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Publication/Creation

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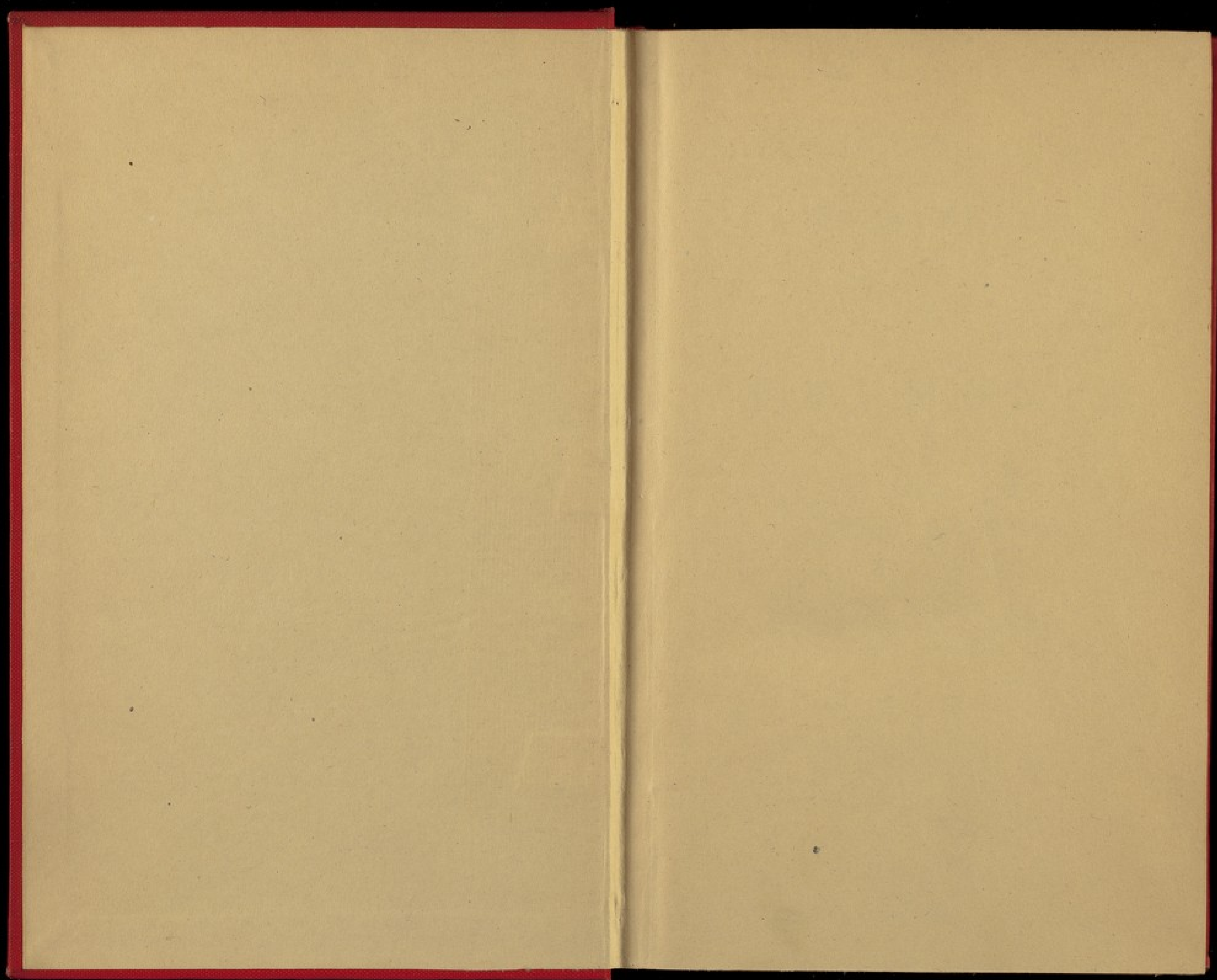

With Dr. Smith's Compliments

ON THE

TREATMENT

OF

PNEUMONIA.

ROYAL ARMY MEDICAL
COLLEGE LIBRARY.

BY

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EDINBURGH: PRINTED BY OLIVER AND BOYD.

MDCCCLXVI.

REPRINTED FROM THE EDINBURGH MEDICAL JOURNAL FOR JULY 1866.

ON THE TREATMENT OF PNEUMONIA.

THE following facts respecting the cases of pneumonia, treated in the hospital of the 47th Regiment, at various stations in Canada, between March 1862 and September 1865 (the period of my charge of that corps), are placed on record as a contribution to the data still required to enable the profession to arrive at definite conclusions, not only on the question of the treatment of pneumonia, but also as regards some points in the nature of that disease. The cases which came under observation occurred chiefly among soldiers of the 47th Regiment, but those of a few men of other corps, who were treated in the same hospital, are also included in what follows. The subjects of the attacks were all males, and the total number treated amounted to 108 cases, of whom 3 died, giving a mortality of 1 in 36.

The cases were distributed over the period in question as under :—

TABLE, No. I.

Years.	Periods.	Cases.	Deaths.	Remarks.	Stations.
1862	Mar. to Dec.	33	1	Priv., Ar. Hos. Cor.	Montreal.
1863	Jan. to Dec.	42	1	Corporal, 47th Regt.	Montreal, 5 m.; Kingston, 7 "
1864	Jan. to Dec.	24	1	Private, 47th Regt.	Kingston, 5 "; London, 3 "; Hamilton, 4 "
1865	Jan. to Sept.	9	...	. . . .	Hamilton, 4 "; Toronto, 5 "
	Totals......	108	3		

The 47th Regiment arrived in Canada in July 1861; and between that time and September 1865, the deaths above recorded were the only casualties which it suffered by pneumonia; that disease having, in the period named, caused the loss of only two men to the corps,

the third man who died having been at the time only temporarily attached to it. The ages of the men attacked ranged from fifteen to forty-four, as under:—

TABLE, No. II.

Years of Age.	No. of Cases treated.	No. of Deaths.
15 to 20	3	0
20 to 25	31	2
25 to 30	47	0
30 to 35	21	1
35 to 40	5	0
44	1	0
Totals,	108	3

Seventy per cent. of the whole attacks occurred in the periods of the different years extending from December to March inclusive; but the months of March, April, and May, were those which gave the highest numbers, having supplied respectively 21, 14, and 16 cases of the whole. The fewest seizures happened in the periods from July to October inclusive; whilst the highest number, 21, and the lowest, 1, recorded in any single month, fell respectively in March and September.

In attempting to analyze these cases, in order to estimate the amount of influence exerted on their duration and mortality by the nature of the treatment adopted, it will be desirable to examine those of each year separately, as well as to make a general comparison of the whole, adding such details of the characteristic cases as may give a general idea of the forms in which the disease occurred. In order, also, the better to show the effects of treatment, the cases will be classed into three divisions, according to the nature of the remedies employed, which may be stated, in a general way, as under:—

1*st*, Those cases in which general bloodletting was employed, at the outset of the disease, in conjunction with the application of turpentine fomentations to the chest, and the administration of tartar emetic in ¼-gr. doses. The latter remedy was given at first every hour or every second hour, according to the urgency of the symptoms, until vomiting or some decided impression on the force of the circulation was induced. Afterwards, when these results had been produced, the intervals between the doses were extended to three or four hours whilst the symptoms continued with any degree of urgency. Finally, it was given only three times a-day. In cases where symptoms of nervous excitement existed, or the bowels became much relaxed, a few drops of laudanum were given with each dose of the antimony. In some of the early cases, calomel and opium, or hydrargyrum cum creta was administered; but the use of mercury in any form, with a view to the induction of its

constitutional action, was soon entirely abandoned, it having become evident that any apparent good effects which resulted from the administration of that drug were more than counterbalanced by the deterioration of health which, for some time, followed its employment.

When the force of the disease had been broken, and convalescence approached, bicarbonate of potash was given three times a-day, either in infusion of senega or water,—at first in the intervals between the doses of tartar emetic, but alone, after convalescence had been established, and the administration of the latter remedy was no longer considered necessary. Large blisters also were applied in those cases where, after other treatment had been employed, persistent pain indicated that pleuritic affection existed. Wine was likewise prescribed when, after the force of the disease had been broken, there existed signs of nervous disturbance indicated by a degree of increased frequency of pulse to which the rate of the respiration and the temperature of the body did not bear a due proportion.

It was also given, at any time in the course of the disease, when the pulse became weak. It may also be added that, as a general rule, a purgative of a drachm of compound jalap powder, with two grains of calomel, was administered on admission, provided the bowels were not already relaxed; but purging, beyond what might be necessary to obviate constipation, was not afterwards had recourse to as part of the treatment.

2*d*, The few cases in which cupping, followed by the other treatment detailed above, was employed instead of general bloodletting.

3*d*, Those attacks in which neither general nor local bleeding was had recourse to, but where reliance was placed on the use of turpentine fomentations, and the employment, according to the circumstances of the case, of the other remedies already mentioned, but with, in general, an earlier use of wine, where support was indicated.

In estimating the duration of the disease, the outset of the attack is reckoned from the occurrence of the rigor, and recovery is counted from the day on which the urgent symptoms had disappeared, and the patient was, as a general rule, placed on a better diet. The full periods of residence in hospital are also given; but it will be necessary to bear in mind that in this respect the results obtained in civil and military hospitals cannot fairly be compared with each other, because, in the majority of cases occurring among soldiers, the period of residence is, from the requirements of military duty, much longer than would be necessary in the case of a patient under treatment in a civil hospital, for an attack of pneumonia of equal severity.

Experience in the management of the sick of corps also has led me to discontinue the practice of allowing men to be convalescent

in barracks, unless under peculiar circumstances of rare occurrence, and to adopt the system of detaining every soldier in hospital, who may have been under treatment there, until fit to undertake at once any duty he might be liable to be called upon to perform. This consideration likewise will, in respect to the period of total residence in hospital, exert an influence on it to the disadvantage of a military hospital, when any attempt is made to compare the results of treatment in civil and military practice.

But in addition to the increased period of residence in hospital, which followed from the causes above named, the fact that not less than 70 per cent. of all the cases occurred during the most trying part of a Canadian winter, had likewise a very important influence on the duration of the period in question, as any increased severity of the weather often rendered it prudent to subject a soldier recently passed through a severe pneumonia, although in all respects well, to a still further period of detention in hospital, in the hope that a favourable change of weather might enable him to return to an every-day mode of life, requiring at all times during the winter months much exposure, not only in the course of duty, but even from the arrangements peculiar to a soldier's residence in a Canadian barrack.

Of the 33 cases treated between March and December 1862, 14 were bled from the arm at the outset of the disease, 3 were cupped, and 16 were neither cupped nor bled. The average duration, counting from the date of the rigor to the beginning of convalescence, in the 14 cases in which bloodletting was employed was $9\frac{11}{14}$ days, the shortest period 5 days, the longest 15; and the average total residence $23\frac{8}{14}$ days; the shortest period 9 days, the longest 58. Three cases, however, whose periods of total residence were 58, 47, and 25 days, had suffered relapses, after apparent recovery, on the twenty-sixth, nineteenth, and ninth days respectively. Of these 14 cases, 3 were bled more than once in the course of this disease. The first, a case of single pneumonia, was bled to 16 oz. on the third, and to 10 oz. on the fifth day of the disease: duration, 12; total residence, 28 days. The second, a case of double pneumonia, was bled to 14, 8, and 7 oz., between the first and fifth days; period of recovery, 8, and of total residence 17 days. The third, a case of single pneumonia, was bled twice, on the first day of the disease, to 7 and 6 oz. This case recovered on the sixth, and was discharged, to duty, on the fourteenth day of the disease. In the remainder of the cases, blood was drawn once in the course of the attack, and the quantity varied from 8 to 16 oz.,—average $12\frac{2}{5}$ oz. Of these 14 cases which were bled, 3 were double pneumonias, the remainder single, and all recovered.

Three cases lost blood by cupping only, but were otherwise treated much as above described, and with the following results:— The first case, one of double pneumonia, was cupped to 4 oz. on the

fourth, and died on the twelfth day of the disease. The second, a case of single pneumonia, was cupped to 8 oz. on the fourth, and recovered on the ninth day of the disease,—total residence, 23 days. The third, also a case of single pneumonia, was cupped to 6 oz. on the third, and recovered on the eighth day of the disease,—total residence, 27 days.

Of the 16 cases treated without bloodletting in any form, the average period of recovery was $8\frac{9}{16}$ days,—the shortest period 2, the longest 13 days. The average total residence was $15\frac{5}{8}$ days,— the shortest period 5 days, the longest 42. All these latter cases were, however, examples of the disease in a mild form, and 11 out of the 16 occurred during warm weather, between June and October. The existence of a milder temperature, whilst it caused attacks of a less severe character, led also to the total residence in hospital being shorter than usual in proportion to the periods of recovery. These last were all cases in which only one lung was attacked.

Of the 42 cases admitted in 1863, 5 were bled from the arm, and all recovered. The remainder were neither cupped nor bled, and of these one died. Of the cases not bled, one was received over from another hospital convalescent, and was discharged after 36 days' residence in hospital. Three more of the same number were treated in the Forty-Seventh hospital, but during my absence. The details of these 4 cases are therefore not included with the following. Of the 5 cases which were bled, 4 were simple, and one complicated. The average period of recovery of the 4 simple cases was 9 days, the shortest period 7 days, the longest 11. Average period of total residence, $30\frac{3}{4}$ days,—shortest period 24 days, longest 35. Of these cases, one was a double pneumonia, in which bloodletting was employed to the extent of 12 oz. in the fourth day of the disease, and to 15 oz. on the sixth. Recovery took place on the eleventh, and the man was discharged to duty on the thirty-second day. In the three remaining cases only one lung was affected, and the average quantity of blood drawn was $12\frac{1}{3}$ oz. The fifth case was one of double pneumonia grafted on bronchitis, to which the man was liable. The pneumonic symptoms disappeared in 25 days, but the patient was under treatment for 71 days before the complicating bronchitis abated. Bloodletting, to 12 oz., was employed in this case at the outset of the disease.

Of the remaining 33 cases treated without bleeding, one died on the twenty-fifth day of the disease, and the average period of recovery of the remainder was $8\frac{2}{32}$ days,—the shortest period 2 days, the longest 18. The average period of total residence was $33\frac{2}{32}$ days,—the shortest period 5 days, the longest (in a case where the greater portion of one lung became, for a time, consolidated) 128. These 33 cases were scattered over the whole year, but the larger proportion of them occurred in the winter months.

Of the 24 cases admitted in 1864, 8 were treated in my absence.

In 7, of the remaining 16, bloodletting was employed, and, of those so treated, one case died on the seventh day of the disease. The average period of recovery of the other six was $6\frac{1}{2}$ days,—the shortest period 4 days, the longest 8. The average period of total residence was $24\frac{1}{2}$ days,—the shortest period 20 days, the longest 29. Of the remaining 9 cases treated without loss of blood, the average period of recovery was $6\frac{7}{9}$ days,—the shortest period 4, the longest 10 days; and the average period of total residence was $23\frac{1}{3}$ days,—the shortest period 9, the longest 44 days. Of the 7 cases which were bled, one was a double pneumonia, the remainder were single. The whole of the 9 cases treated without bloodletting were examples of single pneumonia.

Of the 9 cases which were admitted between January and September 1865, 4 were bled from the arm, at the outset of the disease, in quantities varying from 10 to 14 oz. The average period of recovery of these cases was $7\frac{1}{4}$ days,—the shortest period 6, the longest 8 days; and that of total residence, $23\frac{1}{4}$ days,—shortest 20 days, longest 26. Of the remaining 5 which were not bled, the average duration was $6\frac{4}{5}$ days,—the shortest 4, the longest 9 days; and the average total residence, $22\frac{1}{5}$ days,—the shortest period 15, the longest 30 days. These were all cases of single pneumonia.

As regards the relative frequency of the side of the body attacked, the right lung alone was the seat of disease in 58 per cent. of all the cases, the left lung in 24, and both lungs together in 17 per cent.

The following tables will show the relative proportions borne by the periods of recovery and total residence in each year, to those of the other years under observation, in the two classes of cases according as they were treated (*1st*) with and (*2d*) without general bloodletting:—

1st, Average duration of uncomplicated cases (one complicated being omitted), treated by general bloodletting:—

TABLE, No. III.

Years.	Period of Recovery.			Period of Total Residence.			Cases.
	Average.	Shortest.	Longest.	Average.	Shortest.	Longest.	
1862	$9\frac{13}{14}$	5	15	$23\frac{5}{14}$	9	58	14
1863	9	7	11	$30\frac{3}{4}$	24	35	4
1864	$6\frac{1}{2}$	4	8	$24\frac{1}{2}$	20	29	6
1865	$7\frac{1}{4}$	6	8	$23\frac{1}{4}$	20	26	4
						Total...	28

2d, Average duration of uncomplicated cases treated without general bloodletting:—

TABLE, No. IV.

Years.	Period of Recovery.			Period of Total Residence.			Cases.
	Average.	Shortest.	Longest.	Average.	Shortest.	Longest.	
1862	$8\frac{9}{16}$	2	13	$15\frac{5}{8}$	5	42	16
1863	$8\frac{9}{32}$	2	18	$33\frac{3}{32}$	5	128	32
1864	$6\frac{7}{9}$	4	10	$23\frac{1}{3}$	9	44	9
1865	$6\frac{4}{5}$	4	9	$22\frac{1}{5}$	15	30	5
						Total...	62

1st, These tables show very distinctly, by numbers, what my own observation of the cases in detail had led me to conclude, viz., that the results noticed in cases treated by general bloodletting were, unquestionably, of a more uniform character than those which were observed in cases which recovered without the use of that remedy. This will best be understood from a statement of the average range in days, between the average lowest and highest periods of recovery and residence in hospital, which were as 5 and 19, to 9 and 53 respectively, for 28 cases bled, as compared with 62 not so treated.

2d, They demonstrate, also, that the relative periods for which the cases were under treatment in 1863 were considerably greater than for any of the other years under consideration; and, to account for this difference, two sets of conditions may be stated as having probably more or less influenced its production. One of these had reference to the circumstances in which the men themselves were actually placed; the other, and probably not the least important of the two, depended on a temporary change which my own views underwent as to the mode of treatment to be adopted.

The first consideration referred to was the removal of the regiment from a barrack placed in a comparatively open, elevated, and airy position, in the town of Montreal, and from the advantages of an hospital where the convalescent sick could have the benefit of open-air exercise in almost any weather, to a set of buildings temporarily occupied as a barrack, and situated in a crowded, low-lying, and unhealthy part of the same town, with the disadvantage, moreover, of an hospital which, from its position and construction, was not only indifferently lighted and ventilated, but was likewise unprovided with means of open-air exercise for the convalescent sick during winter weather. That the circumstances of the soldiers' accommodation had an influence on the type of their diseases, I have very little doubt; and, accordingly, the attacks of pneumonia from which they suffered whilst those conditions lasted were of a more asthenic type than those which came under observation in the course of the previous and subsequent years, when their barrack accommodation was better. I have also a strong suspicion

that the circumstances of the men whilst under treatment in hospital, more especially in respect to open-air exercise in the course of their convalescence, materially influenced the duration of their attacks.

To the circumstance, however, of a temporary change having taken place as regarded my own views of the best plan of medical treatment to be adopted, I am inclined to attach the most importance of all; and I will now briefly state what that change was, and how it originated. Having observed that, under the influence of the warm weather of the summer and autumn of 1862, the cases of pneumonia which occurred in the course of those seasons were much milder in character than those which had occurred during the winter and spring months, I was led to discontinue the use of bleeding; and, having remarked the apparent success which attended that less active plan of treatment, at a time when my mind had been rendered undecided on the question of bloodletting by the strong feeling of opposition to its employment which then existed among the members of the medical profession, I was led to consider, whether, in resorting to bloodletting as the most essential part of the treatment of a disease asserted to be the same under every variety of circumstances, and at all times better treated without that remedy, I had not, after all, adopted a course which was unnecessarily severe.

I was, therefore, induced to inquire whether equally satisfactory results might not, on the whole year, have been obtained without loss of blood at all. Bloodletting was, accordingly, in 1863, employed only in such of the cases as, at the outset, threatened to be unusually severe, and of a nature to deter me from submitting them to the risk of what was virtually an experiment. A review, however, of the results of this less active plan of treatment forced upon me the conclusion that in no respect were they equal to those obtained under a more general practice of bloodletting, the good effects of which were in no way rendered more apparent than by the fact, that, whereas in 1862, when the disease had been actively treated, the lung affection very rarely overstepped the stage of congestion or engorgement, in 1863, on the contrary, that of hepatization rendering a lengthened convalescence inevitable, was frequently reached in cases subjected to a less effective method of treatment.

I therefore resolved to resume the treatment by bloodletting, so soon as the attacks of 1864 should have changed from the mild type of summer to the more severe form of the winter months. This was accordingly done, and with the success anticipated, excepting in the first serious attack of the season, which was, unfortunately, not bled at the outset of the disease: its early indications having been believed to be favourable to recovery without bloodletting. In that case, however, bleeding was subsequently employed, but at a stage of the complaint when there was very little certainty of its

making any impression for good on its progress. The following table of the ratio per cent. of cases bled, and of the average periods of recovery and total residence, for the whole of the cases of each year, will show at a glance—so far as that can be taught by numbers—the influence exerted by bloodletting on the duration of the disease:—

TABLE, No. V.

Years.	Per-centage of Cases Bled from the Arm.	Average Periods of Recovery of Total Cases in each Year.	Average Periods of Total Residence of all Cases in each Year.
1862	$42\frac{14}{33}$	$8\frac{4}{5}$	$20\frac{4}{5}$
1863	$13\frac{3}{8}$	$8\frac{1}{5}$	$32\frac{5}{8}$
1864	$37\frac{1}{2}$	$6\frac{2}{3}$	$23\frac{12}{15}$
1865	$44\frac{4}{9}$	7	$22\frac{2}{3}$

The subjoined details of a few of the cases will give the reader a good general idea of the whole. The summaries, also, of the three fatal cases with which these extracts close, will, I think, prove instructive:—

CASE I.—Private Henry Veasey, 47th Regiment, age 28.—*November 28th*, 1864.—A stoutly made man, of bad character, who reported himself sick yesterday morning, and stated that, although feeling slightly ill from a cold for a few days previously, he had been fit for duty until that morning, when he was attacked with rigor, followed by cough and pain in the right breast. No evidence of pneumonia was then detected on examination of the chest. A purge was administered, and he was ordered to bed.

This morning there are undoubted signs of pneumonia affecting the greater part of the right lung; the expectoration is rust-coloured and tenacious, and the cough causes great pain of the right breast. Pulse 80; respiration 28. Was this morning bled to ℥xvj., which he bore without syncope. To have ant. tart. gr. ¼, every third hour, unless much nauseated. Turpentine fomentations to the affected side three times a-day. Diet, spoon (tea, bread, and arrowroot), with two pints lemonade for drink.

29th.—Pulse 84; resp. 24; crepitation audible, but more air entering the lung than on yesterday. Expectoration copious, very fluid, and plum-juice-coloured; not so much pain. Continue the treatment by antimony and fomentation as above. Diet and drink as on yesterday.

30th.—Pulse 60; resp. 20; air entering the lung freely, with coarse crepitation; expectoration fluid, copious, and rust-coloured. Treatment and diet as on yesterday.

December 1st.—Pulse 68; respiration natural; steadily improving; no pain. Air entering the lung freely, with large crepitation; expectoration copious, fluid, and still rust-coloured, but less so than on yesterday. Antimony to be given three times a-day, and fomentations to be used twice a-day. Beef-tea diet, lemonade.

3d.—Pulse 72; resp. 22; air entering the lung freely; very little crepitation; expectoration scarcely at all tinged, but slightly purulent. To have bicarb. potassæ, gr. xv., in aquæ ℥iv. three times a-day. Omit the antimony and fomentations. Beef-tea and lemonade.

5th.—Pulse 68; resp. 18; no expectoration; scarcely any cough; air entering the lung freely; coarse crepitation at the base, with the expiratory murmur only. Bicarbonate of potash as above. Diet low.

7th.—Pulse 60; resp. 20; air entering the whole lung; prolonged sound of expiration at the base, with harshness more than crepitation; no cough or expectoration. Treatment as above. Diet low, with two eggs and one pint of milk.

10th.—Respiration natural; no cough or expectoration. Treatment and diet as above.

20th.—No relapse; now quite strong; discharged to duty. Diet, roast chop from the 11th, with one pint beer daily from the 14th.

Case II.—Private Michael Tierney, 47th Regiment, age 28.—*November 29th*, 1864.—Admitted yesterday from the guard-room, in which he was confined for drunkenness on the 26th inst. On the night of the 27th was attacked with rigor, which was followed by cough. On admission there were distinct signs of pneumonia affecting the greater part of the right lung, and attended with pain and rust-coloured tenacious expectoration. He was bled to ℥xij., without syncope, in the course of the evening.

Passed a restless night. Pulse now 120; resp. 39; crepitation audible over the greater part of the right lung; expectoration plum-juice-coloured, but not of a very dark tint. The blood drawn did not show the "buffy coat." To take ant. tart. gr. ¼, with tinct. opii. m. x., every fourth hour; half an ounce of wine every second hour. Turpentine fomentations to the affected side of the chest three times a-day. Diet, spoon, with lemonade.

30th.—By last evening the pulse had fallen to 116; to-day it is 94; resp. 28. Feels considerably better. Air entering the lung freely; coarse crepitation over the greater part of it; expectoration copious, fluid, and tinged rust colour. Remedies, diet and wine as above.

December 1st.—Feels better; pulse 84; air entering the whole of the lung, but crepitation very well marked with the sound of expiration; expectoration fluid and less tinged; no pus in it; slight pain at the lower part of the affected side. Had some sleep in the course of the night, and is less nervous in appearance. Skin moist; tongue loaded with a white fur, but also moist. Continue the antimony with opium, as above, every fourth hour; also the fomentations as before. Diet and wine as above.

3d.—Pulse 80; resp. 28. Has steadily improved since last report. Skin moist; no pain; much less cough; expectoration copious, fluid, and moderately tinged. To have antimony with opium, as above, three times a-day. The fomentations to be omitted. Beef-tea diet from the 2d, wine and lemonade as before.

5th.—Pulse 76; resp. 25. Has steadily improved since the 3d. Air entering the lung freely; coarse crepitation at the base; expectoration fluid, mucous, and untinged; slight pain at the lower part of the right side of the chest on full inspiration. The antimony was omitted yesterday, when potassæ bicarb. gr. xv., in infus. senegæ ℥ij., was ordered three times a-day. The latter to be continued, a blister to be applied to the seat of pain, and pulv. Doveri gr. xij. given at bedtime. Beef-tea diet, wine and lemonade as before.

6th.—Continues steadily improving; very little cough, and a mere trace of expectoration. The blister acted well, and has quite removed the pain complained of in the region of the lower false ribs of the right side, and which was probably pleuritic in its character. Diet and treatment as above.

10th.—Pulse 78; resp. 24; air freely entering the lung, with the exception of a small portion at the base where the respiratory murmur is obscured, but without crepitation; slight increase of dulness on percussion at the spot in question; scarcely any cough; slight, untinged, mucous expectoration. Diet low from the 7th, with wine, two eggs, and one pint milk on this date. The alkali continued as above.

13th.—Steadily improving; neither cough nor expectoration. Omit the medicines. Diet as above.

22d.—Has been steadily improving in strength since last report, and there has been no return of pulmonic symptoms; but being a prisoner he is detained

longer than usual under observation. Diet, roast chop from the 14th, with one pint of beer daily from the same date.

25th.—Quite well; discharged to duty. Diet and beer as above.

Case III.—Private John Walsh, 47th Regiment, age 20.—*November 29th*, 1864.—Attacked yesterday morning with rigor, which was followed by cough. Admitted into hospital in the evening, suffering from severe cough, attended with pain in the right side of the chest, and with obscurity of the respiratory murmur at the base of the corresponding lung. There was no expectoration. Pulse 108, full and bounding. He was bled to ℥xvj., with marked relief to his symptoms. This morning the pulse is 96; respiration 28, and attended with less pain; air entering the lung with tolerable freedom; crepitation at the lower part, and the sound of expiration prolonged. Blood drawn last evening presents the "buffy coat." To have ant. tart. gr. ¼, every third hour; turpentine fomentations to the chest three times a-day. Spoon diet, with lemonade.

30th.—Now free from pain. Pulse 60; resp. 20; air entering the lung; much less cough; coarse crepitation, mixed with bronchitic rales; expectoration muco-purulent, only one streak of blood. Diet and remedies as above.

December 1st.—Not quite so well as on yesterday. Cough more troublesome; expectoration slightly tinged with blood; air entering the lung, but crepitation very marked with the expiratory sound,—that of inspiration very little audible. Pulse 92, and slightly weak. Continue the antimony, as above, every third hour, also the fomentations three times a-day. To have two ounces of wine. Diet, beef-tea; drink as above.

3d.—Yesterday morning had much improved, the pulse having fallen to 84, and the respiration to 22, whilst air entered the lung much more freely. To-day the pulse is 68; resp. 20; skin moist; expectoration copious, and fluid. Yesterday, three doses of antimony, with tinct. opii. m. x., in each, were administered in the course of the day. The fomentations also were continued. The antimony and opium to be continued as on yesterday, the fomentations to be omitted. Beef-tea diet, with three ounces of wine.

5th.—Has steadily improved since last report. Was yesterday ordered bicarb. potassæ, gr. xv., in infus. senegæ, ℥ij., three times a-day. Antimony and fomentations were omitted. To-day there is very little cough, and no expectoration. Pulse 60; resp. 22; air entering the whole of the lung; slight coarse crepitation at the base. Continue the alkali. Low diet.

7th.—Pulse 56; resp. 20; air entering the whole of the lung; occasional large crepitation at the base, chiefly with expiration; no cough or expectoration. Continue the alkali and diet as above, two eggs, one pint milk.

10th.—Pulse 60; resp. quite natural; neither cough nor expectoration. Continue the alkali. Low diet, eggs and milk.

11th.—No sign of disease, but slightly debilitated. Omit the medicines. Low diet, eggs and milk.

14th.—Continues free from disease, and regains strength. Diet, roast chop from the 13th, with one pint beer.

21st.—Respiration natural. Feels strong and able to return to duty, to which he is now discharged. Diet with beer as above.

Case IV.—Private Thomas Williams, 47th Regiment, age 28.—*December 3d*, 1864.—Was attacked with rigor on the 30th November, when on guard, and began to suffer from cough on the next day, when he was admitted into hospital with obscure signs of pneumonia. He was ordered a purge, with tartar emetic every third hour, and the usual turpentine fomentations. Yesterday the pulse was 100; respiration 24; and there was evidence of well-marked pneumonia at the base of the right lung; but, as the pulse was rather deficient in strength, it was hoped that antimony and fomentations would be sufficient to control the disease. To-day, however, there is great heat of skin, troublesome cough, and rust-coloured and rather tenacious sputa. Pulse 108, and rather sharp; respiration 32; well-marked pneumonia, in the first stage, at the

base of the right lung. To be bled to ℥viij. Ant. tart. gr. ¼, every fourth hour; turpentine fomentations three times a-day. Diet, spoon, with lemonade.

4th.—Became faint when ℥viij. of blood had flowed, but is considerably better. To have ant. tart. gr. ¼, with tinct. opii, m. x., three times a-day. Diet as above.

5th.—Pulse 96; resp. 22; expectoration very copious and fluid, but less tinged than on yesterday; air entering the whole of the lung, with coarse crepitation at the base. Continue the antimony and opium as on yesterday. Omit the fomentations. Beef-tea diet, with lemonade.

6th.—Pulse 84; resp. 24; air entering the lung freely; crepitation less marked than on yesterday; expectoration fluid and frothy, very little tinged with blood. To have bicarbonate of potash in infusion of senega, three times a-day. The chest to be twice fomented. Diet, beef-tea and lemonade.

7th.—Pulse 76; resp. 18; very slight cough; expectoration fluid and untinged; large crepitation at the base of the lung. Continue the bicarbonate of potash. Omit the stupes. Diet, beef-tea with lemonade.

9th.—Pulse 72; resp. 22; very little cough; expectoration fluid, mucous, and untinged; air freely entering the whole of the lung; still slight crepitation at the base. Continue the potash. Low diet with lemonade.

10th.—Pulse 76; resp. 22; expectoration copious, and untinged; large crepitation still audible at the base of the lung. Potash continued. Low diet, with two eggs, and one pint of milk.

12th.—Pulse 68; resp. 20; air entering the lung freely; still slight crepitation at the base; expectoration fluid and untinged. Continue the potash. Diet as above.

16th.—Left his bed yesterday for the first time. Free from cough; no expectoration; resp. natural. Omit the potash. Diet, roast chop with a pint of beer.

22d.—Rapidly regaining strength; no cough or expectoration; states that he is quite well. Diet and beer as above.

26th.—States that he feels quite strong, but looks rather delicate; no cough; respiration natural. Diet, etc., as above.

27th.—Continues well, and is anxious to return to duty. Discharged.

CASE V.—Private George Arnold, 47th Regiment, age 23.—*December 8th, 1864.*—This man, who is employed as an officer's servant, had an attack of pneumonia of the right lung in August 1863. He was then treated by blood-letting, and tartar emetic, and was under treatment for 27 days. On the night of the 6th inst., during severe weather, he was sent a message for his master. In the course of the same night he had a rigor, and began to suffer from cough almost immediately afterwards. He was admitted into hospital on the following morning, with signs of incipient pneumonia at the base of the right lung. Was ordered a purge, and to take ant. tart. gr. ¼, every third hour. Turpentine fomentations were also applied three times a-day. In the evening a vein was opened, but as syncope threatened, no blood was drawn. This morning the pulse is 112, respiration 40. Did not begin to expectorate until this morning, and what he brings up is tenacious, and very much tinged. There is crepitation over the right lung, as high as the level of the third rib, both before and behind. Has been bled to xij., with much relief to the breathing. To have ant. tart. gr. ¼, with tinct. opii, m. x., every third hour. Turpentine fomentations three times a-day. Diet, spoon, with lemonade.

9th.—Pulse 100; resp. 40; air entering the whole of the lung; small crepitation, mixed with sonorous rales; expectoration copious, very much tinged, and rather tenacious. Very little uneasiness in the chest; bowels rather relaxed; less thirst than yesterday. Continue antimony every third hour, with tinct. opii, m. x., in the two first doses. Continue the fomentations. Spoon diet and lemonade.

10th.—Pulse 92; resp. 32; air freely entering the whole lung; coarse crepitation only at the base; expectoration more fluid, and very little tinged.

Continue the antimony as above, but without opium. Beef-tea diet, with lemonade.

11th.—Pulse 76; resp. 28; air entering the whole lung freely; prolonged expiration, with crepitation at the base; expectoration copious, fluid, and slightly tinged. Continue the antimony and fomentations. Beef-tea diet and lemonade.

12th.—Pulse 76; resp. 28; air entering the lung freely; very slight crepitation; expectoration very little tinged. Treatment and diet continued as above.

13th.—Pulse 72; resp. 24; air entering the lung freely, accompanied by loud sonorous rales; no crepitation; expectoration copious and untinged. To have bicarbonate of potash in infusion of senega three times a-day. Low diet, two eggs, one pint milk.

14th.—Pulse 68; resp. 20; expectoration small in quantity and untinged; very little cough; respiration almost natural, but sound of expiration still prolonged, and a little rough in tone. Potash and diet as above.

16th.—No cough; progressing favourably. Treatment as above. Diet, roast chop.

19th.—Air freely entering the lung; occasional sonorous rales; no crepitation; neither cough nor expectoration. Diet and remedies as above.

21st.—Air entering the lung freely; no crepitation; neither cough nor expectoration. Omit remedies Diet as above, with one pint beer daily from 20th.

22d.—Rapidly regaining strength; no cough or expectoration; respiration natural. Diet and beer as above.

24th.—Respiration natural; feels strong and able to return to duty, to which he is discharged.

CASE VI.—Private John Ryan, 47th Regiment, age 21.—*December 12th, 1864.*—Was discharged from hospital on the 30th of last month, after a very mild attack of scarlatina. He had in the interval fully regained his previous strength. At 9 A.M. yesterday he was attacked with rigor and felt cold during the whole day, and until late in the evening, when he became hot and feverish. About 3 A.M. of to-day he began to suffer from pain in the right side of the chest, attended with slight cough. The pulse is now 100; resp. 40; temperature in the axilla 105°. There is slight crepitation audible with the sound of inspiration at the base of the lung; prolonged and roughened sound of expiration at the same point; no expectoration; ant. tart. gr. ¼, every third hour; turpentine fomentations three times a-day. Diet, spoon, with lemonade.

13th.—Pulse 108; resp. 28; temperature barely 104°; air freely entering the whole of the lung, no crepitation, but slight roughness with the sound of expiration at the base. Treatment and diet as above.

14th.—Pulse 100, rather sharp; resp. 34; air entering the lung, with tolerable freedom down to the base; crepitation audible about half-way up the lung, but not well marked; cough became more troublesome in the course of the night; considerable distress of breathing, with pain below the right axilla; expectoration not very copious, rust-coloured, and tenacious; considerable thirst; has been, this morning, bled to ℥x. To have ant. tart., gr. ¼, with tr. opii, m.x., every third hour; turpentine fomentations as above. Diet, spoon, with lemonade.

15th.—Pulse 112; resp. 28; expectoration tenacious, rather scanty, and considerably tinged; air entering the lung with tolerable freedom; crepitation well marked towards the base; tongue furred and slightly dry at the tip; much thirst, and cough very distressing. The antimony to be continued as on yesterday, but without opium; turpentine fomentations as before. Diet, beef-tea; lemonade, with ℥ss. wine every second hour.

16th.—Pulse 96; resp. 28; cough much less troublesome; expectoration more copious and fluid, but still rust-coloured; air entering the whole of the lung with tolerable freedom, and attended with large crepitation towards the base; tongue moist; less thirst. Treatment and diet as on yesterday.

17th.—Pulse 92; resp. 36; tongue rather furred, but moist; complains of sharp pain at the lower part of the right side; air, however, entering the lung freely with large crepitation; expectoration more copious, fluid, and less tinged than on yesterday; to have a blister, six by four inches, applied to the right side. To take potassæ bicarb., gr. xv., three times a-day; the antimony to be omitted, but the fomentations continued until the blister is applied. Three ounces of wine in half-ounce doses, every two hours. Diet as above.

18th.—Pulse 88; resp. 24; the blister has acted well, and he is now quite free from pain; expectoration not very copious, but fluid and untinged with blood. Treatment and diet as above.

19th.—Pulse 80; resp. 24; much less cough; expectoration fluid and untinged; tongue less furred and quite moist. Treatment as above. Diet, beef-tea, with two eggs, and one pint of milk.

20th.—Pulse 76; resp. 24. Treatment as above. Diet, low, with eggs and milk.

21st.—Pulse 84; resp. 24; air entering the lung freely; slight roughness with the sound of expiration, but no crepitation; very little cough; slight mucous expectoration; no tinge of blood. Continue the potash. Diet as above.

24th.—Pulse and respiration natural; no cough or expectoration for the last forty-eight hours. Roast-chop diet; one pint of beer.

30th.—Quite well for more than a week past. Discharged to duty.

CASE VII.—Lance-sergeant Robinson, 47th Regiment, age 37.—*January 5th*, 1865.—Was attacked with rigor in the forenoon of the 3d instant, and cough soon followed. He had suffered from cold for a few days previously; admitted into hospital yesterday morning, but did not then suffer from well-marked signs of pneumonia; to-day there is crepitation over the right lung, as high as the angle of the scapula, which is most marked with the sound of expiration; he states that he had a similar attack last year when at Gananoque, drilling volunteers, and was there treated by a civil practitioner, who bled him to about one pound; states also, that he quite regained his previous strength, and never felt better than a short time previous to his present attack; the expectoration is now rust-coloured, but fluid, and brought up with tolerable freedom; pulse 84; resp. 30; temperature 103°. Since the pulse, etc., was recorded this morning, he has been bled to ℥xij.; to take ant. tart., gr. ¼, every third hour; turpentine fomentations three times a-day. Diet, spoon, with lemonade.

6th.—Pulse 76; resp. 20; temperature 98°; air freely entering the lung, down to the base; crepitation still distinct; expectoration less tinged, but rather tenacious; blood drawn yesterday shows the "buffy coat;" bowels constipated. Continue the antimony every third hour, with ʒi. of sulph. magnesiæ in each dose; the fomentations to be continued; diet and drink as above.

7th.—Pulse 76; resp. 20; temperature 100°; air entering the lung freely, with coarse crepitation; signs of bronchitis heard under the axilla; cough short and troublesome; expectoration untinged and fluid, but less in quantity. Antimony, gr. ¼, every second hour, until vomiting is produced,—afterwards every third hour; to have tinct. camph. co., ʒi. with the first dose of antimony; fomentations to be continued. Diet, beef-tea; drink as above.

8th.—Pulse 96; resp. 32; temperature 103°; air entering the lung freely down to the base; coarse crepitation mixed with sonorous rales; sharp pain in the side a little below the breast; expectoration rather scanty, very tenacious, and of a slightly yellow tinge; tongue furred, but moist. To have a blister applied to the right side; antimony, gr. ¼, and tr. opii, m. v., every third hour. Diet, spoon, with lemonade; wine ℥ss., every second hour.

9th.—Pulse 88; resp. 22; temperature 102°; air entering the lung, with coarse crepitation, and sonorous rales, audible chiefly on forced respiration, and then, most distinctly with the sound of expiration; the blister has acted well, and there is less pain; cough less troublesome; expectoration more

copious and brought up with less difficulty, but still very tenacious, and tinged of a yellow colour as if mixed with bile. Antimony to be continued every third hour, and potassæ bicarb., gr. xv., in water, ℥iij., also every third hour, but between the doses of antimony. Diet, wine and lemonade as above.

10th.—Pulse 76; resp. 20; temperature 98°; was attacked last evening with a "stitch" a little below the nipple of the right side; a small blister was applied, and the pain is now much less severe; there is still some complaint of pain under the spot over which the first blister was applied; the cough is much less troublesome; the expectoration also is brought up with much more freedom, it is still tinged of a yellow colour and rather tenacious; quantity rather smaller than on yesterday; air entering freely down to the base of the lung; large crepitation. Antimony and bicarbonate of potash three times a-day. Diet, wine, and lemonade as above.

11th.—Pulse 72; resp. 20; temperature natural; no pain; much less cough; expectoration more fluid and much less tinged. Omit the antimony; continue the potash. Diet and wine as above.

12th.—Pulse and respiration natural; much less cough; expectoration fluid and untinged; bowels constipated; to have pulv. jalapæ comp. ʒi.; continue the potash. Diet, low; wine continued.

18th.—No cough or pain; air entering the lung freely, but still slight crepitations at the fore part of the base, audible chiefly with expiration. Diet, roast chop, with one pint beer, and two eggs, from the 17th.

22d.—Respiration natural; feels well and able to return to duty, to which he is now discharged.

CASE VIII.—Private Patrick Brady, 47th Regiment, age 22.—*January 23d*, 1865.—Went to bed well on the 21st inst., but, about 5 o'clock on the following morning, he was attacked with rigor; about two hours afterwards cough commenced, and about 1 P.M. he began to expectorate mucus tinged with blood; about 2 P.M. of the same day he was admitted into hospital; his pulse was then 96; respiration 24; at 5 P.M. he was bled to ℥xiv., and ordered antimony every third hour, with turpentine fomentations to the chest. This morning the pulse is 104; respiration 24; temperature 100°; the pulse is soft, the skin moist, and the cough less severe; air enters the whole of the lung, but the sounds of respiration are somewhat obscured; there is small crepitation at the base behind; coarser opposite the angle of the scapula; expectoration copious, frothy, and tinged a bright scarlet; to have ant. tart., gr. ¼, with sulph. magnesiæ, ʒi., every third hour; turpentine fomentations three times a-day. Diet, spoon, with lemonade.

24th.—Pulse 72; resp. 20; temperature 101°; air entering the lung freely down to the base; small crepitation audible there chiefly with the sound of expiration, which is in duration as two to one compared with that of inspiration; large crepitation audible behind, on a level with the nipple; expectoration fluid, in considerable quantity, and thoroughly tinged with blood of a bright red colour; cough less troublesome; tongue loaded, but moist; no thirst; slight pain near the right nipple. Ant. tart., gr. ¼, three times a-day; omit the fomentations. Diet, spoon, with lemonade.

25th.—Pulse 64; resp. 32; temperature 100°; air entering the lung freely; still slight crepitation; expectoration more fluid and very much less tinged; cough very troublesome last evening, but now much less so since the application of a mustard-plaster. Continue the antimony as above. Diet, beef-tea, with lemonade.

27th.—Air entering the lung freely; large crepitation near the base; respiration natural as to frequency; expectoration fluid, frothy, and very little tinged. Omit the antimony; to take bicarb. potassæ, gr. xv., three times a-day. Diet, beef-tea, with wine ℥ij.

29th.—Pulse and respiration natural; air entering the lung; very little crepitation; expectoration fluid, frothy, and not at all tinged. Continue potassæ bicarb. as above. Diet, low, with two ounces wine.

February 13th.—By the 3d instant, all the symptoms had abated; since that date he has been gradually regaining strength; now well in every respect; discharged to duty. Diet, roast chop, with one pint of beer daily from the 3d to the present date.

CASE IX.—Private Francis Nash, 47th Regiment, aged 30.—*February 5th*, 1865.—A weakly man of rather intemperate habits; was under treatment in hospital for 44 days, in July and August 1864, at London, Canada West, for an asthenic attack of pneumonia of the right lung, complicated with ague and diarrhœa, which he contracted when on outpost duty. He was confined in the guard-room for drunkenness about 2 P.M. of the 2d instant; at 4 o'clock on the following morning he had a rigor, and felt sick and ill; admitted into hospital the same morning, suffering, apparently, from the effects of drink; in the course of the same night he began to cough and to suffer from pain in the right side of the chest, and on the 4th he began to expectorate, bringing up mucus slightly tinged with blood. To-day there is moderate cough, and the expectoration is copious and tolerably fluid, but slightly tinged with blood; pulse 96; resp. 28; temperature 98°. To have ant. tart., gr. ¼, three times a-day; turpentine fomentations every fourth hour. Diet, beef-tea, with lemonade.

8th.—Pulse 104, soft, but rather weak; resp. 36; expectoration a good deal tinged, and in considerable quantity, but very tenacious; tongue furred and rather inclined to be dry; a blister was applied to the side yesterday; it has acted well; he had bicarb. potassæ, gr. xv., three times, and no antimony, also two ounces of wine. The potash to be continued to-day as on yesterday, but gr. ¼ ant. tart. to be given with each dose. Diet, beef-tea, with two ounces wine.

9th.—Pulse 100; resp. 32; temperature 103°; tongue furred and slightly dry; face flushed; air entering the lung freely, but small crepitation very distinctly marked towards the base; expectoration moderate in quantity, very tenacious, and brought up with difficulty, tinged throughout with blood; cough troublesome, no pain. Antimony and potash continued as above. Beef-tea diet; two ounces wine, one pint milk.

10th.—Pulse 76; resp. 32; temperature 99°; expectoration more fluid, brought up with less difficulty, and not so much tinged; tongue less furred, but still rather dry at the tip; the cough continues troublesome; less thirst. Continue the remedies; diet, wine, etc., as on yesterday.

11th.—Pulse 60; resp. 28; temperature natural; much less cough; expectoration fluid and easily brought up, but still a little tinged; tongue much less furred and quite moist. Antimony, gr. ¼, twice a-day; potash three times a-day. Diet, low, with three ounces wine, and one pint milk.

12th.—Pulse 60; resp. 25; tongue clean and moist; expectoration copious, fluid, and slightly tinged; air entering the lung freely down to the base, where there is large crepitation behind; relative length of the sounds of inspiration and expiration natural. Omit the antimony; continue the potash as above. Diet and extras as on yesterday.

15th.—Pulse 72; resp. 24; coarse crepitation still audible at the base of the lung; very little cough; muco-purulent expectoration in small quantity, slightly tinged with blood. Potash continued; also diet and extras as above.

21st.—No cough or expectoration; rapidly regaining strength; slight coarse crepitation still audible at the base of the lung, but air entering freely. Continue the potash as above. Diet, roast chop, with one pint beer.

March 3d.—With the exception of slight debility, there has been no sign of disease during the past week; now strong and able to return to duty, to which he is discharged. Diet, roast chop, with one pint beer daily since last report.

CASE X.—Private Philip Judge, 47th Regiment, age 21.—*April 7th*, 1865.—Was on guard on the 2d instant; continued in good health until the evening of the 5th, when he had a rigor, and suffered from sickness of stomach followed by pain in the right side of the chest, and slight cough; on the morning of

the 6th, he began to expectorate rust-coloured mucus, and was then admitted with symptoms of incipient pneumonia in the right lung, he had a purge and was given two doses of tartar emetic which caused vomiting; turpentine fomentations were applied twice in the day. This morning the pulse is 88 and full; resp 20; temperature 102°; very little air entering the base of the right lung; small crepitation audible as high as, and on a level with, the nipple, both in front and behind; expectoration very much tinged, small in quantity and very tenacious. To be bled to ℥x., and to take ant. tart., gr. ¼, every third hour. Turpentine fomentations three times a-day. Diet, spoon, with lemonade.

8th.—Pulse 92; resp. 20; temperature 102°; pulse soft; air entering down to the base of the lung, where there is large crepitation behind; expectoration more copious, less tenacious, moderately tinged, and muco-purulent in character. Ant. tart., three times a-day. Turpentine fomentations as on yesterday. Diet, beef-tea, with lemonade.

9th.—At 10 A.M., pulse 88; expectoration tolerably fluid, and very little tinged; cough less troublesome; still slight pain at the lower part of the chest; air entering the lung freely down to the base where there is large crepitation with the sound of respiration. Antimony three times a-day; potassæ bicarb., gr. xv., three times a-day. Turpentine fomentations as on yesterday. Diet, beef-tea; omit the lemonade. At 5 P.M., pulse 84; resp. 24; temperature 101°.

10th.—Pulse 80; resp. 24; temperature 98°; less cough; expectoration very little tinged; large crepitation still audible at the base of the lung; duration of the sounds of expiration and inspiration nearly equal; skin moist; tongue very little furred; no thirst. Continue ant. tart. and potassæ bicarb. as on yesterday. Omit the fomentations. Diet, beef tea.

11th.—Pulse 80; resp. 22; temperature 100°; expectoration considerably more tinged, and less copious; air entering the lung, but not quite so freely as on yesterday; sonorous rales mixed up with large crepitation; considerable pain of the side on coughing or full inspiration. A large blister to be applied to the side; antimony and potash as on yesterday. Diet, beef-tea.

12th.—Pulse 76; resp. 28; temperature 100°; the blister acted well, and the pain has quite ceased; very little cough; expectoration fluid and much less tinged; skin moist; tongue slightly furred, but moist. Continue the remedies and diet as on yesterday.

13th.—Continues improving. Omit the antimony, but continue the potash. To have low diet to-morrow.

15th.—Free from pain; no cough; a little untinged expectoration yesterday; none to-day. Continue the potash. Diet, low.

19th.—Rapidly convalescing; no pain or cough; respiration at the base of the lung nearly natural; sound of expiration still slightly prolonged. Omit remedies. Roast-chop diet to-morrow.

30th.—Has progressed favourably since last report; now quite strong and able to return to duty, to which he is discharged.

The details of the ten cases above recorded will, I trust, enable the reader to form a very fair estimate of the total series; but my original intention was to have made such a selection from the whole as would have included characteristic examples of the cases of each year of the period embraced in this record. Loss of health in my family, however, made it suddenly necessary that I should at once return to England, and left no time for making the necessary extracts from the public records. Fortunately, however, I had, towards the end of 1864, begun a system of making duplicate notes of the records of cases of pneumonia which came under my care, and, in that way, I have now been enabled to give in detail

information which I hope may be found sufficient for the end in view.

The general deductions given at the beginning of this paper, are based on facts which were tabulated at the time each case occurred.

The following are the records of the three cases which terminated fatally; the two first in detail; the last in a condensed form.

FATAL CASE, No. I.—Private Francis M'Ardle, Army Hospital Corps, age 25; service, 7 years; station, Montreal, Canada East; time on the station, 8 months. —*March* 12*th*, 1862.—An Irishman; by trade a labourer; a stoutly-made man; was formerly in the 47th Regiment; and has done duty in the hospital of the corps for the last 3 years; was attacked, on the 8th instant, with rigor, which was followed, on the 10th, by pain in the right side of the chest, accompanied by cough and expectoration of rust-coloured sputa. When admitted into hospital, on the latter date, there was obscure crepitation at the base of the right lung. The pulse was 100; the breathing much hurried; and there was great thirst; he was cupped to about ℥ iv., and was given ant. tart., gr. ¼, with hydrarg. cum creta. gr. ½, every third hour. Yesterday he was a good deal better, but the pulse was still high and the breathing hurried; the expectoration was copious, and of the same character as on the previous day; a blister was applied at bedtime, and the antimony continued as above. To-day he is free from pain; the breathing is nearly natural, and the pulse 96; the blister has acted well; the bowels are constipated. To have pulv. jalapæ co., ʒi., calomel, gr. ij; the antimony to be continued as before, after the purge has acted. Diet, spoon, with two pints lemonade.

14*th*.—There was an increase of fever yesterday morning, and the tongue became dry, whilst expectoration was more difficult, and the pulse rose to 108. He had ant. tart., gr. ¼, every hour up to about 3 P.M., when he became much under the influence of the drug, and had an attack of syncope after having been to the close-stool, his bowels having been freely acted upon by a purgative enema. Towards evening, he seemed a good deal better, his pulse having fallen in frequency, whilst, however, it lost strength from the action of the antimony: his tongue also had become moist. The antimony was discontinued, and ℥ ij. of brandy in ℥ss. doses were given in water, in the course of the evening. He passed a restless night, and now complains of slight pain in the left side, where there is evidence of incipient pneumonia at the base of the lung. Pulse 108; resp. 28; tongue dry at the tip; sputa rusty and rather scanty; great thirst. A blister to be applied to the left side of the chest. To take pulv. Doveri, gr. viij., hyd. cum creta, gr. i., ant. tart. gr. ¼, three times a-day. Diet, spoon, with lemonade, and ℥ ij. of brandy.

15*th*.—The blister has acted well, and he is quite free from pain. He suffers less from cough, and his breathing is much more quiet. He is now perspiring profusely, and seems on the whole considerably better, although his pulse is feeble, whilst it is at the same time less frequent than it was yesterday. The tongue is less furred, and is now moist. The strangury has ceased. To take the following three times a-day:—℞ Ammoniæ sesquicarb., gr. v.; tinct. camph. co., ʒ i.; spt. æth. nit., m. xx.; aquæ, ℥ i.—M. Omit the powders. Diet, beef-tea; two pints lemonade; two ounces brandy.

16*th*.—There is this morning some distress of breathing, with pain across the chest. The pulse is 104, and inclined to be weak; and the tongue is slightly dry at the tip. There is some increase of dulness on percussion at the lower part of the left side of the chest, as well as an absence of the sound of respiration at the base of the lung. There is large crepitation, mixed with sonorous rales, at the lower part of the right side. The bowels are constipated. A purgative enema to be administered, and a mustard-plaster applied to the front of the chest. The mixture as above ordered, but omitting the tinct.

camph. co., to be given every third hour. The diet, lemonade and brandy, as above. Towards evening, distress of breathing came on attended with suppression of the expectoration. Pulse 120; face flushed. The brandy was omitted and the mixture discontinued.

17*th*.—After the stimulating treatment had been discontinued, last evening his condition improved, and he passed on the whole a tolerable night. There is less difficulty of breathing, and the pulse has fallen to 100. The tongue is moist, and the face less flushed. There is evidence of induration at the base of the left lung. The right is doing well. The following to be given every second hour:—℞ Vin. ipecac., ʒ ss.; potassæ bicarb., gr. xv.; infus. senegæ, ℥ i.—M. Diet, beef-tea, with two pints lemonade.

18*th*.—Is considerably better this morning. The pulse has fallen to 80, and is of moderate strength. There is no distress of breathing, and the cough is less troublesome, whilst expectoration is more free and less tinged. The tongue is moist, and but little furred. Percussion gives a clear sound over the base of the left lung, and large crepitation is audible there. Continue the mixture. The following to be given three times a-day:—℞ Pulv. Doveri, gr. v.; hydrarg. cum creta, gr. ij.—M. Diet, beef-tea, with lemonade.

Vespere.—Has dozed a good deal in the course of the day. States that his gums are now tender. The tongue is slightly dry at the tip. Omit the powders. To have two ounces of brandy, at four times, in water, in the course of the evening.

19*th*.—About 2 A.M. his breathing became much distressed, and since then insensibility has gradually come on. His breathing is now very much hurried, and accompanied by occasional long convulsive inspirations. His countenance is dusky and his skin congested. His pulse is extremely feeble, and there has been an involuntary discharge of urine. The hair to be removed, a blister to be applied to the nape of the neck, and a mustard plaster to each calf. To have occasionally a little brandy and water, if he can swallow.

20*th*.—Remains in much the same condition as that reported yesterday. His countenance is dusky, and he can be only partially roused. His pulse is very frequent, extremely feeble, and somewhat intermittent. His teeth are covered with sordes. The blister has acted well, but he has not become more sensible. The discharges are passed in bed. A turpentine enema to be administered, and to take what stimulants and nourishment he can swallow.

21*st*.—From yesterday morning the powers of life gradually failed, and he expired in the way of coma at half-past eight the same evening.

Post-mortem examination fourteen hours after death.—There were tolerably strong pleuritic adhesions over the greater part of both lungs, but in a more marked degree on the right side; and in freeing the base and posterior part of the right lung, the tissue of it gave way under the hand. There was intense congestion of the base and lower and posterior half of the right lung, together with the condition of red hepatization at different spots in the same positions, but most marked in degree towards the base. There was intense congestion, but in a less degree at the base of the left lung, which was, however, free from hepatization. There was no tubercular deposit or other disease of either lung. There was slight adhesion of the pericardium to the heart, near its apex, and the disease seemed of recent date. The quantity or character of the pericardial fluid could not be ascertained, as it escaped through a cut accidentally made in removing the thoracic contents. The liver was much congested, and somewhat softened at the posterior part of the right lobe. The kidneys were also congested, and there was a slight trace of the incipient deposit of Bright's disease. There was no other apparent disease of the abdominal contents.

This case was the first which came under my care during my service in Canada, and I fear that I cannot look back with satisfaction to the course I adopted in treating it. The lesson, however, which its progress and result taught me was a valuable one, and I

believe that the details I have given respecting it will prove to be not without interest to others.

Fatal Case, No. II.—Lance-corporal William Dickson, 47th Regiment; age 21; service 2¼ years; station, Kingston, Canada West; time in Canada, $2\frac{1}{12}$ years. *August 13th*, 1863.—This man was under treatment, at Montreal, for remittent fever, from the 24th September to the 20th October 1862. He is now admitted into hospital on account of general debility and pains in the back and limbs. His tongue is loaded, and his pulse slightly accelerated. There is no headache, but he feels heavy, and is much inclined to sleep. His appetite is bad, and he suffers from thirst. His bowels are tolerably regular He had to-day a slight rigor followed by sweating. To have a common purgative dose with 5 grains of quinine in it. Diet, spoon, with two pints lemonade.

14th.—Passed a restless night, coughing much, and expectorates tenacious mucus, slightly tinged with blood; pulse 108; much thirst; tongue loaded. There are now undoubted signs of the first stage of pneumonia at the base of the right lung. Was well purged yesterday. To have turpentine fomentations to the side, and to take ant. tart., gr.¼, every second hour. Diet and lemonade as on yesterday.

19th.—Has had well-marked pneumonia, which is now waning; crepitation still distinct; sputa less bloody and tenacious; pulse 95, rather weak. To have the following three times a-day:—℞ Ant. tart., gr.¼; tinct. camph. co., ʒ ss. Liq. Ammoniæ acet. ℥ ss. Diet, beef-tea; two pints lemonade; two pints milk.

[Here my charge of the case ceased, and the following entries were made by the medical officer who relieved me.]

21st.—Respiration easy; pulse quiet and regular; slight cough. To have cough-mixture. Diet continued.

22d.—Much better; dislikes the lemonade. Diet continued; omit lemonade.

24th.—Not so well to-day. Breathing more difficult; dulness over the lower lobe of the right lung; general aspect unfavourable. To have ant. tart., gr.¼; calomel, gr.j.; every second hour. Diet, low; two pints milk, one egg.

25th.—Seems a little better, but his respiration is still hurried. Continue treatment. Diet, beef-tea; one pint beer, four ounces wine, one egg, two pints milk.

26th.—Was very weak last night, but is rather better to-day. Continue powders every third hour. Diet, beef-tea; two ounces brandy, four ounces wine, two pints milk, one egg, one tin essence of beef.

27th.—Much better, but still very weak. Diet and extras as on yesterday.

28th.—Same as yesterday. Mouth not affected by the mercury. Continue powders every third hour. Diet and extras continued as above.

29th.—Not so well as on last night. Had some delirium during the night. Very thirsty. Continue powders. Diet, etc., as above.

31st.—Improving slowly. Much difficulty of respiration. Mouth not yet touched by the mercury. Diet, beef-tea; one egg, two pints milk, eight ounces wine, one tin essence of beef.

September 2d.—Not so well. Has had since diarrhœa. Checked. Omit the powders. Diet, etc., continued as above.

3d.—Looks very ill still, and has much dyspnœa. Very weak. Cough-mixture. Diet, etc., continued as above.

4th.—Rather better than on yesterday. Diet, etc., continued as above.

6th.—Worse. Dyspnœa increased. Omit the mixture. ℞ Spt. ammoniæ aromat.; spt. ætheris comp., āā. m.x. Liniment—crotonis tiglii for chest. Diet, etc., continued as above.

