which their dress is regulated, their immediate recognition by official and other visitors, are strong recommendations in its favour.

A pattern for the men which is not suggestive either of the police or the prison, and some quiet dark colour, relieved by white cuffs and collar, and made as becoming as possible for the women, are therefore recommended. Every attendant should be taken first on trial for some months, and should not wear uniform till a permanent servant of the institution. The keys should be carried in the pocket, or else attached to a cord and tucked beneath the waistband of the apron.

There should never be less than two attendants in each ward, and thirty to forty patients under three attendants is a preferable number. The attendants should be made responsible for the cleanliness of the dormitories and day-rooms; but all cleaning will, as a rule, be done by patients under their superintendence.

An efficient night watch should be maintained by specially appointed attendants, to guard against accident during the night, to minister to the sick, and such as suffer from epileptic fits, to soothe the restless and noisy, and to rouse all such as are dirty, at fixed intervals.

One attendant for each sex will be sufficient for this duty in a small asylum; but with over 400 patients, there should either be two attendants, or convalescent patients may be appointed as assistants. The comfort and cleanliness of the patients will be greatly promoted by a well-regulated system of night watching, and the ordinary attendants will secure sound sleep, without which it is impossible that they should perform their duties. If the attendants are disturbed repeatedly at night, they will, in all probability, be irritable and inattentive during the day, and so utterly unfit for the special character of their work.

If no mechanical method of checking the rounds of the night attendant is employed, vigilance should be secured by irregular visitation; or the emptying and restuffing of all dirty beds may be made part of the night attendant's duty, and he will so be made careful that their number is as small as possible.

Domestic Servants and Artisans.—A certain number of domestic servants and artisans are necessary in every asylum. The domestic servants working in the laundry kitchen, and dairy, and attending on the officers of the institution, should be boarded and

lodged in the asylum, and should not be counted as attendants, although they may be made responsible for the conduct of patients who are temporarily employed with them.

The outdoor servants and artisans should be in every way distinct from the attendants, but like the domestic servants, should be made responsible for the care of all patients employed with them. As many as possible should be lodged in cottages on the asylum estate; and in these cottages under the care of the artisans, may be placed a certain number of the more quiet and convalescent patients. They may be employed at weekly wages, and boarded, or not, as may be most convenient.

Arrangements should be made by which the artisans may relieve the attendants occasionally on Sundays, and so secure to the latter more frequent leave of absence on that day.

The domestic servants who will be most required in the asylum are,—

Laundress and laundry-maids.
Cook, kitchen, and dairy-maids.
Housemaids.

The other servants most requisite are,—

Storekeepers.
Gardener and farm-labourer.
Baker.
Engineer and gasman.
Porters, and

A certain number of artisans, such as carpenter, tailor, shoemaker, upholsterer, painter and glazier, are indispensable in an asylum, to superintend the patients employed in the workshops, and to execute the minor work and repairs which are constantly necessary in a large establishment. To these may be added, basket, mat, or brush maker, printer, blacksmith, mason, &c., &c., as it may be found profitable to employ the patients in these trades, or to execute the minor repairs necessary to the building or its fittings. A bandmaster or chief musician should form part of the staff of every asylum; he should conduct the musical services of the church, instruct the attendants (and such patients as are capable of learning) in music, both vocal and instrumental, and preside at the concerts, dances, and other amusements which should form part of the asylum routine.

Classification.—The exact classification which shall be adopted in an asylum, though a portion of asylum organization, has an important bearing on asylum construction, which must depend, indeed, more or less, upon it.

Certain rules have been laid down, by authorities on asylum construction and management, as to the number of classes for which provision should be made.

The English Commissioners in Lunacy direct that "the building shall be so constructed as to admit of the separation of the male and female patients, respectively, into at least three classes". (Appendix *A*.) And in addition to this, separate buildings are recommended for the working patients, for the idiotic and epileptic, and for chronic cases, making a total of at least six divisions. The Scotch Commissioners give similar directions, substituting imbecile and fatuous, for epileptic, whom it would appear they do not think it advisable to keep apart.

The Belgian Government directs provision to be made for,—1st, the quiet,—2nd, the dirty,—3rd, idiots,—4th, epileptics,—5th, convalescent,—6th, excited,—7th, violent,—in every asylum in which the number of patients exceeds 100; and the American Association of Superintendents of Hospitals for the Insane, advise "that every hospital having provision for two hundred or more patients, should have in it at least eight distinct wards for each sex." (Appendix *A*.)

The number of sections, divisions, or wards, which shall exist in an asylum, is a totally distinct question from the exact classification which shall be adopted for the patients. The constant association of large numbers of the insane, of whatever class, is more or less objectionable; and it may be at once admitted that at least six divisions should be made in every asylum for 500 patients, if only to prevent the association of large numbers; but how far a definite classification according to the more marked features of their malady shall be made, is a question for further discussion.

The "Relative Connexion" system of the Germans, in which a line is first drawn between curable and incurable, or acute and chronic,—each class being relegated to a separate section of the establishment,—has never found favour in other countries. It is open to abundant objection, and is now falling into disuse in Germany itself.

The system which has found favour with the English Commissioners, consists of a separation of the working classes from those incapable of employment, and their accommodation in distinct blocks of buildings. This system is, in several respects, objectionable. Almost every patient in an asylum should be more or less a worker. Many, it is true, will do little, but there is always a hope that they will do more, and if separated entirely from the workers they lose all the benefit of example, which operates strongly among the insane. At the same time, the workers will feel themselves a distinct class, working under compulsion, patients only in name, dealt with as labourers and artisans, and therefore wrongfully detained in an asylum. Those of the same trade or employment are associated together during the hours of labour, and it is frequently to their mental advantage that such association should then be broken up, and that they should pass to the society of those who are otherwise engaged.

Neither the classification founded upon the durability of the malady, its curability or incurability, or what has been called the industrial system, can be recommended. The only proper classification is a medical one; and if to this is added a consideration of the social condition, and the peculiar psychological individuality of the patient, everything necessary in the way of classification will be attained.

The provision for patients paying for their own maintenance, and for the idiotic, in buildings detached from the asylum, is considered in a subsequent part of this Report, so that these may be excluded from consideration here.

The sick and infirm,—all those aged and worn out, and suffering from extreme dementia, as well as the worst cases of epilepsy, for whom special provision in the shape of furniture, bedding, nursing, is necessary; the cases recently admitted,—as requiring special medical treatment by reason of their mental condition; and the more noisy and violent class,—those less under self-control, and sometimes needing temporary isolation; are the only patients for whom *classification* can be recommended.

For the whole remaining body of the patients, a psychological arrangement rather than a classification should be adopted.

Those cases should be associated which are least likely to injure, and most likely to benefit, each other, no matter what may be the character or form of their disease, or whether supposed to be curable or incurable. Thus the melancholic and the excitable may sometimes be mutually useful; at others kindred spirits may exercise a beneficial effect on each other. Variety is as pleasant to an asylum patient as to any one else, and it would not be found satisfactory, even if it were possible, to have all our associates like ourselves in their mental characteristics. Social position and education may often be advantageously considered in the arrangement of patients; and those who, when sane, occupied the same social standing, will often be most fitting companions in their insanity, and should, if possible, be placed apart from the other inmates, even though all are now on the one dead level of pauperism. The following remarks on this subject by Dr. Browne, are at once eloquent and to the point* "It is not enough that the furious should be separated from the docile, or the imaginative from the fatuous. The mind of every individual should be carefully studied; its healthy as well as its insane bearings analyzed, and the relations which they may have with, or the influence they may acquire upon, the minds of others calculated, and groups formed in reference to the result. The violent or malicious may often be confided with perfect safety to the acquisitive, or vain, or religious monomaniac. The happy and the affectionate may be associated with the desponding and despairing, and the helpless idiot may become the adopted child of some mother whose only delusion is, weeping for infants which she never bore. Whole families may be formed; a vain idler may be entrusted to the tutelage and example of three or four industrious knitters or oakum teasers, and being encircled by temptation to

* *What Asylums were, are, and should be:* By W. A. F. Browne, M.D., one of the Commissioners in Lunacy for Scotland, and formerly Superintendent of the Crichton Institution for the Insane, Dumfries.

exertion, and stimulated by the desire of rivalry, abstraction from the dormant idea is often the consequence. A contented self-satisfied and active-minded maniac is joined to a timid, a lethargic, and a gloomy maniac, and seldom fails to communicate some portion of those qualities which it is our object to infuse."

"The association of lunatics requires to be skilfully managed; but when classes are formed in conformance to the mutual wants, and wishes, and dispositions of the parties, the system is at once beautiful and self-operating."

It must never be forgotten, in making a distinct class of the more violent and noisy patients, that in many instances, the presence of one or two such patients in the quieter wards will be of benefit to themselves, without being hurtful or annoying to the rest; and that they are more likely to be impressed with the behaviour of the other patients, and conduct themselves quietly and well, than to stir up strife and discord. Every trial should be made, by so dividing the cases as to make the number of violent inmates in the ward specially appointed for them gradually less, and so assimilate its character to that of the ordinary division of an asylum.

The separation of three or four of the noisy and violent from the remainder of the inmates of the ward, will frequently completely alter the character of the entire division,—and the plan adopted for this in the New York State Asylum is worth attentive consideration. Off the most noisy ward, which contains twelve patients, is a small ward to contain four only. These are placed under one nurse. The extremely violent, and those who perpetually behave badly and cause tumults and disturbance in the other wards, are here placed together, and removed as soon as their behaviour is such as to induce the superintendent to place them in other wards.

In many instances, whatever the basis of classification, it will not hold good throughout the 24 hours. The habits and requirements of some patients necessitate other provision at night than that which is made for those with whom they are fitly associated during the day. The day association must therefore be broken up, and a night classification, based on the requirements of the patients, made.

A certain number of the convalescent patients should be placed in cottages, either in bodies of ten or twelve, with an attendant, or in the homes of the artisans or labourers of the asylum. By these they will be kindly treated and cared for, and with them they will lead a life differing from the artificial one of the asylum. They will, at the same time, remain under observation, and so re-enter the world gradually, instead of passing at once over the asylum threshold into the business and cares of life. The remainder may fairly be kept for a time in the wards, where their example is good for the other patients, and they will materially assist the nurses.

Separate wards for epileptics have been advocated, because their care and treatment requires special knowledge on the part of the attendants, and some provision for their safety during the fits to which they are subject, and because it has been thought that they are terrifying and annoying to other patients, whilst the fellow feeling which the particular nature of their malady induces, makes them willing to render assistance to one another in its active paroxysms. All these advantages are, however, more or less outweighed by the utter depression which the perpetual contemplation of epileptic fits is liable to cause to all, both patients and attendants. At the same time, a certain number of the epileptic cases are fitted for work, and should be employed with the ordinary patients, whilst the mental condition of the others renders them more fitted for the violent section of the institution. The cases in which the epileptic fits are very frequent should be placed in the infirmary, and the remainder distributed throughout the hospital, according to their mental peculiarities.

The number of patients who may properly be associated in the various divisions of an asylum, has an important connection with the subject of classification. As a general rule, the numbers in each class should be such as to require the services of not less than two attendants. Divisions ranging from 15 to 40 are preferable. In the more violent ward, 15 to 20 patients, under two or three attendants, are quite as many as should be placed together; whilst in the quieter wards, 40 patients, under two or three attendants, are not too many. A small ward, to contain four or five of the most violent patients, is extremely useful.

Diet.—The quantity, the quality, the preparation, and the distribution of the diet of the patients, in an asylum, is, as Dr. Conolly remarks,* a subject in every way worthy of the careful consideration of the managers, officers, and attendants. "All habitual physical discomfort is opposed to mental recovery, and a scanty, ill-cooked, unwholesome diet, creates a chronic uneasiness and dissatisfaction, impairs the health, and increases the mortality of an asylum. There is some reason to suppose that insane patients, shut within the bounds of an asylum, and necessarily leading a monotonous life, require, as prisoners are said to require, a greater quantity of food than persons who are at large. It seems, at all events, to be established in asylums, that a very low diet conduces to a high mortality, and that the deaths diminish when the diet is improved."

A fair quantity of wholesome nutritious food is necessary, for the quiet and for the health of the inmates. The saying that "a hungry man is an angry man," the truth of which in ordinary life few will be found to deny, is true to a fourfold extent in an asylum; and the quietest hours of the day in asylum wards are those which immediately succeed the breakfast, dinner, and supper of the inmates. Insanity is, in very many cases, a disease of debility; sometimes it is the direct result of semi-starvation, going on for years; and improved diet is often the chief element in the cure of the patient. Statistics have been published, by both English and French writers, which prove more or less conclusively that the recoveries in asylums are positively increased in number by plentiful and nutritious diet; and the effect of feeding on mental, as well as bodily health, has been noticed by most asylum physicians.

But it is not the mere quantity alone of the food which contributes to the health and comfort of the inmates. The quality of the viands should be carefully attended to, and special provision made for such as, from their physical condition, require an extra allowance of ordinary food, and such nutritious diet as concentrated soup, beef tea, eggs, wine, porter, or brandy.

The preparation, and the mode of distribution, are equally important. The food should be so prepared that any officer of, or visitor to, the asylum could dine from it with satisfaction; and it should be served with cleanliness and decorum, and at fixed hours. The taking of food should be made a pleasure. "The first and chief *amusement* is to eat," laughingly remarks Professor Meyer, the Superintendent of the Göttingen Asylum, one of the leaders of the modern school of psychology in Germany, when speaking of the arrangements of the institution under his care. Meals consisting of a liberal supply of wholesome food, served with cleanliness and order, in a well-furnished and cheerful dining-hall, are the best *amusements* which can be afforded to an inmate of an asylum, and will go a long way towards producing content, which is a good step on the road to cure.

The dietaries of English asylums, given in the Appendix, will serve as a useful guide, as to the quantity and variety of food necessary for the insane; and they may be modified so as to suit the climate, and the habits of the people of this Colony.

Clothing.—The clothing of the patients in an asylum merits very careful attention, both as one of the means of preserving health, and one of the things reacting on the mind. In some forms of nervous disturbance, the function of animal heat is interfered with, and warm clothing in chilly weather is especially necessary. The clothing should be regulated by the temperature. No pains should be spared to make the dress of the patients, both male and female, as becoming as possible, and a variety of pattern and colour should be used. Uniformity of dress can be desirable only as a check upon escape from the asylum, and its disadvantages much outweigh the trifling advantage which is gained in this particular. A special uniform, unless distinctly military in type, is almost always suggestive of the prison. The style of dress need not be made too miscellaneous; all needful variety may be secured for the men by two or three distinct colours, whilst prints and winseys admit of almost any variety both in pattern and colouring, and such variety is especially pleasing to the female sex. For men employed in agricultural labour, special

* *The Construction and Government of Lunatic Asylums and Hospitals for the Insane*: By John Conolly, M.D., p. 65.

suits are requisite; and for all the asylum inmates, newer clothes, or some of a different pattern or material, are desirable for Sunday.

The supply of linen should be sufficient, and such minor articles as neckerchiefs should be provided and worn. It has been well remarked by Dr. Conolly* on asylum management, that "the number of female patients who go about bareheaded is always greatest where there is most neglect." Caps and bonnets should be provided for the female patients, and every care taken that they are worn, and that their hair is attended to and kept in order. All the patients should be supplied with boots or shoes.

Every precaution should be taken to prevent the patients divesting themselves of their clothing or boots. Constant watchfulness on the part of the attendants may do much to prevent this; but in some cases, locks, instead of laces or buttons, to the boots, and patent buttons which can only be undone by an attendant's key, are necessary, instead of those ordinarily worn. The patient must be "clothed," although not in his "right mind." For destructive patients, strong dresses made of linen or canvas, and so lined as to be as comfortable as possible, should be employed for use during the day, and quilted coverlets at night.

Nothing more completely betrays the character of the management of an institution for the insane than the way in which the patients are clothed. Torn and ragged dresses are the surest proof of neglect.

The change of bed-linen should be at least weekly, for the majority of patients. For some, one sheet a week may be sufficient for all the purposes of cleanliness. Body linen should be changed as often as is necessary, and for the majority of patients this will be twice a week.

With the assistance of a small amount of hired labour, the major part of the bedding and clothing required for the patients may be made in the establishment, at a less cost than they can be purchased ready made. It will perhaps be necessary to purchase hats, bonnets, and a few other articles.

Labour by Patients.—That labour is an important agent in the treatment of the insane is so universally acknowledged that the point need scarcely be insisted on. It relieves monotony, it abstracts the mind from dominant and frequently hurtful ideas, it preserves health of body, and it promotes in the highest degree restoration to health of mind. Many patients have worked out their own cure. Its regulation therefore is important, and at the same time it is a source of income and profit to the institution, and serves to lessen considerably the cost of maintenance of the inmates.

Every care should be taken that the employment selected for the patients is such as is best fitted for their mental and bodily condition, at the same time that it is real; calculated to utilize the knowledge and the habits which the patients may have acquired when sane, and to benefit the finances of the institution. Sedentary occupations appear to be less favourable to the recovery of the patients than those which are active in character. Fortunately, agricultural occupation is at the same time healthful and profitable. It is in its variety calculated to interest the patients, to sooth their excited, or awaken their dormant faculties, and to contribute to health by sufficient corporeal exercise. The large majority of the working patients of the male sex should be employed either in farming or gardening, or in tending the pigs or cattle belonging to the asylum, the remainder may be employed in the various trades for which their prior life most fits them. Those trades should, if possible, be selected in which the articles manufactured will serve for use in the asylum. Experience proves that the more self-contained an asylum is, the more self-supporting it is likely to become. The boots and shoes, the clothes and bedding, should be made in great part, if not entirely, by the asylum inmates; and all the carpenters', joiners', painters', plumbers', and other work required done by them also.

For the women, the laundry will afford constant employment. It has been objected to washing by hand, that it is unhealthy, that the stooping position, the steamy atmosphere, and the emanations from soiled linen, are detrimental to health; but with a well-ventilated wash-house, and a proper arrangement of wash-tubs, some of these dis-

* *Op Cit.*, p. 60.

advantages may be obviated; and washing, as affording active corporeal exercise, is peculiarly useful to certain classes of the insane. It is astonishing how much excitement evaporates with the steam of the wash-tub. The remainder of the female patients may be employed in knitting and sewing, and in assisting in the kitchen. A certain number of both sexes will necessarily be employed in house-work, in cleaning the rooms and furniture, and in the necessary minor service of the asylum.

In summer-time, a certain number of women may be employed in field work with advantage.

With a proper selection of occupation for the various classes of patients, little danger is to be apprehended from entrusting patients with tools and implements. Accidents from this cause are very few in asylums, and to run some small risk, and so benefit the great mass of patients, is undoubtedly better than to prevent work for fear of accidents. "Nine-tenths of madmen are neither habitually furious nor malicious, and if they pass the ordeal of such an examination as it is in the power of every man acquainted with the human mind to institute, it would be egregious folly to debar them from a privilege which may contribute to their happiness, and cannot, in ninety cases out of a hundred, interfere with the happiness or safety of others. Should accident occur, and even life be sacrificed, one person has suffered for the good of many; such is all life here, outside, as well as inside, the asylum bounds.

The patients supported at the expense of the State may fairly be expected to work for its benefit. The establishment is fully entitled to the proceeds of the labour of all those supported on charity, but a system of compulsory labour cannot be recommended. There will, as a rule, be little difficulty in setting all to work, who should be permitted to do so, and work should be encouraged by a system of remuneration. The lunatic has no claim for remuneration for his earnings in the asylum, where he is cared for and supported. "The amount of these can be as nothing in liquidation of the debt which he owes for peace and protection, and chance of recovery which he enjoys; and it would be ridiculous, and might be even dangerous, to inculcate upon him that he has any such claim."* But he is likely to take more interest in his occupations if such remuneration is made, and he is able to see a reward for his daily work.

"Payments in money are not advocated, although in some cases strongly desired, and more irresistible than any other temptation; but it is generally more convenient, and equally acceptable to the other contracting party, to pay in another manner."* Either better diet or clothing may be given, certain luxuries awarded, or a portion of the earnings of every patient set apart to accumulate till restoration takes place, when it may be delivered to him to meet the exigencies of dismissal.

When a workman, learned in a special trade, is found fit for work in an asylum, it will usually be found equally profitable to himself and to the institution to allow him the means of following his avocation. A bookbinder at Prestwich binds all the periodicals, and keeps in good order the library of the institution; and a clockmaker at Illenau keeps all the clocks of the asylum in repair, and makes others for sale.

Amusements.—Means of amusement which demand active muscular exercise, and those directed more immediately to mental distraction, are equally useful, and in this respect the methods of amusing the patients adopted in Great Britain may be closely followed.

The supply of games in the rooms should be liberal and varied,—out-door exercise, foot-ball, cricket, fives, ball, &c., should in every way be encouraged; but it must never be forgotten that *work*—useful employment—should always be more inculcated than mere amusement, and that *play* will be more appreciated if it comes as a relaxation from active employment, than if it is attainable at all hours. The evening should be the time during which the ordinary in-door and out-door amusements are most practised, and then should be prepared such extra amusements, both in the wards and in the amusement room, which will produce gratification without hurtful excitement, and at which the majority of the asylum inmates may be permitted to assist. The total number who may usually be permitted to attend the associated amusements is one-half to two-thirds or more. These

* *What Asylums were, are, and should be:* By Dr. W. A. F. Browne.

amusements should consist of dances, concerts, lectures and readings, magic lantern exhibitions, conjuring and theatrical performances; and though in the main the amusements in an asylum must be supplied by the inmates themselves, and be more or less of a mutual character, efficient assistance may frequently be obtained from neighbouring towns, by means of small payments, or by appealing to the charity of amateur and professional entertainers. These in many cases are quite ready to lend their services for the amusement of the patients, who often keenly appreciate the excellence of such performance and the kindheartedness which afford them.

Associated amusements should be held so far as possible on fixed days, to which the patients may look forward; and in providing them, it may be well to avoid the pushing system of amusement which is in vogue in some English asylums, in which almost every evening is occupied by some entertainment or another. This tends to produce a dissipated state of the insane, not less than the sane mind, and forces the patients into an unnatural and artificial liking for excitement, and a craving which may not be easily satisfied on their departure from the asylum, or into a feeling of weariness and disgust with pleasure-seeking. Music must at all times be the great source of amusement in all asylums. Its soothing influences, its marked results on mental disease, have been described by almost all writers on insanity. The evidence on this subject, obtained at the Retreat, York—an asylum belonging to, and containing a large number of, members of the Society of Friends, but into which other people not belonging to the sect are occasionally admitted—is interesting. It is found that the members of the society, who are little used to music, and who seldom are able to play themselves, are very difficult to amuse or to "get at" in their alienation, but that music seems at once to work wonders for all not belonging to the society. "Get them to play," says the matron of the institution, "and they are soothed at once." A band is a great assistance in asylum amusement, and a band, small or large, may be almost always obtained from among the attendants and officers; new comers being selected with a special eye to their qualifications in this respect. The talents of patients in this direction should never be permitted to lie dormant. Vocal as well as instrumental music should be practised, and in this a large number of the patients can assist.

Advantage should be taken of all amusements outside the asylum, but easily accessible from it; and visits to such entertainments—flower-shows, concerts, readings, &c., may be made the reward for good behaviour or diligent work, and will frequently be marvellously beneficial to the mental health of the patients.

A school for the idiotic and feeble-minded youth is indispensable in every asylum where these form part of the population; and although there is little practical evidence of the good effect of educational processes upon the minds of the adult insane, it is all but invariably admitted that mental occupation directed to some useful end, mechanical mental work, such as simple arithmetic, or learning by rote, is very likely to prove beneficial to certain forms of mental disease. In such cases, which should be carefully selected, this mode of treatment should be pursued to the fullest extent. A teacher, whose especial duty it would be to superintend the scholastic exercises of such patients, might also be usefully employed at other times in reading to or otherwise assisting to amuse and occupy other patients, and in assisting them in their writing letters to their friends, for which distinct hours may be set apart, and which is to be in every way recommended and encouraged.

Animals and Birds.—All such animals and birds as can be kept at small expense and little trouble, and serve in any way to amuse and interest the patients, should undoubtedly be kept in asylums; and in New South Wales, kangaroo, wallaby, and numerous kinds of birds, may be added to, or substituted for, those which are to be found in most European and American asylums.

With a farm, it will generally be found an economy to keep cows, instead of purchasing milk; and in all asylums, pigs should be kept to eat the refuse. Additional food may be grown for them on the farm and garden, and they may be profitably bred, fattened, slaughtered, and eaten in the asylum. Their care affords occupation to a certain number of patients, to whom, as well as others, they are almost certain to be objects of interest; pork will be an agreeable change of diet to the inmates; and with properly

constructed piggeries placed at a little distance from the asylum, pigs will be in no way a nuisance.

The number and character of the horses kept must depend entirely on the size and wants of the establishment.

The patients may often be made to take the greatest interest in all animals which are the property of the asylum, and especially when these animals are entrusted more or less to their care; all such interest is healthful, as tending to prevent the introspection to which all the insane are liable.

Relief on Discharge.—Some provision for the relief of such of the patients as are in need, on their discharge, is urgently needed in every asylum, and more urgently in a colony than in an older country. The patient is not unfrequently a stranger in the land; kindred and home are far away; the few ties of friendship which he has formed have been swept away by the dire malady which has prostrated his intellect and ruined his fortunes, and he walks away from the asylum gate a free man, once more in his right mind, but without a shilling and without a friend. He has no character from his last place, it has been lost in the turmoil of his disease. The stigma (unhappily) of the asylum is still upon him, and lucky is he if he meet with the Good Samaritan in the way, and is saved from a return of his malady in the trials for work and for bread which his destitute position render immediately necessary to him. A small sum from a special fund at the disposal of the asylum authorities, or a system of discharge on trial, during which a fixed sum, equal in amount to the maintenance rate of the asylum, should be paid to every homeless and needy patient, and would save many from a return to the asylum, and thus he at once a charity to the individual and an economy to the state.

Asylum Reports.—It seems advisable that a complete system of reports should be instituted, and that these reports should consist of three kinds.

1st. Reports made by attendants and officers.
2nd. Reports made by the board of control.
3rd. Reports made by the board of inspection.

The reports made by the attendants should include a statement of,—

The number of patients.
" admissions, discharges, and deaths.
" taking medicine, using the bath, and remaining in bed.
" attending amusements, &c.
" in seclusion.
" employed; the kind of employment being specified.
" having fits, attempting to escape, suffering from accidents, &c.

In all cases, departures from rule and the reasons for them should be reported, and any other particulars which the medical superintendent may deem necessary, may be given.

These reports should be made daily, and given to the chief attendant.

The night attendants' report should include a statement of,—

The number wet, dirty, noisy, sick, destructive, taking medicine, and having fits during the night; and should be delivered to the chief attendant in the morning.

From the ordinary and the night attendants' reports, and from matters which have come under personal observation, the chief attendant's report should be compiled. It should be mainly a summary of the reports which he has received, and as such, will comprise a general statement of the condition of the division of the establishment under his charge. This report should be delivered to the medical superintendent every morning. In the Report on Colonial Hospitals and Lunatic Asylums, published by the Secretary of State for the Colonies, is a form of weekly report by chief attendants, and such a weekly summary of his reports may be made with advantage by the chief attendant of each division; this form is given in Appendix *D*, No. 6, and some of the forms given in this Appendix may be adopted for the daily reports of ordinary night and chief attendants. It will be found useful to print the forms for the different sexes in different colours.

The use of reports of this kind must be obvious to all who have at all studied the question of asylum organization. They are the best means of keeping the attendants in a state of thorough attention, and preventing them slurring over their duties. "An attendant will slur over many things if he is to have himself for his sole judge, which he will do exactly and conscientiously if he has to write down an account of his measures, and of his reasons for them, for the judgement of superior authorities." And they spare to the superintendent a considerable amount of personal inquiry in his government of the asylum, whilst they afford him at the same time materials on which to ground his own reports.

All the reports made by attendants should be kept for the inspection of the boards of control and inspection.

The reports of officers should be made at least annually, and should embrace a consideration of the entire general government of the institution. The report of the superintendent should include a general statement of the working of the institution, and should be accompanied by such statistical and other tables as are necessary to place fully before the board of control and the world the condition of the institution, and supplemented by financial statements prepared by the steward and secretary. The statistical returns should not serve merely to point out the state and condition of the asylum, but should be available also for scientific purposes, and therefore should be made according to one uniform plan. The English Commissioners in Lunacy have, in their Twentieth Report, published forms for asylum medical statistics, with the view of facilitating statistical comparison. These forms have been adopted in some of the English asylums, and are given in Appendix *E*, tables 1, 2, 3, 4, 5, 6. In the Report on Hospitals and Asylums from the Colonial Office, the importance of uniformity of plan in the preparation of asylum statistics is pointed out, as well as the difficulties attending their preparation and the tendency which the work has to become too cumbrous for any but the practised statistician to manage. With the idea, therefore, of limiting these returns to such as could be furnished by officers of ordinary intelligence without any unreasonable amount of trouble, modified forms of statictical returns have been drawn, of a short and manageable character, for all asylums, and additional forms for larger asylums, both series of which will be found in Appendix *E*.

For the sake of uniformity, and a comparison with the statistics of English asylums, the forms issued by the English Commissioners in Lunacy, should, if possible, be adopted in a large colony like New South Wales; and if these are supplemented by the tables for larger asylums, issued by the Colonial Office, all necessary statistics will be obtained. It may however be interesting to furnish tables showing the social condition (married or single), and the religious denomination of the patients.

The reports issued by the board of control may be simply an adoption of, or preface to, that of the superintendent, or it may be deemed advisable to describe fully the operations of the board. They should be made annually.

The report of the board of inspection should enter into the general condition of the asylum, and should be accompanied by suggestions for whatever improvement or alterations may be considered necessary.

The reports of the board of control containing the reports of the superintendent and other officers, and the reports of the inspecting board, should be published annually for the information of Parliament and people. Every care should be exercised in these reports that the objects and aims of the institution are fully set forth by the language employed. The importance of a correct nomenclature can scarcely be over-estimated. "The erroneous views of insanity formerly entertained, and the unfortunate modes of treatment which resulted from them, led to the adoption of terms which are now without meaning, and the continued use of which has an unfavourable influence on the best interests of the insane."*

The terms "lunacy" and "lunatic" which originated from a popular belief in influences that have long since been shown to have no existence, and have now no meaning in reference to the diseases of the mind, should be replaced by "insanity" and "insane."

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* Kirkbride: *On Hospitals for the Insane.*

The "awful word mad-house" has happily almost disappeared; but the term "asylum" remains, and, though in many ways in itself unobjectionable, has been associated with institutions in which every cruelty and abomination were practised, till it has suffered from the contact, and its original meaning, never very expressive of the purpose to which it was applied, has almost disappeared. There is no reason for, and many against its retention; and it should undoubtedly be replaced by the words "Hospital for the Insane", which are expressive of the curative purposes, which every institution for the insane ought to have. The *treatment* and care are, or should be the object of all institutions in which the insane are accomodated.

All such terms as "cells" and "keepers", which smack of the prison, should never be heard within an asylum, or used when speaking of the provision for those mentally afflicted. When things are known by their right names, and institutions for the insane seen as they should be, no small part of the horror with which they are commonly regarded, and the stigma which unhappily attached to all who have been their inmates, will disappear, and a proper nomenclature in reports intended for the information of the people is therefore of extreme importance.

Accommodation for Patients paying for their Maintenance.

From the fact that insanity is a disease treated in some measure as other diseases, it is possible that the conclusion may be drawn that in this as in other ailments the great middle classes should be left to take care of themselves, and to pay for their medical attendance and such nursing and care as may be requisite. But the least thought will show that insanity differs materially from all other affections to which mankind are liable—in its nature, which renders it unfitted for treatment at home, whilst at the same time it exposes the patient to ill-treatment from the careless, the greedy, and the cruel, since his complaints, often well-founded, are unheeded—in its duration, which in the shortest cases may be counted in months, and the longer in years—and in its pauperizing effects on the patient and all with whom he is connected.

The long duration of the malady, the costly nature of the treatment, whether the patient is kept at home, in which case he requires the more or less constant attendance of a paid nurse or of some member of his family who might otherwise be winning bread by work; or sent to an asylum in which the care and treatment necessary must be paid for at a high price—are a heavy tax upon those in moderate circumstances. It may safely be said that no form of sickness with which we are acquainted leads so directly to pauperism as insanity; and on this account, as well as on account of the abuses which are so liable to occur where the care and treatment of the insane becomes a matter of commercial speculation, it has become a settled opinion in the minds of those who have carefully considered this question, that, for the insane of the middle classes, as well as for the insane poor, some provision should be made in public institutions where they may pay such sums as they are able, for the care and treatment they receive. Public institutions are fitter residences for this class than private asylums, because the patients can as a rule be maintained at a cheaper rate in them, and because they are less liable to abuses of various kinds than asylums kept for the profit of one or more individuals, where the desire for gain and the mental powerlessness of the patient, are constant temptations to depart from the way that is right.

Following the example set by the states of the American Union as well as those of Germany, provision should be made in the Government asylums of New South Wales for paying as well as indigent patients. Such provision should consist of either one section of the ordinary asylum, or, if detached houses, which may be built and increased in number as needed. A separate kitchen should be provided, and the fittings of the various rooms made similar in character to those which the patients are accustomed to at home. Especial care should be taken in providing amusements for the patients, since it will be more difficult to find employment for them than for pauper patients. The lectures and concerts which are given in the common amusement room will be available for paying as well pauper patients, and the one superintendence, commissariat, and government will serve for both classes.

It is doubtful whether it is advisable to provide very high-class accommodation in a public asylum. The wealthy classes are generally able to secure for their insane such accommodation as accords with their position, in proprietary asylums, and their care and treatment may fairly be left to private enterprise. Such princely establishments as Ticehurst (where a pack of harriers is kept for the amusement of the patients), and Brislington in England, Saughton Hall in Scotland, and those at Vanvres and Ivry sur Seine in France, are not likely to be soon established in this country, but every comfort and luxury is be obtained for insane as well as sane people by those who have wealth at command.

Criminal Lunatics.

It is not proposed to discuss the advisability of a special asylum for criminals. Such asylums have, with the full concurrence of public opinion, been established in Great Britain and Ireland, and in the most populous states of the American Union; and, following the example of kindred nations, New South Wales has already made special provision for the criminal insane.

The Colonial Secretary is empowered to direct that all persons acquitted on the ground of insanity, the jury finding specially that such persons were insane at the time of the commission of the offence, and all persons sentenced or ordered to be kept in any gaol, prison, or penal establishment, who may be shown to be insane, or unfit from imbecility of mind for penal discipline, shall be sent under warrant to the asylum specially provided. But the asylum so specially provided differs in almost every respect from those which exist for a similar purpose in other countries. Instead of being a cheerful residence for the insane, a hospital for those sick in mind, it is simply a small, ill-regulated prison. The classes sent to it include those who have become insane from the long indulgence of criminal propensities; those in whom some degree of imbecility renders a vicious character still more intractable; and those who have done wrong conscientiously believing it to be right, and have become criminal for want of timely protection during their insanity;—those, in fact, criminal before insane, and those insane before they committed criminal acts.

It may therefore be proper to consider—

1st, What classes should be sent to a special asylum;
2nd, What that asylum should be in construction and organization.

Under the term "Criminal Lunatics" are included two distinct classes—First, those who become insane whilst undergoing imprisonment for offences against the law; and, secondly, those who whilst insane commit criminal acts, and are either found insane on arraignment, or acquitted on the ground of insanity. The first class, again, may be subdivided into "convicts," and ordinary prisoners; or those undergoing penal servitude, and those in prison for minor offences.

The "convict" class has its distinctive characters. It consists for the most part of men who have been long the companions of thieves and ruffians, who have given unrestrained license to the brutalizing influence of their passions, who are learned in prison ways and in prison language, and upon whom the stamp of iniquity is plainly visible, the shadow of insanity hiding but little of the natural depravity of the man. These men, on becoming insane, are frequently extremely dangerous, and are besides not fit associates for the ordinary inmates of an asylum ward. By the non-criminal inmates, especially if capable of reflection (and the mind is never totally eclipsed), and by their friends, the presence of such convicts will be felt as a contamination, and the moral effect of the association is calculated to be extremely bad; besides which, these "convicts" are still under sentence, and have frequently a long time to serve, their insane condition not having released them from the consequences of their crime. For these reasons, the convict class of insane are, as a body, proper subjects for a special asylum.

It is difficult to draw a distinct line between the "convict" class and the prisoners in ordinary gaols; but although among the latter may be found men as utterly depraved and of as criminal disposition as among the former, yet they differ in many respects from

them as a body. The offences with which they are charged are often less heinous in character, the number suffering imprisonment for the first time is large, they have not so much caught the language and manner of the criminal class, and on becoming insane are less likely to be dangerous and offensive. In many cases, they are, as far as *criminal disposition* is concerned, little removed from their fellow-men, and their presence has not been found objectionable in ordinary asylums, when their antecedents are kept secret from the other patients. This is the experience in America, where all; in Scotland, where the majority; and in England, where a certain number of this class are confined in the ordinary asylums.

A principle of selection from the criminal class should therefore be adopted. Each case should be specially considered—the nature of the crime—the antecedents of the individual—and the peculiar form the insanity assumes, should be taken into account before determining to which asylum the patient should be sent. Crimes classed as offences against the person, and insanity taking the form of homicidal mania, may be considered to make the patient a fit subject for a special asylum.

The second class of criminal insane should be distinguished altogether from that already named. It includes men morally bad, whose madness is the result of a long course of debauchery, and who differ therefore in little from the criminal; but the large mass are, neither before nor after the act which has brought them under the term criminal insane, *of criminal disposition*. There will come under this category men of honour, probity, and delicacy of feeling, who have pilfered from their neighbour, or, to borrow an illustration from an eminent authority on this subject, "who, in obedience to the supposed command of the Deity, with a faith like that of Abraham, have sacrificed with bleeding heart the dearest object of their affection," and women of true womanly character, who have, during insanity arising from the "pains and perils of child-birth" slain their offspring. They are criminal as regards the act but not as regards the disposition, and they are legally irresponsible. These unfortunates claim our extremest pity. To place them all in association with the convict class is a wrong to the individual; and, happily, experience has proved that the greater number may safely be kept in the wards of ordinary asylums among those who but for timely protection might have done similar acts.