7th.—Appears to be dying. Nil. Add two ounces brandy to the extras.

8th.—Died at 2 A.M. to-day.

Post-mortem appearances.—Chest: Right lung condensed, and nearly a quart of serum in the pleural cavity; a few slight recent adhesions, with soft

lymph deposited on the surface. The whole lung in an advanced state of grey hepatization. At the apex softening had commenced, and the tissues had broken down, forming several small cavities. This was also the case at one or two points at the base of the lung. In other parts it was solidified throughout its structure. Left lung crepitant and healthy, without any tubercular deposit. Heart rather large, structure firm, valves healthy. Abdomen: Liver somewhat enlarged, structure healthy. Stomach, intestines, spleen, and kidneys normal.

Fatal Case, No. III.—Private John Allen, 47th Regiment; age 33; service, 15 years; station, Hamilton, Canada West; time in Canada, $3\frac{4}{12}$ years. Had been for several years past employed about the officers' mess; and, when attacked by his last illness, was acting as scullery-man to that establishment. His employment exposed him to considerable alternations of temperature, and he has been generally considered to be a man who regularly consumed a large quantity of drink. Some ten years ago, when serving at Corfu, he had an attack of pneumonia, for which he was bled at the arm; and again, at Cork, in 1860, he had a similar attack, for which he was under treatment for twenty-three days. On the night of the 1st instant (November 1864), he had a rigor, and soon afterwards began to suffer from cough, and pain in the right side of the chest.

He was admitted into hospital on the morning of the 2d, and then his breathing was short, and he was unable to make a full inspiration without suffering from acute pain in the right side. Crepitation could not be detected, but there was obscurity of the respiratory murmur over the lower part of the right lung, with some prolongation of the expiratory sound. Towards evening the expectoration became rust-coloured. He was ordered a purge; turpentine fomentations were applied to the side, and tartar emetic afterwards administered in gr.¼ doses every second hour, until nausea supervened, and then less frequently.

On the morning of the 3d, the pulse was 108 and rather full; respiration 28. The breathing was more free, sputa copious but not coloured, and of considerable tenacity. Crepitation could not be distinctly made out, although air could be heard to enter the lung.

On the morning of the 4th, the pulse had fallen to 96 in frequency, and was soft and of good strength; respiration 28; expectoration not so much tinged, but rather more copious and of less tenacity. No sound of air entering the back part of the base of the right lung, but small crepitation near the lower part in front. Large crepitation near the spine, and on a rather lower level than that of the angle of the scapula. The antimony to be continued every third hour unless it caused much nausea, and also the turpentine fomentations.

On the 5th, the pulse had fallen to 80, and was soft and of good strength; respiration 24; expectoration copious, less deeply tinged, and more fluid; crepitation very distinct over the base of the lung. The antimony was given three times a-day, and the turpentine fomentations were applied the same number of times. In the course of the night of the 5th, he suffered a relapse without any assignable cause; and, on the morning of the 6th, his breathing was found to be considerably distressed; respiration 40, whilst the pulse was 104; the sputa were more tinged, and much more tenacious. The antimony was given more frequently, and the fomentations were continued. In the evening it was found that he had been much nauseated, and the strength of the pulse reduced, but without abatement of the violence of the symptoms. The pulse was 108, and the respiration 44. There was great distress of breathing; and, in order to relieve that, he was bled from the arm to eight ounces, with slight relief. There was bronchial respiration over parts of the lung on a level with the angle of the scapula, whilst no air entered the lung below that position. The blood drawn became to all appearance a solid mass of the "buffy coat." There was no sign of disease in the left lung.

He passed a restless night, and on the morning of the 7th he was still much

distressed. Respiration 44; pulse 120, but of good strength; slight lividity of the lips. The disease still seemed to be confined to the right lung, into which rather more air entered, with sound of coarse crepitation. The sputa were much tinged, less copious, and very tenacious. As it was evident that the greater part of the right lung had become incapable of action, and the left was embarrassed by the amount of blood thrown upon it, twelve ounces of blood were taken from the arm, and with the effect of affording very considerable relief. The countenance became clearer, there was much less distress of breathing, and in the course of the afternoon he had some sleep. In the evening he appeared considerably better. About 9 P.M. a blister was applied to the right side; he was then cheerful, and after that appeared to fall asleep, lying on the left side. About 10 P.M. it was observed that his breathing had become embarrassed; and when I saw him at 11 he was comatose, and could be only partially roused when stimulants were steadily administered, but without any permanent good effect; and he expired in the way of coma at 3 A.M. of the 8th.

Post-mortem examination fourteen hours after death.—Body muscular, and not emaciated. Marks of cupping and blistering of old standing on the right breast. The blister applied on the evening of the 7th had acted partially. Both lungs were firmly adherent to the walls of the chest, but especially the right, which could only be removed with great difficulty, owing to some recent and many old adhesions of great strength. The fore-part of the surface of the right lung was covered with a tough membrane of a yellow colour. With the exception of a small portion of the apex, and a part at the front of the base, the right lung was in the condition of red hepatization. It sank in water, and the larger divisions of the bronchi were filled with fibrinous casts, which retained their form on removal. The left lung was very much gorged with blood, its tubes loaded with mucus tinged with blood, but its tissue crepitated, and seemed throughout to be otherwise healthy. There was slight excentric hypertrophy of the left ventricle of the heart, but no valvular disease. The liver was considerably enlarged, and presented well-marked cirrhosis. The kidneys were of large size, and lobulated in form: one, which was laid open, presented incipient granular deposit of Bright's disease, and was much congested; the other was preserved whole.

The grand error committed in the management of this, the first serious case of the season, was the omission to bleed moderately at the outset of the disease. Had that course been adopted, there is every reason for believing that the favourable result which followed the employment of the remedy in question in so many cases of a similar nature would not have been wanting in this instance. Bloodletting was, however, subsequently made use of in this case, but at a stage of the disease when, hepatization having already taken place, there was no prospect that it could limit the advance of the complaint on the right side of the chest, although it might still, by relieving the engorged state of the left lung, assist in obviating the tendency to death by coma from mal-arterialization of the blood, which the condition of the lips and countenance showed to be imminent. I regret that the administration of wine was not commenced at this stage of the disease; but I must confess that I was not prepared for so early a fatal termination, although I became fully aware of the gravity of the attack from the time that the exacerbation of the symptoms and the sudden advance to hepatization took place. At the same time, however, whilst fully admitting the dangerous condition into which the case

had fallen, I cannot altogether divest myself of the suspicion that the sudden supervention of coma was to a considerable extent determined by the accident of the man having been allowed to fall asleep whilst resting on his left side,—a position which could scarcely fail, in the existing state of the right lung, so to impede the action of the left as to cause a degree of embarrassment of the respiration which would be likely soon to lead to an early termination, such as actually happened.

From a careful study of the facts observed in connexion with the whole series of cases of pneumonia which came under my notice, I have been led to draw the following general conclusions:—

1*st*, As regards the exciting causes to which the disease could be clearly traced, one of the most frequent was exposure when on guard, and more especially when on sentry at night during severe weather,—conditions which were also, in all probability, materially aggravated by the overcrowding and want of ventilation which, as a general rule, existed in the guard-rooms. Another cause, of frequent occurrence, was confinement in the guard-room when under the influence of drink; as was also a want of sufficient care on the part of the men to avoid getting chilled, on their return to their barrack-rooms, when overheated and fatigued by a march into the country during the winter, or by a trying field-day at other seasons. Other cases, which could not so clearly be traced to their exciting cause, probably owed their origin to a certain amount of exposure during the depth of winter, which was inseparable from the daily routine of their barrack-life. In one instance, also, the disease came on after a severe fall causing slight concussion of the brain.

The time which elapsed between the date of exposure, where that could be clearly determined, and the occurrence of the rigor, was found to vary from a few hours to three or four days. In some of the cases recorded above will be found examples of the shorter periods, whilst the longer interval was well exemplified in the cases of four young and previously healthy men, who took part in a rather fatiguing field-day during warm weather in the month of June, and who were all attacked with pneumonia, which showed symptoms, mild in degree, but very characteristic of the disease. In one of the four, the complaint appeared on the third day, but in the other three it did not begin until the fourth. The man first attacked was under treatment for thirteen, two of the others each for eleven, and the fourth for ten days, the mildness of the weather having, in these, as in other instances, determined the degree of severity of the attack—it having been almost invariably found, that the rapidity with which an attack came on, bore a close ratio to the intensity of the exciting cause, which latter also determined the degree of violence of the attack.

2*d*, The earliest observed stethoscopic indication of the existence of the disease was a decided obscurity of the sounds of respiration,

accompanied by some degree of alteration of the relative proportions of the inspiratory and expiratory murmurs—the latter having become prolonged, whilst the former was shortened—less so, however, with the first indications of a change from health, but increasing, as the period of the setting in of crepitation approached, until but little of the inspiratory sound could be distinguished, and that of expiration became not only prolonged as to duration, but exaggerated in tone, so as to bear a close resemblance to bronchial breathing, of which it was probably the first degree. This did not, however, depend on actual consolidation, but was owing in all probability to that amount of increased density of structure which was the result of great engorgement of the vascular tissues, and, perhaps, in some measure also to fluid effusion into air-cells as well. In the earlier stage of the obscured respiratory sound, its tone was somewhat altered, by having become less soft in character; but it was not until the stage of crepitation in its first degree approached that the expiratory part of it became exaggerated, to be afterwards, in many cases, for a few hours lost altogether during ordinary respiration, although evidence that air entered the diseased portion of the lung could still be heard during forced respiration. This obscurity of respiration was first noticed by me in 1862, during my examinations of the earlier cases of pneumonia which came under my care; and, in the whole course of my subsequent experience, although often not recorded, this condition was never found wanting when carefully searched for. The alteration of the relative proportions of the respiratory sounds, which attended this state of the breathing, showed that it depended on commencing engorgement of the lung tissues affected in pneumonia; that condition progressing in intensity, as indicated by the change of character of the expiratory sound until the acme of engorgement—without, however, actual consolidation—was reached, as shown by the fact, that but little air then entered the diseased portion of lung during ordinary respiration. To this highest degree of engorgement, in acute cases treated at the outset by bloodletting, and in mild or asthenic ones where the progress of the disease was favourable to recovery without hepatization, relief was, however, soon afforded, by the setting in of secretion as manifested by crepitation, small at first, but gradually becoming of a less fine character, as the lessening engorgement allowed the smaller ramifications of the bronchial tubes to regain more of their natural capacity.

The stage of engorgement in its various degrees generally lasted to near the end of the first or beginning of the second day of the disease. Then, with or without a short interval of absence of respiratory sound, small crepitation set in; and, in sthenic cases early bled, and where everything was favourable, lasted probably for twenty-four hours more, when large crepitation could be heard over part of the lung. This generally happened towards the end of the third, or in the course of the fourth day of the disease. Judging

by the rate of the pulse, taken in conjunction with recorded observations of the temperature of the body, the period at which the accompanying fever attained its greatest height, corresponded with the acme of engorgement and the duration of small crepitation. It gradually abated, however, on the occurrence of large crepitation in such sthenic cases as had been efficiently treated, and the disease then steadily abated without hepatization having occurred at all. For a few days, however, after the cough and expectoration had entirely ceased, large crepitation could be heard at the base of the lung, chiefly during expiration. The evidence of disease, which could be last distinguished, immediately before the return of natural respiration, was some prolongation and roughening of the sound of expiration.

3*d*, Facts which have come under my own observation, and which are to my mind conclusive, have forced upon me the conviction, that the assertion which has been so confidently maintained to the effect,—1*st*, That a pneumonia cannot exist and recover without having passed through all its stages, short of gangrene, but up to that of suppuration or gray hepatization; and, 2*d*, That it implies ignorance of the true pathology of the disease, either to attempt to interfere with the progress of that course, or to believe that bloodletting can act in any other way than to impede what is looked upon as the natural process of recovery;—is true only as regards certain classes of cases, and is not borne out by facts in respect of the disease in general. All my experience of pneumonia leads me to conclude, that the natural course of a sthenic attack of that disease, induced by an exciting cause acting with a high degree of intensity, and treated by bloodletting at the outset of the disease, is in strict accordance with the succession of changes which I have already described in treating of the stethoscopic signs and progress of the complaint.

A perusal of the cases of recovery given above will show the grounds on which the observations I have just made are based, and will explain the characters which I believe to be usual in that acute and sthenic form of attack which should, in my opinion, be considered typical of pneumonia. When, however, an attack originally such as that above referred to is allowed to run its course, without adequate treatment, its tendency is to a fatal termination, which will in all probability happen before more than perhaps a small portion of only one lung has reached the stage of red hepatization. Fatal case No. 1, recorded above, is an example of the disease terminating in this way. In cases, however, which are asthenic from the beginning, or which have been induced by exciting causes acting with moderate intensity, as is generally the case in the summer and autumn months in Canada, and during most seasons of the year in the more temperate climate of Great Britain, as well as in those attacks in the treatment of which it may not have been considered necessary to employ bloodletting, recovery may in a

large proportion of instances be satisfactory, provided they have been early brought under intelligent medical treatment, and that, too, without hepatization ever having occurred. Case No. 9, given above, is a fair example of an asthenic pneumonia occurring in a weakly man, and running its course in the manner which has just been indicated. A proportion of such cases, however, will, without assignable cause, or the existence of any very apparent difference in character from other attacks to all appearance identical with them, run on to hepatization—that stage coming on either gradually or by a sudden exacerbation of symptoms after apparent temporary amendment—and require a lengthened period of treatment for their cure. Cases of this description may also terminate fatally, but then, in comparison with what is observed in sthenic attacks having a similar result, there will be a very marked difference in the rapidity with which they will have run their course, which may not close in death until after the lapse of several weeks. In cases of this description, examination of the body after death will disclose a large portion of lung in the condition of grey hepatization, which may even have gone on to the formation of abscess, as happened in the second fatal case recorded above.

A considerable number of cases of a nature similar to those last described, with the exception that they all recovered, came under my notice in the season of 1863, when from a local cause the complaint was less sthenic in form, and when also, for a reason already given, bloodletting was less frequently had recourse to in its treatment. Of this nature, also, I believe that the majority of the cases of pneumonia treated in civil hospitals in this country partake; and from all I can learn on that subject, I am induced to suspect that a very considerable proportion of those cases are not brought under medical treatment until the stage of hepatization has probably set in.

4th, As will have been inferred from what has already been mentioned in the course of this paper, I have arrived at the conclusion, founded on facts, which I do not think can well be misinterpreted, that contrary to what has been asserted on this point also, variations in the nature and intensity of the exciting cause, as well as the influence of changes in climate, in atmospheric conditions, and in locality, affect, in a marked degree, the form or type in which pneumonia may occur. This was in no way more clearly made apparent than by the modifications of the disease, caused in the course of a single year in Canada, by the variations of a temperature ranging from —35° in the open air to 100° in the shade: the extreme cold of winter producing attacks of pneumonia which were severe in form and rapid in accession in direct proportion to the severity of the exciting cause; whilst, on the other hand, the milder temperature of summer and autumn led to attacks which were slow in accession and correspondingly slight in degree.

5th, My experience of the effects of bloodletting convinced me

that its employment at the outset of pneumonia in its sthenic form was attended with most beneficial results, not only in shortening the duration of the disease, and rendering convalescence satisfactory, but also in giving an amount of certainty and uniformity to the results of treatment which could not be attained by the employment of any other combination of remedies. As to its power in "cutting short" the disease—if by this term is meant to be expressed the probability of its at once arresting, and as it were stamping it out —my own experience would go to show that its employment is not attended with any such result. In proof of this I may mention that so soon as I became aware of the import of the condition of the respiration, which is first observed at the outset of pneumonia, I attempted, by early bleeding before the disease had advanced beyond the stage indicated by obscurity of the respiratory sounds, to arrest it in that of engorgement. In no case, however, was this practice attended with the result desired; but, on the contrary, in every attack so treated, instead of being altogether prevented, small crepitation seemed to undergo an earlier development,—an occurrence which may perhaps be held as in some measure bearing out the accuracy of the views I have expressed as to the nature of the early stage of the disease in sthenic attacks. The subsequent progress of all such cases early bled was otherwise invariably satisfactory.

I would still, however, feel inclined to consider this question in the light of an open one, and to believe, until distinct proof to the contrary shall have been produced, that bloodletting practised soon after the occurrence of the rigor may possibly at once arrest the disease. I am the more inclined to this view of the matter, because Dr Jameson, my colleague in the 47th Regiment, informs me, that in one case which he bled freely immediately on the man's admission into hospital, and within a very short time of the occurrence of an attack of rigor which, from all the attending circumstances, and happening as it did at a time when pneumonia was prevalent among the men of the corps, appeared to be the initial symptom of an attack of that disease, no further indisposition followed. This may or may not have been a case which, if it had not been so treated, would have proved one of pneumonia; but still I believe the fact is worth recording.

A perusal of the records of cases which I have given above will show I think, upon the whole, with considerable clearness, that it was by limiting the stage to which the diseased action advanced, rather than by affecting the extent of lung to be attacked, that bloodletting manifested its power to shorten the duration of the disease. That it also influenced the amount of lung attacked, however, appears evident, from what was found to have happened in some of the fatal cases, neither of which were bled at the outset of the disease. It may be here stated, with regard to the extent of lung affected in cases early bled, that it amounted, as a general

rule, to from one-half to three-fourths; and that in respect of the part first attacked, in no instance did the disease begin at the apex.

After having most carefully watched the whole course of the disease in attacks where bloodletting was employed at the outset, I feel satisfied that in no case so treated did red hepatization take place; both the exaggerated respiratory sound heard near the acme of engorgement, as well as the absence of evidence of the entrance of air, excepting during forced respiration, which frequently for a few hours preceded the setting in of small crepitation, having been, as already so often stated, unconnected with any degree of actual consolidation. Neither were the bronchitic sonorous râles occasionally audible along with large and small crepitation near the middle of the lung, in the course of some of the cases, confounded with the blowing sound of bronchial respiration heard when true hepatization was present. The facts of greatest importance, however, noticed with reference to the employment of bloodletting, were the rapidity with which such cases recovered in proportion to the severity of the attacks, and the uniformity of the results observed on a review of the whole cases so treated, as compared with that obtained in the milder and more asthenic attacks in which bloodletting was not made use of. This has been shown by the tabular statements given at an earlier part of the paper.

A further consideration, possessing also considerable practical importance, is the fact, that in cases not bled it was found that there existed, throughout the greater part of the attack, a danger that a fresh accession of fever, and a rapid advance to hepatization, might not only suddenly occur, but do so at a period of the disease when good results from bloodletting, if it should then be employed, were but little likely to be obtained. In conclusion, I would, however, beg that it may be distinctly understood, that whilst advocating the employment of bloodletting at the outset of sthenic cases of pneumonia, such as are seen in young and previously healthy soldiers, and whilst maintaining also from actual observation that the good results which follow such a mode of treatment surpass in a marked degree those obtained from any other combination of remedies, I do not in any way call in question the value of that mode of treatment termed "restorative," as applied to a particular class of cases, and which has been employed with so much success in the management of the pneumonia seen in civil hospitals in Britain.

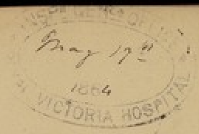
It would appear, however, from such limited details as have been given of the cases, on the results obtained in which this plan of treatment has been based, not only that the attacks were of an asthenic character, but it may also be inferred that, in a large proportion of instances, the disease had advanced to the stage of actual consolidation before it was brought under medical treatment at all. On this supposition, therefore, these were cases in which bloodletting would

in all probability have been inadmissible, but they were exactly such as would derive benefit from the description of treatment in question. My own experience of pneumonia would, accordingly, lead me to conclude that it is only in such asthenic cases as those above referred to, modified as they must be by the minor degree of intensity of their exciting cause, as it prevails in a climate equable on the whole as that of Britain is, and influenced also as they cannot fail to be by conditions of food, clothing, locality, and occupation, that this plan of treatment can be advantageously employed.

In sthenic cases, such as came under my own observation in Canada, and of which it is possible that examples may occasionally be met with at home, facts have convinced me that a restorative plan of treatment could not be exclusively employed without the risk of at least a considerable mortality, or at all events the almost certainty of a recovery protracted beyond what it would have been had bloodletting been made use of. I would further add, that what I have learned in the course of this inquiry induces me to believe that much of the confusion and diversity of opinion which have of late years arisen on the subject of the pathology and treatment of pneumonia has been the result of a somewhat restricted view of the extent of the field of inquiry embraced by the subject under investigation, and the too resolute belief, not only that the asthenic pneumonia, which has of late years supplied the larger proportion of the cases met with in this country, is the sole form in which inflammation of the lungs prevails now, but is even the only type in which that disease has existed at any previous period. I must at the same time beg to be pardoned if I venture also to hint my suspicion that some portion of this state of opinion may likewise be due to the condition of the lungs which exists during the highest state of engorgement having been confounded with that state of actual hepatization the occurrence of which renders it absolutely essential for the cure of the disease that the next highest stage—that of suppuration or grey hepatization—should also follow.

I would now close this paper with the expression of a sincere hope that the facts, with the conclusions deduced from them, which I have endeavoured to record, may prove suggestive to other inquirers; and that they may also, perhaps, be the means of inducing my fellow-labourers in the public service to enter upon an inquiry for the prosecution of which they enjoy advantages that do not often fall within the reach of their brethren in civil life.

PRINTED BY OLIVER AND BOYD, EDINBURGH.



INSANITY AND CRIME:

A MEDICO-LEGAL COMMENTARY ON THE CASE OF GEORGE VICTOR TOWNLEY.

BY

THE EDITORS OF THE "JOURNAL OF MENTAL SCIENCE."

"It continually happens in this country, where our legal system is the growth of ages, imperfections are naturally to be found which are patiently endured until some event occurs which places its defects so flagrantly before us that we set ourselves at once to the duty of remedying them."—THE LORD CHANCELLOR: *Speech on the First Reading of the "Lunacy Regulation Bill" in the House of Lords, February 27, 1862.*

LONDON:
JOHN CHURCHILL AND SONS,
NEW BURLINGTON STREET.
MDCCCLXIV.

TO

JOHN CHARLES BUCKNILL, M.D., Lond.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS,
VISITOR OF CHANCERY LUNATICS, LATE EDITOR OF "THE JOURNAL OF MENTAL SCIENCE,"
ETC. ETC. ETC.

The following Pages are Inscribed,

IN TOKEN OF ADMIRATION

OF HIS ABLE AND SUCCESSFUL EFFORTS TO ADVANCE

THE LITERATURE AND PRACTICE OF PSYCHOLOGICAL AND LEGAL MEDICINE,

AND OF OUR SINCERE FRIENDSHIP.

"It appears that all the metaphysical tests of insanity prove equally worthless in the balance of criticism, or the crucible of experience. How, then, it will be asked, are the difficult and arduous questions of criminal insanity to receive a practical solution? If no rules can be laid down with respect to the quality of mind which shall excuse, and that which shall inculpate the perpetrator of a criminal act, in what manner is murder to be distinguished from madness, felony from fatuity, crime from disease? Truly by *Medical Diagnosis*, founded upon all the circumstances of the case; upon all the mental and bodily phenomena; the history and the present symptoms; upon all those circumstances which enable a skilful and experienced physician to decide upon the existence or absence of disease of the brain affecting the mental functions."—*Unsoundness of Mind in Relation to Criminal Acts.* An Essay by John Charles Bucknill, M.D., Lond. &c. &c. 2nd edit.

INSANITY AND CRIME.

I. History of the Case.

George Victor Townley was tried at Derby, on the 11th and 12th December last, for the wilful murder of Miss Goodwin, a young lady of nearly twenty-three years of age, who resided with her grandfather, Captain Goodwin, at Wigwell Grange. He belonged to a respectable family living near Manchester, was about twenty-five years of age, and was described as a man of quiet and refined manners, a good linguist, and an accomplished musician. He had made the acquaintance of Miss Goodwin about four years before, at the house of one of his relatives in Manchester; a strong attachment was formed between them, and at the time of the murder they had been engaged for upwards of three years. Townley's want of means and of settled employment were impediments to marriage; and once the engagement had been broken off for a time, but had been soon renewed.

On the 14th August, Miss Goodwin wrote to Townley formally asking to be released from her engagement, apparently giving as an excuse the strong objection of her grandfather to its continuance. The true reason, however, was, that she had become attached to a clergyman who had been staying at Wigwell Grange. Most painfully affected by the letter, Townley, nevertheless, replied to it in a natural and sensible manner, saying that he was not the man to stand in her way, that the sooner it was all settled the better, but begging for a last interview, "though God knows what misery it gives me to say so!" To this request Miss

Goodwin appears to have consented at first—then to have written again to stop his coming, on the plea that she was about to leave Wigwell Grange for an indefinite time. Townley, nevertheless, went on the 20th August to Derby, and slept that night at the Midland Hotel. On the following morning he left Derby for Whatstandwell (the nearest station to Wigwell Grange), about half-past eleven reaching the Bull's Head Inn, where he ordered a bed. Thence he walked past the Grange to Wirkworth, and called on the Rev. H. Harris, a friend of the Goodwin family. To him —after inquiring about the clergyman who had been at the Grange—he said that he had written to release Miss Goodwin from her engagement, but that he had come to hear from herself that she gave it up, adding, " I know I am not a good match, and have no wish to stand in her way." His manner was that of an ordinary man, perfectly calm and collected. At the suggestion of Mr. Harris he returned to the Grange and, arriving there at twenty minutes to six, asked for Miss Goodwin; she met him at the drawing-room door, and they went into the garden together. Half-an-hour afterwards she returned to the house, but went out again at a quarter to seven. Between eight and nine she was seen walking up Wigwell Lane with Townley; and shortly afterwards a labourer, hearing a moaning noise, ran forward, and met Miss Goodwin staggering towards her home, " guiding herself by the wall," her face and the front of her dress covered with blood. She said that a gentleman down the lane had been murdering her, and begged to be taken home. As the labourer was supporting her in his arms, Townley joined them, confessed that he had stabbed her, and helped to carry her towards the Grange. He called her " Poor Bessie" several times, and said, " You should not have proved false to me." After a while they had to lay her down; the labourer went for help, and on his return Townley was trying to stop the bleeding. As they bore her towards the hall, Townley said " he was afraid she was dead, and bent down and kissed her." It was true she was dead, and the strange party carried her corpse to the house. At the gate Captain Goodwin met them, and in reply to his

question, who was the murderer? Townley acknowledged his act, and added, " She has deceived me, and the woman that deceives me must die. I told her I would kill her. She knew my temper." Two packets of her letters he gave up to Captain Goodwin, saying that he did not wish them to be brought into court, and these were destroyed unread. On his way to the station, with a policeman, he said, " I am far happier now that I have done it than I was before, and I trust she is."

As the facts of the crime admitted of no dispute, the defence set up for the prisoner was, that by the " mysterious dispensation of Providence he had been deprived of his reason to such a degree as to render him not amenable to the laws for the dreadful deed which he had undoubtedly committed." Evidence was given by the prisoner's maternal aunt, that his grandfather's sister had destroyed herself, and was supposed to be insane; that a first-cousin was for many years in an asylum, and that *her* maternal uncle had had ten children, of whom five were insane. His mother testified to the great distress which Miss Goodwin's letter had caused him, and to his natural excitability of disposition. The proof of insanity, however, rested almost entirely on the evidence of Dr. Forbes Winslow, who first saw him on the 18th November, three months after the murder. Mr. Baron Martin, in summing up with great care, said that nothing was more vague than insanity, but that " what the law meant by an insane man was a man who acted under delusions, and supposed a state of things to exist which did not exist, and acted thereupon. A man who did so was under a delusion, and a person so labouring was insane. . . . . The question is, whether the prisoner was labouring under that species of insanity which satisfies you that he was quite unaware of the nature, character, and consequences of the act which he was committing; or, in other words, whether he was under the influence of a diseased mind, and was really unconscious at the time he was committing the act that it was a crime." His lordship continued, that the jury must judge of the act by the prisoner's statements, and by what he did at the time. Unless they

were satisfied—and it was for the prisoner to make it out—that he did not know the consequences of his act, or that it was against the law of God and man, and would subject him to punishment, he was guilty of murder.

After an absence of five minutes the jury returned a verdict of *Guilty* of wilful murder; and Mr. Baron Martin, in passing sentence of death, said, "In that verdict I entirely concur."

On the following day (Dec. 13th), Mr. Baron Martin wrote to Sir G. Grey, calling his attention to the evidence of Dr. Winslow and Mr. Gisborne, "who both deposed in the strongest manner that the prisoner is now of diseased mind, and absolutely insane;" but adding, at the same time, "The conviction is in my opinion right." In reply to a communication from the Home Office, asking whether he himself believed Townley to be *now* insane, he said, "I cannot say that I have formed any decided opinion upon the point." (Dec. 18th.)

These letters Sir George Grey forwarded at once to the Commissioners in Lunacy, with the following observations of his own:—

> "Sir George Grey is of opinion that the verdict of the jury—in which Mr. Baron Martin, who presided at the trial, concurs, and which appears to Sir George Grey from the evidence to have been right—decides the question as to the sanity of the prisoner at the time when the crime was committed. The only question, therefore, on which any doubt exists, and upon which, in the opinion of the judge, there ought to be further inquiry, is whether the prisoner is now insane."

This inquiry, "recommended by Mr. Baron Martin, whether or not the prisoner is at the present time of unsound mind," the Commissioners were requested to undertake.*

The Commissioners replied, on the 28th December, in a long Report, signed by Messrs. Campbell, Wilkes, and

* "The papers sent herewith comprise two letters from the learned Judge, with Sir George Grey's reply to the former of them; the notes of evidence taken at the trial, including the evidence of Dr. Forbes Winslow and Dr. Gisborne; and a series of applications from various persons to whom the prisoner is known, and who are able to speak as to the state of his mind before or since the commission of the murder."—*Mr. Waddington's Letter to the Commissioners in Lunacy, Whitehall, Dec. 23.*

Forster. It was impossible, they said, to separate the consideration of what Townley's condition had been during the entire period of his confinement from their opinion of his present state, and added, that what it is now it has been throughout.

"Being of opinion, therefore" (they conclude), "that the prisoner continues to be now in the same mental state as when he committed the murder and underwent his trial, we think that, applying the law as laid down by Mr. Baron Martin to this case, the prisoner, George Victor Townley, was justly convicted."

Having thus answered Sir George Grey's inquiry, they proceeded to say that, "in view of the extravagant opinions deliberately professed by him, of his extraordinarily perverted moral sense, and of the hereditary taint alleged and apparently proved to have existed in the family of the prisoner's grandmother, we cannot consider him to be of sound mind." They could not find any evidence of the existence of a delusion; although they pressed him very closely as to his alleged belief in a conspiracy, "we could not satisfy ourselves that this was in the nature of a delusion. It seems certain that some members of the deceased's family objected to his engagement with her, while others favoured it, or were indifferent; and that the former had obtained an influence over her, some little time before her letter was written, which was meant finally to put an end to it. Hence he believed that she had been acted upon by a conspiracy, which she meant 'in the tenderest point to injure him;' and all the questions we put upon this part of the case failed to draw from him anything that could bear other construction than that he had taken a disordered and morbid view of an actual occurrence."

Meanwhile Sir George Grey was relieved in an unexpected manner from the difficulty of acting upon a report, in which it was stated that Townley was legally convicted, though of unsound mind; for a certificate was received at the Home Office, signed by three justices of the peace and two medical men (and amended next day in a technical point), under the provisions of the 3 & 4 Vict.

cap. 64, s. 1, stating, in the terms required by law, that they had examined the prisoner, and that he was of unsound mind. Upon these certificates Townley was, in accordance with the construction which has been uniformly placed on that section of the act, ordered to be removed to Bethlehem Hospital—the capital sentence being respited but not commuted.

Immediately there arose a great outcry throughout the land; a miscarriage of justice was attributed to the influence of money; and at the Derbyshire Epiphany Sessions, held on the 5th January, a strong remonstrance was signed by forty magistrates for the county, and sent to Sir George Grey. In this it was stated, with reference to the certificates under the 3 & 4 Vict., that the inquiry had not, like all previous inquiries of the kind, originated with the authorities of the gaol, but had been promoted and conducted entirely as a matter of professional business by Townley's legal adviser; and the necessity of a full and public inquiry by some responsible authority was earnestly urged. Sir George Grey replied that he had no knowledge of any irregularity; reminded the justices that neither Townley's legal adviser, nor the two medical men who signed the certificate, could have been admitted to the prisoner without their sanction; and added that, as far as concerned the step to be taken by the Secretary of State in conformity with the law on the receipt of the certificates, it was immaterial how the inquiry originated, provided the certificates were in accordance with the provisions of the statute.

In a second letter of the 15th January, the Derbyshire magistrates replied to Sir George Grey, that on the application of Townley's solicitor, the visiting justices of the gaol had consented to a preliminary inquiry into the state of the prisoner's mind, for the purpose only of ascertaining whether there was sufficient ground for further and more formal investigation, and *not for the purpose of sending a certificate to supersede that investigation.* They still urged, therefore, that although the certificates might be in accordance with the provisions of the statute, the fact of so important a docu-

ment arresting the course of justice, and substantially transferring the power of life and death from the Crown to two justices and two medical men, put in motion by the prisoner's solicitor, called for an inquiry into the origin and progress of so unusual and startling a proceeding.

At this stage the matter rests for the present. Townley is in Bethlehem Hospital; there is great public dissatisfaction at the way in which a criminal has been withdrawn from legal punishment; an earnest desire is expressed on many sides, that some definite conclusion as to what insanity shall mean may be come to; and all are agreed upon the necessity of abolishing a law, by which the power of reprieving any criminal is placed in the hands of two justices of the peace and two medical men, who may be moved by interest or inspired by a crotchet.*

* Whilst these sheets were going through the press, the following report has been published (*Times*, Feb. 3rd) :—

"Bethlehem Hospital, Jan. 28.

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

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

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

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

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

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

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

"The supposition that he killed Miss Goodwin under the influence of the

II. The Medical Evidence of Insanity.

On the 18th November, three months after the murder, Dr. Winslow examined the prisoner Townley for nearly two hours, in the presence of Mr. Sims, the governor of the gaol; and again on the 10th December, the day before the trial, he examined him for three-quarters of an hour. "He

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

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

"The prisoner endeavoured to represent the catastrophe to us as due to the influence of sudden impulse, but the details which we elicited from him show that he used threats of murder for some time before he struck the first blow. We think that his clear memory of the events attending the crime, and also the attempts which he has made to misrepresent the state of his mind and memory at the time of these events, are evidence of his sanity.

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

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

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

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

Looking on this report as conclusive that Townley is of sound mind, and a certificate having been received by him to that effect, Sir George Grey has informed the Derbyshire magistrates that Townley's sentence had been commuted to penal servitude for life, and that the prisoner will be dealt with accordingly. Sir G. Grey adds, that it is the intention of the Government to propose an amendment of the Act under which the certificates of insanity in this case were given.

We rejoice at this result, not only because it fully justifies the views taken in these pages—views which, if regard were had to scientific accuracy, it was im-

was not aware," said Dr. Winslow, "of my name or of the object of my visit. His behaviour was quite natural and not assumed."* Both at the trial and in subsequent letters to *The Times* and the different medical papers, Dr. Winslow desired to guard himself against the expression of any speculative opinion as to Townley's insanity on the 21st August, the day of the murder. "I deposed only," he writes, "to what I myself observed of his mental state when I examined the prisoner on the 18th November and the 10th December. On both those occasions I, in common with Mr. Gisborne, surgeon of the prison, and Mr. Sims the governor, found him insane."† As, however, both these gentlemen testified, that on those dates Townley's state of mind was exactly as on admission into the goal, the scientific evidence, in so far as it expressed the true state of things, necessarily was equally applicable to the 21st August. The Commissioners have insisted upon this fact in their Report.

The results of Dr. Winslow's examinations were as follow:—

"He repeated to me that he did not recognise he had committed any crime at all—neither did he feel any degree of pain, regret, contrition, or remorse for what he had done,

possible to avoid—but because "the appointment of medical gentlemen of great experience in mental diseases" to examine into Townley's state of mind, is an admission of the principle that special experience is required "in order to form a conclusion whether a man is a lunatic or not," and establishes a precedent which we hope may be followed for the future.

* Did Dr. Winslow imagine that Townley mistook him for an itinerant preacher of the Gospel, who, with benevolent design, was making this minute examination into the state of his thoughts and feelings? Or did he, with still more confiding simplicity, think that so skilful and energetic a tactician as Mr. Leech proved himself, had failed to give his client any kind of notice of the interview with his "expert"?

† In the certificates of the three Derby borough justices and the two medical men, Mr. Sims is likewise made to concur with Dr. Winslow and Mr. Gisborne. "The governor of the gaol," it is there said, "deposed to the fact of the prisoner bring insane at that period." (Dec. 11th.) On the 13th January, Mr. Sims, in a letter to *The Times*, calls this an important error. "I never was at the trial asked," he writes, "by counsel whether I considered the prisoner sane or not. Immediately after counsel had elicited an opinion of insanity from Dr. Winslow and Mr. Gisborne, I was asked whether I considered the prisoner in the same state then as he was when he came into the gaol; my answer was in the affirmative—not that I meant to imply that I considered him insane, *for I have never done so.*"

I endeavoured to impress on his mind on my first visit the serious nature of the crime he had committed. He repudiated the idea of its being a crime either against God or man, and, in reply to some observation of mine, attempted to justify the act, alleging that he considered Miss Goodwin as his own property; that she had been illegally wrested from him by an act of violence; that he viewed her in the light of his wife who had committed an act of adultery; and that he had as perfect a right to deal with her life as he had with any other description of property, as the money in his pocket, &c. I endeavoured to prove to him the gross absurdity of his statement and the enormity of his offence, and he replied: 'Nothing short of a miracle can alter my opinions.'"

"The expression that Miss Goodwin was his property was frequently repeated: he killed her to recover and repossess himself of property which had been stolen from him. I could not disturb this, as I thought, very insane idea. I said: 'Suppose any one robbed you of a picture, what course would you take to recover it?' He said he would demand its restitution, and if it were not granted, he would take the person's life without compunction. I remarked that he had no right to take the law into his own hands; he should have recourse to legal measures to obtain restitution. He remarked that he recognised the right of no man to sit in judgment upon him. He was a free agent, and as he did not bring himself into the world by any action of his own, he had perfect liberty to think and act as he pleased, irrespective of any one else. I regard these expressions as the evidence of a diseased intellect."

"Last evening he said that he had been for some weeks previously to the 21st of August under the influence of a conspiracy. There were six conspirators plotting against him with a view to destroy him, with a chief conspirator at their head. This conspiracy was still going on while he was in prison, and he had no doubt that if he was at liberty, they would continue their operations against him, and in order to escape their evil purposes he would have to leave the country. He became much excited, and assumed

a wild, maniacal aspect. I am satisfied that aspect was not simulated. I could not get from him the names of the conspirators."

On cross-examination, Dr. Winslow added that he should class the case "as one of general derangement;" that Townley did "not appear to have a sane opinion on a moral point;" that "his moral sense was more vitiated than I ever saw that of any other human being;" that he "seemed incapable of reasoning correctly on any moral subject;" and that he "was beyond atheism."

On considering the tenor of the evidence, then, it appears that Dr. Winslow founded his opinion of Townley's madness —first, on the existence of a delusion as to conspiracy; secondly, on the extravagant notions which the prisoner is said to have had with regard to Miss Goodwin being his property; and, thirdly, on the great perversion of his moral sense. The Report of the Commissioners, however, proves satisfactorily that the so-called delusion as to a conspiracy was a natural belief which was justified by the facts. So serious a misinterpretation of a simple fact must needs weaken the force of the second count; the ideas so extravagantly expressed with regard to property may have a more natural interpretation than the downright imbecility which, as interpreted by Dr. Winslow, they would indicate. To argue that the woman who deceives you must die is not evidence of intellectual disorder, however much it may mark moral deficiency; it is simply the argument which the Sultan employs when he sends the erring inmate of his harem on her last sail on the Bosphorus. The charge of founding his diagnosis of insanity on the perversion of the moral sense, Dr. Winslow himself repudiated in a letter to *The Times*. "I said that his moral sense was extremely vitiated," he writes; "but it is not the fact that I, when in the witness-box, inferred George Townley to be insane and legally irresponsible from such a condition of perverted thought." It would appear, then, that this physician based a positive and extreme opinion of Townley's insanity mainly on that which was an error of his own—on the mistaking of a true belief for a delusion. Still it is possible that he may

have come to a right conclusion on erroneous ground, that his instincts may have led him right when his analytical observation failed; and into this probability we shall presently examine further.

The evidence of Dr. Winslow was supported by that of Mr. Gisborne, the surgeon of the gaol, who at the trial declared his belief that Townley was of unsound mind. This testimony surprised the visiting justices of the gaol; and Mr. Mundy, M.P., complained at the Derbyshire Sessions that they had not been informed by the surgeon when he changed his mind on the subject of Townley's sanity, seeing that he had previously recorded "his opinion that he was perfectly sane." To this censure Mr. Gisborne replied in a curious, rambling letter, in which he acknowledged that, after having had Townley under observation from the 24th August, he made the following entry in the "Prison Journal" on Oct. 6th:

> "Townley, aperient pills; good health, mind and body."

He went on to say that although impressed, as the public were, that the prisoner was sound in mind and body, yet the "monstrous notions" of the latter sorely perplexed him: "Sometimes I thought he was sane; again I thought he was insane." A consultation with Dr. Hitchman left him convinced of the prisoner's legal sanity, and certain that an intelligent jury would find him guilty; but he afterwards read Dr. Winslow's Report that "Townley's delusions and statements emanated from organic brain mischief—that he was insane," and thereupon "through the portals of doubt" did this new light guide him to the conclusion that Townley was of unsound mind.* Still, however, he wavered: "Almost till going into the witness-box, I was undecided as to the opinion I should give. . . . I told Mr. Leech I should be guided much by what transpired in court."† It is plain

* "In short," said the judge, interposing, "Dr. Wycherley took the very thing for granted which it was his duty to ascertain; and you, sir, not to be behind Dr. Wycherley, took the thing for granted at second hand."—*Hard Cash*, a matter-of-fact Romance, by Charles Reade.

† A letter appeared in the *Derby Mercury* for Jan. 20th, from the Honourable and Rev. Frederick Curzon, J.P., reminding Mr. Gisborne of a conversation

that this gentleman was in the unhappy position of having a task imposed upon him to which he was unequal, and that he simply drifted into the result of his vacillations, such as it was. His evidence manifestly damages rather than supports the cause of Townley's insanity; but it may be justly dismissed from consideration as valueless on either side of the question.

It was in reality, then, entirely on Dr. Winslow's evidence that the theory of the prisoner's insanity rested. That evidence has since been invalidated to a serious extent by the proved misinterpretation on his part of a true belief, and by the statement of Mr. Sims that he never believed Townley insane, as Dr. Winslow understood him to have done. There is further this negative evidence against that physician's theory—that although he discovered "general derangement," "delusion," "incapability of reasoning on any moral subject, and an inability to appreciate the absurdest of ideas," yet Dr. Hitchman, an eminent psychologist, and a conscientious man, was unable after careful examination to find insanity in the prisoner.

III. The Plea of Partial Insanity; was it Substantiated in Townley's Case?

No one, however credulous he might be, or however subtle he might deem himself as a psychologist, would venture to declare that Townley was afflicted with a general frenzy, either at the time when he murdered Miss Goodwin or when he was tried for the murder. That he was conscious of the act which he had committed; that he was even capable of reasoning calmly, if perversely, about it; and that he was alive to the serious position in which it had placed him, must be sufficiently plain to everyone. "His views of right and wrong, false as they are," the Commissioners say, "appear to have been coherently acted upon, and with a full

which he had with him in November, in which, in reply to the question, "As you have many opportunities of seeing Townley, will you tell me, is he sane or insane?" Mr. Gisborne said, "Townley is as sane as you or I;" and added, "He will be hung to a certainty!"

sense of what they involved." If Townley was insane, it was from some form of partial insanity that he suffered. What, then, are the categories of partial insanity to any of which it may be thought possible to refer the alleged madness of Townley? These are :—

1. *Monomania, or Partial Intellectual Insanity* (*Monomanie Intellectuelle* of Esquirol), in which there is a delusion upon one subject, or the delusions are confined to a certain circle of ideas, apart from which partial eclipse the mind is thought to be sound.

2. *Moral Insanity* (*Monomanie Raisonnante* of Esquirol), in which the character, feelings, and affections are changed, while there is seemingly no intellectual derangement.

3. *Impulsive or Instinctive Insanity* (*Monomanie Affective* of Esquirol, *Manie sans Délire* of Pinel), in which there is a violent, perhaps an irresistible, impulse to commit a crime with a full consciousness of its nature and even horror of it—the intellect seeming unaffected.

The currency which these names have obtained necessitates the present use of them, ill-chosen and objectionable as they unquestionably are.

1. *Monomania, or Partial Intellectual Insanity.*—That a person may exhibit insanity only on one or two points, apart from which the operations of his mind are vigorous and healthy, is a well-received article of popular faith. It is not by any means a certain article of a true scientific faith; for in most of these cases it is evident, on sufficiently careful observation, that the mind is not unaffected outside the circle of recognised morbid ideas—that in reality there are discoverable such a change in the character and habits, such perversion of the feelings, such an excitability of disposition, with loss of self-control, as to constitute a general disturbance apart from the particular delusion. The latter is an evident symptom, which anyone who runs may recognise; but the general disorder—which is, in fact, a moral insanity—requires for its discovery the careful examination of some one who has known the individual or who knows the disease. And yet it is of a serious nature; for it is exactly that state

of mind in which there is the disposition to violent excitement, with a power of will greatly diminished, in which there is the danger of unaccountable impulses suddenly springing up at any time. Anyone, therefore, afflicted with partial insanity is not safe; he may not only at any moment become the evident victim of his false idea, but he may be hurried into sudden violence by some new and dangerous impulse, which appears to have no relation to the delusion, but which is an expression of the disease of which it is a symptom. Partial insanity does, therefore, take away from the sufferer some, if not all, responsibility for his criminal actions, whether these are plainly related to his delusions or not. The law recognises this in civil cases, where it makes void every act of the lunatic done during the period of lunacy, however limited his delusions, and even when the act can in no way be connected with the influence of them. But it is not so in criminal cases: in them the connection between the delusion and the act must be shown; and thus the law truly merits the reproach of being more careful about the mental state when property is concerned than when life is at stake. And what is it which the law really demands? That the sane and logical mind should dive into the dark wasteful depths of the lunatic's soul, and follow the incoherencies of his wild and wayward thoughts. And if the sound mind should fail in tracing out a connection where no path is, then the lunatic is to be sacrificed to the vengeance of the law which not he, but his disease, has outraged.* Surely it is a manifest absurdity to impose on any sane man the task of tracing out a connection between mental phenomena the essential character of which is that they are not coherent—that they follow one another in no logical relation—that not the order, but the disorder of their occurrence is utterly opposed to all the experience of sanity! The delu-

* "Was't Hamlet wronged Laertes? Never, Hamlet!
If Hamlet from himself be ta'en away,
And when he's not himself does wrong Laertes,
Then Hamlet does it not; Hamlet denies it.
Who does it then?—His madness. If't be so,
Hamlet is of the faction that is wronged:
His madness is poor Hamlet's enemy."

sion is not itself the disease, but a symptom of the disease; and it is as certain as observation can make it, that the criminal act may be a manifestation of the disease of which the delusion is a manifestation, without any connection between them being evident to the looker-on.

The homicidal acts done by those insane who suffer from partial intellectual insanity fall naturally into three divisions:—

(*a.*) When the act is done directly in consequence of a delusion. It may be a voice from Heaven which commands the deed, and the law would then hold the sufferer guiltless. It may be that he kills some one under the delusion that his life is in danger from him; then also the law would hold him irresponsible. But if under the delusion that he is the victim of a cruel and persistent persecution the madman shoots his supposed enemy, then he is hanged: had this fancied enemy been his natural heir, whom he disinherited under the influence of his delusion, then the law would have voided the will. The truth meanwhile is, that when a positive delusion exists in the mind, the rest of the mind is so far affected that unaccountable impulses spring up without being dictated by the delusion, and impulses which are in relation with the delusion acquire an irresistible force. The impossibility which the law assumes in this matter is that the passion in the insane mind should be as much under control as the passion in the sound mind—in other words, that insanity should be sanity.

(*b.*) Where the act is done indirectly in consequence of the delusion, but the connection cannot be seen by the sound mind, although the lunatic himself may disclose it. A young gentleman, for example, committed a frightful assault upon a child, cutting the calves of its legs through to the bone. As this person's morbid fancy was that he was in love with windmills, there was no connection apparent between his delusion and the act. And yet the truth was that he had been placed by his friends in a part of the country where there were no windmills, and he committed the assault in order that he might be removed to some place where there were windmills. Those who think that the

mind is unaffected apart from the delusion might do well to reflect upon the logic of such a manner of reasoning.

(*c.*) Where no relation between the delusion and the act can be recognised by the looker-on, or made known by the lunatic, however willing the latter might be to exhibit it. A mother of two children fancies that she is persecuted, and is suicidal, but goes about her daily duties with regularity. One day, without seeming anywise different from usual, she took one of her children and beat its head against the floor till it died; and she would have done the same with the other child had she not been prevented. She was sent to an asylum, where after a time she quite recovered; but she never could tell how it was that she had killed her child, when she was so fond of it. In such case the frightful impulse is as little within the control of the will as an attack of epilepsy, to which, indeed, it is strictly comparable.

Are there any valid grounds, then, on which to base an inference that Townley suffered from partial intellectual disorder? It was certainly said in medical evidence that he had a delusion as to the existence of a conspiracy against him, consisting of six persons with a chief at their head. With a prudent wisdom, the prisoner, it appears, spoke only in general terms of this conspiracy, and would not give the names of the conspirators. On the face of it such a delusion had an exceedingly suspicious look; so vague and general a description of it was not at all consistent with the way in which lunatics talk about their delusions, if they talk of them at all. It is marvellous that the examining physician did not suspect, what the Commissioners at once discovered, that this idea of a conspiracy was anything but a mad notion. Certain of the friends of Miss Goodwin, solicitous of her welfare, were anxious that she should get rid of what all must admit to have been a long and objectionable engagement, and they doubtless did their best to bring that desirable result about. So far Townley was the victim of a conspiracy; and so far from the belief in it being evidence of insanity, he must verily have been all but an idiot if, under the circumstances, he had not suspected

these hostile influences. He did believe in them: and although he may have taken an exaggerated view of an actual occurrence, that belief was the sum and substance of the delusion alleged. By a singular fitness however, owing to what Townley prudently said and more prudently did not say, the medical evidence at the trial went exactly as far as was necessary to establish the belief in a conspiracy, and stopped exactly at that point where it was necessary it should stop to prevent the bubble being burst. Unlike real lunatics, who are mostly very angry at being considered insane, Townley seems to have exhibited himself in the most obliging manner exactly as far as was advisable for his own case that he should do so. Even if it be thought that he was simulating, it must be allowed that there was a certain sincerity in him; for although he did not speak the whole truth, he did not volunteer a falsehood, but assumed a wild maniacal aspect after he had said all that it was prudent to say. When we follow the statements further made with regard to this supposed delusion, they are likewise strange and suspicious. Townley expressed a belief that if he were at liberty the conspirators would continue their operations against him, and he would be obliged to leave the country. Now, it is certain that Townley was not the dupe of his own so-called delusion—certain that he knew what the Commissioners tell us was the nature of it: put this fact then by the side of his statement, that he would have to leave the country, together with the indefinite description of the conspiracy, and then let it be said whether it is not difficult to avoid some suspicion that Townley was deliberately deceiving Dr. Winslow. Be that as it may, however, it is unfortunately the fact that Dr. Winslow was deceived as to the real import of that on which he mainly based his opinion—that his superstructure of general derangement was raised on an extremely rotten and unstable foundation.

It is a rule of evidence, the justice of which there is no gainsaying, that the whole of the evidence of a witness whose testimony is discredited on one important point is more or less invalidated. This rule must be especially applicable to the evidence of the "expert." If one skilled in handwriting

swore positively at a trial that a certain word was in the handwriting of A or B, and it was proved that the word was not in the handwriting of A or B, the jury would rightly place little confidence in the rest of his evidence. It is to be regretted, therefore, that the unreliable evidence, so positively given, of a delusion which never existed, does seriously invalidate the rest of the medical evidence of Townley's insanity. When we are told that he really thought that he regained possession of Miss Goodwin by killing her, it is plain that, if this statement is literally accepted, we must believe Townley to be intellectually incoherent, if not imbecile, which all the evidence proves he was not. We cannot but suspect here an exaggerated misinterpretation of an actual expression, similar to that by which a delusion of insanity was detected in a simple true belief; and we cannot but think that Townley did not believe that he recovered bodily possession of his betrothed by stabbing her, but that it was in a less literal sense that he thought he regained possession of his property. Miss Goodwin's affections (herself, as it were) had been stolen from him; by taking from him who had robbed him that which had been stolen, he did, in a certain sense, recover his property, even though it was under the condition of destroying it. Such reasoning may argue moral perversion, but there is no evidence in it of intellectual disorder. And, at any rate, the theory which represents a man who coherently supported and acted upon false notions of morality, and in whom a daily observer and an experienced psychologist, could neither of them detect insanity, unable to appreciate the absurdity of the idea that he would gain repossession of a sovereign by throwing it into the Thames, is utterly inconsistent with the facts of insanity, and would be laughed out of a scientific court. Such theory is itself a scientific incoherency and a psychological curiosity. Though a man be mad, he cannot well combine intellectual dementia with great and coherent intellectual activity.

It is a necessary conclusion, from the analysis of the medical evidence, that George Victor Townley was not afflicted with any form of partial intellectual insanity.

2. *Moral Insanity.*—Much as the assumption of such a variety of insanity has been reprobated, its existence rests with certainty on the general agreement of all writers who have had a practical knowledge of insanity: if the names of those who have testified to its existence were given, the list must embrace all the distinguished writers who have devoted their lives to the study of insanity. Unless, then, it is thought right to discard the special knowledge of those who have so laboured in patient observation of facts, in favour of a popular prejudice, it is full time to recognise the truth, however inconvenient it may seem. Without illusion, hallucination, or delusion, it is certain that a disorder of mind exists, the symptoms of which are exhibited in a perverted state of those mental faculties which are usually called the active and moral powers—the feelings, affections, propensities, temper, habits, and conduct. Still, though in such case the individual may reason very acutely—may excuse, or explain, or justify his insane acts, and seems in full possession of his intellectual powers, these latter are really affected indirectly through the morbid state of the feelings; all his reasoning is tainted with the morbid self. He may judge very correctly of the relations of external objects and events to one another, but no sooner is self concerned than he displays in his reasoning the influence of his morbid feelings; he cannot realize truly his relations; his whole manner of thinking is a delusion—a lie. And the lie is of the worst kind; for it is not absolutely false, like a delusion mostly is, but it contains some truth hopelessly perverted. It is difficult sometimes for a looker-on, impressed with the acuteness of their selfish reasoning, and offended by their vices or perverse actions, to avoid thinking that these people could help their follies if they liked; but whosoever has sufficient practical knowledge of insanity knows that they are sufferers from disease, and that their follies or vicious acts are as little within their control as the irregular and purposeless movements of one who is afflicted with a chorea.

It is certainly natural that the doctrine of moral insanity should be looked on with extreme disgust; for it is startling enough at first sight, and it has undoubtedly been

greatly abused. By self-sufficient ignorance, or bold and unscrupulous advocacy, the plea founded on it has been made a subterfuge for the criminal to escape punishment. Dr. Prichard, who was the author of the term, never imagined that the vicious act or crime would of itself be considered proof of moral insanity. It is not sufficient merely to state an opinion; in the previous history there must be some evidence of disease from which the crime can be logically deduced, as the acts of the sane man are deduced from his motives, in order to establish moral insanity. "There is often," says Dr. Prichard, "a strong hereditary tendency to insanity; the individual has previously suffered from an attack of madness of a decided character; there has been some great moral shock, as a loss of fortune; or there has been some severe physical shock, as an attack of paralysis or epilepsy, or some febrile or inflammatory disorder, *which has produced a perceptible change in the habitual state of the constitution. In all cases there has been an alteration in the temper and habits.*" The recognition of moral insanity is, then, a medical diagnosis of a difficult nature, in which the crime is to be traced from disease as its cause, through a careful appreciation of various symptoms, physical and mental.

There is something inconsistent, after all, in the unwillingness which there is to acknowledge moral insanity. Almost every case of insanity really begins in emotional disturbance; and moral disorder may precede for some time intellectual disorder, and itself constitute the disease. Furthermore, so constantly does moral insanity accompany intellectual insanity, that Esquirol declared "*moral alienation,*" and not delusion, "*to be the proper characteristic of mental derangement.*"

It is found, on sufficiently accurate investigation, that in the majority of cases where moral insanity exists the cause of disease is hereditary taint. When such a taint does exist it undoubtedly represents a positive defect in the constitution of nervous element, and predisposes, therefore, to any of those forms of nervous disease in which the degeneration of nerve element may display itself. When,

at the trial of the unhappy youth Burton, whose mother and brother were insane, the Judge laid it down that "Hadfield's case differed from the present, for there wounds on the head had been received which were found to have injured the brain," the exhibition was not an instructive one; for a judge ought to have known that a strong hereditary predisposition to insanity is often as injurious to the brain as blows upon the head are. In reality, the hereditary predisposition to insanity implies an innate disposition in the individual to act out of harmony with his relations as a social being: the acquired irregularity of the parent has become the natural infirmity of the offspring, as the acquired habit of the parent animal sometimes becomes the instinct of the offspring. Hence comes the impulsive or instinctive character of the phenomena which mark hereditary insanity; the actions are frequently sudden, unaccountable, and seemingly quite motiveless. Appeal to his consciousness, and the individual will reason with great intelligence, and seem nowise deranged; but leave him to his own devices, or place him under conditions of excitement, and his unconscious life appears to get the mastery, and to drive him to extravagant, dangerous, and immoral acts. What is more unnatural than for a child six or seven years old to commit suicide, or to manifest dreadful propensities to cruelty, or even to homicide! And yet many cases are on record in which children suffering from moral insanity through hereditary taint have exhibited such desperate tendencies. The undoubted existence of such examples in children in whom no delusion exists, where no motive can be traced and no responsibility can be assumed, might well make the boldest pause before he denies the possibility of such a disease in adults because he cannot trace a motive, or thinks he detects a wicked one. By his acts, as well as by words, does man express himself; and it is in insanity of action, rather than of thought, that hereditary madness declares itself.

It admits of no question in science that homicidal and like desperate acts are committed by those afflicted with moral insanity without any delusion being present in the

diseased mind. Besides acts of eccentricity and immorality, and the homicide which a father or mother commits for the purpose of sending a child to heaven, it is to this class that those instances belong in which lunatics commit murder merely from a morbid desire of being hanged. That is one well-recognised way in which hereditary madness displays itself.* As there is no positive delusion in such cases, but only the morbid desire and the consequent crime appear, the unfortunate sufferers are very liable to be hanged, and those who give evidence in their favour to get into difficulties. Thus, in the painful case of the youth Burton, tried before the late Mr. Justice Wightman at Maidstone, counsel put to a medical witness this question—"Suppose a man with a desire to be hanged, and committing homicide with that object, would that be a mark of insanity?" The witness replied that no doubt such a man must be under a delusion. The Judge thereupon asked, "What delusion?" The witness was perplexed and could not clearly define, but supposed there must be many conceptions; doubtless he felt how impossible it was for him to dive, as Lord Denman expressed it, into the mind of a being so madly irrational. In summing up, the Judge said: "He was supposed to desire to be hanged, and in order to attain the object committed murder. That might show a morbid state of mind, but not delusion." Certainly not delusion, unless a delusion that it was a pleasant thing to be hanged; but delusion is not proof of insanity, and insanity may exist without delusion. And if definite ideas are put beneath words used, it will appear that a morbid state of mind really means a diseased state of mind, and that a diseased state of mind is insanity, which is exactly the condition of things in unfortunate beings like Burton. There is no possibility of explaining on psychological principles how it is that anyone commits murder for the sake of being

* At the trial of Burton, Mr. Joy, the surgeon of the gaol, said that in his opinion the prisoner was perfectly sane. Asked whether it could be a mark of insanity to commit homicide from a desire to be hanged, he replied that he thought it would, "*but he had never heard or read of any case of that kind, except that of McNaughten.*" Mr. Joy had not taken the trouble to open a textbook of "Medical Jurisprudence" before daring to give evidence upon a matter of which he was perfectly ignorant.

hanged, and it is not to be wondered at that lawyers will not believe in the existence of that condition, the peculiarity of which is that it seems to them inexplicable; but what the lawyers and the public should try to realize is that insanity is a bodily disease, and as a disease must be examined, and that such phenomena as Burton exhibited are explicable on pathological principles. The morbid feeling or impulse driving an unwilling mortal on to a desperate deed is really no more wonderful than the convulsion of a limb, which the sufferer cannot prevent. And it may perhaps be allowed, on psychological grounds, that there is not—what Mr. Justice Wightman seemed to fancy there was in Burton's case—any particular gratification in being hanged, such as might render homicide for the attainment of that end a tempting and a pleasant vice. Society scarcely needed to be frightened by a terrible example from yielding to that temptation. On the theory of his sanity there was no adequate motive for Burton's crime; but his act was exactly that kind of desperate, self-centred, motiveless, impulsive deed which those who have a knowledge of insanity know to occur sometimes where madness has been inherited.