But, unfortunately, there are some among them whose insanity is of such a type that, except under close and watchful guardianship, they would again commit similar crimes to those with which they are already charged. Some also have passed into this class who have only just escaped the gallows, and owe their lives to the clever sophistry of the advocate, the partisan evidence of the physician, or the muddled brains and maudlin sympathy of the jury. These, for the public safety, must be kept in such close confinement as is impossible in an ordinary asylum, without converting it into a prison, and so sacrificing the comfort and imperilling the chances of recovery of the other inmates.

Selection, then, should be exercised here also. The laws of New South Wales have already mercifully omitted those found insane on arraignment from the operation of the Criminal Lunatics Act, and there can be little doubt that they may be safely treated in an ordinary asylum. To these may be added a certain number of those acquitted on the ground of insanity, leaving those who have committed the higher class of offences, such as murder, treason, and offences against the life or person, or who have shown dangerous homicidal propensities, to the safe keeping of a criminal asylum.

The suggestions, then, which it is thought necessary to make as regards criminal lunatics, are,—

First—That all the "convict" class should be sent to the special asylum for criminals.

Second—That all found insane on arraignment, should, as at present, be treated in the ordinary asylums.

Third—That a special selection should be made from the remaining two classes—certain cases only being sent to the criminal, and the remainder to the ordinary asylums, the cases to be selected for the criminal asylums, being those prisoners in ordinary gaols in whom a *criminal disposition* is markedly apparent, their prior history, the nature of their offence, and their mental

condition being duly considered; and those of the so-called "Queen's pleasure men" who have committed treason, murder, or offences against the person, and whose form of insanity is calculated to lead to a repetition of the original offence.

Provision should also be made for the subsequent transfer to the criminal asylums of any person belonging to the class of criminal insane who it may be found difficult or dangerous to maintain in an ordinary asylum, and to the ordinary asylums of such convicts and others of the insane in the criminal asylums as become demented and fatuous, and so no longer need the special provisions of the criminal, and would not be objectionable in ordinary asylum wards.

It is important, even in a financial point of view, that as small a number as possible should be maintained in a criminal asylum, which from its special character and from the larger number of officers and attendants required must always be more expensive than an ordinary asylum. The weekly maintenance rate at Broadmoor is about 25s. per inmate, whilst in ordinary pauper asylums it is, as a rule, under 10s. The charge for Government cases of criminal insane at the private asylum, Fisherton Home, is 17s., whilst pauper patients are received from the counties at 12s. In Tasmania, the cost of maintenance for criminal insane is 15s. 11d. weekly, whilst the ordinary pauper insane cost 11s. 8d.

The number now maintained in the criminal asylum, or who would be placed in the criminal asylum under the operation of the Criminal Lunacy Act, if the accommodation were sufficient, is very large in proportion to the number it is thought necessary to place in the criminal asylums of Great Britain.

In England and Wales, with an estimated population, in 1866, of 21,210,020, the number of criminal insane in the state asylum or awaiting removal to it, was 540, or 1 to 39,277;

In Scotland, with a population of 3,153,413, it was 46, or 1 to 68,552;

In Ireland, with a population of 5,582,625, it was 132, or 1 to 42,292;

Whilst in New South Wales, with a population estimated at this time at 447,620, it is 51, or 1 in 8,776—

And the following table, classifying the present criminal lunatics according to their crimes, speaks strongly in favour of a selection of cases being made:—

CLASSIFICATION of the 51 patients who come under the operation of the Criminal Lunacy Act, in the Lunatic Asylums at Parramatta, on the 17th September, 1868.

Crimes.	Males.	Females.	Total.	Found Insane on Arraignment.			Acquitted on the ground of Insanity.			Convicted and Certified to be Insane after Sentence.		
				M.	F.	Total	M.	F.	Total	M.	F.	Total
Murder*	23	...	23	2	...	2	13	...	13	8	...	8
Wounding with intent	5	...	5†	...	...	...	3	...	3	2	...	2
Rape	2	...	2	...	...	...	1	...	1	1	...	1
Cattle stealing	1	...	1	...	...	...	...	...	...	1	...	1
Arson	1	...	1	...	...	...	...	...	...	1	...	1
Horse stealing	3	...	3	...	...	...	...	...	...	3	...	3
Larceny	8	1	9	...	...	...	...	...	...	8	1	9
Burglary	2	...	2	...	...	...	...	...	...	2	...	2
Robbery, being armed	3	...	3	...	...	...	...	...	...	3	...	3
Vagrancy	1	...	1	...	...	...	...	...	...	1	...	1
Idle and disorderly	1	...	1	...	...	...	...	...	...	1	...	1
	50	1	51‡	2	...	2	17	...	17	32	1	33

* Three of the murderers are also serving an imperial sentence, and stand on the books as "British Lunatics."

† One of these stands committed to take his trial for murder.

‡ Of this number, 38 only are at present confined in the Criminal Asylum, owing to want of room.

The discharge of criminal lunatics should be specially regulated. On recovery, all under sentence should be sent, both from the criminal and ordinary asylums, to the prisons from which they were received; and all those whose sentence has expired should be discharged.

The cases of the "Queen's pleasure" class should be specially considered. A certain number may be safely set at liberty, as is proved by the practice at Broadmoor, Dundrum, and Perth. But certain of those whose crime has been homicide, marked by signal atrocity, or who, under treatment, have displayed great malignity of disposition, and according to the best teachings of medical science would be likely to suffer from a second attack of a similar nature, should, even when sane, be kept in confinement. Pitiable though their condition may be, the public safety must be considered before their special welfare, and every precaution taken that no repetition occurs of what has already been done once too often. Certain other cases, it may be necessary, for state reasons, to keep in confinement.

The cases of "convicts" remaining insane after the expiry of their sentence, should in all justice be specially considered also. Where, from the form of the insanity and the character of the individual, the case may be safely treated in an ordinary asylum, it should be sent to one; but, if otherwise, it should be maintained in the criminal establishment. The practices of discharging all convicts still insane on the expiry of their sentence to ordinary asylums, as is done at Broadmoor, and of keeping all (except such as their friends undertake to make special provision for) such in the criminal asylum, as is done at Auburn, New York State, are equally open to objection; the one as unfair to the other inmates of ordinary asylums, and the other as unfair in some cases to the "convict" himself.

The clever prisoner sometimes feigns madness with all the skill of an accomplished actor, and the reckless convict with violent passions, is scarcely at times to be distinguished from the madman. It is important therefore to determine that every case is really one of insanity before it is transferred to an asylum. Every precaution should be taken to detect malingering, and to separate as far as possible those peculiar cases, well known to all who have been connected with prisons, which stand on the debatable ground which separates badness from madness (or rather, in which they both meet), from those in which the insanity is undoubtedly present.

In the English convict prisons, whenever a man becomes awkward, obstinate, or violent—to use the prison term, "refractory,"—he is sent from the public works at Portland or Portsmouth, and from the Pentonville Prison, to Milbank for "observation." This observation is continued for periods varying from a week to six months, or more, till, in fact, the prisoner is either a fit subject for a Lunatic Asylum (so fit, that the medical officers have no difficulty in signing a certificate of insanity), or is so "tamed" that he is sent to his ordinary work and ordinary punishment.

The so-called "observation" consists of placing the prisoner in a special cell, made very strong, lighted either from the roof or high up in the wall, and having attached a separate yard for exercise. Each airing court has a pierced door, so that the warder on duty outside has the prisoner in it almost constantly under observation. If the prisoner tries to tear his clothes, break the door, or is otherwise violent, he is placed in a strait-jacket. If he knocks his head against the wall, a cork cap is put on; sometimes he is hobbled; sometimes his cell is "padded" with cocoa-nut matting, which, whilst sufficiently soft to prevent injury, is also particularly rough and scratchy. No work is allowed, no communication with other prisoners, and no religious services in the church, though the chaplain pays an occasional visit. All braces, shoe-laces, &c., with which he might hang himself, are removed. For bed he has a board instead of the ordinary hammock or iron bedstead. If it appears necessary, the medical officer reduces his diet. He is visited very frequently by both medical officers and warders, and is made to feel that a return to work, to exercise, in connection with the other prisoners, and indeed to all the small pleasures of prison life, depend upon himself. He is under observation and treatment; and the said treatment, though not always of the most pleasant kind, is not strictly punishment. The medical officers report that such treatment does not conduce to insanity, and that the vast majority return to the ordinary prison routine in a longer

or shorter period. The cases of supposed feigned insanity are treated in the same way, and often with the same result, but do not escape extra punishment if detected.

There can be no hesitation in recommending a similar course for adoption in New South Wales. Special cells for observation, if they do not already exist, are easily constructed; and there can be no doubt of the importance of a complete investigation of every case before the prisoner is removed to an asylum. If kept even three, four, or five months under observation in the prison, the cases will then reach an asylum almost as quickly as the majority of insane people not criminal, who, from various causes, are detained outside the asylum walls; and if, in addition to this, every case is examined by a specially appointed officer before transfer, few will reach the asylum, but such as are really insane.

At Millbank and Perth Prisons, special wards are set apart for epileptic and weak-minded criminals. The former require some extra watching; and the prison routine, especially where isolation is practised, is thought to conduce to absolute insanity in the latter. Both classes are, therefore, kept apart from the ordinary prisoners, in large, well-ventilated wards; work, eat, and drink in common; and sleep either in cells or dormitories, as seems most fit.

The number of these cases at Millbank is nearly 200.

These precautions to prevent the accession of insanity in a class already strongly predisposed to it, are worthy of the most attentive consideration.

It remains to be seen what an asylum for criminals should be in construction and organization.

On an examination of the Reports on the Asylums at Broadmoor and Perth, it will be seen that they are essentially in their characters places of treatment for the insane, and not merely places for their safe keeping—asylums, and not prisons,—and although at Auburn, U.S., the arrangements for the safe keeping somewhat predominate over those for interesting, amusing, or treating the patients; still, it is essentially, in its construction and organization, an asylum. A stricter discipline, and perhaps a compulsory industry, may be introduced—arrangements may be made for the safe keeping of the inmates; but the main object and intention of all asylums for insane criminals should be their restoration to mental health.

Criminal asylums should be surrounded by a wall, beyond which only such of the insane as can be safely trusted should be allowed to pass, but over which, by placing the asylum on a hill, a full view of the neighbouring country may be obtained. Within this wall should be such an amount of garden-ground as can be cultivated by the inmates of the asylum, and airing grounds for the insane of each sex.

The first necessity in a criminal asylum is classification. The "Queen's pleasure men" are, in every respect, a distinct class from the convict. They should be placed in separate wards, and take exercise in different airing grounds; and only those among them who are extremely violent should be associated in any way with the convict class. The object is to restrain, not to punish, these unfortunate beings. They are pronounced dangerous to society, and are restrained to prevent a repetition of the act which they have committed; but to associate them, well educated and refined as they sometimes are, fully conscious of all their surroundings as they are in many cases, with coarse and ruthless ruffians whose hands are tainted with the most atrocious crimes, would be the direst punishment. But classification should extend further than this. It is well known that the criminal insane are apt to combine for mischief—a peculiarity which is witnessed in no other class of insane, and which seems to depend on their old prison habits—and such combination is always dangerous. It is best met by never allowing the association of a large number—by restricting the number in each division to from fifteen to twenty—and by changing them from one division to another on the slightest appearance of combination for evil purposes. These divisions will serve also as a means of classification according to mental condition.

Temporary association of a larger number may be permitted in an airing-ground for short periods, but not constantly; and it is preferable to separate those of the more violent class completely from the rest, and set apart for them a special court, as is done at Broadmoor.

The accommodation in the asylum should consist of day-rooms and dormitories; the former being used as dining-rooms, since a common dining-hall is not advisable. The single rooms should be sufficient to accommodate about half the entire number. The windows should be protected by light iron bars on the outside; and with this arrangement, the sashes may be of wood, double hung, and made to open freely.

The baths should be placed in each division, so that no unnecessary communication is allowed between the different classes.

One large room will serve for chapel, and for all purposes of amusement.

The attendants should be in the proportion of one to every five or six patients throughout, and in the more violent division there should be one to every four.

The dress of the patients should be as little convict-like as possible. Divine service should be performed on Sundays, and every effort should be made to induce the patients to employ themselves usefully.

It has been proposed that industry should be made compulsory in asylums for the criminal insane. There can be no doubt that constant employment has a salutary effect, and tends largely to mental restoration; and from a financial point of view it is also to be encouraged, but it is very doubtful whether occupation of any kind should be made compulsory. The system of rewards for special industry, as practised at Broadmoor, seems much preferable to a system of compulsory labour, which is too suggestive of the prison. If the patients are occupied as far as possible, and given to understand that they will derive an advantage in extra food, or money, for their industry, there are few who will not work. There must always be a difficulty in providing work for the insane of this class, since few can be trusted with tools which might be used as lethal weapons, but a few men may always be employed in gardening; others may be employed at special trades, such as shoemaking, tailoring, &c.; and for the remainder, mat-making, knitting, net-making, or even oakum-teasing, are preferable to idleness. The women may be employed in the laundry, and in knitting and sewing. If money is given for extra work, it may be spent upon minor luxuries by the convict himself, through the attendant, or placed in safe keeping by the officers of the asylum till the patient's discharge.

In most particulars except those above mentioned, a criminal asylum should differ little, if at all, in construction or organization, from an ordinary asylum for indigent patients.

As regards the special government most fitting for an asylum in this Colony, which must necessarily be for some years to come, of small size, it is suggested that it should be separated altogether from the ordinary asylum, and made a special institution,—that it should be placed under the charge of a non-medical superintendent,—that the medical officer of the nearest prison should be responsible for the medical treatment, and pay daily visits,—that the commissariat of the nearest prison should furnish all supplies, the prison chaplain be entrusted with the necessary religious ministrations,—and that the whole establishment should be subject to the frequent visitation of an inspector or other officer appointed by the Government, and not placed like the ordinary asylums, under a board of control.

At Parramatta—the site of the present asylum—there are no obstacles to the carrying out of this system which may not be overcome; and the present criminal asylum, though a model prison, and nothing more, containing scarcely any of the essentials of an asylum, may possibly, with alterations, be made the nucleus of an efficient asylum for insane criminals.

The practice of placing an asylum, even for insane convicts, in connection with a prison, cannot be recommended on general grounds; but it is less objectionable on the whole than uniting it with an ordinary asylum; and union with one or the other is almost necessary, since, for financial reasons, a separate staff of officers and a separate commissariat are not advisable for a small asylum. As the number of inmates increases, and the asylum gradually grows, it may cease to have any connection with the prison, and become a distinct institution like Broadmoor or Dundrum.

Asylums for Idiots.

Idiots come under the general operation of the laws relating to lunatics, which afford them protection and give them the same legal claims as the insane. But the ordinary wards of asylums are not fit residences for them; their presence in such wards is hurtful to themselves since many are strongly imitative and acquire bad habits and crooked thoughts from those around them, and it is frequently baneful and irritating to the ordinary inmates of the asylum. It is therefore necessary, in dealing with the idiot, to provide him a home apart from the lunatic. The number of the idiot population in a young country will not justify the expense attending the building and organization of a special establishment like those of Great Britain or the United States; and therefore, a division or section of the general asylum should be set apart for idiots only. It seems most advisable, for many reasons, that this section should consist of detached houses or cottages in the asylum grounds, removed from the main building, and kept as distinct as circumstances will permit—sufficiently distinct to maintain a complete separation of the two classes, but near enough to be subject to the superintendence of the chief medical officer of the asylum, and to be fed from the asylum commissariat.* The main cooking may even be done in the general asylum kitchen, whilst the idiot establishment itself may be so fitted as to be capable of providing for the minor wants of its inmates in this direction.

When a home has been provided with all needful economy, where the idiot may be fed, lodged, clothed, and kept in cleanliness and comfort, away from the prejudicial influences of asylum life, and yet subject to its organization and medical supervision, one large step in the right direction will have been taken. But in establishing such a home, the example of the several States of the American Union may well be followed, and the teaching of the idiot become a matter of state philanthropy, instead of being left to private benevolence, as in England. Such teaching should be directed to develop the germ of mental power which has been accorded to him, to correct faulty habits, and to improve his physical powers. All human beings are improvable, and each has a right to the means of improvement; this right implies a duty on the part of the others to furnish the means.

"The idiot child whose feeble mental perceptions are strengthened by exercise, who is trained to habits of cleanliness, decency, order, and industry, may remain idiotic and dependent; but is more docile, more happy, more capable, and therefore, a less offensive and more useful member of society than he would otherwise have been." †

The ordinary child is taught and improved, so that he may become a better man than he would otherwise be, and so the imbecile child should be taught and improved, in order that if he never rises above idiocy he may be better as an idiot. It is important to select trained and judicious teachers. The experience of the American institutions seem to prove that women are much more fitted for this work than men; that they have at once more patience and more tact; and that boys, even when they have attained the age of 17 or 18, never fail to yield to them implicit obedience. It is suggested therefore, that efforts should be made to secure the services of a teacher trained in one of the English schools; and that to her, under the superintendence of the physician of the asylum, the general education of the patients should be intrusted. The girls may be taught sewing, knitting, and household work in the idiot institution itself, and the boys may be employed at trades in the workshops of the general asylum, or employed on the farm and garden.

The main character of the institution should be that of a school, and not an asylum. The greater number of the inmates should pass only a few years of their early life within its walls, and when all that is possible to improve their mental and physical condition has been done they should return to their friends. A few, friendless and

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* "I think in the absence of a better plan, a separate cottage, or rather, I should say, a separate house might be organized, keeping the staff as distinct as possible, but under the supervision of the medical superintendent of the lunatic establishment. Nothing is worse than associating idiots with lunatics. The lunatics get annoyed by their presence, and the idiots get entirely neglected."—*Ext. from a letter from Dr. Down, Superintendent of the Earlswood Asylum.*

† *Report of Massachusetts Board of State Charities*, 1868.

homeless, may be allowed to remain permanently within the institution. All those found to be vicious and intractable, and those whose idiocy is complicated with severe epilepsy, may find a home in the ordinary asylum.

The number of idiot children at this time in the asylums of Tarban and Parramatta, is 30; of these 7 are males and 23 females. It is extremely difficult to account for this disproportion in numbers, since in all old countries where in the ordinary population the females considerably outnumber the males, the number of male idiots is invariably found to be larger than the number of the females. In France there are 51·22 males to 48·78 females, and this is about the usual proportion. In idiot schools the proportion of females is generally found to be even less than exists in the general population, since they are more frequently kept at home by their friends, being found teachable to some extent and useful in minor household work.

Asylums for Inebriates.

The necessity for some provision for persons of intemperate habits seems, by the recent Act for Scotland, and by the action taken by the English Commissioners in Lunacy, in obtaining the opinion of counsel upon the legality of allowing such patients to be received as boarders in lunatic hospitals, to be fully recognized in Great Britain; but so far as experience at present goes, the plan of admitting such patients into ordinary asylums is very far from being a satisfactory one.

This class of patients is objected to by almost all asylum superintendents; and a consideration of their peculiarities will suffice to convince any one that ordinary asylums are not fit residences for them, and that their association with the insane is not at all desirable.

The American plan of separate institutions for this class is far preferable in many respects; and such institutions may be expected to render useful service to the community at large. But a consideration of how far such an institution is desirable at present in New South Wales, and whether it should be inaugurated by Government or by private philanthropy, does not come within the scope of this Report.

Reception House.

The Reception House at Darlinghurst, is intended, according to the first and third section of the Act of Council 31 Victoria, No. 19, for the reception of all patients under proper lunacy certificates, pending their removal to a lunatic asylum. No time is however fixed for the duration of the patients' sojourn, and it is important that every care should be taken to make such sojourn as short as possible. The Reception House should not be allowed to become in any way a hospital for the insane; such treatment as is necessary should of course be carried out during the patients stay, but it should not be continued beyond a few days under the disadvantages of situation, the size, and the inherent character of the institution. Prolonged treatment in such an institution is equally unfair to the superintendents of the ordinary asylums, who receive the patients only after the malady has passed beyond the stage in which it is most under the influence of remedies both medical and moral, and to the patient, whose illness may be prolonged, and his ultimate restoration to health imperilled. Some periodical inspection should be made, to see that the patients are not detained longer than is necessary. Any departure from the law which makes certificates of lunacy necessary before the patient can be received at the Reception House, should only be permitted in very special instances if at all, since such departure may lead to the most serious abuses.

The advantages of the Reception House may fairly be placed at the service of people in good circumstances, who are willing to pay for the accommodation afforded.

FRED^C. NORTON MANNING, M.D.

October 24th, 1868.

I CANNOT conclude this Report (which has been prepared hurriedly, and under peculiarly disadvantageous circumstances) without an expression of my thanks to all who have assisted me in carrying out the instructions I received from the Government of New South Wales. The Right Honorable the Secretary of State for the Colonies rendered me, with promptness and courtesy, which I cannot too gratefully or respectfully acknowledge, every assistance in his power. To the Commissioners in Lunacy for England and Scotland I am indebted for copies of Statutes and Reports, and for advice which proved most useful. The Inspectors of Lunatics in Ireland furnished me with Reports and other papers, and the Superintendents of the various asylums in England and Scotland received me with marked kindness, and spared no pains to render my visits both profitable and pleasant. In America, Mr. Secretary Seward gave me much useful assistance. From Governor Bullock, of Massachusetts, Dr. Howe, Mr. Sanborn, the Secretary of the Massachusetts Board of State Charities, and the New York Charity Commissioners, I received every possible help; and to the Superintendents of American Asylums I am indebted for an amount of considerate kindness and a hearty hospitality I can never forget. In France, my cordial thanks are due to Dr. Rousillon, Inspector of Asylums, Sir J. Oliffe of the British Embassy, and all the Directors of Asylums I visited, especially to Dr. J. Falret, Dr. Morel of St. Yon, Rouen, and Dr. Blanche of Paris. In Belgium, to M. Oudart and Dr. Vermeulen, Inspectors of Asylums—the latter of whom accompanied me in my visits to two asylums in Ghent; and to Dr. Ingels, of Guislain's Hospital. In Germany, to Drs. Roller, Ludwig Meyer, and Reÿe, to whom I owe almost all the information I possess on the subject of German asylums. In Holland, to Dr. Ewerts, who spent a long day in making me fully acquainted with the organization of Meerenberg, and gave me information on the asylum system of Holland. I am indebted for copies of plans to Mr. C. N. Howell, of 3, Lancaster-place, Waterloo Bridge, the Architect of New Surrey Asylum, of whose courtesy this is but scant acknowledgment; to Mr. Stock, of Duke-street, London Bridge, who designed the cottages at the Essex County Asylum; to Mr. Holland, of Prestwich, who designed the additional blocks, and the new hospital at the Prestwich Asylum, and made also the first draft for the New Cheshire Asylum at Macclesfield; to M. Legueux, architect, of Paris, who very politely gave me plans of the new asylums of Ville Evrard; and to Dr. Vèdie, of the Evreux Asylum, for a tracing of the plan of that institution. The Colonial Architect in New Zealand, Mr. Weaver, supplied me at once with tracing plans of the Auckland Asylum, on stating to him the purpose for which they were intended.

FREDC. NORTON MANNING.

APPENDIX A.

I.—Suggestions and instructions in reference to sites, construction and arrangement of Buildings, and plans of Lunatic Asylums, drawn up by the Commissioners of Lunacy, England.

II.— Ditto ditto ditto Scotland.

III.—Propositions on the construction and organization of Hospitals for the Insane, agreed to by the Association of Medical Superintendents of American Institutions for the Insane.

IV.—Bath rules in use in English Asylums, with circular letter by Commissioner in Lunacy, giving general directions with regard to Bathing arrangements.

APPENDIX B.

Dietaries in use in English, Scotch, and French Asylums.
" in the lunatic wards of the poorhouses in Scotland.
" in the central criminal asylum in Dundrum, Ireland.
" in the Freiderichsberg Asylum, near Hamburg.

APPENDIX C.

Programmes of Amusements in English and Scotch Asylums.

APPENDIX D.

FORMS.

1. Attendant's Daily Reports.
2. Summary of do.
3. Night Attendant's Reports.
4. Summary of do.
5. Chief Attendant's Reports.
6. Summary of do.
7. Extra Ward Returns.
8. Extra and ordinary Diet Rolls.

APPENDIX E.

FORMS FOR ASYLUM MEDICAL STATISTICS.

1. Forms published by Commissioners in Lunacy.
2. Ditto in Report on Colonial Hospitals and Asylums.

APPENDIX F.

Fig. 1. Plan of Bath-house at Evreux Asylum.
" 2. Do. of Water-closet, Washington Asylum.
" 3. Sketch to explain the *Système D'Arcet.*
" 4. Position of Water-closet in relation to the Corridor at Cupar Asylum.
" 5. Do. do. the New Surrey Asylum.
" 6. Do. do. Prestwich Asylum.
" 7. Form of Window at the Leicester Asylum, and in the Infirmary at the Sussex, and the Rooms for Excited Patients at Murthly.
" 8. Gas Lamp at Evreux.
" 9. Window at the Chester Asylum.
" 10. Guislain's Window.
" 11. Kitchen Boiler on a Pivot at Ville Evrard Asylum.
" 12. Wooden Blocks to teach Position at the Syracuse Idiot Asylum.
" 13. Do. do. Size do.
" 14. Do. do. Form do.
" 15. Plan for a General Bath Room.
16. Ha-ha Fence and Seat at the Derby Asylum.

APPENDIX G.

PLANS.

1. Government Asylum, Washington, U.S.
2 & 3. Essex County Asylum.
4 & 5. Perth District Asylum, Murthly.
6 & 7. Chester County Asylum, Macclesfield.
8. St. Ann's Asylum, Paris.
9. Ville Evrard Asylum, near Paris.
10 & 11. Cottages, Essex Asylum.
12, 13, 14. Surrey County Asylum, Brookwood.
15. Freidrichsberg Asylum, Hamburg.
16 & 17. Hospital at Prestwich Asylum.

APPENDIX A.

(No. 1.)

SUGGESTIONS AND INSTRUCTIONS IN REFERENCE TO (1) SITES,—(2) CONSTRUCTION AND ARRANGEMENT OF BUILDINGS,—(3) PLANS—OF LUNATIC ASYLUMS, BY THE COMMISSIONERS IN LUNACY FOR ENGLAND AND WALES.

No. 1.—Sites.

General.

1. The site of an asylum should be of a perfectly healthy character, and offer facilities for obtaining a complete system of drainage. A chalky, gravelly, or rocky subsoil, is most desirable; but if a clayey subsoil only can be obtained, an elevated position is indispensable.

It should not be near to any nuisances, such as steam-engines, shafts of mines, noisy trades, or offensive manufactures; neither should it be surrounded, or overlooked, or intersected, by public roads or footpaths.

Proportion of land.

2. The land belonging to the asylum should, when practicable, be in proportion of not less than one acre to four patients, so as to afford ample means for agricultural employment, exercise, and recreation; and should be so situate as to offer facilities for any extension which may become necessary at a future period.

Form of ground.

3. The site of the building should be elevated, as respects the surrounding country, and (if to be obtained) undulating in its surface, and cheerful in its position, and having a fall to the south.

Position and aspect of building.

4. The building should be placed near the northern boundary of the land; and it is important that the site should afford a plateau of sufficient extent for the structure, and for ready access from the north; the whole of the southern portion of the land being available for the undisturbed use of the patients.

Locality.

5. The asylum should be as central as possible to the mass of population in the county or district for which it is to be erected, and should be convenient with respect to its easy access by public conveyance, in order to facilitate the visits of friends and the supply of stores.

Supply and quality of water.

6. It is of the utmost importance that there should be a constant and ample supply of good water, of which a careful analysis should be made, with a view of determining the proper materials for pipes and reservoirs, and also in order to ascertain its fitness for the purposes of drinking and washing. The quantity, exclusive of rain water, should, at the driest season, be not less than twenty-five gallons per patient, per diem, and the amount should be accurately gauged.

No. 2.—Construction and Arrangements of Buildings.

General form.

1. The general form of an asylum should be such as to afford an uninterrupted view of the surrounding country, and the free access of sun and air; and be so arranged as to give the principal day-rooms, on the lowest and middle stories, a southern or south-eastern aspect.

Entrance and offices to the north.

2. There should be no road of approach or public entrance on the south side of the asylum.

The general entrance, the porter's room, the reception and visitors' rooms, the committee room, the clerk and steward's office and store rooms, and the other offices, should be placed on the north side of the building.

Character of building.

3. As the building is intended for the accommodation of pauper patients, all superfluous external decoration should be avoided; at the same time it should be rendered as cheerful and attractive as due considerations of economy will permit.

Separation of sexes, and classification.

4. The accommodation for the male and female patients should be kept distinct on either side of the centre; and the building should be so constructed as to admit of the separation of the male and female patients respectively into at least three classes. As a general rule, the numbers in each class should be such as to require the services of not less than two attendants.

Stories.

5. The building may consist of three stories, provided the uppermost story be devoted to sleeping accommodation.

Buildings for working patients.

6. Buildings of a cheap and simple character, consisting merely of associated day-rooms and dormitories, without long corridors or other expensive arrangements, should be provided for the use of working patients. These buildings should be placed in connexion with the wash-house and laundry on the female side, and be conveniently situate in reference to the workshops and farm buildings on the male side.

For idiotic and epileptic patients.

Provision of an equally simple and inexpensive description should also be made for a portion of the idiotic and epileptic patients, and also for chronic cases.

Size of chapel and offices.

7. The chapel, and all offices and parts of the building common to the establishment, such as the kitchen and scullery, the wash-house and laundry, the workshops and store rooms, should be sufficiently spacious to meet the prospective wants of the asylum in case of an increase in the number of patients.

Position of chapel.

8. The chapel should not be placed over the kitchen. It should be capable of comfortably accommodating at least three-fourths of the patients. It should have the usual character and arrangement of a church, and contain no special or peculiar provision for the separation of the sexes.

General dining-hall.

9. A general dining-hall, conveniently situate with reference to the kitchen, and capable of being made available for the purposes of recreation, should be provided for the patients of both sexes.

Officers' residences.

10. A good residence should be provided for the medical superintendent, with kitchen and other necessary domestic offices.

Suitable apartments of moderate extent should also be provided for the assistant medical officer, the steward, and the matron; but for these officers a separate kitchen is not required.

Domestic servants.

There should also be sleeping accommodation for the domestic servants of the institution, with whom might conveniently be associated those patients who habitually work in the kitchen.

Proportion of single rooms.

11. The proportion of single rooms throughout the asylum need not exceed one-third. The single rooms should be chiefly in the wards appropriated to the excited and the sick. A few should be available for special cases in the other wards.

Arrangement of upper stories. Passages and corridors.

12. In the upper stories, passages of communication of moderate width should be adopted in lieu of wide corridors, and the dormitories should be placed to the south. Generally, long, wide, and expensive corridors should not be constructed, but only so much passage or corridor provided as may be absolutely necessary to connect the several parts of the building.

Stairs.

13. The stairs should be built of stone, without winders or long straight flights. The well should be built up, and hand-rails should be provided.

Staircases.

14. The staircases should be so arranged that the medical officer, attendants, and others, may pass through from one part to another without necessarily retracing their steps.

Material for floors. Provision against fire.

15. All the corridors, and day and sleeping rooms, should have boarded floors; and it is desirable that the boards should be tongued. It is indispensable that they should be of the best wood, and thoroughly well seasoned. The floors of the sculleries, lavatories, and water-closets need not be of wood. There should be a disconnexion of the floor and joists at all the internal doorways, by means of a stone sill; and in all cases where a fireproof construction is not adopted, similar separations, at not greater distances apart than fifty feet, should be made in the floors and joists of the galleries or corridors. Provision should also be made for a complete fireproof separation of the timbers of the roof at the same distances, and the parapet should be carried through the roof one foot above the slating.

Oak floors, capable of being cleaned by dry rubbing, are preferable for the corridors and day-rooms.

Plastering.

The walls of the galleries and rooms generally should be plastered.

Number of beds in dormitories.

16. No associated bed-rooms should be designed to contain less than three beds.

Height of each story, and dimensions of rooms.

17. The general height of each story should not be less than eleven feet.

The associated dormitories should not contain less than fifty feet superficial to each bed or patient.

Dormitories.

The separate sleeping-rooms generally should be of not less than the following dimensions, viz., nine feet by seven superficial, and eleven feet high. Those appropriated to sick or bed-ridden patients should be of somewhat larger dimensions, and some of these should be provided with a fire-place.

Size of day-rooms.

18. The day-rooms, of which there should be at least one in each ward, should contain not less than twenty feet superficial for each patient, and should be calculated for the whole of the patients in each ward, exclusive of corridors or galleries.

Position of day-rooms.

19. The day-rooms should be so arranged as to afford ready communication with the grounds, and those appropriated to the aged and infirm should be on the lowermost stories.

Attendants' rooms.

20. Rooms should be provided for two or more attendants to each ward, and single attendants' rooms should not be of less dimensions than 120 feet superficial; and, whenever practicable, these should be placed between two dormitories, with glazed doors of communication.

Windows.

21. The windows of the day-rooms and corridors should be large and of a cheerful character, and every one be made to open easily, and so as to allow a free circulation of air, but not so far as to expose patients to danger.

The wall below should not be sloped or splayed, but recessed, to admit, if requisite, of a seat.

In the dormitories and single rooms the windows should, as a general rule, not be placed more than four feet from the floor.

Shutters.

Sliding shutters should be provided for a majority of the single sleeping-rooms.

Doors.

22. The doors of the single rooms should open outwards, and be so hung that when open they will fold back close to the wall.

Lavatories, baths, and water-closets.

23. In each ward there should be conveniences for washing the person, a slop-room containing a sink, a store-room or closet, water-closets, and a bath. (In many instances the bath-room may be so arranged as to be available for two or more wards.) It is very desirable that all water-closets, lavatories, &c., should be placed in projections.

Infirmaries.

24. Suitable infirmaries, in the proportion of at least one-tenth of the whole, should be provided, in which the cubical contents of the sleeping-rooms should be greater than in other parts of the building; and every room, including the single rooms, should have an open fire-place.

A small day-room in each infirmary is also desirable.

Warming.

25. All the day-rooms and galleries should be warmed by means of open fire-places, or open fire-stoves; and in large rooms two fires should be provided. Fire-places should also be built in all associated dormitories. In large rooms, such as the chapel or general dining-hall, and in the corridor, further provision for warming may be necessary, by means of some simple system of hot-water pipes in connexion with the open fire-stoves or fires.

Ventilation.

26. The ventilation generally should be provided for by means of flues, taken from the various rooms and corridors into horizontal channels communicating with a perpendicular shaft, in which a fire-box should be placed for the purpose of extracting the foul air.

Smoke flues.

27. In all cases where descending or horizontal smoke flues are used, they should be entirely constructed of brick-work, rendered or pargetted, inside and out; and flues from any of the heating or other furnaces, which are carried up through any of the main walls, should be constructed with a hollow space round them, to prevent the inconvenient transmission of heat into the building during the warmer periods of the year, and to allow of a moderation of the temperature of the building at other periods, when, owing to a change in the atmosphere, it may become inconveniently hot.

Ventilating flues.

28. Whenever ventilating flues are constructed of inflammable materials, such as quartering lathed and plastered, a distance of at least twenty feet from their point of connexion with any shaft, furnace, rarefying chamber, or smoke flue, must be constructed entirely of brick, stone, or other fireproof material.

The rarefying chamber for ventilation, together with the adjoining roof, must be entirely fireproof; and a communication should be made with it by means of a slate or iron door-frame.

Drainage.

29. The best and most approved system of pipe or tubular drainage should be adopted, with a sufficient fall, so as effectually to carry off to a sufficient distance from the asylum the soil and all other impurities; and the sewage should be collected in closed tanks, and so placed and constructed as to render the contents available for agricultural purposes.

Means of flushing should be provided.

Airing courts.

30. The enclosed airing courts need not be more than two in number on each side, and should be of ample extent so as to afford proper means for healthful exercise. They should all be planted and cultivated, and any trees already existing within them should be preserved for shade. The walls should be sunk in a ha-ha.

Rain water.

31. The whole of the rain water from the building should be collected in tanks, suitably placed, for the purposes of the wash-house, and, if possible, at such levels as will dispense with the labour of pumping.

Lead is an objectionable material for pipes and reservoirs, as adulterating the water.

Lightning conductors.

32. Lightning conductors should be placed on the most elevated parts of the building; and they may be connected with the stacks of iron rain-water pipes, which, in that case, should be fixed so as to answer the double purpose of rain-water pipes and lightning conductors.

Farm buildings.

33. Farm buildings, with suitable stables, &c., for visitors' horses, should be provided.

No. 3.—Plans required.

1. One or more sheets of the Ordnance map, containing the county, borough, or district in respect to which the asylum is to be erected; or some other large map, in which the situation of the proposed asylum, and all the public roads and footpaths in the vicinity thereof, are clearly and fully defined.

Scale of 100 feet to an inch.

2. A general plan of the land (with the block of the buildings and offices), and of the exercise grounds, garden, and road of approach, with the levels of the surface of the ground at the quoins of the building, offices, and fence walls, figured thereon.

Scale of 20 feet to an inch.

3. Plans of the basement, ground, and each other floor of the building and offices; also of the roofs and gutters, and of the principal elevation.

Scale of 10 feet to an inch.

4. Elevation of portions of the principal front, and also of any other parts in which any variation therefrom takes place.

Scale of 5 feet to an inch.

5. Transverse and longitudinal sections, or sufficient portions thereof to show the construction of every portion of the building.

Scale of 1 foot to ½ an inch.

6. Plan and section of one separate sleeping-room, dormitory, and eating or day-room respectively, or of part of the same, showing the method of warming and ventilating each; also of the baths and washing-rooms, and water-closets, and the construction of the apparatus for each.

7. An abstract of the draft contract and specification, giving a concise statement of the whole of the intended work; and also a detailed estimate of the building, and the prices at which the different materials and workmanship have been calculated in making the estimate.

8. The thicknesses of the walls, and the scantlings of the timbers of the floors and roofs, to be figured.

9. The general system of heating and ventilation proposed to be adopted throughout the asylum, to be fully described in the drawings and specifications.