We give briefly an account of the crime of Burton, because it illustrates a moral insanity in which the crime was logically traceable to disease, and in that regard, as in other respects, affords a striking contrast to the case of Townley. Burton, the depraved "young man of twenty," as he was called, was a youth of eighteen; his mother had been twice in a lunatic asylum, was desponding, and had attempted suicide; his brother was of weak intellect, silly and peculiar. The person to whom he had been apprenticed and others gave evidence that he was always strange, and not like other boys; he "had a very vacant look, and when told to do anything, would often run about looking up to the sky as if he were a maniac," so that the indentures had to be cancelled. "The case was very simple, but very shocking." The prisoner said that he had felt "an impulse to kill some one;" that he had sharpened his knife for the purpose, and went out to find somebody on whom he should use it; that he followed a boy, who was the first person he saw, to a

convenient place; there he knocked him down, stuck him in the neck and throat, knelt upon his belly, grasped him by the neck and squeezed till the blood came from his nose and mouth, then trampled upon his face and neck until he was dead. He then washed his hands, and went quietly to a job which he had obtained. He knew the boy whom he had murdered, and had no ill-feeling against him, "only I had made up my mind to murder somebody;" he wished to be hanged. His counsel argued that this vehement desire to be hanged was the strongest proof of insanity; the counsel for the prosecution urged that the fact of the prisoner committing the murder to be hanged showed that he knew the consequences of his act, and that to say he was insane was to confound depravity with insanity. He was found guilty; and Mr. Justice Wightman, in passing sentence, informed him that he had been "guilty of a more barbarous and inhuman murder than any which has come under my cognizance during a judicial experience of upwards of twenty years." Indeed, the murder was so cruel, that in the tenderness of his heart the Judge "could not trust himself to dwell upon its shocking details." When sentence had been passed, the prisoner said, with a smile, "Thank you, my lord," and went "down the dock, followed by an audible murmur and almost a cry of horror from a densely-crowded audience." That cry was, perhaps, an unconscious testimony that the theory of moral depravity did not quite suffice to explain Burton's case. His hereditary antecedents, his previous history, the motive with which he committed the murder, the desperate way in which the act was done, his conduct immediately after the murder, the readiness with which he told all about it, and his behaviour during the trial and after the sentence,—all pointed, as definitely as circumstances could point, to insanity and not depravity. There was no need to found a diagnosis of insanity on the crime itself, peculiar as was its character, nor even on the strange motive of it, morbid as that was; by a chain of circumstances the course of the hereditary disease downwards to its desperate evolution was logically marked out. However, Burton was hanged; while Townley, in whose case no at-

tempt was made to connect the crime with a disease as cause, was sent to a lunatic asylum.

With the foregoing principles for our guidance, is it possible to refer the supposed madness of Townley to the category of moral insanity? When we learn that he did not acknowledge that he had committed any crime, but justified his act, that he looked on Miss Goodwin as his property, that he considered he had a perfect liberty to think and act as he pleased, and that he recognised the right of no one to sit in judgment upon him—it might at first sight seem that such sentiments must indicate moral insanity. But what evidence was there, *before the crime*, of the disease of which the murder might be regarded as the effect? Townley had always been treated as a perfectly sane man by his relatives and friends; they had made no objection to his engagement with Miss Goodwin, but had even recommended him to go and see her when it was broken off; and the utmost that could be said in favour of hereditary insanity was, that he had not a good head for business, that a grand-aunt had committed suicide, and some more distant relatives had been insane.* No lineal ancestor of the prisoner was said to have been insane, and it did not appear that any of the present generation of the family in any of its collateral branches were thus afflicted. So remote a hereditary taint, in the absence of all symptoms of disease previous to the crime, will certainly not justify us in deducing the latter from it as a cause of disease; to acknowledge that hereditary taint is sufficiently proved in any one who commits a crime, merely because of its existence in some remote ancestor, would be the assumption of so large a license as to make science justly merit the reproach of wilfully confounding depravity with insanity. In the history of Townley, previous to the crime, there is no positive evidence of insanity offered,

* In a letter to the *Manchester Guardian*, the Rev. W. Wild, who was "personally acquainted with the former private life and temperament of G. Townley," and who had laboured to get a commutation of the sentence, says that he "never indulged the notion of insanity, strictly speaking, as causing the fatal deed," and believes a more satisfactory line of defence might have been adopted.

urgently desirable as such evidence was, and strained, as we may well think, events would be to favour that supposition.

In the circumstances under which the crime was committed, and in the manner of its perpetration, there is nothing to indicate insanity, but, on the contrary, the amplest evidence of a mind deliberate and self-possessed. Mr. Harris testified to the cool and collected manner of Townley immediately before the murder; and the way in which he acted immediately after it, giving up letters to Captain Goodwin so that they might not be brought into court, shows that he had his wits sufficiently about him then. From the circumstances of the crime, nothing can be extracted to justify the belief that a mind sound up to this point, had suddenly lost its balance, and become desperately insane. In spite of this, however, it will be assumed by some, that the great disappointment which he had met with, and the suffering which he had undergone in consequence, had made him mad. No doubt he suffered much; men of his selfish type do; but is it logical to accept disappointment and suffering as having produced insanity in the absence of evidence of insanity? Apart from that consideration, however, it may be very positively asserted that the kind of insanity from which Townley is represented as afterwards suffering, could not be suddenly produced by a moral shock. *Nemo repente fuit turpissimus*, is as true of moral insanity as of moral depravity. And as the state of mind testified to by Dr. Winslow on the 18th November was that which the prisoner exhibited on admission into Derby Gaol immediately after the murder, it is evident that if he was insane, he must have been insane before the disappointment. As we have already seen, there was not the slightest evidence that he was, but strong evidence that he was not.

Failing, then, to discover any direct signs of disease incapacitating Townley from the control of himself either before, or at the time of the murder, let it be added by way of positive evidence against insanity, that if ever jealousy or revenge, if ever evil passion of any kind, can be the cause

of murder by a person of sound mind, all the circumstances of Townley's crime claim the acknowledgment of such passion in his case. "She has deceived me, and the woman that deceives me must die. I told her I would kill her. She knew my temper." Not much evidence in this genuine outburst of satisfied revenge, in this real utterance of a badly-constituted nature, of that deliberate desire to re-possess himself of property which on consideration developed itself. Certainly it must be difficult for the most innocent simplicity to avoid a suspicion that the elaborate and perverse reasoning did not dictate the crime, but was afterwards made the justification of a self-feeling and vain mortal, who had put himself in hopeless antagonism with the world, and subjected himself to the humiliation of legal punishment.

In the mental state of Townley, as it was described after the crime, can we recognise the proofs of disease? On the supposition of insanity we shall have to admit that an individual who had never shown any symptoms of insanity, who committed a crime from motives and under circumstances similar to those under which many such crimes have been committed by persons never suspected to be insane, did nevertheless suddenly fall into the extremest degree of moral insanity. "His moral sense was more vitiated than I ever saw that of any other human being," Dr. Winslow said. . . . "He seemed incapable of reasoning correctly on any moral subject." The crime is assumed to have been the severe symptoms of a disease which had never hitherto shown itself; an extreme moral insanity is supposed to have sprung up, like Jonah's gourd, in a single night. And on what grounds are we required to admit this miraculous development? Because a man who had committed a crime refused to admit that he had done wrong, but talked as a necessitarian or an atheist might; and because a psychological expert, who had put down that which was a true belief as a delusion proving madness, being painfully shocked by such want of moral sense, thought there must be insanity. It is true, that Dr. Winslow afterwards wrote a letter to disclaim the idea of having inferred insanity from perverted views on

religious subjects, and to lay stress on the *intellectual* delusions as contradistinguished from the *moral* perversion; but as all delusion disappeared when examined into, the scientific advocates of Townley's madness will probably insist on retaining the moral perversion to rest their theory upon.

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

to insanity if any distinction between disease and vice is to be maintained. There is wanting all proof of disease rendering the individual unaccountable; and if the doctrine of moral insanity is to gain acceptance, disease must always be proved, not by making assumption support assumption, but by logical appreciation of symptoms.

3. *Impulsive Insanity.*—Nothing has excited a more angry resistance in the legal mind, and been less acceptable to the conservative instincts of the public, than the doctrine that a man may be irresistibly impelled, by reason of disease, to a criminal act which he knows to be wrong, and himself, perhaps, revolts at. "Such a theory was as contrary to common-sense as it undoubtedly was to law," Mr. Justice Wightman said in that case already quoted, in which he lost the dignified impartiality of the judge in the warmth of the interested advocate. And yet all who have given the labour of their lives to the study of insanity, men eminent and men not eminent, English authors and foreign authors, living writers and writers who have passed to their rest, are perfectly agreed upon the existence of such a form of mental disease, and have thus conspired, with a remarkable unanimity, against the common-sense of such as the late Mr. Justice Wightman. Now, a common prejudice which better knowledge would disperse is exceeding apt to be mistaken for common sense; and common sense which gets angry at contradiction, and gets angry on the judge's bench, is not unlikely to be a vulgar prejudice. The theory of impulsive insanity is, no doubt, contrary to the law as laid down by the judges, from whose ill-grounded speculations and crude *dicta* one of the ablest of themselves, Mr. Justice Maule, dissented; but when a judge goes out of his way to pronounce as contrary to common sense a doctrine which all those eminent men who have studied the matter specially, accept, it is not seemly on his part; and any one inclined to such a rashness might do well, for the sake of his calling, to remember that it was once thought contrary to common sense to say that the earth moved round the sun.

There can be no doubt that the term instinctive insanity is badly chosen; it strikes one at once as absurd to say that

there is in man an instinct to commit homicide. In most cases of impulsive insanity it is quite evident that there is present in the mind of the sufferer an *idea* that he must kill some one. He is conscious of the horrible nature of the idea, struggles to escape from it, and is miserable with the fear that it may at any moment prove too strong for his will and hurry him to the deed which he dreads, yet cannot help dwelling upon. It is not right, then, to say, as is often said, that the intellectual powers are quite sound; there is a diseased idea present, and at any moment the whole mind may be brought under the influence of it. So desperate is the fear of yielding to the morbid impulse, so intense the suffering, that a mother afflicted with the impulse to kill her child, has killed herself to prevent a worse consummation. It often happens that the sufferer succeeds in controlling the morbid idea for a time, calls up other ideas to counteract it, warns his victims to get out of the way, or begs to be bound; but at last, from some deterioration of the bodily health, the idea gains a fatal preponderance; the tension of it then becomes excessive; it is no longer an *idea* the relations of which the mind can contemplate, but a violent *impulse* into which the mind is absorbed, and which irresistibly realises itself in action. In physiology it is perfectly well known that an idea may cause action quite independently of volition, and a class of movements are described as *ideomotor* in the text-books of that science. It is in strict correspondence, then, with physiological fact, that in cerebral pathology a variety of disease is recognised in which morbid idea causes morbid action.

The fact that an individual afflicted with an idea rendered predominant by disease can and does sometimes resist and control it, causes many to think, and some to argue, that it might always be resisted successfully. In reality it is a simple question of the degree of morbid action—whether the idea shall be kept in subjection or become uncontrollable. As a chronic disease may become acute, so a morbid idea, which remains in consciousness, may become an impulse which in defiance of the will escapes from consciousness into outward realization. By an act of will a person may prevent

involuntary movement of his limbs when the soles of his feet are tickled, but the strongest will could not prevent spasmodic movements of the limbs if the excitability of the spinal cord is increased by strychnia or by disease. In like manner, a diseased state of these ganglionic nerve-cells, which minister to the manifestation of idea, will produce a morbid idea that may pass into an impulse beyond control of the will. For any one to recommend control of the morbid idea when disease has reached a certain intensity, would be all one as if he should preach moderation to the convulsions of epilepsy. In such case the responsibility is not in relation to consciousness, but in relation to the degree of volitional power as this may be diminished or abolished by disease. And in such case, we may add, that the estimation of the individual's condition is not a simple fact for common sense to decide upon summarily, but a difficult question of medical diagnosis for the physician who has made disease his study. It is because so-called common-sense, arguing from the self-consciousness of a sound mind, has treated the question summarily, that many undoubted lunatics have been hanged—lunatics who, had the halter not cut their disease short, would have proved its existence by sinking into dementia.

Is it possible to bring Townley's crime under the category of impulsive insanity? Certainly not. What has been said with regard to the possibility of general moral insanity might be repeated here. There was no evidence of the existence of such morbid impulse before the act; in the circumstances of the act itself there was the strongest possible evidence against any such impulse; and the subsequent history of the state of mind disproves positively the existence of impulsive insanity. No one with a sufficient practical or proper theoretical knowledge of mental diseases would injure science by attempting to make Townley the victim of impulsive insanity.

Having brought forward the different forms of partial insanity, and shown how impossible it is, with a just appreciation of scientific knowledge, to refer Townley's case to any one of them, the question naturally arises, What form

of insanity, then, did Dr. Winslow attribute it to? That is just the question which it is impossible to answer. Townley's insanity, as described by that psychologist, was a medley, a scientific patchwork, ingeniously constructed, boldly devised, striking in appearance, but really a scientific incoherency—a mixture of incompatibles. "General derangement and diseased intellect," with the ability to pass off a true belief as a delusion, "not a sane opinion on a moral point," "vitiation of moral sense," "inability to appreciate the absurdity of the idea" that by killing Miss Goodwin he would regain possession of her, and the coherent reasoning of a necessarian—these together constitute an extreme form of insanity of some kind, perhaps a new and at present obscure form of disease, which future ages will describe as "intelligent imbecility." How it was that Dr. Hitchman and the governor of the gaol could doubt the existence of insanity in one so very mad passes understanding. One does not know whether to wonder more at the obtuseness of these gentlemen, who could not detect madness where Dr. Winslow discovered it in such extreme degree, or at the marvellous perception of Dr. Winslow who could discover such extremity of insanity where these gentlemen could detect none. Unfortunately, these alleged symptoms of an extreme mental degradation are incompatible with the actions of the cool, self-possessed man who spoke with Mr. Harris as he went on his way to the murder, or of the calm and collected individual who took tea with Captain Goodwin immediately after it: the facts as Townley appears to have exhibited them to Dr. Winslow are in contradiction to the facts as we have them from other sources. It is a pity for the sake of his science that this psychologist had not, instead of rejecting the moral perversion, and appealing to intellectual disorder, rejected the intellectual delusions, and rested the plea of madness on moral deficiency. Then, though the plea might, and no doubt would, have been without avail in the Court where Townley was tried, it would perhaps have rested on a substratum of truth, such as the legal tribunals of the world cannot take notice of: for who shall affirm that Townley's character did not feel in some

measure the effect of the hereditary taint?—who can apportion the amount of his responsibility?* But this principle must ever prevail in science and in law, that, when moral insanity is suspected and pleaded, there cannot rightly be any ground for acquittal on that plea, if the criminal act, as a symptom, cannot be logically connected by a train of other symptoms—such as change of habits, feelings, and character—with disease as its cause.

IV. Antagonism of Law and Medicine on Questions of Insanity.

The result of the deliberations of the judges, on which the law in cases of murder where insanity is pleaded now rests, is that the prisoner is guilty if at the time he committed the act he was aware of the nature and consequences of it,—in other words, was capable of knowing what he did was wrong. Under this dictum it would be necessary to hang nine-tenths of the lunatics in England, in the event of their committing murder. So flagrantly unjust has it occasionally appeared, that since the time when it was put forth after McNaughten's trial, a judge has more than once ruled in direct opposition to it. In the trial of Frost, Mr. Justice Williams said to the jury, "It was not merely for them to consider whether the prisoner knew right from wrong, but *whether he was at the time he committed the offence deranged or not.*" And Lord Campbell said on one occasion in the House of Lords, that he had looked into all the cases that had occurred since 1793, and to the direction of the judges in different cases, "and he must be allowed to say that there was a wide difference, both in meaning and words, in their description of the law." Thus there is not in reality any legal certainty, and it is a matter of accident whether a man is hanged or acquitted on the plea of insanity. McNaughten was acquitted in opposition to the *dictum* of the judges; while Bellingham, who had several delusions to

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

which his crime was clearly attributable, was hanged. Fooks, who had delusions as to persecution, was recently hanged at Dorchester; Clark, with similar delusions, was, after being sentenced to death, admitted to be insane. When at the trial of Oxford, the Attorney-General cited the case of Bowler, Mr. Baron Alderson interrupted him with this observation—"Bowler, I believe, was hanged, *and very barbarous it was.*" And yet, at the trial of Pate, Baron Alderson laid it down that a lunatic was responsible for a criminal act if his delusion had not conduced and driven him to the act. The legal net does, in fact, drag into its meshes all but those extremest cases of madness where the frenzy is so patent that they are not likely to come into any court of justice. Not only must all homicidal madmen who suffer from impulsive insanity, and all those who suffer from general moral insanity, be legally responsible, but all those also who suffer from delusion, in whom a connection between, not the disease and the act, but the delusion and the act, is undetected by the looker-on, or the connection is such as would not excuse murder if the delusion were true. Where two symptoms of a disease exist—the delusion and the criminal act—what the law demands is, that one should be proved to be the cause of the other, before it will admit the disease: it insists on our becoming guilty of the logical fallacy of mistaking the concomitant effects of a common cause for cause and effect.

The fundamental defect in the legal test of responsibility is that it is founded upon the consciousness of the individual. And while this is so, it is admitted in every book on mind published at the present day, even by pure metaphysicians, that the most important part of our mental operations takes place unconsciously. Consciousness is recognised to be merely a condition of mental action, which is not invariably present in those operations that it does usually accompany, and which is invariably absent in a great part of mental action. Physiologists have long taught this truth, which pure metaphysicians now recognise; and the pathologists who are engaged in the study of insanity have been driven quite independently to its recognition, from their observation

of the facts of mental disease. To reject the legal test of responsibility is not, then, a mere caprice or prejudice of the "mad doctors," but the legal test is rendered ridiculous by the first principles of every system of mental philosophy. The true responsibility of an individual is not in relation to his consciousness, but in relation to his power of volitional control over his mental operations. And when those who are engaged in the study of insanity affirm that there may be, by reason of disease, an inability to control an act which all the while is known to be wrong, they simply lay down a proposition which is in strict accordance with the first principles of a positive science of mind.*

But if it were right to accept the validity and sufficience of consciousness as a test of responsibility, how manifestly unjustifiable a proceeding it is to conclude from the phenomena of the consciousness of a sound mind as to the condition of the unsound mind! And that is exactly what the law demands should be done. Because an individual in perfect health feels that he has a conscious control over his ideas and actions, he assumes that the individual whose mind is prostrated by disease has a like power, and determines that he is culpable if he does not exercise it. It would be not one whit less absurd for the healthy man who has control of his limbs to insist on the punishment of the epileptic or the paralytic because he did not display such control. Nevertheless, this is the state of affairs which the present Lord Chancellor, the legal guardian of lunatics, would have continue as forming his ideal of perfection. In a speech in the House of Lords (March 11th, 1862) he said that he had "found an evil habit had grown up of assuming that insanity was a physical disease and not a subject of moral inquiry." This was an error to be rooted out: judges and juries should accept "their own moral conclusions;" and it was nowise necessary "that a man should have studied the subject of insanity in order to form a conclusion whether a man was or was not a lunatic." Notwithstanding such a positive state-

* "Homicidal Insanity." By Henry Maudsley, M.D., *Journal of Mental Science*, Oct., 1863. Many examples of homicidal insanity are brought forward, and grouped, according to their relations, as morbid states of the nervous system.

ment by one who is so highly placed, we do not fear that even a Lord Chancellor of England will succeed in putting back the hand of scientific progress on the dial-plate of time. If it must still, however, for a time be that we are to conclude from the revelations of a sound consciousness as to the condition of things in the diseased mind, at least let the induction be made from those phenomena of the sound mind in which there is the nearest approach to the phenomena of insanity. Whosoever can recall some of the operations of his mind in the delirium of a fever, or whosoever will reflect on his mental states in dreaming, may form a notion of the helpless condition in which the insane are permanently, and may then, perhaps, be more inclined to look with charitable feeling upon their acts. The most ardent worshipper of common-sense may remember occasions in his dreams when he terribly outraged common-sense, when for the life of him he could not do what he knew he ought to do, or could not leave undone what he clearly knew to be wrong. If he is sincerely anxious for truth he will not allow such a lesson to be thrown away; the life of the insane is a real dreaming, from which, unhappily, they do not awake. "No one who has not been made mad knows how terribly real the delusions of the insane are," was the expression of one who had recovered his reason. And it is to these suffering beings, deprived by a dreadful disease of their power of will, that the sound mind, arguing from its own consciousness, preaches, with a serene self-complacency, responsibility and the duty of self-control. There is nothing new, nothing strange in that; it was precisely this feeling that madmen might, if they would, act as healthy lookers-on felt that they themselves could, which dictated the whips, chains, and bars wherewith insanity was at one time treated; and it is precisely that same feeling in attendants on the insane which renders the management of them, and not of the patients, the difficulty of an asylum: they will not believe that the insane cannot think and act as they know they can themselves. When a patient's ribs are broken by brutal attendants in a badly-managed asylum, it is in consequence of that same error of the sound mind by which consciousness

of right and wrong is made the legal test of responsibility and many lunatics are hanged.

It is natural that the physician, looking at human action as an object of scientific study and at insanity as a disease, should become impatient of the injustice to the insane in the existing laws; but it is equally natural that the jurist, who regards man as a citizen and looks to the interests of society, should be jealous of interference with the punishment which the law awards to offences. No wonder that judges, from their point of view, have often pronounced the doctrine of impulsive insanity to be fraught with danger to society. Nay, some have gone so far as to say that, notwithstanding the doctrine be true, it is necessary still to punish the insane offender. A man not criminal in the eye of Heaven must be accountable to human law in order to deter others from crime, Lord Brougham on one occasion said. And Mr. Baron Bramwell, in pronouncing sentence on a lunatic at Lincoln (Dec. 6th, 1862), said "He was not sure that it is not more necessary to punish a madman than a sane one, so far as the protection of the public is concerned." On what tablet, then, is that law written by which society assumes the right of committing a great crime for its own protection? Against Mr. Baron Bramwell we might quote the words of the judge who tried Clark at Newcastle (Oct., 1861), and who wisely said, "It would be folly—almost blasphemy—to punish a man for an offence to which he has been instigated, not by his own guilty will, but by an affliction sent upon him by Providence itself." Punishments which offend the moral instincts of mankind must sooner or later bring the law into contempt; and it is tolerably certain that severe laws never yet prevented crime, very certain too that unjust laws have tended to increase it. If the law is not founded in justice, it is in the long run far more dangerous to the welfare of society than the escape of many criminals from legal punishment. To execute a madman is no punishment to him, who regards himself as a martyr; but his death is a punishment to those who are offended at the cruel folly of a law which, to use the words of Sir E. Coke, offers such "a miserable spectacle, both against law and of extreme inhumanity and cruelty, and can be no example to others." If the doctrine of moral insanity is true, it cannot be injurious to the welfare of society to recognise it; but, on the contrary, it must be injurious to the welfare of society not to recognise it. The present uncertainty which exists as to whether a criminal will be convicted or acquitted as insane, and the accidental character of the result, afford a practical illustration of the evil effect of the endless controversy between the ideal man which the law sets up and the real man of medical science. If the criminal is acquitted as insane, there is often a loud and angry outburst of popular passion, and even lawyers think there has been a miscarriage of justice; if he is hanged, a number of truth-seeking men, who are calmly observing facts, know that a judicial murder has been committed. Can such a state of things, damaging as it is both to science and law, be in any way of advantage to the welfare of society?

V. Suggestions for the Amendment of the Criminal Law of Lunacy.

If the antagonism which at present exists between law and medicine is to be done away with, the result can only be brought about by a change in the law. These unfortunate dicta, which Mr. Justice Maule rejected at the time, but on which the law with regard to insanity now rests, are so inconsistent with facts that their validity cannot be accepted save on the condition of banishing altogether mental philosophy, giving up all observation, and ceasing for evermore to pursue science in the department of mind. As that cannot be, however, it is really only a question of time when, through the growth of enlightened opinion, the old garment shall drop off, and a righteous law shall be the expression of a higher social development. The law of insanity which exists now is not that which was laid down by Lord Coke and Sir M. Hale; with advancing knowledge the crude dicta of those judges have necessarily been abolished. Why, then, should the law which now prevails

be deemed eternal and all-sufficient? The study of insanity has only engaged attention within a very recent period; but the moment men began to occupy themselves in scientific observation of its phenomena, the cruel folly of the law was evident, and from that time to this the outcry against its injustice has become louder and louder.

The history of every department of knowledge shows that after the theological spirit had died away, the metaphysical spirit strenuously opposed for a time the advent of positive science; and the present attitude of the law in regard to insanity forcibly illustrates this metaphysical stage. The disposition to look on the insane as possessed with devils is altogether abandoned, but the metaphysical spirit which held entire sway for a time after the theological had disappeared, still inspires that unjust law which opposes the progress of positive science in insanity. Clinging to a last stronghold, it may struggle well, but it is fighting against the great law of human development, and it must fight in vain. And though men high in authority dogmatically uphold the ancient system, it matters not much; they are not immortal, and the spirit of progress is. Even if the present agitation subsides without any step in advance being made, or even if an Act of Parliament were passed determining that the old system should be maintained, the old system is none the less certainly doomed. Men will become mad, and madmen will commit crimes, and in spite of prejudice and in spite of clamour, science will declare the truth. Juries, too, will now and then be found enlightened enough to appreciate it; and if the voice of justice is unsuccessfully raised, it will be but a doubtful triumph for prejudice when science shall say, "You have hanged a madman."

We indicate briefly, in conclusion, certain changes which are urgently demanded.

1. To preserve its dignity and efficiency it is necessary that the law be brought into accordance with the state of knowledge in insanity. It is necessary that the different forms of partial insanity be recognised as disease, doing away with legal responsibility. The absurd and injurious metaphysical test of responsibility must be abolished, as contrary to science and justice. No attempt should be made at any precise definition of what insanity is or what it is not; but each case in which the plea is set up should be examined on its own merits, and the disease proved by a careful consideration of the previous history, character, and habits, and a systematic exposition of the various symptoms, physical and mental, with the inferences which they justify. Such a medical diagnosis should be demanded by the Court for its information. "The opinion of witnesses possessing peculiar skill," writes Mr. Smith—whom the Lord Chancellor praises as "a very admirable commentator, who died much too early"—"is admissible whenever the subject-matter of inquiry is such that inexperienced persons are unlikely to prove capable of forming a correct judgment on it without assistance—in other words, where the matter so far partakes of the nature of a science as to require a course of previous habit and study in order to the attainment of knowledge with regard to it."

When the present unsatisfactory line of legal responsibility is removed, it must still be that doubtful cases will sometimes occur. Between the tyranny of passion and the irresistible act which is the result of mental disease, there must occasionally be a difficulty in deciding. But in the majority of cases, there will be an obvious difference between the man who *will* not and him who *cannot* conform to the laws by which the well-being of society is secured. It would be unjustifiable to say that a being like Townley, who willingly enough accepts the benefit of the protection which the laws of society afford him, who has shown no symptoms of disease, and who, when evil passion has brought him into collision with laws, says he, as a free agent, rejects them, should be held guiltless of crime. All the circumstances of his crime, and his conversation after it, proved that Townley *would* not, and not that he *could* not, conform to the laws. The medicine which shall minister to such persons must always come, not from the physician, but from the law. If the case of Townley had been made a simple matter of medical diagnosis by impartial and skilful physicians, the examination must have failed to *prove* the existence of any

disease of which the crime was a result; whatever suspicion there might have been of an innate feebleness of moral nature, it would have been impossible to pronounce him guiltless of murder by reason of disease. To have done so would have been to discard all the rules of medical evidence in diagnosis.

2. A change in the existing method of obtaining scientific evidence is plainly most necessary; nothing can exceed the awkwardness and uncertainty of the present plan of proceeding in England. "An array of medical men," as Dr. Bucknill observes, "are marshalled by the attorneys on each side according to their preconceived opinions of the case. These medical witnesses may usually be divided into two classes—those who know something of the prisoner and nothing of insanity, and those who know something about insanity and nothing of the prisoner. They generally succeed in neutralizing each other's evidence, and in bringing the medical profession into contempt, at least among lawyers." Only by abolishing a system which puts a premium on unscrupulous advocacy—for it invites those who are more eager for notoriety than careful for truth—which practically excludes the tender conscience from giving scientific testimony in many cases, and which subjects medical science to extreme degradation, can the benefit of any change in the present law be reaped. Scandals must occur as heretofore, if no steps are taken to secure impartial scientific evidence.

The estimate of the scientific evidence of medical witnesses in insanity has now nearly reached the level assigned by Lord Campbell to that of another class of "experts," the so-called experts in handwriting. Of these, in a recent trial, the Vice-Chancellor, Sir J. P. Wood, said, "The next, and certainly the lowest class of evidence, was that of experts who knew nothing of the person, but formed their judgment from a comparison of several specimens of his writing." "Hardly any weight," said Lord Campbell, "is to be given to the evidence of what I may call scientific witnesses. *They come with a bias.*" "It has always," Dr. Bucknill writes, "appeared to us that the witness-box is no proper place for

the psychopathic physician in these cases; and that the very fact of his being called] either 'for the Crown' or 'for the defence' renders it impossible for him to hold an impartial position; that if the cross-examination is often damaging to his character for exactitude in scientific knowledge, it is not less damaging to that of the Court itself as an institution whose purpose is to elicit truth and administer justice."

The remedy is an obvious one; it is to make the medical witnesses in matters of science, witnesses not for the prosecution or the defence, but witnesses called by the Court itself. Then would their evidence be freed from all suspicion of advocacy, and gain the authority in which it is now wanting. In France, when a criminal is suspected to be insane, the Court appoints a commission of medical men, or selects one man experienced in mental diseases, to examine into the case, and to report upon it; the whole life of the prisoner and the present symptoms are investigated, and the questions put and the answers to them are recorded for the information of the Court. "The French system, which places the scientific *expert* before the Court in an independent and impartial position, and affords him an ample opportunity to form a decided and trustworthy opinion, appears to be in every way worthy of imitation."* Such an alteration would not be any novelty in England; for in difficult questions of collisions on the sea and of salvage, where special knowledge is required, the Masters of the Trinity Company are called in to assist the Admiralty Court. And surely a shipwreck or a collision at sea is a fact much more within the knowledge of ordinary men than the diagnosis of cerebral disease where lunacy exists. By the adoption of some such plan, the Court would secure impartial and trustworthy evidence, on which it could act as might seem to it good, and the poor man would obtain that equality with the rich before the law which it is the boast of England to give him, but which he practically has not at present when insanity is pleaded.

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

LONDON:
SAVILL AND EDWARDS, PRINTERS, CHANDOS STREET,
COVENT GARDEN.

THIRTY-THIRD

ANNUAL REPORT

OF

THE DIRECTORS

OF

JAMES MURRAY'S ROYAL ASYLUM

FOR LUNATICS,

NEAR PERTH.

JUNE, 1860.

PERTH:
PRINTED BY C. G. SIDEY, POST-OFFICE.

MDCCCLX.

ANNUAL REPORT

BY THE DIRECTORS OF

JAMES MURRAY'S ROYAL ASYLUM

FOR LUNATICS.

11TH JUNE, 1860.

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

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

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

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

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

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

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

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

REPORT OF PHYSICIAN

FOR THE YEAR 1859-60.

General Results.

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

Unprecedented fullness of Institution.

Gradual Increase of Population since 1854-5.

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

Continued demand for Accommodation.

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

Its Advantages and Disadvantages.

Admissions.

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

Re-admissions.

Removal of Non-recovered cases.

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

Removals on probation.

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

Removals of Aliens under Poor-Law Act.

Effects of premature removals.

Voluntary Patients.

Suicide as a result of premature removal.

Causes of premature removal.

Recoveries.

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

Proportion of Recoveries.

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

Mode of Calculation.

Standard proportion.

Proportion of Incurables.

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

Fallacies of Statistics.

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

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

Mortality rate.

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

Standard Mortality rate.

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

Curability of different forms of Insanity.

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

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

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

Greater curability of acute and recent Insanity.

Female versus Male Recoveries.

Proportion of Incurables.

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

Expenditure on Improvements.

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

Establishment of Workshops for Males and Females.

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

Amateur workmen among higher class private Patients.

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

Teaching of Trades.

Classes.

Workshops for Milliners and Dressmakers, &c.

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

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

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

Re-roofing Asylum and out-houses.

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

Beds for dirty Patients.

Hot-air Press.

Laundry Furnaces.

Iron Bedsteads.

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

Re-painting.

Day-rooms in Pauper Wards.

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

Laboratory and Dispensary.

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

Water Cisterns.

A supplementary regulating cistern has been attached to the hot-water cistern, which supplies the baths for the higher classes of patients; and large repairs have been executed—as happens almost yearly—on the bottom or lining of cisterns corroded by the gradual action of hard waters on the lead.* During the past year a variety of powerful testimony has appeared in support of the views on the action of waters on lead, which we were led to adopt as the result of experiment in 1857, and which we published in 1858. The subject has been copiously reviewed in the *Times*, in whose columns a variety of persons—architects, builders, chemists, and others practically conversant with the subject—give corroborative evidence. Quite recently, equally favourable testimony has been given in an article on "Our Water Supply," in the *Scottish Review*.† The distinguished analyst, Dr Hassall—the "Analytical commissioner" of the *Lancet*, and the author of the well-known work on "Food and its Adulterations"—remarks: "From the number of samples of water which I have received containing lead, I am induced to believe that that metal is more frequently introduced to the system in this way than is commonly suspected; indeed, so many well-ascertained cases of lead-poisoning, arising from the use of water contaminated with it, have occurred, that I am of opinion that the use of lead for the storage and conveyance of water *ought to be entirely discarded*, especially in the cases of small towns and single houses."‡ In America, the subject of the use of lead in the manufacture of vessels or pipes for the storage or conveyance of water has been considered of such importance, that a bulky

Action of hard waters on lead.

Testimony of Dr Hassall.

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

† April, 1860, pp. 170, et seq.

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

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

Substitutes for lead in making of water cisterns or pipes.

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

Home-like Furnishings.

Curtains.

Window-blinds.

Washing-stands.

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

Mistaken ideas as to construction and furnishing of Asylums.

Practical results of such ideas.

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

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

Home-like surroundings essential to comfort and happiness.

The Asylum as a permanent Home.

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

Contrast between British and Continental Asylums.

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

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

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

Lectures.

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

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

Readings.

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

Pic-nics. Carriage Drives. Botanical excursion with Professor Balfour. Cricket Matches. Social re-unions. Soiree of Sabbath Evening Class. Concerts. Professional assistance. Curling parties. Public Amusements in Perth. Public Concerts in Perth. Public Lectures in Perth.

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

Miscellaneous Entertainments in Perth.

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

Mortality. Causes of Death. Necropsies.

The deaths during the year have amounted to 10—5 in male patients, and 5 in females. The ages at death were above 70 in 1 case, above 60 in 3, above 50 in 1, above 40 in 2, above 30 in 2, and between 20 and 30 only in 1. The causes of death in 5 patients were diseases of the lungs—Phthisis in 2 cases, acute Pneumonia in 2, and senile Bronchitis in 1. In 2 cases intestinal affections proved fatal—the special form of disease being Dysenteric Diarrhœa in the one case, and acute Gastro-enteritis in the other. 2 of the remaining patients died from acute Nervous Exhaustion; in one resulting from acute Mania, supervening in the course of General Paralysis; while the third case proved fatal under a combination of Bright's disease of the kidneys and valvular disease of the heart. In 7 of the deaths post-mortem examinations were obtained, and some of the latter present points of considerable interest as illustrative of the Pathology of Insanity. It is somewhat unfortunate for our pathological inquiries, that we cannot ensure necropsies in every case of death. We are entirely dependent on the permission or wishes of relatives or guardians, who frequently object to post-mortem examinations, from a variety of most absurd reasons—which objections, whether well founded or the reverse, we are bound to respect and obey.

Illustrations of rare Pathological Lesions in the Insane. Abscess of the Brain.

The most interesting of the necropsies during the year revealed, in the same patient, the following lesions:—1, Abscess of the brain; 2, Bright's disease of the kidney; 3, Abscess of the kidney; 4, Mitral valvular disease [regurgitant] of the heart; 5, Atheromatous deposit in the cardiac valves; 6, Atrophy of the left lung as a result of old pleurisy; 7, Osseo-cartilaginous metamorphosis of pleuritic effusion; besides, 8, The presence of serious organic lesions of the brain, heart, and kidneys, without adequate attendant symptoms during life. We do not find abscess of the brain, as a lesion occurring among the insane, at all referred to in Bucknill and Tuke's excellent "Manual of Psychological Medicine." Hence, we presume, it is at least rare in the insane. This is the only case in which we remember to have met with cerebral abscess in the insane; but in this case, we do not regard the lesion in question as having had any specific relation,

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

Bright's Disease.

Albuminuria.

Case illustrative of rare Pathological conditions.

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

History of case.

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

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

Pathology of Case.

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

Abscess of Brain.

Atrophy of Lung.

Osseo-cartilaginous growth in the Pleura.

Mitral valve disease.

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

rience. We have met with few cases of valvular disease; instances of hypertrophy or dilatation have been more common, though far from numerous; but cardiac bruits have occurred more frequently than any of the above lesions. Such bruits, however, as we shall immediately show, we do not hold at all conclusive as to the existence of valvular disease. The upper portion of the right kidney was excavated by a series of abscesses containing thick pus—the cortical substance had been removed by suppurative absorption, and was replaced by a dense fibrous tissue. The remaining part of the right kidney, as well as the whole of the left, presented all the appearances of one of the forms of Bright's disease—viz., the granular form. Under the microscope, the renal epithelium was partly granular, partly fatty. It is noteworthy in this case, that granular Bright's disease—that form in which minute yellow specks are usually scattered throughout the cortical substance of the kidney,—was associated with atheromatous deposit in the cardiac valves, a coincidence of by no means unfrequent occurrence.

Abscess of Kidney.

Bright's disease.

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

Atheroma of Cerebral Arteries.

Atheromatous Diathesis.

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

Gastro-Enteritis.

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

One case, fatal by Phthisis, was interesting, in so far as a distinct anæmic bruit marked the heart's action during life, and because the said anæmic bruit serves as a text for a few remarks on the subject of similar *cardiac murmurs not depending on, or connected with, organic disease of the heart.* During life the action of the heart had been rapid, irritable, weak; and a prolonged blowing murmur, loudest at the apex, and accompanying the first sound of the heart, had long been distinctly audible. This murmur had been invariably ascribed by us to anæmia, and not to valvular disease; and the necropsy proved the correctness of our conclusions. The heart was found pale and flabby, but the valves were quite normal. The pericardial sac contained nearly half-a-pint of serum. The patient was much enfeebled, and attenuated by advanced Phthisis: the lungs were found riddled by vomicæ. Her colour was sallow, her appearance cachectic, and her general condition was that of chlorosis. Over the large vessels at the root of the neck, on the right side, was occasionally heard—what is also not unfrequent in this class of cases [chlorotic females]—a musical sound, synchronous with the ventricular systole of the heart. We have long suspected the correctness of the prognostications of heart disease, so far as these are founded solely on bellows murmurs; and a series of cases observed during life, associated with their relative necropsies, have converted suspicions of correctness into proofs of incorrectness. What we mean is, that so many cases occur of undoubted cardiac murmurs, without the existence of any structural disease to account therefor, as should render the Physician extremely careful in founding his prognosis on such murmurs alone, or, perhaps, as should lead him, in the majority of cases, to give a very guarded opinion as to the nature of the case and its probable issue. For instance, in cases of chlorosis or anæmia, and in states resembling these conditions or cachexies, and resulting from the exhaustion of protracted and debilitating disease, there are frequently cardiac bruits of considerable intensity, unassociated with any structural lesion. Yet in such cases the action of the heart is often weak and irregular. There may be palpitation and dyspnœa to an alarming extent, and the general symptoms may lead erroneously to the belief in not only cardiac, but also in pulmonary, disease. "The mere intensity of a bellows sound is," says Dr Brinton, "[unless extreme] a bad guarantee for its valvular origin; which again is better suggested by a *long* [as during systole, diastole, and pause] and *unvarying* [as during sleep and excitement] character of the murmur." †

Cardiac Bruits in Anæmia and Chlorosis.

Cardiac Bruits not necessarily indicative of organic disease of Heart.

Prognosis in Heart disease.

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

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

Albuminuria

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

Investigations.

Positive results.

Negative results.

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

Albuminuria not necessarily indicative of organic disease of Kidney.

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

Albuminuria in Cholera, &c.

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

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

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

Bright's disease associated with Cardiac disease.

Chemistry & Microscopy of Urine in Bright's disease.

Bright's disease without usual signs.

What is Bright's disease?

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

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

Renal and Cardiac Dropsy—their differential Diagnosis.

Cardiac Hypertrophy and Bright's disease.

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

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

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

Albuminuria in other Asylums.

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

Etiology of Insanity.

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

Hereditary predisposition.

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

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

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

* Page 19, Table V.—Obituary.

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

Deficiencies of Admission Schedules.

Statistics—their use and abuse.

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

Illustrations of fallacies of Statistics.

Testimony of Dr Farre.

Relations of Phrenology to Psychopathy.

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

Investigations on "Phrenological development" of Heads.

Phrenological standards.

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

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

Scale of size of "Organs."

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

Fundamental propositions of Phrenology.

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

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

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

"The size of the brain, in whatever direction developed, is the measure of general mental power. If it be in the direction of the propensities, the individual will manifest power of animal passion; if in that of the sentiments, the momentum will be of a moral kind; if in the anterior lobe, it will produce superiority of reflection; and if in all regions, it will result in universal greatness."—[Smith, p. 33].

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

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

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

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

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

Coincidences and contradictions in facts.

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

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

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

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

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

Cautions in investigation.

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

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

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

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

Pathological or Psychopathic illustrations of Phrenology.

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

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

Hypothesis or speculation versus fact.

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

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

Monomania: What is it?

Phrenological classifications of Insanity.

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

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

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

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

Amativeness

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

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

Philoprogenitiveness.

2. *Philoprogenitiveness.*—"It is more considerably developed in the female head, both of the human species and of the lower animals, than in the male."—[Smith, p. 88]. "While visiting a Lunatic Asylum, we observed in one of the female inmates, about 38 years of age, a very large development of this organ, and remarked to the Physician of the Establishment that she would manifest extreme solicitude about children. He mentioned that she had no children, but that it was certainly remarkable that most of her time was occupied in dressing, undressing, and nursing *dolls*" (p. 90). "When in a state of disease, this organ produces great anxiety about children. Dr Andrew Combe's patient, who, during her illness, always imagined that fresh disasters were happening to her children, complained of pain at the site of this organ. At Vienna, Paris, and Amsterdam, Dr Gall saw young ladies who declared that they were pregnant, although no such thing was or could be the case. A man also declared that he was with child of twins. In these the organ was very large, and probably gave this turn to their hallucination" (p. 93). Table I. shows that Philoprogenitiveness was *very large* in 22 males and 18 females—that it was therefore most largely developed in *males*. This result, it will be observed, is contrary to the statement first quoted from Smith. It was large in 42 males and 57 females, small or very small in none. This "organ" was more largely developed than any other of the 35—nearly three times as largely as the next in point of size, which was Firmness. The number of cases in which it was very large, and the fact that in no patient of either sex was it ever small, would appear to show the predominance of animal propensities in our population. Table II. shows that, in 8 cases of Erotomania in females, Philoprogenitiveness was very large in 1, and large in 5; in 6 Masturbators (5 males and 1 female), it was large in 5, very large or very small in none: in 3 females, subjects of Puerperal Mania, it was large in all: in 6 females, who showed a marked anxiety about children, it was very large in 2, and large in 3; and in 5 females, who showed a great delight in fondling dolls, it was very large in 3, and large in 1. The latter statement would appear to accord with the anecdote quoted in the second place from Smith—the fondness for dolls in unmarried females often seeming to us to take the place of love of offspring in the married, and both affections depending on the same feminine instincts. Table III. shows that, of 40 cases in which Philoprogenitiveness was very large, the real character exhibited some kind of confirmation in 12 only. On the whole, however, there was more frequently a correspondence between the size of the organs of Amativeness and Philoprogenitiveness, or, generally speaking, of the organs situated at or below the occiput, and the real character of individuals, than can be asserted in regard to any of the other 35 "organs." In other words, in a considerable proportion of patients, there was both a fullness of the occipital and sub-occipital regions of the skull, and a manifestation of animal propensities. But that these two sets of phenomena did not necessarily or invariably stand in the relation of cause and effect, we hold to be proved by the facts, that it frequently happened there was occipital fullness without corresponding manifestation of the propensities, or a manifestation of propensities without corresponding occipital fullness.

Predominance of Animal propensities.

Occipital fullness as a measure of Animal propensities.

Concentrativeness.

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

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

Adhesiveness.

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

Combativeness.

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

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

Destructiveness.

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

Alimentiveness and Love of Life.

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

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

Secretiveness.

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

Acquisitiveness.

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

Constructiveness.

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

Self-esteem.

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

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

Love of Approbation.

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

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

Cautiousness.

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

Benevolence.

14. *Benevolence.*—Table I. shows that it was very large in 5 males; very small in no case; large in 72 cases (41 males and 31 females); small in 46 cases (20 males and 26 females). Table II. shows that, of 4 patients who were characterized by excessive liberality of disposition (3 males and 1 female), this organ was large in all; while in 45 patients, chiefly cases of Chronic Dementia, who were characterized by facility of disposition (29 males and 16 females), it was very large or very small in none; large in 20 cases (14 males and 6 females); and small in 16 cases (10 males and 6 females). Table III. shows that, of the 5 patients in whom it was very large, the actual character was confirmatory in only *one.* "In Insanity, Gall states, this organ is manifested by excessive liberality and profusion, and by a desire to give away everything of which the individual is possessed. He observes that, in Idiocy, it produces good nature and harmlessness; while, where it is small, and Destructiveness large, the unfortunate is prone to fits of rage, and becomes dangerous. . . . He does not detail the evidence on which [his observations] proceed, and does not pretend that the cerebral parts, to whose action he attributes the phenomena, were examined or found diseased [!]. The profusion which he attributes to an over-action of Benevolence may proceed from general fatuity, from vanity, from small Acquisitiveness and Cautiousness, joined with general prostration of reflecting intellect; in short, from *a thousand* [!] sources, instead of that on which he founds his *conjectures.* We have the more reason to view, with the utmost distrust, Gall's observations upon this subject, when we find that he designated this organ the seat of the faculty of justice and moral obligation. While he does so, he very coolly details a great variety of facts relating to its function, totally at variance with his leading definition."—[Smith p. 149]. Here, again, phrenologists are at issue with a vengeance, and their statements are so confused and contradictory, that it need not detain us to say whether or not our statistics bear any of them out.

Veneration.

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

Firmness.

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

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

Conscientiousness.

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

Hope.

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

Wonder.

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

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

Ideality.

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

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

Wit or Mirthfulness.

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

Individuality.

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

Locality.

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

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

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

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

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

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

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

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

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

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

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

Discrepant or contradictory results.

Conformation of Head.

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

General form.

Frontal region.

Coronal region.

Occipital region.

Basal region.

Peculiarites of conformation.

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

General results of Phrenological investigations.

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

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

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

Relations of Meteorology to Psycopathy.

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

Meteorological observations in connection with changes in phases of Insanity.

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

Fallacies in observations on Ozone.

Barometrical changes.

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

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

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

Thermometrical changes.

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

Anemometrical changes.

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

Changes in regard to Moisture.

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

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

Cautions in observations on the bearings of Meteorology on Psycopathy.

In forming any estimate of the effect of atmospheric conditions or changes on the insane, it is right to bring under notice the fact that, in Asylums, in bad weather, the patients are mainly confined *in-doors*. The effect of this is, that many patients who, when constantly engaged in vigorous physical exercise in the open air in fine weather, are quite quiet and inoffensive, industrious and happy—when confined within narrow galleries, or in small day-rooms, idle, and, having no proper vent for their superabundant physical or cerebral activity, become excitable and quarrelsome, and not unfrequently, according to the nature or form of their insanity, dangerous to themselves or others. But such results have nothing directly or necessarily to do with the weather: they are due manifestly to the want of sufficient physical exercise or of suitable occupation; to compulsory association in too intimate a relationship or proximity with their fellows; and to similar circumstances. Many cases of Chronic Dementia or Chronic Mania seem quite unaffected by, and indifferent to, all kinds of weather; cold and heat, summer sunshine or winter storm are equally unheeded. But in such patients there is generally a certain torpor of the cutaneous and other bodily functions, as well as an inertia of the faculties of the mind. In connection with this indifference to cold or heat, it is well to bear in mind the analgesia and anæsthesia, so common in certain classes or individuals of the insane. On the other hand, many of the insane—just as is the case in the sane—are extremely susceptible of atmospheric changes; and in them this susceptibility would appear connected with, or dependent on, their most sensitive nervous organization.

Anæsthesia and Analgesia in the Insane.

General results of Meteorological Investigations.

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

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

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

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

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

Prospective wants of Scotland.

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

It is not our purpose here to add anything to the arguments already adduced by ourselves in support of the decision of the Directors as to the future mission or use of this Institution. Let us rather cite the testimony of some of the highest authorities in Britain on the management of Asylums and the treatment of the insane—testimony which materially strengthens the directorial decision above referred to.

Testimony of the Earl of Shaftesbury.

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

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

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

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

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

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

Individualising system.

Testimony of Dr Conolly.

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

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

The "rich" versus the "poor" Insane.

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

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

Testimony of Dr Bucknill.

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

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

Association of "private" and "pauper" Insane.

Testimony of Dr Boyd.

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

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

Testimony of Commissioner Gaskell.

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

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

Hospitals for the Insane contrasted with infirmaries and Dispensaries.

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

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

Certain modes of Pauperisation.

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

Testimony of the public Press.

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

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

Example of the County of Gloucester.

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

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

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

Remunerative and Non-remunerative classes of Patients.

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

Public versus Private Asylums.

* April 14, 1860 (p. 465).

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

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

Association of wealthy and indigent Insane.

Minimum rates of Board.

W. LAUDER LINDSAY, M.D.

APPENDIX

TO

REPORT OF PHYSICIAN,

CONSISTING OF

STATISTICAL TABLES.

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

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

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

II.—ADMISSIONS DURING 1859-60.

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

II.—ADMISSIONS—[CONTINUED].

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

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

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

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

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

III.—RECOVERIES DURING 1859-60.

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

III.—RECOVERIES—[CONTINUED].

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

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

IV.—DEATHS DURING 1859-60.

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

IV.—DEATHS—[CONTINUED].

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

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

PHRENOLOGICAL TABLES.

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

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

TABLE I.—[Continued].

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

ABSTRACT OF TABLE I.

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

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

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

TABLE II.—[CONTINUED].

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

TABLE II.—[CONTINUED].

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

TABLE II.—[CONTINUED].

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

ABSTRACT OF TABLE II.

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

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

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[CONTINUED].

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

TABLE III.—[Continued].

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

ABSTRACT OF TABLE III.

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

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

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

TABLE IV.—[Continued].

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

TABLE IV.—[CONTINUED].

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

TABLE IV.—[CONTINUED].

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

TABLE IV.—[CONTINUED].

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

TABLE IV.—[CONTINUED].

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

TABLE IV.—[Continued].

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

TABLE IV.—[Continued].

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

TABLE IV.—[Continued].

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

TABLE IV.—[Continued].

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

TABLE IV.—[Continued].

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

TABLE IV.—[Continued].

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

TABLE IV.—[CONTINUED].

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

TABLE IV.—[CONTINUED].

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

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

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

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

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

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

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

TABLE VI.—[CONTINUED].

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

TABLE VI.—[CONTINUED].

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

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

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

METEOROLOGICAL TABLES.

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

a. The Barometer.

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

b. The Thermometer.

Thermometer	Cases	Group
Between 38° and 39°	3	3 cases.
,, 39° ,, 40°	0	
,, 40° ,, 41°	7	124 cases.
,, 41° ,, 42°	1	
,, 42° ,, 43°	18	
,, 43° ,, 44°	3	
,, 44° ,, 45°	14	
,, 45° ,, 46°	9	
,, 46° ,, 47°	22	
,, 47° ,, 48°	26	
,, 48° ,, 49°	13	
,, 49° ,, 50°	11	
,, 50° ,, 51°	14	73 cases.
,, 51° ,, 52°	15	
,, 52° ,, 53°	13	
,, 53° ,, 54°	10	
,, 54° ,, 55°	8	
,, 55° ,, 56°	4	
,, 56° ,, 57°	1	
,, 57° ,, 58°	3	
,, 58° ,, 59°	4	
,, 59° ,, 60°	1	
Between 60° and 61°	1	9 cases.
,, 61° ,, 62°	1	
,, 62° ,, 63°	3	
,, 63° ,, 64°	2	
,, 64° ,, 65°	2	
Total, ...		209 cases.

Lowest actual marking, ...	33°.15
Highest do., ...	73°.42
Lowest mean daily marking,	38°.57
Highest do.,	64°.71

TABLE I.—[Continued].—*c. Moisture.*

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

d. Winds.

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

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

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

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

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

b. Language.

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

c. Ideas.

Development of transient and unusual delusions.

d. Muscular exercise.

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

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

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

b. Language.

Taciturnity; nostalgia.

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

a. State of the Weather at and around Perth.

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

b. State of the Weather throughout Scotland.

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

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

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

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

TABLE III.—[Continued].

b. State of the Weather throughout Scotland.

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

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

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

CHAPLAIN'S REPORT.

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

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

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

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

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

NINETEENTH

ANNUAL REPORT

OF THE

SOMERSET COUNTY PAUPER

LUNATIC ASYLUM,

From the 1st of January to the end of the Year.

1866.

WELLS:
PRINTED BY M. BACKHOUSE, HIGH STREET.

MDCCCLXVII.

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A LIST OF THE

COMMITTEE OF VISITORS

OF THE

Somerset County Pauper Lunatic Asylum, 1866.

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TREASURER:

CAPT. GILES, Stuckey's Banking Company,
Wells.

NINETEENTH ANNUAL REPORT

OF THE

VISITORS

OF THE

SOMERSET COUNTY LUNATIC ASYLUM:

PRESENTED TO THE

COURT OF QUARTER SESSIONS,

HELD AT TAUNTON, IN THE SAID COUNTY, ON TUESDAY THE 1ST DAY OF JANUARY, 1867.

The committee are happy to be able to report that the patients in the asylum have been healthy during the past year and the mortality not greater than usual.

The admissions of women have been considerably above the average, and the house may be considered full.

The new building at the farm is now finished; it will contain 33 women, and if any infectious disease break out, it may be used as an Hospital.

The new building on the male side is roofed in, the fire proof arches are being constructed with all possible speed, and it is hoped that they will be finished by the summer.

The rate of pay from the Unions has been 8s. 2d. during the last year, having been raised to that

amount at Lady Day, 1861. Since then the balance in favor of the asylum has been largely increased, but the recent rise of prices has reduced the balance so much during the last 12 months, that the committee have thought it necessary to raise the pay from January 1st to 8s. 9d.

Dr. Madden-Medlicott's salary has been increased from £120 to £150, and Mr. Duke's, from £120 to £130.

Dr. Boyd will in June next have completed the term of 20 years service to the county.

The committee have the pleasure of again expressing their approval of the manner in which all persons connected with the Asylum have performed their duties, and in particular their great satisfaction with the valuable services of Dr. Boyd and Dr. Madden-Medlicott.

F. H. Dickinson,	E. H. Dickinson,
E. H. Clerk,	Chas. Barton,
Edward A. Freeman,	G. F. Luttrell,
William Pinney,	R. B. Coles,
W. F. Knatchbull,	Robert Clerk,

J. Wollen.

NINETEENTH ANNUAL REPORT

OF THE

SOMERSET COUNTY LUNATIC ASYLUM

FOR THE YEAR 1866.

BY R. BOYD, M.D., F.R.C.P.

Physician and Superintendent.

PART I.

There has been an unusual increase in the number of females admitted in 1866, having exceeded by about one third that of the males. This is contrary to what has usually taken place. The total number of admissions to the end of last year was 1481 males, and 1408 females, a difference of 73 in favor of the males.

The following changes have since taken place amongst the inmates:—

	Males.	Females.	Total.
Remaining in the Asylum on 31st December 1865, not including those on probation	225	255	480
Cases admitted in 1866	78	106	184
Ditto discharged, recovered ...	37	51	88
Ditto ditto relieved	10	13	23
Ditto ditto not improved	3	2	5
Died	37	24	61
Remaining on 31st December	216	271	487
Of these are out on probation	3	2	5

There is a slight decrease in the total number of admissions and discharges this year compared with last. The decrease is in the males. There is an increase of 16 females, making a total increase of 7 as shown above, not including those on probation. From the pressure on the

female side, some harmless chronic cases were, with the consent of the authorities, received at wards set apart for them in the Bath Union.

As usual many aged and infirm cases have been sent from workhouses, (18 males and 12 females) in the last stage of disease; of whom 7 males and 3 females died here after a few weeks. Hence no fair inference can be deduced from the statistics of County asylums. As at present conducted, they are to a great extent hospitals for union workhouses as well as for the insane.

The new detached buildings at the farm yard, intended as an hospital in case of any contagious disease amongst the inmates, might have been occupied if required, some time ago; they have been partly furnished, the kitchen has not been fitted up, nor is the wall of the airing court, or new road way to farm yard yet finished The workmen have all been engaged completing the large addition to the west wing of the main building that it might be roofed before winter, which has been accomplished. The cottage for the garden attendant at the end of the building, instead of having an ordinary roof, is proposed to be covered by an iron cistern 3 feet deep, which would contain about 150 hogsheads of water, weighing about 36 tons. It is intended, by means of a force pump to raise the water from the rain water tank beneath the new building into the iron cistern. This pump to be worked by the excitable patients in No. 3, who cannot be employed in the ordinary out-door labour. It often happens that when the taps on the ground floor are allowed to run, the pressure is not sufficient to raise the water to the upper story, so that a high service from another source would be very useful. The cost of the iron cistern will be about three times that of the ordinary roof, but the useful employment of patients, and the great advantage of a large supply of soft water would much more than compensate for the cost.

In 1847 when this asylum was built for 350 patients, according to the published returns on the 1st of January in that year, there were 610 pauper lunatics and idiots belonging to the county, including those in licensed houses, workhouses, and those lodged with relatives and others, receiving parochial relief. The asylum has since been made to accommodate 520. Having attained this number last

year, an hospital for 33 patients was added, and when the extension of the west wing, which will be ready for occupation in the summer, is completed, there will be room for at least 600. There have not been any patients belonging to other counties received since those from Glamorgan were removed in May 1865.

It has been suggested that a separate Asylum for Idiots would be desirable; either a general one including other counties, or a small one in connection with this, and where the habits and education of the idiot children might meet with special attention.

From the Parliamentary Return it appears that the number of insane paupers chargeable to the poor rates on the 1st of January 1866, in Somersetshire, was 727 lunatics and 358 idiots,—total 1085. Of these 508 were maintained in the county asylum, 2 in a licensed house, 280 in the workhouse, 61 boarded out, and 234 resided with relations. So that less than half the pauper lunatics and idiots in Somersetshire are in the county asylum.

According to the same return the number of Paupers in England and Wales on the same date, was 924,813, exclusive of those in eight Gilbert's Incorporations. Of these 39,827 were insane paupers, 29,617 lunatics, and 10,210 idiots. Thus 4 . 3 per cent of the pauperism is ascribable to insanity. In regard to sexes, 17,437 were males, and 22,390 females. Of these,

21,986	were maintained in County or Borough lunatic asylums.
1,288	in registered hospitals or licensed houses.
9,973	in union or parish workhouses.
993	in lodgings or boarded out.
5,587	residing with relatives.

By comparing this return with the one already alluded to for 1st of January 1847,—the increase in the population has been from 14,664,208 to 19,967,690—whilst, in the same period the number of pauper lunatics and idiots has more than doubled. The grand total of insane paupers, lunatics, and idiots, in 1841 was 16,634, and 39,827 in 1866.

Of the 16,634 insane paupers of 1841, there were 7469

males, and 9165 females.

5053	were maintained in county lunatic asylums and hospitals.
3626	in licensed houses.
4490	in the union workhouse.
3465	with their friends or elsewhere.

From the above it appears that the insane paupers have more than doubled in number in workhouses, and those boarded out with friends have nearly increased in the same ratio, that there is a decrease of about two thirds of those in licensed houses, and that those in asylums have nearly quadrupled in the 19 years, from 1847 to 1866.

At the meeting of the Association of Medical Officers of Asylums, in July 1865, a resolution was carried unanimously in favour of placing this numerous class in workhouses on the same footing as those in asylums. Since then the illtreatment and neglect of the sick poor in several workhouses has been exposed and condemned, which will probably lead to the introduction of some beneficial measures regarding medical relief, the abolition of the contract system in workhouses, and the establishment in them of Hospitals for the sick. " The sick ward of the Union is the proper "basis of all care for the sick poor. We ought rather to "make the existing machinery do its work than supercede "it with new machinery doomed to rust in its turn". To this fact, copied from the " Times", may be added another:—" The whole of the London Lunatic Asylums in and near "the metropolis are full, consequently three lunatics (two of "which are dangerous) had to be removed during the week "from St. Olave's Workhouse to Fisherton House, Salisbury, "the nearest Asylum in which accommodation could be obtained".—*Times, Dec. 10th*, 1866.

In passing through Paris last summer I paid a hurried visit to the " Salpêtrière" and was struck with the circumstance of such an immense Pauper establishment for females standing within its boundaries. It is situated in its own grounds and contains between five and six thousand people, less than two thousand of whom are insane—the remainder of the building being a workhouse, containing the infirm female poor of Paris. The guide said there were a great many officials and attendants employed. In one infirmary there were a number of aged, apparently bedridden women.

There was a row of beds on each side of the room, and a double row in the centre, head against head; they were spring beds, and the bedsteads had white furniture contrary to custom in England. The room was not close, all the windows on one side being open. It was on the ground floor. The floor was nicely polished, waxed and well rubbed, there was no matting or carpets. In a dining room laid out for dinner, the tables were polished or varnished, on them were glasses, glass decanter crofts, salt, pepper, and mustard pots, knives and forks, no table cloths; benches or forms as used here. The kitchen and laundry were admirable in their arrangements, and are said to be the largest in the world. In the former it is stated that upwards of 3000 lbs. of animal food are daily cooked. In the laundry upwards of 30,000 pieces are washed daily, they wash for the " Hotel Dieu" and other hospitals. The linen room in this establishment, might be considered as one of the sights of Paris, unrivalled for extent, order, and arrangement.

Within the walls there was an ornamental garden with seats, and near the entrance a capacious and handsome chapel. The " Bicêtre" a smaller but similar institution, being a workhouse for the male poor is situated in a different part of Paris and like " Salpêtrière, includes the infirm, sick, and insane, who are all treated as the circumstances of their case demand. In England, where the medical treatment of the sick in workhouses is under the contract system it is impossible they can receive the same justice.

M Falret, physician to this large hospital of Salpêtrière, in his work recently published,* states that after several years' research into the morbid anatomy of insanity, and after failing to elucidate the nature of the malady, by the aid of facts so gained, he next attempted to interpret the nature of mental disorders by recourse to the doctrines of phsycology, especially those of the Scottish metaphysicians for fifteen years, but at the end of that time had to lament that his labour was all vanity and vexation of spirit. My own experience of upwards of 30 years, and after having examined nearly every case that has died in this institution.

* Des maladies mentales et Ades siles d'Aliénés.

and previously upwards of two thousand of the poor in the Infirmary of St. Marylebone the results of which have been published* agrees with that of M. Falret as regards the morbid anatomy of insanity, which may be considered and is very frequently only the delirium of chronic disease. The connection between mental disorder and bodily disease has been frequently alluded to and even so far back as in the first annual report of this asylum. In the analysis of the causes of insanity of the first two thousand cases, in the 17th annual report p. 28, it is shown that about one half depended upon bodily or physical causes. Therefore as the sick ward of the union is the basis of all care for the sick poor, and insanity is so frequently the result of bodily ailments, the laws regarding medical relief and pauper lunacy should be amalgamated.

Would it not be more rational to treat diseases with more care at the earliest stage, before delirium supervened, before the sufferers were beyond relief, or incapable of appreciating the efforts to restore them to health? Are they less objects for care and sympathy when suffering from sickness or accident, before being deprived of reason, than afterwards? and would not measures taken at the onset have saved much suffering, been more useful, and perhaps saved valuable lives from becoming mentally total wrecks. A poor man recently in writing to express his gratitude for timely assistance in sickness, concludes with this trite and expressive observation, " poor people does be lost for want of means when they are sick."

Under the poor law the system is how to avoid relief to the poor in sickness, for the relieving officer is told medical relief is the stepping stone to other relief, therefore if possible it must be avoided.† Is it then to be wondered at that

* Philosophical Transactions for 1861.

† " It is a prevalent impression in this country that there is no legal relief for the poor in France, because there is no class answering to our 'paupers,' and no workhouses. But although no dingy brick buildings, nor palatial structures, destined for the reception of the indigent, meet the traveller's eye in France, and although there are neither paid overseers, nor surly masters, nor salaried union doctors connected with the administration of aid to the distressed in that country, still there can be no doubt that the poor are there much more tenderly treated, and more efficiently relieved too, than in England. Amongst us, relief

under such a system, workhouses are comparatively empty whilst asylums which have been constantly added to, are still over crowded, and insanity supposed to be increasing? This is becoming a national disgrace. The health of the poor is of the highest importance to the State, as it is from their ranks, that our labourers, soldiers, and sailors are supplied. The great evil to contend with amongst the labouring classes is intemperance, it too often brings whole families to the workhouse; this evil is said now to exist even to a greater degree in France than in England, owing to excess in smoking which destroys the appetite, and drives the individual to the use of Absinth and other stimulants. How legislation could deal with such cases it is difficult to determine. Whether by compelling publicans to provide tea, coffee, soup, or other refreshments for wayfarers, might be matter for consideration; at present, it is seldom that anything beside intoxicating liquid can be obtained.

The orderly conduct of about 300 patients, male and female when assembled in the dining hall, has been frequently remarked by the visitors and strangers, and many have said that had they been ignorant of where they were they would not readily have guessed it. Numbers of these are chronic cases and in wards attached to workhouse infirmaries under similar laws and government to county asylums, might be equally well managed and could be more easily visited by their friends, whilst county asylums could receive the recent and curable cases. Should it be considered preferable to continue the present system of enlarging county asylums so as to include all chronic cases, it might be so arranged here as to include idiot and industrial schools. More land can be had to purchase, and there is stone and lime on the farm. The example of " Salpêtrière" would prove that the size of the establishment need be no barrier to good management.

attended with enormous expense is thanklessly received, because it is almost always contemptuously, and but too often brutally, administered; and because here, poverty is regarded as a crime to be punished rather than as a misfortune to be alleviated; whereas in France, the revenue destined to succour those requiring public assistance is dispensed with; an economy which permits almost all the receipts to go directly to the purpose for which they are designed, and alms are given in a manner calculated to assuage the humiliated feelings of the recipients; the rule most strongly insisted upon in the official instructions issued to the

DIVINE SERVICE.

A new Chapel is much required, the present one not being sufficiently large for all the patients capable of attending Divine Service since the numbers have increased. Should one be built it ought to be large enough to afford accommodation for the families of married attendants. Some sittings might also be provided for strangers as in one or two other Asylum Chapels, noticed in last report. The present Chapel would be very useful if converted into a work and school room, which is much wanted for the females, the day rooms on the female side being insufficient.

Should a Chapel be built detached from the asylum, the daily morning service might be held in the large hall, immediately after breakfast, but if built in the garden behind the house as originally suggested the Chapel could easily be connected by a covered way with the hall.

The Chaplain has established a daily school on the female side, which has been regularly attended by between thirty and forty patients who learn to read, write and cipher. It has been in operation since April last; was visited, and much approved of by the Government Inspector of Schools. The Workmistress assists in teaching.

A sum of £8 has been granted this year by the Visitors for the library, and 5 guineas in books by the Christian Knowledge Society. The books are eagerly sought after by many of the patients and attendants.

directors of the "Bureaux de Bienfaisance" in France being the truly Christian one, 'that in the distribution of relief they must always remember that misfortune does not obliterate shame or destroy self-respect, and that one of their most important duties is to succour the unfortunate without causing them a blush."

The French system of poor relief is entirely and strictly confined to outdoor assistance, save only that portion of it which is administered through the "hospices" and hospitals; the former serving as asylums for deserted children and those whom old age or incurable infirmities may have rendered incapable of earning their bread, and the latter appropriated to the reception of those suffering from acute disease, or accidents which necessitate medical advice and assistance. The old and infirm inmates are employed in performing any light work required within the house which is not beyond their strength; and for this they receive small gratuities, which they expend on tobacco and snuff, or in

ACCIDENTS.

An accident occurred to one man aged 73, who is excitable and stubborn; he was struck by an epileptic patient in the same ward, and his left collar bone was fractured, which became united in a few weeks; he is feeble, and still in the infirmary. Two Coroner's inquests have been held, one on a female aged 64, in the early part of the year. She slipped down three wooden steps leading into No. 4 corridor, and broke both bones of the right leg, she died in the infirmary about 4 weeks afterwards; she had also pulmonary disease. The second inquest was on a man aged 75, who suffered acutely from cancer in the nose; he hanged himself with his neckkerchief to the iron window guide in one of the single rooms, 5 weeks after his admission. Several suicidal cases have been admitted during the year, and 13 males and 15 females required to be fed by the stomach tube for various times, from once only to three times a day, for as many as five weeks without intermission. Of these cases five males and four females have died. There is but one female at present who requires to be fed by the stomach tube.

AMUSEMENTS.

The weekly dances are continued Wednesday evenings, for about two hours, and have been occasionally varied by theatricals. In the autumn the Yeomanry assembled in front of the asylum for their biennial weekly training at Wells; during the week they, and the Volunteer Rifle Corps attended a performance of the "Ticket of Leave," and "Bombastes Furioso." There were two other performances of the same pieces, at one of which there were about an equal number of patients, and of persons from the neigh-

procuring for themselves what they term "petitsdouceurs" (little delicacies) in addition to the ordinary diet of the establishment.

Although the system of relieving the poor is carried out through the agency of unpaid officials in France, still the acts of those benevolent persons who devote their time gratuitously to provide for the wants of the deserving poor, are as strictly watched over by the constitutional authorities as if they were well-paid public servants; the manner in which they discharge their duties is marked and reported upon, and dismissal is the certain consequence of inattention or neglect; a disgrace which is more keenly felt than we in England, with our ideas on such subjects, can imagine.—Vol. vi, page 44, 45, *Cornhill Magazine.*

bourhood, upon which occasion the hall was crowded, strangers being unconsciously mixed up with the patients. About 600 persons were present.

The theatricals have been resumed this winter and Planche's Historical Drama of Charles xii. is in rehearsal for the Christmas holidays. Some new scenery for the piece has been obtained in London by my friend Mr Balderson, who has kindly interested himself in getting it up and procuring the requisite dresses. It is longer, being in two Acts, and includes more characters than any performance hitherto attempted here.

Last spring one of the patients, a sail maker, employed his time in making two tents. The larger one, capable of dining 500 persons, the smaller one for the band. During the summer they were put up in front of the house, and in hot weather the patients frequently had their meals in the larger one; a pleasure which they enjoyed very much, from the sense of freedom it gave them.

A new Van has been purchased which with the other conveyances, enabled a large party to be sent to Cheddar on two occasions, accompanied by some of the band. On Thursday the band plays in the hall during dinner. There is also a practice one night in the week. The Band (consisting of 16 performers) is composed of the male attendants to whom great credit is due for their willingness to devote a portion of their time for the amusement and benefit of the patients. They continue to improve steadily under the instruction of Mr Bristow.

For a belief in the wonderfully soothing effects of music on the Insane we have the authority of Holy writ, in the case of King Saul; and the Greeks and Romans were equally aware with the Jews of its power. In modern times the effect which the "Ranz de Vaches" produced on the Swiss, and the "Reel of Tulloch gorum" on the Highlanders is well known. Music is said by Esquirol to act upon the physical system by producing gentle shocks upon the nerves, quickening the circulation. It acts upon the mind, in fixing the attention by mild impressions, and in exciting the imagination by agreeable recollections. It is a valuable remedial agent particularly in convalescence.*

* This power of music is attested by Euripides, although he considered

IMPROVEMENTS.

A portion of one of the corridors on the male side, originally a day room, has been floored with oak, the tile flooring having been removed and used in bath rooms and closets. By this means a dormitory for ten beds has been obtained, more space has been gained for the beds, some having been removed from crowded dormitories. The new lavatory has been fitted up with iron enamelled turn over basins and adjoining are six new earth closets, which after several months use, are free from smell, and continue to be preferred to water closets. The water closets in No. 4 on both sides have been arched, tiled, and quite renewed.

Rooms have been made over the female infirmary for eight beds, and a good sized store room for the female clothing. The high pitch of the roof affords very good airy bedrooms, and these rooms will be further extended by the gradual appropriation of all available parts of the roof. The corridors, some of the dormitories, and single rooms have been papered, painted and coloured.

Some trees and shrubs have been planted in the grounds, and airing courts. A row of young oaks has been planted on the slope next the Bath road, from the lower lodge to the red stone quarry.

FARM.

The root crop this year has been much above the average; the hay crop was the largest ever grown here, and was well saved.

In consequence of the County Surveyor's letter in the "Times" respecting the utilization of the sewage, referring to the practice established here for so many years, several enquiries have been received from strangers. Amongst the enquirers who entered most fully on the

it so often misapplied. — *vide Euripides Medea*—lines 193—206. "Now if thou shalt call the men of former days witless and not wise at all, you will not far be wrong—those I mean who devised songs for festal meetings and revels, and pleasant tales of life as the accompaniment of dinners—but no one has devised how to cease by music and many toned songs the infernal pains of men, from whence deaths and dreadful mischances overturn houses,—and yet it were a gain to cure men of these ills by songs but where there are festive banquets why do men exert the voice unnecessarily, for the well furnished banquet at the time hath an enjoyment of itself to men?"

subject was the Chairman of the New Middlesex Industrial School at Feltham. On a recent visit to the Island of Jersey, one of the Jurats, Mr Neel, showed me at Gorey, the training ship for boys for the Navy, also the new industrial school for 120 boys, just completed, the arrangements in which are excellent. Mr Neel, who suggested the building of the school, was requested by the States to superintend the erection, previous to which he visited several of those in England. The arrangements he has there carried out with respect to the sewage, solid manure, and earth closets, are most complete.

CHARGE.

The charge for maintenance of patients has continued the same as last year, but owing to the increased price of meat and bread, it has been below the actual cost, and the balance at the Bankers in favour of the asylum has been so much reduced, that it will be necessary to raise the charge for 1867.

The Officials have, with rare exceptions, conducted themselves with kindness to the patients and been attentive to their duties; and the Superintendent, has, in conclusion again to thank the Visitors for the kind consideration and the assistance they have afforded him in the discharge of his onerous duties.

PART II.

In the first part of this report, it is stated that although insanity has not been and cannot be defined, it is very frequently the delirium of chronic disease. In proof of this statement a reference to *Table C.* (page 39) in the last annual report is sufficient, as in that table is shown "the assigned causes of death, as ascertained by *post mortem* examination, specifying each form of insanity, in 446 males and 320 females in this asylum, to the end of 1865." From an analysis it appears that

		Males.	Females.
Organic diseases of the brain existed in		43 ℔ cent	31 ℔ cent
Ditto	chest	45 ,,	44 ,,
Ditto	abdomen	12 ,,	25 ,,

So that diseases of the brain were more common in males and diseases of the abdomen in females in connection with the different forms of insanity. In many of the cases several of the organs were diseased in the same individual.

As regards these different forms, mania was the most common in both sexes. Cases of melancholia were about double the number in females they were in males. There were about a third more males than females affected with dementia; of general paralysis there were about six males to one female; cases of epilepsy were nearly two males to one female. The cases of idiocy were rather more numerous in females.

As regards the time of death, rather more males died in the forenoon and females in the afternoon, but amongst the whole of the cases there was only a difference of two in favor of the forenoon, as shown in *Table B.*

The form of the disorder, with the *death-rate* in each year to the end of 1865, was shown in *Table A* in the last report; from which it appears that the highest mortality was in the year 1854, and the highest death-rate from general paralysis in males being 27·3 per cent, and from mania in females amounting to 31·2 per cent, whilst in males from the same disorder it was 22·5 per cent; from melancholia the mortality in males was 9·9 and above double in females, amounting to 19·4 per cent; in the other forms of the disorder the difference between the sexes was not remarkable; in dementia 16.6 in males and 20 per cent in females; in epilepsy

15·5 in males and 14·7 per cent in females.

In the *Medical Times and Gazette* vol. 11 for 1866, pp. 11, 256, and vol. 1 for 1867, p. 37, will be found three separate notices of "INSANITY IN FRANCE" from a Report to the Emperor by M. Armand Béhic, Minister of Public Works, and M. Legoyt, entitled *Statistique des Asiles d' Aliénés de* 1854 à 1860. For the purpose hereafter of comparing the results of the statistics of this asylum, in this and previous annual reports, with the statistics of the French asylums, the following notes are copied from the above Journal:——

"The development of madness amongst the inhabitants of any country is a subject which deserves the fullest investigation. Official records both in France and England show that year by year madness is spreading—so far, at least, as can be judged from the increasing number of patients coming under observation in the institutions appointed for their reception. Speaking generally, it is within our experience that the notion of diseased minds becoming more common than they formerly were, is very widely entertained; and perhaps we may trace this belief in some measure to statements which have been made by Lord Shaftesbury, who is the Chairman of the English Lunacy Commissioners, to the effect that the high pressure at which business affairs are now conducted, and the immense amount of speculation going on, conduce to the development of a state of mental and nervous excitement subversive of the equilibrium of nature. Is it a fact capable of substantial proof that, *cæteris paribus*, insanity is increasing? Granting the augmented residents in asylums, do they increase in a corresponding ratio with the general population either of this or any other country, and to what extent is that increase affected by the undoubted disposition towards a more ample provision for humane and charitable purposes now manifested happily in all the chief states of Europe? These are very important questions to be determined, and all observations which will help us to a clearer conception of the points of difficulty involved will be properly appreciated by those interested in the subject.

Unfortunately, our own Lunacy Commissioners, for some reason or other, hardly ever venture in their reports beyond a stereotyped meagreness of detail which deprives them of

value; and they are aptly characterised by a French writer as *un peu trop concises encore*.

In 1851 there was 1 insane person to every 796 of the population of the empire; in 1861 the proportion was 1 to every 444 persons, which is equivalent to an increase of 83 per cent. in the ten years. The inmates of asylums increased 87 per cent. in the same period, and the difference between these two ratios comes very near to the ascertained increase of the French population in the ten years.

Now we are well aware that much may be said against accepting these deductions as to the rapid development of insanity in France, and we should not, therefore, make them the basis of any comparison with other states, did we not believe that, for the reasons already adverted to, the margin of error is universal.

The English Lunacy Commissioners report that on Jan. 1st, 1864, they were "concerned more or less in the welfare of 44,695 persons of unsound or defective intellect," 38,154 of whom were located in asylums, workhouses, etc., and 6541 were living with relatives or in lodgings. Allowing for cases not coming under the cognizance of the Commissioners, we may estimate the total number of insane to have been at that period in round numbers about 45,000. This would give one insane to every 450 of the entire population, which is, therefore, a little more favourable than the most recent estimate for France.

We hold, then, that the increase or diminution of the patients under restraint is no fair test of the actual movement of insanity; it may, and no doubt does, simply imply an increased disposition towards humane administration, or the reverse. So when M. Béhic tells us that in 1836 the ratio of inmates to the total population was as one to 3024, whilst in 1861 it was as one to 1214, and that, therefore, the population increased only 10 per cent. in the interval, whilst the inmates increased 172 per cent., we accept the statement, but it proves nothing more than that the authorities have recognised their duty of providing increased accommodation since 1836. Both in the English and French asylums the annual rate of increase of the inmates has declined in the last ten years, and probably for the same reason—namely, that the room available for new patients in both countries is pretty well exhausted. At the

end of 1860 there were but 1321 vacant places in all the French asylums, and the recently issued report of the English Commissioners (a) shows that not above 1000 more patients could be received in the public institutions. Indeed, we notice that in Devon the total accommodation is put for 673 patients, yet the actual inmates number 690. In Kent they appear to have more than 100 patients in excess of their accommodation, and the same incongruity is shown in two other counties. There are, however, instances in the same tabular arrangement suggestive of loose supervision, and it is possible the facts we have quoted are not strictly accurate. M. Béhic shows that the rate of increase in the admissions has decreased very considerably ; and in England the numbers themselves fell from 9248 in 1860 successively to 8955, 8863, 8588 in 1863. It is true they rose again to 9367 in 1864, and to 10,341 in 1865, but nobody can doubt that this sudden increase was due to extended accommodation rather than to any sudden manifestation of mental aberration in excess of the ruling average.*

It may be convenient to bring our conspectus into some sort of classification, according to the nature of the several branches of the subject.

Age.—At what age does insanity most frequently develope itself? M. Béhic's figures lead him to the conclusion that *la folie ne se manifeste guère qu'après la vingtième année, et qu'elle devient ensuite de plus en plus fréquente avec l'âge jusqu'à 40 ans, marchant pour ainsi dire parallèment avec le développement de la raison.*

From the age of 40 the proportional number of cases of insanity, and likewise the hope of cure, diminish gradually to the limits of life. The deaths follow very nearly the same law. In both sexes the maximum of insanity is found between 30 and 40 years of age, and the proportion of cure is greatest between the ages of 20 and 30.

Sex.—In what degree does insanity depend upon sex, and whether is the male more prone thereto than females ? We are here on ground which has been most stoutly contested by the advocates of two opposing doctrines, and truth compels us to say that much reliance seems to have been placed

(a)* Twentieth Report of the Lunacy Commissioners, p. 7.

on very imperfect data. M. Esquirol, whose high authority on the general subject of mental disorders is unquestionable, inclined to the view that women were more liable than men to attacks of insanity, and his theory has found many supporters since his time. * But, as was well demonstrated by Dr. Thurnam, M. Esquirol's opinion is founded on an erroneous method of statistical analysis, for he omitted to take into account the general preponderance of females in ordinary populations ; and, moreover, his conclusions are drawn from a comparison of *existing* cases, instead of the cases *occurring* in the two sexes, thus arriving at a proportion of thirty-seven males to thirty-eight females as an average of different counties. This is certainly a very slender thread on which to hang so great a drawback to the general excellence of the feminine nature as is involved in the stigma of peculiar susceptibility to physiological or psychological influences tending to madness. Dr. Thurnam showed that out of 48,143 admissions to asylums the males exceeded the females by 13 per cent. The development and ultimate issue of the malady after admission have been found to lead to the accumulation of female patients much faster than of males, for the probability of female recovery is much greater, and of death very much less, than in the other sex ; and therefore, if we may infer anything at all, it is that on the whole men are actually more liable to the disorder than women. Dr. Thurnam found that the mortality of insane men in the public asylums of England exceeded on an average that of insane women by 50 per cent. These deductions admit of general application, but they are not without exception. In certain institutions where a particular class of patients is received, the admissions of women have exceeded by 20,30, and even 45 per cent. those of men ; and it is quite conceivable that in large towns the sexes may be very oppositely affected to what is generally observable.

Without pretending for a moment that M. Béhic's report has decided the point of relative liability, it is certain that his very elaborately detailed facts are a valuable contribution

* It will be seen from Table xi. in the appendix to this report, that notwithstanding the larger proportion of females in the population generally, the admission of males has exceeded by 70 that of females in 19 years, since the opening of the asylum.

—perhaps the most valuable of its kind that we have—to the data necessary for determining the problem. Judging, then, from the French returns, it would appear that, taking the aggregate of the *aliénés* in asylums there would be found at any given time more women than men insane. But it would be fallacious therefrom to assume that necessarily insanity is more common to women than to men, inasmuch as the proportion of admissions, of discharges, and of deaths is very much higher amongst males. It is true that according to the French census of 1861, the enumerated proportions of the sexes are changed according as the *malades* are in asylums or *à domicile*: of the first category the males were 48 and the females 52 per cent.; of the second the males were 54 and the females 46 per cent.; and of both classes combined the males were 4 per cent. in excess of the females. This excess of males is accounted for by the great difference in the relative proportions of the sexes amongst the *fous* as distinguished from the *idiots-crétins*: with the former the females, whether *á domicile* or in asylum, are 4 per cent. in excess of the males; but of the *idiots-crétins, à domicile*, the males outnumber the females by 14 per cent. whilst in the asylums the females are 2 per cent. in excess. The preponderance of female *fous, à domicile*, may be reasonably ascribed to the fact that it is the privilege of their sex to be protected, as it is the duty of males to protect; if the malady strike down the protector, he has no one to look to but the State; the difference in the position of the two sexes in this respect is sufficiently obvious. We know nothing, however, of the relative duration of the disease or of the rates of mortality and recovery amongst those unfortunates who are deprived, too often by mistaken kindness, of the advantages of proper treatment obtainable in institutions specially adapted for them, and therefore we are not warranted in rejecting the conclusions which we derive from the facts relating to asylums.

Let us then summarise the results of the seven years 1854-61 to which M. Béhic's report relates. We have seen that of 100 inmates on a given day 48 were males; to an annual average of 100 of both sexes the male ratio was for admissions 52, discharges 53, cured 51, deaths 55. Thus we see that while the admissions and discharges of both sexes almost balance each other, the excess of males

dying is 4 per cent over those cured; and this exactly corresponds with the difference in the rate of mortality of the two sexes, which is 16 per cent. for males and 12 per cent. for females as calculated from the average annual deaths and the mean population of the asylums. This mean population is represented by the mean number of patients constantly *entretenus* during the seven years, and precisely agrees in its proportion of the sexes with the proportion ruling amongst the inmates on a given day—a very clear indication that the excess of females may be set down as a pretty constant ratio. The foregoing facts enable us to see how it is that the sojourn of male inmates is shorter than that of females: they are admitted in greater numbers, but they pass through the asylums very much quicker, and their places are filled by new patients much more rapidly than are those of the female inmates. The inevitable corollary follows that in so far as the movement of insanity as observed in asylums may be taken for a guide, men are more susceptible to mental derangement than women; and unless the issue of the malady is different amongst the lunatics at large, we must consider it an established axiom that insanity more often attacks men than women, albeit the census returns would always give *moins de fous que de folles*.

The mean term of residence of the *aliénés* of both classes was 265 days for males and 279 days for females. The males are slightly more liable to relapse after apparent cure than females; and there is a remarkable difference in the proportions of the two sexes in regard to the combination of insanity with paralysis, inasmuch as 12 per cent. of the male admissions were thus complicated, but only 3 per cent. of the females. Hereditary tendencies are discovered in equal proportions of the sexes; but of the causes of insanity the males, whose derangement was brought about by physical causes, were 11 per cent. in excess of the females, while under moral causes the females were 5 per cent. in excess of the males. The mean age on admission was 40 years for males and 42 years for females; the mean age at death was 46 years for males and 50 years for females. Of relapses, the two sexes differ little in their proportions; 102 males to 100 females is the exact ratio.

Mortality.—The mortality in asylums, which was at the

rate of 14·34 per cent. in 1855, as calculated on the mean number of inmates during the year, declined to an average rate of 13·5 per cent. in the following five years 1856-60; yet M. Béhic speaks of the mortality as having *légèrement augmenté*. He arrives at this by taking an average of the seven years 1854-60, which he compares with the average of the twelve years 1842-53—a comparison which is vitiated by his including in the more recent period the very exceptional mortality of nearly 17 per cent, (in 1854), which was caused by the cholera epidemic. It is something so very unusual for a Frenchman to depreciate his own country that we deem it only right to point out the unfairness of M. Béhic's conclusion.

Curable and Incurable.—Since 1856 the patients under treatment in asylums have been classed under the chances of cure which their state appeared to offer, and the results show that less than 20 per cent. of both sexes are classed as "presumed curable." More than four-fifths of the unfortunates offer no chance of cure, which sad result is due in great part to the negligence or mistaken affection of the friends of the patient, who will not part with him until his malady has become inveterate and hopeless.

It appears that more than one-fourth of the inmates of asylums are not placed there until more than a year has elapsed since the commencement of the attack, and one cannot, therefore, be surprised at the number of incurables which encumber the asylums.

Relapses.—About 77 per cent. of the admissions were for the first time, the remaining 23 per cent. being readmissions after relapse, or as transfers from one asylum to another. 47 per cent. of the readmissions after relapse were of cases in their first year of presumed recovery; every subsequent year the chance of relapse diminishes, whilst it is greatest in the first month after supposed cure.

Civil Condition.—The number of unmarried patients received into the asylums exceeded by nearly 50 per cent. those who were married. M. Béhic hesitates to accept the conclusions of some *aliénistes* that celibacy creates a disposition to insanity, but he remarks that the solitude and isolation of many unmarried persons would operate in the direction of placing the celibate *malade* in asylum almost as a necessity, whereas the married sufferers would often find in the bosom of their own family those first cares which help to restore

the lost mental equilibrium. Therefore he adds: *Il ne serait donc pas étonnant que, si les aliénés mariés sont moins nombreux dans les établissements speciaux, ils eussent, au contraire, une supériorité numérique marquée parmi les malades à domicile.*

Occupation.—The influence of occupation on bodily health is known to be considerable; the *mens sana in corpore sano* implies concurrent circumstances of suitable employment, with proper food, clothing, and lodging. M. Béhic classifies his patients according to their profession or calling, and obtains these results:—

Militaires et marins	1	admission	to	every	1,711	inhabitants.
Professions libérales	1	"	"	"	1,911	"
Rentiers et propriétaires	1	"	"	"	3,609	"
Professions industrielles, commerciales, manuelles	1	"	"	"	5,487	"
Professions agricoles	1	"	"	"	18,819	"

Thus we see that the agricultural class, in proportion to its population, supplies but an inconsiderable contingent to insanity, whilst the profession of the soldier and the sailor is most prolific in mental aberration. But M. Béhic warns us that we should commit a grave error if we inferred from the foregoing that insanity is really more frequent in the Army and Navy than in other classes of society, and attributes the high proportion we have quoted to the vigilance of the administration in forthwith placing under treatment every soldier or sailor who shows signs of the malady. There may be something in this reasoning, but nevertheless it does not seem difficult to believe that the soldier's life and daily associations, with the temptation to drink, are more likely to engender an unhealthy state of the mind than almost any other calling.

As a set-off against the proclivity to insanity on the part of the honourable profession of arms, it is right to point out that of all classes they show by far the largest proportion of cures. The vigilance just adverted to insures their being brought under treatment at the first dawn of the malady, and they are all of an age at which the greatest proportion of cures is found, so that everything is in their favour.

After them the agricultural class offers the next highest proportion of recoveries, and following them come the domestic servants, wages and salaries class *(gens à gages)*,

the commercial class, and lowest on the list "*individus sans profession*."

Preserving the same classification, it is found that the two sexes show somewhat different results in their death-rate, for the ratio of deaths to admissions is very much higher amongst males of each of the categories, except in the class of *individus sans profession*. Here the mortality of males is 50 per cent., and of females 55, a difference which is partly explained by the numbers of the sex who live *dans le vagabondage, et particulièrement les filles publiques* included in the class. The lowest percentage of deaths amongst males is found amongst the *rentiers et propriétaires*, then follow the *militaires et marins*, and the highest ratios found are yielded by those *sans profession*, *professions agricoles*, *professions manuelles ou mécaniques*, and, highest of all, *gens à gages*. The lowest percentage of deaths of females is given by the *professions libérales* (21 per cent.), and the highest, as we have said, by those *sans profession*.

Causes of Insanity.—In examining the presumed causes of Insanity, M. Béhic avows that the results of Medical investigation must be taken approximatively. Many reasons combine to make it exceedingly difficult in some cases to discover, in the diverse influences which destroy the mental balance, the decisive cause of which insanity is the result. There is also the repugnance of many families to disclose the necessary information, and there is a tendency on the part of the majority of Medical men to consider moral causes as quite secondary and accidental, and to refer the disease mainly to physical causes.

In 1000 cases of insanity 607 have been reported as due to physical causes, and 393 to moral causes. The former operate very much more largely than the latter in both sexes, with this difference—that the largest proportion of moral causes belongs to women.

An analysis of the *physical* causes shows very considerable difference in the two sexes. Thus, in 8797 cases of men and 7069 of women, the effect of age (*démence sénile*) was the cause in 8 per cent. of men and in 6 per cent. of women; distress and misery to 5 per cent. of men and 8 per cent. of women; intemperance to 34 per cent. of men and 6 per cent of women; and 23 per cent. of the women were brought into insanity by diseases peculiar to their organism,

such as disease of the uterus, suppression of periodical functions, pregnancy, and childbirth.

Of the *moral* causes, those which appear most potent in subversion of the mental balance are domestic troubles, religious excitement, reverse of fortune, and disappointed ambition. Observed cases of 4919 men and 5438 women yielded the following results:—

	Precentage of	
	Men.	Women.
Domestic griefs and troubles	20	29
Love, jealousy, and pride	15	16
Loss of fortune	11	5
Loss of friends	5	11
Religious excitement	7	14
Disappointed ambition	7	3
Excess of *travail intellectuel*.	6	1

The conclusion which the analysis of presumed causes of insanity supplies is, that the most potent and frequent influence is intemperance; then follow in order domestic troubles, age, diseases of different organs, epilepsy, religious excitement, venereal abuses, and privations of all kinds.

With regard to the proportions cured of the two classes, there seems to be a reversal of the previously stated facts, inasmuch as in 1000 admissions it was stated that 607 were due to physical causes and 393 to moral causes; whereas, out of 1000 cures, the diminished proportion of 536 cases originated in physical causes, and the increased ratio of 464 cases were due to moral causes, so that, relatively to the numbers admitted, insanity arising from moral causes appears to have the largest chance of recovery under treatment. And if we compare the death-rate of the two classes we see that of 1000 deaths 694 were of patients whose malady had a physical origin; so that in every way the insane of that category, *qui sont en réalité doublement malades, puisque la folie se complique toujours chez eux d'une autre affection*, have the chances against them. Reducing the proportions of the physical to the moral causes of insanity to a common ratio, it will be seen that in admissions it was as 100 to 65; in cures, as 100 to 86; and in deaths as 100 to 44.

Hereditary Predisposition.—It has been held by many *aliénistes* that hereditary transmission is commonly between individuals of the same sex—that is to say, from father to

son, and from mother to daughter. The French statistics are confirmatory of that theory. In 1000 admissions of each sex, 264 males and 266 females had received the germ of their malady at birth; and of the 264 mal.s, 128 inherited from their father, 110 from their mother, and 26 from both parents; of the 266 females, 100 inherited from the parental, 130 from the maternal side, and 36 from the two combined. Fifteen per cent. of the insane cured were recorded as having had hereditary tendency to the disease.

The returns do not discriminate in the discharges those *before* and *after* cure prior to 1854, but in that year the proportion of discharges in 100 cases treated was 9 per cent. cured, and 5·4 *avant guérison*. In 1860 the relative proportions were 7·0 and 7·1, so that the ratio of cures has regularly diminished, whilst that of uncured has gradually increased. The same results are observable if we take 100 discharges as the basis. In 1854 there were 62 cured, and in 1860 only 50; the numbers uncured were, therefore, 38 in 1854, and 50 in 1860. It is worthy of remark that the cures are more numerous among men than women; the average proportion was 8·7 per cent. of men treated, and 38 per cent. of women This difference, M. Béhic believes, obtains in other countries, and is partly due to the desire on the part of the asylum authorities to abridge the period of convalescence amongst men, so that they may the sooner return to their families who are dependent upon them; whilst the females are detained as long as possible from a humane dislike to expose them to the forlorn, isolated, and dependent position which awaits so many of them on their return to society.

Another reason for the greater proportion of cures amongst males is that the causes which most frequently produce insanity in them are those most easily amenable to proper treatment and cure. Thus intemperance, which is the most frequent cause of insanity in men, produces a less intense form of the malady, and one more easily curable, than the prevailing causes of insanity in the other sex.

Nothing is more clearly established in the records of insanity than that the chance of cure diminishes gradually with the duration of the treatment. Thus, on an average of 100 cures, 80 per cent. (four-fifths) were in the first year of treatment, of which 38 per cent. took place in the first three

months after admission. The mean duration of treatment of the *guérisons* was nine months for males, and about ten months for females.

The statistics of asylums reveal very sad facts respecting the number of *aliénés* who die directly after their admission.

In 17,167 deaths 12 per cent. died in the first months of their entry, 7 per cent. in the second months, 6 per cent. in the third—that is, a fourth part of the total deaths occur in the first three months of their restraint. This may be accounted for by the shock and conflict of feelings consequent on sudden removal from friends, and to some extent also by the great state of debility in which many of the patients are found at the moment of their admission. The first hypothesis would perhaps explain the reason why the *idiots-crétins* do not suffer half so high a death-rate; their insensibility to emotional feelings would account for the change making little impression on them.

Idiots and Crétins.—Of the 84,214 *aliénés* enumerated in France in 1861, 42,689 were returned as *fous*, and 41,525 as *idiots-crétins*; but of these almost equal numbers there was a remarkable divergence in their disposition, for while of the lunatics 64 per cent. were subject to proper restraint and treatment, 91 per cent. of the idiots were at large, or, at any rate, dependent only upon the care of friends and relatives. The census of 1856 showed precisely similar results as to the location of both classes of *aliénés*, but the ratio of increase on the gross population of the two periods was 18 per cent. for the *fous* and 59 per cent. for the idiots in the five years. M. Béhic, however, attributes this large increase rather to errors in the prior enumeration than to any such actual increase of the malady itself as those results would imply. M. Béhic concludes that the male sex furnishes the largest proportion of idiots, and further states that his conclusion is borne out by the observations of nearly all other countries where the distinction between the two kinds of mental disorder is recorded. We believe that this is true of some countries—Denmark, for instance—but we apprehend that statistical science is hardly advanced enough in the majority of states to yield the necessary facts for verification. But so far as England is concerned a Poor-law return for January 1, 1865, rather upsets M. Béhic's doctrine, for of 10,021 idiot paupers 54

per cent. were females. The Lunacy Commissioners for both divisions of Great Britain make no classification of the insane in their reports, and the census Commissioners fail also in this particular. Nevertheless it is discreditable that so important a distinction should be thus ignored and it is to be hoped that the deficiency will be supplied at no distant date. Of the *idiots-crétins* in asylums the absolute increase was 32 per cent. in 1856-61, which is attributed to the admission in recent years of a great number of idiots who were before that time living with their friends. The hopeless nature of *idiocy* is shown by the fact that there were only four cases out of every 1000 inmates wherein the malady at the time of admission was held to be susceptible of amelioration; nevertheless, we find subsequently that 5 per cent. of the idiots discharged were *après guérison*, the proportion of cured amongst the *fous* being 53 per cent. The rate of mortality amongst idiots was 9·5 per cent., or 47 per cent. less than amongst the *fous*; in other words there die in the asylums, out of an equal population, 147 *fous* against 100 *idiots-crétins*. The mean age at death of *idiots-crétins* was 32½ years for males, and 34½ years for females; their chance of life is fifteen years short of that of the *fous*.

The mean term of their residence was 302 days; and as this is not much longer than that of the *fous*, taking into account the comparative incurability of the disease, it would seem that virtually the French system turns these unfortunates out when just as little fitted to be left to the tender mercies of the world as when they were admitted in the first instance.

Only 15 per cent. of the idiots were voluntarily placed in the asylums; the remaining 85 per cent. were *placements d'office*."

Dr. Madden-Medlicott has again tabulated from the official records, as in former reports, 1000 admissions, 500 of each, with the results, making a complete analysis of 3000 cases of insanity for this county which came under treatment in the County Asylum.

The readmissions or relapses in the thousand cases, amounting to 45 males and 57 females, are not included in the following table, but are separately noticed.

TABLE A.

Showing the Civil Condition, and number of children belonging to each sex, in 455 Males, and 443 Females.

Quinquennial Periods.	Civil Condition.												Number of Children belonging to each sex.					
	Single			Married.			Widowed.			Not Known.			Males.			Females.		
	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.
Under 20 years.	29	26	55	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
From 20 to 25 years.	47	44	91	2	8	10	0	6	0	0	0	0	1	0	1	3	8	11
" 25 " 30 "	38	28	66	8	18	26	0	2	2	0	0	0	2	4	6	22	15	37
" 30 " 35 "	19	25	44	27	22	49	1	3	4	1	0	1	22	19	41	30	36	66
" 35 " 40 "	18	23	41	29	19	48	2	4	6	0	0	0	52	45	97	34	39	73
" 40 " 45 "	15	25	40	36	19	55	2	12	14	0	0	0	55	47	102	44	29	73
" 45 " 50 "	12	10	22	26	25	51	1	10	11	0	0	0	34	35	69	50	42	92
" 50 " 55 "	10	7	17	25	15	40	2	7	9	0	0	0	40	42	82	29	32	61
" 55 " 60 "	5	8	13	22	16	38	1	7	8	0	0	0	25	39	64	27	17	44
" 60 " 65 "	6	5	11	14	17	31	5	8	13	0	0	0	20	24	44	36	45	81
" 65 " 70 "	1	5	6	11	3	14	7	3	10	0	0	0	40	20	60	6	9	25
" 70 " 75 "	2	4	6	10	0	10	6	4	10	0	0	0	27	23	50	0	0	0
" 75 " 80 "	1	2	3	4	1	5	4	3	7	0	0	0	18	11	29	4	3	7
" 80 and upwards	0	1	1	2	0	2	4	3	7	0	0	0	11	6	13	3	3	6
Total............	203	213	416	216	163	379	35	67	102	1	0	1	347	315	662	288	279	567

* In 63 males and 94 females the sex of the children was not specified.

TABLE B.

Number of attack at each quinquennial period, and state of bodily health on admission.

Quinquennial Periods.	Number of Attack.															State of Bodily Health.								
	1st.			2nd.			3rd. or more.			From Birth.			Unknown.			Good.			Indifferent.			Bad.		
	M.	F.	Totl.	M.	F.	Totl.	M.	F.	Totl.	M.	F.	Totl.	M.	F.	Totl.	M.	F.	Totl.	M.	F.	Totl.	M.	F.	Totl.
Under 20 years.	16	16	32	3	5	8	0	0	0	10	6	16	0	0	0	7	8	15	20	16	36	2	3	5
From 20 to 25 years.	28	30	58	6	13	19	1	2	3	10	5	15	4	2	6	18	11	29	26	28	54	5	13	18
" 25 " 30 "	26	36	62	8	7	15	3	1	4	4	3	7	5	1	6	22	7	29	17	31	48	7	10	17
" 30 " 35 "	30	38	68	14	6	20	1	3	4	1	1	2	2	2	4	9	12	21	19	21	40	20	17	37
" 35 " 40 "	34	29	63	7	10	17	4	3	7	2	2	4	2	2	4	13	13	26	19	24	43	17	9	26
" 40 " 45 "	27	38	65	14	8	22	6	4	10	4	4	8	2	2	4	18	10	28	24	35	59	11	11	22
" 45 " 50 "	26	30	56	5	8	13	5	6	11	1	1	2	2	0	2	9	7	16	15	29	44	15	9	24
" 50 " 55 "	20	17	37	10	7	17	7	4	11	0	0	0	0	1	1	7	2	9	16	22	38	14	5	19
" 55 " 60 "	17	13	30	6	9	15	5	8	13	0	0	0	0	1	1	3	3	6	13	17	30	12	11	23
" 60 " 65 "	10	17	27	5	4	9	7	7	14	2	0	2	1	2	3	3	2	5	14	15	29	8	13	21
" 65 " 70 "	15	6	21	2	3	5	2	1	3	0	0	0	0	1	1	4	1	5	7	8	15	8	2	10
" 70 " 75 "	14	4	18	2	1	3	2	3	5	0	0	0	0	0	0	4	0	4	7	6	13	7	2	9
" 75 " 80 "	5	4	9	2	1	3	2	1	3	0	0	0	0	0	0	0	0	0	5	2	7	4	4	8
" 80 and upwards	5	3	8	0	1	1	0	0	0	0	6	0	1	0	1	0	2	2	4	2	6	2	0	0
Total…………………	273	281	554	84	83	167	45	43	88	34	22	56	19	14	33	117	78	195	206	256	462	132	109	241

In comparing the preceding *Table A* with the corresponding ones, of the statistics of the first two thousand cases in the 13th and 14th annual reports, it is remarkable that the number of re-admissions have considerably diminished of late. In the previous tables the relapses were as nearly as possible equal in the sexes, only a difference of 1, and amounting almost to 13 per cent.; in the last thousand the re-admissions have amounted only to 9 per cent. in the males and 11 per cent. in the females. This is much below the average, which according to the French statistics has amounted to 23 per cent., and the two sexes differed little in their proportions.

Age.—In the males, the admissions gradually increased in number at each period up to 45, in the females up to 35, as was previously noticed, and agrees with the experience of Esquirol. The maximum of insanity is stated by M. Béhic to be between 30 and 40 years of age in both sexes, and the mean age on admission 2 years later in females than males, the reverse of our experience. Here, the maximum in both sexes, in the 3,000 cases, was between 40 and 45 years, there was, however, only a difference of 8 between this and the period from 30 to 35 years. With respect to the civil condition the married males exceeded the single by 4·3 per cent. but the single females exceeded the married by 10 per cent. The widowed were nearly 1 in 10, but the widows were nearly double in number the widowers.

The number of children was 3070, and the male children exceeded the females by 70. The average number of children for the married and widowed was above 2 for each person.

From *Table B* it appears that in 61·7 per cent. of the admissions it was a first attack of insanity, in 18·6 a second attack, in 9.8 a third or more attack; 6.2 per cent. were from birth or childhood, and in 3·7 the number of the attack was not known. The bodily health was indifferent in more than half, bad in more than one quarter, and good in less than a quarter only of those admitted.

Adding the whole of the cases in this and corresponding tables in previous reports, amounting to 2639, excluding re-admissions, the admissions for the first time were 68 per cent., which is 9 per cent. less than M. Béhic's statistics,—the admissions for more than the first time were 22.9 per cent.; those from birth were 2.7, and those of whom no information was recorded, to 6.4 per cent.

TABLE C.

Duration of existing attack in 455 males and 443 females, on admission.

	M.	F.	Total.	Pr cent
Under 1 month........	125	140	265	29·9
1 ,, ...	38	55	93	
2 ,, ...	54	47	101	27·1
3 ,, ...	34	15	49	
4 ,, ...	15	19	34	
5 ,, ...	5	8	13	10·5
6 ,, ...	32	17	49	
7 ,, ...	7	4	11	
8 ,, ...	6	9	15	
9 ,, ...	4	5	9	7·9
10 ,, ...	5	3	8	
12 ,, ...	16	12	28	
14 ,, ...	1	0	1	
15 ,, ...	2	0	2	
16 ,, ...	1	2	3	
18 ,, ...	12	11	23	
2 years........	17	18	35	
3 ,, ...	5	9	14	
4 ,, ...	4	2	6	
5 ,, ...	5	2	7	14·3
6 ,, ...	1	2	3	
7 ,, ...	1	4	5	
8 ,, ...	1	8	9	
18 ,, ...	1	4	5	
20 ,, ...	1	0	1	
Several	7	8	15	
From Birth	34	23	57	6·3
Unknown	21	16	37	4
Total	455	443	898	100

From *Table C* it will be observed that more females than males were ad-
mitted in the earliest stage of the attack. under 1 month. It also appears
that a larger number of male than female idiots were admitted, those in whom
the disorder existed from birth. In comparing this with the corresponding
tables in the 13th and 14th Reports, it is worthy of notice that a larger number
are now sent in the earlier stages of the disorder, the difference amounting to
8½ per cent in the first 3 months, and there is a difference of 14½ per cent in
the ratio of recoveries,—of the first 2000 cases 33·5 per cent and of the last
1000 cases 47·8 per cent recovered.

TABLE D.

Religion, and degree of Education, at each period.

Quinquennial Periods.	Church of England.			Dissenters.			Wesleyans.			Unknown.			Good.			Read and Write.			Read only.			None.			Unknown.		
	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot	M.	F.	Tot
Under 20 years.	13	19	32	7	6	13	1	0	1	8	2	10	4	0	4	9	12	21	3	9	12	12	5	17	1	1	2
From 20 to 25 years.	33	38	71	11	9	20	3	5	8	2	0	2	6	4	10	26	33	59	3	10	13	12	5	17	2	0	2
,, 25 30 ,,	31	36	67	10	9	19	4	3	7	1	0	1	5	2	7	26	26	52	7	10	17	6	10	16	2	0	2
,, 30 35 ,,	39	35	74	5	9	14	1	3	4	3	3	6	4	3	7	28	32	60	10	9	19	4	5	9	2	1	3
,, 35 40 ,,	35	30	65	10	8	18	1	7	8	3	1	4	5	2	7	1	22	43	5	15	20	16	7	23	2	0	2
,, 40 45 ,,	37	38	75	8	11	19	5	5	10	3	2	5	4	5	9	23	21	44	13	15	28	13	14	27	0	1	1
,, 45 50 ,,	30	34	64	5	7	12	2	3	5	2	1	3	3	3	6	22	19	41	1	18	19	13	5	18	0	0	0
,, 50 55 ,,	30	21	51	7	6	13	0	2	2	0	0	0	4	1	5	16	16	32	8	11	19	9	1	10	0	0	0
,, 55 60 ,,	21	24	45	4	5	9	2	1	3	1	1	2	2	1	3	16	13	29	5	9	14	4	6	10	1	2	3
,, 60 65 ,,	18	24	42	3	4	7	3	0	3	1	2	3	1	2	3	11	8	19	2	9	11	11	11	22	0	0	0
,, 65 70 ,,	15	8	23	0	3	3	2	0	2	2	0	2	0	1	1	10	3	13	1	5	6	8	2	10	0	0	0
,, 70 75 ,,	14	7	21	1	1	2	3	0	3	0	0	0	0	1	1	6	1	7	5	4	9	6	2	8	1	0	1
,, 75 80 ,,	6	4	10	2	0	2	1	2	3	0	0	0	1	0	1	5	1	6	2	2	4	1	2	3	0	1	1
80 and upwards.	6	4	10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	3	3	4	0	4	1	0	1
Total...........	328	322	650	73	78	151	28	31	59	26	12	38	39	25	64	220	208	428	65	129	194	119	75	194	12	6	18

The religion of nearly three fourths was the Established Church, and three fourths had received some degree of education, which corresponds with the previous reports.

TABLE E.

Occupations

Males.				Females	
Labourers ...	170	Shopmen	7	Householdwork ...	151
Bakers and Millers	11	Tailors	13	Servants	120
Blacksmiths	14	Weavers	6	Charwomen... ...	21
Butchers	10	Yeomen	28	Dressmakers... ...	11
Carpenters and Coopers	25	Other different trades	24	Plain Needlework ...	20
Coal-hauliers & Miners	19	No occupation ...	29	Factory Girls ...	2
Innkeepers & Brewers	7	Unknown	2	Glovers	17
Hawkers	8			Hawkers	6
Masons	22			Laundresses ...	17
Painters and Plumbers	8			Schoolmistresses ...	9
Pensioners	10			Shoebinders	6
Sailors	8			Shopkeepers	9
Schoolmasters ...	6			Weavers	10
Servants	12			No occupation ...	44
Shoemakers	16				
		Total ...	455	Total ...	443

The agricultural labourers have been as usual the most numerous class amongst males; those engaged in household work and as domestic servants amongst females.

TABLE F.

Number admitted from each Union.

	M	F	Tol		M	F	Tol
Axbridge	37	34	71	Brought forward ...	256	272	528
Bath	63	60	123	Taunton	38	33	71
Bedminster	27	21	48	Wellington	24	20	44
Bridgewater	13	31	44	Wells	29	31	60
Chard	22	27	49	Williton	23	20	43
Clutton	27	24	51	Wincanton	19	19	38
Dulverton	5	4	9	Yeovil	24	19	43
Frome	17	15	32	Sherborne	3	2	5
Keynsham	5	6	11	Bradford	1	0	1
Langport	20	21	41	Mere (Wilts) ...	1	0	1
Shepton Mallet ...	20	29	49	Cardiff	37	27	64
Total ...	256	272	528	Grand Total...	455	443	898

It will be seen that that the admissions from the Bath Union, as usual, have far exceeded those from any other although it is the only union in the county that provides specially for the care of chronic and incurable lunatics. The population of the Bath union is about one seventh that of the county and their admissions here still bear about the same proportion to that of all the other unions.

TABLE G.

Forms of insanity, and probable causes of the disorder.

Forms of Insanity.	M.	F.	Tot.	Probable Causes of the Disorder. Moral.	M.	F.	Tot.	Physical.	M.	F.	Tot.
Mania	131	163	294	Anxiety	7	4	11	Congenital	30	16	46
Do. Recurrent	28	45	73	Disappointment	4	7	11	Dis nervous centres	9	5	14
— Puerperal	0	19	19	Fright	3	12	15	Hereditary	56	74	130
Monomania	12	15	27	Grief	7	24	31	Injury to head	12	4	16
Melancholia	100	110	210	Jealousy	6	4	10	Ditto spine	0	1	1
Dementia	23	24	47	Loss of Employment	2	0	2	Intemperance	43	18	61
General Paralysis	54	9	63	Losses in trade	5	1	6	Pregnancy	0	5	5
Moral Insanity	1	0	1	Ill treatment	0	8	8	Previous illness	54	72	126
Idiocy	15	11	26	Over-study	6	3	9	Puerperal disease	0	11	11
Epilepsy	44	37	81	Poverty	3	5	8	Old age	4	3	7
Epilepsy & Idiocy	13	3	16	Religiousexcitement	10	24	34	Struck by lightning	0	1	1
Delirium Tremens	16	1	17	Remorse	0	2	2	Fall from a height	10	2	12
Fatuity	18	6	24	Superstition	0	1	1		218	212	430
								No cause assigned	184	136	320
Total	455	443	898	Total	53	95	148	Total	402	348	750

Forms of Insanity. As usual Mania was the most common form of insanity. Melancholia was next in frequency, then dementia, in both sexes. There were more cases of mania, melancholia, and of recurrent mania (in fact relapses) in the females than the males. There were as usual more cases of general paralysis, epilepsy, idiocy, delirium tremens and fatuity in males than females, which no doubt would account for the greater ratio of recoveries in females than in males, especially in county asylums, where cases are not excluded on account of being incurable.

Causes. It will also be observed from *Table G.* that the physical greatly outnumbered the moral causes in both sexes; hereditary pre-disposition and previous illness being as usual the most common and included in the physical causes. In 898 cases 148 were due to moral, and 340 to physical causes, and the moral causes were most numerous in women. In 320 the causes were not ascertained.

Dr. Prichard in his treatise on insanity, states, with respect to the productive causes of insanity, that congenital on hereditary predisposition must exist as the groundwork in all instances; this is reckoned a physical cause, and such it is in one sense, but is not to be taken into the amount in the comparative estimate which he has made from several authors of various countries. Both Pinel and Esquirol ascribe greater importance to moral causes. From the rare occurrence of insanity in rude nations, and its comparative frequency in those which are civilized, it has been argued that the most influential causes of the disease are circumstances connected with the improved state of human society. There may be something in the state of civilization which tends to promote the existence of that congenital state of bodily structure on which predisposition to mental diseases depends. M. Pinel's first inquiry to a patient who still preserved some remains of intelligence, was, have you undergone any vexation or disappointment? Seldom was the reply in the negative. According to M. Esquirol's tables in Saltpêtrière for 2 years, the moral causes were 323—hereditary predisposition 105—and physical causes 361. In his private establishment moral causes 167—hereditary predisposition 150—physical causes 120. Excess in the use of intoxicating fluids was also a frequent cause of mental derangement. Love, jealousy, excessive devotion, are principally causes of madness in females.

TABLE H.

The state of the Memory, and Affections at each period

Quinquennial Periods.	MEMORY																	
	Good			Bad			Indifferent			Feeble			Lost			Unknown		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Under 20 years	13	9	22	8	6	14	1	1	2	2	5	7	5	5	10	0	1	1
From 20 to 25 years	19	32	51	15	12	27	1	3	4	7	3	10	5	1	6	2	1	3
„ 25 30 „	21	28	49	12	10	22	3	2	5	7	6	13	3	2	5	0	0	0
„ 30 35 „	26	21	47	4	14	18	1	1	2	4	7	11	11	6	17	2	1	3
„ 35 40 „	13	27	40	19	7	26	2	4	6	7	7	14	6	1	7	2	0	2
„ 40 45 „	31	28	59	9	15	24	1	1	2	10	7	17	2	5	7	0	0	0
„ 45 50 „	15	34	49	10	4	14	2	0	2	6	4	10	6	2	8	0	1	1
„ 50 55 „	11	18	29	10	5	15	5	0	5	10	5	15	1	1	2	0	0	0
„ 55 60 „	14	13	27	6	7	13	1	1	2	5	9	14	1	1	2	1	0	1
„ 60 65 „	14	15	29	4	6	10	0	1	1	4	6	10	3	2	5	0	0	0
„ 65 70 „	10	4	14	4	4	8	0	0	0	2	1	3	2	2	4	1	0	1
„ 70 75 „	3	4	7	9	1	10	0	0	0	1	3	4	5	0	5	0	0	0
„ 75 80 „	1	2	3	5	2	7	0	0	0	0	1	1	3	1	4	0	0	0
„ 80 and upwards	0	2	2	2	1	3	1	0	1	1	0	1	2	1	3	0	0	0
Total	191	237	428	117	94	211	18	41	32	66	64	130	55	30	85	8	4	12

Quinquennial Periods.	AFFECTIONS														
	Natural			Estranged			Enfeebled			Lost			Unknown		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Under 20 years	8	9	17	12	13	25	1	0	1	6	4	10	2	1	3
From 20 to 25 years	11	12	23	23	31	54	1	1	2	4	0	4	7	8	15
„ 25 30 „	12	14	26	15	25	40	3	1	4	3	4	7	13	3	16
„ 30 35 „	11	12	23	24	27	51	0	0	0	6	5	11	7	5	12
„ 35 40 „	14	6	20	22	30	52	2	1	3	4	3	7	7	5	12
„ 40 45 „	21	14	35	17	28	45	2	1	3	5	6	11	7	5	12
„ 45 50 „	7	16	23	20	20	40	1	3	4	5	4	9	5	2	7
„ 50 55 „	7	9	16	20	15	35	0	2	2	2	1	3	8	1	9
„ 55 60 „	7	11	18	11	16	27	1	1	2	3	2	5	6	1	7
„ 60 65 „	9	13	22	10	12	22	1	0	1	2	1	3	3	3	6
„ 65 70 „	5	4	9	11	4	15	1	0	1	2	2	4	0	1	1
„ 70 75 „	2	2	4	10	1	11	1	1	2	4	2	6	1	2	3
„ 75 80 „	1	1	2	6	3	9	0	0	0	2	2	4	0	0	0
„ 80 and upwards	1	0	1	2	3	5	0	0	0	2	1	3	1	0	1
Total	116	123	239	203	228	431	14	11	25	50	37	87	67	37	104

In nearly one half the memory was good, it was bad in nearly one fourth, and feeble or entirely lost in one fourth. These results correspond nearly with those previously observed with respect to memory. In nearly one half the affections were estranged and one tenth lost, in more than one fourth, natural, in only 57 were the affections strong. It has been justly remarked that self love predominates among the insane

TABLE J.

Conduct at each period.

Quinquennial Periods.	Orderly. M.	Orderly. F.	Orderly. Tot.	Violent. M.	Violent. F.	Violent. Tot.	Dangerous. M.	Dangerous. F.	Dangerous. Tot.	Suicidal. M.	Suicidal. F.	Suicidal. Tot.	Noisy. M.	Noisy. F.	Noisy. Tot.	Mischievous. M.	Mischievous. F.	Mischievous. Tot.	Dirty. M.	Dirty. F.	Dirty. Tot.
Under 20 years.	1	3	4	15	13	28	3	2	5	2	7	9	1	2	3	4	0	4	3	0	3
From 20 to 25 years.	4	2	6	21	24	45	11	5	16	4	11	15	2	8	10	4	0	4	3	2	5
„ 25 „ 30 „	8	4	12	19	22	41	7	2	9	4	8	12	4	9	13	3	1	4	1	2	3
„ 30 „ 35 „	6	1	7	20	20	40	9	9	18	8	10	18	4	10	14	0	0	0	1	0	1
„ 35 „ 40 „	4	3	7	18	20	38	8	7	15	10	9	19	6	6	12	1	1	2	2	0	2
„ 40 „ 45 „	8	3	11	26	17	43	3	11	14	14	14	28	1	8	9	0	1	1	1	2	3
„ 45 „ 50 „	4	4	8	14	15	29	5	2	7	11	14	25	4	8	12	1	0	1	0	2	2
„ 50 „ 55 „	1	1	2	23	8	31	4	0	4	8	15	23	1	5	6	0	0	0	0	0	0
„ 55 „ 60 „	5	3	8	10	9	19	1	1	2	8	10	18	1	8	9	0	0	0	3	0	3
„ 60 „ 65 „	3	2	5	8	7	15	1	3	4	11	9	20	1	7	8	1	0	1	0	2	2
„ 65 „ 70 „	3	1	4	3	2	5	5	3	8	5	2	7	2	3	5	1	0	1	0	0	0
„ 70 „ 75 „	4	1	5	7	1	8	2	0	2	4	2	6	0	1	1	1	2	3	0	1	1
„ 75 „ 80 „	3	0	3	2	2	4	2	0	2	0	2	2	2	2	4	0	0	0	0	0	0
80 and upwards.	5	1	6	1	1	2	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0
Total......	59	29	88	187	161	348	61	45	106	89	113	202	29	78	107	16	6	22	14	11	25

Not one-tenth it appears were orderly in their conduct, the violent were about four to one of the orderly, and the dangerous, suicidal, noisy and mischievous amounted to nearly one half of the whole number, the dirty were only 1 in 36. These results differ materially from those observed in the first two thousand cases, the conduct was orderly in about one fourth and the violent only exceeded the orderly by one fourth, the dangerous, suicidal, noisy and mischievous did not amount to quite 44 per cent.

TABLE K.

Showing the Conversation, and Expression, at each period.