10. Each plan to show the several classes and numbers of patients to be accommodated, in the wards, day-rooms, dormitories, cells, galleries, and airing courts, respectively, to which such plan relates.

(No. 2.)

SUGGESTIONS AND INSTRUCTIONS IN REFERENCE TO (1) SITES,—(2) CONSTRUCTION AND ARRANGEMENT OF BUILDINGS,—(3) PLANS,—OF LUNATIC ASYLUMS, BY THE COMMISSIONERS IN LUNACY FOR SCOTLAND.

No. 1.—Sites.

General.

1. The site of an asylum should be of a perfectly healthy character, and offer facilities for obtaining a complete system of drainage. A calcareous, gravelly, or rocky subsoil is most desirable; but if a clayey subsoil only can be obtained, an elevated position is indispensable. The land should be capable of profitable cultivation, and it is also desirable that it should afford a supply of water.

It should not be near to any nuisances, such as steam-engines, shafts of mines, noisy trades, or offensive manufactures; neither should it be surrounded, nor overlooked, nor intersected, by public roads or footpaths.

Proportion of land.

2. The land belonging to the asylum should, when practicable, be in proportion of not less than one acre to four patients, so as to afford ample means for agricultural employment, exercise, and recreation; and should be so situate as to offer facilities for any extension which may become necessary at a future period.

Form of ground.

3. The site of the buildings should be elevated, as respects the surrounding country, and (if to be obtained) undulating in its surface, and cheerful in its position, and having a fall to the south.

Position and aspect of building.

4. The principal buildings should be placed near the northern boundary of the land; and it is important that the site should afford a plateau of sufficient extent for the main structure, and for the means of ready access from the north; the whole of the southern portion of the land being available for the undisturbed use of the patients.

Locality.

5. The asylum should be as central as possible to the mass of population in the country or district for which it is to be erected, and should be convenient with respect to its easy access by railway or other public conveyance, in order to facilitate the visits of friends and the supply of stores. It should be within such distance of a town as to command the introduction of gas, water, &c., and of one of sufficient size to afford the means of amusement and recreation for the medical staff, the attendants, and such of the patients as might derive benefit from a change in the asylum routine.

Supply and quality of water.

6. It is of the utmost importance that there should be a constant and ample supply of good water, of which a careful analysis should be made, with a view to determine the proper materials for pipes and reservoirs, and also in order to ascertain its fitness for the purposes of drinking and washing. The quantity, exclusive of rain water, which should be collected in cisterns on the roof, should, at the driest season, be not less than forty gallons per patient per diem, and the amount should be accurately gauged.

No. 2.—Construction and Arrangements of Buildings.

General form.

1. The general form of an asylum should be such as to afford an uninterrupted view of the surrounding country, and the free access of sun and air; and be so arranged as to give the principal rooms a southern or south-eastern aspect.

Entrance and offices to the north.

2. There should be no road of approach or public entrance traversing the grounds.

The general entrance, the porter's room, the reception rooms, the committee room, the store rooms, and the other offices, should be so placed as not to interfere with the amenity of the buildings occupied by the patients.

Character of building.

3. As the buildings are intended chiefly for the accommodation of pauper patients, all superfluous external decoration should be avoided; at the same time, they should be rendered as cheerful and attractive as due considerations of economy will permit.

Separation of sexes and classification.

4. The accommodation for the male and female patients, in the main structure, should be kept distinct on either side of the centre; and this building should be so constructed as to admit of the separation of the male and female patients respectively into at least three classes. As a general rule, the numbers in each class should be such as to require the services of not less than two attendants.

Stories.

5. The main building may consist of three stories, provided the uppermost story be devoted to sleeping accommodation.

Buildings for working patients.—For idiotic and epileptic patients.—Cottages.

6. Detached buildings of a cheap and simple character, consisting chiefly of associated day-rooms and dormitories, might be provided for the use of working patients. For the females, these buildings might be placed in connexion with the wash-house and laundry; and for the males, be in proximity to the workshops and farm buildings.

Provision of an equally simple and inexpensive description might also be made for a portion of the idiotic, imbecile, and fatuous patients, and also for chronic cases; or cottages might be erected for the accommodation of a large proportion of the working and inoffensive patients, who might be placed either under the care of the families of the attendants, or of cottar tenants of the asylum.

Situation and size of offices.

7. All offices and buildings common to the establishment, such as the kitchen and scullery, the wash-house and laundry, the workshops and store-rooms, should be conveniently placed, and be made sufficiently spacious to meet the prospective wants of the asylum in case of an increase in the number of patients.

Position of chapel.

8. The chapel should be of easy access, and it should be capable of comfortably accommodating at least three-fourths of the patients. It should have the usual character and arrangement of a church, and contain no special or peculiar provision for the separation of the sexes.

General dining-hall, library, and reading-room.

9. A general dining-hall, conveniently situate with reference to the kitchen, should be provided for the patients of both sexes; and also a library and reading-room, capable of serving for the general purposes of instruction and recreation.

Officers' residences.—Domestic servants.

10. A suitable residence should be provided for the medical superintendent, with kitchen and other necessary domestic offices.

Apartments of moderate extent should also be provided for assistant medical officers and pupils, the steward, and the matron; but for them a separate kitchen is not required.

There should also be appropriate sleeping accommodation for the domestic servants of the institution.

Proportion of single rooms.

11. The proportion of single rooms throughout the asylum need not exceed one-third. The single rooms should be chiefly in the wards appropriated to the excited and the sick, and the patients of dirty habits. A few should be available for special cases in the other parts.

Arrangement of day-rooms and dormitories.

12. Passages of communication of moderate width should be adopted in lieu of wide corridors, and the day-rooms and dormitories should be placed on one side, and to the south. Under certain circumstances, the day-rooms or dormitories may occupy the whole breadth of the building.

Stairs.

13. The stairs should be built of stone, without winders or long straight flights. The well should be built up, and hand-rails should be provided.

Arrangement of buildings.

14. The buildings should be so arranged that the medical officer, attendants, and others, may pass through from one part to another without necessarily retracing their steps.

Material for floors.—Provision against fire.

15. All the passages, and day and sleeping-rooms, should have boarded floors; and it is desirable that the boards should be tongued. It is indispensable that they should be of the best wood, and thoroughly well seasoned. The floors of the sculleries need not be of wood. There should be a disconnection of the floor and joists at all the internal doorways, by means of a stone sill; and in all cases where a fireproof construction is not adopted, similar separations, at not greater distances apart than fifty feet, should be made in the floors and ceilings. Provision should also be made for a complete fireproof separation of the timbers of the roof at the same distances, and the parapet should be carried through the roof one foot above the slating.

Plastering.

The walls generally should be plastered or lined with Roman cement.

Number of beds in dormitories.

16. No associated bedrooms should be designed to contain less than six beds, nor more than fourteen.

Height of each story, and dimensions of rooms.

17. The general height of each story should not be less than eleven feet.

The associated dormitories should not contain less than fifty feet superficial to each bed or patient.

Dormitories.

The separate sleeping-rooms generally should be of not less than the following dimensions, viz., 9 feet by 7 superficial, and 11 feet high. Those appropriated to sick or bed-ridden patients should be of somewhat larger dimensions, and some of these should be provided with a fire-place.

Size of day-rooms.

18. The day-rooms, of which there should be at least one in each ward, should contain not less than 20 feet superficial for each patient, calculated for the whole of the patients in each ward.

Position of day-rooms.

19. The day-rooms and work-rooms for females should be so arranged as to afford ready communication with the grounds, and those appropriated to the aged and infirm should be on the lowermost stories.

Windows.

20. The windows of the day-rooms and corridors should be large and of a cheerful character, and every one be made to open easily, and so as to allow a free circulation of air, but not in such a manner as to expose patients to danger.

The wall below should not be sloped or splayed, but recessed, to admit, if requisite, of a seat.

Shutters.

Shutters should be provided for a majority of the single sleeping-rooms.

Door.

21. The doors of the single rooms should open outwards, and be so hung that when open they will fall back close to the wall.

Lavatories, baths, and water-closets.

22. In each ward there should be conveniences for washing the person, a slop-room containing a sink, a store-room or closet, and water-closets. It is very desirable that all water-closets, lavatories, &c., should be placed in projections. A bath should be provided in the wards occupied by the dirty patients; but there should be besides general bath-rooms conveniently situated, for the general use of the patients, and the bath should be so placed as to leave all the sides free.

Infirmaries.

23. Suitable infirmaries, in the proportion of at least one-tenth of the whole, should be provided, in which the cubical contents of the sleeping-rooms should be greater than in other parts of the building; and every room, including the single rooms, should have an open fire-place.

A small day-room in each infirmary is also desirable.

Warming.

24. All the day-rooms and galleries should be warmed by means of open fire-places, or open fire-stoves; and in large rooms two fires should be provided. Fire-places should also be built in all associated dormitories; but in them and other large rooms, such as the chapel or general dining-hall, and in the corridors and passages, further provision for warming may be necessary.

Ventilation.

25. The ventilation generally should be provided for by means of flues, taken from the various rooms and corridors into horizontal channels communicating with a perpendicular shaft, in which a fire-box should be placed for the purpose of extracting the foul air.

Smoke flues.

26. In all cases where descending or horizontal smoke flues are used, they should be entirely constructed of brick-work, rendered or pargetted, inside and out; and flues from any of the heating or other furnaces, which are carried up through any of the main walls, should be constructed with a hollow space round them, to prevent the inconvenient transmission of heat.

Ventilating flues.

27. Whenever the building generally is not fire-proof, and when ventilating flues are constructed of inflammable materials, such as quartering lathed and plastered, a distance of at least 20 feet from their point of connexion with any shaft, furnace, rarefying chamber, or smoke flue, should be constructed entirely of brick, stone, or other fire-proof material.

The rarefying chamber for ventilation, together with the adjoining roof, should be entirely fire-proof; and a communication should be made with it by means of a slate or iron door-frame.

Drainage.

28. The best and most approved system of pipe or tubular drainage should be adopted, with a sufficient fall so as effectually to carry off to a sufficient distance from the asylum the soil and all other impurities; and the sewage should be collected in closed tanks, and so placed and constructed as to render the contents available for agricultural purposes.

Means of flushing should be provided.

Airing courts.

29. The enclosed airing courts need not be more than two in number on each side, and should be of ample extent so as to afford proper means for healthful exercise. They should all be planted and cultivated, and any trees already existing within them should be preserved for shade. The walls should be sunk in a ha-ha.

Rain water.

30. The whole of the rain water from the building should be collected in tanks, suitably placed, for the purposes of the wash-house, and, if possible, at such levels as will dispense with the labour of pumping.

Lead is an objectionable material for pipes and reservoirs, as adulterating the water.

Lightning conductors.

31. Lightning conductors should be placed on the most elevated parts of the building; and they may be connected with the stacks of iron rain-water pipes, which, in that case, should be fixed, so as to answer the double purpose of rain-water pipes and lightning conductors.

Cottages.

32. The cottages, if adopted, should be of different sizes, each calculated to accommodate from three to five patients, in addition to the family of the occupier. The male patients should be placed either in single rooms, or in dormitories for three or four, and each cottage should contain a water-closet.

Farm buildings.

33. Farm buildings, with suitable stables, &c., should be provided, and also workshops suitable for the employment of the patients, according to the prevalent occupations of the district.

No. 3.—Plans required.

1. One or more sheets of the Ordnance map, containing the county, borough, or district in respect to which the asylum is to be erected; or some other large map in which the situation of the proposed asylum, and all the public roads and footpaths in the vicinity thereof, are clearly and fully defined.

Scale of 100 feet to an inch.

2. A general plan of the land (with the block of the buildings and offices) and of the exercise grounds, garden, and road of approach, with the levels of the surface of the ground at the quoins of the building, offices, and fence walls, figured thereon.

Scale of 20 feet to an inch.

3. Plans of the basement, ground, and each other floor of the main building, subsidiary buildings, and offices; also of the roofs and gutters, and of the principal elevation.

Scale of 10 feet to an inch.

4. Elevation of portions of the principal front, and also of any other parts in which any variation therefrom takes place.

Scale of 5 feet to an inch.

5. Transverse and longitudinal sections, or sufficient portions thereof to show the construction of every portion of the building.

Scale of 1 foot to ½ an inch.

6. Plan and section of one separate sleeping-room, dormitory, and eating or day-room respectively, or of part of the same, showing the method of warming and ventilating each; also of the baths and washing-rooms, and water-closets, and the construction of the apparatus for each.

7. An abstract of the draft contract and specification, giving a concise statement of the whole of the intended work; and also a detailed estimate of the building, and the prices at which the different materials and workmanship have been calculated in making the estimate.

8. The thicknesses of the walls, and the scantlings of the timbers of the floors and roofs, to be figured.

9. The general system of heating and ventilation, proposed to be adopted throughout the asylum, to be fully described in the drawings and specifications.

10. Each plan to show the several classes and numbers of patients to be accommodated, in the wards, day-rooms, dormitories, cells, galleries, and airing courts, respectively, to which such plan relates.

(No. 3.)

On the Construction and Organization of Hospitals for the Insane.

The Association of Medical Superintendents of American Institutions for the Insane, have unanimously agreed upon the following propositions relative to the Construction and Organization of Asylums; and also requested their publication by the members in their annual reports.

On the Construction of Hospitals for the Insane.

1. Every hospital for the insane should be in the country, not within less than two miles of a large town, and easy accessible at all seasons.

2. No hospital for the insane, however limited its capacity, should have less than fifty acres of land devoted to gardens and pleasure grounds for its patients. At least one hundred acres should be possessed by every State hospital, or other institution for 200 patients, to which number these propositions apply, unless otherwise mentioned.

3. Means should be provided to raise ten thousand gallons of water, daily, to reservoirs that will supply the highest parts of the building.

4. No hospital for the insane should be built, without the plan having been first submitted to some physician or physicians, who have had charge of a similar establishment, or are practically acquainted with all the details of their arrangements, and received his or their full approbation.

5. The highest number that can with propriety be treated in one building is two hundred and fifty, while two hundred is a preferable maximum.

6. All such buildings should be constructed of stone or brick, have slate or metallic roofs, and as far as possible, be made secure from accidents by fire.

7. Every hospital having provisions for two hundred or more patients, should have in it, at least, eight distinct wards for each sex, making sixteen classes in the entire establishment.

8. Each ward should have in it a parlor, a corridor, single lodging-rooms for patients, an associated dormitory communicating with a chamber for two attendants, a clothes-room, a bath-room, a water-closet, a dining-room, a dumb-waiter, and a speaking tube leading to the kitchen or other central part of the building.

9. No apartments should ever be provided for the confinement of patients, or for their lodging-rooms, that are not entirely above ground.

10. No class of rooms should ever be constructed without some kind of window in each, communicating directly with the external atmosphere.

11. No chamber for the use of a single patient should ever be less than eight by ten feet, nor should the ceiling of any story occupied by patients be less than twelve feet in height.

12. The floors of patients' apartments should always be of wood.

13. The stairways should always be of iron, stone, or other indestructible material, ample in size, in number, and easy of ascent, to afford convenient egress in case of accident from fire.

14. A large hospital should consist of a main central building with wings.

15. The main central building should contain the offices, receiving-rooms for company, and apartments entirely private for the superintending physician and his family, in case that officer resides in the hospital building.

16. The wings should be so arranged, that if rooms are placed on both sides of a corridor, the corridors should be furnished at both ends with movable glazed sashes, for the free admission of both light and air.

17. The lighting should be by gas, on account of its convenience, cleanliness, safety, and economy.

18. The apartments for washing, clothing, &c., should be detached from the hospital building.

19. The drainage should be under-ground, and all the inlets to the sewers should be properly secured, to prevent offensive emanations.

20. All hospitals should be warmed by passing an abundance of pure, fresh air from the external atmosphere over the pipes or plates containing steam under low pressure, or hot water, the temperature of which, at the boiler, does not exceed 212 degrees Fah., and placed in the basement or cellar of the building to be heated.

21. A complete system of forced ventilation in connection with the heating, is indispensable to give purity to the air of an hospital for the insane; and no expense that is required to effect this object thoroughly, can be deemed either misplaced or injudicious.

22. The boilers for generating steam for warming the building, should be in a detached structure, connected with which may be the engine for pumping water, driving the washing apparatus, and other machinery.

23. All water-closets should, as far as possible, be made of indestructible materials, be simple in their arrangement, and have a strong downward ventilation connected with them.

24. The floors of both rooms, water-closets and basement stories, should, as far as possible, be made of materials that will not absorb moisture.

25. The wards for the most excited class should be constructed with rooms on but one side of a corridor, not less than ten feet wide, the external windows of which should be large, and have pleasant views from them.

26. Wherever practicable, the pleasure grounds of a hospital for the insane should be surrounded by a substantial wall, so placed as not to be unpleasantly visible from the building.

On the Organization of a Hospital for the Insane.

1. The general controlling power should be vested in a board of trustees or managers, if of a State institution, selected in such a manner, as will be likely most effectually to protect it from all influences connected with political measures or political changes; if of a private corporation, by those properly authorized to vote.

2. The board of trustees should not exceed twelve in number, and be composed of individuals possessing the public confidence, distinguished for liberality, intelligence, and active benevolence; above all political influence, and able and willing faithfully to attend to the duties of their station. Their tenure of office should be so arranged that, where changes are deemed desirable, the terms of not more than one-third of the whole number should expire in any one year.

3. The board of trustees should appoint the physician, and on his nomination, and not otherwise, the assistant physician, steward, and matron. They should, as a board, or by committee, visit and examine every part of the institution at frequent stated intervals, not less than semi-monthly, and at such other times as they may deem expedient, and exercise so careful a supervision over the expenditures and general operations of the hospital, as to give to the community a proper degree of confidence in the correctness of its management.

4. The physician should be the superintendent and chief executive officer of the establishment. Besides being a well-educated physician, he should possess the mental, social, and physical qualities, to fit him for the post. He should serve during good behaviour, reside on, or very near the premises, and his compensation should be so liberal as to enable him to devote his whole time and energies to the welfare of the hospital. He should nominate to the board suitable persons to act as assistant physician, steward, and matron; he should have entire control of the medical, moral, and dietetic treatment of the patients, the unrestricted power of appointment and discharge of all persons engaged in their care, and should exercise a general supervision and direction of every department of the institution.

5. The assistant physician, or assistant physicians, where more than one are required, should be graduates of medicine, of such character and qualifications as to be able to represent and to perform the ordinary duties of the physician during his absence.

6. The steward, under the direction of the superintending physician, and by his order, should make all purchases for the institution, keep the accounts, make engagements with, pay and discharge those employed about the establishment; have a supervision of the farm, garden, and grounds, and perform such other duties as may be assigned to him.

7. The matron, under the direction of the superintendent, should have a general supervision of the domestic arrangements of the house, and under the same direction, do what she can to promote the comfort and restoration of the patients.

8. In institutions containing more than 200 patients, a second assistant physician, and an apothecary, should be employed, to the latter of whom, other duties, in the male wards, may be conveniently assigned.

9. If a chaplain is deemed desirable as a permanent officer, he should be selected by the superintendent, and, like all others engaged in the care of patients, should be entirely under his direction.

10. In every hospital for the insane, there should be one supervisor for each sex, exercising a general oversight of all the attendants and patients, and forming a medium of communication between them and the officers.

11. In no institution should the number of persons in immediate attendance on the patients, be in a lower ratio than one attendant for every ten patients; and a much larger proportion of attendants will commonly be desirable.

12. The fullest authority should be given to the superintendent to take every precaution that can guard against fire or accident within an institution, and to secure this an efficient night-watch should always be provided.

13. The situation and circumstances of different institutions may require a considerable number of persons to be employed in various other positions; but in every hospital, at least all those that have been referred to, are deemed not only desirable but absolutely necessary, to give all the advantages that may be hoped for from a liberal and enlightened treatment of the insane.

14. All persons employed in the care of the insane, should be active, vigilant, cheerful, and in good health. They should be of a kind and benevolent disposition, be educated, and in all respects trustworthy, and their compensation should be sufficiently liberal to secure the services of individuals of this description.

The above propositions which were adopted in 1852, *were supplemented in* 1866 *by the five following.*

1. The large States should be divided into geographical districts, of such size, that a hospital situated at or near the centre of each district, will be practically accessible to all the people living within its boundaries, and available for their benefit in case of mental disorder.

2. All State, county, and city hospitals for the insane should receive all persons belonging to the vicinage, designed to be accommodated by each hospital, who are affected with insanity proper, whatever may be the form or nature of the bodily disease accompanying the mental disorder.

3. All hospitals for the insane should be constructed, organized, and managed substantially in accordance with the propositions adopted by the Association in 1851 and 1852, and still in force.

4. The facilities of classification or ward separation, possessed by each institution, should equal the requirements of the different conditions of the several classes received by such institution, whether these different conditions are mental or physical in their character.

5. The enlargement of a city, county, or State institution for the insane, which, in the extent and character of the district in which it is situated, is conveniently accessible to all the people of such district, may be properly carried, as required, to the extent of accommodating 600 patients, embracing the usual proportions of curable and incurable insane in a particular community.

(No. 4.)

Office of Commissioners in Lunacy,
19, Whitehall Place, S.W.,
8th June, 1857.

Sir,

The Commissioners in Lunacy, having had under their special consideration the subject of the construction, employment, and mode of administration, of baths in asylums, have prepared the accompanying regulations, which they strongly recommend for adoption in all institutions for the insane:—

1. That in no case shall any kind of bath be used as a punishment.

2. That, except for purposes of cleanliness, no bath be used without the authority of one of the medical officers.

3. That no bath be used as a medical agent, or for the purpose of subduing excitement, unless in presence of the medical officer or his assistant, the matron, or deputy matron, or head attendants, and that a record of the employment of the same, and of the exact period of its duration, be kept.

4. Should any new form of bath, or a shower or douche bath, of more than three minutes in duration, be ordered, that the effects in every case be carefully watched by one of the medical officers, and fully reported, with the time of its duration, in the case book.

5. That whenever a wooden frame with a door is used for the douche or shower bath, it be so constructed that the patient be easily seen, and air readily admitted.

6. That, when not in use, the shower bath be kept constantly locked, and the key placed in charge of one of the superior officers.

7. That the days fixed for general bathing be so arranged as to afford to each patient a sufficient supply of warm water. That the matron or her assistant on the female side, and the head attendant on the male side, be present to superintend the process, ascertain by the thermometer the temperature of the water, see that it is properly changed, and an adequate supply of towels, matting, seats, &c., is provided, and especially to observe the bodily condition of the patients, and to report to the medical superintendent any wounds, bruises, or eruptions, or other matters requiring attention.

8. That the hot and cold water taps be so placed, constructed, or protected, as to prevent patients turning on the water, and that the bath be fully prepared, and the temperature ascertained, before a patient is placed in it.

I am, Sir,
Your obedient servant,
JOHN FORSTER,
Secretary.

Essex County Asylum.

Rules for the Bath Room.

1. Every patient shall bathe at least once a week, and oftener if necessary.
2. The temperature of the bath must not be lower than 90, nor higher than 98 degrees, unless ordered specially by the medical officer.
3. The attendants are not to allow the patients to have the use of the keys of the baths, nor to bathe themselves, but one attendant is always to be present, who shall use a thermometer to test the temperature of the bath before any patient is permitted to enter it.
4. More than three or four patients are not to be bathed in the same water, but a less number if the supply of water is sufficient; and whenever more than one is so bathed, the warmth of the bath is to be kept up by the addition of fresh hot water, sufficient to maintain the temperature at from 90 to 98 degrees, but no additional hot water must ever be added to a bath during the time a patient is in it.
5. Under no circumstances is a shower or other *cold* bath to be administered without the special order of the medical superintendent, or in his absence of the medical assistant; and whenever such a bath is given, it shall be in the presence of the matron or head female attendant, or of the male head attendant, as the case may be.
6. All shower baths ordered for medical purposes will be recorded in the case books, by the superintendent or his assistant, showing the date and duration of the shower bath, and the name of the patient subjected to it, and the reasons for its having been ordered; and any attendant placing a patient in a shower bath without a special order shall be guilty of misconduct.
7. The attendants are requested to be careful in seeing that there is an adequate supply of towels, seats, &c., and that each bather is made thoroughly dry before dressing, also that his nails are attended to, and his hair properly cut, and also carefully to observe the bodily condition of each patient, and to report to the medical superintendent or assistant, any wounds, bruises, or eruptions, or other matters requiring attention.
8. In no case whatever is one patient to be allowed to assist another when in the bath, but in every instance the attendant must be present.

D. C. CAMPBELL, M.D.,
Medical Superintendent.

County Asylum, Stafford.

Rules to be observed in using the warm bath.

Gallery No. Bathing days,

1. Every patient to be put into a warm bath at least once in a week, on the day specified above, unless orders are given to the contrary.
2. No patient to be put into a bath in less than an hour and a half after each meal.
3. The water to be changed for every patient, and the bath to be about half filled.
4. The temperature of the water to be about 96° Fahrenheit; and no patient to be put into a bath at less than 90° or above 130° Fahrenheit—unless ordered by the medical officer.
5. Previous to using the bath, the attendant must see that the water is the proper temperature; that the floor of the bath-room is covered with matting; and that each patient is undressed and dressed in the bath-room without any unnecessary exposure to cold.
6. No patients to remain less than five minutes in the bath. During this time their persons are to be thoroughly cleansed with soap and water, and upon coming out of the bath, the attendant is to carefully rub them dry with clean towels.
7. When there is not a sufficient supply of hot water to enable all the patients in a gallery to be bathed on the same day, one half shall be bathed one day and the remainder the next; a list of the names of those not bathed being kept by the attendant, to prevent any patient being omitted.
8. The bath and bath room are to be kept thoroughly clean, and to be used only for the purposes for which they are intended.
9. The hot and cold water, and also the waste water taps, are always to be turned off after being used, and the key to be kept by the attendant.
10. No attendants, on any excuse, to leave a bath-room while a patient is in the bath, or to trust the key of the bath out of their possession.

Rules to be observed in using the Shower Bath.

1. The shower bath to be administered only by the order of the medical officer.
2. The medical officer, matron, or head attendants, always to be present during the time of using it.
3. The time for remaining in the shower bath never to exceed three minutes.
4. The patient to be thoroughly dried after having the bath.
5. The bath to be used only as a medical agent. The keys for turning the taps of the warm bath, and the keys of the shower baths, to be kept locked up, and out of the reach of patients.

County Asylum, Prestwich.

Rules to be observed as to bathing the patients.

Female ward, No. Bathing day, at

1. Every patient shall be bathed once a week (unless there is a special medical order to the contrary), and as much oftener as is necessary. Every patient shall be bathed immediately on admission unless it is ordered otherwise by the medical officer.

2. Every bath to be previously prepared by the assistant matron (or in her absence, the matron), the temperature of the water not to exceed 96°, nor to fall below 90° Fahrenheit, unless specially ordered. The assistant matron (or in her absence, the matron) to see that the patients are properly bathed, their persons cleansed with soap, carefully rubbed dry after the bath, and that they are not unduly exposed to cold during dressing or undressing.

3. The water to be changed for every patient.

4. The assistant matron (or in her absence, the matron) to be present whilst the patients are bathed.

5. The bath taps, of both cold and hot water, to be kept at all times locked, under charge of the attendants, and inaccessible to the patients.

6. An immediate report to be made to the medical officer by the assistant matron, of any bruises, sores, or eruptions existing upon the person of any patient when bathed.

The shower bath.

7. The shower bath to be administered only by the special order of the medical officer.

8. The matron shall at all times be present at the administration of the shower bath.

9. No patient shall remain longer than one minute in a shower bath, excepting by the order, and in the presence, of a medical officer, and then for not longer than three minutes.

10. The key of the shower bath not to be accessible to the attendants, but to be kept by the matron and medical officer.

11. Every patient after using the shower bath to be carefully rubbed dry, and quickly dressed, without undue exposure to cold.

Brookwood Asylum.

Baths.—Regulations for the guidance of the attendants.

1. Every patient to be bathed immediately after admission, and once a week afterwards, unless exempted by medical order. Should there be the slightest doubt as to the advisability of bathing any patient, owing to sickness, feebleness, or excitement, immediate reference to be made to one of the medical officers.

2. The name of every patient not having the customary bath to be inserted in the daily report sheet.

3. In preparing a bath, the cold water is always to be turned on first.

4. Before the patient enters the bath, the temperature is to be ascertained by the thermometer, and is not to be less than 88 degrees, nor above 98 degrees. In case of the thermometer becoming inefficient from injury, &c., all bathing operations to be suspended until another be obtained.

5. Not more than patient to be bathed in the same water. Any infringement of this rule to be entered in the daily report sheet.

6. Under no circumstances whatever are two patients to occupy the bath at the same time.

7. During the employment of the bath, the room is never to be left without an attendant. At all other times the door is to remain locked, and the floor to be kept dry.

8. Under no pretence whatever is the patient's head to be put under water.

9. In the bath the body of each patient is to be well cleansed with soap. After coming out of the bath, especial care must be taken to dry those patients who are feeble and helpless, and to clothe them as rapidly as possible.

10. The keys are never to remain on the bath taps, nor are they to be employed by patients. When not in use, they are to be locked in the attendants' room.

11. Any marks, bruises, wounds, sores, local pain, evidences of disease of any kind, complained of by the patients, or noticed by the attendant during any of the bathing operations, to be immediately reported to one of the medical officers, and also to be entered in the daily report sheet.

12. Any deficiency in the supply of warm water, soap, towels, &c., to be entered in the daily report sheet.

13. The attendants are to bear in mind that, except under medical order, the baths are to be employed solely for the purposes of cleanliness.

14. Neither the cold nor the shower bath is ever to be employed, except under medical order, and then only in presence of one of the officers. When not in use the door of the latter is to remain locked, and the key to be kept in the dispensary.

15. It is the duty of the head attendant to be present at all baths employed under medical order, and to take care that the duration does not exceed the time specified in such order. He is also to supervise the whole of the ordinary bathing operations, to ascertain that the rules are rigidly carried out, and to report to the medical superintendent every infringement that may come to his knowledge.

June, 1867.

T. N. BRUSHFIELD, M.D.,
Medical Superintendent.

APPENDIX B.

THREE COUNTIES ASYLUM.

(Beds, Herts, and Hunts.)

Dietary Table.

Days of the Week.	Breakfast.					Dinner.																Supper.								
	Males.		Females.			Males.								Females.								Males.					Females.			
	Bread.	Milk Porridge.	Bread.	Butter.	Tea.	Beer.	Bread.	Cooked Meat.	Plum Pudding.	Pie.	Soup.	Stew.	Vegetables.	Beer.	Bread.	Cooked Meat.	Plum Pudding.	Pie.	Soup.	Stew.	Vegetables.	Beer.	Bread.	Butter.	Cheese.	Tea.	Bread.	Butter.	Plum Cake.	Tea.
	oz.	pt.	oz.	oz.	pt.	pt.	oz.	oz.	oz.	oz.	pt.	pt.	oz.	pt.	oz.	oz.	oz.	oz.	pt.	pt.	oz.	pt.	oz.	oz.	oz.	pt.	oz	oz.	oz.	pt.
Sunday	7	1½	6	½	1	½	2	6	...	...	...	...	16	½	2	5	...	...	...	...	12	...	7	½	...	1	...	...	8	1
Monday	7	1½	6	½	1	...	8	...	...	...	1½	...	...	...	6	...	...	...	1	...	...	½	7	...	1½	...	6	½	...	1
Tuesday	7	1½	6	½	1	...	...	6	...	...	...	...	16	...	...	5	...	...	...	...	12	½	7	...	1½	...	6	½	...	1
Wednesday	7	1½	6	½	1	...	6	...	...	...	...	1	...	...	4	...	...	...	...	1	...	½	7	...	1½	...	6	½	...	1
Thursday ...	7	1½	6	½	1	...	...	6	...	...	...	...	16	...	...	5	...	...	...	...	12	½	7	...	1½	...	6	½	...	1
Friday	7	1½	6	½	1	...	...	1½	...	10	...	...	4	...	...	1½	...	10	...	...	4	½	7	...	1½	...	6	½	...	1
Saturday ...	7	1½	6	½	1	...	...	...	16	...	...	...	...	...	...	...	12	...	...	...	...	½	7	...	1½	...	6	½	...	1
Totals.....	49	10½	42	3½	7	½	16	19½	16	10	1½	1	52	½	12	16½	12	10	1	1	40	3	49	½	9	1	36	3	8	7

N.B.—Scale per gall. for porridge..... 12 oz. oatmeal, 1 pint milk.

" " tea ..... 1 oz. tea, 4 oz. sugar, 1 pint milk.

" lb. for plum pudding... 8 oz. flour, 1 oz. raisins, 1 oz. treacle, and 1 oz. suet.

Soup, for 500 patients..... The liquor of the meat the previous day, 120 lbs. legs and shins of beef, 28 lbs. pease, 56 lbs. carrots, 56 lbs. onions, 28 lbs. oatmeal, salt, pepper, herbs, &c.

Stew for 500 patients ..... The liquor of the meat the previous day, 65 lbs. meat, 280 lbs. potatoes, 112 lbs. onions, 28 lbs. oatmeal.

Extra.—All male patients employed.—2 oz. bread, ½ oz. cheese, and ½ pint beer at 10 a.m., and ½ pint beer at 4 p.m.

Women employed at the wash-house and laundry.—6 oz. meat and vegetables for dinner on Mondays. Bread and cheese and ½ pint of beer 10 a.m. and at 4 p.m.

Helpers in the wards and needlewomen.—Bread and cheese and ½ pint beer at 10 a.m.

Snuff and tobacco to be given as indulgences to the workers, &c.

Note.—On Mondays the above dietary is varied by rice pudding in lieu of soup, and on Wednesdays beef steak puddings in lieu of stew.

SUSSEX COUNTY ASYLUM.

Diet Scale.

	Breakfast, At 8 a.m.				Dinner, At 1 p.m.															Supper, At 6 p.m.					
	Males.		Females.		Males.							Females.								Males.			Females.		
																				Sweet Cake or			Sweet Cake or		
	Bread.	Cocoa.	Bread.	Cocoa.	Bread or Dumpling	Beer.	Uncooked Meat.	Suet Pudding or Pie.	Mutton Broth.	Irish Stew.	Vegetables.	Bread or Dumpling.	Beer.	Uncooked Meat.	Suet Pudding.	Baked Pie.	Plum Pudding.	Mutton Broth.	Meat Stew.	Vegetables.	Bread.	Butter.	Coffee.	Bread.	Butter.	Tea.
	oz.	pt.	oz.	pt.	oz.	pt.	oz.	oz.	pt.	pt.	oz.	oz.	pt.	oz.	oz.	oz.	oz.	pt.	pt.	oz.	oz.	oz.	pt	oz.	oz.	pt.
Sunday	6	1	5	1	6	½	6	12	...	...	16	5	½	8	...	...	...	...	...	12	6	½	1	5	½	1
Monday	6	1	5	1	6	½	4	...	1	...	8	5	½	4	8	...	...	...	...	12	6	½	1	5	½	1
Tuesday	6	1	5	1	6	½	2	16	...	...	8	...	½	2	...	12	...	...	...	8	6	½	1	5	½	1
Wednesday	6	1	5	1	6	½	8	...	...	...	16	5	½	4	...	...	...	...	1	12	6	½	1	5	½	1
Thursday	6	1	5	1	6	½	4	...	...	1	8	...	½	...	...	...	12	...	...	...	6	½	1	5	½	1
Friday	6	1	5	1	6	½	2	16	...	...	16	5	½	4	...	12	...	...	...	12	6	½	1	5	½	1
Saturday	6	1	5	1	6	½	4	...	1	...	8	5	½	4	...	...	...	1	...	8	6	½	1	5	½	1
Weekly Total	42	7	35	7	42	3½	30	44	2	1	80	25	3½	26	8	24	12	1	1	64	42	3½	7	35	3½	7

DINNER.

	Male Patients.	Female Patients.
Sunday	Bacon and greens, with fruit or suet pudding.	Roast pork.
Monday	Mutton broth or bread and cheese (3 oz).	Meat pudding (boiled), or fruit pudding.
Tuesday	Meat and potato pie.	Meat and potato pie.
Wednesday	Roast beef or pickled pork.	Meat stew and dumpling.
Thursday	Irish stew.	Plum pudding and treacle sauce.
Friday	Meat and potatoe pie, or plum pudding and treacle sauce.	Meat pudding (baked), or bacon 4 oz., with suet pudding 4 oz.
Saturday	Mutton broth.	Mutton broth, or Irish stew.
	Bread, beer, and vegetables daily.	

Extra diet for sick.—Mince-meat, steak, mutton chop, fowl, fish, eggs, mutton-broth, beef tea, essence of beef, milk, arrow-root, rice pudding, batter pudding, sago, barley water, gruel, oranges, biscuits, calf's foot jelly, porter, bitter ale, port wine, sherry, brandy, gin, whisky, rum, lemonade, soda water.

Extra diet for working patients.—½ pint beer, 2 oz. bread, 1 oz. cheese, at 11 a.m., and ½ pint beer at 4 p.m., the laundry patients ½ pint tea. Tobacco and snuff given as indulgences.

Attendants' and servants' diet.—Men, 1 lb. uncooked meat; women, ¾ lb. ditto; 1 lb. vegetables, 1 lb. bread, 2 pints beer daily. 2 oz. tea, ¾ lb. sugar, ¼ coffee, ½ butter, 1 lb. cheese, weekly. ¼ lb. meat may be exchanged for pudding or pie, at the discretion of the housekeeper.

Cocoa for one hundred patients.—3¼ lb. cocoa, 6¼ lb. treacle, 3 gallons milk, or more, if the dairy yields it.

Coffee	ditto	1½ lb. coffee, ¼ lb. chicory, 5 lb. treacle, 2 gallons milk.
Tea	ditto	1 lb. tea, 4 lb. sugar, and 2 gallons milk.
Mutton broth	ditto	The liquor of the cooked meat, bones, &c., 25 lb. meat, 3 lb. Scotch barley, oatmeal, rice, 10 lb. Turnips, cabbage, parsnip, leek, onion, artichokes, or other vegetables, herbs, salt, and pepper.
Meat pie	ditto	Dripping crust, 31 lb. flour, 50 lb. potatoes, 13 lb. meat.
Meat pudding	ditto	25 lb. meat, 30 lb. flour—boiled or baked.
Meat stew	ditto	25 lb. meat, in a stew with potatoes and other vegetables mixed with rice and barley.
Plum pudding	ditto	Flour, 46¾ lb., suet, 6¼ lb., raisins, 7¾ lb.