CONVERSATION

Age in Quinquennial Periods.	Rational. M.	Rational. F.	Rational. To	Incoherent. M.	Incoherent. F.	Incoherent. To	Personal. M	Personal. F.	Personal. To	Indecent or Abusive. M.	Indecent or Abusive. F.	Indecent or Abusive. To	Silent or Dumb. M.	Silent or Dumb. F.	Silent or Dumb. To	Religious. M.	Religious. F.	Religious. To
Under 20	3	5	8	14	15	29	0	1	1	1	0	1	10	4	14	1	2	3
.. 25	6	7	13	31	29	60	1	5	6	5	4	9	5	1	6	1	6	7
.. 30	4	4	8	30	28	58	5	5	10	1	2	3	2	5	7	4	4	8
.. 35	7	8	15	27	28	55	2	4	6	1	1	2	4	1	5	7	8	15
.. 40	7	3	10	23	27	50	5	3	8	4	4	8	4	1	5	6	8	14
.. 45	8	6	14	30	32	62	5	5	10	1	4	5	4	1	5	5	8	13
.. 50	5	8	13	20	22	42	4	4	8	0	1	1	5	1	6	5	9	14
.. 55	1	1	2	19	16	35	6	3	9	1	0	1	5	1	6	5	8	13
.. 60	7	1	8	14	15	29	3	4	7	1	0	1	2	3	5	1	8	9
.. 65	3	2	5	10	22	32	3	1	4	1	0	1	2	1	3	6	4	10
.. 70	3	1	4	11	8	19	1	0	1	1	1	2	0	0	0	3	1	4
.. 75	1	1	2	11	3	14	3	2	5	0	0	0	1	0	1	2	2	4
.. 80	0	2	2	6	4	10	3	0	3	0	0	0	0	0	0	0	0	0
Above 80	2	1	3	4	2	6	0	0	0	0	1	1	0	0	0	0	0	0
Total ...	57	50	107	250	251	501	41	37	78	17	18	35	44	19	63	46	68	114

EXPRESSION

Age in Quinquennial Periods.	Natural. M	Natural. F.	Natural. To	Melancholy. M.	Melancholy. F.	Melancholy. To	Sullen. M	Sullen. F	Sullen. To	Sly. M.	Sly. F.	Sly. To	Vacant. M.	Vacant. F.	Vacant. To	Wild. M.	Wild. F.	Wild. To
Under 20	6	4	10	3	11	14	1	0	1	4	0	4	12	10	22	3	2	5
.. 25	9	7	16	6	23	29	4	2	6	4	0	4	14	6	20	12	14	26
.. 30	4	9	13	12	18	30	2	2	4	4	0	4	12	5	17	12	14	26
.. 35	5	6	11	8	20	28	4	4	8	4	4	8	11	4	15	16	12	28
.. 40	4	4	8	7	18	25	7	2	9	7	1	8	14	3	17	10	18	28
.. 45	10	6	16	17	21	38	1	3	4	6	3	9	6	7	13	13	11	29
.. 50	7	3	10	15	20	35	1	2	3	1	4	5	9	4	13	6	12	18
.. 55	3	2	5	15	14	29	5	2	7	2	2	4	4	1	5	8	8	16
.. 60	3	4	7	11	11	22	0	4	4	5	1	6	3	3	6	6	8	14
.. 65	4	4	8	12	10	22	0	6	6	4	3	7	4	1	5	1	6	7
.. 70	3	3	6	4	4	8	0	1	1	3	0	3	7	2	9	2	1	3
.. 75	2	1	3	4	3	7	0	1	1	0	1	1	7	1	8	5	1	6
.. 80	2	1	3	3	2	5	1	1	2	0	1	1	3	1	4	0	0	0
Above 80	2	2	4	1	1	2	0	0	0	1	0	1	1	0	1	1	1	2
Total ...	64	56	120	118	176	294	26	30	56	45	20	65	107	48	155	95	113	208

In these cases the conversation was rational in 12 per cent, in the former 2000 cases in previous reports in 17½ per cent; irrational in 71, and in the former cases in 70 per cent. Silent or dumb in 7, and in the former cases in 9½ per cent. The expression of the countenance often indicates the character of the insanity. It was natural in 63·3, in the previous cases in 16·2 per cent; melancholy in 32·7, in the previous cases in 23·4 per cent; sullen in 6·2, in the previous cases in 5·7 per cent; sly in 7·3 per cent in both tables; vacant in 17·2, in previous cases in nearly 17 per cent; wild in 23·2, in previous cases in 27·5 per cent.

TABLE L.

Results at each period.

Quinquennial Periods.	Recovered.			Relieved.			Not Improved.			Dead.			Remaining.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Under 20 years.	16	18	34	1	3	4	3	1	4	5	1	6	7	11	18
From 20 to 25 years.	22	44	66	3	3	6	2	0	2	4	2	6	20	14	34
„ 25 „ 30 „	22	27	49	5	3	8	5	2	7	4	6	10	16	16	32
„ 30 „ 35 „	22	26	48	3	5	8	1	0	1	15	6	21	9	17	26
„ 35 „ 40 „	26	24	50	3	1	4	3	0	3	16	3	19	4	23	27
„ 40 „ 45 „	33	31	64	3	3	6	2	1	3	13	8	21	10	20	30
„ 45 „ 50 „	14	24	38	2	1	3	3	1	4	16	12	28	7	11	18
„ 50 „ 55 „	26	18	44	1	3	4	0	1	1	10	6	16	10	5	15
„ 55 „ 60 „	14	19	33	1	1	2	0	0	0	10	3	13	6	12	18
„ 60 „ 65 „	11	15	26	2	0	2	0	0	0	6	10	16	7	8	15
„ 65 „ 70 „	7	6	13	4	1	5	1	0	1	6	4	10	4	1	5
„ 70 „ 75 „	4	2	6	0	1	1	0	0	0	12	3	15	2	2	4
„ 75 „ 80 „	0	4	4	1	0	1	1	0	1	7	3	10	1	0	1
80 and upwards.	0	2	2	0	0	0	1	0	1	5	1	6	0	1	1
Total......	217	260	477	29	25	54	22	6	28	129	68	197	103	141	244

In the 1000 cases, 500 of each sex, in Table L. it appears, that the ratio of recoveries has been in the males 42·7, and in the females 52 per cent. being 9¼ per cent. greater than in the males. In the first 2000 cases, it appears in the 14th. Report page 24 that there was a difference of nearly 3 per cent. in favor of the females, the recoveries in the males amounting to 35·7 and in the females to 38·8 per cent. The recoveries have therefore been 7 per cent. in the males and nearly 13¼ per cent. females more, in the last 1000 than in the first 2000 admissions. This difference is perhaps to be accounted for, by the large number of chronic and incurable cases, brought from the different licensed houses, on the opening of this asylum. The average of recoveries in the whole number in the first 2000 cases was 37, and in the last 1000 cases 47 per cent. This difference of ten per cent. may be attributed to earlier admissions, there being now much less reluctance than formerly in bringing patients to the asylum. The greatest number of recoveries occurred in males at the age of 40 to 45, and in females from 20 to 25; this differs from the previous cases in some degree. The number relieved was 5·8 in the males and 5 per cent in the females; not improved 4·4 males and 1·2 in the females. These numbers are less than in the 2000 cases. The deaths were much greater than usual amongst the males, amounting to 25·9, whilst amongst females the deaths were 13·6 per cent. which gives a mean rate of mortality for both sexes in the 1000 cases of 19·7 per cent. The rate of mortality varied, in France M. Bèhic's lowest rate in the five years 1860—60 was 13·5 per cent. the highest 17 per cent. The numbers remaining in the asylum of the 1000 cases were 20·7 per cent. males and 28·2 per cent. females. The recoveries in the 1000 cases, in Table L. greatly exceeds those in the 2000 given in the 14th Report, pages 24 and 25.

The state of the pulse, tongue, and skin on admission in 500 males and 500 females.

MALES.

State of the pulse. In 1 case it reached to 145 pulsations in a minute; in 1 to 140; in 11 from 120 to 130; in 6 from 110 to 120; and in 21 from 100 to 110; thus the state of

the pulse was very frequent from 100 to 145 pulsations in a minute. The pulse varied in 75 cases from 90 to 100; in 135 from 80 to 90; in 150 from 70 to 80; in 31 from 60 to 70; in 3 from 50 to 60; in 1 case the pulsation was as low as 48 per minute, and in the remaining 65 cases 20 were recorded as feeble, and 45 not specified at all.

The tongue was clean in 210 cases; white in 165; red in 23; brown in 5; furred in 57; flaccid in 10; not recorded in 30.

The condition of the skin was cool in 170; cold in 45; warm in 155; hot in 50, clammy in 52; dry in 3; not recorded in 25.

FEMALES.

State of the pulse. In 1 case it reached to 136 pulsations in a minute; in 10 from 120 to 130; in 3 from 110 to 120; in 43 from 100 to 110; in 57 from 90 to 100; in 137 from 80 to 90; in 120 from 70 to 80; in 24 from 60 to 70; and in the remaining 105 cases, 56 were recorded as feeble, and 49 not specified at all.

The tongue was clean in 189 cases; white in 180; red in 34; brown in 5; furred in 61; flaccid in 4; not recorded in 27.

The condition of the skin was cool in 153; cold in 26; warm in 168; hot in 69: clammy in 45; dry in 3; not recorded in 36.

The numbers admitted from their own homes, were 307 males, 292 females; from workhouses, 89 males, 94 females; from hospitals and infirmaries 7 males and 13 females; from prisons and other asylums 52 males and 44 females.

RELAPSES.

The readmissions in the 500 cases were 102, of these 45 were males and 57 females, 31 males and 37 females were readmitted once, 10 males and 7 females twice, making 20 and 14, respectively and in all 102 readmissions; of the 31 males admitted once, 7 were cases of mania, 9 of melancholia, 2 of dementia, 2 of monomonia, 5 of general paralysis, 3 of epilepsy and 3 of delirium tremens. The assigned causes of the disorder in these cases were, intemperance in 8, anxiety in 3, cerebral disease in 2, over study in 2, previous illness in 4, fright in 1, religious excitement in 1, pecuniary losses in 1, injury to the head in 1, and hereditary predisposition in 8. Of the 37 females readmitted once, 19 were

TABLES showing the age an

R. for

MALES.

EPILEPTIC MALES.	Age	January 1 to 31.		Feb. 1 to 28		March 1 to 31.		April 1 to 30.		May 1 to 31.		June 1 to 30.		July 1 to 31.		August 1 to 31.		Sept. 1 to 30.		Oct. 1 to 31.		Nov. 1 to 30.		Decr. 1 to 31.		WHOLE YEAR.		GRAND TOTAL
INITIALS.		D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	
	18	22	5	13	24	9	3	...	...	R:		...	...	...	...	...	...	...	...	...	...	...	...	...	...	44	32	78
A. J.	45	6	11	12	...	9	6	13	1	5	...	1	2	2	...	2	2	8	2	11	2	3	1	5	...	77	27	104
Ac. Ja.	51	22	...	11	...	12	...	8	1	...	8	6	3	3	3	11	2	29	35	...	10	5	10	...	14	107	86	193
Ba. J.	37	3	...	...	...	...	...	2	2	...	...	...	...	2	1	3	1	3	3	...	...	...	...	3	1	15	7	22
Ber. S.	68	22	4	20	9	19	2	33	18	27	12	34	15	12	12	31	7	37	10	25	2	34	9	38	7	332	107	439
Bo. Ab.	31	20	...	19	...	23	...	9	1	6	5	5	1	8	4	11	1	7	...	5	...	5	3	7	...	125	15	140
Br. W.	25	...	...	2	1	1	...	1	2	2	3	3	1	2	...	2	...	2	2	...	...	...	...	...	2	15	11	26
Bu. W.	27	16	1	13	10	17	2	27	7	10	4	25	14	17	20	13	14	18	9	20	25	20	15	17	8	212	129	341
Bur. S.	38	15	...	19	21	19	1	10	1	10	...	12	1	9	2	3	4	13	6	7	10	12	12	7	2	141	60	201
Bur. J.	52	...	...	...	...	7	3	1	8	2	7	3	2	...	3	...	...	4	3	D.		...	...	...	...	17	26	43
Br. Ben.	63	...	...	...	...	4	9	...	...	4	6	3	2	7	3	3	4	3	4	1	2	2	2	2	...	29	32	61
C. S.	30	10	5	21	...	6	...	9	5	14	14	1	3	20	6	4	...	10	...	3	1	8	...	23	9	128	43	171
Ca. Jos.	21	...	13	3	13	...	8	7	22	7	19	9	11	6	19	3	26	6	19	3	18	1	1	3	17	47	191	238
Co. T.	36	1	...	2	5	2	2	...	2	6	...	5	...	4	1	1	1	2	...	5	1	10	...	6	2	43	14	57
D: G.	44	27	10	19	8	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46	18	64
Da. H.	53	20	9	17	2	35	6	13	3	13	11	25	8	25	6	17	14	24	6	34	9	33	10	27	3	283	87	370
De. J.	22	...	...	6	7	4	1	8	...	3	9	12	2	5	21	7	3	1	1	1	2	...	2	...	...	52	28	80
D. R.	38	...	...	5	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	6	12
De. R.	43	...	...	...	3	12	10	...	...	1	...	5	2	3	...	...	R.	...	...	...	...	...	...	...	...	21	15	36
E. W.	23	...	...	1	1	1	4	...	2	...	5	3	1	1	...	2	6	...	...	6	...	...	2	3	4	17	25	42
E. F.	41	...	...	2	...	...	...	2	...	...	...	6	...	2	4	2	...	5	...	5	...	5	2	6	...	35	6	41
F. J.	32	6	2	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	2	8
G. H.	26	58	3	67	...	45	...	24	3	11	...	20	3	15	4	46	12	31	18	18	9	16	23	41	9	392	84	476
G. A.	29	...	...	5	...	9	5	...	...	7	...	7	1	5	1	4	2	13	6	...	...	4	1	...	...	54	16	70
H. W.	40	2	...	2	2	4	...	8	1	5	2	6	...	22	2	7	5	12	...	9	...	17	...	4	...	98	12	110
H. J.	28	20	...	6	3	5	...	3	...	1	...	4	...	9	4	3	1	2	...	...	...	...	1	2	...	55	9	64
H. C.	26	...	5	2	...	1	2	5	5	...	5	5	6	...	...	11	3	10	8	8	8	3	6	6	10	51	58	109
Ho. H.	38	20	8	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	8	28
Ha. G.	50	16	...	21	7	4	2	14	...	15	2	15	...	8	...	12	...	21	...	23	2	5	1	10	6	167	19	186
J. W.		...	...	3	4	3	1	...	2	1	...	5	1	5	...	2	3	4	2	4	2	3	2	2	1	33	18	51
		41	...															8	5	15	16	27	12	11	3	149	72	221
Total	....	175	175	491	157	619	200	412	168	489	193	407	232	471	189	627	202	502	202	582	236	536	185	628	222	6329	2367	8696
Average	...	13·2	4·8	14·4	4·6	18·2	6	12·4	5·2	14·7	5·9	14·5	7	14	6	19	6·1	15·2	6·3	15·3	6·2	14·1	4·9	15·7	5·5	147	55	202

cases of mania, 4 of puerperal mania, 5 of melancholia, 2 of monomania, 1 of dementia, 1 congenital imbecility, 1 general paralysis, and 4 of epilepsy. The assigned causes were, intemperance in 2, grief in 2, disappointment in 1, religious excitement in 3, over study in 2, injury to head in 1, fright 1, pecuniary losses 1, pregnancy 3, previous illness 6, hereditary predisposition 8, no cause assigned 7.

Of the 7 males and 10 females admitted twice, 4 males and 7 females suffered from mania, 2 males and 3 females from melancholia, 1 male from epilepsy—of these 2 of the male cases were assigned to intemperance, 1 male and 4 females to hereditary predisposition, 3 females to grief and disappointed affection, 1 female to religious excitement, and in 4 males and 2 females no cause was assigned.

EPILEPSY.

There have been as many as 88 epileptics during the year, 45 males and 43 females. Of these 6 males and 3 females have died, 1 male has been discharged relieved, and 1 male and 2 females were discharged on probation but have all three been brought back. There are now 39 males and 40 females remaining. One of the males has not as may be seen from the Table, D. R. aged 38, had any fits for nine months, so that his name may be omitted in the list for 1867; he is still in the house being imbecile and should he have a return it can be noted in next report. The greatest number of fits during the year was 993 in one female idiot, M. E. aged 33 and 851 in a male idiot R. R. aged 23. The total number of fits in males was 6784, and in females 8696, being an average of 150 in each of the males, and 202 in the females. This is considerably above the average of last year. In the case of the girl mentioned in last report to whom bromide of potass was given, there was a cessation of fits and it was left off for some weeks; the fits returned but again ceased after resuming the use of this drug.

TREATMENT BY HYPODERMIC INJECTION.

One female maniac C. L. aged 35, single, most obscene in her conduct and language, noisy, destructive, and dirty

TABLES showing the age and the number of fits by day and by night in each epileptic patient for the year 1866.

R. for those discharged relieved ; D. for those who died ; T. for those transferred.

MALES.

EPILEPTIC MALES. INITIALS.	Age	January 1 to 31.		Feb. 1 to 28		March 1 to 31.		April 1 to 30.		May 1 to 31.		June 1 to 30.		July 1 to 31.		August 1 to 31.		Sept. 1 to 30.		Oct. 1 to 31.		Nov. 1 to 30.		Decr. 1 to 31.		WHOLE YEAR.		GRAND TOTAL
		D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	
	18	22	5	13	24	9	3	...	...	R.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	44	32	76
A. J. ...	45	6	11	12	...	9	6	13	1	5	...	1	2	2	...	2	2	8	2	11	2	3	1	5	...	77	27	104
Ao. Ja. ...	51	22	...	11	...	12	...	8	1	...	8	6	3	3	3	11	2	29	35	...	10	5	10	...	14	107	86	193
Ba. J. ...	37	3	...	...	...	...	...	2	2	...	...	...	...	2	1	2	1	3	3	...	...	...	...	3	1	15	7	22
Ber. S. ...	66	22	4	20	9	19	2	33	18	27	12	34	15	12	12	31	7	37	10	25	2	34	9	38	7	332	107	439
Bo. Ab. ...	31	20	...	19	...	23	...	9	1	6	5	5	1	8	4	11	1	7	...	5	...	5	3	7	...	125	15	140
Br. W. ...	25	...	...	2	1	1	...	1	3	2	3	3	1	2	...	2	...	2	2	...	...	...	...	...	2	15	11	26
Bu. W. ...	27	16	1	13	10	17	2	27	7	10	4	25	14	17	20	13	14	18	9	29	25	20	15	17	8	212	129	341
Bur. S. ...	38	15	...	19	21	19	1	10	1	10	...	12	1	9	2	8	4	13	6	7	10	12	12	7	2	141	60	201
Bur. J. ...	52	...	...	...	...	7	3	1	8	2	7	3	2	...	3	...	...	4	3	D.		...	...	...	...	17	26	43
Br Ben. ...	63	...	...	...	...	4	9	...	...	4	6	3	2	7	3	3	4	3	4	1	2	2	2	2	...	29	32	61
C. S. ...	30	10	5	21	...	6	...	9	5	14	11	1	3	20	6	4	...	10	...	3	1	8	...	22	9	128	43	171
Ca. Jos. ...	21	...	13	3	15	...	8	7	22	7	19	9	11	6	19	3	23	5	19	3	18	1	1	3	17	47	191	238
Co. T. ...	38	1	...	2	5	2	2	...	2	6	...	5	...	4	1	1	1	2	...	5	1	10	...	5	2	43	14	57
D: G. ...	44	27	10	19	8	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46	18	64
Da. H. ...	53	20	9	17	7	35	6	13	3	13	11	25	8	25	6	17	14	24	6	34	9	33	10	27	3	283	87	370
De. J. ...	22	...	...	6	7	4	1	8	...	3	9	12	2	5	1	7	3	1	1	1	2	...	2	...	...	52	28	80
D. R. ...	38	...	...	5	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	6	12
De. R. ...	48	...	...	...	3	12	10	...	...	1	...	5	2	3	...	...	R.	...	...	...	...	...	...	...	...	21	15	36
E. W. ...	23	...	...	1	1	1	4	...	2	...	5	3	1	1	...	2	6	...	...	6	...	...	2	3	4	17	25	42
E. F. ...	43	...	...	2	...	...	...	2	...	...	...	6	...	2	4	2	...	5	...	5	...	5	2	6	...	35	6	41
F. J. ...	32	6	2	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	2	8
G. H. ...	26	56	3	67	...	45	...	24	3	11	...	20	3	15	4	46	12	34	18	18	9	16	23	41	9	392	84	476
G. A. ...	29	...	...	5	...	9	5	...	...	7	...	7	1	5	1	4	2	13	6	...	...	4	1	...	...	54	16	70
H. W. ...	40	2	...	2	2	4	...	8	1	5	2	6	...	23	2	7	5	12	...	9	...	17	...	4	...	98	12	110
H. J. ...	28	20	...	6	3	5	...	3	...	1	...	4	...	9	4	3	1	2	...	...	...	...	1	2	...	55	9	64
H. C. ...	26	...	5	2	...	1	2	5	5	...	5	5	6	...	...	11	3	10	8	8	8	3	6	6	10	51	58	109
Hs. H. ...	38	20	8	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	8	28
Hu. G. ...	50	16	...	21	7	4	2	14	...	15	2	15	...	8	...	12	...	21	...	23	2	5	1	10	5	167	19	186
J. W. ...		41	...	3	4	3	1	...	2	1	...	5	1	5	...	2	3	4	2	4	2	3	2	2	1	33	14	61
K. G. ...	27	17	4	16	9	12	...	7	1	8	3	14	7	7	5	7	7	8	5	15	16	27	12	11	3	149	72	221
L. C. ...	70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	3	...	4	2	2	6	2	8	...	20	11	31
M. J. ...	65	4	3	8	2	19	1	19	8	8	11	15	13	20	8	22	6	6	8	18	5	20	8	6	2	165	75	240
M. B. ...	18	1	...	4	3	3	1	4	1	4	1	2	...	1	3	...	3	3	3	...	...	...	...	...	...	22	15	37
N. R. ...	37	3	1	14	4	2	4	8	1	4	...	4	5	8	1	11	...	4	...	6	1	2	...	4	1	70	18	88
P. J. ...	44	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	2	...	2	1	6	1	7
P. C. ...	26	...	...	4	6	11	11	11	3	8	6	3	3	13	11	20	24	20	44	5	15	2	5	3	...	100	128	228
P. R. ...	23	40	6	46	8	40	2	34	8	41	14	45	16	23	45	33	76	58	52	46	50	49	55	36	35	489	362	851
Pi. R. ...	25	5	3	15	9	6	5	14	3	8	4	28	16	4	20	8	15	15	22	14	32	20	53	4	30	139	217	356
S. A. ...	57	17	8	...	...	17	...	1	1	...	...	1	...	2	13	10	1	3	6	...	...	10	...	1	...	62	29	91
S. J. ...	24	10	...	13	11	9	...	3	2	2	...	6	...	4	5	9	...	7	...	6	...	8	...	8	4	85	22	107
S. S. ...	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	3	...	4	...	2	...	13	...	13
S. H. ...	18	7	11	11	10	15	9	13	11	11	3	41	8	18	7	13	3	10	...	14	9	18	9	22	9	193	89	282
T. T. ...	55	6	...	2	6	5	11	12	19	3	16	3	6	3	5	1	...	2	...	7	1	4	...	...	...	48	64	112
W. G. ...	29	6	...	3	5	3	12	6	8	3	13	2	18	4	15	3	7	4	16	8	16	6	12	10	7	58	129	187
W. J. ...	28	57	17	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57	17	74
W. W. ...																												
Total ...	....	478	129	438	204	394	121	329	152	253	183	393	171	300	214	345	255	414	294	332	259	354	250	327	186	4344	2440	6784
Average ...	....	11.1	3.0	10.6	5.1	9.9	3	8.4	4	6.5	4.6	9.7	4.4	7.7	6	8.8	6.5	10.3	[illegible]	8.3	6.4	9.3	6.3	8.1	4.6	93	54	153

FEMALES.

EPILEPTIC FEMALES. INITIALS.	Age	January 1 to 31		Feb. 1 to 28		March 1 to 31.		April 1 to 30.		May 1 to 31.		June 1 to 30.		July 1 to 31.		August 1 to 31.		Sept. 1 to 30.		Oct. 1 to 31.		Nov. 1 to 30.		Dec. 1 to 31.		WHOLE YEAR.		GRAND TOTAL.
		D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	D.	N.	
B. C. ...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	...	15	0	15
B. M. ...	28	17	3	8	4	6	3	7	4	5	6	8	4	12	2	13	1	12	2	10	2	5	2	8	9	111	42	153
Be. E. ...	65	25	1	7	1	...	4	1	3	...	1	3	3	...	4	3	2	8	3	8	3	23	2	22	6	100	33	133
Bo. C. ...	39	3	5	...	2	...	3	...	1	...	...	...	...	...	3	...	2	...	3	...	5	...	3	...	4	3	31	34
Bo. E. ...	39	9	5	18	2	21	6	21	5	15	9	16	9	12	8	31	6	27	11	21	5	16	11	18	4	225	81	306
Bu. L. ...	34	58	9	62	6	79	4	48	6	32	4	23	16	31	6	30	10	41	10	34	9	23	5	15	16	485	101	586
Bw. J. ...	29	8	3	6	4	10	3	6	3	13	10	13	8	10	11	9	6	8	5	8	9	7	9	6	4	104	75	179
B. A. ...	20	27	8	6	4	15	2	11	2	2	7	5	6	9	7	25	3	23	6	18	5	8	7	29	...	178	57	235
C. E. ...	50	2	1	16	5	6	2	3	1	2	...	3	...	Rem.		...	...	...	...	...	...	A	...	3	2	35	11	46
C. EwensA.	67	10	1	21	3	8	2	13	2	1	...	5	1	19	1	31	3	25	...	34	1	21	1	38	5	226	20	246
C. M. A. ...	37	9	2	8	1	8	3	2	8	7	3	7	5	6	2	2	3	7	5	9	1	6	3	7	1	78	37	115
C. H. ...	50	2	6	...	5	...	7	2	8	...	10	...	15	8	12	28	11	8	14	5	10	...	10	5	13	58	121	179
Co. S. ...	37	7	8	14	4	30	5	18	4	21	3	17	6	13	3	22	10	15	7	17	6	15	3	11	5	192	64	256
Cou. S. ...	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	10	...	...	...	12	2	14
D. E. ...	30	...	2	...	6	...	5	...	5	...	8	...	4	...	2	...	1	...	1	2	6	...	4	...	3	2	47	49
D. J. ...	35	18	17	8	18	8	18	4	17	11	18	19	23	20	16	20	15	17	19	15	20	11	20	20	16	171	217	388
D. H. ...	29	...	...	R.		...	...	A.		...	2	...	3	5	3	16	3	...	...	12	3	15	2	10	2	58	18	76
E. E. ...	24	21	5	15	4	31	6	23	4	34	8	22	5	24	5	15	5	34	9	22	4	16	4	19	7	276	66	342
F. S. ...																												
F. A. ...	37	20	6	23	14	10	13	7	2	1	6	9	11	7	6	32	10	18	13	D.		...	...	...	...	127	81	208
G. E. ...	29	...	...	...	...	...	...	...	...	6	8	...	...	...	...	...	...	...	...	16	5	5	3	36	8	57	16	73
G. M. ...	27	3	3	19	5	20	7	14	8	6	4	13	4	13	3	33	8	27	7	27	9	18	5	30	4	223	71	294
H. E. ...	29	...	3	1	1	5	5	7	6	...	...	5	6	8	8	...	...	9	5	2	3	5	1	14	5	62	47	109
H. S. ...	64	10	3	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	3	13
H. A. ...	21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	16	1	28	1	44	5	49
J. D. ...	41	6	10	9	4	...	2	D.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	16	31
K. J. ...	43	5	2	13	3	7	2	...	...	11	4	2	5	1	2	12	4	5	2	3	4	3	4	3	3	54	31	85
L. A. ...	37	3	5	...	8	3	16	10	6	10	...	9	15	14	6	16	13	14	10	13	9	18	8	9	10	120	110	230
L. E. ...	33	3	1	3	2	20	3	3	6	22	16	19	5	25	7	18	10	14	1	16	5	50	6	5	3	186	49	235
L. M. ...	23	28	1	27	11	24	10	22	12	...	...	18	12	17	14	27	14	21	16	18	12	21	12	28	9	281	139	420
M. E. ...	31	2	5	...	2	2	3	2	3	97	9	10	2	...	1	I	—	...	...	2	2	4	2	2	2	25	22	45
M. E. ...	33	63	19	75	9	100	25	68	13	19	7	100	6	82	8	60	5	61	12	47	9	50	4	47	11	863	130	993
M. E. ...	17	6	4	...	4	1	2	3	6	10	6	8	10	7	3	11	10	10	3	24	9	1	1	6	3	87	62	149
P. E ...	43	3	4	...	4	9	5	7	3	27	10	11	4	8	4	12	4	8	2	13	4	8	2	14	3	103	45	148
S. E. ...	25	26	13	21	4	37	8	29	6	6	2	28	7	27	10	37	9	30	9	30	14	31	8	33	9	355	107	462
S. A. ...	28	7	4	13	12	13	8	5	6	21	5	4	18	7	3	7	7	9	7	15	5	10	4	3	7	99	83	182
Se. J. ...	21	8	1	10	...	11	3	13	1	...	...	15	2	—	...	58	5	12	2	20	10	16	1	17	1	222	39	261
T. S. ...	58	...	...	...	...	...	...	...	...	31	18	31	3	21	8	...	...	...	—	10	6	14	4	27	9	51	19	70
T. C. ...	23	4	2	25	2	38	3	30	3	18	...	...	...	28	3	31	5	28	2	31	2	23	1	18	...	323	44	367
T. L. ...	10	2	3	...	...	...	3	...	3	...	...	...	7	..	9	...	6	...	7	15	4	...	2	1	2	36	46	82
T. A. ...	40	...	...	...	...	...	...	...	...	...	...	—	...	—	..	...	...	...	...	7	11	6	14	8	9	21	34	55
W. E. ...	38	11	..	5	...	8	1	...	...	...	...	4	1	9	3	14	3	5	3	10	5	3	2	8	2	77	20	97
W. A. ...	43	...	...	...	...	...	...	...	...	...	...	...	—	...	...	...	...	...	...	3	5	9	8	34	11	46	24	69
Y. K. ...	32	51	10	58	3	89	14	34	11	70	9	55	6	28	6	13	8	13	6	27	9	44	6	33	13	513	101	614
Total ...	....	175	175	491	157	619	206	412	168	489	193	497	232	471	189	627	202	502	202	582	236	536	185	628	222	6329	2367	8696
Average ...		13.2	4.8	14.4	4.6	18.2	6	12.4	5.2	14.7	5.9	14.6	7	14	6	19	6.1	15.2	6.3	15.3	6.2	14.1	4.9	15.7	5.5	147	55	202

in her habits, got well rapidly after the employment of the hypodermic injection of a solution containing half a grain of acetate of morphia. Several others were quieted by similar means, procuring them sleep after the failure of narcotics given in the usual way. The shower bath still continues to be used with benefit in several cases.

The bitartrate of potass in half drachm doses, three times a day, has been found exceedingly useful in several cases of renal dropsy, in which the urine was scanty and highly albuminous. One female J. E. aged 27, a violent maniac who has been six years in the asylum, had general anasarca which came on rapidly, with persistent albuminuria, her mental faculties were for the time restored, and her conduct in the Infirmary for many weeks was quiet and orderly. As soon, however, as the dropsical symptoms disappeared, under the treatment above referred to, her mind became as bad as before, and she has again her attacks of excitement. In none of the other cases was any change observed in the mental condition during the continuation of the dropsical symptoms.

Feeding Cases.—These have not been so numerous as in the preceding year, as may be seen from the table of diseases treated in each quarter in the annual reports. Some of these cases were of a very grave character. P. G. a male, aged 38, married, recently returned from Australia, where he had gone as a settler, refused food for five consecutive days prior to admission; he was fed from that time continuously, by a stomach tube, three times a day with milk, beef tea, eggs and wine, for twelve weeks; he then took food voluntarily. His recovery was rapid from that time, and he left the asylum three months afterwards; he has since returned safely to his family in Australia. Several others have been admitted in an extremely exhausted state from attempting suicide by starvation, and have been fed in like manner by the stomach tube, for shorter periods varying from two to six weeks, with like favourable results.

The following table records the diseases occurring in each quarter. The first quarter is January, February, and March; the second quarter is April, May, and June; the third quarter is July, August, and September; and the fourth quarter is October, November, and December.

	Diseases.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.	
		M.	F.	M.	F.	M.	F.	M.	F.
Nervous.	Maniacal excitement	7	5	1	2	5	2	2	3
	Delirium Tremens	0	0	1	0	0	0	1	0
	Hemiplegia	0	1	0	0	1	0	0	0
	Hysteria	0	1	0	2	0	0	0	1
	Chorea	2	0	2	0	2	2	2	0
	Epilepsy	13	10	15	13	14	11	10	12
	Arachnitis and Cerebritis	0	0	1	2	2	0	1	0
	General Paralysis	6	1	3	0	5	0	7	0
	Palsy	3	0	4	1	3	3	4	3
	Total	31	18	27	20	32	18	27	19
Respiratory.	Asthma	1	1	0	1	2	3	3	3
	Bronchitis	4	2	8	4	4	2	2	3
	Influenza	3	2	7	1	0	1	3	3
	Pleuro-pneumonia	0	2	2	0	0	1	4	1
	Pneumonia	0	0	0	0	1	0	4	1
	Phthisis	8	4	9	7	8	2	6	6
	Total	16	11	26	13	15	9	22	17
Circulatory.	Scrofula	1	1	1	0	3	1	2	1
	Amenorrhœa	0	2	0	2	0	1	0	2
	Dropsy	3	2	3	1	0	0	3	3
	Purpura	0	0	0	0	0	0	0	0
	Cachexy	0	3	1	3	2	1	1	2
	Total	4	8	5	6	5	3	6	8
	Feeding Cases	0	0	2	2	0	2	2	2
Digestive.	Cynanche Tonsillaris	0	0	1	0	0	0	0	1
	Gastritis	2	0	0	0	1	2	1	0
	Hœmatemmesis	0	1	0	0	1	0	1	0
	Enteritis or Dysentery	0	0	0	0	1	0	1	0
	Diarrhœa	0	1	0	1	2	2	3	1
	Dyspepsia	1	1	2	4	5	3	2	3
	Icterus	0	0	0	0	1	0	1	0
	Painters' Colic	0	0	0	0	2	0	2	0
	Hernia	1	0	0	0	0	0	0	0
	Stricture of rectum	0	0	1	0	0	1	0	1
	Total	4	3	4	5	13	8	11	6
Uterine and Urinary	Blenorrhagia	0	1	0	2	0	3	0	5
	Nephritis and Ischuria	0	0	0	0	1	0	1	0
Locomotive organs, skin, and cellular tissue.	Phymosis	0	0	0	0	1	0	0	0
	Fractures	1	1	1	0	0	0	0	0
	Wounds *(contusions)*	1	1	0	1	2	0	0	0
	Ulcers	2	3	3	2	0	2	5	2
	Abscess	2	1	3	2	4	0	2	2
	Carbuncle, Anthrax	1	2	0	2	5	1	2	0
	Erysipelas	0	1	0	1	0	0	0	2
	Gangrene	0	2	0	0	0	0	0	0
	Herpes	0	0	1	1	0	1	1	1
	Lupus	0	0	0	2	1	0	1	0
	Eczema	3	2	1	1	1	2	0	3
	Psoriasis	0	0	0	0	0	1	1	4
	Rheumatism	0	0	1	0	1	0	0	0
	Pernio	1	0	0	0	0	0	0	0
	Ustio	0	0	0	0	0	0	1	0
	Total	11	13	10	12	15	7	13	14
	Ophthalmia	1	1	0	0	0	1	0	1
	Fever	1	0	2	1	0	0	0	1
	Gross Total	68	55	76	61	81	51	82	37

Analysis of the Tables in Appendix.

The recoveries in Table I. in the Appendix only amount to 88, or 47·8 per cent. on the admissions for the year 1866, which is a considerable falling off from the two previous years, in both of which the recoveries were upwards of 50 per cent. on the admissions in the year: in the males the recoveries were 47·6, and in the females 48·3 per cent. In 28 males and 40 females admitted within 3 months of the attack, the average duration of time under treatment before discharge from the asylum was 6·5 in the males and 7·5 months in the females. In the 9 males and 11 females in whom the disorder on admission was of upwards of 3 months duration, the average duration of treatment was in the males 10·9 and in the females 21 months. One half of the male and two thirds of the female recoveries were cases of mania, including recurrent and puerperal forms of the disorder. Hereditary predisposition and previous illness were the most frequent causes, as found here and stated in previous reports.

The number admitted (184) as shown in Table II. distinguishing those from each Union, is 12 less than in 1865, but the females are 2 more than in the preceding year, in which also there was an increase of females over those in 1864. Of the 184 admissions, (78 males and 106 females) 61 males and 69 females were sent from their homes; 8 males and 33 females from workhouses; 9 males and 4 females from gaols and asylums. The recoveries amongst these admissions, within the year, amounted to 25·6 in the males and nearly 27 per cent. in the females; discharged relieved and not improved to 5·1 in the males and 6·6 per cent in the females; the mortality to 18 in the males and 6·6 per cent in the females; remaining in the asylum 51·3 males and 65 per cent. females.

Table III. is most comprehensive, and is a complete monthly record of the changes amongst the patients; of the epileptics, and number of fits; of the violent, dirty, and destructive patients; of those in seclusion, and duration of same; of those under medical treatment; of those attending Divine service, and school; and the number employed, unemployed, sick, and infirm. The average number of epileptics has been about 75, nearly 40 males and 35 females; the average number of fits 6784 for the males and 8696 for the

females, being an unusually large number for the latter. The average number of violent males has been nearly double the females, 5 in the one case and 2·6 in the other; the opposite is the case to a greater degree in the dirty cases, the average being 10·5 for males and 27·8 for females; the same as regards the destructive 6·3 for males and 13·4 for females. The average number in restraint and seclusion of each sex was 4. The average number under medical treatment in each month was 36 males and 32 females; attending church on Sundays 119 males and 146 females; employed 14 males and 128 females; unemployed, sick, and infirm, 100 males and 133 females. The mortality as usual was highest in the cold weather, during the winter months.

The period of life at which the admissions were most numerous amongst the males was from 30 to 45, and amongst the females at an earlier period, from 20 to 30, after which there was a decrease for the next decennial period, and an increase again from 40 to 45 as shown in Table IV. It will also be observed that the married greatly exceeded the single males; the married females only slightly exceeded the single; the widowed were nearly equal. Those labouring under a first attack amounted to nearly 60 per cent., the others to above 40 per cent.

The occupations of the males and females are shown in Table V. The agricultural labourers formed the most numerous class of the former, as usual, and domestic servants, and labourers' wives of the latter. There were a greater number of paupers than usual amongst the females.

In about one third the bodily health was good, bad in nearly one fourth, and indifferent in the remainder, considerably more than one third, as shown in Table VI.; from which it also appears that the bodily health of those remaining 109, was good in more than a third, bad in less than one tenth, and indifferent in considerably more than half.

Of the 184 admissions, 134 professed to be members of the church of England as shown in Table VII.; only 50 belonged to other persuasions; 11 had received a good education; 90 could read and write; and 35 had received no education.

The probable causes of the disorder are shown in Table VIII. The moral causes were as three to one in females compared with males. The physical causes were as three to

one of the moral causes—hereditary predisposition being included amongst the physical causes—some writers consider that it should not be included in either class. Excluding 28 cases congenital or hereditary, the physical causes would still be more than double the moral, which must be owing to the large number of persons labouring under delirium from chronic diseases who might be attended to in a proper Union infirmary. The number from previous illness and cerebral diseases amounted to 57. If these were subtracted the moral causes would predominate, and be as 41 to 34 ; no cause was assigned in 24 cases.

Of the forms of the disorder mania predominates as shown in Table IX.; more than half the cases are included in mania, recurrent and puerperal. The cases of epilepsy have been more numerous than usual amongst females.

From Table X. it appears that 108 of the cases were not of more than three months duration on admission, and of these 35 recovered and were discharged, with 1 relieved and 1 not improved ; and that 16 died within the year, leaving 55 still under treatment. Of the 76 in whom the disorder had existed longer than 3 months previous to admission, 13 recovered, 1 was discharged relieved, and 3 not improved, and 6 died, leaving 53 in the asylum at the end of the year; total 108 of the admissions of 1866.

The annual admissions, since opening the asylum, from 1848 to the end of 1866 are shown in the Table XI. together with the recoveries, total discharges and deaths, distinguishing the sexes, also showing the numbers remaining at the end of each year, with the ratio per cent under each head, for the whole period. The total number of cases including relapses has been 3073, males 1559, females 1514. The per centage of new cases has been 85 and of relapses 15 per cent. There has been a difference of 5 per cent in the recoveries in favor of the females, and the mortality has been 9 per cent less in them, than in the males ; the total recoveries amounted to 42 per cent, relieved to nearly 9 per cent, discharged not improved to 4¾ per cent, deaths to 28½ per cent, in the whole number, and those remaining to nearly 16 per cent.

The Table XII. is a nosological arrangement of the causes of death at three periods of life in both sexes. From cerebral disease the mortality was double, in males compared

with females ; there were a third more cases of males.

Of the cases remaining in the asylum at the end of the year it appears from Table XIII. that only 20½ per cent were considered curable, 21 per cent were sick and aged, 22½ per cent were idiots and epileptics, 21½ per cent were incurable, quiet, and harmless, and 14½ per cent were incurable and dangerous or noisy.

SUMMARY OF THE OBITUARY FOR 1866.

The deaths have this year been 61, viz. 37 males and 24 females, one in excess of last year, the number of males being greater by 7 and of females less by 6. The average mortality is always considerably higher amongst males than females. This year it has been above 16 per cent, for males and only nine per cent for females, on the average population in the asylum, a difference of 7 per cent. in favour of females; in the French asylums there was a difference of 4 per cent in their favour, 16 per cent. for males, as here, and 12 per cent. for females. In the first three months of the year, 13 males and 7 females died ; in the second quarter 4 males and 4 females ; in the third quarter 4 males and 5 females ; in the last quarter 16 males and 7 females, being the greatest number. The deaths were also numerous in the first quarter. In the forenoon 34 deaths occurred, 24 in the afternoon, 1 male at noon and 1 at midnight. In the previous year there were most deaths in the afternoon.

The time under treatment varied in the males from 10 to 4977 days, and in the females from 23 to 6719 days ; the average time for males was 825, and for females 1491 days.

This is much above the mean time of residence in the French asylums, which is stated as 265 days for males and 279 days for females.

Age and civil state.—Under 30 years of age there were 4 males and 1 female ; from 30 to 40, 7 males and 3 females ; from 40 to 50, 8 males and 6 females ; from 50 to 60, 6 males and 6 females ; from 60 to 70, 5 males and 5 females ; from 70 to 80, 5 males and 2 females ; upwards of 80, 2 males and 1 female. Of these, 15 males and 10 females were single ; 15 males and 11 females married ; 7 males and 3 females widowed.

The occupations of the males and females were—

Males.		Females.	
Agricultural Labourers	16	Charwomen	4
Blacksmiths	2	Farmers' wives	2
Butcher	1	Household work	4
Carpenter	1	Labourers wives	3
Coachman	1	Needlework	2
Collier	1	No occupation	2
Costermonger	1	Pauper	1
Cooper	1	Schoolmistress	1
Clerk	1	Servants	4
Farmers	2	Weaver	1
Masons	2		
No occupation	2		
Paupers	2		
Schoolmaster	1		
Tailors	2		
Traveller	1		
Total	37	Total	24

Form of mental disorder.—There were 13 cases of mania in the males and 11 in the females; 4 cases of melancholia in males and 4 in females; 5 cases of dementia in males and 3 in females; 4 males and 1 female had general paralysis; 4 males and 1 female were idiots; 5 males and 3 females were epileptics; in three of these males it was combined with mania; there were 2 males and 1 female in a state of fatuity. Of these 20 males and 9 females were labouring under a first attack; 3 males and 3 females under a second; and 3 males and 2 females under a third attack; in 6 males and 4 females from birth; in 5 males and 6 females the number of the attack was not known.

The bodily condition on admission was good in 2 males and 1 female; bad in 13 males and 12 females; indifferent in 22 males and 11 females.

Duration of the disorder, was under 3 months in 6 males and 1 female; from 3 to 6 months in 5 males and 2 females; from 6 to 12 months in 3 males and 1 female; from 1 to 2 years in 5 males and 3 females; from 2 to 4 years in 6 males and 7 females; from 4 to 15 years in 4 males and 6 females; from 15 to 34 years in 4 males and 3 females; from birth or childhood in 4 males and 1 female. The ascribed causes were—grief and poverty in 4 males and 5 females; religious excitement in 1 male; ill usage in 2 males; fright in 1 male and 1 female; hereditary in 3 males and 4 females; congenital in 4 males and 1 female; bodily illness in 8 males and 8 females; intemperance in 4 males; cerebral disease in 3 males and 1 female; spinal disease in 2 males and 1 female; sunstroke in 1 male; natural decay in 1 male and 1 female; cause not ascertained in 4 males and 2 females.

Assigned causes of death. In 6 males and 3 females there was meningitis and cerebral disease, and more fluid than natural in the cerebral ventricles; in two females there was cerebritis. In 3 epileptic males there was blood in considerable quantity in spinal canal, myelitis in 3 males and 1 female. There was pulmonary apoplexy in 2 males; pneumonia in 8 males and 3 females; pleurisy with effusion of fluid in the chest in 2 males and 3 females; bronchitis and asthma in 2 males and 4 females; pulmonary phthisis in 3 males and 4 females; enlargement of heart in 1 male; dropsy in 1 female; inflammation, or ulceration of the intestines in 6 males and 1 female; cachexy in 7 females; cancer in 2 males, erysipelas in 1 female.

Appearances after Death, and Weight of the Body and principal Organs in 36 Males and 23 Females.

In 1 male and 1 female there was no *post mortem* examination. *Head and Spine.*—The skull was unusually thick in 2 males, the inner table deeply indented opposite enlarged pacchionian bodies, in 1 female, the diploe congested with blood in 1 male; dura mater preternaturally adherent in 7 males and 3 females, loose in 1 male, distended with fluid in 3 males; pus in surface of arachnoid in 1 female, opacity of the arachnoid in 7 males and 1 female; congestion of blood in cerebral vessels in 6 males and 1 female; atheromatous deposits in cerebral arteries in 2 males; cerebral substance indurated in 4 males and 3 females, softened in 2 males and 3 females; more fluid than natural in the ventricles in 12 males and 11 females; brain indurated in 4 males and 3 females; softened in 2 males and 3 females; pale in 2 females; atrophied in 3 males and 5 females; enlarged above the average weight, in 13 males and 10 females; natural in 8 males and 6 females; the right hemisphere from $\frac{1}{4}$ to $1\frac{1}{2}$ ounces heavier than the left in 3 males. The weight of the encephalon varied in 36 males from $36\frac{3}{4}$ to $55\frac{1}{2}$ ounces, and in 23

females from 30 to 49¾ ounces; the average weight in the males was 48.5, and in the females 41.9 ounces. The spinal canal contained a quantity of blood in 3 males, (epileptics), the spinal cord was unusually firm in 3 males and 3 females, and softer than natural in 9 males and 3 females. The spinal cord varied in weight in 30 males from ¾ to 1½ ounces, and in 20 females from ½ to 1½ ounces; the average weight in the males was 1·2 and in the females 1·1 ounce.

Thorax.—There were old pleuritic adhesions in 7 males and 7 females; recent pleuritic adhesions in 6 males and 4 females, and fluid in the chest varying from 2 to 6 pints in 3 males; and from 2 to 3½ pints in 4 females; congestion of blood in the lungs was found in 12 males, and 4 females in the right lung, and in 9 males and 1 female in the left lung; the maximum weight of the right lung in the males was 29 and in the females 28 ounces, and of the left lung 28 in the males, and 20 in the females; the average weight of the right lung in the males was 23, and in the females 20 ounces, the average weight of the left lung in the males was 21.3 ounces. Pneumonia was found in the right lung in 10 males and 2 females, the average weight was 35 in the males and 27 in the females; the left lung weighed 65 ounces in one case of pneumonia which was the maximum weight in 7 males and the average 38; in 5 females, the average weight of the left lung was 28 ounces. There were 3 cases of tubercles in the right lung in males and 4 in females, and of the left lung 5 in males and 4 in females; the average weight of the right lung in males was 25·6, and in females 22 ounces, and of the left, 28 in males and 23 in females. There were 7 cases of emphysema in males and 6 in females, the average weight of these, with the lungs not diseased, in 12 males was 16·7 and in 13 females 13 ounces for the right lung, and the average of the left lung in 12 males was 15, and in 15 females 11.3 ounces. The heart was enlarged in 4 males and 1 female, smaller than natural in 3 males and 8 females; there was valvular disease in 1 male, and pericarditis with dropsy in 1 female; the average weight of the heart in 36 males was 9.9 and in 23 females 7.3 ounces.

Abdomen.—The omentum fatty in 1 male; old peritoneal adhesions in 1 male; gastritis in 1 male; an ulcer in the stomach in 1 male and in 1 female; a tape worm 25 feet long

in the stomach of 1 male, and one also in the colon of 1 male, and in the ileum in 1 female; the colon enormously distended, 13 inches in diameter and a contraction in the rectum, in 1 male; enteritis in 6 males and 3 females, with ulceration in 1 male; the mucous membrane of the intestines dark coloured in 4 males and 1 female; the intestines had a natural healthy appearance in 15 males, and 12 females. The organs generally large in 3 males, and 4 females; organs small in 5 females; the liver enlarged in 5 males and 1 female; atrophied in 1 male and in 1 female; the right kidney enlarged in 3 males, and both kidneys in 1 female; an abscess in left kidney in 1 male and a cyst filled with fluid in 1 male; spleen soft in 1 female; mesenteric glands enlarged in 1 male; general dropsy in 1 female with enlarged kidneys. The stomach varied in weight in 36 males from 4 to 9 ounces and in 21 females from 2¾ to 7 ounces; the average weight in the males was 5·7 and in the females 5 ounces. The liver varied in weight in the males from 35 to 114¾ ounces, and in the females from 20 to 60 ounces; the average weight in the males was 47·1 and in the females 41·2 ounces. The spleen varied in weight in the males from 1¾ to 10 ounces, and in the females from 1½ to 7¼ ounces; the average weight in the males was 4·6, and in the females 4 ounces. The pancreas varied in weight in the males from 2 to 4 ounces, and in the females from 1¼ to 3 ounces; the average weight in the males was 2·4, and in the females 2·1 ounces. The right kidney varied in weight in the males from 2½ to 8½ ounces, and in the females from 2¾ to 5¾ ounces; the average weight in the males was 4·5 and in the females 3·8 ounces. The left kidney varied in weight in the males from 3 to 7½ and in the females from 2½ to 6¾ ounces; the average weight in the males was 4·7 and in the females 4·2 ounces. The average weight of the renal capsules in 85 males was ·75 and in 21 females, ·72 of an ounce. The average weight of the uterus was 2·2 ounces. The body was unusually fat in 3 males and 3 females, and emaciated in 7 males and 5 females; it varied in weight in 35 males from 74 to 157 lbs. and from 41 to 126 lbs in 21 females; the average weight in the males was 112, and in the females 88½ lbs. The length, varied in 35 males from 4 ft. 10 inches to 5 ft. 11 inches, and in 21 females from 4-9 to 5-5 inches; the average length in the males was 5 feet 5½ inches, and in the females 5 feet 1 inch.

APPENDIX.

TABLE I. (1866.)

Showing the time that each of 88 cases required for its treatment to effect recovery, with the length of time the disease existed before admission.

Duration of the Disease prior to Admission.	No of Cases. M.	No of Cases. F.	Time occupied in the Treatment to effect Recovery. Months. MALES.								FEMALES.							
1 Week	5	8	4	11	2	12	4	..	..	..	4	11	4	3	4	6	7	5
2 Weeks	8	8	7	8	2	5	8	3	3	5	6	8	5	17	7	13	10	21
3 Ditto	4	6	3	3	15	4	..	..	..	..	8	6	7	16	11	5	..	..
4 Ditto	2	3	16	7	..	..	..	..	..	..	11	4	10	..	..	..	..	..
5 Ditto	1	2	5	..	..	..	..	..	..	..	4	20	..	..	..	..	..	..
6 Ditto	2	6	7	3	..	..	..	..	..	..	6	11	10	17	8	30	..	..
7 Ditto	2	1	20	6	..	..	..	..	..	..	7	..	..	..	..	..	..	..
8 Ditto	3	5	6	10	8	..	..	..	..	..	10	13	6	15	5	..	..	..
10 Ditto	1	1	6	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..
3 Months	2	2	17	4	..	..	..	..	..	..	51	28	..	..	..	..	..	..
4 Ditto	..	1	..	..	..	..	..	..	..	..	17	..	..	..	..	..	..	..
5 Ditto	1	1	10	..	..	..	..	..	..	..	9	..	..	..	..	..	..	..
6 Ditto	3	3	17	11	9	..	..	..	..	..	3	9	11	..	..	..	..	..
12 Ditto	1	1	22	..	..	..	..	..	..	..	24	..	..	..	..	..	..	..
16 Ditto	..	1	..	..	..	..	..	..	..	..	21	..	..	..	..	..	..	..
2 Years	..	1	..	..	..	..	..	..	..	..	35	..	..	..	..	..	..	..
Unknown	2	1	5	3	..	..	..	..	..	..	24	..	..	..	..	..	..	..
Total	37	51																

Of these 88 Recoveries the form of the Disorder had been:—

	M.	F.
Mania	10	17
Ditto Recurrent	8	11
Ditto Puerperal	0	2
Monomania	0	1
Melancholia	13	19
Delirium Tremens	6	0
Eiplepsy and Mania	0	1
Total	37	51

The Causes were

	M.	F.
Hereditary Predisposition	6	13
Grief and over-anxiety	0	7
Love and Jealousy	1	3
Fright	0	2
Ill-treatment & destitution	1	2
Previous Illness	6	8
Losses in business, Poverty	4	1
Intemperance	8	1
Unknown	10	8
Religious Delusions	0	3
Critical Period	0	2
Sunstroke	0	1
Overwork	1	0
Total	37	51

TABLE II.

Showing the Number of Patients admitted from each Union, distinguishing between those brought from their own homes, the Workhouses, and Asylums, with the results in 1866.

UNIONS.	Homes.		Workhouses		Gaols and Asylums.		Total.		Recovered.		Relieved and not Improved.		Died.		Remaining.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Axbridge	10	9	0	3	1	0	11	12	1	4	0	0	4	1	6	7	23
Bath	11	6	0	3	4	0	15	9	4	4	0	0	2	0	9	5	24
Bedminster	1	4	1	2	0	0	2	6	0	1	0	0	1	0	1	5	8
Bridgwater	6	5	0	3	2	0	8	8	2	1	1	0	1	0	4	7	16
Chard	2	3	2	1	0	0	4	4	0	1	1	0	1	0	2	3	8
Clutton	2	2	1	4	0	0	3	6	1	0	0	1	0	0	2	6	9
Dulverton	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Frome	1	2	0	0	0	0	1	2	1	0	0	0	0	1	0	1	3
Keynsham	1	1	0	2	0	0	1	3	1	0	0	0	0	0	0	3	4
Langport	2	4	0	0	0	0	2	4	1	2	1	0	0	1	0	1	6
Shepton Mallet ..	3	5	0	4	0	1	3	10	2	2	0	2	0	1	1	5	13
Taunton	5	6	0	3	1	2	6	11	3	3	0	0	1	1	2	7	17
Wellington	3	4	0	3	0	0	3	7	1	2	0	0	1	0	1	5	10
Wells	3	9	1	1	0	0	4	10	1	6	0	3	0	1	3	5	14
Wincanton	3	3	1	2	0	0	4	5	0	1	0	0	1	1	3	3	9
Williton	3	2	0	0	0	1	3	3	1	1	0	0	0	0	2	2	6
Yeovil	4	4	2	2	1	C	7	6	1	0	1	1	2	0	3	5	13
Total	61	69	8	33	9	4	73	106	20	28	4	7	14	7	40	69	184

TABLE III.

Changes of Patients and Principal Occurrences of each Month.

	Jan.		Feb.		March		April.		May.		June.		July.		Aug.		Sep.		Oct.		Nov.		Dec.		Total in 1866.	
	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F
No. of Patients on the 1st of the Month ...	223	253	219	260	217	260	217	260	217	268	219	272	219	277	220	278	221	276	226	271	222	281	220	283	216	271
" admitted	3	9	7	8	4	7	6	12	7	11	8	10	9	11	9	5	7	4	3	15	9	10	6	4	78	106
" discharged recovered	2	2	4	4	0	4	2	3	3	4	6	2	7	6	5	5	0	7	3	3	2	3	3	8	37	51
" " relieved	2	1	0	0	0	0	2	0	1	1	1	2	1	1	0	1	0	0	0	0	2	3	2	4	10	13
" " not improved ...	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	2
" of deaths	5	1	5	3	3	3	2	1	1	2	1	1	0	2	2	1	2	2	4	2	7	2	5	4	37	24
" Patients remaining on last of the month	219	260	217	260	217	260	217	268	219	272	219	277	220	278	229	276	226	271	222	281	223	283	216	271	487	
" of Epileptics	43	36	40	31	40	34	40	33	39	34	39	34	39	33	39	33	41	33	39	35	40	39	40	40	39·8	35
Aggregate number of Fits	627	650	630	648	519	825	481	580	438	682	553	729	534	609	600	829	708	704	532	518	623	721	513	830	6784	8696
Number of Violent Patients...	5	6	4	4	5	4	10	8	3	1	4	0	6	2	1	1	4	0	7	0	2	3	8	3	5	2·6
" Dirty ditto	9	23	11	22	13	27	11	28	11	27	10	30	11	31	13	29	9	28	9	32	10	27	9	30	10·6	27·8
" Destructive ditto	7	12	8	10	6	19	7	16	10	9	10	12	8	16	9	15	1	17	4	16	3	13	3	15	6·3	13·4
" Panes of Glass broken	15	2	36	7	1	4	7	36	13	1	15	2	18	8	7	4	1	18	15	5	6	2	1	7	124	96
" Patients in restraint	0	0	0	0	1	3	1	1	1	2	1	1	0	0	0	1	0	0	0	0	0	2	0	2	·3	1
" " in seclusion	0	6	0	9	1	4	1	9	0	1	0	5	1	3	1	1	1	3	2	4	6	0	4	1	1·4	3·8
Aggregate Hours of ditto	0	99	0	95	48	80	10	110	0	3	0	37	10	62	6	6	7	14	16	48	212	0	141	3	377	46·4
Average ditto	0	16½	0	10	48	20	10	12	0	3	0	7	10	20	6	6	7	5	8	12	35	0	36	3	160	114½
No. of Patients under Medical Treatment ...	38	28	35	36	39	37	36	34	36	31	37	28	37	30	34	33	37	35	35	30	35	30	33	37	36	32
Greatest Weekly Number. Attending Parish Church Sundays	12	17	16	30	22	30	17	31	12	29	13	30	14	35	17	37	16	39	16	32	15	30	17	38	18	36
Ditto Chapel ditto	87	106	91	109	94	112	100	106	113	114	111	112	107	109	105	115	105	110	103	106	103	110	99	112	101	110
Ditto on Morning of week days	57	94	61	96	59	96	57	96	49	96	43	96	49	94	48	95	58	96	57	90	47	93	58	91	53	94
Ditto on Evenings	55	80	58	84	57	84	55	86	57	90	55	90	57	90	56	84	50	92	59	84	56	84	62	80	57	85
Ditto at School	0	0	0	0	0	0	0	30	0	31	0	33	0	32	0	32	0	32	0	30	0	38	0	33	0	34
Employed	106	119	112	120	113	119	112	130	113	131	114	134	111	136	110	139	113	130	121	139	107	135	107	123	111	128
Unemployed, Sick and Infirm ...	126	139	108	136	101	139	102	136	101	141	101	139	91	138	111	136	110	131	107	135	91	107	75	117	100	133

Average. Monthly Average.

TABLE IV.

Showing in quinquennial periods, the ages of those admitted, the sexes, the civil condition, and the number of the attacks of Insanity.

Quinquennial Periods.	Number of Admissions.			Civil Condition						Number of Attack.							
				Single.		Married.		Widowed.		1st.		2nd.		3rd or more.		Unknown.	
	M.	F.	Tot.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 15 years.	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0
From 15 to 20 years.	2	4	6	2	4	0	0	0	0	2	2	0	2	0	0	0	0
" 20 " 25 "	7	14	21	6	9	1	5	0	0	3	6	4	5	0	1	0	2
" 25 " 30 "	8	19	27	6	11	2	7	0	1	6	13	1	4	0	2	1	0
" 30 " 35 "	9	8	17	3	5	6	3	0	0	5	7	3	0	0	1	1	0
" 35 " 40 "	9	10	19	3	3	5	7	1	0	5	5	1	4	0	0	3	1
" 40 " 45 "	10	16	26	1	7	8	6	1	3	7	7	0	5	2	2	1	2
" 45 " 50 "	5	10	15	0	1	5	8	0	1	3	7	0	2	2	1	0	0
" 50 " 55 "	2	10	12	0	1	2	7	0	2	1	4	1	3	0	3	0	0
" 55 " 60 "	8	3	11	2	0	5	3	1	0	3	1	2	1	2	1	1	0
" 60 " 65 "	5	4	9	0	1	5	2	0	1	2	3	1	1	1	0	1	0
" 65 " 70 "	6	2	8	2	2	1	0	3	0	6	1	0	0	0	1	0	0
" 70 " 75 "	5	1	6	1	0	21	0	3	1	4	0	0	1	1	0	0	0
, 75 " 80 "	2	3	5	0	1	1	1	1	1	2	3	0	0	0	0	0	0
" 80 and upwards	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0
Total............	78	106	184	26	46	42	49	10	11	49	61	13	28	8	12	8	5

TABLE V.

Showing the occupations of Patients admitted in 1866.

Males.				Females	
Labourers	22	No occupation ...	2	Agricultural Servants	7
Blacksmiths	5	Policeman	1	Charwomen... ...	3
Basketmaker	1	Paupers	2	Domestic Servants...	20
Butchers	2	Painters	2	Errand woman ...	1
Clerks	3	Servant	1	Farmers' daughters	3
Cabman	1	Soldier	1	Glovers	3
Cooper	1	Shoemakers ...	2	Householdwork ...	12
Costermonger... ...	1	Sawyer	1	Labourers' wives ...	17
Carpenters	5	Schoolmasters ...	2	Laundresses ...	4
Gardeners	2	Tailors	7	No occupation ...	4
Herbalist	1	Weavers	3	Paupers	16
Hawker	1	Woodman	1	Sempstresses ...	10
Masons	2	Yeomen	2	Schoolmistresses ...	2
Do Labourers... ...	3			Shopwomen	4
Miller	1				
		Total ...	78	Total ...	106

TABLE VI.