LANCASTER COUNTY ASYLUM, PRESTWICH.

Ordinary Diet Table.

Breakfast.		Dinner.	Supper.
		Males.	
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	1½ pint milk porridge, 6 oz. bread, or 1 pint tea, 6 oz. bread, ½ oz. butter	Pease soup 1½ pint (containing 4 oz. meat for each patient), 6 oz. bread, ½ pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, ½ pint beer Roast meat (7 oz. uncooked and free from bone), 1 lb. vegetables, 6 oz. bread, ½ pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, ½ pint beer Boiled meat (7 oz. uncooked and free from bone), 1 lb. vegetables, 6 oz. bread, ½ pint beer Irish stew, 1½ pint (containing 4 oz. meat for each patient), 6 oz. bread Boiled meat (7 oz. uncooked and free from bone), 1 lb. vegetables, 6 oz. bread, ½ pint beer	1 pint tea or coffee, 6 oz. bread, ½ oz. butter.
		Females.	
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	1½ pint milk porridge, 6 oz. bread, or 1 pint tea, 6 oz. bread, ½ oz. butter	Pease soup, 1½ pint (containing 4 oz. meat for each patient), 6 oz bread, ½ pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, ½ pint beer Roast meat (5½ oz. uncooked and free from bone), 1 lb. vegetables, 4 oz. bread, ½ pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, ½ pint beer Boiled meat (5½ oz. uncooked and free from bone), 1 lb. vegetables, 4 oz. bread, ½ pint beer Irish stew, 1½ pint (containing 4 oz. meat for each patient), 6 oz. bread Boiled meat (5½ oz. uncooked and free from bone), 1 lb. vegetables, 4 oz. bread, ½ pint beer	1 pint tea or coffee, 6 oz. bread, ½ oz. butter.
		Extra Diet Table for Patients employed. *Males.*	
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	1½ pint milk porridge, 8 oz. bread, or 1 pint tea, 8 oz. bread, ½ oz. butter	Baked lobscouse (containing 4 oz. meat for each patient), 8 oz. bread, 2 oz. cheese, ½ pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, 2 oz. bread, 2 oz. cheese, 1 pint beer Roast meat (7 oz. uncooked and free from bone), 1 lb. vegetables, 8 oz. bread, 2 oz. cheese, 1 pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, 2 oz. bread, 2 oz. cheese, 1 pint beer Boiled meat (7 oz. uncooked and free from bone), 1 lb. vegetables, 8 oz. bread, 2 oz. cheese, 1 pint beer Irish stew (containing 4 oz. meat for each patient), 8 oz. bread, 2 oz. cheese, ½ pint beer Roast meat (7 oz. uncooked and free from bone), 1 lb. vegetables, 6 oz. bread, 1 pint beer	1 pint tea or coffee, 6 oz. bread, ½ oz. butter.
		Females.	
Monday Tuesday Wednesday Thursday Friday Saturday Sunday	1½ pint milk porridge, 6 oz. bread, or 1 pint tea, 6 oz. bread, ½ oz. butter	Baked lobscouse (containing 4 oz. meat for each patient), 6 oz. bread, 1 oz. cheese, ½ pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, 2 oz. bread, 1 oz. cheese, 1 pint beer Roast meat (5½ oz. uncooked and free from bone), 1 lb. vegetables, 6 oz. bread, 1 oz. cheese, 1 pint beer Meat pies (containing 4 oz. meat for each patient), 1 lb. vegetables, 2 oz. bread, 1 oz. cheese, 1 pint beer Boiled meat (5½ oz. uncooked and free from bone), 1 lb. vegetables, 6 oz. bread, 1 oz. cheese, 1 pint beer Irish stew (containing 4 oz. meat for each patient), 6 oz. bread, 1 oz. cheese, ½ pint beer Roast meat (5½ oz. uncooked and free from bone), 1 lb. vegetables, 4 oz. bread, 1 pint beer	1 pint tea or coffee, 6 oz. bread, ½ oz. butter.

LEICESTER AND RUTLAND COUNTY ASYLUM.

Ordinary Diet.

Breakfast.

Males, coffee or cocoa, 1 pint, with 6 oz of bread, and ½ oz. butter.
Females, coffee or cocoa, 1 pint, with 5 oz. of bread, and ½ oz. butter.

Dinner.

Sunday... ... Monday ... Wednesday ... Thursday ... } Meat days. { Males, 6 oz. cooked, free from bone, with 3 oz. of bread. Females, 5 oz. cooked, free from bone, with 3 oz. of bread. } Vegetables in season, 12 oz.

Tuesday, Irish stew, males and females, 16 oz., with 3 oz. of bread, 1 oz. cheese.

Friday, soup day—males, 1½ pint, 6 oz. of bread, 1 oz. cheese; females, 1 pint, 4 oz. bread, 1 oz. cheese.

Saturday, meat pie—males, 1 lb., 3 oz. bread; females, 1 lb,. 3 oz. bread.

*** Males and females ½ pint beer daily, excepting Fridays.

Supper.

Males—tea, 1 pint, 6 oz. bread, ⅓ oz. butter; females, tea, 1 pint, 5 oz. bread, ⅓ oz. butter.

Patients employed in the wards and laundry are allowed for luncheon, 4 oz. bread, 1 oz. cheese, and ½ pint beer, extra.

Those employed in workshops and farm—4 oz. bread, 1 oz. cheese, and 1 pint beer, extra.

Extra diet at the discretion of the medical superintendent.

Scale, per gallon, for

Coffee—2½ oz., 1 pint new milk, 4 oz. sugar.
Tea—1 oz., 1½ pint new milk, 3½ oz. of sugar.
Soup—1½ lb. of legs and shins, 2 oz. oatmeal, 2 oz. pease, with carrots, onions, and herbs.
Irish stew, per lb., 2 oz. meat, 10 oz. potatoes.

Attendants and male servants.

Weekly—1¼ oz. tea, 3 oz. coffee, ½ lb. butter, ½ lb cheese, ¾ lb. moist sugar.
Daily—1½ pint ale, 8 oz. cooked meat, 12 oz. vegetables, 1 lb. bread.

Nurses and female servants.

Weekly—1¼ oz. tea, 3 oz. coffee, ½ lb. butter, ½ lb. cheese, 3 oz. loaf sugar, 8 oz. moist sugar.
Daily—1 pint ale, 6 oz. cooked meat, 12 oz. vegetables, 1 lb. bread.

LINCOLN COUNTY ASYLUM.

Ordinary Diet.

Week Days.	Breakfast.					Dinner.																Supper.					
	Males.			Females.		Males.								Females.								Males.			Females.		
	Bread.	Cocoa.	Porridge.	Bread.	Cocoa.	Bread.	Beer.	Suet Pudding.	Cooked Meat.	Pie.	Soup.	Stew.	Vegetables.	Bread.	Beer.	Suet Pudding.	Cooked Meat.	Pie.	Soup.	Stew.	Vegetables.	Bread.	Butter.	Tea or Coffee.	Bread.	Butter.	Tea or Coffee.
	oz.	pt.	pt.	oz.	pt.	oz.	pt.	oz.	oz.	oz.	pt.	oz.	oz.	oz.	pt.	oz.	oz.	oz.	pt.	oz.	oz.	oz.	oz.	pt.	oz.	oz.	pt.
Sunday	6	1	...	5	1	...	½	4	6	...	...	...	12	...	½	4	5	...	...	...	8	6	½	1	5	½	1
Monday	6	1	...	5	1	6	½	...	...	...	1	...	...	5	½	...	...	..	1	...	...	6	½	1	5	½	1
Tuesday	6	...	1	5	1	...	½	...	1½	10	...	...	8	...	½	...	1½	10	...	...	8	6	½	1	5	½	1
Wednesday	6	1	...	5	1	...	½	4	6	...	...	...	12	...	½	4	5	...	...	...	8	6	½	1	5	½	1
Thursday	6	...	1	5	1	6	½	...	...	...	...	12	...	5	½	...	...	...	...	12	...	6	½	1	5	½	1
Friday	6	1	...	5	1	...	½	4	6	...	...	...	12	...	½	4	5	...	...	...	8	6	½	1	5	½	1
Saturday	6	...	1	5	1	...	½	...	1½	10	...	...	8	...	½	...	1½	10	...	...	8	6	½	1	5	½	1
Total	42	4	3	35	7	12	3½	12	21	20	1	12	52	10	3½	12	18	20	1	12	40	42	3½	7	35	3½	7

Cocoa for 250 patients.—7½ lbs. cocoa, 15 lbs. treacle, 9 galls. milk.
Porridge do. do. 18 lbs. oatmeal, 20 galls. milk, 12 galls. water.
Soup do. do. The liquor of the cooked meat, uncooked bones, 28 lbs. beef, 14 lbs. rice, 14 lbs. pease, 7 lbs. pearl barley, herbs, salt, pepper, &c.
Stew do. do. 28 lbs. beef, 168 lbs. vegetables in the liquor of the meat cooked previously.

Extra Diet.

Out-door workers, 4 ozs. bread, 2 ozs. cheese, and half a pint beer, at 11 a.m.
Kitchen, laundry, and washerwomen, 2 ozs. bread, 1 oz. cheese, ½ pint beer, at 11 a.m.; and 4 ozs. bread, ½ oz. butter, and 1 pint tea, at 4 p.m.
Ward-cleaners, 4 ozs. bread, 2 ozs. cheese, at 8 p.m. on Tuesdays and Fridays.
Tobacco and snuff are given as rewards to the industrious.

Attendants' Dietary.

Females.—10½ lbs. bread, 3½ lbs. cooked meat, 10½ pints beer, ½ lb. fresh butter, ¼ lb. coffee, 1 lb. sugar, 2 ozs. tea, 1 lb. cheese, 3½ pints milk, vegetables—weekly.

Males.—10½ lbs. bread, 5¼ lbs. cooked meat, 14 pints beer, ½ lb. fresh butter, ¼ lb. coffee, 1 lb. sugar, 2 ozs. tea, 1 lb. cheese, 3½ pints milk, vegetables—weekly.

NEW SURREY ASYLUM.

Diet Scale.

	Breakfast.						Dinner.														Supper.					
	Males.			Females.			Males.							Females.							Males.			Females.		
	Bread.	Butter.	Cocoa.	Bread.	Butter.	Cocoa.	Meat (uncooked).	Irish Stew.	Soup.	Meat Pie.	Vegetables.	Bread or Dumpling.	Beer.	Meat.	Irish Stew.	Soup.	Meat Pie.	Vegetables.	Bread or Dumpling	Beer.	Bread.	Butter.	Tea.	Bread.	Butter.	Tea.
	oz.	oz.	pt.	oz.	oz.	pt.	oz.				oz.	oz.	pt	oz.				oz.	oz.	pt.	oz.	oz.	pt.	oz.	oz.	pt.
Sunday	6	⅓	1	5	⅓	1	8	...	...	...	16	4	½	7	...	...	...	12	3	⅓	6	⅓	1	5	⅓	1
Monday.....	6	⅓	1	5	⅓	1	8	...	...	...	16	4	½	7	...	...	...	12	3	⅓	6	⅓	1	5	⅓	1
Tuesday.....	6	⅓	1	5	⅓	1	4	stew	...	...	16	4	½	3	stew	...	...	12	3	⅓	6	⅓	1	5	⅓	1
Wednesday ...	6	⅓	1	5	⅓	1	8	...	...	...	16	4	½	7	...	...	...	12	3	⅓	6	⅓	1	5	⅓	1
Thursday	6	⅓	1	5	⅓	1	4	...	soup	...	...	6	½	3	...	soup	...	...	4	⅓	6	⅓	1	5	⅓	1
Friday	6	⅓	1	5	⅓	1	8	...	...	...	16	4	½	7	...	...	...	12	3	⅓	6	⅓	1	5	⅓	1
Saturday	6	⅓	1	5	⅓	1	5	...	...	pie	12	4	½	4	...	...	pie	8	3	⅓	6	⅓	1	5	⅓	1
Weekly Total..	42	2⅓	7	35	2⅓	7	45	...	...	...	92	30	3½	38	...	...	...	68	22	2⅓	42	2⅓	7	35	2⅓	7

Extra for Workers.

Males.....4 ozs. bread.....1 oz. cheese.....½-pint beer daily.
Females.....3 ozs. „ .....1 oz. „ .....⅓-pint beer daily.

Half at breakfast, and half at dinner-time.

WORCESTER ASYLUM.

Ordinary Diet Table.

Days.	Breakfast, 7 a.m.		Dinner, 1 p.m.		Supper, 6 p.m.	
	Males.	Females	Males.	Females.	Males.	Females
Sunday ...	1 pint coffee, 6 oz. bread, ⅓ oz. butter.	1 pint coffee or tea, 5 oz. bread, ⅓ oz. butter.	5 oz. roast meat, cooked, without bone; 4 oz. bread, ½ pint beer, vegetables.	4 oz. roast meat, cooked, without bone; 3 oz. bread, ½ pint beer, vegetables.	1 pint tea, 6 oz. bread, ⅓ oz. butter.	1 pint tea, 5 oz. bread, ⅓ oz. butter.
Monday ...			3 oz. meat, raw, and without bone, stewed or hashed, with 6 oz. of suet pudding; 4 oz. bread, ½ pint beer, vegetables.	3 oz. meat, raw, and without bone, stewed or hashed, with 5 oz. suet pudding, 3 oz. bread, ½ pint beer, vegetables.		
Tuesday ...			5 oz. boiled meat, without bone; 4 oz. bread, ½ pint beer, vegetables.	4 oz. boiled meat, without bone; 3 oz. bread, ½ pint beer, vegetables.		
Wednesday			1 pint Irish stew, containing 3 oz. uncooked meat, without bone; 4 oz. bread, ½ pint beer.	1 pint Irish stew, containing 3 oz. uncooked meat, without bone; 3 oz. bread, ½ pint beer.		
Thursday..			16 oz. beefsteak pie, including 4 oz. uncooked meat, without bone, with vegetables, ½ pint beer.	12 oz. beefsteak pie, including 3 oz. uncooked meat, without bone, with vegetables, ½ pint beer.		
Friday ...			5 oz. boiled meat, without bone; 4 oz. bread, ½ pint beer, vegetables (varied by substituting fish, and puddings of fruit and rhubarb. when in season).	4 oz. boiled meat, without bone; 4 oz. bread, ½ pint beer, vegetables (varied, same as males).		
Saturday..			1 pint pease-soup, containing 3 oz. meat, 6 oz. bread, ½ pint beer.	1 pint pease-soup, containing 3 oz. meat, 6 oz. bread, ½ pint beer.		

Luncheon and extra allowance:—For patients working in the wards, kitchen, laundry, workshops, farm, or garden—4 oz. bread, ½ oz. cheese, ½ pint beer, at 10 o'clock; ½ pint cider or beer, at 4 o'clock.

STAFFORD ASYLUM.

Diet Table.

	Breakfast.					Dinner.																Supper.					
	Males.		Females.			Males.								Females.								Males.			Females.		
	Cocoa with Milk and Sugar.	Bread.	Coffee with Milk and Sugar.	Bread.	Butter.	Cooked Meat, free from bone.	Bread.	Beer.	Soup.	Meat Pie.	Rice or other Puddings.	Potatoes.	Other Vegetables	Cooked Meat free from bone.	Bread.	Beer.	Soup.	Meat Pie.	Rice or other Puddings.	Potatoes.	Other Vegetables.	Bread.	Cheese.	Beer.	Bread	Butter.	Tea with Milk and Sugar.
	pt.	oz.	pt.	oz.	oz.	oz.	oz.	pt	pt.	oz.	oz	lb	Not weighed, but served out at discretion.	oz.	oz	pt	pt	oz	oz.	lb	Not weighed, but served out at discretion.	oz.	oz	pt	oz	oz	pt.
Sunday	1	8	1	6	½	6	6	¾	...	...	...	¾		5	6	½	...	...	...	¾		8	12	½	6	7	1
Monday	1	8	1	6	½	...	6	¾	1	...	10	...		...	4	½	1	...	8	...		8	12	½	6	7	1
Tuesday	1	8	1	6	½	...	3	¾	...	14	...	...		...	3	½	...	10	...	...		8	12	½	6	7	1
Wednesday	1	8	1	6	½	6	6	¾	...	...	...	¾		5	6	½	...	...	...	¾		8	12	½	6	7	1
Thursday	1	8	1	6	½	...	6	¾	1	...	10	...		...	4	½	1	...	8	...		8	12	½	6	7	1
Friday	1	8	1	6	½	6	6	¾	..	...	...	¾		5	6	½	...	...	...	¾		8	12	½	6	7	1
Saturday	1	8	1	6	½	...	3	¾	...	14	...	...		...	3	½	...	10	...	...		8	12	½	6	7	1
Total Weekly Amount ...	7	56	7	42	3½	18	36	5¼	2	28	20	2¼		15	32	3½	2	20	16	2¼		56	14	5¼	42	3½	7

Extras.

Full diet, consisting of 6 ounces of meat, with ale, wine, or brandy, in cases of illness or debility. Soup, arrowroot, eggs, bacon, &c., if necessary.

To working patients—Bread, cheese, beer, and tobacco, as indulgences.

Total amount of meat consumed by each patient weekly—Males, 30 ounces, cooked and free from bone. Females, 24 ounces, cooked and free from bone.

To make soup for 100 patients.—The liquor in which the meat of the previous day has been boiled, 12½ lbs. of meat, consisting of legs and shins of beef, 1½ lb. of rice, 3 lbs. of onions, 3 lbs. of leeks, 6 oz. of salt, 2 oz. of pepper, 3½ quarts of pease, with herbs, &c., consisting of carrots, turnips, cabbage, celery, parsley, and parsnips, according to the season, and sufficient water to make 100 pints.

To make cocoa for 200 patients.—9 lbs. 6 oz. of cocoa, 6 lbs. and 4 oz. of sugar, 9 quarts of milk, and sufficient water to make 200 pints.

To make coffee for 200 patients.—3½ lbs. of coffee, 6¼ lbs. of sugar, 9 quarts of milk, and sufficient water to make 200 pints.

MIDDLESEX COUNTY LUNATIC ASYLUM, COLNEY HATCH.

Ordinary Diet Table.

	Breakfast.				Dinner.																			Supper.					
	Males.		Females.		Males.						Females.													Males.			Females.		
											Dining in Hall.						Dining in Wards.												
	Bread.	Cocoa.	Bread.	Cocoa.	Bread.	Meat (cooked).	Vegetables.	Soup.	Pie.	Beer.	Bread.	Meat (cooked).	Vegetables.	Soup.	Pie.	Beer.	Bread.	Meat (cooked.)	Vegetables.	Soup.	Irish Stew.	Pie.	Beer.	Bread.	Cheese.	Beer.	Bread.	Butter.	Tea.
	oz	pt	oz	pt	oz	oz	oz	pt	oz	pt	oz	oz	oz	pt	oz	pt	oz	oz	oz	pt	pt	oz	pt	oz	oz	pt	oz	oz	pt
Sunday ...	6	1	5	1	4	5	12	...	...	½	4	5	12	...	...	½	4	5	12	...	...	...	½	6	2	½	5	½	1
Monday ...	6	1	5	1	6	...	...	1	...	½	5	...	...	1	...	½	5	...	...	1	...	...	½	6	2	½	5	½	1
Tuesday ...	6	1	5	1	4	5	12	...	...	½	4	5	12	...	...	½	4	5	12	...	...	...	½	6	2	½	5	½	1
Wednesday	6	1	5	1	4	5	12	...	...	½	4	5	12	...	...	½	4	5	12	...	..	...	½	6	2	½	5	½	1
Thursday	6	1	5	1	4	5	12	...	...	½	4	5	12	...	...	½	5	2	...	...	1	...	½	6	2	½	5	½	1
Friday	6	1	5	1	4	5	12	...	...	½	4	5	12	...	...	½	4	5	12	...	...	...	½	6	2	½	5	½	1
Saturday...	6	1	5	1	...	2	4	...	10	½	...	2	4	...	10	½	...	2	4	...	...	10	½	6	2	½	5	½	1

Patients employed upon the farm and garden, in the workshops, or domestic offices, receive the following extra diet:—

Male patients.—Bread and cheese and ½ pint beer at 11 a.m.; ½ pint beer at 4 p.m.; bread and butter and 1 pint tea at 5 p.m.

Laundry-women, and patients employed in the kitchen.—Bread and cheese and ½ pint beer at 11 a.m.

* Wards 10, 14, and B. 3, have batter pudding, made with 2 ounces meat, 8 ounces flour, and 1 ounce suet.

GLOUCESTER COUNTY LUNATIC ASYLUM.

Diet Table.

	Breakfast.						Dinner.																		Tea.						Supper.		
	Males.			Females.			Males.									Females.									Males.			Females.			M.	F.	
	Coffee with Milk and Sugar.	Bread.	Butter.	Tea, with Milk and Sugar.	Bread.	Butter.	Cooked Meat free from Bone.	Bread.	Potatoes.	Other Vegetables.	Soup.	Meat Pie, containing 4 oz. of Beef.	Suet Pudding.	Beer.	Bacon.	Meat Cooked, without Bone.	Bread.	Potatoes.	Other Vegetables.	Soup.	Meat Pie, containing 4 oz. of Beef.	Suet Pudding.	Beer.	Bacon.	Bread.	Cheese.	Tea, with Milk and Sugar.	Bread.	Butter.	Tea, with Milk and Sugar.	Beer.	Bread.	Beer.
	pt.	oz	oz	pt.	oz	oz	oz.	oz	lb		pt	oz.	oz	pt	oz	oz.	oz	lb		pt	oz.	oz	pt	oz	oz	oz	pt.	oz	oz	pt.	pt	oz	pt
Sunday	1	6	1	1	5	½	6	4	½	As in season extra to Potatoes.	...	...	...	1	...	5	3	½	As in season, extra to Potatoes.	...	...	...	½	...	6	2	1	5	½	1	1	3	½
Monday	1	6	1	1	5	½	...	4	*½		...	...	12	1	4	...	3	†½		...	...	12	½	4	6	2	1	5	½	1	1	3	½
Tuesday	1	6	1	1	5	½	6	4	½		...	...	Alternate Mondays.	1	Alternate Mondays.	5	3	½		...	...	Alternate Mondays.	½	Alternate Mondays.	6	2	1	5	½	1	1	3	½
Wednesday	1	6	1	1	5	½	6	4	½		...	...		1		5	3	½		...	...		½		6	2	1	5	½	1	1	3	½
Thursday	1	6	1	1	5	½	6	4	½		...	...		1		5	3	½		...	...		½		6	2	1	5	½	1	1	3	½
Friday	1	6	1	1	5	½	...	4	½		..	9		1		...	3	½		...	8		½		6	2	1	5	½	1	1	3	½
Saturday	1	6	1	1	5	½	...	4	...		1	...		...		...	3	..		1	...		...		6	2	1	5	½	1	1	3	½
Total	7	42	7	7	35	3½	24	28	3		1	9	12	6	4	20	21	3		1	8	12	3	4	42	14	7	35	3½	7	7	21	3½

* Alternate Mondays. † Alternate Mondays.

Extra Diet.—Males.—Those employed have for luncheon—4 oz. bread, 1 oz. cheese, and ¾ pint of beer, and at 4 p.m. ¾ pint of beer. Tobacco and snuff are given as indulgences.

Females.—Those employed have luncheon, and at 4 p.m. ½ pint of beer. Snuff is allowed.

Patients employed in the laundry have every Monday a meat dinner, and cakes for tea. They also have daily 4 oz. bread 1 oz. cheese, and 1 pint beer. The medical superintendent orders what he deems fit for the invalids.

DERBY COUNTY ASYLUM.

Ordinary Diet.

	Breakfast.				Dinner.														Supper.					
	Males.		Females.		Males.							Females.							Males.			Females.		
	Bread.	Milk Porridge.	Bread.	Milk Porridge.	Beer.	Bread.	Uncooked Meat.	Pie or Pudding.	Soup.	Stew.	Vegetables.	Beer.	Bread.	Uncooked Meat.	Pie or Pudding.	Soup.	Stew.	Vegetables.	Beer.	Bread.	Cheese.	Bread.	Butter.	Tea.
	oz.	pt.	oz.	pt.	pt.	oz.	oz.	oz.	pt.	oz.	oz.	pt.	oz.	oz.	oz.	pt.	oz.	oz.	pt.	oz	oz	oz	oz.	pt.
Sunday	6	1	5	1	½	6	7	...	...	...	12	½	5	7	...	...	...	12	½	6	2	5	½	1
Monday	6	1	5	1	½	6	...	...	1	...	...	½	5	...	...	1	...	...	½	6	2	5	½	1
Tuesday	6	1	5	1	½	6	7	...	...	...	12	½	5	7	...	...	...	12	½	6	2	5	½	1
Wednesday	6	1	5	1	½	6	7	...	...	...	12	½	5	7	...	...	...	12	½	6	2	5	½	1
Thursday	6	1	5	1	½	6	...	...	...	12	...	½	5	...	...	...	12	...	½	6	2	5	½	1
Friday	6	1	5	1	½	6	7	...	...	...	12	½	5	7	...	...	...	12	½	6	2	5	½	1
Saturday	6	1	5	1	½	6	...	14	...	...	...	½	5	...	14	...	...	...	½	6	2	5	½	1

Workers, ½ pint beer extra at 11 o'clock a.m., and at 4 o'clock p.m.

Laundry-women, ½ pint beer, with bread and cheese, at 11 o'clock a.m., and ½ pint beer at 4 o'clock p.m.

ESSEX LUNATIC ASYLUM.—DIETARY FOR THE PATIENTS.

Days of the Week.	Breakfast.						Dinner.															Supper.					
	Male.			Female.			Male.							Female.								Male.			Female.		
	Bread.	Butter.	Tea.	Bread.	Butter.	Tea.	Uncooked Meat.	Bread.	Beer.	Soup.	Meat Pie.	Plum Pudding.	Potatoes.	Uncooked Meat.	Bread	Beer.	Soup.	Meat Pie.	Plum Pudding.	Potatoes.	Bread.	Butter.	Tea.	Bread.	Butter.	Tea.
	oz.	oz.	pt.	oz.	oz.	pt.	oz.	oz.	pt.	pt.	oz.	oz.	oz.	oz.	oz.	pt.	pt.	oz.	oz.	oz.	oz.	oz.	pt.	oz.	oz.	pt.
Sunday	6	½	1	5	½	1	7	5	½	...	...	...	12	7	4	½	...	...	...	12	6	½	1	5	½	1
Monday.....	6	½	1	5	½	1	3	6	½	1½	...	...	...	3	5	½	1½	...	...	...	6	½	1	5	½	1
Tuesday.....	6	½	1	5	½	1	7	5	½	...	...	...	12	7	4	½	...	...	...	12	6	½	1	5	½	1
Wednesday ...	6	½	1	5	½	1	3	...	½	...	12	...	8 oz. inclu. in pie	3	...	½	...	12	...	8 oz. inclu. in pie	6	½	1	5	½	1
Thursday	6	½	1	5	½	1	7	5	½	...	...	...	12	7	4	½	...	...	...	12	6	½	1	5	½	1
Friday	6	½	1	5	½	1	...	...	½	...	...	16	...	...	...	½	...	...	16	...	6	½	1	5	½	1
Saturday	6	½	1	5	½	1	7	5	½	...	...	...	12	7	4	½	...	...	...	12	6	½	1	5	½	1
Total	42	3½	7	35	3½	7	34	26	3½	1½	12	16	48	34	21	3½	1½	12	16	48	42	3½	7	35	3½	7

When vegetables are not given at dinner, the males receive 8 ozs. and the females 7 ozs. bread each.

BRISTOL BOROUGH ASYLUM.

Ordinary Diet Table.

	Breakfast.	Breakfast	Dinner.	Dinner.	Tea.	Tea.
	Males.	Females.	Males.	Females.	Males.	Females.
Sunday ...	6 oz. bread ½ oz. butter 1 pt. coffee	5 oz. bread ½ oz. butter 1 pt. coffee	4 oz. cold corned beef. 16 oz. vegetables. ½ pint beer.	3 oz. cold corned beef. 12 oz. vegetables. ½ pint beer.	6 oz. bread ½ oz. butter 1 pint tea	5 oz. bread ½ oz. butter 1 pint tea
Monday ...	ditto	ditto	8 oz. roast beef (weighed uncooked). 16 oz. vegetables. ½ pint beer.	8 oz. roast meat (weighed uncooked). 12 oz. vegetables. ½ pint beer.	ditto	ditto
Tuesday ...	ditto	ditto	1 pint Irish stew. 4 oz. bread. ½ pint beer.	1 pint Irish stew. 4 oz. bread. ½ pint beer.	ditto	ditto
Wednesday	ditto	ditto	4 oz. hot corned beef. 16 oz. vegetables. ½ pint beer.	3 oz. hot corned beef. 12 oz. vegetables. ½ pint beer.	ditto	ditto
Thursday .	ditto	ditto	16 oz. meat pie or pudding. potatoes ½ pint beer.	12 oz. meat pie or pudding. potatoes. ½ pint beer.	ditto	ditto
Friday ...	ditto	ditto	1 pint pease-soup. 4 oz. bread. ½ pint beer.	1 pint pease-soup. 4 oz. bread. ½ pint beer.	ditto	ditto
Saturday .	ditto	ditto	10 oz. raisin or suet pudding with sweet dip. ½ pint beer.	8 oz. raisin or suet pudding with sweet dip. ½ pint beer.	ditto	ditto

Lunch, for working patient, 4 oz. bread, ½ oz. cheese, ½ pint beer; 3 p.m., men, ½ pint beer, women, ½ pint tea. Work ward and laundry, hot supper once a fortnight. Rhubarb or fruit pie added occasionally in the season, or fresh salad. Irish stew and pease-soup are supplied according to the wish of each patient.

NORTHAMPTON GENERAL LUNATIC ASYLUM.

Ordinary Diet Table for Pauper Patients.

Breakfast.

Males—6 oz. of bread, ½ oz. of butter, and 1 pint of coffee.
Females—6 oz. of bread, ½ oz. of butter, and 1 pint of tea.

Dinner.

Sundays, Tuesdays, and Thursdays.	Males—11 ozs. of uncooked meat, 12 ozs. uncooked vegetables, 3 ozs. of bread, and ¾ of a pint of beer. Females—9 ozs. of uncooked meat, 12 ozs. uncooked vegetables, 3 ozs. of bread, and ½ pint of beer.
Mondays & Fridays	Males—1¼ lb. of Irish stew, 3 ozs. of bread, and ¾ of a pint of beer. Females—1 lb. of Irish stew, 3 ozs. of bread, ½ pint of beer.
Wednesdays & Saturdays.	Males—16 ozs. of meat pie or suet pudding, and ¾ of a pint of beer. Females—12 ozs. of meat pie or suet pudding, and ½ pint of beer.

Supper the same as breakfast.

Scale for articles undermentioned.

Per gallon.

Tea—1 oz. of tea, 3 ozs. of sugar, and ½ a pint of milk.
Coffee—3 ozs. of coffee, 5 ozs. of sugar, and ¾ of a pint of milk.

Per pound.

Meat pie—2 ozs. of uncooked meat, 12 ozs. uncooked potatoes, 5 ozs. of flour, with dripping.
Irish stew—2 ozs. meat, 10 ozs. uncooked potatoes, seasoned with pepper, salt, and onions.
The liquor of the previous day's boiled meat is added to the Irish stew.
Suet pudding—4 ozs. of bread, 2½ ozs. of flour, 2 ozs. of suet, ¼ of a pint of milk, and 1 oz. of sugar.

Extras to industrious patients.

The female pauper patients employed in the laundry have meat diet daily, pudding four times a week, and 5 ozs. of bread, 1 oz. of cheese, and 1 pint of beer extra daily.

The workers on the farm, artisans, and ward helpers have 5 ozs. of bread, 1 oz. of cheese, and ¾ of a a pint of beer daily, with the addition to workers on the farm during the summer, and to artisans all the year round, of ½ pint of beer at 4 o'clock.

Tobacco and snuff are also allowed to the industrious patients.

MONTROSE ROYAL ASYLUM.

Lowest Scale of Dietary.

Breakfast.

Males—2 pints porridge and ½ pint sweet milk, or
¾ „ coffee and 8 ozs. bread and butter.
Females—1½ pints porridge and ½ pint sweet milk, or
¾ „ coffee and 6 ozs. bread and butter.

Dinner.

Sunday—Broth, bread, and 4 ozs. cooked meat, without bone.
Monday—Rice and milk and bread, or broth.
Tuesday—Broth, potatoes, or vegetables, and 4 ozs. cooked meat.
Wednesday—Broth and bread.
Thursday—Broth, potatoes, or vegetables, and 4 ozs. cooked meat.
Friday—Broth, bread, and 4 ozs. fish.
Saturday—Pease-soup and bread.

Supper.

Males—2 pints porridge and ½ pint sweet milk, or
¾ „ tea, and 8 ozs. bread and butter.
Females—¾ pint tea, and 6 ozs. bread and butter.

Working patients get 3 ozs. bread, 1 oz. cheese, and ½ pint beer at 11 a.m., for lunch.

8 ozs. oatmeal for males, and 6 ozs. for females, for porridge.
2 „ barley for each patient, for broth.
3 „ rice, for rice and milk, for each patient.
4 „ split pease, for pease-soup, do.
½ „ sugar, for tea or coffee, do.
⅓ „ butter, do. do. do.
⅙ „ coffee for each patient.
1/12 „ tea, do.

Overhead flour bread used for dinner—males 8 ozs., and females 6 ozs.
When potatoes for dinner, 1 lb. allowed for each patient.
When vegetables, males get 6 ozs. bread, and females 4 ozs.

EDINBURGH ROYAL ASYLUM.

Diet Table.

Breakfast.

Males.

6 ozs. oatmeal or 2 pints porridge, and ¾ pint skimmed or butter milk; or,
¼ oz. coffee, ½ oz. sugar, 7½ ozs. bread, and ¼ oz. butter.

Females.

6 ozs. oatmeal or 1½ pint porridge, and ¾ pint skimmed or butter milk; or,
¼ oz. coffee, ½ oz. sugar, 5 ozs. bread, and ¼ oz. butter.

Dinner.

Sunday—4 ozs. rice, ⅓ oz. sugar, and ½ pint sweet milk.
7½ ozs. bread for males, and 5 ozs. for females.
Monday—7 ozs. uncooked meat, boiled in broth, with 2 ozs. barley.
7½ ozs. bread or 1⅛ lb. potatoes (males), and 5 ozs. bread or 1⅛ lb. potatoes (females).
Tuesday—7 ozs. uncooked meat, stewed or roasted, and 8 ozs. vegetables.
Bread or potatoes, as on Monday.
Wednesday—Broth made with 2 ozs. meat boiled down in the broth.
8 ozs. dumpling—of flour, suet, and currants.
Bread or potatoes, as above.
Thursday—7 ozs. uncooked meat made into Irish stew.
Bread or potatoes as above.
Friday—Pease-soup, made from 2 ozs. meat and 4 ozs. pease.
Bread or potatoes, as above.
Saturday—7 ozs. meat and broth, as on Monday.
Bread or potatoes, as above.

Supper.

Males.

6 ozs. oatmeal or 2 pints porridge, and ¾ pint skimmed or butter milk; or, ⅓ oz. tea, ½ oz. sugar, 7½ ozs. bread, and ¼ oz. butter.

Females.

⅓ oz. tea, ½ oz. sugar, 5 ozs. bread, and ¼ oz. butter.

Luncheon.

For workers.

Bread, 2½ ozs.; cheese, 1 oz.; beer, ½ pint.

FIFE AND KINROSS DISTRICT LUNATIC ASYLUM.

Dietary.

Dinner.

Saturday and Monday.—Beef, 6 ozs.; potatoes, 1 lb.; broth, unlimited.
Sunday.—Rice and milk, unlimited; 4 ozs. bread, 2 ozs. cheese.
Tuesday.—Irish stew, 5 ozs. meat, 1½ lb. potatoes, 4 ozs. bread.
Wednesday.—Pork, 8 ozs.; 1 lb. potatoes.
Thursday.—Pease-soup, unlimited; 6 ozs. bread, 2 ozs. cheese.
Friday.—8 ozs. fresh fish, or 4 ozs. salt do., with 1½ lb. potatoes.

Breakfast.

Porridge and milk, unlimited.

Tea.

Bread and butter, and tea.

4 ozs. bread, 1 oz. cheese, with ½ pint beer, for working patients.

Diet Tables for Lunatic Wards of Poorhouses, issued by the Commissioners in Lunacy for Scotland.

Breakfast.		Dinner.	Supper.	
Males.	Females.	On three days in the week—	Males.	Females.
6 ozs. of oatmeal made into porridge, with ¾ pint butter milk or skimmed milk, or ½ pint new milk.	5 ozs. of oatmeal made into porridge, with ¾ pint butter milk or skimmed milk, or ½ pint new milk. Or 6 ozs. bread, ½ oz. butter, with tea or coffee.	1½ pint barley broth. 4 ozs. cooked meat, exclusive of the meat in the broth. 8 ozs. bread, or 1 lb. potatoes. The potatoes and meat shall occasionally be served as Irish stew, with the proper quantity of onions; or as meat and potato pudding. On one day in the week— The preceding dinner, with pease-soup instead of broth. On one day in the week— 1½ pint pease-soup or broth. 12 ozs. meal pudding or suet dumpling for males, 10 ozs. for females. On one day in the week— 1 lb. potatoes or 4 ozs. rice. 8 ozs. sweet milk. 2 ozs. cheese. 6 ozs. bread. On one day in the week— 6 ozs. cooked meat. ½ lb. vegetables. ½ lb potatoes. 6 ozs. bread.	6 ozs. of oatmeal made into porridge, with ¾ pint butter milk or skimmed milk, or ½ pint new milk. Or 8 ozs. bread, with tea or coffee.	5 ozs. of oatmeal made into porridge, with ¾ pint butter milk or skimmed milk, or ½ pint new milk. Or 6 ozs. bread, ½ oz. butter, with tea or coffee.