Showing the bodily health of 184 patients on admission, as contrasted with the present condition of those remaining.

	Bodily Health on Admission.				Present Bodily Health of those remaining		
	Good.	Bad.	Indifferent.		Good.	Bad.	Indifferent
Males...	23	21	34	Males...	13	4	24
Females	38	24	44	Females	25	6	37
Total...	61	45	78		38	10	61

TABLE VII.

Showing the religion, and the degree of education with reference to the admissions.

	Religion.						Degree of Education.				
	Church of England	Wesleyans.	Other Dissenters	Roman Catholics	Jew.	Not Known.	Good.	Read and Write.	Read only.	Neither read nor write.	Not Known.
Males...	61	5	8	0	1	3	7	40	14	14	3
Females	73	6	22	3	0	2	4	50	27	21	4
Total...	134	11	30	3	1	5	11	90	41	35	7

TABLE VIII.

Showing the probable Cause of the Disorder in the admissions in 1866

	M	F	Total.		M	F	Total.
Fright, Superstition...	0	2	2	Accidental Injury ...	1	2	3
Disappointment ...	2	2	4	Congenital	2	1	3
Jealousy	1	4	5	Disease of nervous centres	12	14	26
Illtreatment	0	2	2	Critical period ...	0	7	7
Overwork	1	0	1	Hereditary predisposition	10	18	28
Religious excitement	3	7	10	Intemperance ...	9	3	12
Poverty	3	7	10	Old age	4	3	7
Remorse and Grief ...	0	7	7	Previous illness ...	17	14	31
				Sunstroke	2	0	2
No cause assigned ...	11	13	24				
Total ...	22	44	65	Grand Total...	57	62	119

TABLE IX.

Showing the Forms of the Disorder in the admissions in 1866.

Forms of the Disorder.	Males.	Females.	Total.
Mania	29	35	64
Ditto Recurrent	8	18	26
Ditto Puerperal	0	7	7
Monomania	1	2	3
Dementia	7	6	13
Melancholia	15	21	36
Congenital Idiocy	2	1	3
Epilepsy	5	13	18
General Paralysis	3	0	3
Delirium Tremens	4	0	4
Fatuity	4	3	7
Total	78	106	184

TABLE X.

Showing the duration of the existing attack in those admitted with reference to the result in 1866.

Duration of the existing attack.	Admitted			Recovered			Relieved			Not Improved			Died			Remaining		
	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
Under 1 Month.	32	37	69	12	12	24	0	0	0	0	0	0	7	2	9	13	23	36
" 2 Months	8	15	23	3	7	10	0	0	0	0	0	0	1	2	3	4	6	10
" 3 "	8	8	16	1	0	1	1	0	1	1	0	1	2	2	4	3	6	9
" 4 "	2	3	5	0	1	1	0	0	0	0	0	0	0	0	0	2	2	4
" 5 "	1	4	5	0	2	2	0	0	0	0	0	0	0	0	0	1	2	3
" 6 "	3	8	11	2	3	5	0	0	0	0	0	0	1	0	1	0	5	5
" 7 "	1	2	3	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2
" 8 "	0	2	2	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
" 9 "	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
" 12 "	3	3	6	0	1	1	0	0	0	0	0	0	0	0	0	3	2	5
" 16 "	2	2	4	1	1	2	0	0	0	0	0	0	0	0	0	1	1	2
" 2 Years,	3	4	7	0	1	1	1	0	1	0	1	1	0	0	0	2	2	4
" 2½ "	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
" 3 "	1	4	5	0	0	0	0	0	0	0	0	0	1	1	2	0	3	3
" 4 "	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
" 5 "	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
" 8 "	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
" 10 "	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
" 13 "	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
" 17 "	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Several "	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
From Childhood	3	6	9	0	0	0	0	0	0	1	0	1	0	0	0	2	6	8
Unknown	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	3	0	3
Total.....	78	106	184	20	28	48	2	0	2	2	2	4	14	8	22	40	68	108

TABLE XI.

Showing the annual admissions since the opening of the Asylum 1st March 1848, with the discharges, & the numbers of each year remaining 31st Dec. 1866

	ADMITTED.					1866												TOTAL DISCHARGES.												Remaining 31st Dec 1866		
	New Cases.		Relapsed Cases			Recovered			Relieved			Not Improved			Died.			Recovered.			Relieved			Not Improved			Died					
	Males	Females	Males	Females	Total.	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
1848	140	142	2	..	284	..	..	..	..	..	..	..	..	..	..	1	1	34	32	66	19	25	44	6	4	10	59	61	120	24	20	44
1849	63	73	5	7	148	..	..	..	..	..	..	..	..	..	..	..	..	27	29	56	8	13	21	3	6	9	28	24	52	2	8	10
1850	53	63	10	5	131	..	..	..	..	..	..	..	..	..	..	..	..	22	23	45	5	12	17	5	10	15	27	19	46	4	4	8
1851	54	55	10	3	122	..	..	..	..	..	..	..	..	..	1	..	1	25	22	47	3	9	12	4	3	7	28	18	46	4	6	10
1852	57	56	5	10	128	..	..	..	..	..	..	..	..	..	..	..	..	25	30	55	3	8	11	4	2	6	27	21	48	3	5	8
1853	62	52	7	12	133	..	..	..	..	..	..	..	..	..	1	1	2	24	26	50	6	5	11	4	3	7	31	23	54	4	7	11
1854	50	55	8	10	123	..	..	..	..	..	..	..	..	..	..	..	..	25	38	63	5	6	11	9	1	10	16	17	33	3	3	6
1855	65	65	13	4	147	..	..	..	..	..	..	..	..	..	..	..	..	37	29	66	6	7	13	2	3	5	26	20	46	7	10	17
1856	61	49	12	11	133	..	..	..	..	..	..	..	..	..	..	..	..	26	30	56	5	8	13	9	2	11	24	17	41	9	3	12
1857	74	65	19	9	167	..	..	..	..	1	1	..	..	..	..	2	2	38	33	71	8	3	11	6	7	13	33	25	58	8	6	14
1858	69	61	11	10	151	..	..	..	..	..	..	1	..	1	..	2	2	39	35	74	6	6	12	5	4	9	22	16	38	8	10	18
1859	65	52	12	23	152	..	..	..	..	..	..	..	..	..	1	1	2	37	43	80	5	2	7	4	3	7	26	15	41	5	12	17
1860	62	49	14	15	140	..	..	..	..	1	1	..	..	..	2	..	2	32	37	69	8	9	17	5	1	6	25	7	32	6	10	16
1861	94	73	14	12	193	..	..	..	..	..	..	..	..	..	1	1	2	47	52	99	8	3	11	5	1	6	32	17	49	16	12	28
1862	71	70	18	9	168	..	1	1	..	..	..	..	..	..	1	1	2	42	47	89	5	6	11	5	1	6	22	12	34	15	13	28
1863	54	69	16	17	156	..	2	2	3	..	3	..	..	..	3	1	4	24	54	78	9	6	15	5	..	[illegible]	25	14	39	7	12	19
1864	97	73	22	25	217	2	2	4	2	1	3	..	..	..	1	3	4	58	49	107	5	6	11	5	..	[illegible]	29	16	45	22	27	49
1865	71	81	21	23	196	15	22	37	1	3	4	1	1	2	12	4	16	33	46	79	6	6	12	4	2	4	19	14	33	30	37	67
1866	66	78	12	28	184	20	24	44	4	7	11	1	2	3	14	7	21	20	24	44	4	7	11	1	2	[illegible]	24	7	21	39	66	105
	1328	1281	231	233	3073	37	51	88	10	13	23	3	3	6	37	24	61	615	679	1294	124	147	271	91	55	146	513	363	876	216	271	487

ADMITTED.	Males	Females	Total
Per centage of new cases	85·4	84·7	85
Ditto relapsed ditto	15·6	15.3	15
	100	100	100

DISCHARGED.	Males	Females	Total
Per centage of cases recovered	39·5	44·5	42·0
Ditto relieved	8·0	9·8	8·9
Ditto not improved	5·7	3·7	4·7
Ditto dead	33·0	24·0	28·5
Ditto remaining	13·8	18·0	15·9
	100	100	100

TABLE XII.

Causes of Deaths at three periods of life in 60 cases, in 1866.

Causes of Death.	Under 40 Years.		From 40 to 60 Years.		From 60 and Upwards.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.
Cerebro-spinal System. Epilepsy	4	1	2	1	0	1	6	3
Cerebral Apoplexy	0	0	1	0	0	0	1	0
Meningitis	0	0	1	1	2	1	3	2
Myelitis—General Paralysis	1	1	4	1	0	0	5	2
Total	5	2	8	3	2	2	15	7
Respiratory System. Hydrothorax	0	0	0	1	1	0	1	1
Emphysema	0	0	1	0	2	2	3	2
Pneumonia	1	1	2	0	2	0	5	1
Pleuro-pneumonia	1	0	1	1	1	1	3	2
Pulmonary Phthisis	4	1	1	3	0	2	5	6
Total	6	2	5	5	6	5	17	12
Cancer	0	0	0	0	1	0	1	0
Circulatory System. Enlarged Heart	1	0	0	0	0	0	1	0
Dropsy	0	1	0	0	0	1	0	2
Total	1	1	0	0	0	1	2	2
Digestive Organs. Ulcer in the Stomach	0	0	0	1	1	0	1	1
Enteritis	0	0	0	0	0	0	1	0
Erysipelas	1	0	0	1	0	0	1	1
Fractured leg	0	0	0	0	1	1	0	1
Gross Total	13	5	14	10	10	9	37	24

TABLE XIII.

Showing the classification of the Patients remaining in the Asylum at the end of the year 1866.

	Males	Females	Total.	Average.
Idiots	25	14	39	8·0
Epileptics	35	35	70	14·4
Sick	32	33	65	13·3
Aged	17	21	38	7·9
Incurable, quiet and harmless	38	66	104	21·4
" not quiet and harmless	26	55	71	14·5
Curable	43	57	100	20·5
Total	216	271	487	100

OBITUARY.—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Jan 25, 8.15 a.m. 432 and 391	June 9, 1853.	33. Single.	Epilepsy, combined with mania; first attack; good health.	Nineteen years, fright, from the machinery in a factory lifting him up by the neckerchief, no bodily injury.	Epilepsy. Pulmonary apoplexy, serum in the cerebral ventricles.	Between 2 and 3 oz. of serum in the cerebral ventricles, the encephalon large 52½, some blood in spinal canal, cord rather soft at centre 1¼	No pleuritic adhesions, blood effused in the substance of the lung, portions in the state termed pulmonary apoplexy, they did not sink in water; heart 12¼.	Intestines were natural weight of the stomach 5½, liver 54, spleen 6½, pancreas 2½, right kidney 5½, left 5¾; renal capsules ¾; weight of the body 140 lbs; height 5ft. 6in,
Jan. 26, 9 a.m. 1481.	Dec. 23, 1865.	81. Widowed.	Fatuity.	Three months.	Ulcer in stomach.	Brain natural encephalon 48½, spinal cord natural 1.	No pleuritic adhesions, cadaveric congestion of blood in right lung 22, left 13; heart large 15¼.	Old peritoneal adhesions stomach 6½, an ulcer size of 2s 6d at cardiac end, perforating stomach; liver 37, small, spleen 3½, pancreas 2½, right kidney 3½, left 4, renal capsules ¾ body 107 lbs, height 5ft. 3 inches.
Jan. 27, midnight, 874.	April 3, 1859.	34. Single.	Mania; first attack; indifferent health.	Seven years: cause not known.	Pulmonary phthisis ulceration ileum.	Brain natural 48, spinal cord natural 1½.	Old pleuritic adhesions tubercles and cavities in both lungs, right 28, left 35, heart 6½.	Mesenteric glands enlarged, ulcers in small intestines: stomach 4½, liver 54, spleen 7½, pancreas 2½, right kidney 3, left 4, renal capsules ¾; body emaciated 86 lbs; height 5ft. 5 inches.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death, Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoridupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Jan. 31, 4 a.m. 1419.	May 3, 1865.	38, Single.	Epilepsy combined with mania; first attack: indifferent health.	Three years.	Epilepsy; blood in spinal canal; pneumonia.	Brain large 53½, blood in spinal canal, cord 1½.	Lower lobe right lung in 2nd stage of pneumonia 46½, left 14; heart 10.	Intestines were natural organs large, stomach 7, liver 59, spleen 7, pancreas 4, right kidney 5½, left 5½, capsules ¾; body 130 lbs; height 5ft. 11 inches.
Jan. 31, 8 a.m. 1452.	Aug. 14, 1865.	28. Single.	Epilepsy combined with mania; first attack; indifferent health.	Thirteen months.	Epilepsy, blood in spinal canal.	Brain firm, 49¾, rusty discoloration on the under surface of the right middle lobe Blood in the spinal canal, the cord firm 1.	Pleuritic adhesions on right side, congestion of blood in lower lobe, a few tubercles in upper lobe right lung 21, left 18; heart 8½.	Stomach 4½, liver 51, spleen 7, pancreas 3, right kidney 4½, left 5¼, renal capsules ¾; weight of the body 120 lbs.; height 5ft. 5 inches.
Feb. 7, 2 a.m. 1409.	April 10, 1865.	46. Widowed.	General paralysis; melancholia; first attack; bad health.	Twelve months; intemperance.	Fluid in the brain, myelitis,	About six ounces of fluid in the sac of of the archnoid, right cerebral hemisphere 1½ ounce heavier than the left, encephalon 46½, the lower part of spinal cord softened, 1½.	Lungs dark coloured as usual in coal miners congestion of blood in both, right 24, left 21; heart 10½.	The intestines natural, stomach 6, liver 48, spleen 10, pancreas 3, right kidney 5¾, left 6. renal capsules ¾; weight of the body 127 lbs.; height 5 feet 10 inches.
Feb. 18, 5 a.m. 1439 and 691	June 22, 1865.	82. Widowed.	Mania; third attack; bad health.	Some months. disappointment.	Meningitis; emphysema.	Dura mater firmly adherent to the skull, more fluid than natural in the ventricles, encephalon large 53¾.	Pleuritic adhesions on both sides, emphysema of the anterior edges of upper lobes of lungs. right 15, left 12; heart 9½.	Weight of the stomach 5½, liver 42, spleen 4, pancreas 3, right kidney 3½, left 3¾; renal capsules ¾; weight of the body 110 lbs; height 5 ft. 6. inches.

OBITUARY, *continued*.—MALES.—1866.

Date of Death. 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Feb. 22, 6.30 a.m. 1400.	Feb. 18, 1865.	31. Single.	General paralysis: Mania: first attack; bad health.	Eighteen months.	Pulmonary tubercles, pneumonia, enteritis.	Brain large firm, 52½, spinal cord unusually firm 1½.	Pleuritic adhesions on both sides, tubercles in lungs, pneumonia in lower lobes of both lungs, right 27, left 33½ ; heart 9.	Red patches on the mucous membrane of the colon; stomach 6, liver 52, spleen 5¼, pancreas 3, right kidney 4, left 5, capsules ¾ ; weight of the body 127 lbs. ; height 5ft. 10 inches.
Feb 28. 11.15 a.m 984 and 374.	Sept. 14, 1860.	63. Single.	Mania recurrent ; third attack ; bad health.	Five years and a-half.	Pulmonary phthisis.	Brain rather soft and pale, more fluid than natural in the ventricles, 47¼, cord soft 1¼.	Pleuritic adhesions on right side, lung 16½, softened tubercles in upper lobe left lung 28 ; heart small 7.	Intestines were natural, stomach 5¼, liver 35, spleen 4, pancreas 2½, right kidney 3¼, left 5¼. capsules ½ ; body emaciated 74 lbs. ; height 5ft. 4 inches.
Feb. 28, 1. p.m. 1379.	Nov. 18, 1865.	48. Married.	Melancholia ; epilepsy, and general paralysis ; first attack ; bad health.	Ten months; poverty.	Meningitis, fluid in the cerebral ventricles, congestion of blood in the brain.	Diploe of skull unusually red, the dura mater distended, fluid escaped from sac of arachnoid, opacity of arachnoid ventricles filled with fluid, the structure of brain had numerous red specks, 46½ ; slight softening in spinal cord 1.	Pleuritic adhesions on left side only, congestion of blood in lower lobes of both lungs right 21, left 25, heart 9½.	Omentum & mesentery unusually fat, stomach large 7½, liver 54, spleen 6, pancreas 3½, each kidney 5½, capsules 1 ; body fat 157lbs ; height 5 feet 9 inches.

OBITUARY, *continued*.—MALES.—1866.

Date of Death. 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES. And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
March 1, 1. pm. 1248 and 291	Aug. 17, 1863.	44. Single.	Dementia ; indifferent health.	Many years; love.	Fever, enteritis.	Brain natural 48¼ ; spinal cord natural, 1.	Pleuritic adhesions on both sides, emphysema of upper lobes, right 18½, left 20 ; heart 8.	Mucous membrane of intestines dark coloured and thickened, stomach 5½, liver 44, spleen 4½, pancreas 2½, right kidney 5¾ left 5½, capsules ½ oz. ; weight of the body 106 lbs, length, 5ft. 7in.
March 9, 3 30 a.m. 939	Feb. 15, 1860.	44. Single.	Epilepsy combined with dementia ; indifferent health.	From birth,	Gangrene of left lung, pleuritis.	Right cerebral hemisphere ½ oz. heavier than left, more fluid than natural in ventricles, encephalon small 36¼ ; spinal cord rather soft ¾.	Recent adhesions lymph on left lung, 2 pints of fluid by measure on left pleura, upper lobe partly gangrenous, 8, right 13, left 15½, heart 7½	Weight of stomach 5¾, liver 39, spleen 3¼, pancreas 1¾, right kidney 2½, left 3¼, capsules ½ ; weight of body 99 lbs. length 4ft. 10 inches.
Mar. 11, 3. a.m. 304 and 37	June 27, 1851.	78. Widowed.	Melancholia recurrent ; third attack ; indifferent health.	Fifteen years; grief, domestic affliction, ill conduct of his son, and death of his wife.	Cancerous tubercles in left pleura and hydrothorax, meningitis.	Dura mater unusually adherent, opacity of the arachnoid, the ventricles distended with fluid, encephalon large 53¼ ; upper third of spinal cord soft, 1¼.	Six pints of fluid by measure in the left pleura, cancerous tubercles from size of a pea to a pigeons egg on the costal pleura, left lung much compressed by the fluid, it contained a few tubercles, right 23, left 9 ; heart 10½.	Ileum unusually red ; stomach 4¼, liver large 114¾, spleen 4, pancreas 3, right kidney 4¾, left 6, capsules ¾ oz., weight of the body 134 lbs. length 5ft. 7 inches.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
April 21, 7.15 p.m. 846	Dec. 27, 1858.	55. Single.	Mania; first attack; good health.	Ten years; intemperate habits.	Inflammation and ulceration of colon, and stricture of the rectum, tympanitis.	Brain natural above the average weight 50¾; spinal cord rather soft 1.	No pleuritic adhesions, the lower lobe of right lung congested with blood 25, left 19, heart 10.	Enormously distended colon thickened 13 in. in diameter, interior red, the rectum contracted, a ring of ulceration four inches above the sphincter; small intestines natural, slight redness of mucous membrane of the stomach 7, liver 43, spleen 3½, pancreas 2½ right kidney 4½ left 4 renal capsules 1. Body 147 lbs; height 5ft. 6in.
April 29, 7.30 p.m. 1498	April 7, 1866.	66. Widowed.	Dementia; first attack; bad health.	Seven weeks; bodily illness.	Meningitis, pleuro-pneumonia.	The cerebral ventricles dilated and filled with fluid, 48½.	Recent lymph on pleura on left side, a portion of lower lobe hepatized; congestion of blood in right 24½, left 24; heart 10½.	Stomach 6½, liver large congested with blood 62¾, spleen 5¾ pancreas 2¼, right kidney 5½, left 5½, renal capsules ¾. Body 147 lbs, height 5ft. 6 inches.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death, Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
May 14, 4.30 a.m. 1465.	Oct. 1, 1865.	49. Single.	Mania and general paralysis; first attack; indifferent health.	Nineteen months; hereditary predisposition	Meningitis, myelitis, pleuro-pneumonia.	Opacity of the arachnoid, ventricles distended with fluid about four ounces encephalon 51½; spinal cord soft creamy at upper part 1¼.	Three pints of fluid by measure in left side recent lymph on surface of lung, the upper lobe of lung in second stage of pneumonia; lower lobe of right lung in first stage of pneumonia, 40, left 35; heart large 12¾.	Stomach 7, liver 65, spleen 6¾, pancreas 3½, right kidney 6, left firmly adherent at the lower part in which was an abscess size of a walnut 6; weight of the body 135 lbs, length 5ft. 11 in.
June 8, 4.15 p.m. 1509	May 29, 1866.	45. Married,	Mania; indifferent health.	Three weeks: first attack; no cause assigned.	Congestion of blood in the brain, and right lung, maniacal exhaustion.	The cerebral vessels congested with blood, brain large and rather soft, 53¼; spinal cord 1¼.	No pleuritic adhesions, congestion of blood in lower lobe, right lung 23, left 13; heart 8½.	Intestines were natural, stomach 5, liver 45, spleen 5¼, pancreas 3, right kidney 3¾, left 4, renal capsules ¾, body wasted 90 lbs, length 5 ft. 7 inches.
Aug. 13, 5 p.m. 1519.	July 9, 1866.	39. Married,	Mania; indifferent health.	Six weeks; no history of case.	Double pneumonia.	The brain firm, much above the average size 54½; middle portion of spinal cord, soft 1.	Old pleuritic adhesions on both sides, both lungs in first stage pneumonia, right 33, left 45; heart 11.	Intestines were natural, stomach 6½, liver 66, spleen 7, pancreas 3, right kidney 4, left 5, renal capsules 1, weight of body 107 lbs; length 5 ft. 5 in.
Aug. 25, 6.30 p.m. 1516.	June 26, 1866	20. Single,	Epilepsy combined with mania; indifferent health.	Five and half years; fever.	Arachnitis, erysipelas.	Opacity of the arachnoid, more fluid than usual in the lateral ventricles, skull rather thick, encephalon, 44½; spinal cord 1½.	No pleuritic adhesions, each lung weighed 14 ozs.; heart small, 5½.	Redness of mucous membrane of stomach 5½, liver 50, spleen 4½, pancreas 3, right kidney 2½, left 5, renal capsules ¾; body 97 lbs, length 5 ft. 5in.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois.		
						HEAD AND SPINE.	THORAX.	ABDOMEN.
Sept. 14. 7 p.m. 1125.	March 1 1862.	53. Single,	Idiocy combined with epilepsy; bad health.	From birth; congenital deficiency.	Myelitis, pneumonia.	Congestion of blood in cerebral vessels, brain small 38½; lower portion of spinal cord softened, 1.	Pleuritic adhesions, lower lobe of left lung in advanced stage of pneumonia, right 14, left 31; heart 8.	Intestines were natural, stomach 4½, liver 37, spleen 6, pancreas 3, each kidney 3, renal capsules ½, weight of body 90 lbs; length 5 ft. 1 inch.
Sept. 27, noon 1526.	July 31, 1866.	63. Married,	Dementia; bad health.	Four months; first attack.	Ulceration of colon, dysentery.	Brain natural, appearances large 53½; spinal cord 1¼.	Emphysema of anterior edges of lungs, right 17½, left 15; heart 9.	Mucous membrane of colon, dark coloured & ulcerated throughout; stomach 6, liver 51, spleen 3¾, pancreas 2½, right kidney 3½, left 4, renal capsules ¾; body wasted 87 lbs, length 5 ft. 5 in.
Oct. 10, a.m. 1539.	Sept. 8, 1866.	75. Married,	Mania; bad health.	Upwards of Three years; first attack; bodily illness.	Cancer, suicide by hanging. Inquest.	NO POST MORTEM EXAMINATION.		
Oct. 13, 5.30 a.m. 1447.	July 21, 1865.	34. Married,	Mania: indifferent health.	Sixteen months; second attack; poverty.	Myelitis, general paralysis.	Brain appeared natural. 41½; spinal cord soft, 1½.	Recent pleuritic adhesions, right lung 19½, left 15; heart 9.	A tapeworm in colon, stomach 5, liver 36, spleen 4, pancreas 2, right kidney 5, left 5½, renal capsules ½; body 77 lbs., length 5 feet.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES. And weight of the various Organs in Ounces Avoirdupois.		
						HEAD AND SPINE.	THORAX.	ABDOMEN.
Oct. 15, 11.15 a.m. 1476.	Nov. 22, 1865.	50. Married,	Mania; indifferent health.	Two and half years; first attack; sun stroke.	Arachnitis, emphysema pulmonary tubercles.	Opacity of arachnoid, more fluid than natural in ventricles, encephalon 47¼; spinal cord, 1¼.	Emphysema of both upper lobes, right 17¼, tubercles and a small cavity size of a walnut in left apex, 28; heart 8¾.	Intestines were natural, stomach 6, liver 49, spleen 3, pancreas 2¾, right kidney 5¼, a small cyst in left 4¾, renal capsules ¾, body 110 lbs., length 5 ft. 5 inches.
Oct. 15, 2.30 p.m. 1544.	Oct. 4, 1866.	63. Married,	Melancholia; bad health; refused food.	Four months; second attack; no cause assigned.	Erysipelas, pneumonia, meningitis.	Dura mater adherent, opacity of arachnoid, more fluid than natural in ventricles; and blood in vessels, encephalon 46, spinal cord not examined.	No pleuritic adhesions, lower lobes of both lungs hepatized, right 35, left 38; heart 9½.	Organs natural, weight of stomach 5½, liver 4, spleen 1¾, pancreas 2, right kidney 4½, left 5, renal capsules ¾; body 101 lbs. length 5 ft. 3 inches.
Nov. 7, 12.45 p.m. 1510.	June 11, 1866	22. Single,	Melancholia; bad health.	Six months; first attack; illness, pulmonary phthisis.	Pulmonary phthisis, dysentery.	Dura mater distended, brain large, congestion of blood in cerebral vessels 50; spinal cord firm, 1.	Old pleuritic adhesions, a few tubercles in upper lobe right, 22, a large cavity size of a turkey egg, in left apex, 18½, heart 9½.	Mucous membrane of colon, red and rough throughout, stomach 4, liver 44, spleen 3½, pancreas 2½, right kidney 3½, a scrofulous abscess size of a hazel nut about the centre, left 4½, renal capsules ¾, body wasted 72 lbs., length 5 ft. 3 inches.

OBITUARY, *continued*.—MALES.—1866.

Date of Death. 1866.	Date of last Admission	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Nov. 7, 3.45 p.m. 1540.	Sept. 28, 1866	68. Single,	Dementia; bad health.	From birth; imbecile.	Meningitis, pneumonia.	Skull flat on top, thick; dura mater loose, anterior hemispheres atrophied, opacity of arachnoid, much fluid in ventricles, white deposits on cerebral arteries, encephalon 41 ; spinal cord, 1.	Emphysema of upper lobes both lungs, right 12. lower lobe left lung red, hepatized, 21, heart 10½.	Intestines were natural stomach 4, liver 36, spleen 2½, pancreas 2, right kidney 4, left 3, renal capsules ½; body short, wasted, 70 lbs., length 4 ft. 10 inches.
Nov. 12, 1 p.m. 1030.	March 6, 1861.	55. Married,	Epilepsy combined with mania; bad health.	Several years.	Epilepsy, pneumonia.	Cerebral vessels congested with blood, bloody specks in the cerebral structures. encephalon 46 ; the spinal cord, 1½.	Lower lobe right lung in first stage of pneumonia 22 ; congestion of blood in lower lobe of left 19 ; heart 8.	Intestines were natural, stomach 5½, liver 41, spleen 3, pancreas 3½, right kidney 4½, left 5½, renal capsules ¾, body 108 lbs., length 5 ft. 5 inches.
Nov. 13, 1 a.m. 1523.	July 27, 1866.	75. Widowed.	Fatuity ; bad health.	Six months ; natural decay ; old age.	Meningitis, pneumonia.	The dura mater preternaturally adherent, brain wasted, atheromatous deposits in cerebral arteries congestion of blood in veins 44 ; spinal cord natural 1¼.	No pleuritic adhesions, the anterior edges of lungs emphysematous red softening of lower lobe right 24, congestion of blood in left 18 ; heart 10½.	Intestines were natural stomach 4, liver 36, spleen 3, pancreas 2 right kidney 3, left 5½, capsules ¾; body 95 lbs, length 5ft. 4in.

OBITUARY, *continued*.—MALES.—1866.

Date of Death. 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Nov. 23, 8 p.m. 1220. and 447	Mar 12. 1863.	71. Married,	Mania; recurrent indifferent health.	Three years; intemperate habits ; 2nd, attack,	Meningitis, pneumonia.	Dura mater strongly adherent to skull, right cerebral hemisphere 20½, left 20¾, cerebellum 5, medulla and pons 1, encephalon 47 ; spinal cord soft 1¼.	Old pleuritic adhesions, on both sides. lower lobe right lung in first stage pneumonia 27, congestion of blood in lower lobe left 20, heart large, fatty, flabby, bony deposit in aortic semilunar valves.	The intestines natural, stomach 6½, liver 52, spleen 5¾, pancreas 2¾, each kidney 4½, renal capsules ¾; body 125 lbs. ; length 5 ft. 5 inches.
Nov. 24, 5 p.m. 1526.	Aug. 1, 1866.	56. Married,	Dementia; and general paralysis, indifferent health.	Six months; cause not ascertained.	Meningitis myelitis ; pneumonia.	Dura mater firmly adherent to the skull, brain firm, right cerebral hemisphere 19, left 18¾ : cerebellum 4½, medulla and pons 1, encephalon 43¾ : spinal cord soft 1, blood in the spinal canal.	No pleuritic adhesions, the lower lobe right lung in the first stage of pneumonia 31, congestion of blood in lower lobe left 24 ; heart 7.	Intestines dark coloured, stomach 5¾, liver 40, spleen 6, pancreas 2, right kidney 2¼ left 3½, renal capsules ¾, body 90 lbs. ; height 5ft. 2 inches,

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois.		
						HEAD AND SPINE.	THORAX.	ABDOMEN.
Nov. 27, 3. a.m. 1528.	Aug. 4, 1866.	53. Married,	Mania; indifferent health.	Five months; religious excitement; first attack.	Enteritis, pneumonia.	Brain large, each cerebral hemisphere 23, cerebellum 5½, medulla and pons 1, encephalon 52½.	No pleuritic adhesions, the lower lobe right lung in 1st stage of pneumonia 30, congestion of blood in lower lobe 24; heart 10½.	Mucous membrane of the small intestines of a dark purple colour, inflamed, stomach 9, liver large 67, spleen 8, pancreas 2½, right kidney large, pelvis dilated 8½, left 4½, renal capsules 1; body 135 lbs; lenght 5ft. 10 inches.
Dec. 3, 1.30 a.m. 1550.	Nov. 20, 1866.	36. Married,	Mania; indifferent health.	Three weeks; intemperance first attack.	Meningitis, enlarged heart.	Dura mater strongly adherent to the skull, congestion of blood in the cerebral vessels right hemisphere 22¼, left 22¼, cerebellum 5¾ medulla and pons 1, encephalon 50¾; spinal cord 1½.	Lungs appeared natural right 20, left 18; heart enlarged 13¾.	Stomach 7, liver 60, spleen 4¾, pancreas 2, right kidney 5½, left 5¾, renal capsules ¾.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois.		
						HEAD AND SPINE.	THORAX.	ABDOMEN.
Dec. 12, 9.30. a.m. 1435.	June 15, 1865.	48. Married,	Dementia; and general paralysis, indifferent health	Two years; meningitis; first attack.	Fluid in the brain, pulmonary apoplexy.	Opacity of the arachnoid, brain large, 52, the grey matter paler than natural, the ventricles distended with fluid, a considerable quantity escaped when the dura mater was opened, right hemisphere 1 ounce heavier than left; cord 1½.	Congestion of blood in patches on the lower lobes of both lungs, right 29, left 28; heart natural 9.	Organs large, stomach 6½, liver 65, spleen 4½, pancreas 3, right kidney 5½, left 5¾, renal capsules ¾; body fat 140lbs. length 5ft. 9in.
Dec. 13, 5 a.m. 1549.	Nov. 16, 1866.	71. Widowed.	Mania; bad health.	Six weeks; pulmonary disease; 1st attack.	Asthma, enteritis.	Brain appeared natural, on each side of the pons a small quantity of blood was effused beneath the arachnoid, 49; spinal cord 1½.	Pleuritic adhesions on left side, cadaveric congestion in lower lobe right 21, left 14, emphysema of upper lobes; heart 8.	Mucous membrane of large intestines thickened and discoloured, dark brown, stomach 5¾, liver 42, spleen 2, pancreas 2, right kidney 3, left 3½, renal capsules ¾; body thin 97 lbs, length, 5ft. 9 inches.

OBITUARY, *continued.*—MALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Dec. 18, 7 p.m. 1450.	Aug. 7, 1865.	46. Married,	Melancholia; indifferent health.	Two years and a quarter; first attack grief.	Pneumonia.	Brain large, 59; spinal cord natural $1\frac{1}{2}$.	Recent pleuritic adhesions on left side, congestion of blood in lower lobe right 27, left lung solid in an advanced stage of pneumonia, purulent matter oozing from cut surfaces 65; heart large 14.	Intestines were natural, stomach 6, liver large 103, spleen 5, pancreas 4, right kidney 7, left $7\frac{1}{2}$, renal capsules 1. Body large and fat 190 lbs, length 5ft. 11 inches.
Dec. 22, 7 30. a.m. 1460.	Sept. 2, 1865.	25. Single,	Epilepsy combined with idiocy indifferent health.	Since birth; congenital.	Spinal apoplexy double pleuro pneumonia,	Brain large 53, structure natural. From 3 to 4 ounces of fluid blood in the spinal canal, cord $1\frac{1}{4}$.	About 2 pints of fluid in the chest, the lower lobes of both lungs in the first stage of pneumonia, right 43, left 35; heart $10\frac{1}{2}$.	The intestines natural, stomach large, $7\frac{1}{2}$, it contained a tape worm 25 feet long, liver 52, spleen 7 pancreas 3, right kidney $4\frac{3}{4}$, left 5, renal capsules $\frac{3}{4}$. Body fat 148 lbs; lenght 5ft. 7in.

OBITUARY.—FEMALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Jan. 8, 1. p.m. 1296.	Nov. 21, 1864.	64. Married.	Mania; indifferent health.	Three years; first attack; anxiety.	Inquest case. Chronic cerebritis, asthma, accidental fall down three steps, both bones of right leg broken, three weeks before death.	Membranes natural, the brain unusually firm, the lateral ventricles dilated to admit the fore finger, encephalon 39, spinal cord also very firm $1\frac{1}{4}$.	No pleuritic adhesions, cadaveric congestion of right lung 20, left $9\frac{1}{2}$; emphysema of upper lobes lungs, heart 8.	Intestines were natural, stomach 5, liver 52, spleen $2\frac{3}{4}$, pancreas 2, right kidney $4\frac{1}{2}$, left $4\frac{1}{2}$, renal capsules $\frac{3}{4}$, uterus $2\frac{1}{2}$, body 105 lbs., length 5ft. 5 in.
Feb. 4, 7. a.m 1237 and 910.	May 9, 1864.	46. Married.	Melancholia; indifferent health.	Two years; second attack, suicidal, no cause assigned.	Hydrothorax, purpura; affecting thighs.	The cerebral ventricles rather dilated and filled with fluid, encephalon $47\frac{3}{4}$, spinal cord natural $1\frac{1}{4}$.	No pleuritic adhesions, 2 pints of fluid by measure in the chest, lower lobe of right lung compressed like a piece of leather 15, left 13; heart small 7.	Intestines dark coloured, stomach 6, liver $40\frac{3}{4}$, spleen $3\frac{1}{2}$, pancreas 3, right kidney $4\frac{1}{2}$, left $4\frac{3}{4}$, renal capsules $\frac{3}{4}$ uterus $3\frac{1}{4}$; body 102 lbs. length 5 feet.
Feb 7. 2.15 p.m 1403.	Dec. 4, 1865.	64. Married.	Epilepsy; bad health.	Two years; first attack; fright.	Cerebritis; epileptic fits.	Brain soft, especially at the anterior and lower portions of left cerebral hemisphere, it was of a dark brown colour, encephalon small, 35, spinal cord 1.	Pleuritic adhesions on the right side only, right lung $8\frac{1}{2}$, left 12; heart 7.	Intestines were natural, stomach 5, liver was small 28, spleen 2, pancreas 2, right kidney 3, left $3\frac{1}{4}$, renal capsules $\frac{3}{4}$, uterus 3; body 77 lbs. length 5 feet.

OBITUARY, *continued*.—FEMALES.—1866.

Date of Death. 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Feb. 21, 9 15 a.m. 1205.	Dec. 18, 1863.	29. Single.	Idiocy; indifferent health.	From birth: congenital.	Pericarditis; cardiac dropsy.	Brain small, pale, in other respects natural, encephalon $38\frac{1}{4}$ spinal cord natural $1\frac{1}{4}$.	Dense pleuritic adhesions, two pints of fluid by measure in the chest, a few tubercles in the lungs, right 13, left 12; heart and pericardium firmly adherent, the latter much thickened, covered with lymph, heart enlarged, 12.	Peritioneum distended with straw coloured fluid, redness of the mucous membrane of the colon; weight of stomach $5\frac{1}{2}$, liver 50, spleen hard and enlarged $7\frac{3}{4}$, pancreas $2\frac{1}{2}$, kidneys large, structure pale, surface, smooth under capsules, each 5, renal capsules $\frac{3}{4}$, uterus 2; weight of body 91 lbs. length 4 ft. 9 inches; general anasarca.
March 1, 9.30 p.m. 721.	Oct. 19, 1857.	59. Single.	Mania; bad health.	Twelve years - first attack: bodily illness.	Pleuro-pneumonia.	Brain natural. $48\frac{1}{4}$; spinal cord natural $1\frac{1}{4}$.	Recent pleuritic adhesions on left side only, pneumonia in second stage in upper lobes right lung 25, left $11\frac{1}{2}$; heart $8\frac{1}{2}$.	Weight of stomach $4\frac{3}{4}$, liver 46. spleen $5\frac{1}{2}$, pancreas $2\frac{3}{4}$, right kidney 4. left $4\frac{1}{4}$, renal capsules $\frac{1}{4}$, uterus $1\frac{3}{4}$; body, fat, 126 lbs length 5ft. 3 in.
March 9, 3.45 a.m. 41 9	Feb. 21, 1853.	41. Single.	Epilepsy combined with dementia, good health.	From birth; hereditary on Father's side.	Pulmonary tubercles, pneumonia.	More fluid than natural in ventricles, encephalon $42\frac{1}{4}$; spinal cord rather soft $1\frac{1}{2}$.	Pleuritic adhesions on both sides, tubercles and pneumonia lower lobes, each lung 27; heart $8\frac{3}{4}$.	Intestines were natural, stomach $4\frac{1}{4}$, liver $44\frac{1}{2}$, spleen $4\frac{3}{4}$ pancreas $2\frac{1}{4}$, right kidney $3\frac{1}{4}$, left $3\frac{1}{4}$ renal capsules $\frac{3}{4}$; uterus $2\frac{3}{4}$; body 88 lbs, length 5 ft. 4in.

OBITUARY, *continued*.—FEMALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES. And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
March 9, 5 a.m. 1333.	April 8, 1865.	41. Married.	Dementia; indifferent health.	Two years; first attack; bodily illness.	Chronic cerebritis.	Brain small, structure unusually tough and firm the ventricles distended with fluid, 34; spinal cord tough $1\frac{1}{2}$.	No pleuritic adhesions, organs natural, right lung 12; left $9\frac{1}{2}$; heart 7.	Weight of stomach 5, liver 42, spleen $5\frac{1}{4}$, pancreas $1\frac{1}{2}$, right kidney $4\frac{1}{2}$, left $4\frac{1}{2}$, renal capsules 1, uterus $1\frac{1}{2}$; body small, wasted 57 lbs, length 4 ft. 6 in.
April 21, 2 p.m. 1220. and 752	Feb. 27, 1864.	56. Married.	Mania, recurrent; bad health.	Two years and a quarter; third attack; bodily illness.	Meningitis;	Purulent matter along the cerebral veins on both hemispheres, brain rather pale and soft 46; cord natural $1\frac{1}{4}$.	No pleuritic adhesions, cadaveric congestion of blood in lungs, right 18, left $16\frac{1}{2}$; heart $7\frac{1}{2}$.	Intestines were natural. stomach 7, liver 50. spleen 4. pancreas $2\frac{1}{2}$. right kidney in which was a small cyst $3\frac{1}{2}$, left $5\frac{1}{4}$, renal capsules 1, uterus $2\frac{1}{2}$; body 109 lbs. length 5 ft. 3 in.
May 5, 1.30 p.m. 1435.	April 12. 1866.	43. Single.	Mania; bad health, refused food.	Six weeks. always imbecile.	Phlegmanous erysipelas.	NO POST MORTEM EXAMINATION.		
May 24, 1 a.m. 804 and 355	Sept. 30 1858.	76. Married	Mania; bad health.	Fourteen years 2nd attack.	Meningitis; asthma, pulmonary tubercles.	Dura mater firmly adherent, congestion of blood in cerebral veins. above 2oz. of fluid in ventricles, brain soft, small $37\frac{1}{2}$.	Old pleuritic adhesions on left side, clusters of turbercles in left lung, a few in apex of right lung, other portions emphysematous, $16\frac{1}{2}$, left 12; heart filled with pale fibrine 7.	Organs small, stomac[h] $2\frac{1}{2}$. liver 37, sple[en] $4\frac{1}{2}$. pancreas $2\frac{3}{4}$, righ[t] kidney $3\frac{1}{4}$, left $3\frac{1}{4}$, renal capsules $\frac{3}{4}$, uteru[s] 1; body much emaciated 41 lbs. length 4 feet 9 inches.

OBITUARY, *continued*.—FEMALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
June 5, 9.30, a.m. 1056.	Mar. 26, 1862.	66. Single.	Mania; blind and deaf, bad health.	Five years; previous illness.	Meningitis; asthma.	Dura mater adherent, lateral ventricles very much dilated and distended with fluid. encephalon 44; spinal cord soft, 1½.	No pleuritic adhesions, the anterior of both lungs emphysematous, right 19, left 22; heart 8½.	Intestines were natural. stomach 6½. liver 38, spleen. soft, 7½. pancreas 2¼, right kidney 4½. left 4½, renal capsules ½, uterus 1½, body 123 lbs., length 5 ft. 6 inches.
July 5. 2.15 p.m. 1413.	Jan. 9, 1866.	69. Single.	Dementia, fatuity; indifferent health.	Three years and half; helpless.	Fluid in the brain, emphysema of the lungs.	The lateral ventricles dilated and distended with fluid, encephalon 49½; spinal cord natural 1.	No pleuritic adhesions, emphysema of the anterior edges of the upper lobes of both lungs, right 19, left 11½; heart small 5.	Organs small, stomach 5, liver 20, spleen 1½, pancreas 1½, right kidney 3, left 3½, capsules ½; uterus 2¾; intestines natural; body 74 lbs, length 5ft
July 7, 8.15 a.m. 817.	Dec. 30, 1858.	53. Married.	Melancholia; bad health.	Eight years and half; first attack; ill health.	Asthma; ulceration of the stomach.	Brain appeared natural 45½; spinal cord natural 1.	No pleuritic adhesions, the lungs emphysematous, right 14. congestion of blood in left, 29; the heart small 4½ oz.	Mucous membrane of intestines thickened, an ulcer size of half a crown, with raised edges near the pyloric orifice of stomach 4½. liver 33. spleen 4, pancreas 2, right kidney 3, left 3½, renal capsules ½. uterus 2¼; body emaciated 64 lbs. length, 4t. 10 inches.

OBITUARY.—FEMALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Aug. 25, 3 p.m. 16.	April 1, 1848.	55. Married.	Mania, remittent; indifferent health.	Thirty four years; first attack; hereditary on Father's side.	Epilepsy fluid in brain, arachnitis.	The pacchionian bodies large, deep indentations opposite them in skull. lateral ventricles distended with fluid, encephalon 4¾, gritty particles unusually large in pineal gland, corpus striatum ¼ oz. optic thalamus 2 drachms.	No pleuritic adhesions, cadaveric congestion of the lower lobe of right lung 21, left natural 12; heart large and fatty, valves healthy 11½.	The intestines natural, stomach 6. liver 49, spleen 2. pancreas 2½, right kidney 3½. left 4, renal capsules ¾, uterus large 3½; body 118 lbs.; length 5 ft. 3 inches.
Sept. 18, 2 a.m. 838 and 444.	Feb. 21, 1859.	37. Married.	Epilepsy combined with mania; indifferent health.	Many years; first attack; hereditary.	Epilepsy pleurisy.	Brain appeared natural, encephalon 47½.	Pleuritic adhesions on left side and recent lymph on costal pleura, 3½ pints of serum and pus left lung atrophied, compressed, right 21; heart small 6¾.	Stomach 4½, liver large 6½, spleen 6. pancreas 2½. right kidney 5¾. left 6¾. renal capsules 1, uterus 3; body 95 lbs, length 5ft. 3 in.
Sept. 29, 8.30 p.m 678 and 516	Jan. 17, 1857.	56. Single.	Mania; recurrent indifferent health.	Nine years; third attack; hereditary.	Pleurisy.	Brain appeared natural, 44½, spinal cord 1½.	Two pints of fluid by measure on the right side, the pulmonary pleura thickened and the lung compressed, 15. left 15½, emphysematous; heart 7½.	Mucous membrane of intestines thickened. stomach 5½. liver 42, spleen 3, pancreas 2½, right kidney 4½, left 4½, renal capsules ½, uterus 2; body 110 lbs. length 5ft. 3in.

OBITUARY, *continued.*—FEMALES.—1866.

Date of Death, 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Oct. 18, 4 a.m. 1361	May 29, 1865.	71. Single.	Mania; indifferent health.	Eighteen months; first attack; no cause assigned.	Meningitis, renal calculi.	Dura mater firmly adherent, opacity of the arachnoid, the ventricles contained about 5 ounces of fluid, encephalon 41¾; spinal cord natural, 1.	No pleuritic adhesions, emphysema of upper lobes of both lungs, right 12, left 6½; heart 8½ oz.	Intestines were natural, stomach 5, liver 30, spleen 3, pancreas 2½, right kidney 3¾, left 3½, renal capsules ¾; uterus, body 90 lbs, length 4ft. 10in.
Oct. 18, 3.30 a.m. 1459	June 12, 1866.	90. Widow.	Fatuity; indifferent health.	One year; first attack; old age.	Natural decay.	More fluid than usual in the cerebral ventricles; the brain pale, 38¼; spinal cord natural 1.	No pleuritic adhesions, the lungs emphysematous, right 7, left 6; heart 7.	The intestines natural, stomach 4½, liver 31½, spleen 7½ pancreas 2½, right kidney 2¾, left 3½, renal capsules ¾, uterus 2; body 78 lbs. length 5 feet.
Nov. 20, 4.45 a.m. 1415	Jan. 24, 1866.	49. Widow.	Melancholia; bad health.	One year; anxiety; refused food.	Marasmus.	The brain firm, pale, 42¼; spinal cord firm 1.	No pleuritic adhesions, the organs small, right lung 6½, left 7½, heart 4½.	Organs were wasted, stomach contracted appeared thickened, 5, liver 27, spleen 3¼, pancreas 2, right kidney 3, left 3½, renal capsules ¼, uterus 2, body emaciated, only 65 lbs. length 5ft. 2in.
Nov. 24, 2.45 p.m. 1480.	Aug. 15, 1866.	60. Married.	Mania; indifferent health.	Four months; 1st attack poverty; illness.	Pulmonary Phthisis.	Brain appeared natural, 43¾; spinal cord 1.	Pleuritic adhesions on the left side only, congestion of blood in the lower lobe right lung 26, miliary turbercles in upper lobe left, a portion of dark coloured, gangrenous, 22; heart 6½.	Intestines were natural, stomach 5, liver 39, spleen 4, pancreas 2½, right kidney 4, left 4½, renal capsules ¾, uterus 2½; body thin, 87 lbs. length 5ft. 2in.

OBITUARY, *continued.*—FEMALES.—1866.

Date of Death 1866.	Date of last Admission.	Age at Death. Civil State.	Mental State and Bodily Condition on Admission.	Duration and Cause of Disorder.	Assigned Cause of Death.	POST-MORTEM APPEARANCES, And weight of the various Organs in Ounces Avoirdupois. HEAD AND SPINE.	THORAX.	ABDOMEN.
Dec. 14, 2.30 a.m 1468	July 9, 1866.	42. Widow.	Dementia; and general paralysis, bad health.	Nine months.	Myelitis; general paralysis.	The ventricles contained more fluid than natural, encephalon 41¼; the spinal cord soft 1¼	Pleuritic adhesions on the left side only, each lung 11; heart 7.	Intestines were natural, stomach 5¼, liver 44, spleen 2½, pancreas 1¾, right kidney 3½, left 3¾, renal capsules ¾, uterus 1¾; body emaciated, 74 lbs. length 5 feet.
Dec. 18, 3.30 a.m. 982.	April 20 1861.	51. Single.	Melancholia; bad health.	Nine years, first attack; grief.	Pulmonary Phthisis, ulceration intestines.	Brain pale, firm, 46½; spinal cord natural 1¼.	Pleuritic adhesions on both side, tubercles in both lungs, most numerous in the right, 32, left 20; heart small 5.	Ulcers in small intestines stomach 4, liver 32, spleen 3¼, pancreas 1¼, right kidney 3½, left 4, renal capsules ¾, uterus 1½; body emaciated 67 lbs. length 5ft 2 in.
Dec. 31, 8.00. a.m. 1487.	Oct. 1, 1866.	30. Married.	Mania; bad health.	Five months; 2nd attack.	Cachexy; pneumonia left.	Brain small 30, structure appeared natural, spinal cord ¾.	Organs small, the lower lobe right lung in the first stage of pneumonia 15; left 6; heart 5½.	Marks of ulceration in cæcum, organs small, stomach 3½, liver 39, spleen 2½, pancreas 1¾, right kidney 3½, left 4¾, renal capsules ¾, uterus 1½; body 67 lbs. length 5 feet.
Dec. 31, 1.30 p.m. 1313.	Feb. 11, 1865.	31. Single.	Dementia; bad health.	Two years; 1st attack; poverty.	Paralysis; double pneumonia.	Brain appeared natural, 39; spinal cord firm 1¼.	The lower lobe of both lungs in the first stage of pneumonia, right 29, left 28; heart 9.	Intestines were natural, stomach 6, liver 60, spleen 6, pancreas 3, right kidney 5, left 6, renal capsules ¾, uterus 3¾; body 102 lbs. length 5ft. 5in.

ORDINARY DIETARY.

For Breakfast.

Coffee,|| or broth,† 1½ pint for males, 1 pint of coffee for the females; bread 8 oz. for the males, 7 oz. for females, and ½ oz. of butter is allowed for each patient; those who have broth have no butter.

For Dinner.

On Mondays, Wednesdays, Thursdays, Fridays, and Saturdays, ½ pound of uncooked meat, including bone, with one pound and a half of vegetables for the males and one pound for the females; and a half pint of beer or cider is allowed for each patient. On Sundays a pound of suet pudding or rhubarb pie. On Tuesdays one pint and a half of stew‡ and 4 oz of bread, and a half pint of cider or beer.

For Supper.

The same as for breakfast, substituting tea and milk for broth or coffee.

For Lunch.

The working patients have each, at 11 o'clock, 2 oz. of bread and three-fourths of an ounce of cheese, and half a pint of beer, or cider, and the same allowance of beer or cider in the afternoon, ; about 3 lbs. of rag tobacco are distributed each week amongst the working male patients.

|| The coffee is made by boiling 6 lbs. of ground coffee with 6 lbs. of sugar in 32 gallons of water for ten minutes, to which is added 2½ gallons of new milk, The tea is made by substituting 2 lbs. of tea for 6 lbs. of coffee.

† The broth is made from 32 gallons of the water in which the meat had been boiled the previous day, 8 gallons of milk, 10 lbs. of onions, 1 lb. of salt, 20 lbs. of flour, and 4 ounces of pepper.

‡ The stew is made by boiling the bones (which are pounded) for seven hours in 36 gallons of water with the addition of five shins and 16 lbs. of stickings of beef, 12 lbs. of rice, ½ lb. pepper, 2½ lbs. of salt, 6 sticks of celery, a bunch of sweet herbs, 3 pecks of onions, some white cabbages, and a few potatoes, or, Jerusalem artichokes; occasionally 30 lbs. of flour is added.

This quantity is sufficient for 400 persons.

RATIONS FOR THE ATTENDANTS AND SERVANTS WEEKLY ALLOWANCE FOR EACH.

MALES.		FEMALES.	
Meat	7 lbs.	Meat	5½ lbs.
Flour	1 ,,	Flour	1 ,,
Vegetables	14 ,,	Vegetables	10½ ,,
Bread	7 ,,	Bread	7 ,,
Butter	½ ,,	Butter	½ ,,
Cheese	½ ,,	Cheese	½ ,,
Tea	3 oz.	Tea	3 ,,
Sugar	8 ,,	Sugar	8 ,,
Mustard	½ ,,	Mustard	½ ,,
Pepper	¼ ,,	Pepper...	¼ ,,
Vinegar	¼ pint.	Vinegar	¼ ,,
Milk	3½ ,,	Milk	3½ ,,
Ale or Porter	14 ,,	Ale or Porter	10½ ,,

STOREKEEPER'S RETURN OF TAILOR'S AND UPHOLSTERER'S WORK FOR 1866.

	MADE													REPAIRED					
	Jackets	Neckties	Vest	Trousers	Braces	Drawers	Pillowcases	Stretchers	Flannelshirts	Bedticks	Sheets	Mattresses	Shirts	Jackets	Vests	Trousers	Stretchers	Bedticks	Felling Blankets
January	8	16	21	11	18	0	0	0	0	0	0	0	41	20	25	112	6	0	30
February	7	72	11	6	18	0	72	4	0	0	48	0	48	22	21	121	7	9	0
March	8	0	10	6	16	6	0	3	0	0	0	20	100	25	30	138	4	0	0
April	7	12	10	10	12	6	0	5	0	0	0	4	152	27	21	122	0	12	160
May	8	0	9	6	20	0	0	0	0	0	0	54	0	21	18	124	2	0	70
June	8	0	10	7	38	0	12	0	0	0	0	23	0	23	23	134	3	0	0
July	8	0	7	11	0	0	0	2	0	0	0	9	48	23	26	116	0	24	0
August	11	0	12	8	12	0	72	1	12	0	0	16	0	13	12	111	0	0	0
September	11	0	9	6	26	12	61	0	23	0	0	0	50	21	32	101	9	48	0
October	8	0	3	11	12	12	0	3	19	0	0	6	60	12	17	91	6	0	0
November	10	44	10	9	8	12	0	0	7	54	84	0	0	18	19	101	2	15	0
December	7	70	6	12	16	0	0	0	14	0	0	0	0	21	24	147	1	0	0
Total	101	208	120	105	202	48	217	18	75	54	132	132	400	248	280	148	34	108	260

There were 10 Hats for epileptics made in January, and 16 in April, and 10 in September.—Total 36.

WORK DONE BY SHOEMAKERS IN 1866.

Mens' Boots	123	pairs
.. Shoes	99	..
.. Slippers	30	..
.. Boots repaired	140	..
.. Shoes ditto	150	..
.. Slippers ditto	190	..
.. Boots Soled	132	..
.. Shoes ditto	207	..

Women's Cloth Boots	278	pairs.
.. Canvas ditto	32	..
.. Shoes ditto	137	..
.. Slippers	160	..
.. Repaired	547	..
.. Boo ditto	191	..
.. Shoes and Slippers	150	..

HEAD ATTENDANT'S RETURN OF MALE WORKING PATIENTS FOR THE YEAR 1866

No. of Patients, and how employed.	January	February	March	April	May	June	July	August	September	October	November	December	Total Weeks
ARTISANS.													
In Bakehouse & Brew-house	5	5	5	5	4	4	4	4	4	4	4	4	52
As Carpenters	5	5	5	5	5	5	5	4	5	6	4	4	58
At Furnaces	2	2	2	2	2	2	2	2	2	2	2	2	24
As Masons	10	10	10	8	10	10	8	10	10	10	10	10	116
As Painters & Glaziers	2	2	2	1	2	2	2	3	3	3	2	2	26
In Smith's Shop	2	2	2	2	2	2	2	2	2	2	2	2	24
As Shoemakers	5	5	5	5	5	5	5	5	5	5	5	5	60
As Tailors	2	1	1	2	4	4	3	4	36	6	5	4	42
Total	33	32	32	30	34	34	31	34	37	38	34	33	402
LABOURERS.													
Assisting Attendants	16	16	16	16	18	18	16	16	16	18	16	16	198
On Roadways	4	6	3	2	2	2	4	2	4	2	4	4	39
In removing Earth	4	0	3	4	4	3	2	2	0	2	0	0	24
On Farm	27	27	27	24	26	27	25	29	29	29	26	27	323
In Foul Linen House	3	4	3	3	3	3	3	3	3	3	3	3	37
In Garden	10	10	10	10	10	10	10	10	10	10	10	10	120
In Kitchen	1	1	1	1	1	1	1	1	1	1	1	1	12
At Lime Kiln	4	4	3	3	3	3	2	2	2	2	2	2	32
As Quarrymen	5	4	4	6	6	6	4	4	4	4	4	4	55
In Stone Shed	1	1	0	1	1	1	1	1	1	1	1	1	11
As Coir Pickers	4	4	4	5	4	4	4	4	4	3	4	4	48
In Store Room	1	1	1	1	1	1	1	1	1	1	1	1	12
Total	80	78	75	76	79	79	73	75	75	76	72	73	911

The time of four patients being calculated as equivalent to that of one paid person.

The value of the work done by artisans, at 22s. a-week would amount to £442, and of labourers, at 10s. a week, to £405.—Total 847

RETURN BY THE WORKMISTRESS OF THE EMPLOYMENT OF FEMALE PATIENTS FOR THE YEAR 1866.

No. of Patients, and how employed	January	February	March	April	May	June	July	August	September	October	November	December	Total Weeks
Laundry	17	15	16	22	24	23	24	26	16	24	26	27	260
Kitchen	8	9	7	8	7	6	8	8	9	6	7	5	88
Dress-making	2	1	4	5	3	1	0	1	3	1	2	1	24
Fancy Work	2	1	1	2	2	2	1	2	1	1	2	3	20
Plain Work	38	40	35	39	41	36	30	35	40	32	40	36	442
Upholstery	3	0	2	1	0	0	0	2	0	0	1	1	10
Shoe-binding	1	1	0	1	1	1	1	0	1	1	2	0	10
Knitting	1	1	2	1	3	1	1	2	1	2	1	2	18
Mending	15	10	9	11	8	10	9	11	14	8	10	6	112
Coir Picking	4	7	11	8	10	17	14	16	17	12	13	14	143
Assisting Attendants	14	20	15	20	17	15	14	17	15	14	16	12	189
Out of Doors	0	0	0	12	11	14	22	10	0	10	14	0	93
In the Dining Hall	5	8	9	5	6	7	4	8	6	5	6	7	76
Total	110	113	111	135	133	133	128	138	123	116	140	114	1485

LIST OF THE CLOTHING MADE AND REPAIRED BY FEMALE PATIENTS IN 1866.

Item	Number	Item	Number
Aprons	200	Shrouds	48
Blinds	50	Shirts	500
Bonnets trimmed	50	Stockings (knitted pairs)	12
Hats ditto	12	Ties (for Men)	144
Caps ditto	60	Towels ditto	100
Dusters ditto	218	Flannel (vests)	100
Drawers (pairs)	50	Pillow Slips	300
Gowns ditto	350	Shirts (Repaired)	1728
Shifts ditto	450	Dresses ditto	1920
Skirts ditto	150	Stockings ditto	9600
Skirts (flannel)	162	Shifts ditto	1440
Sheets	418	Flannels ditto	600

Value of labour, estimated as the males, but for females, at 10d. a day, amounts to £445 10s. 0d.

FINANCIAL STATEMENTS

PREPARED BY

THE CLERK,

Pursuant to the 16th & 17th Vic., chap. 97, sec. 58.

…g 31st December, 1866.

…TCHINGS AND …MOVALS — …MOUNT PAID			GRAND TOTAL			ARREARS FROM 1865			TOTAL PAID			ARREARS TO 1867		
	s	d	£	s	d	£	s	d	£	s	d	£	s	d
1	12	8	922	11	0	„	„	„	922	11	0	„	„	„
1	7	6	1,456	0	0	„	„	„	1,455	19	11	„	„	„
1	15	8	28	12	4	„	„	„	28	12	4	„	„	„
„	„	„	699	1	0	„	„	„	699	1	0	„	„	„
„	„	„	675	4	4½	7	4	8	682	9	1	„	„	„
„	„	„	34	19	7	„	„	„	34	19	7	„	„	„
„	„	„	615	7	10	„	„	„	615	7	10	„	„	„
1	11	6	819	4	10	„	„	„	819	4	9	„	„	1
„	„	„	94	11	2	„	„	„	94	11	2	„	„	„
1	8	0	481	14	0	„	„	„	481	14	0	„	„	„
„	„	„	8	12	6	8	16	4	17	8	10	„	„	„
„	„	„	178	0	8	„	„	„	178	0	8	„	„	„
„	„	„	385	11	10	„	„	„	385	11	10	„	„	„
„	„	„	10	14	8	„	„	„	10	14	8	„	„	„
„	„	„	608	13	6	„	„	„	608	13	6	„	„	„
„	„	„	64	8	0	„	„	„	64	8	0	„	„	„
„	„	„	8	16	4	„	„	„	„	„	„	8	16	4
„	„	„	63	17	6	„	„	„	63	17	6	„	„	„
0	12	0	933	5	1	„	„	„	924	8	9	8	16	4
„	„	„	607	4	8	„	„	„	607	4	8	„	„	„
1	4	„	539	10	6	„	„	„	539	10	6	„	„	„
8	3	6	510	10	6				510	10	6			

STATEMENT shewing the sums received and due from Unions and others for the Care and Maintenance, &c., of Patients for the Year ending 31st December, 1866.