Broth shall be made with 2 ozs. of meat, exclusive of bone, 2 ozs. of barley, ½ oz. of pease, 1½ of carrots, turnips, or other vegetables, for each ration of 1½ pint.

Pease-soup shall be made from 2 ozs. of meat, exclusive of bone, and shall contain in each ration of 1½ pint, 2 ozs. of whole or split pease, 1½ ozs. pease-flower, 1 oz. vegetables and seasoning.

12 ozs. of meal pudding shall contain 6 ozs. oatmeal, 2½ ozs. suet, ¾ oz. onions.

12 ozs. of suet dumplings shall contain 6 ozs. flour, and 2½ ozs. suet.

The ration of coffee shall contain ¼ oz. coffee, ½ oz. sugar, 1 oz. new milk.

The ration of tea shall contain ⅛ oz. tea, ½ oz. sugar, 1 oz. new milk.

On one day in the week, 8 ozs. of fish may replace 4 ozs. of meat; but fish shall be served at least once a month.

Out-door workers shall receive an extra allowance of 2 ozs. of cheese, or 3 ozs. of meat, with 3 ozs. of bread, and half a pint of beer.

The medical officer shall prescribe whatever other extra diet appears to him to be necessary.

Should the scarcity of any articles of diet render it advisable to depart temporarily from the scale laid down in the table, the medical officer shall take care that substances of equally nutritive value are supplied in their stead.

CENTRAL CRIMINAL LUNATIC ASYLUM, DUNDRUM, IRELAND.

Dietary.

Meals.	Dietary.	Number on each Description of Diet. M.	F.	T.
	Ordinary.			
Breakfast ...	1 pint tea or ¾ pint milk, and 8 ozs. bread; or ¾ pint milk with 1 quart stirabout	70	32	102
Dinner*.....	1 quart of soup and 10½ ozs. bread; or ½ lb. meat and 2½ lbs. potatoes; or on fast days, 1 quart cocoa and 10½ ozs. bread; or ½ lb. ling and 2½ lbs. potatoes			
Supper	1 pint tea, or ¾ pint milk, and 8 ozs. bread			
	Extra.			
Breakfast ...	Tea and eggs, with bread and butter	14	9	23
Dinner	Beef tea, chops, or steaks, with bread, vegetables, porter, beer, &c...			
Supper	Tea, bread and butter, &c.			
	Hospital Diet			
	Includes porter, spirits, wine, arrow-root, &c., &c., as ordered			
		84	41	125

* On Mondays and Wednesdays, soup, consisting of 17 lbs. of coarse beef and 3 ox heads. On Saturdays, soup, consisting of 26 lbs. of mutton.

Diet Table for Lunatics supported by the Departments.

Drawn up by order of the Minister of the Interior, France.

Division of the Day.	Nature of Provisions.	Men. Quantities before preparation.	Men. Quantities after preparation.	Women. Quantities before preparation.	Women. Quantities after preparation.
Daily 1.....	White bread for soup	.....	3 oz.	.....	3 oz.
Daily 2.....	Medium bread	.....	22 „	.....	18 „
Daily 3.....	Wine	.....	1 gill	.....	⅘ gill.
Breakfast	Thin broth	.....	1 pint	.....	1 pint.
	or milk	.....	1 „	.....	½ „
	Feast Days.				
Dinner 1.....	Thick broth for soup	.....	¾ pint	.....	¾ pint.
Dinner 2.....	Boiled meat	10 oz.	5 oz.	8 oz.	4 oz.
Supper 1...	Dried vegetables	⅙ pint	⅓ pint	⅙ pint	⅓ pint.
	or fresh „	12 oz.	8 oz.	12 oz.	8 oz.
	or potatoes	12 „	12 „	12 „	12 „
	or rice	1½ „	7 „	1½ „	7 „
Supper 2...	Cheese	.....	1½ „	.....	1½ „
	or prunes	⅙ pint	¼ pint	⅙ pint	¼ pint.
	or preserve	.....	2½ oz.	.....	2½ oz.
	Fast Days.				
Dinner 1.....	Thin broth for soup	.....	1 pint	.....	1 pint.
Dinner 2...	Dried vegetables	⅓ pint	⅔ „	⅓ pint	⅔ „
	or fresh „	21 oz.	14 oz.	21 oz.	14 oz.
	or potatoes	21 „	21 „	21 „	21 „
	or salt fish	7 „	5 „	7 „	5 „
Supper 1...	Dried vegetables	⅙ pint	⅓ pint	⅙ pint	⅓ pint.
	or fresh „	12 oz.	8 oz.	12 oz.	8 oz.
	or potatoes	12 „	12 „	12 „	12 „
Supper 2...	Cheese	.....	1½ „	.....	1½ „
	or prunes	⅙ pint	¼ pint	⅙ pint	¼ pint.
	or preserve	.....	2½ oz.	.....	2½ oz.

QUATRE MARES, NEAR ROUEN.

DIET TABLE FOR LUNATICS MAINTAINED AT THE COST OF THE DEPARTMENTS.

Division of the Day.		Description of Provisions.	Men.		Women.	
			Quantities before preparation.	Quantities after preparation.	Quantities before preparation.	Quantities after preparation.
Daily	1.	White bread for soup		3 oz.		3 oz.
	2.	Medium bread		22 oz.		18 oz.
	3.	Cider & water in equal parts		2 pints		1½ pint
Breakfast		Thin broth		1 pint		1 pint
		or milk		½ pint		⅓ pint
		or cheese		1½ oz.		1½ oz.
		or butter		1 oz.		1 oz.
		or fruits in season		6 oz.		6 oz.
Dinner	Sunday, 1.	Meat soup		1 pint		1 pint
	Tues. & Th. 2.	Meat for boiling	8 oz.	4 oz.	6 oz.	3 oz.
	Monday 1.	Soup (à la graisse)		1 pint		1 pint
	2.	Meat for ragout	4 oz.		3 oz.	
		with fresh vegetables	6 „		6 oz.	
		or potatoes	8 „		8 oz.	
		or dried vegetables	1/10 pint		1/10 pint	
	Wednesday 1.	Soup (à la graisse)		1 pint		1 pint
	2.	Salt fish	6 oz.	4½ oz.	6 oz.	4½ oz.
		or fricasseed eggs		2		2
		or potatoes	1 lb.		1 lb.	
		or fresh vegetables	14 oz.	10 oz.	14 oz.	10 oz.
		or dried vegetables	¼ pint	½ pint	⅙ pint	⅓ pint
		or rice	1½ oz.	7 oz.	1½ oz.	7 oz.
	Fast days 1.	Thin broth for soup		1 pint		1 pint
	2.	As on Wednesday				
Supper	Sun., Wed.	Pork		2 oz.		2 oz.
	other days	Rice	1½ oz.	7 oz.	1½ oz.	7 oz.
		or preserved pears or prunes		3 oz.		3 oz.
		or thin soup		1 pint		1 pint
		or cheese		1½ oz.		1½ oz.

FRIEDRICKSBERG ASYLUM, HAMBURG.

DIET SCALE.

First breakfast.—Coffee, with milk and sugar. One portion of white bread (wheat bread).

Second breakfast—

Men ...1 slice rye bread, with butter, and slice of white bread; warm beer, as needed.

Women... do. do. do. 1 portion warm beer.

Dinner—

Sunday ...Beef soup, with rice, stewed meat with potatoes and gravy.

Monday ... Do. with peeled barley, beef, rice, and plums.

Tuesday ... Do. with rice, beef, potatoes, and green beans.

Wednesday... Do. with peeled barley, beef, potatoes, and gravy, with raisins.

Thursday ... Do. with rice, beef, potatoes, and carrots. For females, omelette instead of beef.

Friday ...Beef soup, with peeled barley, beef, rice, and plums.

Saturday ... Do. with rice, herrings, potatoes, and plums.

Afternoon—

Coffee, with milk and sugar, 1 slice rye bread, with butter, and a slice of white bread.

Evening—

Twice a week...Tea, 8 portions.

Do. ...Groat soup, 1 portion.

Do. ...Buckwheat soup, 1 portion.

Once a week...Beer, soup, 1 portion.

General remarks on the quantity of the different articles.

Coffee...To 275 portions, 2½ lb coffee, ¾ lb chicory, 2 lb sugar.
Tea ...To 8 portions, ½ oz. tea and ¼ oz. sugar.
1 portion white bread, ¼ lb.
1 portion rye bread, for bread and butter, ½ lb.
1 portion of meat—
Working men, 2½ ozs. (boiled).
Non-working men, 2½ ozs. do.
Working women, 2½ ozs. do.
Non-working women, 2 ozs. do.
Dinner soups...To 275 portions, 11 lbs. rice or peeled barley.
Evening soups—
Groat soup ...1¼ oz. groats, and ⅛ oz. butter, each person.
Buckwheat soup...¼ oz. buckwheat, do. do.
Beer soup ...To 250 portions, *½ tun of beer, 8 lbs. sugar, 42 lbs. rye bread, 9 lbs. white bread, and some dry carraway seeds.
Warm beer—To 120 portions,* $\frac{5}{16}$ tun of beer, and 2½ lbs. sugar.
Potatoes—1¾ lbs. per day for each person.
Vegetables—as much as needed.
Bread (per day)—1 lb. rye, ½ lb. white bread.
Butter—To 40 portions, 1 lb.

APPENDIX C.

PROGRAMMES OF AMUSEMENTS IN BRITISH ASYLUMS.

DERBY COUNTY ASYLUM.

THURSDAY EVENING ENTERTAINMENTS.

On Thursday, February 25th, Dr. Hitchman will continue a series of

Biographical Readings on the Worthies of Derbyshire.

February 25th—Sir Francis Chantry.
March 3rd—John Flamstead.
March 10th—Thomas Linacre.
March 17th—Sir Richard Arkwright.
March 24th—James Brindley.
March 31st—Joseph Wright.

Quadrilles, country dances, music, songs, and recitations, as usual.

Patients' Entertainment. Christmas Eve, 1866. By special desire, and under the immediate inspiration of the Moon, Her Majesty's servants of the Theatre Royal, Mickleover, will produce a drama, dear to all maternal and paternal hearts, and very suggestive as to "elegant accomplishments" and "scholastic reports," entitled—

"Nursery Chickweed," or "The Heartless Art of 'Taking in' Children."

In addition to the above performance, the Manager has condescended to allow two Romans, from the banks of the Tiber, to appear in their native costume, and as "*Tall Talk*," "*Fustian*," and "*Rant*," are unknown to the peaceful inmates of the asylum, except through the reported speeches of certain insane demagogues who are permitted to be at large, the said Romans will be allowed to indulge in a classical quarrel.

PROGRAMME.

Part First.—To commence at 6 o'clock p.m.

Air	"Auld Lang Syne"	*Band.*
Country Dance	"Rory O'More."	*Band.*
Song	"West Countryman."	*W. B.*
Country Dance	"The White Cockade."	*Band.*
Quadrille	"The Edinboro."	*Band.*
Song	"Maggie's Secret."	*L. Y.*
Country Dance	"The Fairy."	*Band.*
Polka	"The Moss Rose."	*Band.*
Duet	"The Gipsy Countess."	*M. M. & M. L.*

* The Hamburg tun is a purely local measurement, and it has been found impossible to ascertain its exact English equivalent.

Quadrille..... "The Young Recruit." (*Pianoforte.*).....*M. W. H. & L. I.*
Song..... "Sweet be thy repose."..... *A Visitor.*
Glee..... "When the Winds Whistle Cold."..... *M. A. P., M. L. & W. H. R.*
Country Dance..... "Haste to the Wedding."..... *Band.*
Song..... "The Death of Nelson."..... *W. H. R.*
Recitation..... "Lord Ullin's Daughter."..... *J. E.*
Song..... "Come, O Sleep!"..... *M. A. P.*
Cornet Obligato..... *W. H. R.*
Carol..... "King Christmas."..... *E. H., J. U., W. B., J. R., J. M., & Chorus.*
Country Dance..... "MacGregor."..... *Band.*
Galop..... "Jolly Dogs." (*Pianoforte.*)..... *Visitors.*
Song..... "When the Swallows Homeward Flee."..... *M. A. P.*
Solo Pianoforte..... "Come where my Love lies dreaming."..... *M. W. H.*

An interval of 15 minutes for lemonade, cake, and oranges.

Part Second.

A brief recitation from Shakespeare's Play of *Julius Cæsar.* Scene III.—Within the tent of Brutus.

Cassius..... *W. H. R.*
Brutus..... *J. H.*

Song..... "The Sound of the Horn."..... *F. A.*
Comic Song..... "She danced like a Fairy."..... *A Visitor.*
Solo Pianoforte..... "Le Jet D'Eau."..... *A Visitor.*
Glee..... "The Fisherman."..... *S. A., J. U., J. M., & J. R.*
Solo Pianoforte..... "What Bells are those."..... *A Visitor.*
Solo Flute..... "The last Rose of Summer."..... *J. A.*
Solo Cornet..... "Ivy Green."..... *A Visitor.*
Solo Pianoforte..... "Orazione."..... *A Visitor.*
Overture..... "The Exhibition."..... *Band.*

To be followed by the laughable Farce of

Nursery Chickweed.

Dramatis Personæ.

Jonathan Chickweed, by Adolphus Takehewyne, Esq., Dotheboys Hall, Yorkshire.
Barnes, a Miller, by Henry Fitzgerald Tollmeal, Esq., Grabham Cottage, Bucks.
Mr. Walton, by J. Brickville, Esq., Hawthorn Place, Mayfair.
Mr. Horatio Mountsorrel, by Maximilian Montezuma, Esq., late of Mexico.
Mrs. Mountsorrel, by Miss Clementina Vere de Vere, Springville, Montgomeryshire.
Nelly, by Miss Adelaide Louisa Therese Ticklewhit, Funnyhampton, Middlesex.

Comic Song..... "Work, Boys, Work."..... *A Visitor.*
Quadrille..... "The Great Globe." (*Pianoforte.*)..... *W. H. & L. I.*
Quadrille..... "The Lancers."..... *Band.*
Polka..... "King Pippin."..... *Band.*
Country Dance..... "We won't go Home till Morning."..... *Band.*
Quadrille..... "The Burlesque."..... *Band.*
Country Dance..... "Ap Shenkin."..... *Band.*
Quadrille..... "La Poste."..... *Band.*
Country Dance..... "Sir Roger de Coverly."..... *Band.*

"God save the Queen."

GLOUCESTER COUNTY ASYLUM.

CHRISTMAS ENTERTAINMENTS, 1867–68.

A Grand Concert will take place in the Ball-room on Tuesday Evening, December 24, 1867, to commence at 6 p.m. precisely.

PROGRAMME.—PART I.

1.—Minuetto and Allegro...First Grand Symphony..... *Haydn.*
2.—Part Song..... "The Chough and Crow"..... *Bishop.*
3.—Song..... "Ben e ridicolo," (Miss Clarke)..... *Randegger.*
4.—Solo, Clarionet..... "Thema and Variations"—(Mr. J. Fowler)..... *J. Moor.*
5.—Song..... "Nazareth"—(Mr. J. P. Wilton)..... *Gounod.*
6.—Overture..... "Cheval de Bronze"..... *Auber.*
7.—Comic Song..... "Champagne Charlie"—(Mr. J. H. Simpson)..... *Alfred Lee.*
8.—Galop..... "Morning Bell."

An interval of a quarter of an hour.

PART II.

1.—Grand selection from "Les Huguenots" ..... *Meyerbeer.*
Solos for Violin, Clarionet, Cornet, Violoncello, and Flute.
2.—....."They offer rank"—(Miss Clarke) ..... *Stephen Glover.*
3.—Part Song ....."Ah! could I with fancy stray" ..... *J. L. Hatton.*
4.—Solo, Violin....."Ah! non Giunge, with Variations"—(Mr. F. Mann) ..... *Bellini.*
5.—Song ....."Sweet Spirit, hear my Prayer—(Miss Wood)..... *Wallace.*
6.—Comic Song ....."When George the Third was King"—(Mr. J. P. Wilton)... *Howard Paul.*
7.—Quadrille....."Pretty Bird" ..... *C. Coote.*
8.—Song ....."May Dew"—(Mr. E. Toller) ..... *Sterndale Bennett.*
9.—Valse ....."Faust"..... *Gounod.*
10.—Comic Song....."What will Mith Wobinthon thay?" (Mr. J. H. Simpson) *C. Solomons.*

Conductor.....Mr. J. Fowler.

PART III.

Christy Minstrels' Entertainment,

By the inimitable Negro Melodists, Messrs. F. Clarke and Addison, who recently had the honor of appearing before his Royal Highness the Emperor of Timbuctoo, will sing some of their new and popular Negro Songs, &c.

Carriages to be ordered at 9 p.m.

THE GRAND ANNUAL BALL AND CHRISTMAS TREE,

With a distribution of upwards of 1,000 presents, will take place in the Ball-room, on Friday, January 3rd, 1868, commencing at 6 p.m. precisely.

The Christmas Tree.

There are trees in the land both fair and grand,
In the field, or the vale, or the hill;
There's the stately oak and the silvery beech,
And the willow over the rill:
But search as you may, for a year and a day,
Never a one will you see,
Be it grand or fair, that can compare
With our glorious Christmas tree!
Then hurrah! to the tree that we love,
A merry song sing we!
To the tree, all trees of the world above.
Hurrah for our Christmas tree!

You may search if you please, far over the seas,
You may read in the cleverest book,
But you never will know, wherever you go,
Nor find wherever you look,
Be it thick, be it tall, be it thin, be it small,
Of low or of high degree,
Any plant with the fame of so noble a name
As that of the Christmas tree!
Then hurrah! to the, &c., &c.

Did ever you know, in the wide, wide world,
With all its fruits and flowers,
Apple, cherry, or pear, a tree that could bear
Such marvellous fruit as ours?
Wherever you've been, no fruit have you seen,
No! and you never will see,
Though you look where you will, and go looking on still,
Like that of our Christmas tree.
Then hurrah! to the, &c., &c.

And its tapers as bright as the sweet starlight
Throw out a hundred gleams—
And pray do you know any tree that can show
A fruit of silvery beams?
And so we declare, contradict if you dare!
That all the world must agree,
Such a tree there is none, 'neath the moon or the sun,
As our glorious Christmas tree!
Then hurrah! to the, &c., &c.

Our own Fireside.

Programme of the Dances.

1.—Country Dance	*Four hands across.*	8.—Valse	*Hilda.*
2.—Polka	*Guck-aeuglein.*	9.—Quadrille	*Pretty Bird.*
3.—Quadrille	*Paul-y-tool-y-tech-nic.*	10.—Galop	*Burlesque.*
4.—Valse	*Rosebud.*	11.—Lancers	*Second Set Lancers.*
5.—Lancers	*New Lancers.*	12.—Polka	*Muleteer.*
6.—Galop	*Orpheus.*	13.—Quadrille	*Semiramide.*
7.—Country Dance	*Three hands round.*	14.—Galop	*Overland Mail.*

Conductor of the Band .....Mr. J. Fowler.

The distribution from the Tree will take place at half-past 8 o'clock.

Carriages may be ordered at 9·30.

THE GRAND CHRISTMAS DRAMATIC PERFORMANCE

will take place at the Theatre of the above institution, on Friday, January 31st, 1868, on which occasion will be represented (for the third time at this institution) the celebrated Drama of the

Dream at Sea,

In Three Acts, by J. B. Buckstone, Esq.

Characters:

Trevanion	Mr. J. Fowler.
Richard Penderell	Mr. J. Bryan.
Launce Lynwood	Mr. E. Toller.
Black Ralph	Dr. Arthur Strange.
Alley Croaker	Mr. J. P. Wilton.
Tommy Tinkle	Mr. J. H. Simpson.
Red Norris	Mr. B. Shadgett.
Williams, Trewoof	Mr. F. Clarke.
Anne Trevanion	Mdlle. Clare Le Roy.
Biddy Nutts	Miss Florence Montgomery.
Margaret (wife of Black Ralph)	Miss Elsie Vernon.
Jack, Polly — Children of Ralph	Master Williams. Miss Warne.

Wreckers, miners, wedding guests, &c., by distinguished Amateurs.

Act 1.

Scene 1.—The Rock of the Armed Knight on the coast of Cornwall. Storm. Wreck of the vessel, and rescue of Richard Penderell.

,, 2.—Old Hall in the house of Gilbert Trevanion.

,, 3.—Interior of Ralph's hut.

,, 4.—Large room in Trevanion's house. Wedding festivities. Appearance of Black Ralph. Death of Anne.

Act 2.

Scene 1.—Interior of Ralph's hut.

,, 2.—Room in Trevanion's house.

,, 3.—The Churchyard of St. Buryan on the cliffs—night.

,, 4.—Launce Lynwood's hovel by the sea shore.

Act 3.

Scene 1.—Hall in Gilbert Trevanion's House.

,, 2.—The Logan Rock.

,, 3.—Pendeen Vau, or the Haunted Cave. Rescue of Anne and death of Ralph.

The performance will conclude with the Laughable Farce of the

Boots at the Swan!

(First time of performance) by Charles Selby.

Mr. Henry Higgins, a gentleman with an unfortunate name and fervent attachment to Emily Trevor .....Mr. J. Bryan.

Frank Friskley, a cavalry captain, with a genius for invention, a propensity for profession, and an attachment for everything but his regiment .....Dr. Arthur Strange.

Peter Pippin, a promising young gentleman in livery, with an inquiring mind and an unfortunate attachment .....Mr. F. Clarke.

Jacob Earwig, "the Boots at the Swan," a free and easy youth, with a talent for pantomime, a refined taste, and a strong attachment to refreshment .....Mr. J. H. Simpson.

Miss Cecilia Moonshine, a romantic lady, a victim to sentiment and light reading, with a fond attachment to extraordinary novelties .....Mdlle. Ethel de Vismes.

Emily Trevor, a young lady with a fortune in perspective, and a confessed attachment to Mr. Henry Higgins.....Miss Elsie Vernon.
Sally Smith, a genteel housemaid, with a good character from her last place, and a slight attachment to a fancy baker .....Mdlle. Clare le Roy.

Acting Manager, Mr. J. H. Simpson. Scenic Artist, Madame Gassini.
Stage Manager, Dr. Strange. Stage Decorators, Messrs. Warne, Mills, and Jenner.
Machinists, Messrs. Clutterbuck, Jennings, and Summers.
Leader of the Band, Mr. F. Mann.
Doors open at half-past 5. Performance to commence at a quarter to 6 precisely.
Carriages may be ordered at a quarter to 10 o'clock.

MONTROSE ROYAL ASYLUM.

Grand Christmas Pantomime.

Positively for the last time this season, on the evening of Friday, 24th Jan., at seven o'clock. Prodigious success! The most brilliant Pantomime of the season.

Bluebeard, or Harlequin and the Magic Mangold Wurzel!

The Burlesque is written expressly for the Royal Phaëtonic Theatre, by our own Penny-a-liner, author of "Greybeard; or Harlequin and the Turkey Gizzard;" "Hokey-Pokey Wankey-Fum; or, Harlequin and the Goose's Merry Thought": and "King Higglety-Pigglety; or, Harlequin and the Magic Pease-Soup."

Overtures, splendid orchestral combinations, and other entirely new music, by Commodore Blowhard, H.M.S.

Scenery unparelleled, by ..... Signor Daub.
The Ballets arranged by .....Maddle Wheelabout.
The extraordinary and incomprehensible machinery elaborated by ..... Mr. Screwdriver.
The gas, magnesium, oxy-hydrogen, and electric illuminations, transformation effects, and frightful explosions (of laughter), by ..... Signor Solderpipe.
The dresses and properties entirely new, and got up with the most reckless disregard of expense, by ..... Miss Threadneedle.
Tricks and magic business by ..... Messrs. Jalup and Fiddlestick.
Balloons, locomotive engines, Armstrong guns, Snider rifles, gun cotton, sticking plaster, nitro-glycerine, seidlitz powders, and other combustibles, not hitherto produced in any pantomime, by ..... Mr. Gammon, late of Spinnage and Company.
The Stage arrangements are under the new Stage Manager ..... Mr. Bristol Birdseye.
The whole being superintended by Barnum Blarney, Esq., P.U.F.F., &c., &c., late of U.S., now Manager (in the summer time), of the Imperial Opera House at Davis' Straits.

The following well-known pantomimic artists having been trained from infancy to tumble head-over-heels (after being brought up on the bottle) under our immediate supervision, are guaranteed as greatly superior to anything in the same line north of the Equator:—

Clown ..... Mr. Letterbag.
Pantaloon ..... Mr. Sarsaparilla.
Columbine ..... Miss Wheelabout.
Harlequin ..... Mr. Last.

Jokes, practical do., and other comic business, by everybody in particular.

Burlesque!

Act. I.—Scene First—An apartment in a Turkish Palace. Bluebeard asleep on the sofa. Guards and pages around him.
Curtain rises to the tune of "Come where my love lies dreaming."
Grand Medley Chorus,
By nobody in particular, followed by the pathetic business, in which many fine sentiments, and selections from the newest Operas will be produced.
Scene Second.—Interior of the paternal abode. Filial obedience, &c., &c.

By-and-by, grand march and procession of the Far-famed Penny Whistle Band, which has been engaged at an enormous outlay.
Solo on the penny whistle, from Don Giovanni, by Signor Mario.

Act II.—Scene—Grand apartment in Bluebeard's Castle. Where Fatima puts her foot in it.
In this Act innumerable murders will be committed in the most cold-blooded manner conceivable, quite eclipsing Boucicault and other sensational pretenders.

Finale—Terrific combat. Bluebeard up a tree.
Gorgeous Transformation Scene!
(Behind the curtain.)
This part of the performances being invisible, the spectators are expected to behold it with profound amazement.

Oranges and gingerbeer.

Harlequinade!

Scene I.—A fashionable perfumer's, in a well-known locality. "Sunnyside Hornpipe," by Harlequin and Columbine. General row. Perfumer comes to grief. The bobbies shaved, and otherwise maltreated.
Scene II.—Somewhere else. Bobbies eat rat-pie. Highway robberies, burglaries, child murder, and other harmless recreations.

Montrose thoroughly drained at last!

After everybody is murdered, all make friends again, and dance the "New Hillside Hoolachin."

Magic Box,

Out of which will be produced something for nobody, and nothing for everybody.

Grand Finale!

Dances by the entire company, in which the Provost and Magistrates of Montrose, and gentlemen of the Press, are expected to join.

To avoid crushing, the doors will be opened three days before the performance commences, and parties who wish reserved seats may apply, if they choose, to the King of Abyssinia.

The performance will commence somewhere between Four p.m. and Five a.m.

All the seats in the Boxes, Pit, and Galleries, being already engaged, the gentlemen of the Press will be accommodated on the couples, where, to obviate crowding, they must sit stridelegs. The Hotel attached to the Theatre being quite full, apartments have been secured for strangers from a distance in the Old Royal Hotel, adjoining the Militia Stores, where the sleeping rooms are large and airy. Attendance indifferent. Cold, shower, douche, and plunge baths in the morning.

Apply to Mr. Hird, Hotel-keeper.

MONTROSE ROYAL ASYLUM.

ROYAL PHAËTONIC THEATRE.—ENGAGEMENT OF OPERATIC TROUPE.

The Manager has much pleasure in announcing that he has completed an engagement with the celebrated Japanese Operatic Troupe of the Prince Satsuma, who have not hitherto appeared on any other stage in Europe or America.

On the Evening of Friday, 25th November, the Manager has secured the services of

PROFESSOR ANDERSON!!!

The Wizard of the North-east, who will exhibit some of his most surprising effects!

The performance will commence with the serio-comic duetto,

LOCHIEL!

Lochiel ... ... Her Wideawake. Wizard ... ... Professor Anderson.

To be followed by selections from some of the most Ancient Operas of Modern Times.

At 8·45 p.m. precisely, will be performed, the far-famed

BALLET DES QUATRES ECOSSAIS!

The renowned Pianists, Mademoiselle Pussie and Signorina Jamsina, will again electrify creation with the equatorial Fantasia of "The Complete Remedy," and the great sensation Nocturne of "Up in the Morning early."

For the last time this season, will be performed, that touching and pathetic tragedy,

BOX AND COX:

Married and Done For.

Being a warning to all unprotected males to avoid ginger wine, tea and turn out, and other female snares.

Doors open at Six in the Morning; but it is quite uncertain at what hour the performance will commence. A medical staff will be in attendance, in the event of any one splitting his sides. Life buoys kept on the stage, lest any of the performers should be drowned with applause.

Special Trains will be run on all the principal Lines, and Return Tickets, including admission to the Theatre, may be applied for at any of the Stations on the Scottish North-Eastern Railway—though it is not at all likely they will be obtained.

Spectacles, False Hair, and Goloshes strictly prohibited.

The prices of admission will be regulated by the state of the Barometer; but no money will be refused at the door.

THE CHRISTMAS PANTOMIME!

Will be produced shortly, and families wishing private Boxes for the season should apply early to the Carpenter. Opera Glasses, which must be left with the Ticket-collectors after the performance, may be obtained from all the principal Opticians, at prices varying from six guineas to ten and sixpence.

GENERAL ASYLUM, NORTHAMPTON.

PROGRAMME OF CONCERT, THURSDAY, DECEMBER 12th, 1867.

Part I.

Valse—(The Quadrille Band.) "Bouquet de Roses." ..... *Hermann.*
Glee—(The Glee Class.) "See our Oars with Feather'd Spray." ..... *Sir J. Stevenson.*
Song—(Mrs. Nugent.) "Thine is my heart." ..... *Schubert.*
Comic Song—(Mr. Whiting.) "The Victimized Old Man." ..... *A. Lloyd.*
Trio—(Mr. Austin, Mr. Yorke, and Mr. Arkell.) "To all you Ladies now on Land." ..... *Callcott.*
Song—(Miss Holt.) "Home, Sweet Home." ..... *Sir H. Bishop.*
Glee—(The Glee Class.) "Since first I saw your face." ..... *Ford*, 1609.
Duet—(Mr. Austin and Mr. Arkell.) "Home to our Mountains." ..... *Verdi.*
Song—(Mr. Bandy.) "The Village Blacksmith." ..... *Weiss.*
Comic Song—(Mr. W. Arkell.) "The broken-hearted Shepherd." ..... *Whymark.*
Song—(Mr. Austin.) "Thou art so near, and yet so far." ..... *Reichardt.*

Part II.

Pianoforte Solo—(Miss Axford.) Selection from "Norma." ..... *Bellini.*
Glee—(The Glee Class.) "Oh! who will o'er the Downs?" ..... *Pearsall.*
Song—(Mr. Yorke.) "The Birds will come again." ..... *Thomas.*
Duet—(Miss Holt and Miss Collier.) "In my Fairy Garden." ..... *Romer.*
Comic Song—(Mr. Whiting.) "Sweet Rosa Jane." ..... *Nash.*
Quartet—(Miss Holt, Miss Collier, Mr. Austin, and Mr. Arkell.) "Farewell to the Forest." *Mendelssohn.*
Piccolo Solo—(Mr. Bandy.) "Rule Britannia," variations.
Glee—(The Glee Class.) "Here in Cool Grot." ..... *Lord Mornington.*
Song—(Mr. Austin; Bassoon Obligato, Mr. Ward.) "I think then of Thee." ..... *Lachner.*
Comic Song—(Mr. Arkell.) "Not for Joseph." ..... *A. Lloyd.*
Solo and Chorus—(The Glee Class.) "God save the Queen."

Conductor—Mr. W. Arkell.

To commence at 7 o'clock.

THE ASYLUM, BOOTHAM, YORK.

PROGRAMME OF CONCERT ON WEDNESDAY EVENING, NOV. 27TH, 1867.

Part 1st.—Sacred.

Anthem ..... "In Jewry is God known" ..... *Whitfield.*
Recit. ..... "And God created man" ..... *Haydn.*
Air ..... "In native worth" ..... *Do.*
Duet ..... "Come ever smiling liberty" ..... *Handel.*
Chorus ..... "Lead on, lead on" ..... *Do.*
Recit. ..... "So will'd my father" ..... *Do.*
Trio and Chorus ..... "Disdainful of danger" ..... *Do.*
Solo and Chorus ..... "O Thou that tellest" ..... *Do.*
Chorus ..... "Hallelujah" ..... *Do.*

Part 2nd.—Secular.

Pianoforte Duet ..... *Mozart.*
Glee ..... "Queen of the Valley" ..... *Calcott.*
Trio ..... "Down among the Lilies" ..... *Glover.*
Madrigal ..... "Who shall win" ..... *Pearsall.*
Song ..... "When sorrow sleepeth" ..... *Laud.*
Glee ..... "Blow, thou winter wind" ..... *Stevens.*
Song ..... "Scenes of my youth" ..... *Benedict.*
Motett ..... "To Thee, Great Lord" ..... *Rossini.*
Finale ..... "God save the Queen" .....

To commence at 7 o'clock.

MONTROSE ROYAL ASYLUM.

GRAND CONCERT.

The Members of the Montrose Choral Society will give a Concert of Vocal and Instrumental Music, on Friday Evening, the 30th March, 1866.

PROGRAMME.

PART I.

Chorus	"Gloria"	*Mozart.*
Solo	"But Thou didst not leave his Soul in Hell"	*Handel.*
Chorus	"Lift up your Heads"	
Chorale	"Sleepers, wake! A Voice is calling"	*Mendelssohn.*
Cornet Duet	"All's well."	

PART II.

Chorus	"O! Hail us, ye Free"	*Verdi.*
Song	"Maggie's Secret"	*Claribel.*
Song	"Auld Joe Nicholson's Bonnie Nannie"	*Scott.*
Chorus	"From our Home, gracious Lord"	*Verdi.*
Song	"The Anchor's weighed"	*Braham.*
Duet	"The Gondolier's Good Night"	*Nelson.*
Song	"Cam' ye by Athol?"	*Dunkeld.*
Glee	"The Winds whistle cold"	*Bishop.*
Song	"Down the Burn, Davie"	*Crawford.*
Solo and Quartet	"Ellen Vane"	*Blockley.*
Song—Comic	(By a Gent.)	*Smith.*
Quartet	"Sleep, Gentle Lady"	*Bishop.*
Chorus	"Away, away, the Morning freshly breaking"	*Auber.*
Finale	"God save the Queen."	

Pianist.....Miss M. Mitchell.

Mr. R. H. Warren, Conductor.

PERTH DISTRICT ASYLUM, MURTHLY.

COURSE OF LECTURES FOR THE WINTER, 1867–68.

I.—Friday, 22nd November, 1867.
"Sponges and Zoophytes."

II.—Friday, 12th December, 1867.
"Jelly Fishes, Actiniæ, and Corals."

III.—Friday, 10th January, 1868.
"Star-Fishes and their Allies."

IV.—Friday, 31st January, 1868.
"Crustacea (Crabs, Lobsters, &c.)"

V.—Friday, 14th February, 1868.
"Insects and Spiders."

VI.—Friday, 28th February, 1868.
"Fishes."

Each Lecture to be illustrated by drawings, living and prepared specimens.

YORK ASYLUM.

PROGRAMME OF ENTERTAINMENTS FOR THE SESSION 1867–8.

1867.

Thursday, Oct. 10.—Vocal and Instrumental Concert.
Saturday, Oct. 12.—Meeting of Discussion Club.
Thursday, Oct. 17.—Lecture—"The Reindeer." by S. W. North, Esq., F.A.S.L.
" Oct. 24.—Magic Lantern Exhibition.
Saturday, Oct. 26.—Meeting of Discussion Club.
Thursday, Oct. 31.—Miscellaneous Reading, by J. G. Fitch, Esq., M.A., one of H.M. Inspectors of Schools.
" Nov. 7.—Ball.

1867.

Saturday, Nov. 9.—Meeting of Discussion Club.
Thursday, Nov. 14.—Lecture—"A Voyage to St. Petersburgh," by T. T. Lambert, Esq.
" Nov. 21.—Lecture—"On the Composition of some of the Heavenly Bodies," by Dr. Procter, F.C.S.
Saturday, Nov. 23.—Meeting of Discussion Club.
Thursday, Nov. 28.—Vocal and Instrumental Concert.
" Dec. 5.—Ball.
Saturday, Dec. 7.—Meeting of Discussion Club.
Thursday, Dec. 12.—Lecture—"The Occupations and Amusements of the Hindoos," by the Rev. A. Stead.
" Dec. 19.—Lecture—"Instinct and Intelligence of Animals," by the Rev. H. V. Palmer.
Saturday, Dec. 21.—Meeting of Discussion Club.
Thursday, Dec. 26.—Reading by Dr. Needham.

1868.

Thursday, Jan. 2.—Lecture—"York Minster, what it has seen and heard," by the Rev. Canon Raine, M.A., Secretary to the Surtees Society.
Saturday, Jan. 4.—Meeting of Discussion Club.
Thursday, Jan. 9.—Annual New Year's Ball.
" Jan. 10.—Servants' Ball.
" Jan. 16.—Lecture—"Among the Manganja," by the Rev. L. J. Procter, M.A., one of the two survivors of the Universities' Mission to Central Africa.
" Jan. 23.—Magic Lantern Exhibition.
Saturday, Jan. 25.—Meeting of Discussion Club.
Thursday, Jan. 30.—Lecture—"On Forest Trees," by the Rev. Canon Hey, M.A.
" Feb. 6.—Ball.
Saturday, Feb. 8.—Meeting of Discussion Club.
Thursday, Feb. 13.—Vocal and Instrumental Concert.
" Feb. 20.—Lecture—"Dr. Arnold, his character and doings," by J. G. Fitch, Esq., M.A.
Saturday, Feb. 22.—Meeting of Discussion Club.
Thursday, Feb. 27.—Ball.
" Mar. 5.—Miscellaneous Reading, by Dr. Needham.
" Mar. 12.—Vocal and Instrumental Concert.
Saturday, Mar. 14.—Meeting of Discussion Club.
Thursday, Mar. 19.—Lecture—"Spenser's Faery Queen," by the Rev. G. Rowe, M.A., Principal of the Training College.
" Mar. 26.—Ball.
Saturday, Mar. 28.—Meeting of Discussion Club.
Thursday, Apr. 2.—Lecture—"The Atlantic and Pacific Oceans," by W. Wallen, Esq.