NAMES OF UNIONS AND OTHERS.	GENERAL CHARGE TO UNIONS and others, at 1s. 2d. per diem. Quarter Ending March 31st. Days.	Amount. £ s. d.	Quarter Ending June 30th. Days.	Amount. £ s. d.	Quarter Ending September 30th. Days.	Amount. £ s. d.	Quarter Ending December 31st. Days.	Amount. £ s. d.	TOTAL. Days	Amount £ s. d.
Axbridge	3,795	221 7 6	3,965	231 5 10	3,918	228 11 0	4,014	234 3 0	15,692	915 7 4
Bath	4,407	257 1 6	4,677	272 15 6	5,207	303 14 10	4,603	268 10 2	18,894	1102 3 0
Beaminster	90	5 5 0	162	9 9 0	116	6 15 4	92	5 7 4	460	26 16 8
Bedminster	2,974	173 12 0	2,950	172 1 8	2,987	174 4 10	3,045	177 12 6	11,958	697 11 0
Bridgwater	2,535	147 17 6	2,535	147 5 10	2,648	154 9 4	3,174	185 3 0	10,882	634 15 8
Bristol, City	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
Chard	2,589	150 19 4	2,616	152 12 0	2,620	152 16 8	2,597	151 9 10	10,421	607 17 10
Clutton	3,498	204 1 0	3,402	198 9 0	3,488	203 9 4	3,543	206 13 6	13,931	812 12 10
Dulverton	360	21 0 0	364	21 4 8	437	25 9 10	460	26 16 8	1,621	94 11 2
Frome	2,070	120 15 0	2,072	120 17 4	2,042	119 2 4	2,024	118 1 4	8,208	478 16 0
Glanmorgan, County of	90	5 5 0	,,	,,	,,	,,	,,	,,	90	5 5 0
Keynsham	671	39 2 10	818	47 14 4	757	44 3 2	806	47 0 4	3,052	178 0 8
Langport	1,689	98 10 6	1,649	96 3 10	1,631	95 2 10	1,564	91 4 8	6,533	381 1 10
Mere	,,	,,	,,	,,	92	5 7 4	92	5 7 4	184	10 14 8
Shepton Mallet	2,526	147 7 6	2,685	156 12 6	2,545	148 9 2	2,609	152 3 10	10,365	604 12 6
Sherborne	289	16 17 2	273	15 18 6	276	16 2 0	266	15 10 4	1,104	64 8 0
South Molton	,,	,,	,,	,,	,,	,,	92	5 7 4	92	5 7 4
Somerset, County of	270	15 15 0	273	15 18 6	276	16 2 0	276	16 2 0	1,095	63 17 6
Taunton	3,597	209 16 6	3,817	222 13 2	4,177	243 13 2	4,128	240 16 0	15,719	916 18 10
Wellington	2,534	147 16 4	2,851	166 6 2	2,374	138 9 8	2,525	147 5 10	10,284	599 18 0
Wells	2,068	120 12 8	2,187	127 11 6	2,355	137 7 6	2,567	149 14 10	9,177	535 6 6
Williton	2,059	120 2 2	2,117	123 9 10	2,208	128 16 0	2,202	128 9 0	8,586	500 17 0
Wincanton	2,357	137 9 10	2,482	144 15 8	2,357	137 9 10	2,347	136 18 2	9,543	556 13 6
Yeovil	1,370	79 18 4	1,314	76 13 0	1,509	88 0 6	1,471	85 15 2	5,664	330 8 0
J. S.	90	5 5 0	44	2 11 4	,,	,,	,,	,,	134	7 16 4
G. G.	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
W. W.	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
E. C.	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
S. P.	90	5 5 0	91	5 6 2	22	1 5 8	,,	,,	203	11 16 10
L. B.	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
R. J.	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
E. P.	90	5 5 0	91	5 6 2	92	5 7 4	92	5 7 4	365	21 5 10
G. N.	,,	,,	13	0 15 2	,,	,,	,,	,,	13	0 15 2
S. C.	,,	,,	57	3 6 6	,,	,,	,,	,,	57	3 6 6
	42,649	2487 17 2	44,041	2569 1 2	44,086	2606 13 8	45,141	2633 4 6	176,517	10296 16 6

NAMES OF UNIONS AND OTHERS.	EXCESS CHARGE from Boroughs, Counties, and others, not contributing to the Original Cost of the Asylum, Credited to the Building Fund. Quarter Ending March 31st. Days	Amount £ s. d.	Quarter Ending June 30th. Days	Amount £ s. d.	Quarter Ending September 30th. Days	Amount £ s. d.	Quarter Ending December 31st. Days	Amount £ s. d.	TOTAL EXCESS. Days	Amount £ s. d.	FUNERALS. Amount Paid £ s. d.	FETCHINGS AND REMOVALS. Amount Paid £ s. d.	GRAND TOTAL. £ s. d.	ARREARS FROM 1865. £ s. d.	TOTAL PAID. £ s. d.	ARREARS TO 1867. £ s. d.
Axbridge	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	5 11 ,,	1 12 8	922 11 0	,,	922 11 0	,,
Bath	3,566	81 14 5	3,717	85 3 7½	4,133	94 14 3½	3,572	81 17 2	14,988	343 9 6	9 0 0	1 7 6	1,456 0 0	,,	1,455 19 11	,,
Beaminster	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	1 15 8	28 12 4	,,	28 12 4	,,
Bedminster	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	1 10 0	,,	699 1 0	,,	699 1 0	,,
Bridgwater	450	10 6 3	397	9 1 11½	426	9 15 3	426	9 15 3	1,699	38 18 8½	1 10 0	,,	675 4 4½	7 4 8	682 9 1	,,
Bristol, City	90	3 7 6	91	3 8 3	92	3 9 0	92	3 9 0	365	13 13 9	,,	,,	34 19 7	,,	34 19 7	,,
Chard	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	7 10 0	,,	615 7 10	,,	615 7 10	,,
Clutton	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	5 0 6	1 11 6	819 4 10	,,	819 4 9	,, ,, 1
Dulverton	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	94 11 2	,,	94 11 2	,,
Frome	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	1 10 0	1 8 0	481 14 0	,,	481 14 0	,,
Glanmorgan, County of	90	3 7 6	,,	,,	,,	,,	,,	,,	90	3 7 6	,,	,,	8 12 6	8 16 4	17 8 10	,,
Keynsham	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	178 0 8	,,	178 0 8	,,
Langport	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	4 10 0	,,	385 11 10	,,	385 11 10	,,
Mere	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	10 14 8	,,	10 14 8	,,
Shepton Mallet	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	4 1 0	,,	608 13 6	,,	608 13 6	,,
Sherborne	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	64 8 0	,,	64 8 0	,,
South Molton	,,	,,	,,	,,	,,	,,	92	3 9 0	92	3 9 0	,,	,,	8 16 4	,,	,,	8 16 4
Somerset, County of	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	63 17 6	,,	63 17 6	,,
Taunton	90	3 7 6	91	3 8 3	92	3 9 0	92	3 9 0	365	13 13 9	2 0 6	0 12 0	933 5 1	,,	924 8 9	8 16 4
Wellington	,,	,,	,,	,,	,,	,,	68	2 16 8	68	2 16 8	4 10 0	,,	607 4 8	,,	607 4 8	,,
Wells	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	3 0 0	1 4 ,,	539 10 6	,,	539 10 6	,,
Williton	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	1 10 0	8 3 6	510 10 6	,,	510 10 6	,,
Wincanton	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	6 0 0	,,	562 13 6	,,	562 13 6	,,
Yeovil	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	5 0 6	4 8 2	339 16 8	,,	339 16 8	,,
J. S.	90	3 15 0	44	1 16 8	,,	,,	,,	,,	134	5 11 8	,, 10 6	,,	13 18 6	,,	13 18 6	,,
G. G.	90	3 15 0	91	3 15 10	92	3 16 8	92	3 16 8	365	15 4 2	,,	,,	36 10 0	,,	36 10 0	,,
W. W.	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	21 5 10	,,	21 5 10	,,
E. C.	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	21 5 10	,,	21 5 10	,,
S. P.	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	11 16 10	,,	11 16 10	,,
L. B.	90	3 7 6	91	3 8 3	92	3 9 0	92	3 9 0	365	13 13 9	,,	,,	34 19 7	,,	34 19 7	,,
R. J.	90	2 1 3	91	2 1 8½	92	2 2 2	92	2 2 2	365	8 7 3½	,,	,,	29 13 1½	52 0 0	74 3 7	7 9 6½
E. P.	90	3 7 6	91	2 1 8½	92	2 2 2	92	2 2 2	365	9 13 6½	,,	,,	30 19 4½	,,	30 19 5	,,
G. N.	,,	,,	13	0 9 9	,,	,,	,,	,,	13	0 9 9	,,	,,	1 4 11	,,	1 4 11	,,
S. C.	,,	,,	57	2 7 6	,,	,,	,,	,,	57	2 7 6	,,	,,	5 14 0	,,	5 14 0	,,
	4,736	118 9 5	4,774	117 3 6	5,111	122 17 6½	4,719	116 6 1	19,331	474 16 6½	62 14 0	22 3 0	10,856 10 0½	68 1 0	10,899 8 9	25 2 3

THE CONSUMPTION OF PROVISIONS AND NECESSARIES

Between the 1st of January and the 31st of December 1866.

ARTICLES	QUANTITY
Bread	239,060 lbs
Flour for puddings	23,456 ,,
Beef	64,186 ,,
Mutton and Veal	14,353 ,,
Pork or bacon	4,563 ,,
Cheese	8,895 ,,
Butter	6,318 ,,
Cream	332½ pints
Milk	7,992 gallons
Tea	1,771 lbs
Coffee	993 ,,
Treacle	1,804¾ ,,
Sugar	5,850 ,,
Ditto (lump)	203 ,,
Yeast substitute	140 ,,
Rice	6,096 ,,
Scotch Barley	60 ,,
Pepper	220 ,,
Salt	6,048 ,,
Vinegar	73½ gallons
Raisins	1,550 lbs
Currants	60 ,,
Buns (Good Friday)	52 doz
Peas	38 bushels
Tobacco	221 lbs
Snuff	76 ,,
Cider	15,551 gallons
Fish	8,769 lbs
Eggs	122½ doz
VEGETABLES.	
Potatoes	4,720¾ pecks
Parsnips	653 ,,
Carrots	510 ,,
Turnips	539 ,,
Onions	310 ,,
Cabbage	13,174 nos
Brocoli	480 ,,
Peas (green)	112 pecks
Beans (broad)	138 ,,
NECESSARIES.	
Candles (dips)	678 lbs
Ditto (moulds)	276 ,,
Soap (hard)	70 cwt
Ditto (soft)	4274 lbs
Soda	4,398 ,,
Starch	198 ,,
Blue	52 ,,
Coal (hard)	18,720 cwt
Ditto (small	1,885 ,,
Coke	2,425 ,,
Gas Coal	1,541 ,,

(NO. 2.)

ACTUAL CASH RECEIPTS AND PAYMENTS FROM JANUARY 1ST TO DECEMBER 31ST, 1866.

DR.	£	s.	d.	£	s.	d.	£	s.	d.
To Balance at the Bank..				2967	4	10			
,, ,, in Clerk's hands				65	9	5	3032	14	3
,, Cash from Unions, &c., for Maintenance of Patients—									
Arrears from Oct. 1st, 1865				46	7	9			
Due Dec. 31st, 1865				2.582	15	4			
March 31st, 1866				2487	17	2			
June 30th, ...				2569	1	2			
Sept. 30th	2606	13	8						
Less Arrears	0	0	1	2606	13	7	10.292	15	0
Received for Funerals and conveyance of Patients, due Dec. 31st, 1865..				12	0	1			
March 31st, 1866				19	11	6			
June 30th, 1866				21	12	2			
Sept, 30th, 1866....................				12	14	2	65	17	11
Building and Repairs, excess charge, due Dec. 31st, 1865				115	16	8			
March 31st, 1866				118	9	5			
June 30th, 1866....................				117	3	6			
Sept. 30th, 1866.........	122	17	6						
Less arrears	0	0	1	122	17	5	474	7	0
Interest for the Year							46	0	0
Received for old Rags				3	0	0			
Part of legal expenses paid by Mr R. Ings..........................				10	0	0	13	0	
							£13,924	14	2

	£	s.	d.	CR. £	s.	d.
Maintenance Account.						
By Salaries and Wages............	1847	2	9			
Provisions and Necessaries	5866	15	3			
Surgery and Dispensary..........	296	0	2			
Clothing........................	1406	12	8			
Furnishing and Bedding	927	18	1			
Miscellaneous, Books, Advertising, Printing Stationery, &c.	325	12	3	10,670	1	2
Farm Account.						
Accounts paid..................	401	19	8			
Wages ditto....................	140	15	0	542	14	8
Funerals and Fetchings				73	6	7
Building and Repairs Account						
Accounts paid..................	1,149	16	11			
Wages ditto....................	323	1	10	1472	18	9
Balance at the Bank	1,141	11	6			
,, in Clerk's hands.........	24	1	6	1,165	13	0
				£13,924	14	2

(NO. 3.)

STATEMENT SHOWING LIABILITIES AND ASSETS OF THE SOMERSET LUNATIC ASYLUM

On the 31st December, 1866.

Dr.

	£	s.	d.	£	s.	d.
To Salaries and wages due to Officers and Servants—						
Farm Account	36	1	3			
Building ditto	26	0	0			
General ditto	481	13	1			
				543	14	4
General Account for Goods supplied	1,551	9	5			
Farm Account..........	28	3	3			
Building ditto..........	177	6	7			
				1,756	19	3
Due to Bailiff				5	3	8
Balance......				3,107	11	10
				£5,413	9	1

Cr.

	£	s.	d.	£	s.	d.
By Balance at the Bank..	1141	11	6			
Ditto in Clerk's hands..	24	1	6			
				1165	13	0
Union Accounts &c., due 31st December, 1866, for the Maintenance of Patients—						
General Charge	2633	4	6			
Excess ditto..........	116	6	1			
Funerals and Fetchings	30	19	2			
	2780	9	9			
Ditto Arrears due Sept. 30th.......	0	0	2			
				2780	9	11
Farm Valuation—(*Vide* sheet No. 4)..				1016	5	0
Goods in Store—(*Vide* sheet No. 7)				451	1	2
				£5413	9	1

(NO. 4.)

FARM AND GARDEN ACCOUNTS FROM JANUARY 1ST TO DECEMBER 31ST, 1866.

Dr.

	£	s.	d.	£	s.	d.
To estimated value of Stock on Farm, 1st January, 1866, viz.—						
Live Stock	403	4	0			
Wagons, Carts, Tools, and sundry Farm Implements	146	10	0			
Mangold & other Roots, Seeds, Hay &c.	442	12	0			
				992	6	0
Purchase of Live Stock	126	12	0			
Corn, Straw, Potatoes, &c................	199	11	1			
Rent, Rates, and Taxes	115	10	9			
Salaries and Wages viz:— Bailiff, Carter, Gardener, Yard-man and attendant on Dairy	143	10	0			
Tools, Manure, &c..........................	66	2	6			
Sundry small accounts	35	8	9			
				686	15	1
Credit of Establishment viz:—						
Estimated Rent in lieu of interest, of 60 acres of Land in cultivation, with Farm Buildings, the Chaplain's Residence, Lodge and Cottage..........................	150	0	0			
Balance in favour of Farm	235	6	8			
				385	6	8
				£2,064	7	9

Cr.

	£	s.	d.	£	s.	d.
By Live Stock sold..............................	134	15	6			
Sundries ditto	10	2	6			
				144	18	0
Produce of Farm supplied to the Establishment, viz:—						
Pork, Butter, Milk, &c.	307	11	5			
Produce of Garden, viz:—						
Potatoes, other Vegetables, and Fruit ...	517	10	4			
				825	1	9
Estimated value of labour of Horse and Man, unconnected with Farm	72	9	0			
Fagots and Straw used at the Establishment	5	14	0			
				78	3	0
Estimated value of Stock, Live and Dead, on Farm, December 31st, 1866.						
12 Milch Cows	180	0	0			
2 Fat Ditto	38	0	0			
22 Fat Sheep	61	12	0			
4 Horses	75	0	0			
57 Pigs	74	12	0			
14 Fowls	1	0	0			
				429	4	0
180 Tons Mangolds, at 14s.	126	0	0			
30 Ditto Sweeds at 14s.	21	0	0			
10 Ditto Carrots, at 40s.	20	0	0			
12 Ditto Parsnips, at 45s.	27	0	0			
30 Ditto Cabbage, at 14s.	21	0	0			
130 Sacks eating Potatoes at 10s.	65	0	0			
1 Ditto Seed, ditto at 16s.	8	16	0			
150 Pecks of Onions, at 1s.	7	10	0			
3 Bushels Broad Beans, at 8s.	1	4	0			
3 Pecks of Peas, at 2s.	0	6	0			
4 Sacks Italian Rye Grass, at 16s.	3	4	0			
37 Tons Hay, at £4	148	0	0			
				449	0	0
Wagons, Carts, &c., &c.				139	1	0
				£2,064	7	9

(NO. 5.)

AVERAGE WEEKLY COST OF MAINTENANCE, MEDICINE, CLOTHING, AND CARE OF PATIENTS FOR THE YEAR 1866. AGGREGATE NO. OF DAYS 176·517. DAILY AVERAGE OF PATIENTS 482·6.

		£ s. d.	£ s. d.	£ s. d.	s. d.
Provisions and Necessaries	Remaining in Store January 1st, 1866		127 9 11		
	Tradesmen's Accounts for the Year	6,081 16 10			
	Clerk's Petty Disbursements	65 9 7	6,972 8 2		
	Farm and Garden	825 1 9			
			7,099 18 1		
	Remaining in Store January 1st, 1867		150 14 11	6,949 3 2	6·14
Clothing.	Remaining in Store January 1st, 1867		263 2 2		
	Tradesmen's Accounts for the year	1,127 8 9			
	Clerk's Petty Disbursements	6 7 11	1,133 16 8		
			1,396 18 10		
	Rags sold during the year	4 19 0			
	Remaining in Store January 1st, 1867	182 7 2	187 6 2	1,209 12 8	11·51
Salaries and Wages.	For the year		2,263 3 3		
	Less Amount Debited to Building Account	250 13 8			
	Ditto ditto Farm Account	143 10 0	394 3 8	1,868 19 7	1 5·78
Surgery and Dispensary.	Tradesmen's Accounts for the year		325 15 1		
	Clerk's Petty Disbursements		3 16 5	329 11 6	3·14
Furnishing and Bedding.	In Store January 1st, 1866		132 9 9		
	Tradesmen's Accounts for the year	985 6 3			
	Clerk's Petty Disbursements	17 17 6	1,003 3 9		
			1,135 13 6		
	Remaining in Store January 1st, 1867		117 19 1	1,017 14 5	9·68
Miscellaneous.	Tradesmen's Accounts for the year		228 13 0		
	Clerk's Petty Disbursements		117 5 0		
	Stamps charged by Treasurer		2 0 0		
			347 18 0		
	Less Interest from Treasurer	46 0 0			
	ditto legal expenses paid by R. Ings.	10 0 0	56 10 0	291 18 0	2·78
				11,669 19 4	9 3·03
	Less Farm Account			385 6 8	3·65
				11,281 12 8	8 11·38

(NO. 6.)

BUILDING AND REPAIRS ACCOUNT.

From January 1st to December 13st, 1866.

Dr.	£ s. d.	Cr.	£ s. d.	£ s. d.
To Balance from 1865	988 0 9	By Sundry Bills for Materials	1043 18 1	
		Wages	250 13 8	
Cash from non-contributing Places and Patients, over and above the charge belonging to the County, as per sheet No. 1	474 16 6			1294 11 9
		Balance		168 5 6
	£1462 17 3			£1462 17 3

(NO. 7.)

BALANCE SHEET, OR GENERAL STATEMENT OF RECEIPTS AND EXPENDITURE OF THE SOMERSET COUNTY LUNATIC ASYLUM FOR THE YEAR ENDING DEC. 31ST, 1866.

DR.

	£ s. d.	£ s. d.
To Balance as per Ledger, *vide* No. 7 of last year's Account—		
Building Account	988 0 9	
General ditto	2,351 16 2	
		3,339 16 11
Balance in Clerk's hands....		65 9 5
Provisions and Necessaries in Store January 1st, 1866 ..	127 9 11	
Clothing, ditto ditto	263 2 2	
Furnishing and Bedding ditto	132 9 9	
		523 1 10
Farm Valuation, Jan. 1st. ..		992 6 0
From Unions, &c., including Arrears from 1865, as shown by sheet No. 1	10,924 11 0	
Less Arrears, still due	25 2 3	
		10,899 8 9
Balance due to Bailiff		5 3 8
		£15,825 6 7

CR.

	£ s. d.	£ s. d.
Balance due to Bailiff		3 9 5
By Maintenance, as per sheet No. 5		11,281 12 8
Building and repairs, as per sheet No. 6		1,294 11 9
Funerals and Conveyance of Patients, as per Ledger		77 8 7
Farm Valuations as per sheet No 4		1,016 5 0
Horse Hire, &c. as per sheet No. 4		78 3 0
Goods in Store, Jan. 1st. 1867 as per sheet No. 5		
Provisions and Necessaries	150 14 11	
Clothing	182 7 2	
Furnishing and Bedding	117 19 1	
		451 1 2
Balance in Treasurer's hands, as per Ledger—		
Building Account	168 5 6	
General ditto	1,430 8 0	
		1598 13 6
Balance in Clerk's hands		24 1 6
		15,825 6 7

BENJAMIN THOMAS DUKE,
Clerk.

R. B. COLES, { Visiting Justice, and Auditor.

THIRTY-FIFTH

ANNUAL REPORT

BY

THE DIRECTORS

OF

JAMES MURRAY'S ROYAL ASYLUM

FOR LUNATICS,

NEAR PERTH.

JUNE, 1862.

PERTH:
PRINTED BY ORDER OF THE DIRECTORS, AT THE JOURNAL OFFICE.

MDCCCLXII.

List of Office-Bearers.

1862-63.

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

DIRECTORS.

I.—EX-OFFICIO.

The Right Hon. the Earl of Kinnoull, Lord-Lieutenant of the County of Perth.
Edward Strathearn Gordon, Esq., Sheriff of the County of Perth.
Hugh Barclay, Esq., LL.D., Sheriff-Substitute of the County of Perth.
David Ross, Esq., Lord-Provost of the City of Perth.
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ANNUAL REPORT

BY THE DIRECTORS OF

JAMES MURRAY'S ROYAL ASYLUM

FOR LUNATICS.

9TH JUNE, 1862.

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

At the date of the last Annual Report there were in the House 202 patients (97 males and 105 females). Since then 36 patients have been admitted (17 males and 19 females). The total number of patients under treatment during the year was 238 (114 males and 124 females). Of this number 18 have recovered (5 males and 13 females); 12 were removed improved (5 males and 7 females); 26 were removed unimproved (17 males and 9 females); and 4 have died (2 males and 2 females.) There now remain in the Asylum 178 patients (85 males and 93 females), being 24 less than at the same period last year. The difference is principally caused by the Directors requiring the removal of certain harmless patients, with the view of securing accommodation for another class, as more fully explained in the Medical Report.

For the ages of the patients admitted during the past year, the form of their insanity, and other particulars, reference is made to the Report by Dr. James M. Lindsay, the Acting Physician in the absence of Dr. William L. Lindsay.

During the past year the Institution has been conducted with its usual efficiency and success, and the Directors earnestly trust that, through the Divine blessing, it may long continue to confer benefits on the community, and to enjoy its wonted prosperity.

WM. PEDDIE, Chairman.

REPORT OF PHYSICIAN

FOR THE YEAR 1861–62.

General results.

At date of last Annual Report, on 10th June, 1861, there remained in the Institution 202 patients. During the past year 36 patients have been admitted, making a total of 238 who have been under care within the year. 56 have been discharged or removed, and 4 have died—leaving 178 patients (85 males and 93 females) as our present population, 74 of whom belong to the Private, and 104 to the Pauper Class. The average daily number resident has been 188.

Decrease in population compared with previous year.

As compared with last year, there is a decrease of 24 in the number remaining at end of the year, a decrease of 29 in the total number under care, and a decrease of 13 in the average daily number resident.

Causes of decrease. Refusals of admission from want of room. Compulsory removals.

This decrease is attributable to the excess of discharges over admissions, occasioned by the necessity to obtain relief from the overcrowded state of the House, which forced us to refuse admissions, and which crowded condition the Directors deemed it advisable to remedy by ordering the removal—1. of those paupers who belonged to other counties than Perth; 2. of such of our chronic or comparatively harmless inmates as were considered most suitable for trial in private houses or otherwise with relatives or friends, and such as presented very little hope of mental recovery.

Beneficial results of decrease. Relief to overcrowding.

By these removals of chronic and relatively incurable cases, the three-fold object so much desired has been secured. 1. Relief to the overcrowded condition of the House. 2. Addi-

Available curative space for recent and urgent cases.

tional accommodation for Private Patients. 3. Available space for the admission of recent acute, or urgent cases; thereby increasing the usefulness of the Institution as a Curative Hospital, and lessening the tendency from which very few public asylums are now exempt, to become in great measure places for the care and safe custody of a large proportion of the chronic insane, to the exclusion of those labouring under recent mental aberration, by whom, as must be reasonably expected, and as all experience shows, more benefit is to be derived from the curative resources of a Hospital, than by those whose insanity has been of long duration.

Additional Infirmary space in high galleries.

Another good result of thinning our overcrowded population has been obtained, by enabling us to devote to the temporary purposes of an Infirmary several of the vacated rooms lately occupied as pauper dormitories, without which we would have been unable satisfactorily to treat those cases of illness which occurred as a slight epidemic in April, and which were removed from the less healthy low galleries to the vacated rooms in the high galleries, which being drier, larger, better ventilated, and better lighted, are more favourable to health.

Refusals of admission.

Increase in 1861.

The following table shows that there has been a progressive increase during the last 3 years in the number refused admission; and that in 1861 there were 7 more refusals of admission than in 1860:—

YEAR.	REFUSALS.								
	Private Patients.			Pauper Patients.			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
1859,	...	...	...	14	7	21	14	7	21
1860,	2	1	3	11	3	14	13	4	17
1861,	6	3	9	5	10	15	11	13	24

In addition to the above, 12 paupers (7 males and 5 females) have been refused admission during the current year.

Proportion of private patients refused.

Considering that a preference is always given to the private class, and that the Institution will probably be devoted to the accommodation of this class alone, some explanation is necessary

Explanation.

to account for the comparatively large proportion of private patients refused admission during the past year. This is readily explained by the fact that for the majority, although private patients, admission was sought at pauper rates of board, and that they belonged to other counties than Perth—the object of the Institution having invariably been, so far as possible, to favour the admission, at these low rates, of Perthshire patients of the indigent private and pauper classes.

Perthshire Patients preferred at low or pauper rates of board.

Overcrowding of Pauper Galleries.

Notwithstanding our diminished population, the pauper galleries must still be considered as somewhat overcrowded, and containing a larger number than they are adapted to accommodate, consistently with the greatest amount of health and comfort. Overcrowding by day is a minor evil, and one easily remedied, compared with the major evil of overcrowding by night, which implies insufficient sanitary measures, confined sleeping room, vitiated atmosphere, and defective cubic space—all which ought to be most carefully guarded against in any community, more especially in a community whose minds are enfeebled, and whose physical condition is frequently more or less deteriorated.

Evil effects of overcrowding.

Chronicity of present community.

In illustration of the chronicity under which the Institution labours, reference is made to Table VI. (see Appendix), from which it appears—1. That 73, or nearly half of the patients at present resident, are between 50 to 78 years of age; 2. That in 92, or rather more than half, the duration of their insanity has been from 5 to 35 years (5 of this number having been insane from childhood); 3. That 76, or nearly a half, have been inmates of this Institution between 5 and 35 years; 4. That 76, or nearly a half, are cases of dementia, chiefly of long standing. These facts sufficiently account for the small proportion, 26·40 per cent., which is the maximum of our present population considered curable; by far the larger proportion, 73·60 per cent., being considered incurable, either as regards the phase or duration of their insanity.

Age.

Duration of Insanity.

Length of Residence.

Demented.

Results—Low ratio of curable, high ratio of incurable.

Chronicity and relative incurability.

Chronicity is not necessarily associated with incurability; the records of Asylums disprove this, but there can be little doubt of their relative association—Chronicity and Incurability being very closely connected, and that the probability or improbability

of cure depend in great measure upon the duration of the malady. We do not mean to assert that the chronic insane can receive no benefit from an Asylum, or that humane efforts should be relaxed on their behalf: on the contrary, we think that an Asylum can do much to relieve the condition of certain classes of them; but it is the exclusion of the probably curable from, and the occupation by those probably incurable of, the curative space, against which we consider it advisable to guard.

Disposal of Chronic Insane.

Whilst believing that many of the chronic insane may, under judicious management, be properly cared for out of Asylums, we are convinced that in the suitable selection of this class great caution is necessary; without which discrimination, we have our doubts as to the success of the too general adoption of any provision for the liberation of the chronic insane from special control and supervision.

Disadvantages of Chronicity. Limits curative usefulness of Institution. Exclusion of recent cases. Diminishes Recoveries.

The disadvantages of such chronicity are very manifest. It diminishes the usefulness of the Institution as a Curative Hospital, by occupying valuable room that might be better devoted to the accommodation of more recent and more urgent cases—thereby lessening the number of recoveries, and otherwise operating injuriously. In such chronicity there is comparatively little mind to work upon to render it available for their own benefit or for the good of those around them. These evils have been partially remedied by the removal of some 26 of our chronic inmates, the number of whom it is very desirable still further to reduce.

Remedy.

Admissions.

The admissions 36 (17 males and 19 females) during the past year show a decrease of 26 on the number admitted in 1860-61, which diminution has been already explained by the crowded condition of the House on 10th June, 1861, leaving very little available room for new cases, and making our ability to accommodate depend upon the discharge or removal of some of the overcrowding population.

Cause of decrease.

Want of room.

Admissions in relation to class, sex, age, &c.

The tables in Appendix show, that of those admitted, 13 are private and 23 are pauper patients, the sexes being nearly equal in each class. All the paupers were sent from Parishes in the County of Perth, with the exception of one out county patient (previously an inmate) who has been discharged recovered.

Paupers. Parishes.

Most patients were admitted between the ages of 30 and 40. The single, as is generally the case, exceeded the married and widowed. There was no predominance of any special occupation. Mania in its various phases was the most frequent form of insanity, Melancholia and Dementia in equal numbers coming next in frequency. Hereditary tendency was the most frequent cause—religious excitement second in frequency—intemperance and senility next.

Admissions in relation to form and causes of Insanity.

The bodily condition of those admitted was good in half the number, indifferent and bad in the remaining half. In the majority, therefore, the physical condition was good, although, by injudicious delay and treatment, a few were admitted in a greatly enfeebled state. Here it affords us pleasure to mention that, in general, great kindness and humanity have been exercised by Inspectors of Poor and others in bringing patients to, and removing them from, the Asylum, and that no unnecessary restraint or harshness have been resorted to. There are, however, a few exceptions to this general remark. In some instances there appeared to have been a want of judiciousness and consideration on the part of those bringing the patient to the Asylum, the comfort of the patient as to clothing, &c., having been greatly overlooked.

Physical condition on Admission.

Transmission of Patients to Asylum generally effected by kindness and humanity in place of unnecessary restraint.

We have also pleasure in recording the fact, that the objectionable practice (formerly so frequent) of sending a female patient to the Asylum under charge of a male person alone has almost disappeared. Occasionally, however, even yet a female patient is brought to, or transferred from, the Asylum by a male custodier alone, unaccompanied by any female nurse or friend.

Female Patients sent with male custodiers now a rare occurrence.

As appears from Table II. (No. 7), the importance of early removal to, and treatment in, an Asylum, is becoming more generally recognised—the insanity in two-thirds of those admitted having been less than 12 months in duration, and in the remaining third the mental aberration had existed from 1 to 20 years.

Early removal to, and treatment in Asylum.

With regard to the probable curability of those admitted, 75 per cent. are considered curable, and 25 per cent. incurable.

Prospective results. Curable. Incurable.

The months in which the greatest number of admissions took place were August of last year, and May of this year.

Liability to Relapses of Insanity.

Previous Attacks.

Melancholics.

It is noteworthy, as showing the liability to a recurrence of insanity, that in 10, or nearly 28 per cent., of those admitted, there had been previous attacks (see Appendix). One of these admitted for the third time, a case of Hypochondriacal Melancholia, illustrates well a class of patients, who, whilst subject to the discipline, care, and quiet of an Asylum, enjoy comparative happiness, are generally contented and industrious members of the community, but whose mental organisations are too feeble to bear up against the anxieties of the outer world, or to compete in the struggle for existence, and who, when liberated from the retirement of an Asylum, soon relapse into their former sad condition. For such, and it is no small class, the Asylum is the safest home; for, although they may not be dangerous in the sense of being violent to others, they may be, and often are so to, themselves, by suicidal tendencies, which are either apparent, or which may at any time be suddenly developed. This class supplies many instances, which are frequently recorded in the daily papers, of suicide by persons who have been inmates of, or whom it is advisable for their own safety to send to, an Asylum, but who are kept at home by relatives or friends.

Danger of Suicide.

Intervals between recurrences of Insanity.

It appears from Table II. (No. 11) that the intervals between recurrences of insanity are very various, ranging from a few months to 20 years.

Suicidal Propensities.

Table II. (No. 12) shows that 7 patients had either attempted or meditated suicide, and that 10 had exhibited violent propensities, prior to admission.

Means of Suicide.

Form of Insanity.

Violent Propensities.

The means used in attempting suicide were cut throat, strangulation, and drowning. The forms of insanity in those who attempted suicide were Melancholia and Senile Dementia. The forms of insanity during which suicide was meditated, and violent propensities were exhibited, will be found in Tables in Appendix.

Re-admissions.

Frequency.

Relapse.

The re-admissions amount to 9, being exactly a fourth of the total number admitted. 7 were admitted for the second time, and 2 for the third time. Of these, the cases of relapse are only 5, or nearly 14 per cent. of the total admissions—3 of the pauper re-admissions being transfers from another Asylum, to which place they were removed from this Institution several years ago on account of the cheaper rate of board charged.

Premature Removal.

The other re-admission, not a relapse, was a private patient removed contrary to medical advice, by her husband, to whom was pointed out the certainty of her being quite unmanageable at home. The patient was not half-an-hour reinstated with her family at home before her conduct convinced the husband of his error, and he had her conveyed back to the Asylum the morning following her removal. This case is one amongst others, illustrating the results of premature removal. In another case of premature removal contrary to medical advice, worse results happened than in the instance of the female patient just referred to. This patient laboured under organic disease of the brain, was removed by his relatives, and shortly afterwards became very excited and violent, inflicting injury on his wife. His mental malady was aggravated, and in all probability his death was hastened by removal from the Asylum. He died a few months after his liberation.

Its results.

Uncontrollable excitement at home.

Violence to relatives.

Aggravation of malady, and probable hastening of death.

Intervals between discharge and re-admission.

The intervals between discharge and re-admission varied from 1 day to 16 years.

Delay in sending Patients to Asylum.

The evil effects of delay in sending patients to the Asylum, either through false economy on the part of guardians, or mistaken notions of affection on the part of relatives, are borne out by the experience of the past year.

Its results.

Exhaustion and diminished chance of early recovery.

Patients are detained at home, although symptoms of insanity have been recognised, till they "break out," or become so violent as to be unmanageable; and very frequently the patient is not sent till the personal safety and comfort of the friends are compromised, by which time the patient has become much exhausted, arriving at the Asylum greatly reduced in physical condition, and with a proportionately diminished chance of early recovery.

Risk from Suicide.

Example of Suicide at Home, by a Melancholic, previously an inmate.

Delay in sending a patient to the Asylum is occasionally attended with the saddest of all results—suicide—an example of which occurred in this county not many weeks ago, having been duly chronicled in the papers. This person, who was subject to mental depression, had been twice an inmate of this Asylum, from which he was removed by his guardian some 12 months ago, considerably improved though not recovered. Since leaving the Asylum he had continued with more or less

regularity at his occupation, but latterly he was observed to become more depressed in mind. This very naturally aroused the anxiety of his guardian, who came to consult us about his case. The advice given to the guardian was to send the patient to the Asylum without delay, the risk from suicide being distinctly pointed out to him, and he obtained from us the papers necessary to be filled up for the admission of the patient. The advice was not followed; and within a few weeks thereafter, the Melancholic committed suicide by drinking a quantity of Nitric Acid, from the effects of which he died the same day.

Want of attention and care in filling up Statutory Admission Papers.

In connection with admissions we must, however reluctantly, refer to the incorrect and unsatisfactory manner in which the Statutory Admission Papers, especially the Medical Certificates, are frequently filled up. Although the marginal notes in these forms give clear directions as to the mode and the terms in which they are to be filled up, many medical men pay little attention to these instructions, probably considering them unnecessary, and mere minor points of detail not affecting the validity of their certificate. These particulars ought to be attended to as strictly as any other part of the Certificate; and so long as certain forms are required by Statute, these forms should receive due attention and care from those whose duty it is to fill them up correctly.

Amending of incorrect or defective Statutory Admission Papers.

The 36th Section of the Lunacy Act provides for the amending of incorrect or defective Orders and Medical Certificates, but it does not clearly define who shall have power to enforce such amendment, although, from the wording of the last clause in said section, "provided nevertheless that no such amendment shall have any force or effect unless the same shall receive the sanction of the Board," it may be inferred, that it is intended the Board should exercise this power. It would appear, however, that the General Board of Lunacy do not consider themselves vested with any such power by the 36th Section; although the English Board of Lunacy exercise this very power, as they seem to put a different interpretation upon the corresponding sections in the English Acts, which are substantially the same as the 36th Section of the Scotch Act.

36th Section differently interpreted.

As a consequence, this duty of amending has devolved upon the Superintendent, whose practice has been, so far as possible, to obtain the amendment of any incorrect or defective admission papers prior to the reception of the patient into the Asylum; but in several cases, where the parties who signed the papers were at a distance, this was obviously impossible, unless admission had been refused, which we would not have considered ourselves justified in doing. The patients were admitted with the imperfect papers, on the understanding that they would be amended as early as possible; but in some cases we have experienced considerable trouble, and in others not a little difficulty, in getting the certificates amended by the medical men.

Difficulties from want of proper power to enforce amendment.

This mode of procedure is evidently very unsatisfactory to all parties concerned, to remedy which it is very desirable that the 36th Section should expressly determine the party intrusted with the power of enforcing the amendment of incorrect or defective orders and medical certificates.

Necessity of better definition of 36th Section.

Of the 56 discharged or removed, the sexes were nearly balanced—27 males and 29 females, of whom 15 were private and 41 were pauper patients.

Discharges. Sex. Class.

There were discharged "recovered," 18 (5 males and 13 females); "relieved" or improved, 12 (5 males and 7 females); and 26 (17 males and 9 females) were removed "not improved."

Considering the chronicity of our population, which tends to diminish the number of cures, it is very satisfactory to find that the recoveries during the past year constitute 50 per cent. of the admissions, which is a ratio considerably above the average of Asylums. As appears from the following summary of general results, this is the largest per centage of recoveries for the last eight years:—

Recoveries.

Comparison with former years.

SUMMARY OF STATISTICAL RESULTS FOR LAST 8 YEARS.

YEAR.	Average daily number of Patients under Care.	Admissions.	Discharges.	Recoveries.	Percentage of Recoveries, calculated on Admissions.	Deaths.	Percentage of Deaths calculated on total number of Patients under Care.
1854-5, - -	135·378	36	74	17	47·20	15	7·24
1855-6, - -	140·549	39	26	16	41·02	7	4·07
1856-7, - -	150·063	47	38	22	46·80	7	3·62
1857-8, - -	164·358	69	49	22	31·83	14	6·42
1858-9, - -	190·310	79	53	34	43·03	11	4·33
1859-60, -	196·007	57	53	22	38·59	10	3·87
1860-61, -	201·402	62	65	29	46·77	10	3·74
1861-62, -	187·935	36	56	18	50·	4	1·68
Average of last 8 years,	170·750	53·12	51·75	22·50	43·15	9·75	4·37

Recoveries in relation to sex, age, relapses, &c.

Of those recovered, 6 were private and 12 were pauper patients. The female recoveries were nearly three times more numerous than the male, whereas in the admissions the sexes were nearly equal. The greatest number, all being females, recovered between the ages of 30 and 40—a significant fact, taken in connection with this being the same period during which the greatest number of admissions took place. The married exceeded the number of single and widowed who recovered. With regard to the form of insanity, it is worthy of note, as bearing upon the liability to relapse, that 5, or nearly 28 per cent., were recoveries from recurrent insanity. The greatest number recovered from acute mania.

Age. Social Condition. Form of Insanity. Frequency of Recurrent Insanity.

With regard to the duration of insanity prior to admission in those who recovered, the following facts show how recovery is influenced by early treatment:—In 16, or 88 per cent., the duration of insanity prior to admission had been under three months; whilst in the remaining 2 patients recovered, it had been from three to twelve months. The residence in the Asylum had been under twelve months, in 15, or 83 per cent., of those who recovered—the remaining 3 who recovered had resided from 1 to 3 years in the Asylum. In 10 of those who recovered, or 55 per cent., there had been previous attacks of insanity, confirming the law, that, after a first attack, there is

Duration of Insanity, and influence of early Treatment.

Previous attacks and tendency to relapse.

a great tendency to recurrence, at some period or other, whether near or remote.

Discharges. Non-recovered Class.

38 patients have been discharged not recovered, of whom 12 (5 males and 7 females) were "relieved," and 26 (17 males and 9 females) were "not improved"—9 belonging to the private and 29 to the pauper class.

Duration of Residence in Asylum.

24, or nearly two-thirds, of those removed non-recovered had been resident from 2 to 34 years, half of this number having resided above 5 years. Of these, 1 had been resident between 33 and 34 years—nearly since the opening of the Institution; 2 had been inmates between 28 and 30 years; 3 between 10 and 15 years; and 6 between 5 and 10 years.

Proportion of Chronic Insanity.

In the half of those removed non-recovered, the form of insanity was chronic dementia, and in nearly a-sixth it was chronic mania.

Compulsory Removal of Chronic Cases.

Of the 29 paupers removed non-recovered, 16 (11 males and 5 females)—all chronic cases, presenting little prospect of mental recovery, and the majority of whom had been resident for a number of years—were removed, at the request of the Directors, by Inspectors of Poor, and transferred to other Asylums.

Transfers to other Asylums.

Transfers under Schedule D^2 to Private Houses as single patients.

9 (2 males and 7 females), chiefly demented, quiet, and tractable cases, were removed by Inspectors of Poor (some of these also being at request of the Directors), under Schedule D^2, to be boarded with relatives, friends, or others, in private houses, as single patients; all of whom, with the exception of two, were recommended by us as deserving a trial of residence out of the Asylum. This recommendation we invariably qualified with the condition, provided they are placed *under proper care and supervision*; for the injurious effects upon the insane by the injudicious, unkind, or ignorant management of them by custodiers, who possess no qualifications fitting them for that delicate office, are well known to every Asylum Superintendent.

Transfers to Poorhouses.

Two male paupers were transferred to Lunatic Wards of Poorhouses.

Evasion of Schedule D^2.

The remaining two males, although admitted as pauper patients, were removed as private patients by their relatives—

Evasion of Schedule D[2] relating to removal of Non-recovered Pauper Lunatics.

this conversion from pauper into private patient having taken place in order to effect their removal by the friends without the expense and trouble attendant upon obtaining the forms required by the Board of Lunacy, before their sanction is granted to the removal of any non-recovered pauper lunatic from an Asylum.

Parishes and Counties to which the non-recovered Paupers were chargeable.

19 of the paupers removed non-recovered were chargeable to parishes in the county of Perth, whilst the remaining 10 were chargeable to parishes in the counties of Fife, Kinross, Dumbarton, and Ross (see Tables in Appendix).

"Relieved."

Dipsomania.

In the number discharged "relieved" is included an insane drinker or dipsomaniac, with a confirmed propensity for stimulants of 15 years' standing, who, although recovered intellectually, could not be considered in any respect morally recovered or reformed. We have, therefore, preferred to class him amongst the "relieved," rather than to increase our ratio of recoveries by the addition of what, at the best, was only a very partial recovery; for our experience leads us to the conviction, that six months' residence in an Asylum are quite inadequate to cure the moral perversion, or effectually to strengthen the self-control, of a confirmed dipsomaniac. The removal of this patient was ordered by the Directors on the ground that, being recovered intellectually, he was not a "lunatic" according to the Statute, and that consequently they had no power of compulsory detention. Owing to there being no adequate legislative provision to meet the case of insane drinkers, who do not appear to be diminishing in number, great difficulties are constantly experienced in the care and management of this unfortunate class—our knowledge of whom forces upon us the conviction that an Asylum for the insane is not the place best adapted for their treatment, but that they require special Institutions, where they would be placed under special discipline and management. Till such special Institutions spring up, under legal sanction, Lunatic Asylums must continue to receive many urgent cases of inveterate drinkers, who are more dangerous to themselves and to society than a large number of those resident in Asylums, to whose names there has been little difficulty in affixing the statutory term

Legal difficulties.

No power of compulsory detention.

Want of legislative provision.

Need of special Institutions for the reception of Dipsomaniacs.

"lunatic," to which so much importance has been attached. There appears to be a growing necessity for Houses, legally sanctioned, for the care of this unfortunately too numerous class. In two apparently confirmed cases of dipsomania—a lady and a gentleman—we were consulted, not with regard to sending them to an Asylum, but as to some quiet boarding-house in the country to which it was desired to send them, so as to avoid their being made certificated "lunatics"—the process necessary for admission into an Asylum.

Instances showing the aversion to be made certificated "Lunatics."

The association of dipsomaniacs with the ordinary community of an Asylum operates injuriously in a twofold way; both upon the inebriate himself, and upon his insane fellow inmates. As a rule, they are prone to exaggeration both in word and deed—are not over-truthful—are cunning, resorting to every artifice to gratify their morbid propensity—very plausible—frequently very intelligent and shrewd—find their stimulant in mischief-making, scandal-talking, or in quarrelling with those about them. Add to all this their particular acquaintance with the meaning of the statutory term "lunatic," and their knowledge that an Asylum has no power of compulsory detention over them beyond a limited period, and we think we have shown such a combination of qualifications, or rather non-qualifications, as to render such persons, in our opinion at least, very undesirable inmates of Asylums, whether regard be had to the amount of benefit likely to be derived by them from Asylum treatment, or the injurious effects upon the ordinary inmates of an Asylum by associating with such morally perverted characters. The sheet-anchor of Asylum treatment—the milk of human kindness—is not always found to be effectual for their cure; it very frequently turns acid, and is rejected by them, or is received without producing any good or permanent results. On the other hand, their influence over those around them, whose intellectual nature may be weaker than their own, but whose moral nature may be vastly superior, is oftentimes found to be anything but beneficial.

Disadvantages of associating Dipsomaniacs with the ordinary community of an Asylum.

Little permanent benefit to their own moral nature, from want of legal power to enforce lengthened discipline and restraint.

Their influence over others injurious.

Mortality.

The mortality during the past year has been 2·12 per cent. of the average daily number resident; or 1·68 per cent. of the total number under care during the year—an unusually low

Mortality.

mortality, whether as compared with our death-rate for the 7 previous years, in each of which it was considerably higher (as will be seen on referring to the Summary of Statistics at page 16), or as compared with the mortality in other Asylums.

This is all the more satisfactory considering the advanced years of our community, nearly half of whom are between 50 and 78 years of age, which might have prepared us to expect a different result—a larger mortality.

Its probable cause.

More favourable Meteorological conditions.

The diminution in deaths may be greatly accounted for by the more favourable meteorological conditions of 1861-62, especially the mildness of the past winter compared with the previous unusually severe winter of 1860, which was most unfavourable to the health of our population, having been characterised by low mean temperature (the cold having been greater than has been known in this country for very many years), and by excessive humidity of the atmosphere.

Comparison of 1860 and 1861 as regards temperature, and its influence on health.

From a comparison of the Thermometrical Register for the two years 1860 and 1861 (see Appendix), it appears, that there was a difference of 21 degrees in the minimum temperature of the two years. The lowest minimum temperature for the month in 1860 was 0 deg., whilst in 1861 it was 21 degs.; or, to contrast the two coldest months of 1860 with the corresponding months of 1861, we find that in 1860, the minimum temperature of the two coldest months was 0 deg. in February, and 3 degs. in December; whereas in 1861 it was 30 degs. in February, and 27 degs. in December. The mean monthly difference in the minimum temperature of 1860 and 1861 was 16·25 degs.; or on an average, 16 degrees of lower temperature each month in 1860. The difference in the mean temperature for the year was 8·64 degs. higher temperature in 1861.

Sanitary condition of Institution, as indicated by Low Mortality and Small Sick List.

Our low mortality, therefore, may be regarded as indicating that a very fair amount of health has been enjoyed by our population. If we look at the general health of our community from another point of view—from the daily number of patients on the sick list (as seen in Table in Appendix)—we find it equally satisfactory. The average daily number of males suffering from bodily ailments during the year was 1·70; and of females

3·11—the average daily number of total 4·81. The average daily per centage on sick list was 1·83 males, and 3·26 females; of the total of both sexes on sick list, the average daily per centage was 2·54; or, in other words, less than 2 in 100 males, and rather more than 3 in 100 females, were daily on the sick list.

Deaths—in relation to class, sex, age, &c.

The deaths amount to 4—all paupers, two of each sex. The average age at death was 59. The average duration of residence was six and a-half years. The duration of residence in the Asylum had been under two months in one case—an old man 66 years of age, who was admitted suffering from acute mania combined with a greatly reduced physical condition, and whose days, it might be said, were numbered on admission; another of those who died had been resident 10 years, the third had been an inmate for 11 years; and the fourth had resided for 5 years. The causes and time of death, and the form of insanity in those who died, will be seen in tables in Appendix.

Slight epidemic of fever.

Its general characteristics.

With the exception of a few cases of fever (from which all the patients are now convalescent), the Institution has been free from any epidemic during the past year. The fever referred to appeared in April, and was characterised by general prostration, a great liability to relapse, and a tendency to involve to a greater or less extent the abdominal viscera.

Its probable cause.

Atmospheric Agencies.

Its cause cannot be traced to any defective sanitary arrangements, but can only be ascribed to atmospheric agencies, which are now generally admitted to bear an important relation to the health of a community.

Cold combined with Damp.

This view of its origin is strengthened by the fact, that the weather during March and the early part of April, the period immediately preceding the occurrence of this illness, was most unfavourable to health—having been marked by an unusual prevalence of biting east wind, a remarkably low temperature, combined with a humid and cloudy state of the atmosphere. The minimum temperature for the month of March was 28 degrees, being lower than the same month in the previous year. This lowering of temperature was sudden, reaching 6 degrees below the minimum temperature of the month immediately preceding.

Attendants' Wages.

Convinced of the importance, as well as of the positive economy, of rewarding really good attendants by correspond-

Attendants' Wages.

ingly good wages, the Directors have from time to time during the past year made various additions to the wages of really deserving attendants, who, from length of service or special usefulness merited consideration.

Recreation and Education.

Amusements, Classes, Lectures, &c.

As heretofore, our means of recreation and education have been in active operation, consisting of our usual in-door amusements and out-door games, classes, assemblies, concerts, &c. During the winter the 7th Course of Lectures was delivered.

To those kind friends from the town and neighbourhood who have added to the happiness and amusement of the inmates during the past winter, or who have aided in their instruction, by appeals both to the mind and the senses, our best acknowledgements are due. Nor can we omit to tender our hearty thanks to those generous contributors and donors to the Asylum Museum and Library, which are gradually augmenting their stores, and which are in a very prosperous condition.

Museum and Library.

Museum.

Its uses.

An aid to other educational means.

The Museum is, in our opinion, a most important adjunct to our other educational means; and we believe that its usefulness, as a means of interesting, instructing, and, in the literal acceptation of that word, *educating* the mentally afflicted, may be still further extended, with the most beneficial results. This principle has been duly recognised, and acted upon. Specimens from the shelves of our Museum have been made the subject of lectures or demonstrations to the inmates, who have also had opportunities of inspecting its wonders and treasures for themselves. In this view, therefore, specimens of natural history, of vegetable products, of raw material or manufactured articles, illustrating Nature's bounties, human art or human industry, form valuable additions to the Museum, and are gratefully appreciated.

Industrial Department.

From the Tables relating to Industrial Department (in Appendix), which illustrate the value of produce and of patients' labour in 1861, we find :—

Garden and Farm Produce.

1. That the total Farm and Garden Produce, which has been steadily increasing in annual value during the last seven years, amounted, in 1861, to £366 8s 1d, being an increase of £10 12s 8d on the previous year, 1860.

Value of Patients' work.

Garden work.

2. That in the Garden and Grounds, which continue to be a healthful, as well as a profitable, source of occupation, some 26 male patients are employed daily, the value of whose labour for the year 1861 is estimated at £193 15s 6d.

Female Needlework.

3. That the value of Female Needlework and Millinery by patients, in 1861, is estimated at £86 9s, being an increase of £14 7s 11d on similar work in 1860.

Artisan work.

4. That the Artizan Work done by male patients amounts to £111 8s 2d.

Male and Female work contrasted in value.

5. That the value of work done by male patients is more than twice as high as that done by female patients—the value of total work done by the former amounting to £305 3s 8d; whilst the value of total work done by the latter amounts to £143 18s 1d—the value of total work done by both sexes being estimated at £449 1s 9d.

Number Employed and Unemployed on 4th June, 1862.

6. That 94 patients, being 52·81 per cent. of the number resident on 4th June, 1862, were Employed; and that those Unemployed numbered 84, being less than a half, or 47·19 per cent.

Average number Employed.

The average number, both of males and of females, employed throughout the year was larger than that on 4th June, 1862—viz., 109 in all, or 57·97 per cent.

It will thus be seen that, considering the number in the Institution, the class, and advanced years of many of the inmates, a very fair proportion is employed, and that the results of their labour are also remunerative.

Improvements

Papering Bed-rooms.

Planting of Female Airing Courts.

Amongst the improvements that have been effected during the year may be mentioned the papering of all the bed-rooms occupied by private patients of both sexes—the planting of two Airing-Courts with flowers and shrubs, the one Airing-Court being for female private patients, and the other for the worst class of female paupers, in both instances with the best results; the female paupers appearing to appreciate the confidence placed in them, and to show that all the finer parts of their nature are not dead though dormant, but that they are still capable of taking an interest in Nature's works—the love of

flowers and of Nature being innate more or less in all, and being that part of the mental constitution which is one of the last to desert those who by affliction have fallen from that exalted position of mind in which their All-Wise Creator originally placed them.

Aviaries.

Two small towers previously empty, situated at the corners of Airing-Courts for male and female private patients, have been converted into aviaries, which now contain pigeons and turtle-doves.

Improved Lavatories for Paupers.

Another improvement begun, but not yet completed, will be the conversion of antiquated and inconvenient Lavatories in two pauper galleries, occupied by males and females respectively, into more modern and less objectionable ones.

Addition to Head Attendants' House.

An addition has been made to the Head Attendant's House, which has also been papered and painted.

J. MURRAY LINDSAY, M.D.,
Interim Physician-Superintendent.

9th June, 1862.

APPENDIX,

CONSISTING OF

STATISTICAL TABLES.

I.—GENERAL RESULTS FOR THE YEAR 1861-62.

	Males.	Females.	Total.	Males.	Females	Total.
Patients admitted from 1827 to 1861, ...				652	676	1328
Of these were Discharged or Removed—						
Recovered, ...	235	328	563			
Improved, ...	84	72	156			
Not Improved, ...	87	78	165			
Died, ...	149	93	242			
Total discharged and died from 1827 to 1861,				555	571	1126
Patients remaining on 10th June, 1861, ...				97	105	202
" admitted during the year from 10th June, 1861, to 9th June, 1862, ...				17	19	36
Total number of Patients under care during 1861-62, ...				114	124	238
Of these were discharged or removed—						
Recovered, ..	5	13	18			
Improved, ...	5	7	12			
Not Improved, ...	17	9	26			
Died, ...	2	2	4			
Total discharged and died during 1861-62,				29	31	60
Patients remaining on 9th June, 1862, ...				85	93	178
Of those remaining on 9th June, 1862, the Classes are—						
Private, ...	37	37	74			
Pauper, ...	48	56	104			
Total Patients of both Classes, ...				85	93	178

Average daily number resident during 1861-62,

Males, 92·65; Females, 95·28. Total, 187·93—Say 188.

II.—ADMISSIONS DURING 1861-62.

	Males.	Females	Total.
1.—Age of Patients admitted.			
Between 15 and 20 years, ...	1	0	1
„ 20 „ 30 „	5	2	7
„ 30 „ 40 „	4	8	12
„ 40 „ 50 „	2	4	6
„ 50 „ 60 „	4	3	7
„ 60 „ 70 „	0	1	1
„ 70 „ 73 „	1	1	2
	17	19	36
2.—Condition as to Marriage.			
Married, ...	5	7	12
Single, ...	12	9	21
Widowed, ...	0	3	3
	17	19	36
3.—Occupation or Position in Life.			
Artist, ...	1	0	1
Clerk in Bank, ...	1	0	1
Clerk, mercantile, ...	1	0	1
Baker's apprentice, ...	1	0	1
Dairy maid, ...	0	1	1
Farmers, ...	2	0	2
Farm servants, ...	1	2	3
Housekeeper, ...	0	1	1
Joiners, ...	2	0	2
Labourer, ...	1	0	1
Labourers, wives of, ...	0	3	3
No occupation, ...	0	3	3
Officer in army, ...	1	0	1
Ploughmen, wives of, ...	0	2	2
Prison warder, wife of a, ...	0	1	1
Printer, ...	1	0	1
Saddler, wife of a, ...	0	1	1
Servants, domestic, ...	0	2	2
Shipowner, ...	1	0	1
Shoemaker, ...	1	0	1
Shoemaker, wife of a, ...	0	1	1
Sailor, ...	1	0	1
Shipmaster, wife of a	0	1	1
Weavers, ...	2	0	2
Worker at a Bleachfield, ...	0	1	1
	17	19	36

II.—ADMISSIONS—[Continued].

	Males.	Females	Total.
4.—Form of Insanity.			
Mania acute and recent, ...	8	8	16
„ Chronic, ...	0	2	2
Monomania, ...	2	0	2
Melancholia, ...	3	5	8
Dementia Chronic, ...	2	2	4
„ Senile, ...	1	2	3
Moral Insanity (dipsomania), ...	1	0	1
	17	19	36
5.—Causes Assigned.			
Anxiety, ...	0	1	1
Child birth, ...	0	1	1
Disappointed affection, ...	0	1	1
Domestic trouble, ...	1	1	2
Grief, ...	0	2	2
Hereditary tendency, ...	3	2	5
Ill health, ...	1	1	2
Intemperance, ...	3	0	3
Love, ...	1	0	1
Miscarriage, ...	0	1	1
No cause assigned or known, ...	6	2	8
Over exertion, ...	0	1	1
Religious excitement, ...	1	3	4
Seduction, ...	0	1	1
Senility, ...	1	2	3
	17	19	36
6.—Bodily Condition on Admission.			
Good, ...	10	8	18
Indifferent, ...	5	7	12
Bad, ...	2	4	6
	17	19	36

7.—Duration of Mental Disease prior to Admission, with the probable Curability and Incurability of those admitted.