The Lectures commence at six p.m., the Discussion Meetings at half-past six, the Balls at seven, and the Concerts at half-past seven o'clock.

APPENDIX D.

FORMS FOR REPORTS, &c.

(No. 1.)

ATTENDANTS' DAILY REPORTS.

DERBY COUNTY ASYLUM, MICKLEOVER.

Male Ward, No......*Date*.....

Beds .....
Patients in the ward at bed-time .....
Patients employed during the day { House ..... / Garden ..... / Farm ..... / Shoemakers' shop / Tailors' " / Plumbers' " / Horse-hair " }
Patients in seclusion ..... { Length of time in seclusion.

Patients who have had an attack of epilepsy .....
New patients admitted .....
Patients received from other wards .....
Patients discharged.....
Deceased .....
Escapes.....
Casualties .....
Ward attendants absent or employed out of the ward during the day .....
Temperature at 9·0 a.m. (Gallery). .....

Signature of attendant.....

WORCESTER COUNTY ASYLUM.

Daily Return.—Male Ward.

No. of Patients..... 186

Employed.	No.			Name of Patients.
Tailors and upholsterers.....		Attended chapel		Admitted.....
Shoemakers and saddlers		,, ball.....		
Carpenters and turners		,, field games ...		Removed.....
Blacksmiths, engineers, and gas makers		,, excursions		
		Under medical treatment		Escaped .....
Painters, glaziers, and plumbers		,, seclusion		
Masons, slaters, and plasterers..		Remained in bed		Dead .....
Bakers and brewers.....		Admitted		
Clerks		Removed		Under seclusion, and for period what.....
Hair and sea grass pickers		Escaped		
Assisting attendants in wards...		Empty beds		
,, gardeners				Injuries and violence to patients, and by whom
,, farm servants				

Names of patients under medical treatment.....
,, ,, having fits, and their number.....
Attendant on leave of absence for to-morrow .....

Signature.....

COUNTY OF GLOUCESTER ASYLUM.

FEMALE DIVISION, No. ATTENDANT'S EVENING REPORT,

Date *day of* 186 .

No. of patients attending chapel .....

Medical Treatment.

Names of patients having had shower baths .....
,, ,, warm ditto .....
,, ,, the wet sheet.....
,, taking medicine .....
,, in bed .....
,, refusing food .....

Recreations. Number.

No. of patients reading and writing... .....
,, ,, attending school .....
,, ,, ,, ball, musical entertainment, &c.....
,, ,, taking exercise beyond the grounds.....
Names ,, unable to walk in the airing grounds.....
,, ,, refusing ditto ditto .....
,, ,, writing letters .....

Number.

No. of patients.....
,, ,, admitted .....
,, ,, discharged .....
,, ,, transferred to other divisions .....
,, ,, received from ditto .....
Deceased o'clock in the presence of .....
Escaped .....
Attempt at escape .....

Behaviour of patients.

Injuries received by attendants or patients (of what nature) .....
Destructiveness (of what nature).....
Otherwise badly behaved (such as violence to attendants, or patients, &c.) .....

Occurrence of fits.

In seclusion.

Name Placed in, at o'clock.
Removed from, at o'clock.

The attendant, in secluding a patient, must immediately report the same to the head attendant, who will at once apply to the superintendent (or in his absence, one of the assistant medical officers) for authority to continue the seclusion. The attendant, immediately after, is to enter the same upon the slate kept in the superintendent's study for that purpose.

Employments.

Patients with	No.	Patients at	No.
Matron		Kitchen	
Storekeeper		Laundry and wash-house	
Workroom.....		Bed-making	
Needlework		Scrubbing.....	
Fancy-work		Washing culinary articles, &c.	
Knitting		Sweeping and dusting	

Names of patients refusing to attend to their ordinary occupation .....

No. of beds .....
" Vacant single rooms .....
" Vacancies in dormitories .....
" " Double-bedded rooms .....
Fresh employed .....

_____ Attendant in charge.

BROOKWOOD ASYLUM. Daily Report. Male Ward, No.____ day of _____186

Employed.	Morn.	After.	Unemployed.	Morn.	After.	Names of Patients Unemployed.
Under the gardener			Unable from excitement ...			
" farm bailiff			" depression ...			
Assisting joiner			" sickness, infirmity, or old age			
" engineers						
" in laundry						
" plumber			Able, but unwilling			
" painter			Secluded			
" tailor						
" shoemaker			Total...			
" mat-maker						
" upholsterer						
" baker			Exercising in airing court			
" bricklayer			" outer grounds			
" in domestic offices			" beyond boundaries			
Coal-carriers						
Helpers in wards						
			No. employed in useful work			
			No. engaged in recreation, &c.			
			No. totally unemployed ...			
			Total No. on Ward List...			
Total...						
Engaged at school			In bed during the day ...			
" in reading and writing			Wet or dirty by day			
" at in or out door games			Wearing locked dresses or boots			
			" strong or special dresses			
			Refusing food			
Total...			Taking medicine			
At chapel						

Admitted ..... Discharged ..... Died—State time, and in whose presence ..... Removed to or from other wards ..... Seclusion—State time, and under whose order ..... Epileptic attacks— State number of fits ..... Attendants absent— State time ..... Attendants on leave to-morrow	NAMES.	All accidents, bruises and wounds, acts of violence, attempts to escape or to commit suicide, articles lost, injured or destroyed, repairs to be executed, all special ward occurrences taking place between 6 a.m. and 8 p.m., to be fully reported. (Repairs not executed within a week, to be noticed to that effect.) Signed_____ *Attendant in charge.* *(After being filled up, this sheet is to be left in the head attendant's room by 9 p.m.)*

ESSEX COUNTY ASYLUM.

WARD NO. MALE ATTENDANT'S REPORT, 186

Number of Patients employed, and their occupations.										Attended Chapel.	Receiving Medicine.	Walked &c., beyond the Airing Court.	
Garden and Farm.	Bricklayer, Mason, Plasterer.	Carpenter, Painter, Glazier.	Picking Hair, Matting, &c.	Engineer and Smith.	Tailor.	Shoemaker.	Household Work.	Reading, Writing, Drawing, &c.	Total Number employed.			About Grounds.	Outside Grounds.

	Names of Patients Unemployed.	In Bed.	In Seclusion.	Why?
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

		No.			
Number of patients in the morning.....			Total number of patients employed		
Removed from Wards No. during the day.....			Ditto unemployed		
Received during the day			Ditto in the ward		
Deduct,—	No.				No.
Removed to Wards No.					
Discharged			Patients *removed to* other wards to sleep		
Died.....			Patients *received from* other wards to sleep		
Number remaining ...					
Number of beds made up					
" " occupied			*Signed,*		
" " empty					
Examined,					Attendant.

List of Clothing, &c., Destroyed 186

Articles, &c., Destroyed.	By whom.	Remarks.

Carpenters', Engineeers' or Bricklayers' Work, necessary to be done.

RETURN of Patients struck or injured, and other casualties.

Name of Patient struck or injured.	Nature of Injury, and how obtained.

N.B.—The knives and forks, pots and porringers, were counted by me, at o'clock, and found correct.

Temperature of Water.

Hour	Degrees.
1st time	
2nd "	
3rd "	

Attendant.

Male Ward No.

(No. 2.)

Weekly Summary of Daily Reports.

BOOTHAM ASYLUM, YORK.

Ward Attendant's Report.

For Week ending 18 . Gallery

	Su.	M.	T.	W.	Th.	F.	S.	Average.
Number of patients.....								
" " " at work in grounds								
" " " " " at farm								
" " " " " in joiner's shop...								
" " " " " " kitchen								
" " " " " " laundry.....								
" " " " " cleaning galleries								
" " " " " sewing.....								
" " " " " knitting								
" " " wet or dirty								
" " " unwell								
" " " excited								
" " " refusing food.....								
" " " requiring to be washed ...								
" " " attending chapel								
" " " " lectures, &c. ...								
" " " out beyond boundaries ...								

(No. 3.)

Night Attendants' Reports.

MONTROSE ROYAL ASYLUM.

Night Attendant's Report.

Date.	Name of Patient.	Wet.	Filthy.	Times changed.	Sick.	Visited specially.	Destructive.	Noisy.	Had Fits.
	Total								

*Attendant's Signature*_____

SUSSEX LUNATIC ASYLUM, HAYWARD'S HEATH.

_____ _____ Department.

Night Attendant's Report.

_____ day of _____ 186 .

State of the Wards.

Ward No.	Patient's Names.	Whether restless, noisy, wet, or dirty.	Number of Patients, and times taken up.

MEDICAL TREATMENT.

Ward No.	Names of Patients.	
	Taking Medicine.	Epileptic Fits. Hour of

CLOTHES SENT TO THE LAUNDRY.

Ward.	Sheets.	Water Sheets.	Blankets.				
1							
2							
3							
4							
5							
6							

The attendants were in their rooms and all lights out at P.M.

Any special remark.

(Signed) ____________

Night Attendant.

The Medical Superintendent desires that these several facts be carefully recorded here by the attendant on duty for the night.

(No. 4.)

WEEKLY SUMMARY OF NIGHT ATTENDANTS' REPORTS.

ESSEX COUNTY ASYLUM.

Ward No. Male Night Attendant's Report during the Week ending 186 .

Name.	SUNDAY.								MONDAY.								TUESDAY.								WEDNESDAY.								THURSDAY.								FRIDAY.								SATURDAY.							
	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.	Wet.	Wet and dirty.	Bedding changed, and how often.	Mattresses left dirty.	Noisy and destructive.	Found in fits, and in what position.	Received medicine, stimulants, &c.	No. of visits.

(Signed)

Night Attendant.

(No. 5.)

Chief Attendants' Reports.

ESSEX COUNTY ASYLUM.

186 .

Females.	Females.	Total Males & Females.
Number of female patients in the house in the morning		
" " admitted during the day		
Deduct,—		
" " dismissed recovered		
" " " improved		
" " " unimproved		
" " " died		
" " remaining		

Female Patients employed, and their Occupations.	Female Wards.										Total Females employed.	
	1	2	3	4	5	6	7	8	9	10		
Laundry and wash-house												
Kitchen												
Needlework and knitting												
Household work												
Reading, writing, &c.												
Total Females employed												
Total Females unemployed												
" attended chapel												
" under medical treatment { In bed												
" under medical treatment { Not in bed												
" in seclusion												
" walked, &c., about grounds												
" " in airing courts												
" " beyond grounds												

Chief Attendant's Signature

COUNTY AND CITY OF WORCESTER PAUPER LUNATIC ASYLUM.

Head Attendant's General Daily Return.

186 .

Names of patients admitted	from
" " removed	to
" " dead	
" " under medical treatment	ailments
" " " seclusion	for what period
" " " shower bath	for what period
" " escaped	from
" " having fits	number of fits
" " injuries and violence	by whom
" " dirty habits	

Attendants on leave of absence for to-morrow

Occupation.	Employed. 1st Ward.	2nd Ward.	3rd Ward.	4th Ward.	5th Ward.	Hospital.	Total.	Remarks.
Tailors								
Shoemakers								
Carpenters								
Smiths								
Upholsterers								
Painters								
Saddlers								
Masons								
Plasterers								
Slaters								
Bakers								
Brewers								
Clerks								
Plumbers								
Glaziers								
Turners								
Weavers								
Mat-makers								
Cotton pickers								
Hair do								
Oakum do								
Assisting attendants								
Do gardener								
Do farm servant								
Total								
Unemployed								
Total								
Admitted								
Removed								
Dead								
Escaped								
Attended chapel								
Do. school								
Do. ball								
Do. field games								
Under medical treatment								
Do. surgical do								
Do. seclusion								
Do. shower bath								
Wet and dirty habits								
Remained in bed								
Empty beds								

Signature, Head Attendant.

BRISTOL ASYLUM.

Male Side. Summary of Attendant's Evening Report. 186 .

	No. of Ward.	No. of Beds.	No. of Patients.	Vacancies.	Admitted.	Received from other Wards.	Sent to other Wards.	Absent.	Discharged.	Dead.	In bed all day.	Attacks of Epilepsy.		Wet and Dirty		In seclusion.	Time secluded.	Wearing ticken.	Sleeping in ticken.	Employed.																	Divine Worship.		Recreation.			Accidents.	Escapes.	Temperature.		
												Day.	Night.	Day.	Night.					Garden.	Farm.	Quarry.	Stables and Piggery.	Stokers.	Smiths.	Coal-porters.	Masons.	Tailors.	Shoemakers.	Carpenters.	Painters.	Mat-making, &c.	Wash-house.	Ward-helpers.	Stores and Cellars.	Kitchen.	Bakehouse and Brewhouse.	Total.	At Chapel.	At prayers.	Out-door exercise.	Beyond the gates.	Evening amusements.	Evening reading.			Day-rooms.	Corridors.	Dormitories.
	1																																													
	2																																													
	3																																													
	4																																													
	5																																													
	6																																													
	7																																													
	8																																													
Infirmary.....																																														
Workshop Ward																																														
Total.....																																														

Head Attendant.

(No. 6.)

Weekly Summary of Chief Attendants' Reports.

BROADMOOR ASYLUM.

Male Division.

Return for the week ending _____ 186.

Number of Patients in Asylum.	Number employed.
Number employed in garden and farm	
,, ,, wards	
,, ,, laundry	
,, ,, kitchen	
,, ,, store-room	
,, ,, engine-house	
,, ,, carrying coals	
,, as shoemakers	
,, ,, tailors	
,, ,, carpenters	
,, ,, bricklayers	
,, ,, painters	
,, ,, blacksmiths	
,, ,, bakers	
,, ,, mat-makers	
,, ,, mattress-makers	
,, ,, mop-makers	
,, ,, tinmen	
,, ,, ...	
,, ,, ...	
,, in sundry work	

Have attended Chapel.

Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.

In Seclusion.

Date of seclusion.	Cause.	Time.	Date of seclusion.	Cause.	Time.

In Restraint.

Date of restraint.	Cause.	Time.	Date of restraint.	Cause.	Time.

Dangerously Suicidal Patients.

Severely Epileptic Patients.

Requisitions not complied with.

Unable to wash and dress themselves.

Wet and Dirty Patients.

Accidents.

Improving Patients.

Observations.

Chief Attendant.

FORM OF WEEKLY REPORTS BY HEAD-ATTENDANTS OR MATRONS IN LUNATIC ASYLUMS, drawn up by one of the English Commissioners in Lunacy, for the Report on Colonial Hospitals and Asylums, and issued by the Colonial Office.

1. State of wards.
   „ furniture and bedding.
2. Number of patients restrained.....
   „ „ secluded .....
   „ „ wearing locked .....
   „ „ or strong dresses .....
   „ „ confined to bed.....
   „ „ „ to the house .....
   „ „ „ airing courts .....
   „ „ „ premises.....
   „ „ unemployed .....
   „ „ not associated at meals .....
   „ „ who do not attend church .....
   „ „ who do not attend meetings for recreation ...
   „ „ who do not wash, dress, or feed themselves...
   „ „ who are wet, or wet and dirty .....

} And why

(No. 7.)

EXTRA WARD RETURNS.

BROOKWOOD ASYLUM.

Female No. Ward.

A List of Articles made and repaired during the Week ending 186 .

Names of Articles.		M.	T.	W.	Th.	F.	S.	Total	Names of Articles.		M.	T.	W.	Th.	F.	S.	Total
Aprons and pinafores	Made ...								Pocket-handkerchiefs ...	Made ...							
	Repaired									Repaired							
Articles knitted and netted	Made ...								Sheets	Made ...							
	Repaired									Repaired							
Bed-ticks	Made ...								Shifts.....	Made ...							
	Repaired									Repaired							
Blankets	Repaired								Shirts.....	Made ...							
Bolster ticks	Made ...									Repaired							
	Repaired								Stays	Made ...							
Bonnets.....	Made ...									Repaired							
	Repaired								Strong rugs	Made ...							
Boots and shoes ...	Bound...									Repaired							
Counterpanes	Repaired								Table-cloths	Made ...							
Drawers.....	Made ...									Repaired							
	Repaired								Tea-cloths, dusters, &c	Made ...							
Flannel jackets.....	Made ...									Repaired							
	Repaired								Towels	Made ...							
Flannel shifts	Made ...									Repaired							
	Repaired								Women's day caps .	Made ...							
Gowns	Made ...									Repaired							
	Repaired								Do. night ...	Made ...							
House flannels	Made ...									Repaired							
Men's day caps.....	Made ...								Women's stockings .	Made ...							
	Repaired									Repaired							
Men's stockings ...	Made ...									Made ...							
	Repaired									Repaired							
Men's working frocks.....	Made ...									Made ...							
	Repaired									Repaired							
Neckerchiefs.....	Made ...									Made ...							
	Repaired									Repaired							
Night-gowns.....	Made ...									Made ...							
	Repaired									Repaired							
Petticoats	Made ...									Made ...							
	Repaired									Repaired							
Pillow-cases	Made ...									Made ...							
	Repaired									Repaired							

_____ Attendant.

ESSEX LUNATIC ASYLUM.

WARD No.

Stock List—Attendants' use.

Bedding.

Bedstead .....
Hair mattress .....
Straw ditto .....
Counterpanes .....
Blankets .....
Sheets .....
Pillow .....
„ case .....
Chamber .....
Round towel .....
Bath ditto .....
Piece carpet .....

Furniture.

Chair .....
Dressing table .....
Chest of drawers .....
Wash-hand stand .....
„ jug .....
„ basin .....
Soap dish .....
Looking glass .....
Poker .....
Shovel .....
Tongs .....
Fender .....
Table cloth .....

Sundries.

Knife and fork .....
Plates .....
Tea spoon .....
„ cup and saucer .....
„ pot .....
Slop basin .....
Sugar ditto .....
Cream jug .....
Kettle .....
Candlestick .....

_____ Steward or Matron. _____ Attendant.

N.B.—The attendants are not allowed to wear, or to keep in their bed-rooms, any clothes issued for the use of the patients, nor to have any bedding there which is not included in the above list.

ESSEX LUNATIC ASYLUM.

WARD No. FEMALE.

Stock List. Patients' Use.

Bedding.

Bedsteads .....
Cribs .....
Pillows .....
„ cases .....
Blankets .....
Sheets .....
„ water .....
Mattresses, hair .....
„ straw .....
Rugs, coloured .....
Ditto, ticking .....
Ditto, white .....
Chambers .....
Round towels .....
Bath ditto .....
Water beds .....

Furniture.

Chairs .....
„ arm .....
„ easy .....
Tables, round .....
„ dining .....
„ recess .....
„ scullery .....
Table covers .....
„ cloths .....
Benches .....
Wardrobe .....
Night chairs .....
Couches .....
Couch covers .....
Chair cushions .....
Forms .....
Lavatory glasses .....
Chimney ditto .....
Fenders .....

Clothing.

Dresses, print .....
„ check .....
„ ticking .....
Aprons, check .....
„ harden .....
Petticoats, jean .....
„ linsey .....
„ flannel .....
Stays, jean .....
„ harden .....
Chemises, linen .....
„ flannel .....
Caps, day .....
„ night .....
Boots, leather .....
„ cloth .....
„ canvas .....
Shoes, leather .....
Stockings .....
Handkerchiefs .....
Bed gowns .....
Bonnets .....
Shawls .....
Pinafores .....

Hardware.

Scissors .....
Dustpans .....
Tin hand bowls .....
Pair carvers .....
Steel .....
Patients' knives .....
„ forks .....
Pots .....
Porringers .....
White plates .....
Tin ditto .....
Meat dish and cover .....
Vegetable dish and cover ...
Pie dishes .....
Soup cans .....
„ ladles .....
Vegetable scoop .....
Cans, beer .....
„ water .....
„ 2-quart and under ...
Saucepans .....
Tea kettles .....
Salts .....
Pepper boxes .....
Spoons .....
Poker .....
Tongs .....
Shovel .....
Coal scuttle .....
„ scoop .....
Dust baskets .....
Candle boxes .....
Corkscrews .....

Brushes, Brooms, and Sundries.	Brushes, shoe	Spoon ditto .....
Combs, large	„ clothes	Knife board .....
„ small	Brooms, hair	Salt box .....
Brushes, hair	„ bass	Knife and fork box .....
„ scrubbing	Wash leathers	House cloths .....
„ hand	Mops	Dish ditto .....
„ stove	Pails	Tubs .....
„ black lead	Thermometers	Mats .....
„ whitewash	Clothes baskets	Domino boxes .....
	Bread ditto	Draught boards .....
	Dinner trays	Pack of cards .....

_____ *Matron.*

_____ } *Attendants.*
_____

BROOKWOOD ASYLUM.

Requirement List to Steward.

For Week ending _____

_____ Ward.	Condemned.	Destroyed.	Lost.	Total.
Bedding and Furniture—				
Clothing—				
Utensils—				

_____ *Attendant in charge.*

Wants Book.

_____ } *Attendants.*
_____
_____

Ward No.

Saturday, 186

	lb.	oz.		No.
Butter	.....	.....	Emery-paper	.....
Cheese	.....	.....	Matches	.....
Tea	.....	.....	House-flannel	.....
Sugar	.....	.....	Chambers	.....
Pepper	.....	.....	Plates	.....
Whiting	.....	.....	Brooms, hair	.....
Soap	.....	.....	„ bass	.....
„ soft	.....	.....	Brushes, scrubbing	.....
Soda	.....	No.	„ hand	.....
Candles	.....	.....	„ stove	.....
Blacking, cakes	.....	.....	„ blacklead	.....
Blacklead, packets	.....	.....	Tobacco	.....
Wash-leathers	.....	.....	Snuff	.....
Mops	.....	.....	.....	.....
Hearthstones	.....	.....	.....	.....
Bath-bricks	.....	.....	.....	.....

N.B.—Unless the worn-out articles are sent to the Steward, in the basket, for the weekly stores new ones will not be issued until the following week.

MALE WARD. No. } Articles sent to and received from Laundry during the Week, commencing Monday 186

CLOTHING.	Arrears brought forward		Weekly.		Foul Linen.												Arrears carried forward.	
					Mon.		Tues.		Wed.		Thur.		Fri.		Sat.			
	Weekly.	Foul.	Sent.	Ret.	Sent.	Ret.	Sent.	Ret.	Sent.	Ret.	Sent.	Ret.	Sent.	Ret.	Sent.	Ret.	Weekly.	Foul.
CLOTHING.																		
Aprons																		
Flannel jackets																		
" drawers																		
Frocks, ticking																		
Shirts																		
Hose																		
Jackets																		
Waistcoats																		
Trowsers																		
Handkerchiefs																		
Neckerchiefs																		
BEDDING.																		
Blankets																		
Counterpanes																		
Mattresses, hair																		
" straw																		
Pillows, hair																		
" ticks																		
" cases																		
Rugs, coloured																		
" strong																		
Sheets, linen																		
" waterproof																		
Towels round																		
" bath																		
SUNDRIES.																		
Table cloths																		
Carpets																		
Chair covers																		
Sofa covers																		

(No. 8.)

EXTRA DIET-TABLE FOR WARD.

GLOUCESTER LUNATIC ASYLUM.

EXTRA DIET TABLE.

Date.	Names.	Meat Dinner.	6 oz. Mutton Chop.	1 pt. Soup.	1 pt. Broth.	1 pt. Beef Tea.	Poultry.	6 oz. Fish.	Eggs.	½ pt. Milk.	1 oz. Butter.	1 pt. Cider.	½ pt. Ale.	1 pt. Porter.	Coffee.	Tea.	Gruel.	Arrowroot.	Sago.	Pudding.	2 oz. Brandy	2 oz. Gin.	2 oz. Red Wine.	2 oz. White Wine.	1 pt. Beer.	3 oz. Bacon.	lb. Lump Sugar.	lb. Moist Sugar.	lb. Bread.	lb. Cheese.	Onions.	Egg Pudding.					Remarks.

Summary of Extra Diet Tables.

BRISTOL ASYLUM.

Summary of Sick and extra Diet List.

Male Side. _____ _____ 186 .

No. of Ward.	No. in Ward.	Meat Dinner.	Minced Meat Dinner.	Fowl.	Eggs.	Mutton Broth.	Beef Tea.	Milk.	Arrowroot.	Rice Pudding.	Barley Water.	Lemonade.	Gruel.	Oranges.	Extra Beer.	Porter.	Cheese.	Extra Bread.	Butter.	Wine. Port.	Wine. Sherry.	Spirits. Brandy.	Spirits. Gin.	Spirits. Whisky.	Tea.	Sugar.				Remarks.
					No.	pints.	pints.	pints.	oz.	oz.	pints.	pints.	pints.	No.	pints.	pints.	oz.	oz.		oz.	oz.	oz.	oz.	oz.	oz.	oz.				
1.....																														
2.....																														
3.....																														
4.....																														
5.....																														
6.....																														
7.....																														
8.....																														
Infirmary																														
Working Ward																														
Attendants																														
Total...																														

_____ _____ Superintendent.

Ward Diet Roll.

EDINBURGH ROYAL ASYLUM.

Diet Roll.

Eighth Male Gallery.

No. of Patients, _____ 18

Diet.	No.	Names of those getting Cordials.	Porter, pints.	Port, oz.	Sherry, oz.	Whisky, oz.
Attendants' diet						
Breakfast.						
Coffee						
Tea						
Porridge						
New milk						
Total...						
Dinner.						
Ordinary						
Steak						
Do. broiled						
Rice						
Sago						
Arrowroot						
Total...						
Supper.						
Coffee						
Tea						
Porridge						
New milk						
Bread and milk ...						
Total...						
Beef tea						
Extra bread						
Custard						
Eggs						
		Total.....				

Checked by

Signature _____

Summary of Ward Diet Rolls.

COUNTY AND CITY OF WORCESTER PAUPER LUNATIC ASYLUM.

Diet Schedule for 18

	No. of attendants.	No. of patients.	Dinner ordinary.	Tea.	Coffee.	Rice and milk.	Beef tea.	Arrowroot.	Sago.	Mince-meat.	Bread.	Butter.	Cheese.	Bacon.	New milk.	Eggs.	Gruel.	Extra bread.	No. for luncheon.	Chops.	Meat. lbs. oz.	Pudding. lbs. oz.	Beer. pts.	Brandy. oz.	Sherry. oz.	Gin oz.	Port oz.	Ale. pts.
Medical Officer																												
Matron																												
Head attendant and storekeeper																												
Servants' hall																												
Laundry																												
Kitchen																												
N. attendant																												
N. nurse																												
Female ward 1																												
" 2																												
" 3																												
" 4																												
" 5																												
" 8																												
" 9																												
Male ward 1																												
" 2																												
" 3																												
" 4																												
" 5																												
Total																												

Storekeeper.

APPENDIX E.

Asylum Medical Statistics.

(No. 1.)

Forms Recommended by the English Commissioners in Lunacy.

Table I.—Showing the Admissions, Re-admissions, Discharges, and Deaths, during the year 1865.

	Male.	Female.	Total.
In the Asylum January 1st, 186			
Admitted for the first time during the year ..... (Male. Fem. Total.)			
Re-admitted during the year ..... (Male. Fem. Total.)			
Total under care during the year			
Discharged or removed—			
Recovered ..... (Male. Fem. Total.)			
Relieved ..... (Male. Fem. Total.)			
Not improved ..... (Male. Fem. Total.)			
Died ..... (Male. Fem. Total.)			
Total discharged and died during the year			
Remaining in the Asylum, 31st December, 1865 (inclusive of absent on trial—males and females			
Average numbers resident during the year			

TABLE II.—Showing the Admissions, Re-admissions, Discharges, and Deaths, from the opening of the Asylum to the present date, December 31, 1865.

	Male.	Female.	Total.
Persons admitted during the period of years			
Re-admissions			
Total of cases admitted			
Discharged or removed—			
Recovered			
Relieved			
Not improved			
Died			
Total discharged and died during the years			
Remaining, 31st December, 1865			
Average numbers resident during the years			

	Male.	Fem.	Total.
Recovered			
Relieved			
Not improved			
Died			

TABLE III.—Showing the Admissions, Discharges, and Deaths: with the mean Annual Mortality and proportion of Recoveries per cent. of the Admissions, for each year since the opening of the Asylum.

Years.	Admitted.			Discharged.									Died.			Remaining 31st Dec., 1865.			Average Numbers Resident.			Per centage of Recoveries on Admissions.			Per centage of Deaths on Average Numbers Resident.		
				Recovered.			Relieved.			Not Improved.																	
	Males.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Mean.	Male.	Fem.	Mean.
From the opening of the Asylum to 31st December, 1859																											
1860																											
1861																											
1862																											
1863																											
1864																											
1865																											
Totals (years) and Averages.																											

TABLE IV.—Showing the History of the Annual Admissions since the opening of the Asylum, with the Discharges and Deaths, and the Numbers of each Year remaining on the 31st December, 1865.

Year.	Admitted.					Of each Year's Discharged and Died in 1865.												Total Discharged and Died of each Year's Admissions.												Remaining of each Year's Admissions, 31st Dec., 1865.		
	New Cases.		Relapsed Cases.			Recovered.			Relieved.			Not Improved.			Died.			Recovered.			Relieved.			Not Improved.			Died.					
	Males.	Fem.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.
1859.....																																
1860.....																																
1861.....																																
1862.....																																
1863.....																																
1864.....																																
1865.....																																
Total ...																																

Summary of the Total Admissions, 1859-65.	Males.	Females.	Total.
Percentage of cases recovered			
" relieved			
" not improved			
" dead			
" remaining			

TABLE V.—Showing the Causes of Death during the Year.

Causes of Death.*	Male.	Female.	Total.
CEREBRAL OR SPINAL DISEASE:			
Apoplexy and paralysis			
Epilepsy and convulsions			
General paralysis			
Maniacal and melancholic exhaustion or decay			
Inflammation and other diseases of the brain, softening, tumours, &c.			
THORACIC DISEASE:			
Inflammation of the lungs, pleuræ, and bronchi			
Pulmonary consumption			
Disease of the heart, &c.			
ABDOMINAL DISEASE:			
Inflammation of the stomach, intestines, or peritoneum			
Dysentery and diarrhœa			
Fever			
Erysipelas			
Cancer			
General debility and old age			
Suicide and accidents			
Total.....			

* Add in foot-note the number ascertained by post-mortem examination.

TABLE VI.—Showing the length of residence in those discharged Recovered, and in those who have Died during the year.

Length of Residence.	Recovered.			Died.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 month						
From 1 to 3 months						
„ 3 „ 6 „						
„ 6 „ 9 „						
„ 9 „ 12 „						
„ 1 „ 2 years						
„ 2 „ 3 „						
„ 3 „ 5 „						
„ 5 „ 7 „						
„ 7 „ 10 „						
„ 10 „ 12 „						
„ 12 „ 15 „						
„ 15 „ 20 „						
„ 20 „ 30 „						
„ 30 „ 40 „						
Total						

(No. 2.)

FORMS RECOMMENDED IN THE REPORT ON COLONIAL HOSPITALS AND LUNATIC ASYLUMS.

General Statistical Form for all Lunatic Asylums.

Table 1.

	Numbers remaining on January 1st of past year.	Admitted during subsequent year.	Average Inmates during such year.	Died.	Discharged.			Average stay of those dead or discharged during the year.	Number of those who having entered before such year still remain.
					a Cured.	*b* Relieved	*c*. Unimproved.		
Males									
Females									
Total									

Table 2.

	Remained over from previous year.		Admitted during the year.		Discharged.				Died.		Average stay of those dead or discharged during the year.	
					a. Recovered.		*b*. Relieved.					
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Mania												
Melancholia												
Dementia												
General paralysis												
Epilepsy												
Other forms												

Table 3.—Obituary for the Year.

Number in Register or Name.	Date of last Admission and of Death.	Age at Death and whether Single, or Married, or Widowed, before Admission.	Mental and Bodily State on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	Post Mortem Examination and Weight of Organs in Ounces Avoirdupois.
e.g., No. 10...	*e.g.*, Last admitted, March 1, 1863. Died, &c.	*e.g.*, 50 Married.	*e.g.*, Mania, wound not healed.	*e.g.*, 6 months. Wound on head.		
No. 11...						
No. 12...						

Additional Statistical Form for large Lunatic Asylums.

Table 1.—Age in relation to Form.

Age at Admission.	Mania.		Melancholia.		Dementia.		Genera Paralysis.		Epilepsy.		Other Forms.		Total of each.	
	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.
Under 20 years														
From 20 to 25 years														
25 to 30 „														
30 to 35 years														
35 to 40 „														
40 to 45 years														
45 to 50 „														
50 to 55 years														
55 to 60 „														
60 to 65 years														
65 to 70 „														
70 years and upwards														
Total														
Deduct re-admissions.....														
Total of Patients.....														

TABLE 2.—Ages in relation to Result.

Age at Admission.	Recovered.		Relieved.		Died.		Unchanged.		Total.	
	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.	Single.	Married or Widowed.
Under 20 years										
From 20 to 25 years										
25 to 30 „										
30 to 35 years										
35 to 40 „										
40 to 45 years										
45 to 50 „										
50 to 55 years										
55 to 60 „										
60 to 65 years										
65 to 70 „										
Over 70 years.....										
Total.....										
Deduct readmissions										
Total of patients.....										

TABLE 3.—Form in relation to probable causes.

	Probable causes, *e.g.*									
	Bodily injury.	Grief.	Drink.	&c.	&c.					Total.
Mania										
Melancholia										
Dementia										
General paralysis										
Epilepsy										
Other forms										
Totals.....										

TABLE 4.—Form in relation to Education.

	Educated.	Uneducated.
Mania		
Melancholia		
Dementia		
General paralysis		
Epilepsy		
Other forms		
Totals		

TABLE 5.—Form in relation to previous Occupation or Profession.

	Occupation, *e.g.*									
	Sailors.	Soldiers.	Carpenters.	&c.	&c.					Totals.
Mania										
Melancholia										
Dementia										
General paralysis										
Epilepsy										
Other forms										
Totals										

TABLE 6.—Form in relation to Duration of Malady and to Result.

	Cured.						Dead.						Relieved.						Unchanged.						Totals.					
	Under 1 month.	Under 3 months.	Under 1 year.	Under 2 years.	Under 5 years.	Under 10 years.	Over 10 years.	Under 1 month.	Under 3 months.	Under 1 year.	Under 2 years.	Under 5 years.	Under 10 years.	Over 10 years	Under 1 month.	Under 3 months.	Under 1 year.	Under 2 years.	Under 5 years.	Under 10 years.	Over 10 years.	Under 1 month.	Under 3 months.	Under 1 year.	Under 2 years.	Under 5 years.	Under 10 years.	Over 10 years.	Under 1 month.	Under 3 months.	Under 1 year.	Under 2 years.	Under 5 years.	Under 10 years.	Over 10 years.
Mania																																			
Melancholia																																			
Dementia																																			
General paralysis																																			
Epilepsy																																			
Other forms																																			
Totals																																			

TABLE 7.—Duration of Malady before Treatment in relation to Result.

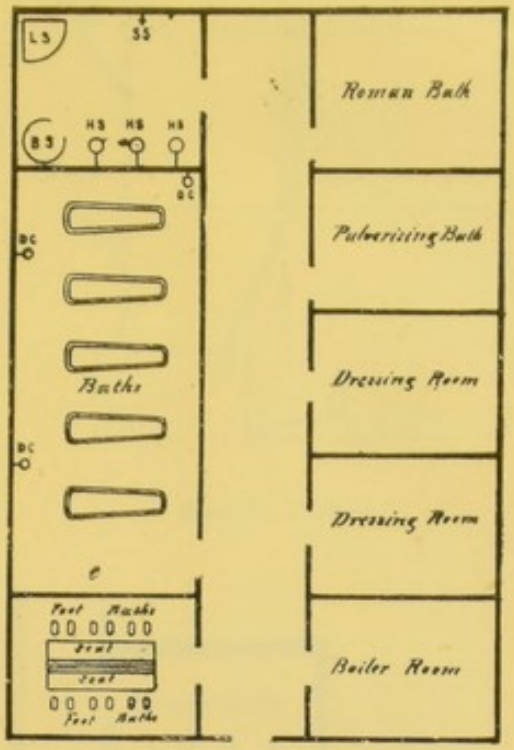
Duration of present attack before treatment.	Cured.						Died.						Relieved.						Unchanged.						Totals.					
	In less than 1 month.	In less than 3 months.	In less than 1 year.	In less than 2 years.	In less than 5 years.	In less than 10 years.	Over 10 years.	In less than 1 month	In less than 3 months.	In less than 1 year.	In less than 2 years.	In less than 5 years.	In less than 10 years.	Over 10 years.	In less than 1 month.	In less than 3 months.	In less than 1 year.	In less than 2 years.	In less than 5 years.	In less than 10 years.	Over 10 years.	In less than 1 month.	In less than 3 months.	In less than 1 year.	In less than 2 years.	In less than 5 years.	In less than 10 years.	Over 10 years.	In less than 1 month.	In less than 3 months.	In less than 1 year.	In less than 2 years.	In less than 5 years.	In less than 10 years.	Over 10 years.
Under 1 week—																														
a. This being first attack																														
b. This not being first attack.																														
Under 2 weeks—																														
a. This being first attack																														
b. This not being first attack.																														
Under 1 month—																														
a. This being first attack																														
b. This not being first attack.																														
Under 6 months—																														
a. This being first attack																														
b. This not being first attack.																														
Under 1 year—																														
a. This being first attack																														
b. This not being first attack.																														
Over 1 year—																														
a. This being first attack																														
b. This not being first attack.																														
Totals																														

These additional tables must be filled up in two sets, one for males the other for females.

To each set of tables a warning should be added against entering the same patient several times under different heads (as under mania and under epilepsy) which would confuse the totals.

Sydney: Thomas Richards, Government Printer.—1868.

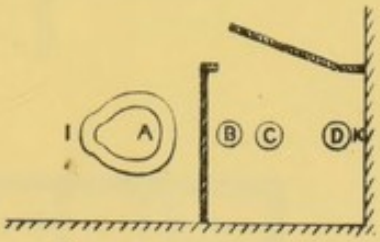
Fig 1



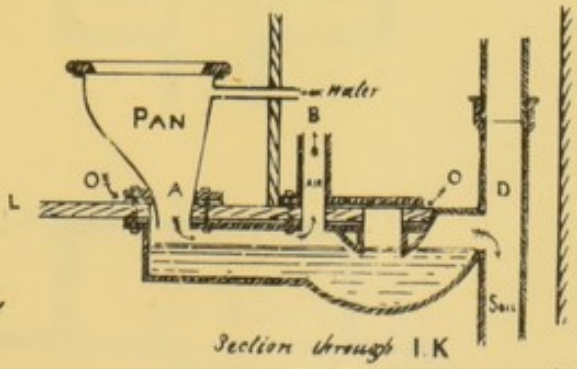
Reference
- D.C. Douch Cocks
- B.S. Barrel Shower
- H.S. Head Shower
- L.S. Lumbar Shower
- S.S. Spinal Shower
- OO Foot Pans Fixed

Plan of Baths at Erreux

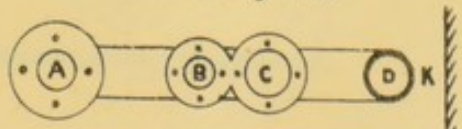
Fig 2



Plan of Water Closet



Section through I.K



Reference
- B Ventilating Pipe
- L Floor
- O Rubber Gaskets

(Sig. 30)

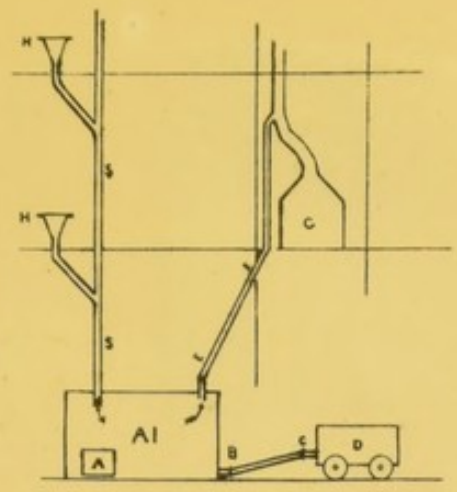
Plan of Water Closet, Washington.

Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

Fig 3

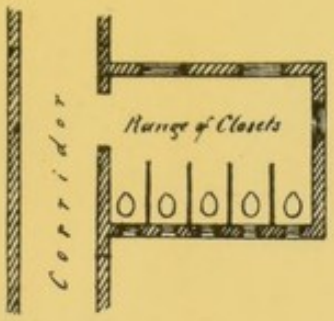
Reference

- A. Opening for cleaning chamber
- A1 Chamber or Cesspool
- B Valve
- C Connection
- D Air tight vessel on wheels
- E E Foul air duct
- G Fireplace
- H H Closet seats
- S S Soil pipe



Système D'Arcet

Fig 4



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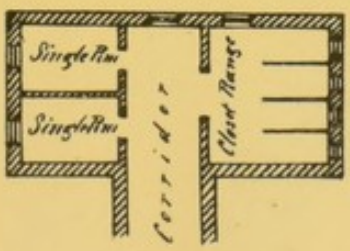

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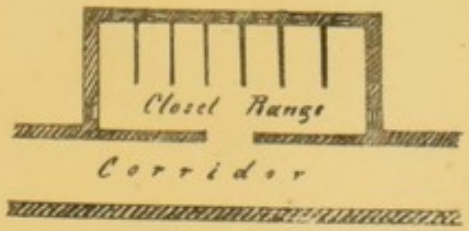
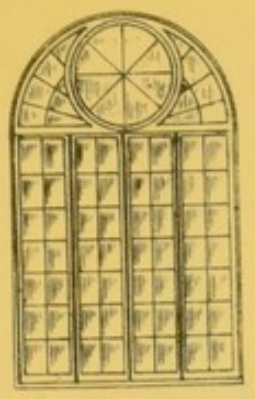


(Sig. 30.)

Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

Fig. 7



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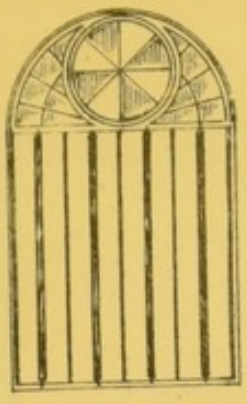
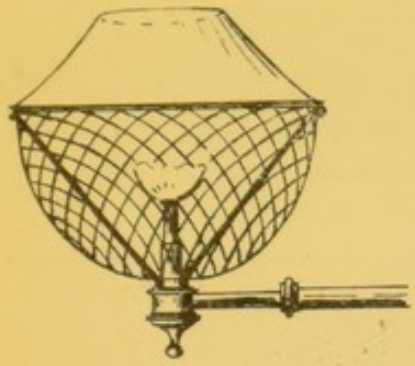


Open

Fig. 8



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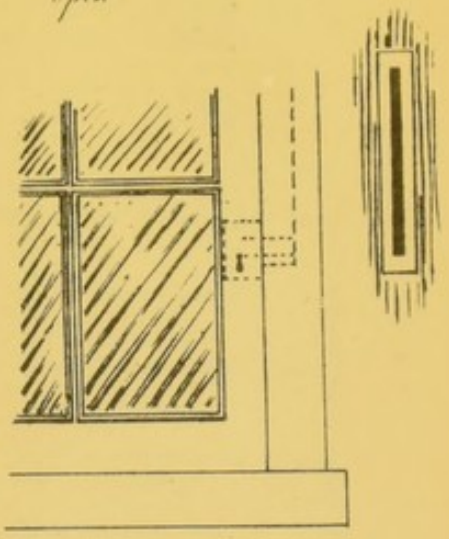
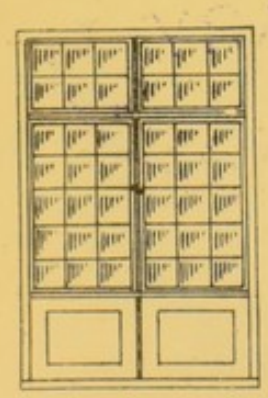


Fig. 10



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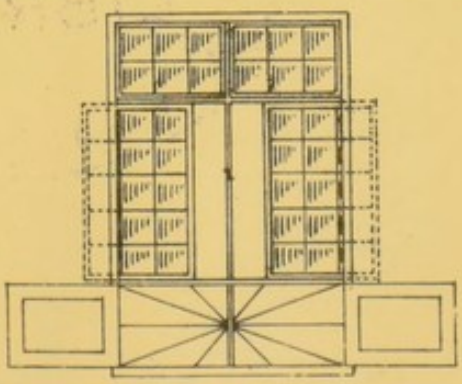


Open

Photo-lithographed at the Govt. Printing Office
Sydney, N.S.W.

Fig 11

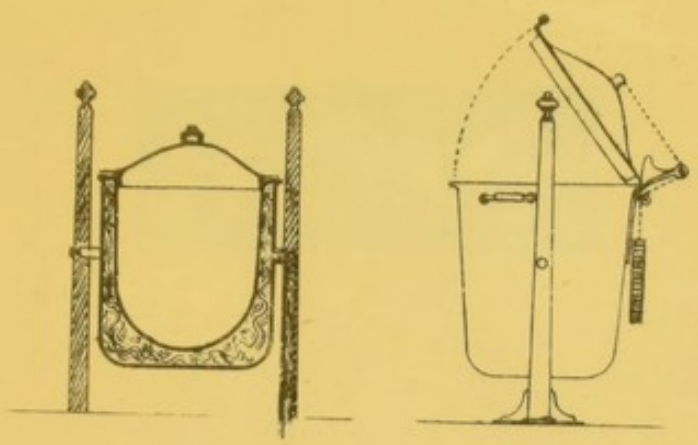
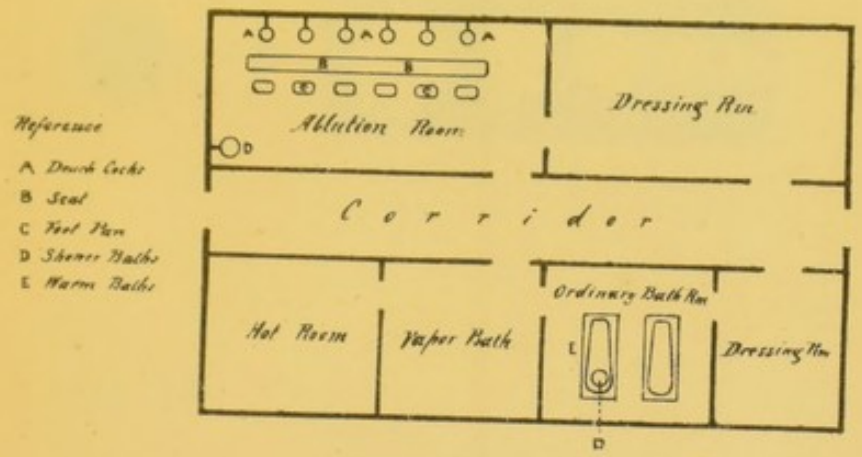


Fig 15



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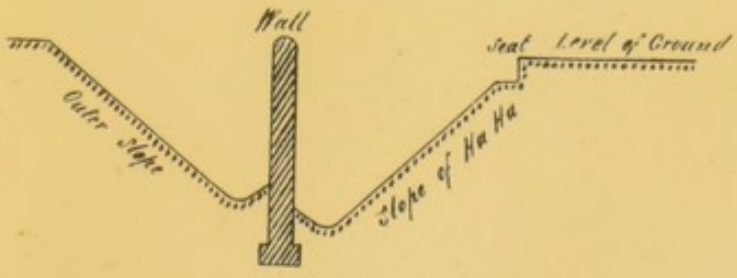
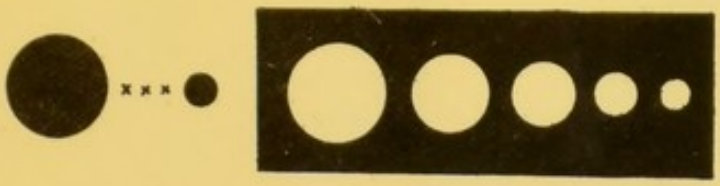


(*Sig.* 30.)

Photo-Lithographed at the Govt Printing Office
Sydney, N.S.Wales.

Fig 12

Fig 13



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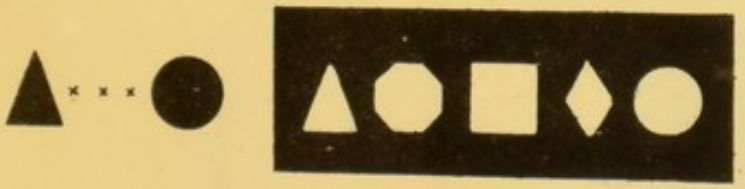
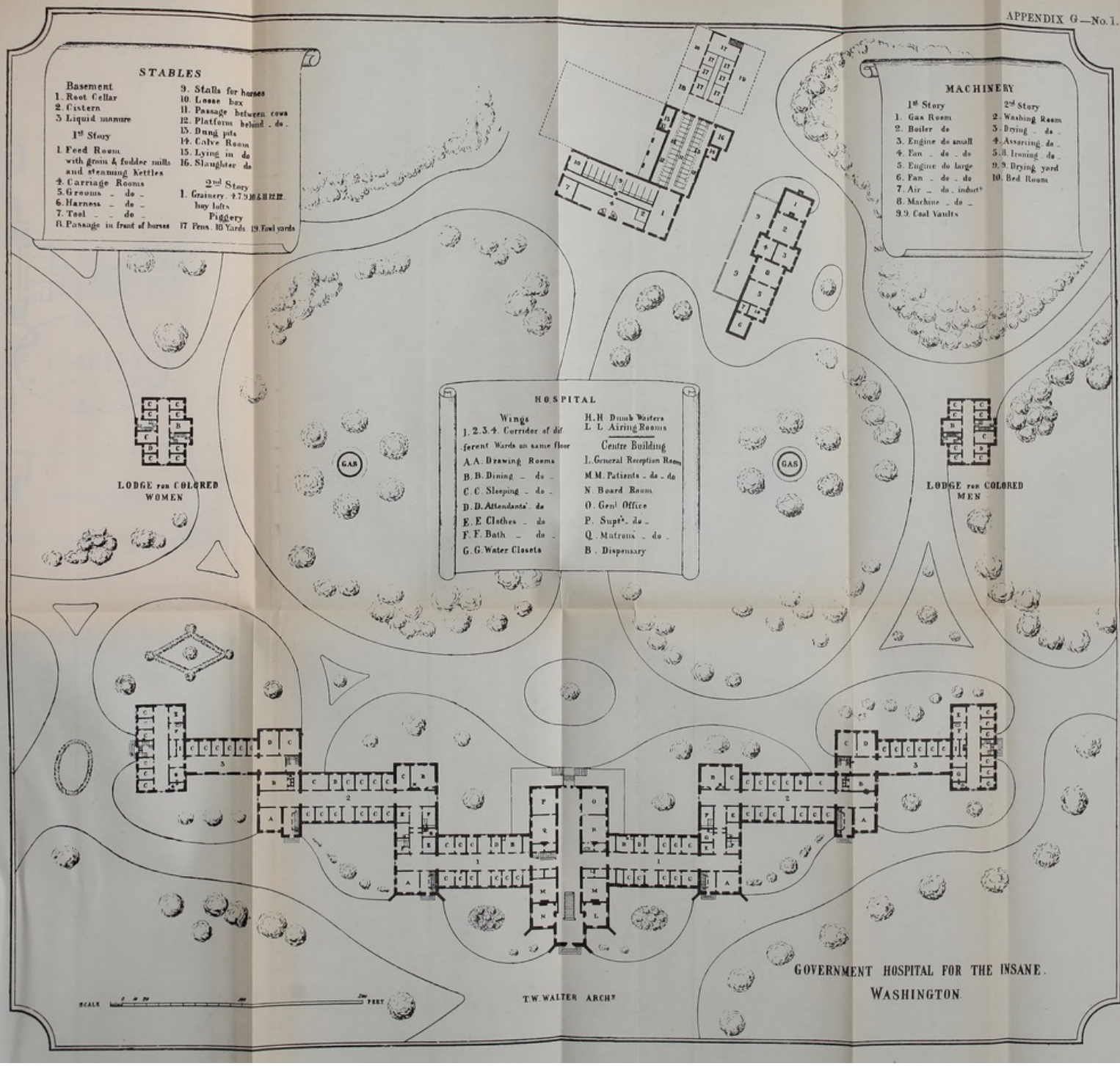
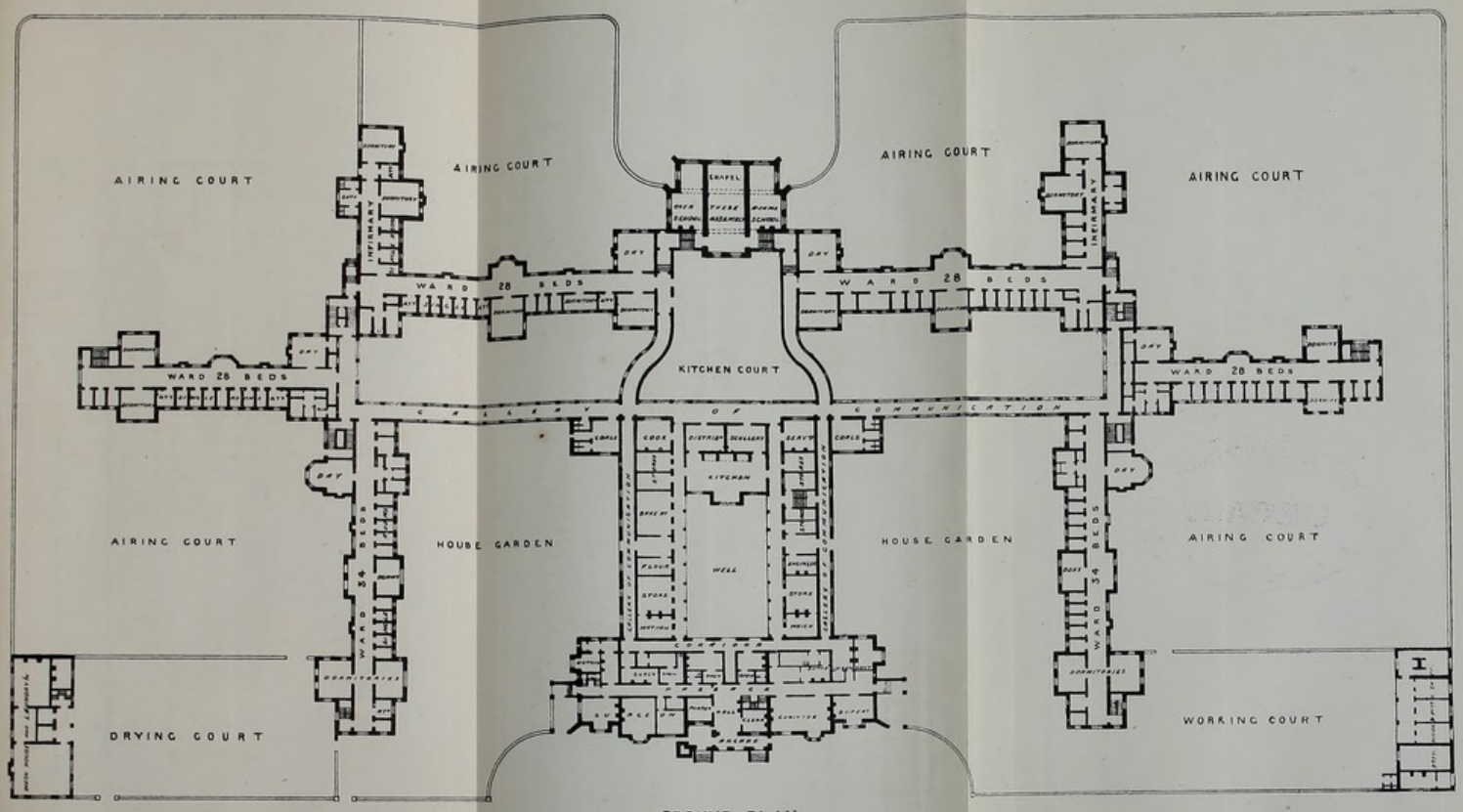


(*Sig.* 30.)

Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales


STABLES
Basement
1. Root Cellar
2. Cistern
3. Liquid manure
1st Story
1. Feed Room with groom & fodder mills and steaming Kettles
4. Carriage Rooms
5. Grooms - do -
6. Harness - do -
7. Tool - - do -
8. Passage in front of horses
9. Stalls for horses
10. Loose box
11. Passage between cows
12. Platform behind - do -
13. Dung pits
14. Calve Room
15. Lying in do
16. Slaughter do
2nd Story
1. Granery. 2.3.4.5.6.7.8.9.10.11.12. hay lofts
Piggery
17. Pens. 18. Yards. 19. Fowl yards
MACHINERY
1st Story
1. Gas Room
2. Boiler do
3. Engine do small
4. Fan - do - do
5. Engine do large
6. Fan - do - do
7. Air - do - induct
8. Machine - do -
9.9. Coal Vaults
2nd Story
2. Washing Room
3. Drying - do -
4. Assorting do -
5.8. Ironing do -
9.9. Drying yard
10. Bed Rooms
HOSPITAL
Wings
1.2.3.4. Corridor of different Wards on same floor
A.A. Drawing Rooms
B.B. Dining - do -
C.C. Sleeping - do -
D.D. Attendants' do
E.E Clothes - do
F.F. Bath - do -
G.G. Water Closets
H.H Dumb Waiters
L L Airing Rooms
Centre Building
I. General Reception Room
M.M. Patients - do - do
N. Board Room
O. Genl Office
P. Supt's - do -
Q. Matrons - do -
B. Dispensary
GAS
GAS
LODGE FOR COLORED WOMEN
LODGE FOR COLORED MEN
SCALE
FEET
T.W. WALTER ARCHT
GOVERNMENT HOSPITAL FOR THE INSANE.
WASHINGTON.

ESSEX ASYLUM



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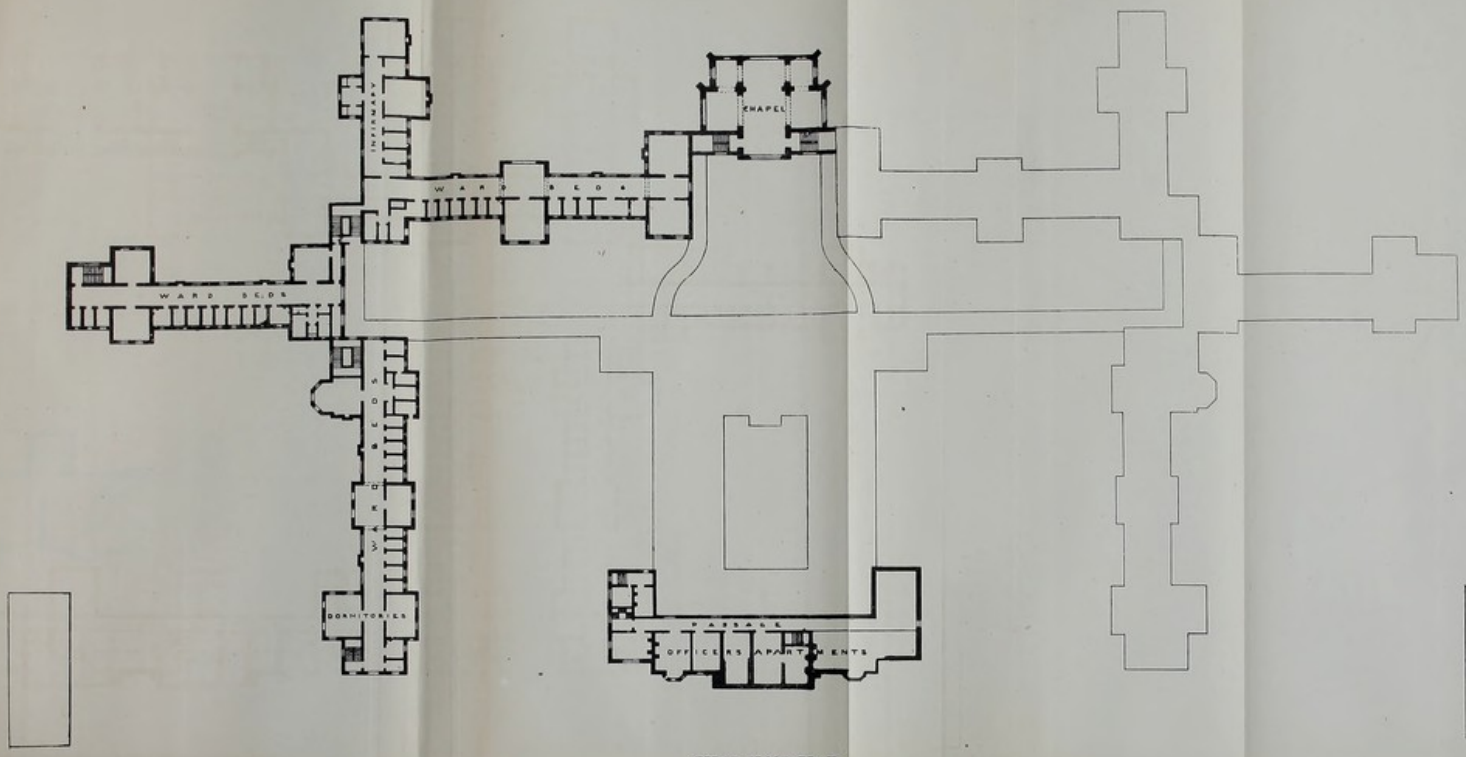
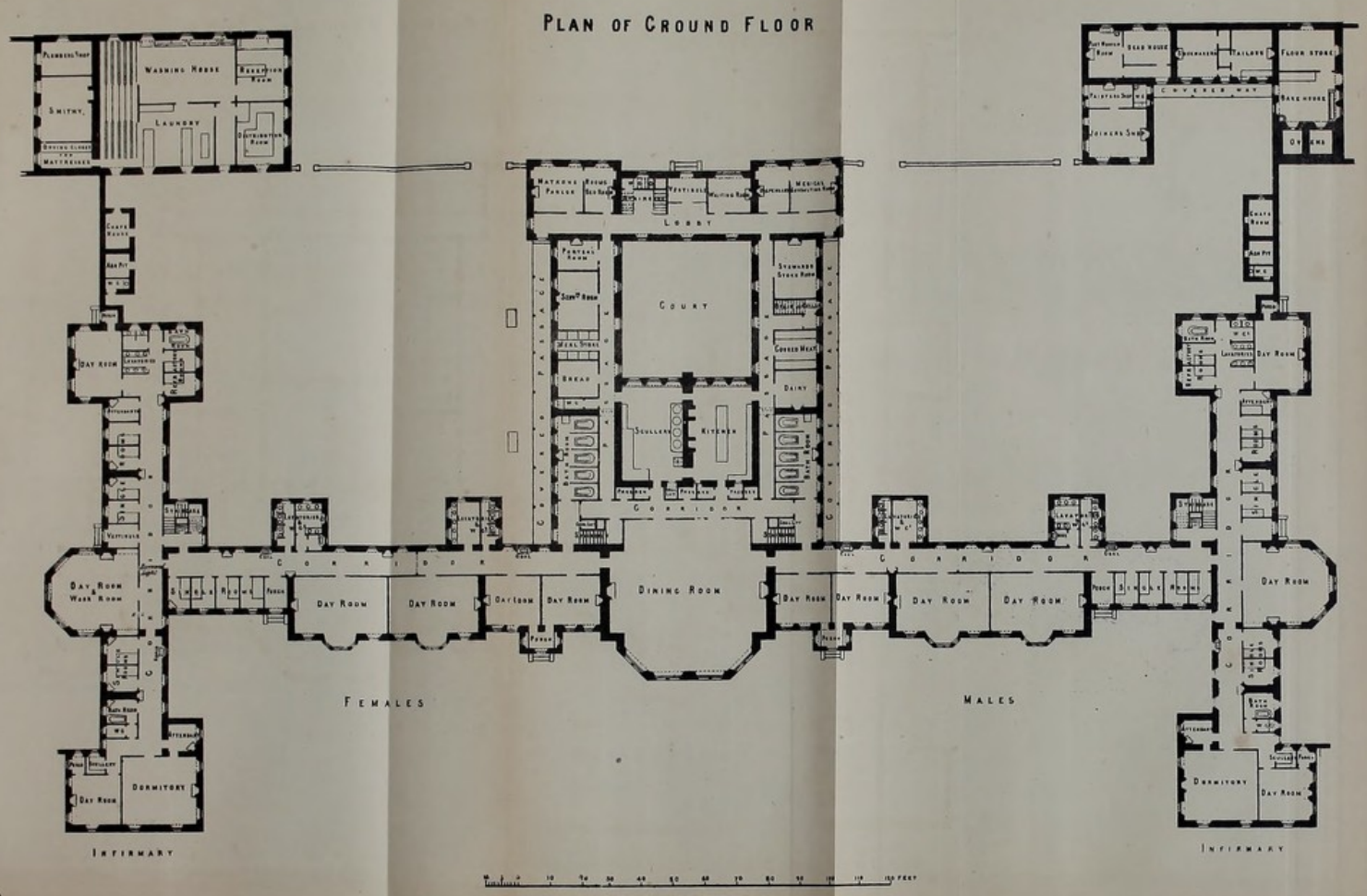
ESSEX ASYLUM.



FIRST FLOOR PLAN.

(*Sig.* 30.)

PERTH DISTRICT LUNATIC ASYLUM



(*Sig.* 30.)

Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

PERTH DISTRICT LUNATIC ASYLUM

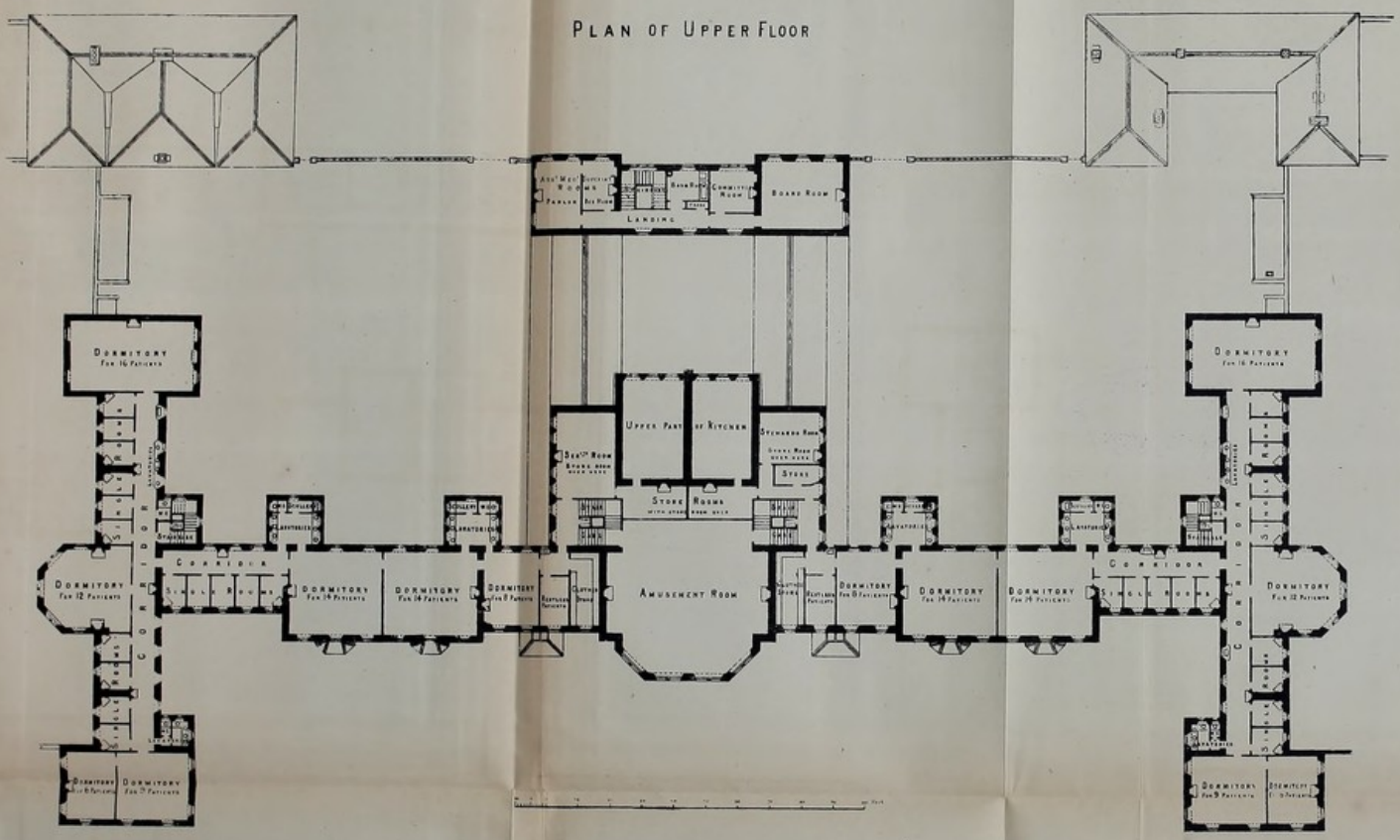
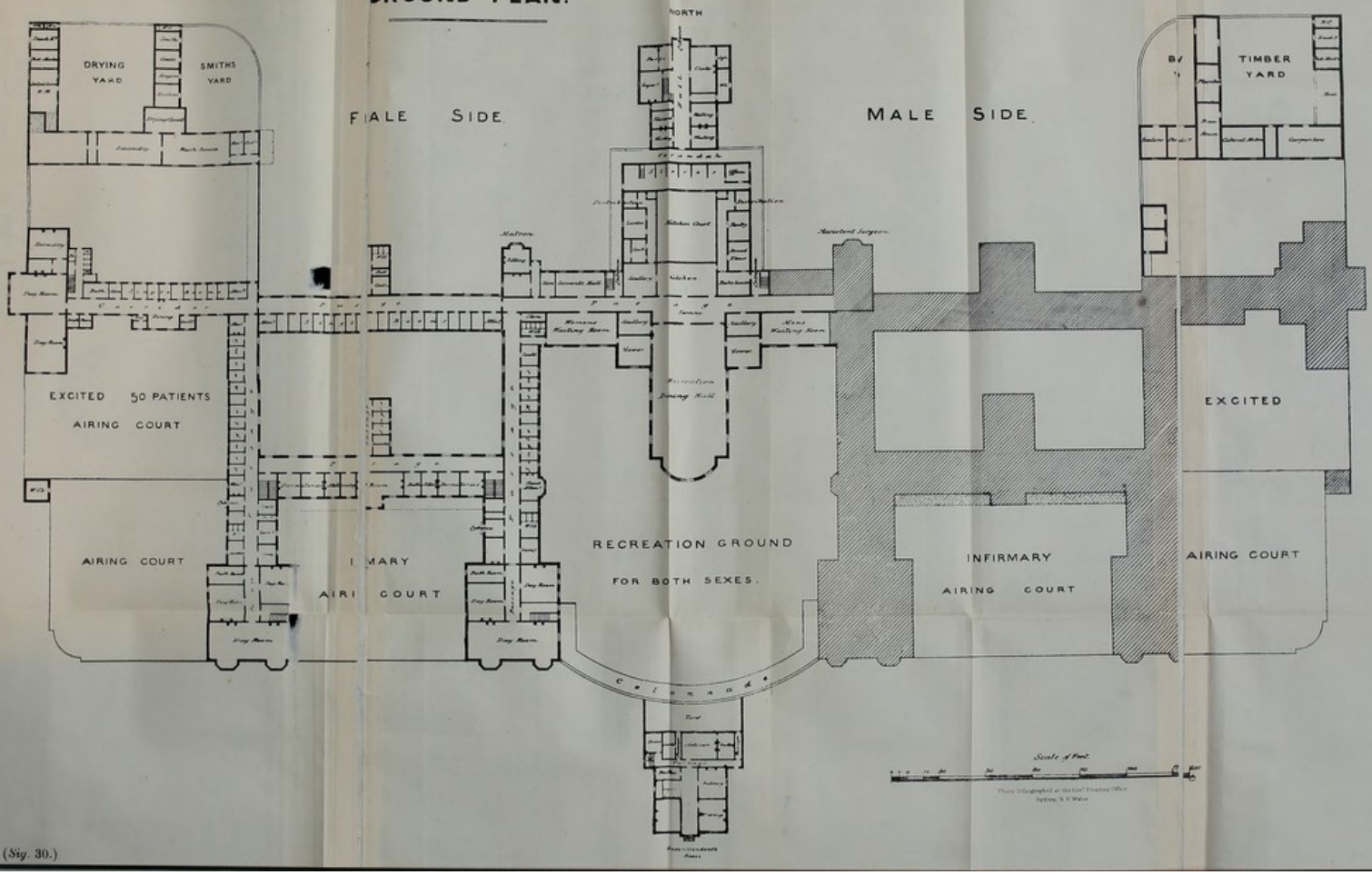


Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

(*Sig.* 30.)

CHESHIR ASYLUM.

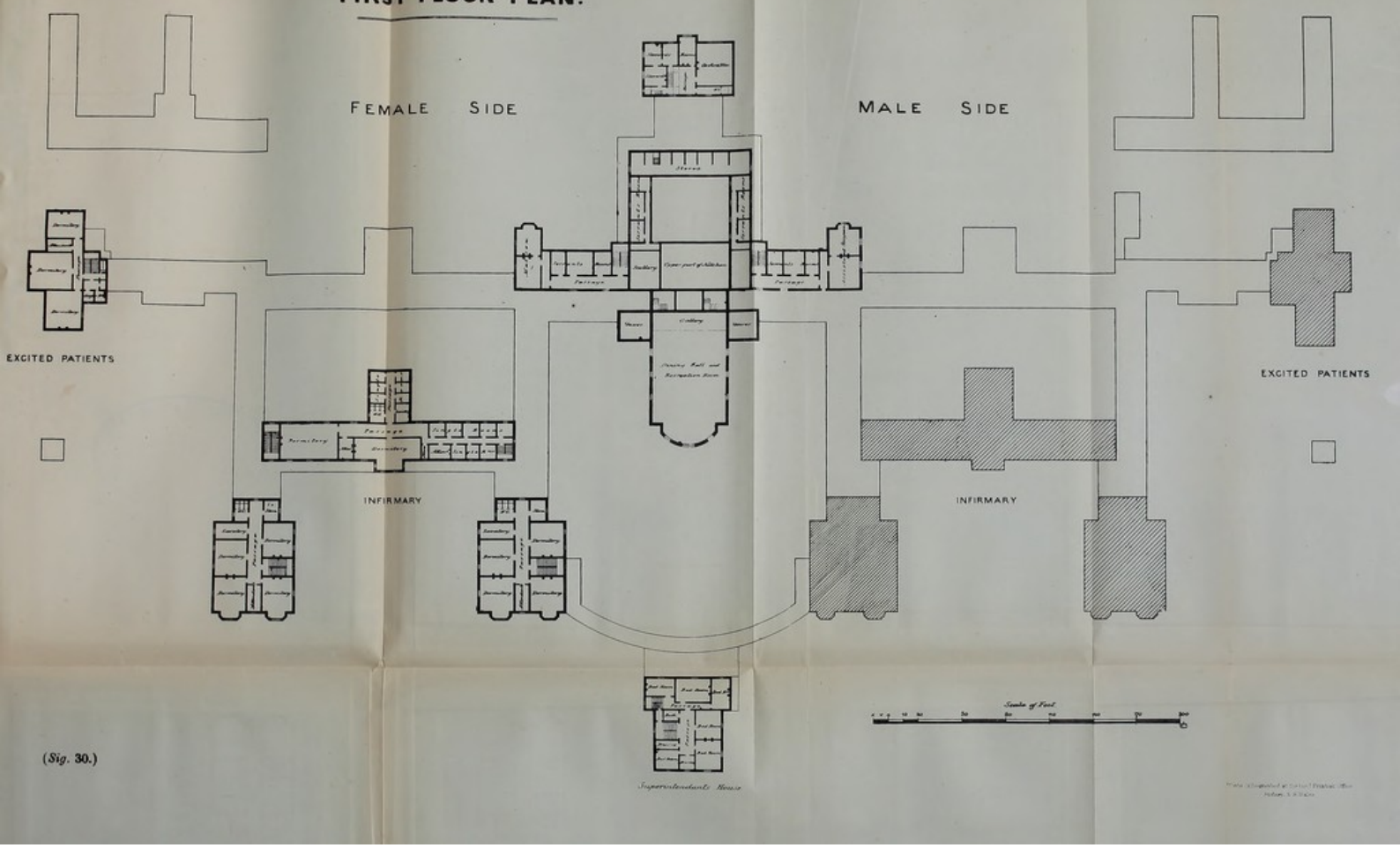
GROUND PLAN.



(Sig. 30.)

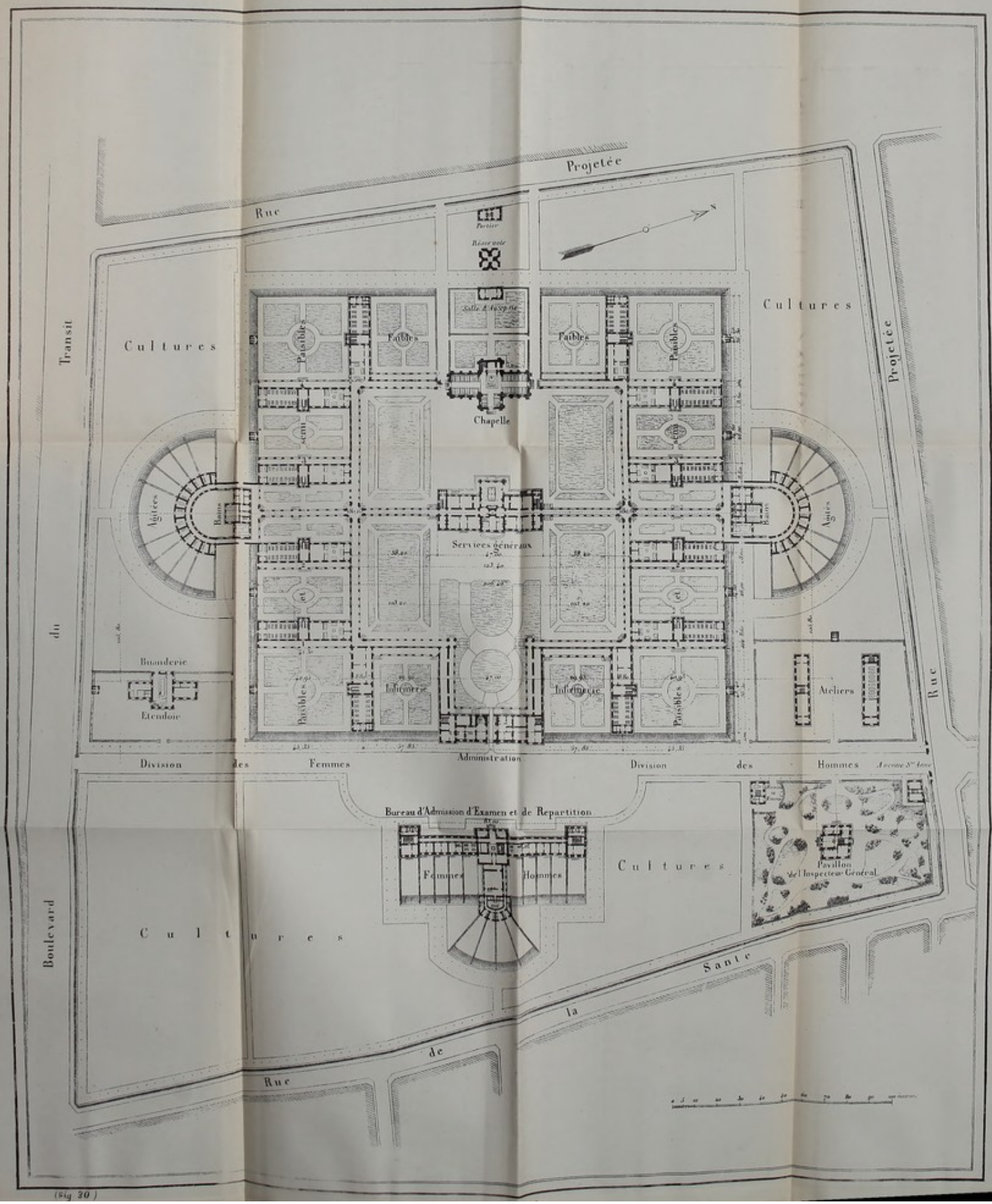
CHESHIRE ASYLUM

FIRST FLOOR PLAN.



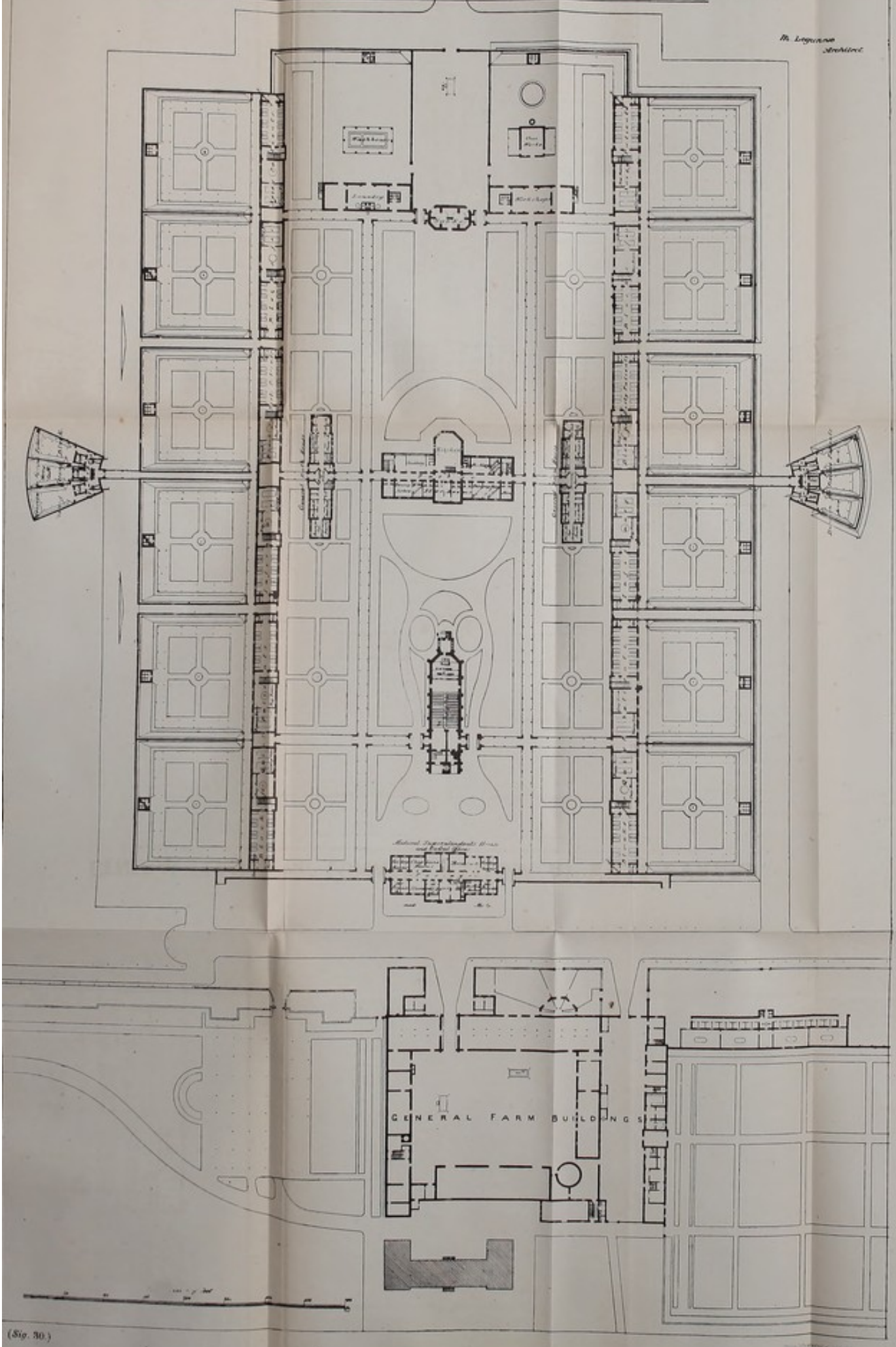
(*Sig.* 30.)

ASILE CLINIQUE D'ALIÉNÉS.



(Fig 30)

GENERAL PLAN OF THE LUNATIC ASYLUM AT VILLE EVRARD.

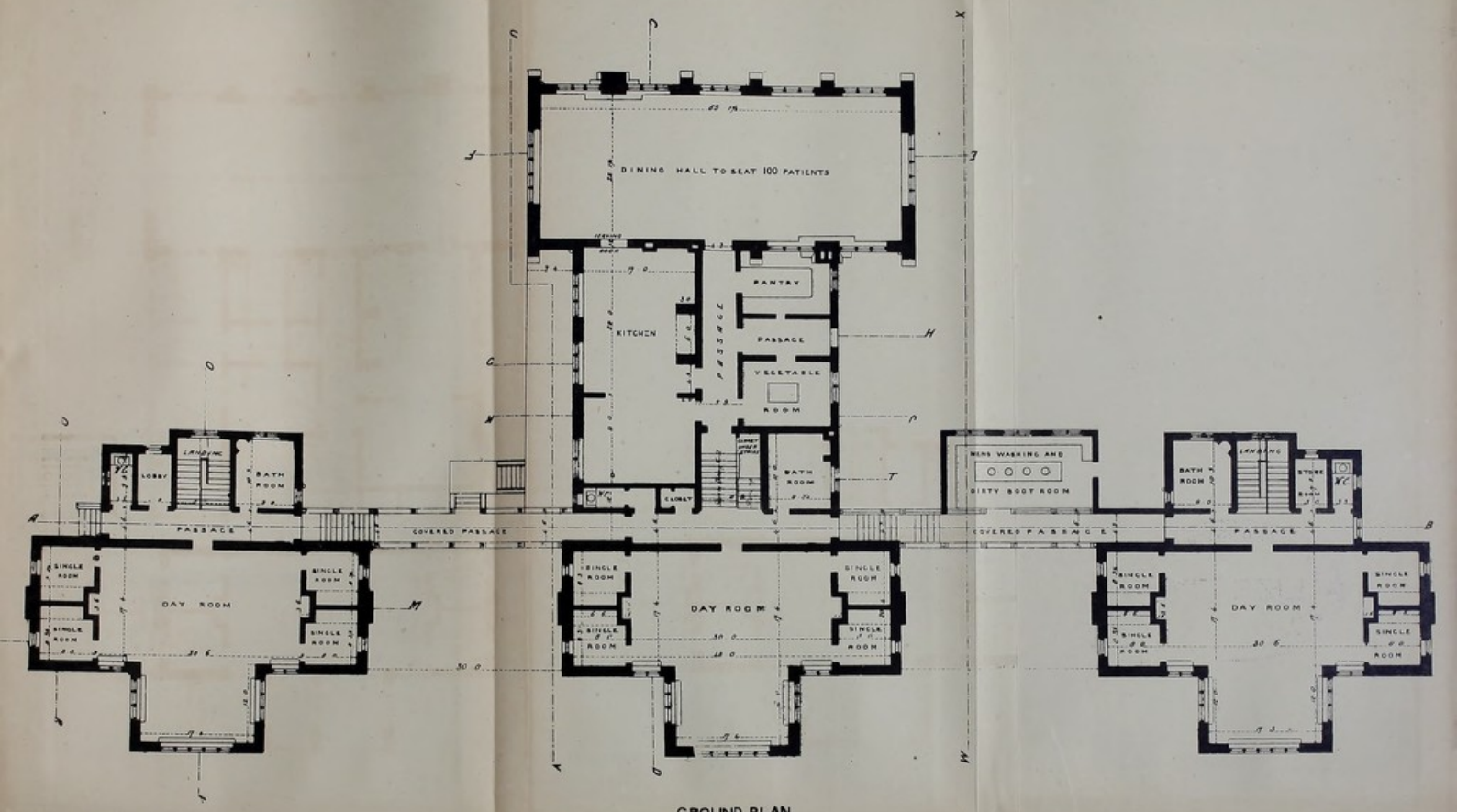


(Sig. 30.)

COUNTY LUNATIC ASYLUM
BRENTWOOD, ESSEX.

ADDITIONAL BUILDINGS.

APPENDIX G.—No. 10.



GROUND PLAN

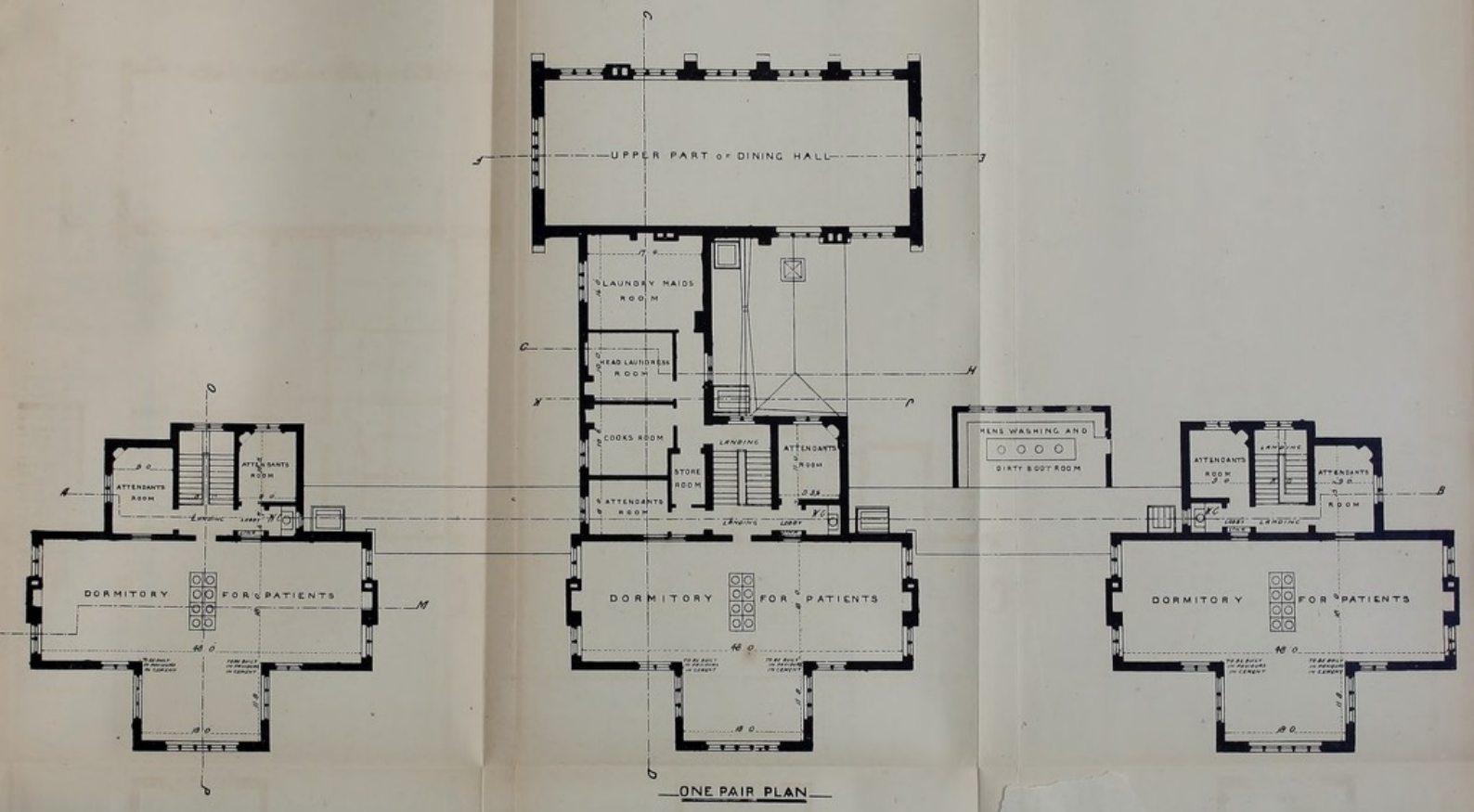
(Sig. 30.)

Scale for 1 2 3 10 20 30 40 50 Feet

Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

COUNTY LUNATIC ASYLUM
BRENTWOOD, ESSEX.

ADDITIONAL BUILDINGS FOR FEMALE PATIENTS.



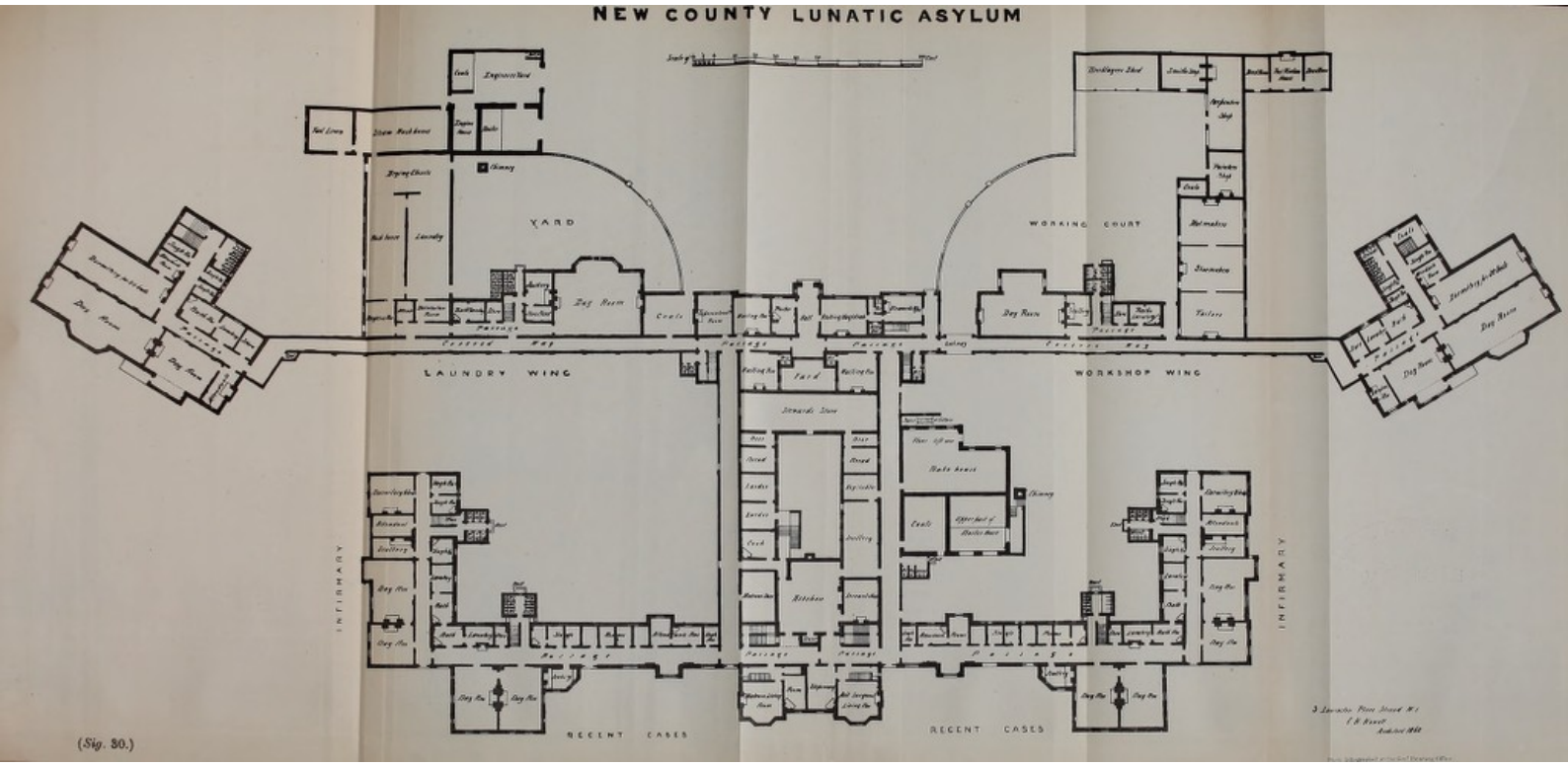
ONE PAIR PLAN

(*Sig.* 30.)

Scale of Feet 0 5 10 20 30 40 50 Feet

Photo-Lithographed at the Govt. Printing Office, Sydney, N.S.W.

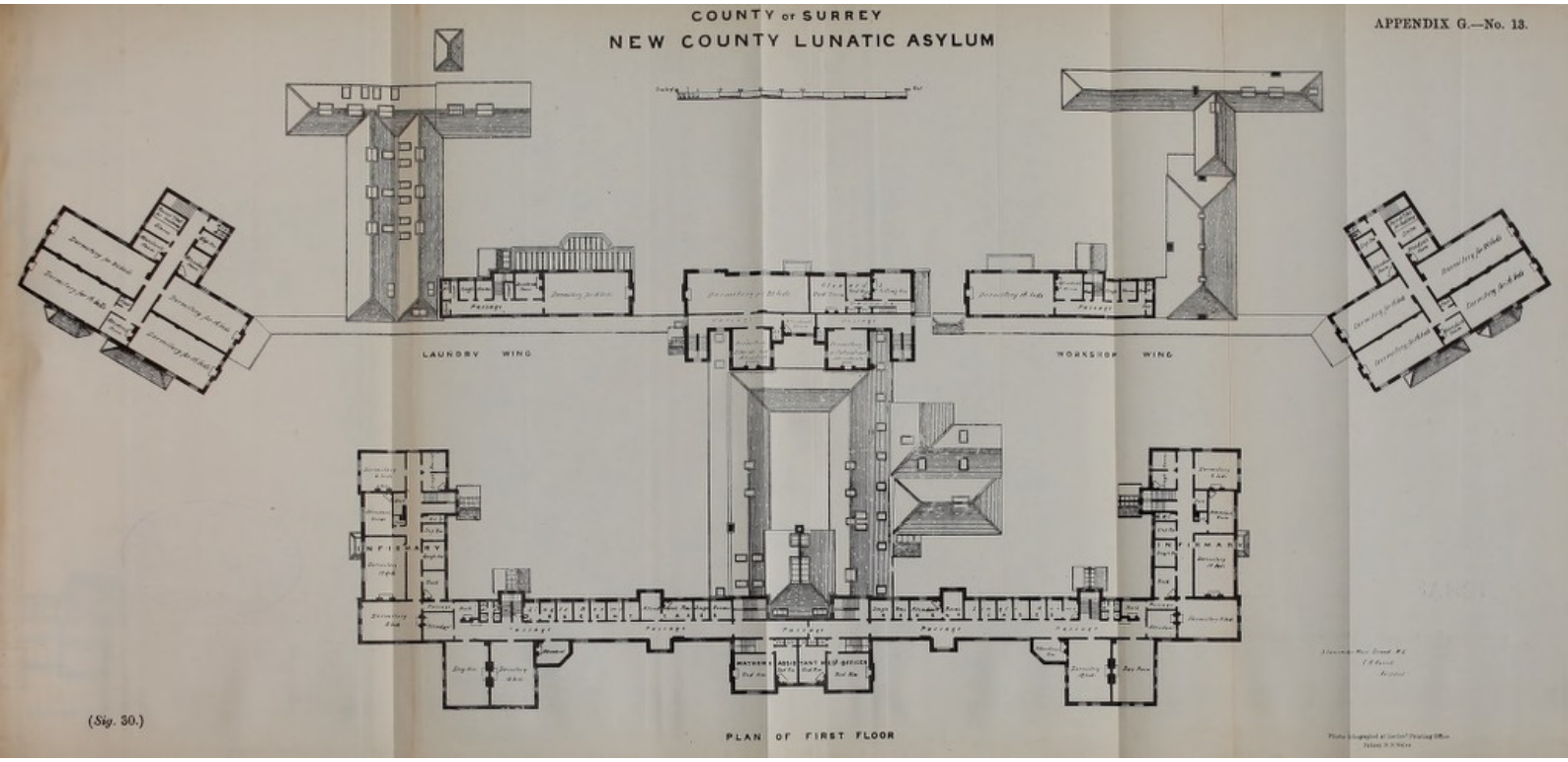
NEW COUNTY LUNATIC ASYLUM



(Sig. 30.)

COUNTY OF SURREY

NEW COUNTY LUNATIC ASYLUM

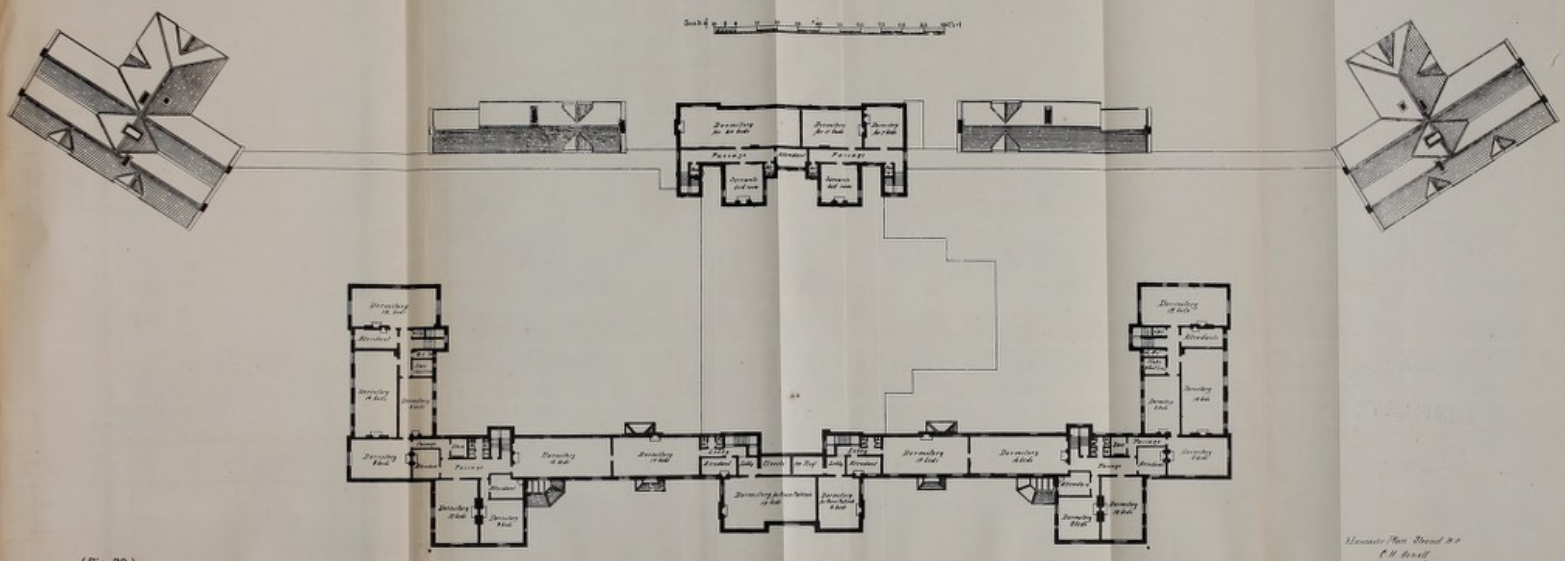


(*Sig.* 30.)

PLAN OF FIRST FLOOR

COUNTY OF SURREY

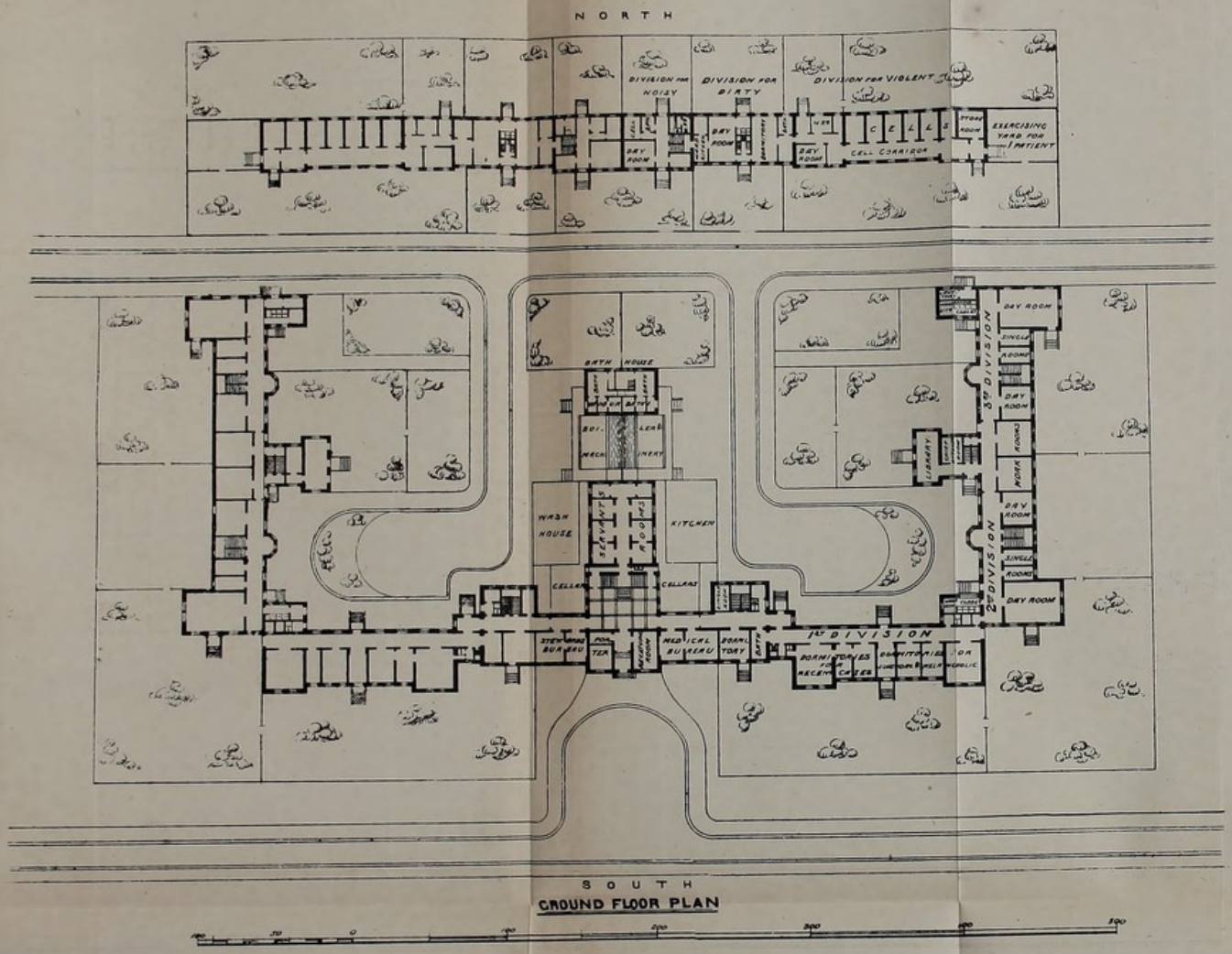
NEW COUNTY LUNATIC ASYLUM



(Sig. 30.)

PLAN OF SECOND FLOOR

ASYLUM AT FREIDRICHSBURGH NEAR HAMBURG

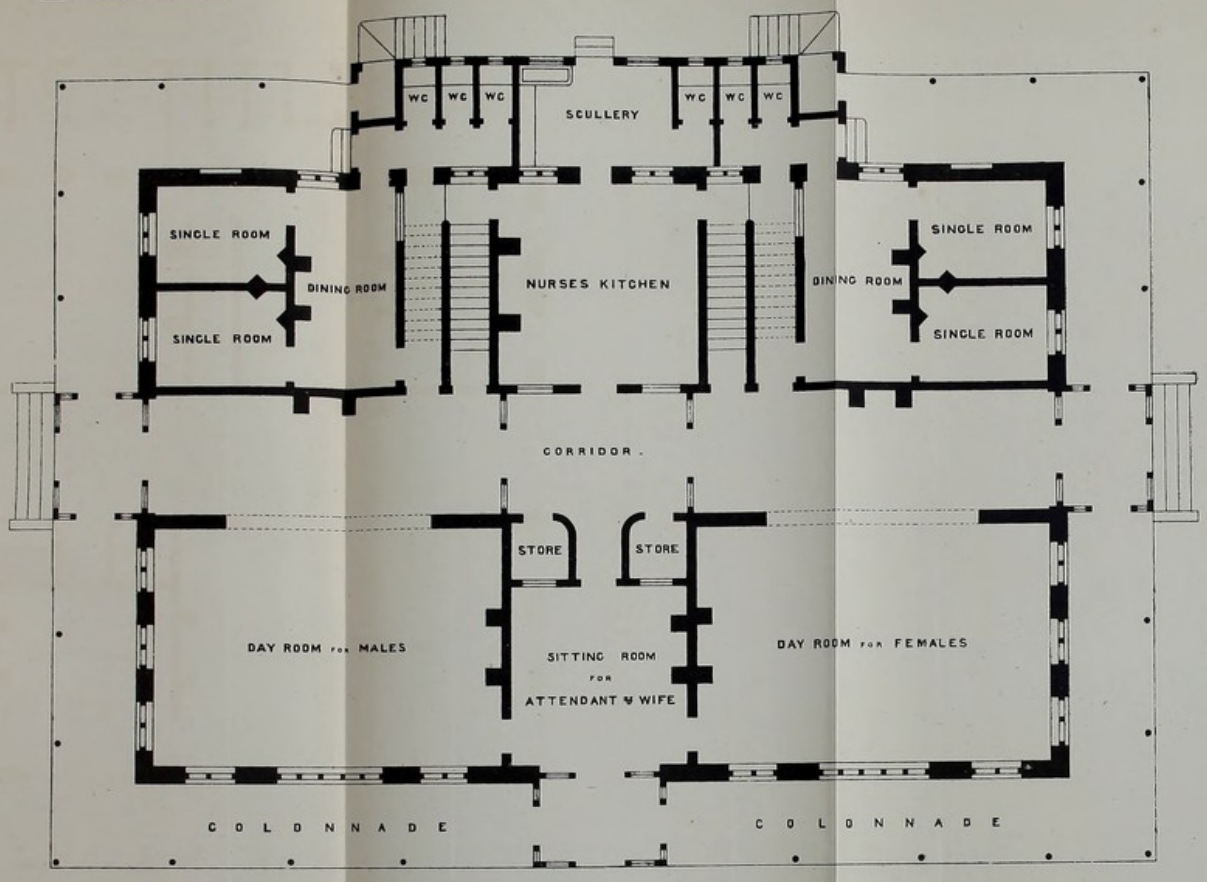


GROUND FLOOR PLAN

(Fig. 30.)

Photo-lithographed at the Gov.t Printing Office
Sydney, N.S.Wales

COUNTY ASYLUM PRESTWICH
HOSPITAL



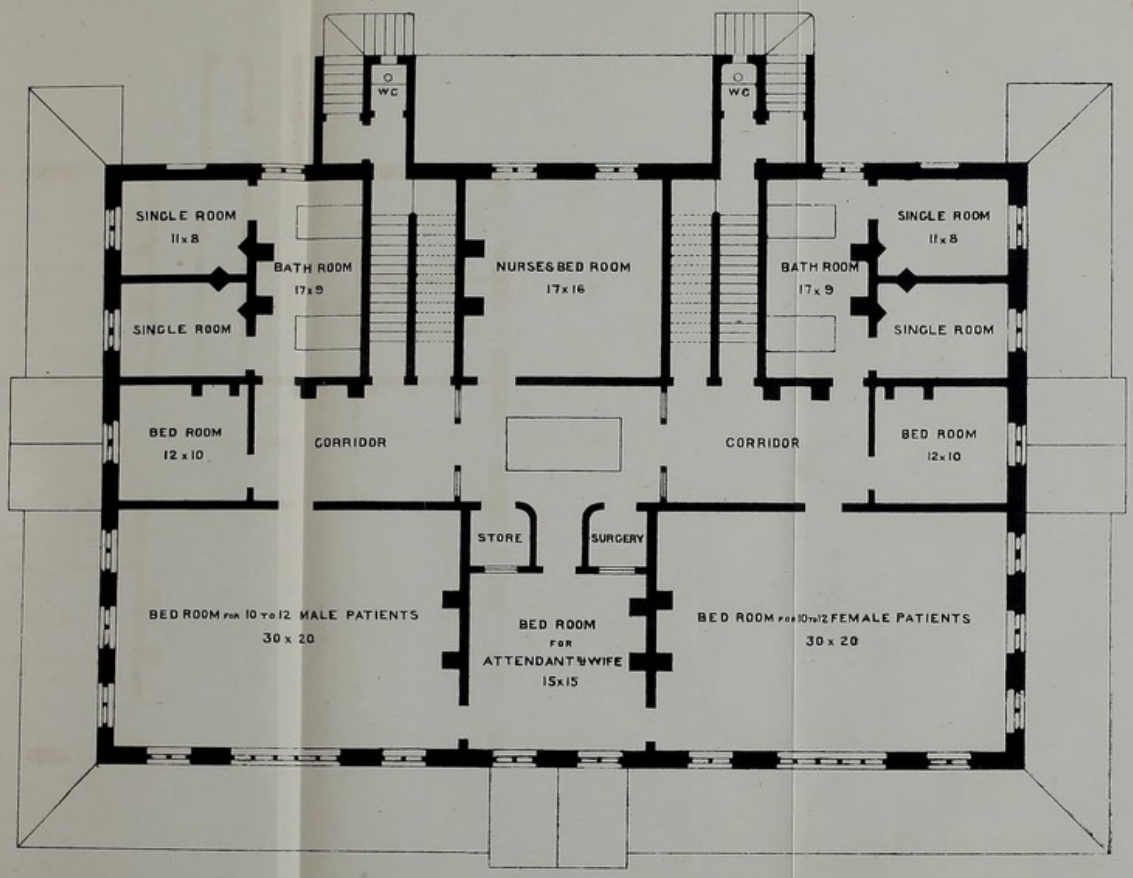
GROUND PLAN

SCALE 0 5 10 15 20 25 30 OF FEET

(*Sig.* 30.)

Photo-Lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

COUNTY ASYLUM PRESTWICH HOSPITAL



CHAMBER PLAN

Photo-lithographed at the Gov^t Printing Office
Sydney, N.S.Wales.

(*Sig.* 30.)