Duration of Disease.	Considered Curable.			Considered Incurable.		
	Males.	Females	Total.	Males.	Females	Total.
Under 1 week,	0	1	1			
Between 1 week & 1 month,	4	4	8			
„ 1 and 6 months,	6	5	11			
„ 6 and 12 „	1	2	3		1	1
„ 1 and 2 years,	0	2	2		1	1
„ 2 and 5 „	1	0	1	1	1	2
„ 5 and 10 „	0	0	0	1	2	3
„ 10 and 20 „	1	0	1	2	0	2
	13	14	27	4	5	9

	Males.	Females	Total.
8.—Number Admitted each Month.			
1861. June (from the 10th), ...	1	0	1
July, ...	4	0	4
August, ...	2	3	5
September, ...	0	2	2
October, ...	1	1	2
November, ...	2	0	2
December, ...	0	1	1
1862. January, ...	1	2	3
February, ...	3	0	3
March, ...	0	2	2
April, ...	1	3	4
May, ...	1	4	5
June (up to 9th), ...	1	1	2
	17	19	36
9.—Class of those Admitted.			
Private, ...	6	7	13
Pauper, ...	11	12	23
	17	19	36

	Males.	Females	Total.
10.—Number of previous attacks in those Admitted.			
One previous attack in	1	5	6
Two previous attacks in ...	1	1	2
Three previous attacks in	1	0	1
Four previous attacks or more in ...	1	0	1
	4	6	10
11.—Intervals between the last and the present attack.			
Between 2 and 3 months, ...	0	1	1
„ 3 „ 6 „ ...	1	0	1
„ 1 „ 2 years, ...	2	1	3
„ 4 „ 5 „	0	1	1
„ 5 „ 6 „	0	1	1
„ 7 „ 8 „	0	1	1
„ 9 „ 10 „	1	0	1
„ 19 „ 20 „	0	1	1
	4	6	10
12.—Suicidal and violent propensities exhibited prior to Admission.			
(1) Attempted suicide, ...	0	3	3
(2) Meditated do., ...	2	2	4
(3) Violent to relatives or others, ...	6	4	10
	8	9	17
(a) Means by which Suicide was attempted.			
Cut throat, ...	0	1	1
Strangulation, ...	0	1	1
Drowning, ...	0	1	1
	0	3	3
(b) Form of Insanity during which Suicide was attempted.			
Melancholia, ...	0	2	2
Senile Dementia, ...	0	1	1
	0	3	3
(c) Form of Insanity during which Suicide was meditated.			
Melancholia, ...	1	1	2
Mania, ...	1	1	2
	2	2	4

	Males.	Females	Total.
(d) Form of Insanity during which violent propensities were exhibited.			
Mania, ...	3	4	7
Monomania, ...	2	0	2
Moral Insanity (Dipsomania), ...	1	0	1
	6	4	10
13.—*Re-admissions. (a) Frequency.*			
For the second time, ...	1	6	7
For the third time, ...	2	0	2
	3	6	9
(b) Intervals between Discharge and Re-admission.			
Under 1 day, ...	0	1	1
Between 2 and 3 months, ...	1	1	2
" 1 " 2 years, ...	1	1	2
" 5 " 10 "	0	3	3
16 years, ...	1	0	1
	3	6	9
14.—*Parishes and Counties from which Pauper Patients were admitted during* 1861-62.			
I.—PERTHSHIRE.			
Auchterarder, ...	0	2	2
Blairgowrie, ...	0	1	1
Comrie, ...	1	1	2
Coupar-Angus, ...	1	0	1
Dunbarney, ...	0	1	1
Findo-Gask, ...	0	1	1
Kinnaird, ...	0	1	1
Kinnoull, ...	1	0	1
Methven, ...	2	0	2
Monzievaird, ...	1	0	1
Perth, ...	2	2	4
Redgorton, ...	1	0	1
Scone, ...	1	0	1
Tibbermore, ...	1	2	3
Total Perthshire Paupers admitted.	11	11	22
II.—FIFESHIRE.			
Largo, ...	0	1	1
Total Paupers admitted during 1861-62,	11	12	23

	Males.	Females	Total.
1. *Class of those Recovered.*			
Private, ...	1	5	6
Pauper, ...	4	8	12
	5	13	18
2. *Age of those Recovered.*			
Between 15 and 20 years, ...	1	1	2
" 20 and 30 years, ...	1	1	2
" 30 and 40 years, ...	0	8	8
" 40 and 50 years, ...	2	2	4
" 50 and 60 years, ...	1	1	2
	5	13	18
3. *Condition as to Marriage.*			
Married, ...	3	8	11
Single, ...	2	4	6
Widowed, ...	0	1	1
	5	13	18
4. *Form of Insanity in which recovery took place.*			
Mania, acute, ...	3	3	6
" recurrent, acute, ...	1	4	5
Monomania, ...	0	2	2
Melancholia, ...	1	4	5
	5	13	18
5. *Duration of Insanity prior to admission.*			
Under 1 week, ...	1	3	4
Between 1 week and 1 month, ...	3	7	10
" 1 and 3 months, ...	0	2	2
" 3 " 12 months, ..	1	1	2
	5	13	18
6. *Duration of residence in Asylum.*			
Under 3 months, ...	2	2	4
Between 3 and 6 months, ...	3	4	7
" 6 and 12 months, ...	0	4	4
" 1 and 2 years, ...	0	2	2
" 2 and 3 years, ...	0	1	1
	5	13	18

III.—RECOVERIES—[CONTINUED].

	Males.	Females	Total.
7. *Number of previous attacks in those discharged Recovered.*			
One previous attack in	1	5	6
Two previous attacks in ...	1	2	3
Several previous attacks in	0	1	1
	2	8	10
8. *Number discharged Recovered each Month.*			
1861. June (from the 10th), ...	0	1	1
August, ...	1	1	2
September, ...	1	2	3
October, ...	0	1	1
November, ...	1	1	2
December, ...	1	1	2
1862. February, ...	0	2	2
March, ...	0	4	4
May, ...	1	0	1
	5	13	18

The Recoveries constitute 50 per cent. of the Admissions.

IV.—REMOVALS OF NON-RECOVERED PATIENTS.

	Males.	Females	Total.
1. *Mental condition on removal, of those Non-recovered.*			
"Relieved,"	5	7	12
"Not improved,"	17	9	26
	22	16	38

2. *Class of those removed Non-recovered.*

	"Relieved." Males.	"Relieved." Females.	"Not improved." Males.	"Not improved." Females.
Private,	1	4	4	0
Pauper,	4	3	13	9
"Relieved,"	5	7		
"Not improved,"			17	9

	Males.	Females	Total.
"Relieved,"	5	7	12
"Not improved,"	17	9	26
	22	16	38

IV.—REMOVALS. NON-RECOVERIES—[CONTINUED].

	Males.	Females	Total.
3. *Duration of residence in Asylum of those removed Non-recovered.*			
Under 3 months, ...	2	1	3
Between 6 and 12 months, ...	2	1	3
" 1 and 2 years, ...	2	6	8
" 2 and 3 " ...	4	1	5
" 3 and 4 "	3	1	4
" 4 and 5 " ...	1	2	3
" 5 and 10 "	3	3	6
" 10 and 15 " ...	3	0	3
" 28 and 30 "	1	1	2
" 33 and 34 " ...	1	0	1
	22	16	38
4. *Form of Insanity in those removed Non-recovered.*			
Mania, recent, ...	2	2	4
" chronic, ...	1	5	6
" religious, ...	0	1	1
" homicidal, ...	1	0	1
Monomania, ...	2	1	3
Melancholia, suicidal, ...	1	1	2
Dementia, chronic, ...	13	6	19
Imbecility, congenital, ...	1	0	1
Moral Insanity (dipsomania), ...	1	0	1
	22	16	38
5.—*Paupers Removed Non-recovered; how disposed of.*			
*(1) Removed as Private Patients to care of Relatives, ...	2	0	2
(2) Transferred to other Asylums, ...	11	5	16
(3) Transferred to Private Houses or Cottages, as single patients, under Schedule D[2],	2	7	9
(4) Transferred to Lunatic Wards of Poorhouses, ...	2	0	2
Total Pauper Transfers and Removals,	17	12	29

*(1) Admitted as Pauper Patients, but converted into Private Patients, in order to effect removal without the sanction of Board of Lunacy.

	Males.	Females	Total.
6.—*Parishes and Counties to which the Paupers Removed Non-recovered were Chargeable.*			
I.—PERTHSHIRE.			
Blair-Athole, ...	1	0	1
Blairgowrie, ...	0	1	1
Caputh, ...	1	0	1
Comrie, ...	1	0	1
Crieff, ...	1	0	1
Dunblane, ...	2	0	2
Dunning, ...	0	1	1
Errol, ...	1	0	1
Fowlis-Wester, ...	1	0	1
Kenmore, ...	0	1	1
Killin, ...	0	1	1
Methven, ...	1	0	1
Meigle, ...	1	0	1
Perth, ...	1	1	2
Rattray, ...	1	0	1
Tulliallan, ...	1	1	2
Total Perthshire Paupers, ...	13	6	19
II.—FIFESHIRE.			
Cameron, ...	1	0	1
Carnock, ...	1	0	1
Cupar, ...	0	1	1
Falkland, ...	0	1	1
Newburgh, ...	0	1	1
Torryburn, ...	1	0	1
Total Fifeshire Paupers, ...	3	3	6
III.—KINROSS-SHIRE.			
Orwell, ...	0	1	1
IV.—DUMBARTONSHIRE.			
Cumbernauld, ...	0	1	1
V.—ROSS-SHIRE.			
Logie Easter, ...	1	1	2

	Males.	Females	Total.
7.—*Summary of Counties.*			
1. Perthshire, ...	13	6	19
2. Fifeshire, ...	3	3	6
3. Kinross-shire, ...	0	1	1
4. Dumbartonshire, ...	0	1	1
5. Ross-shire, ...	1	1	2
Total Paupers Removed Non-recovered,	17	12	29

V.—DEATHS DURING 1861-62.

	Males.	Females	Total.
1.—*Age at Death.*			
45 years, ...	1	0	1
Between 60 and 67 years, ...	1	2	3
Average age at death, 59·5, ...	2	2	4
2.—*Causes and Time of Death.*			
Senile decay and Hip disease: died at 2.15 P.M.,	1	0	1
Senile decay and visceral disease: died at 3 P.M.,	0	1	1
Tubercular disease of lungs: died at 7.55 A.M.	0	1	1
Fracture of Cranium, with inflammation of brain and membranes, caused by injury to head: died at 7.20 P.M., ...	1	0	1
	2	2	4
3.—*Duration of residence in Asylum of those who died.*			
Under two months, ...	1	0	1
Five years, ...	0	1	1
Between 10 and 12 years, ...	1	1	2
	2	2	4
Average duration of residence six-and-a-half years.			

	Males.	Females	Total.
4.—*Form of Insanity in those who died.*			
Mania, acute, ...	1	0	1
„ chronic, ...	0	1	1
Monomania, ...	1	0	1
Dementia, ...	0	1	1
	2	2	4
5.—*Class.*			
All those who died belonged to the pauper class.			

The Deaths constitute—

2·12 per cent. of the average daily number resident.

1·68 per cent. of the total number under care during the year.

VI.—TABLES RELATING TO PRESENT POPULATION.

1.—*Form of Insanity, with the probable Curability and Incurability of Patients Resident on 9th June,* 1862.

Form of Insanity.	Maximum Considered Curable.			Considered Incurable.		
	Males.	Females	Total.	Males.	Females	Total.
Mania, recent and acute,	9	11	20	0	0	0
„ chronic, ...	2	6	8	10	23	33
Monomania, ...	5	1	6	12	3	15
Melancholia, ...	5	8	13	4	3	7
Dementia, senile,	0	0	0	1	2	3
Dementia, congenital,	0	0	0	2	4	6
Dementia, chronic,	0	0	0	35	32	67
	21	26	47	64	67	131

The probably Curable constitute—

26·40 per cent of the present population.

The probably Incurable constitute—

73·60 per cent. of the present population.

	Males.	Females	Total.
2.—*Duration of Insanity in patients resident on 9th June,* 1862.			
Under 3 months, ...	0	3	3
Between 3 and 6 months, ...	3	2	5
„ 6 and 12 „	2	2	4
„ 1 and 2 years, ...	·11	13	24
„ 2 and 5 „	22	28	50
„ 5 and 10 „	21	19	40
„ 10 and 15 „	5	6	11
„ 15 and 20 „	7	1	8
„ 20 and 25 „	8	4	12
„ 25 and 30 „	5	5	10
„ 30 and 35 „	1	5	6
Congenital, ...	0	5	5
Patients resident 9th June, 1862, ...	85	93	178
3.—*Age of patients resident on 9th June,* 1862.			
Between 20 and 30 years, ...	9	6	15
„ 30 and 40 „	20	22	42
„ 40 and 50 „	25	23	48
„ 50 and 60 „	20	27	47
„ 60 and 65 „	6	9	15
„ 65 and 70 „	1	2	3
„ 70 and 75 „	3	3	6
„ 75 and 78 „	1	1	2
	85	93	178
4.—*Length of residence in Asylum of patients resident on 9th June,* 1862.			
Under 3 months, ...	3	8	11
Between 3 and 6 months, ...	4	4	8
„ 6 and 12 „	10	7	17
„ 1 and 2 years, ...	10	10	20
„ 2 and 5 „	21	25	46
„ 5 and 10 „	11	11	22
„ 10 and 15 „	8	7	15
„ 15 and 20 „	5	10	15
„ 20 and 25 „	7	3	10
„ 25 and 30 „	4	3	7
„ 30 and 35 „	2	5	7
	85	93	178

VI.—PRESENT POPULATION—[Continued].

5.—Showing the number of Pauper Patients resident on 9th June, 1862; with the parishes and counties to which they are chargeable.

	Males.	Females	Total.
I.—PERTHSHIRE.			
Abernethy, ...	1	0	1
Auchterarder, ...	0	1	1
Auchtergaven, ...	3	2	5
Blair-Athole, ...	1	1	2
Blairgowrie, ...	0	2	2
Callander, ...	1	0	1
Clunie, ...	0	1	1
Comrie, ...	2	1	3
Culross, ...	1	0	1
Dull, ...	2	3	5
Dunbarney, ...	2	1	3
Dunblane, ...	0	3	3
Dunkeld, ...	1	1	2
Dunning, ...	1	0	1
Errol, ...	5	1	6
Findo-Gask, ...	0	1	1
Fowlis-Wester, ...	1	0	1
Inchture, ...	1	2	3
Kenmore, ...	1	1	2
Killin, ...	1	0	1
Kinnaird, ...	0	2	2
Kinnoull, ...	2	2	4
Little Dunkeld, ...	1	2	3
Longforgan, ...	0	1	1
Logierait, ...	2	2	4
Madderty, ...	0	1	1
Meigle, ...	0	1	1
Methven, ...	2	2	4
Monzie, ...	1	0	1
Monzievaird, ...	1	1	2
Moulin, ...	1	0	1
Muthill, ...	0	3	3
Perth, ...	4	5	9
Rattray, ...	0	1	1
Redgorton, ...	1	2	3
St Martins, ...	0	1	1
Scone, ...	4	5	9
Tibbermore, ...	3	3	6
Tulliallan, ...	0	1	1
Total Perthshire Paupers, ...	46	56	102

VI.—PRESENT POPULATION—[Continued].

	Males.	Females	Total.
Brought Forward, ...	46	56	102
II.—SUTHERLANDSHIRE.			
Golspie, ...	1	0	1
III.—LANARKSHIRE.			
Calder, ...	1	0	1
Total number of Paupers resident, ...	48	56	104
Total number of Private Patients, ...	37	37	74
Total number of both classes resident on 9th June, 1862, ...	85	93	178

VII.—TABLES RELATING TO SANITARY CONDITION OF THE ASYLUM.

1. *Illustrating the Bodily Health of the community, as indicated by the daily number on Sick List ("suffering from bodily ailments") during* 1861-62.

	Number of each Sex for the Month.		Total Number for the Month.	Daily Average of Total No. for the Month.
	Males.	Females		
1861. June (from 10th),	20	49	69	3·20
July, ...	40	80	120	3·87
August, ...	48	77	125	4·03
September, ...	38	81	119	3·96
October, ...	45	75	120	3·87
November, ...	73	101	174	5·80
December, ...	59	114	173	5·88
1862. January, ...	63	86	149	4·80
February, ...	40	95	135	4·82
March, ...	36	94	130	4·19
April, ...	51	79	130	4·33
May, ...	81	170	251	8·09
June (to 9th), ...	23	35	58	7.25
Average Daily number on Sick List, ...	1·70	3·11	4·81	4·81
Average Daily per centage, on Sick List, ...	1·83	3·26	2·54	

VII.—TABLES RELATING TO SANITARY CONDITION OF THE ASYLUM.

2. *Influence of Temperature on Health.*

THERMOMETRICAL REGISTER FOR 1861,

Compared with that of 1860; showing a considerably Lower Monthly Minimum Temperature in 1860, than in 1861, as influencing the Mortality, which was much higher in 1860 than in 1861.

	Mean Temp. for Month.	Maximum Temp. for Month.		1861. Minimum Temp. for Month.		1860. Minimum Temp. for Month.		Difference between Monthly Minimum Temp. of 1860 & 1861, being lower Temp. in 1860.
		Day.	Temp.	Day.	Temp.	Temp.	Day.	
1861.								
January,	36°	31st	50°	4th	21°	21°	29th	None.
February,	42°	28th	50°	14th	30°	0°	14th	30°
March,	48°	14th	56°	21st	40°	26°	14th	14°
April,	56°	24th	63°	2d	48°	28°	11th	20°
May,	60°	19th	73°	9th	50°	36°	3d	14°
June,	70°	20th	79°	1st	60°	40°	2d	20°
July,	69°	15th	73°	10th	60°	45°	27th	15°
August,	67°	29th	71°	14th	60°	40°	31st	20°
September,	62°	1st	72°	27th	50°	32°	24th	18°
October,	54°	24th	59°	29th	43°	30°	10th	13°
November,	41°	20th	52°	24th	30°	23°	28th	7°
December,	37°	17th	50°	25th	27°	3°	25th	24°
Mean for the year 1861,	53·82°		62·33°		43·25°	27°		16·25°
Mean for the year 1860,	45·18°		61·58°		27°			
Difference, being higher temperature in 1861.	8·64°		·75°		16·25°			

VII.—TABLES RELATING TO SANITARY CONDITION OF THE ASYLUM.

THERMOMETRICAL REGISTER FOR FIVE MONTHS OF 1862.

	Mean Temp. for Month.	Maximum Temp. for Month.		Minimum Temp for Month.	
		Day.	Temp.	Day.	Temp.
1862.					
January, ...	46°	29th	51°	20th	34°
February, ...	45°	4th	54°	9th	34°
March, ...	43°	13th	54°	4th	28°
April, ...	52°	30th	65°	13th	40°
May, ...	60°	1st	68°	15th	53°
Mean for the 5 months of 1862, ...	48°		58·4°		37·8°

VIII.—TABLES RELATING TO VISITS TO PATIENTS.

TABULAR ANALYSIS OF "VISITORS' BOOK," For Year 1861.

	Private.	Pauper.	Total.	Private.	Pauper.	Total.
I. Number of Patients resident,	...	...	...	99	152	251
a. Of these were visited, ...	57	102	159			
b. „ not visited,	42	50	92	99	152	251

II. Number of Visits made to the above 159 Patients.

a. By Relatives, ...	683
b. „ Acquaintances, ...	142
c. „ Inspectors of Poor, ...	13
d. „ Medical Men, ...	27
e. „ Law Agents or Legal Guardians, ...	4
f. „ Clergymen, ...	15
	884

III. Average number of Visits to each person visited, 4·86

IV. Number of Refusals of Access to Patients, ... 0

V. Number of Visits when Patient not seen as recommended, 110

VIII.—TABLES RELATING TO VISITS TO PATIENTS.

ANALYSIS OF "VISITORS' BOOK"—[CONTINUED].

VI. Actual Number of Visits to Individual Patients.

Number of Visits.	Number of Patients Visited.	Total Number of Visits.
1 [once] to	37	37
2 [twice] ...	30	60
3 times, ...	23	69
4 "	10	40
5 "	14	70
6 "	5	30
7 "	7	49
8 "	4	32
9 "	3	27
10 "	3	30
11 "	2	22
12 "	2	24
13 "	2	26
14 "	3	42
15 "	2	30
16 "	3	48
17 "	2	34
19 "	2	38
20 "	1	20
21 "	1	21
23 "	1	23
24 "	1	24
29 "	1	29
58 "	1	58
	159	884

VII. Effects of Visits on Patients seen—

Good in	251 instances.
Bad in	47 "
None perceptible in	476 "
	774 instances.

IX.—TABLES RELATING TO INDUSTRIAL DEPARTMENT.

ILLUSTRATING VALUE OF PRODUCE OR LABOUR FOR 1861.

I—GARDENER'S DEPARTMENT.

(a) Farm and Garden Produce Consumed by Patients and Staff in 1861.

Abstract of Produce Consumed during 1861.		
Milk, 1642 Pints, at 4½d, ...	£30 15 9	
" 5522 " at 4d, ...	92 0 8	
		£122 16 5
Pork, 1686 lbs., at 6d, ...		42 3 0
Veal, 60 lbs., at 6d, ...		1 10 0
Firewood, 216 Bags, at 1s, ...		10 16 0
Vegetables, Fruit, &c., ...		179 7 3
Total Produce Consumed, ...		£356 12 8
(b) Surplus Farm and Garden Produce Sold,		9 15 5
Total Farm and Garden Produce,		£366 8 1
Total Farm and Garden Produce in 1861,		£366 8 1
Do. do. 1860,		355 15 5
Increase of Produce in 1861, ...		£10 12 8
(c) Estimated aggregate Value of Patients' Labour in Garden.		
Farm Labour, ...		£18 18 0
Garden do., ...		99 14 0
Pump do., ...		75 3 6
Total Value of Work, ...		£193 15 6
(d) Average Number of Males Working in Garden—26 Daily.		

II.—ARTIZAN DEPARTMENT.

(a) Carpenter and Upholsterer.

Total Value of Work, ...	£30 5 7
Probable Value of Material used, ...	10 1 0
Value of Work in 1861, ...	£20 4 7
Do. in 1860, ...	18 7 4
Increase in 1861, ...	£1 17 3

(b) Painter.

Whitewashing and Painting.

Total Value of Work, ...	£25 16 9
Probable Value of Material Used, ...	8 19 1
Value of Work in 1861, ...	£16 17 8

(c) Tailor.

1. Articles Made.

20 Suits of Clothes, ...	£22 18 8
34 Pairs Trousers, ...	13 13 0
26 Vests, ...	7 3 0
20 Jackets, ...	8 19 10
8 Suits for destructive Patients, ...	3 0 6
16 Stocks and Neck-Ties, ...	0 17 3
15 Caps, ...	1 5 5
14 Pairs Braces, ...	0 12 0
Total Value of Articles Made, ...	£58 9 8
Probable Value of Material Used,	50 13 9
Value of Work, ...	£7 15 11

2. Articles Repaired.

437 Coats, Jackets, Vests, Trousers, &c.	
Total Value of Work, ...	£13 14 4
Probable Value of Material Used, ...	2 0 0
Value of Work on Articles Repaired,	£11 14 4
Do. do. Made, ...	7 15 11
Value of Tailor work in 1861,	£19 10 3

(d) Shoemaker.

	Made.	Reprd.	
Pairs Boots, Shoes, or Slippers,	116.	326.	
Total Value of Work, ...			£74 6 8
Probable Value of Material Used, ...			56 14 1
Value of Work in 1861, ...			£17 12 7

(e) Glazier.

Glazing 317 Panes of Glass.

Total Value of Work, ...	£7 18 6
Probable Value of Material used, ...	2 13 0
Value of Work in 1861, ...	£5 5 6

(f) Mason.

Pointing Boundary Walls of Asylum Grounds.

Total Value of Work, ...	£5 0 0
Probable Value of Material Used, ...	0 10 0
Value of Work in 1861, ...	£4 10 0

(g) Smith and Plumber.

Total Value of Work, ...	£3 2 0
Probable Value of Material Used, ...	0 9 3
Value of Work in 1861, ...	£2 12 9
Do. in 1860, ...	1 11 6
Increase in 1861, ...	£1 1 3

(h) Miscellaneous.

10 Female Patients assisting in Laundry, at 80s,	£40 0 0
2 Do. „ Housemaids, at 60s,	6 0 0
3 Do. „ Cooks, at 60s,	9 0 0
1 Male Patient assisting Porter, ...	5 0 0
Hair Cutting and Dressing, ...	10 18 4
Cleaning Windows, ...	5 15 0
Repairing Cutlery, ...	4 7 0
Cleaning Flues, ...	0 4 6
Total Value of Work, ...	£81 4 10
Probable Value of Material Used, ...	1 10 0
Value of Work in 1861, ...	£79 14 10

II.—ARTIZAN DEPARTMENT—[CONTINUED].

	£	s.	d.
(h) In the Miscellaneous.			
Female Work amounts to	£55	0	0
Male do. do.	24	14	10
	£79	14	10
(i) Summary of Value of Male Patients' Work.			
1. Garden Work, ...	£193	15	6
2. Artizan do., ...	86	13	4
3. Miscellaneous Work, ...	24	14	10
Total value of Male Work, ...	£305	3	8

III.—FEMALE PATIENTS' WORK.

(a) Needlework and Millinery.	Made.	Repd.
Dresses, ...	166	542
Caps, ...	283	582
Chemises, ...	211	518
Shirts, ...	180	689
Drawers, ...	118	419
Hose, ...	110	4286
Nightgowns, ...	188	343
Aprons, ...	273	416
Petticoats, ...	199	520
Sheets, ...	220	318
Pillowslips, ...	229	369
Towels, ...	329	191
Tablecloths, ...	39	78
Blankets, ...	116	319
Seclusion Rugs, ...	115	214
Stays, ...	41	—
Handkerchiefs, ...	349	—
Counterpanes, ...	72	127
Flannels, ...	278	616
Mattresses, ...	49	111
Sundries, ...	—	129

	£	s.	d.
Total value of work, ...	£514	14	3
Probable value of Material used, ...	428	5	3
Value of work in 1861, ...	£86	9	0
do. in 1860, ...	72	1	1
Increase in 1861, ...	£14	7	11

III.—FEMALE PATIENTS' WORK—[CONTINUED].

(b) Bazaar of Female Patients' Work, 1861.

	£	s.	d.
Proceeds from Sale of Articles exhibited in Bazaar, ...	£2	9	1

(c) Average daily number of Female Patients employed, 61, viz., in

Needlework and Millinery, ...	29
Laundry, ...	10
Kitchen, ...	3
Assisting Attendants in Galleries,	17
„ Housemaids, ...	2
	61

Summary of Value of Female Patients' Work.

	£	s.	d.
1. Needlework and Millinery, ...	£86	9	0
2. Miscellaneous, Laundry, &c., ...	55	0	0
3. Proceeds of Bazaar Work, ...	2	9	1
Total value of Female Work, ...	£143	18	1

SUMMARY FOR 1861.

	£	s.	d.
I. Farm and Garden Produce, ...	£366	8	1
II. Summary of Value of Patients' Work.			
1. Garden Work, ...	£193	15	6
2. Artizan do.	166	8	2
3. Millinery and Needle Work, ...	88	18	1
	£449	1	9
III. Summary of Value of Patients' Work, as regards the Sex.			
Value of Work done by Male Patients,	£305	3	8
„ „ Female „	143	18	1
	£449	1	9

IX.—INDUSTRIAL DEPARTMENT—(CONTINUED).

SUMMARY FOR 1861.

	Males.	Females	Total.
IV. *Summary of Patients Employed.* Average number in 1861-62.			
1. In Grounds at Farm and Garden Work,	26	0	26
2. In Workshops as Tailors, ...	2	0	2
" as Carpenters, ...	2	0	2
" as Shoemakers, ...	3	0	3
" as Painters, ...	3	0	3
3. In Female Workroom, and in Galleries at	0	0	0
Needlework, &c., ...	0	29	29
4. In Laundry, ...	0	10	10
5. In Kitchen and Housework, ..	0	5	5
6. In Galleries as Assistants, ...	12	17	29
Total Employed, ...	48	61	109
V. *Class and Number of Patients Employed on 4th June,* 1862.			
1. Private, ...	8	8	16
2. Pauper, ...	31	47	78
	39	55	94
The Males Employed constitute 45·88 per cent. Females, " 59·14 " Total, " 52·81 " of the numbers resident on 4th June, 1862.			
VI. *Unemployed Patients Resident on 4th June,* 1862. Number and Class of Patients who do absolutely no work, being unfitted therefor by the form or phase of their insanity, the condition of their physical health, old age, or other causes.			
1. Private, ...	29	29	58
2. Pauper, ...	17	9	26
	46	38	84
The Males Unemployed constitute 54·12 per cent. Females, " 40·86 " Total, " 47·19 " of the numbers resident on 4th June, 1862.			

PAUPER DIETARY TABLE of JAMES MURRAY'S ROYAL ASYLUM, PERTH.

	BREAKFAST.				DINNER.								
	MALES		FEMALES		MALES.								
	Porridge.	Milk.	Porridge.	Milk.	Broth or Soup.	Uncooked Meat.	Meat & Potato Pie.	Fish.	Fruit Pie.	Rice Pudding.	Potatoes or other Vegetables.	Bread.	Beer.
	pt.	pt.	pt.	pt.	pt.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	pt.
* SUNDAY, . .	2	½	1½	½	1½					14		6	½
MONDAY, . . .	2	½	1½	½		8					16	4	½
TUESDAY, . .	2	½	1½	½	1		16					4	
† WEDNESDAY, .	2	½	1½	½	1½				16			4	
THURSDAY, . .	2	½	1½	½		8					16	4	½
‡ FRIDAY, . .	2	½	1½	½	1½			8			8	6	
SATURDAY, . .	2	½	1½	½		8					16	4	½
Total Weekly Allowance,	14	3½	10½	3½	5½	24	16	8	16	14	56	32	2

	DINNER.									SUPPER.									
	FEMALES.									MALES.					FEMALES.				
	Broth or Soup.	Uncooked Meat.	Meat & Potato Pie.	Fish.	Fruit Pie.	Rice Pudding.	Potatoes or other Vegetables.	Bread.	Beer.	Tea, Coffee, or Cocoa.	Bread.	Butter.	Porridge.	Milk.	Tea, Coffee, or Cocoa.	Bread.	Butter.	Porridge.	Milk.
	pt.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	pt.	pt.	oz.	oz.	pt.	pt.	pt.	oz.	oz.	pt.	pt.
* SUNDAY, . .	1					12		5	½	1	8	½			1	7	½		
MONDAY, . . .		7					14	3	½				2	½				1½	½
TUESDAY, . .	1		14					3					2	½				1½	½
† WEDNESDAY, .	1				14			3		1	8	½			1	7	½		
THURSDAY, . .		7					14	3	½				2	½				1½	½
‡ FRIDAY, . .	1			8			8	5		1	8	½			1	7	½		
SATURDAY, . .		7					14	3	½				2	½				1½	½
Total Weekly Allowance,	4	21	14	8	14	12	50	25	2	3	24	1½	8	2	3	21	1½	6	2

Extra Diet ordered for Sick, at the discretion of the Medical Superintendent.

Extra allowances of Bread, Cheese, Beer, Tobacco, Snuff, and Tea, to Male and Female Working Patients, at the discretion of the Medical Superintendent.

* On Sundays, occasionally, Suet and Meal Pudding (12 oz. to males; and 10 oz. to females) is substituted for Rice Pudding. The Suet and Meal Pudding contains 39lbs. Oatmeal; 17lbs. Suet; 4½lbs. Onions.

† On Wednesdays, in Winter, or when there is no Fruit Pie, the following diet is substituted: Meat (uncooked) 4 oz. to males and 4 oz. to females; Broth or Soup, Potatoes, and Bread, in same quantity as on Fridays.

‡ On Fridays, when there is no Fish, Meat is substituted, viz., uncooked Meat, 4 oz. to males, and 4 oz. to females.

QUANTITIES FOR ONE HUNDRED PATIENTS.

PORRIDGE.—21lbs. Oatmeal.

BROTH.—Liquor of Cooked Meat, Dripping, Bones, &c.—28lbs. Meat; 7lbs. Barley; 26lbs. Vegetables, viz., Carrot, Turnip, Cabbage, Cauliflower, Beans, Green Peas, Leeks, Onions, Parsley.

SOUP.—Liquor of Cooked Meat, Dripping, Bones, &c.—28lbs. Meat; 28lbs. Split Peas; 12lbs. Vegetables, viz., Carrot, Turnip, Green Peas, &c.

MEAT AND POTATOE PIE.—40lbs Meat; 60lbs. Potatoes; 3lbs. Onions; Pepper, &c.

FRUIT PIE.—90lbs. Fruit, (Gooseberries, Rhubarb, or Apples); 12lbs. Sugar; 13lbs. Flour; 3½lbs. Lard.

RICE PUDDING.—10lbs. Rice; 60 pts. Milk; 3½lbs. Sugar.

TEA.—1lb. Tea; 4lbs. Sugar; 12 pts. Milk.

COFFEE.—2¼lbs. Coffee; 5lbs. Sugar; 16 pts. Milk.

COCOA.—3lbs. Cocoa; 4lbs. Sugar; 18 pts. Milk.

CHAPLAIN'S REPORT

TO THE

DIRECTORS OF MURRAY'S ASYLUM

FOR YEAR ENDING 9TH JUNE, 1862.

In laying before the Directors the working of his department and his feeling as to its results, the Chaplain has to acknowledge the cordial and efficient co-operation of the Officers and Attendants of the Institution. Considering the nature of the work, he has been exposed to little interruption in the performance of it. This is doubtless due to the careful selection of those who wait on his services, and to the kind but firm discipline which prevails in the Asylum.

The usual religious exercises have been regularly conducted during the year. The Sabbath Service begins at 11 A.M., and lasts upwards of an hour. The usual service of the Church of Scotland is performed. At Nine o'clock on the mornings of Tuesday and Friday a service is held of not more than half-an-hour's duration, when a portion of Scripture from the Old and New Testaments is read, and praise and prayer are engaged in.

The attendance of patients at these services—which does not fluctuate much— may average a third of those lodged in the House. Of these at least a half may be described as in regular attendance. The irregularity of the others is mainly owing

either to changes in their health leading the Physician to forbid their presence for some time, or to the patients' own caprice—for while some are of necessity detained against their will, there is no enforced attendance. And here as elsewhere the habit of non-attendance is more easily learned than laid aside.

Except in the case of a few the attention given is very fitful. While it lasts, it is in many cases marked; but it is continuous chiefly in those who are convalescent, or whose mania is more chronic than acute. The service, as a vehicle of instruction, is, of course, valuable chiefly to the few who can thus command their attention. The Chaplain is convinced, however, that it supplies a want which many would deeply feel, and that it keeps before the mind man's highest duty and privilege, which in other circumstances many might overlook or forget. Its value is to be calculated more from the impression made on the spirit than from religious knowledge actually received. The marked difference of demeanour in Chapel and out of it, the general quiet that prevails—more especially during prayer,—and the subdued feeling which many exhibit throughout the service, show that impressions are made advantageous alike to their spiritual well-being and to their mental health. This harmony of feeling with the circumstances in which they are assembled can only be secured by a wise selection of those who are permitted to attend. It is much better to debar the individuals whose frivolity is troublesome, or whose excitement arrests attention, than to increase attendance by the sacrifice of the feeling.

The Chaplain strives to make these public exercises the basis of his private visitation. He often directs attention to the passage lately read or discoursed from. He thus most readily finds opportunity of converse, and perhaps indirectly gives an impulse to attention during public worship, and to after-consideration on some truth then read or spoken. Some are thereby led to set themselves to keep the text in mind, and he accordingly finds that they have an increased readiness and fulness of recollection. But this cannot be said of a large number. There are many patients whose sympathy cannot be arrested—there are others whose thoughts cannot be turned with profit to the

subject of religion. Looking at his visits in this light, he finds that the number whom he can lead into profitable religious conversation is very limited.

With Religio-Maniacs he deems it proper to avoid rather than to seek conversation on religious topics. It immediately turns to their own delusions, and for the removal of these the skill of the Physician seems of chief—if not, of sole avail. To converse, and still more to reason with Mono-Maniacs the Chaplain finds productive of very little good. The delusion reappears at the next visit, clothed in all its fulness of former detail.

There is a class of patients altogether averse to conversation on religious topics. They have conceived a dislike to the subject; or, what is more common, they entertain a bitter hatred to clergymen in general. This is often the result of some clergyman having been concerned in their removal to the Asylum, or supposed by them at least to have acted such a part. Hatred of the ministers of religion, if not of religion itself, seems often to arise from this cause.

Among the patients presently resident in the Institution there are several who resolutely refuse to come to Chapel, and seem to dislike any mention of religion, who yet regularly read their Bible, and spend the Sabbath-Day in a becoming spirit.

There are some who will converse only on the subject which is their mania. If a remark aside from that be offered, their attention is immediately lost. There are not a few with whom a rational conversation can be had on one visit, whereas on the next they are either incoherent or silent. While he strives to keep it before him as the chief aim of his visit to bring to bear on the mind 'The Word of Life,' the Chaplain must admit that fitting opportunity of doing so is not easily found, except in the case of a few.

His visit may, in another, though doubtless subordinate aspect, aid in promoting the welfare and happiness of those resident in the Institution. While received as a clergyman and expected to act as one, he finds himself increasingly treated as a friend. His sympathy is looked for, and sought after. Coming only occasionally among them, and called only to the interference

of friendship, he has special facilities for commanding their confidence, and for acquainting himself with their thoughts and feelings, their vexations and desires. He has thus opportunity to soothe and cheer, and give kindly advice, warning against the thought unjustly cherished, pointing the mind in a direction that may interest and employ its energies, urging to some course of conduct that the patient may pursue with pleasure and profit, or stimulating perseverance in one already taken up by them by a friend's interest in its progress. Such influence can of course be most efficiently executed over those whose educational advantages have provided them with resources of amusement or occupation additional to those developed in the immediate pursuit of their business or handicraft. But there are many to whom the sympathy and endeavour of friendship should in some measure be available.

Of his visiting the Chaplain may generally remark, that to not a few his visits seem a pleasure, and he trusts are such. Some who at first refused to converse with him now do so readily. Remarks made by him are kept in mind. Impatience seems sometimes checked, despondency may be temporarily cheered, and some minds may be aided in maintaining composure, submission, and the spirit of a good hope. As to the measure of success no general rule can be laid down, but these are the means by which it is sought, and some channels in which its possibilities seem to run.

As in former years several classes for the amusement or educational improvement of the patients have been in operation during the winter months. The Bible Class has met regularly on Sunday evening. The average attendance has been 38 (16 males and 22 females). Since 3rd November, when the class was resumed after the Summer Recess, the pupils have read the greater part of the Book of Genesis, the Books of Proverbs, Ecclesiastes, and Song of Solomon, in the Old Testament, and the Gospel of John in the New. Extracts from a religious book or periodical have also been read in their hearing. It promotes acquaintance with Bible truth, and affords suitable occupation for the evening of the Lord's-Day, which might otherwise be felt monotonous and irksome. It

has been conducted by the Housekeeper, aided by an upper-class patient.

The same lady takes charge of a class for improvement in Writing and Arithmetic. This class met on Tuesday evening, and had an average attendance of 15. Some of the pupils made manifest improvement. The attention, aptitude, and eagerness of competition seemed general and marked.

The class for the practice of Psalmody held its meetings on Monday evening. It was under the charge of the Matron. The average attendance was upwards of 40, and, while some profited by it, all seemed to find it a pleasure.

Of these classes it may be generally remarked, that the attendance has been regular, the attention on the whole has been good, and very considerable interest has been taken in the work—facts which seem to say that they have been of advantage in communicating instruction and in promoting the patients' recovery and happiness.

During the winter also a course of ten lectures, arranged by the Physician-Superintendent, was delivered to large audiences. That very considerable interest was taken in them was shown in the attention given during delivery, and the remarks made concerning them on other occasions.

JOHN MOODIE, Chaplain.

THIRTY-FIRST

ANNUAL REPORT

OF THE

DIRECTORS

OF

JAMES MURRAY'S ROYAL ASYLUM

FOR

LUNATICS,

NEAR PERTH.

JUNE 1858.

PERTH:
PRINTED BY ORDER OF THE DIRECTORS, BY JAMES DEWAR, JUN.

MDCCCLVIII.

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1858–59.

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ANNUAL REPORT

BY THE

Directors of James Murray's Royal Asylum

FOR LUNATICS.

14th JUNE, 1858.

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

At the date of the last Annual Report, there were in the House 155 patients—85 males and 70 females. Since then 69 patients have been admitted—30 males and 39 females. The total number of patients under treatment during the past year was 224—115 males and 109 females. Of this number 22 have recovered—10 males and 12 females; 9 have been removed improved, 7 males and 2 females; 4 have been removed unimproved, 3 males and 1 female; and 14 patients have died—11 males and 3 females. There now remain in the Asylum 175 patients, 84 males and 91 females. For the ages of the patients admitted during the past year, their social condition, and other particulars, reference is made to the Report of the Medical Superintendent and Appendix thereto, hereto subjoined.

The Directors are happy to be able to report that, during no former period of the history of the Institution, has it been conducted with

greater efficiency and success. No exertions have been spared on their part, both by a judicious expenditure of money in introducing improvements, and by their own personal superintendence, to render it worthy of the confidence of the public; and they have been warmly supported in this respect by the medical and other officers.

The time is now past when it is necessary to dilate on the advantages of Asylums for the insane, as these are now fully admitted by all intelligent men. Although this is the case, there is no doubt much which remains to be discovered in regard to Insanity in its various phases and the best mode of treatment. During recent years much has been done to collect and classify information on the subject, and as all true improvements must be the result of practical experience, nothing can be more conducive to the advancement of sound views than the Reports which are annually published by the medical men of different Asylums throughout the country. Along with the present Report, there is produced one from the Medical Superintendent, which enters minutely into the management of the Institution and its experience during the past year, and discusses many questions which suggest themselves in a manner both interesting and instructive; and as the Directors can add nothing to what is contained in that Report, they would respectfully refer thereto for full information on these subjects.

In conclusion the Directors would record their best thanks to the various Officers for their assiduous attention to the interests of the Institution during the past year; and they trust that, through the Divine blessing, it may long continue to realize the expectations of the benevolent founder, and to prove a boon to the community.

REPORT

BY

THE MEDICAL SUPERINTENDENT

FOR THE YEAR 1857–8.

General Results of Year.

In our Report for 1856-7, we pointed out the steady increase in our population from 1855 to 1857; the number of inmates resident in June 1855 being 133—in June 1856, 146—and in June 1857, 155. This increase has continued during the past year, the number of patients at present resident being 175—that is, 20 more than last year, and 42 more than in June 1855. Rather unusually, there is, at present, and has been for some time, a preponderance of females over males, the former numbering 91, while the latter amount to 84. We have long since reached that limit of fullness of the Institution, beyond which we are constrained to refuse all applications for admission, unless when vacancies occur from discharges or deaths. It has been calculated that since January 1858, admission has been refused, on the ground solely of want of accommodation, to about 60 pauper patients. An urgent and constant demand for the admission of this class of patients continues, and probably will do so, until the District Pauper Asylums of Scotland are ready for the reception of patients. This unusual increase in the demand for admission is undoubtedly due to the operation of the new Act of Parliament anent Lunacy in Scotland, passed

Increase of Population.

Full state of House.

Refusals of admission.

since the date of our last Annual Report.* From an anxious desire to accommodate the most urgent cases of the neighbourhood, especially seeing that admission could not be obtained into other public asylums, which were equally full with our own, we have been now for several months considerably overcrowded in some departments of the Institution, and have been obliged to fit up temporarily as pauper dormitories rooms originally intended for other purposes. We expect this pressure to be relieved on the opening of the Perth District Pauper Asylum. The removal of part, or all, of our pauper population to District Asylums will, it is hoped, enable us to do what it is, at present, impossible to attempt—to classify the patients according to the nature of their disease, and not merely according to their rates of board.

Increase of Staff.

The staff of attendants has been proportionally larger this year than at any former period, in consequence of—1. The unusual number of high-class patients, each requiring a separate servitor; 2. The measures taken with the unruly and excited—the sending of them to pump or garden-work under special attendants; and, 3. The appointment of supernumerary attendants to supplement the ordinary attendants, whenever and wherever a pressure of work rendered their services necessary.

Admissions.

In 1855, we have shown in last year's report, the admissions amounted to 36; in 1856, to 39; in 1857, to 47. This year they have been 69, being an increase of 22 on last year, and 33 on 1855.

Illustrations of advantages of early treatment.

Of 69 admissions, 12 were placed under treatment within a week, 21 within a month, and 51 within 6 months of the breaking out of the disease—a fact that argues favourably for the more healthy ideas prevailing in the public mind as to the advantages of early treatment, and the superiorities of asylum over home management.

Re-admissions or Relapses.

14 of the admissions were re-admissions, or in other words, cases of relapse. Of this number, 10 had been previously discharged recovered, 2 improved, and 2 unimproved. In 11, the patients laboured under the same form of insanity as in last attack, while in 3 the type of the disease had changed.

Changes in type of disease.

One woman was admitted with Erotomania, who had previously suffered from Melancholia; another with Mania, who had also

* 20 and 21 Vict., cap. 71, "An Act for the Regulation of the Care and Treatment of Lunatics, and for the Provision, Maintenance, and Regulation of Lunatic Asylums in Scotland." 25th August, 1857.

previously been a Melancholiac; while a man was admitted with Dementia, who had previously had Acute Mania. Such changes in the type or character of the disease are of constant occurrence.

Recoveries.

The recoveries amounted to 22. 3 patients recovered after a residence of 2 to 4 years in the Institution. The table of relapses shows, however, that all the recoveries cannot be considered as permanent or stable.

Relapses.

Indeed, it may be laid down as a broad general rule that, when insanity has once exhibited itself, there is ever afterwards a tendency to relapse; or, in other words, recovery may in all cases be looked upon as temporary or uncertain. The table of recoveries shows the duration of disease prior to admission to have been under a week in 6, under a month in 9, and under 3 months in 17; while the duration of treatment was under 3 months in 6, under 6 months in 9, and under a year in 16. In estimating the proportion of recoveries, it is necessary to bear in mind the relation of our incurable to our curable population as to number.

Proportion of Incurables.

Of 175 patients presently resident in the Institution, not more than 52 can be properly considered curable, or 29·71 per cent—leaving the very large proportion of 123 patients, or 70·28 per cent., incurable. The older an Asylum is, the greater is likely to be its per centage of incurable cases; for there is a tendency in all public Asylums, where no rules to the contrary exist, to the slow accumulation of chronic and incurable cases.

Removals: improved & unimproved.

9 patients were removed improved, but not recovered, and 4 were removed unimproved; some of them in opposition to our opinion and advice.

Evils of premature removal.

All experience goes to prove the great danger and extreme impropriety of removing patients from Asylums in opposition to medical advice. One of the most frequent and fatal results is suicide. Of the patients removed unimproved, one—a man—escaped from his father's house shortly after his removal from this Asylum: he was found wandering about the country—was taken into custody by the police authorities, and was ordered by the Sheriff of the County to be confined in another public Asylum at his father's expense; another—a woman—was brought back within a few days of her removal from this, greatly worse; a third was placed under private surveillance in his own house, and has since died; a fourth was removed directly to another public Asylum, where he remains unimproved.

Mortality.

Our obituary list contains twice the number of deaths that it did last year. This has arisen chiefly from the three following causes:—1. That several patients were admitted in a dying state, and died within a few days or weeks after admission; 2. That several of the oldest residents in the Institution—some of them upwards of 60 or 70 years of age—have died during the year; and 3. That several persons labouring under General Paralysis, one of the most intractable and fatal forms of insanity, have died during the year. There has been no fatal epidemic, and no general or common cause of death. Diarrhœa occasionally, especially in spring and autumn, shows itself in an epidemic form; but it is generally simple, mild, and transient. Sometimes, however, it becomes more serious. Last spring a few cases, which occurred, assumed a distinctly choleroid type; and, though constituting what is popularly denominated "British Cholera," the affection differed apparently in no essential respect, as we have elsewhere shown,* from the more formidable Asiatic disease. It may, and probably does, to some extent differ in its causation; for it does not follow, because two diseases are attended, or characterised, by similar, or the same, symptoms, that they are the same in nature, or spring from a common cause. On the other hand, however, it must be remembered, in our speculations on this subject, that different causes are perfectly well known to be capable of generating the same disease. Of 14 deaths, 4 occurred in persons above 60 years of age; and 10 in persons above 40. The patients laboured chiefly under chronic and incurable forms of insanity; 3 deaths occurring in General Paralysis, 4 in Dementia, and 2 in Chronic Mania. The curable cases laboured under physical diseases of such a nature, and to such an extent, that they could scarcely have survived. Of 2 females labouring under Acute Mania, one died of Acute Phthisis, and the other of Typhoid Erysipelas. Some of the Pathological lesions were of interest, though not as throwing light on the mental state or phenomena. In one case—that of an old sailor—the principal lesion was an enormous cancerous liver, occupying nearly half the abdomen, and extending on the right side almost to the iliac region. It was of a dark purple colour, was very friable on being manipulated, and it

Epidemic Diarrhœa.

Identity of British and Asiatic Cholera

Causes of Death.

Pathology of fatal cases.

Cancer of Liver.

* "Identity of British and Asiatic Cholera."—*Medical Times, October* 31, 1857.

bulged into a series of cysts full of thick curdy pus. It had contracted a number of adhesions to the stomach, spleen, and intestines. The surface of the intestines was injected and coated with flocculent lymph, and the cavity of the abdomen contained a large quantity of bloody serum. In another case, death occurred during the night from the bursting of a vomica and subsequent asphyxia by the accumulation of the effused pus in the bronchi, trachea, and mouth. He had had hæmoptysis several months anterior to death. The lungs were found full of softening tubercles, which broke up under the slightest pressure; the apices of both were riddled with vomicæ or abscesses, and were also generally and firmly adherent to the walls of the thorax, the pleural adhesions being very dense. A third case was fatal by chronic gastritis and the non-assimilation of food resulting therefrom. The symptoms during life led to the suspicion of ulcer of the stomach. They had been those of chronic vomiting, severe and long persistent; without, however, the appearance of Sarcina in the ejesta. There was neither tumour of the pylorus nor ulcer of the stomach; but there was hyperæmia of the whole interior of the stomach, most intense about the cardia and pylorus, and on the rugæ, all of which were of a deep purple tinge. The stomach contained a quantity of mucous fluid. There was also intense dark purple hyperæmia of the interior of certain parts of the intestines, with irregular contractions of others. The brain was of very firm consistence. [The case was one of Dementia]. There was a large quantity of transparent serum in the ventricles; and adhesions of the Dura Mater, with partial effusions of lymph on the surface of the Pia Mater, made up the catalogue of appearances within the cranium. A fourth patient—likewise an old sailor, who had been a good deal abroad—succumbed to a complication of Hepatitis, Enteritis, and Bronchitis. He had been deeply jaundiced before death, and hepatic disease of the nature of Cirrhosis was suspected. The liver was found to be contracted, shrunk, speckled with white, and of a deep biliary tinge; it was firmly adherent to the colon and stomach. The hepatic epithelium was granular and gorged with biliary pigment; but it was not unusually fatty. The spleen was small, shrivelled, and easily lacerated. The patient reported, during life, that he had repeatedly suffered from ague and jaundice in warm climates. The intestines and mesentery were deeply

Death from bursting of a vomica.

Chronic Gastritis.

Hepatitis.

injected of a dark purple colour; and there was also hyperæmia of the interior of the intestines, especially the small, which were lined with a prune-juice-coloured mucus. There was a small quantity of bloody serum in the cavity of the abdomen. A fifth case was fatal by what has been denominated "serous apoplexy," occurring in the course of General Paralysis. The Dura Mater was adherent to the skull, especially behind; the arachnoid was generally opalescent and studded over posteriorly with numerous white granulations; and there was a large amount of sub-arachnoidean and ventricular serum. The tissues of the cerebrum and cerebellum were soft and friable; but neither was there any distinct softening nor any apoplectic clot.

General Paralysis: its Pathology.

Three deaths fall to be recorded from General Paralysis, usually so-called. This is a term, we believe, liable to be greatly abused or misunderstood. It is too commonly and loosely used to include all cases of Paralysis occurring in the insane, or at least those associated with exaltation of ideas, or with the monomania of pride, vanity, or ambition. The name is somewhat unfortunate; for in one, and that the most characteristic, stage, the Paralysis is local and limited—partial in extent; and, moreover, ordinary and spinal paraplegia sometimes merges into Paralysis as general as this can be. Nor is it marked by a specific pathological condition; and it is not invariably associated with, nor characteristic of, particular forms of insanity. The term "General Paralysis," we believe, ought either to be more rigorously defined than at present, or it should be abolished. It has occurred to us to see many mistakes made from the too vague use of this term, which is frequently a most important one in medico-legal cases. In courts of law it is possible that the lawyer and the medical witness may differ as to the interpretation which they put upon these two words. The lawyer regards the "General Paralysis of the insane" as necessarily incurable, and as necessarily implying death at a period of not more than 2 or 3 years from the origin of the disease. By using this term, then—unless the medical witness otherwise and rigorously define the sense in which he employs the word—he will be held to commit himself to this view of the prognosis—a view which his evidence may variously contradict.

General Paralysis.

Term "General Paralysis" unsatisfactory.

Its medico-legal aspects.

Crisis in disease.

It has frequently been observed that in disease there is a tendency to crisis or death about 4 A.M. This has not been quite borne out by the obituary statistics of the last 4 years in this Institution, which go to show that the tendency to death is greatest between midnight and 6 A.M., and that death certainly occurs frequently, but not most frequently, about 4 A.M. We have noticed the same phenomena in general Hospitals. Our statistics, however, are too limited to enable us to arrive at perfectly satisfactory conclusions on this head. The majority of deaths in this Institution during the last 4 years has occurred between midnight and noon—the number being equally distributed over the 6 hours from midnight to 6 A.M., and then from 6 A.M. to noon,—5 in each period of 6 hours, or 10 in all. While between noon and midnight only 4 happened; and, of these, 3 occurred between noon and 6 P.M.

Peculiarities of disease in the Insane.

Many of the ordinary physical diseases of the sane become most insidious and exceptional in the insane; their character appears to be masked or obscured by an inertia or torpor of the nervous system. Their frequently typhoid type is another feature worthy of note; while a third is the frequent absence of irritative or symptomatic fever. We have sometimes known no complaints made, have seen no external evidence of pain or suffering in Acute Phthisis—"galloping consumption"—where the subsequent necropsy proved the lungs to have been riddled with vomicæ, full of pus; in phlegmonous erysipelas, going on to the formation of enormous collections of pus in the limbs; in Pneumonia, where the lungs were solidified and normal respiration was impossible; in organic diseases of the heart; in gastritis and other diseases. And we have seen, further, surgical operations frequently submitted to without a murmur,—nay, the patient all the while laughing and joking as if feeling had been completely obsolete. The most serious chest diseases may run their course without cough or expectoration; the excito-motor nervous system would appear to be nearly inert or torpid; and to this must be added, as an explanatory fact, that the attention, in the insane, is sometimes, in great measure, or quite, lost. Sooner or later progressive emaciation and debility, languor, lassitude, and indolence, perhaps anorexia or sleeplessness, direct attention to the state of the patient, in whom the physical signs then show the extent of the appa-

Absence of symptoms.

rently latent disease, which, however, has been really rapidly advancing towards its fatal termination. The progress of physical diseases towards an acmé or fatal termination, with almost none of the ordinary symptoms, is calculated to strike the general practitioner among the sane as something incredible, but it is nevertheless true. This masking of disease necessarily entails upon the Psychological Physician the—"alieniste"—to use a continental expression—greater watchfulness, greater trouble, greater responsibility, than on his brother in ordinary civil practice. We have seen cancer of the liver, accompanied with Enteritis and Peritonitis, fatal, without pain wringing from the sufferer a single complaint: nay, in one individual, whose case recurs to our memory, his personal character was greatly modified for the better,—the type or aspect of his malady quite changed,—by his fatal organic disease. From having been passionate, fretful, and abusive, he became affable, mild, and docile. This effect of co-existent physical lesions in modifying the character of the patient and altering the type of disease has not unfrequently been very marked. The dying patient has even been sane in his last moments; death has been immediately preceded by a bright, but transient, flicker of the light of reason; and the sufferer has expressed himself serenely, contentedly, happily, as to his latter end, and his transition from life, with all its troubles and diseases, to eternity, with all its joys and comforts. The dying moments of patients are, whether in a Psychological or religious aspect, frequently thus invested with peculiar interest. But this subject may be considered to fall perhaps even more specially within the province of the Chaplain, and we shall not, therefore, further enlarge upon it.

Insanity as modified by disease and death.

Frequently cerebral disease would appear to be vicarious, or, in other words, it takes the place of, and alternates with, disease in other parts of the body. This phenomenon has been chiefly noticed in connection with Phthisis. The latter is one of the most common complications of insanity. It often happens where insanity and Phthisis, or,—perhaps we may be allowed to say, assuming, for the sake of illustration, the pathology of the cerebral disease,—tubercular or scrofulous disease of the brain and lungs, co-exist in an individual, when disease in the one organ is prominent, that of the other is in abeyance. That is to say, where and when the Phthisis becomes acutely developed, the patient

Alternations of Insanity with Phthisis, &c.

becomes *pro tem.* sane; and, on the other hand, when the pulmonary disease is overcome or retrogades, insanity again appears, frequently in the form of a paroxysm of acute mania. *Apropos* of Phthisis, we may further state that the scrofulous diathesis frequently manifests itself differently in different members of a family. One may be a lad of precocious talents, giving promise of the highest future distinction, but withal of an extremely sensitive nature, and possessed of a delicate nervous or nervo-sanguine temperament; a second may be of a very lymphatic temperament and suffer from scrofulous sores of the glands of the neck; a third may die young of Phthisis; a fourth may be insane; and a fifth, a drunkard or a prodigal. *Diseases of the stomach* are probably not unfrequent in the insane,—sometimes idiopathic, sometimes as the result of abstinence from food or the injection of improper food. After deaths from abstinence the mucous membrane of the stomach is sometimes found in a state of inflammation, softening, or ulceration. The stomach may sometimes become habituated to food of an unusual kind, which, so far from being deleterious, may appear quite the reverse; at least we can testify that a patient, who frequently for weeks together eats quantities of grass, is perhaps the strongest and healthiest member of our community. He is subject to periods or fits of excitement, during which his appetite is inordinate, and there is no satisfying the incessant cravings of his morbid hunger. It is very certain, though it does not admit of definite statistical proof, that Dyspepsia, that protean and heterogeneous group of gastric maladies, is frequently the precursor, if not the cause, of insanity; interfering, as it does, more or less directly, with the due nutrition of the brain. Dr Bucknill* says that he never met with an instance of decided Bright's disease in the insane. One of the deaths which we have to record during the last year, appeared to us, from the symptoms, to have resulted from valvular disease of the heart, associated with Bright's disease. But, as there was no necroscopical examination, we cannot be sure that our conclusions were correct; and we shall not, therefore, at present combat his assertion. We cannot, however, see *à priori* why Bright's disease should not be as common in the

The scrofulous diathesis in its varied manifestations.

Diseases of Stomach.

Idiosyncrasies & habits as to food.

Dyspepsia as a forerunner of Insanity.

Bright's disease.

* "Manual of Psychological Medicine," by Drs Bucknill and Tuke: London, 1858, p. 451.

insane as in the sane, in proportion as the former are equally exposed to its causes with the latter. The same author further asserts that the kidneys are remarkably free from disease in all the forms of insanity; "and the changes which give rise to albuminous urine are especially rare in them." The latter statement corresponds with the result of researches made by ourselves, in 1856, on the chemico-microscopical characters of the urine in insanity; for, "in not a single instance was the urine albuminous."*

Albuminous urine.

Size of Brain & configuration of Skull in relation to Insanity.

It has frequently been supposed that a necessary relation or fixed proportion subsists between mental disease and the size of the brain; and again, between the latter and the external size of the cranium or head; further, that the heads of the insane are characterised by certain peculiarities of conformation which are virtually diagnostic; and that the form and size of the head, may, therefore, in many, if not in all, cases, be valuable criteria in the determination or discovery of insanity. As a contribution towards the elucidation of this subject, we have caused a number of measurements of the head to be made in 121 patients—48 males and 73 females. It has been thought advisable, or necessary, to add to the measurements of the head those of the height or stature, with a view to ascertain what relation subsists between the height of body and the size of head, and in what, and how many, cases the head is abnormally diminished or increased in size in proportion to the dimensions of the rest of the body. We are not prepared to admit that the size of the brain can be accurately estimated by external measurements of the head, nor that the mere size of the brain is always an index or measure of the amount or quality of intellectualization, or of abnormal mental phenomena. But, so far as mere measurement of the head and observations on its configuration can lead us to useful results, and so far as our experience in this Institution goes, our conclusions and results may be shortly stated as follows:—

Phrenology in its relation to Pschology

Results of researches.

1. That the size of the skull in the insane (excluding the class of Idiots) does not materially differ from its size in the sane.
2. That no relation can be traced, in the generality of cases, between

* "Contributions to the Chemistry and Histology of the Urine in the Insane."—Journal of Psychological Medicine, July, 1856, p. 488.

the size or form of the skull and the different types or phases of insanity.
3. That, though peculiarities of conformation of the skull certainly frequently exist, they do not bear any fixed relation to the types or phases of insanity.
4. That similar conformational peculiarities are probably equally common, or nearly so, in the sane.
5. That in a large proportion of cases the cranial development is decidedly good, and the conformation of the head apparently normal and regular.
6. That the size and form of the head are therefore *per se* fallacious criteria in the differential diagnosis of insanity.

It is to be noticed that our population includes no idiot cases, which are, therefore, excluded from our statistics. This is most important to bear in mind, for there is no doubt the above propositions do not hold equally good in regard to the idiot. Dr Bucknill lays it down that the average dimension of the head in the insane is below that of the sane; but he allows, that, in a large number of cases, the head is apparently, not only normal as to size, but it is even larger, and "well developed," in phrenological phrase.* According to our measurements, the circumference of the head at its greatest diameter, including forehead and occipital protuberance, was 24 inches in 8 males, 5 being cases of Dementia, 1 of Melancholia, 1 of Monomania, and 1 of Mania. In none of the females did the head attain this diameter. It was 23½ inches in 9 cases, 2 of these being females; or, in 6 cases of Dementia, 1 of Melancholia, 1 of Monomania, and 1 of Mania. It was 23 inches in 28 patients, 11 being females; or, in 11 cases of Dementia, 3 of Melancholia, 7 of Monomania, and 7 of Mania. The lowest diameter was 19 inches in 2 females, 1 being a case of Mania, and the other one of Monomania. The next lowest measurement was 20 inches in 4 females, 2 being cases of Mania, 1 of Melancholia, and 1 of Dementia. The lowest measurement in males was 21 inches in a case of advanced Dementia; but it was only 21½ inches in one of the most active and intelligent members of the

Dimensions of the Head in different forms of Insanity.

* Manual of Psychol. Medicine, p. 424.

Circumference of Head in Insanity.

community—a well-educated, accomplished gentleman—a man remarkable for his powers of memory. The diameter was 22 inches in the largest number of cases—37—11 males and 26 females. The average circumference in males was 23·90 inches, and in females, 21·74. The heights of the males, who had the largest circumference of cranium, were in 1, 5 feet 2 inches; in 1, 5 feet 5 inches; in 2, 5 feet 6 inches; in 1, 5 feet 7½ inches; in 1, 5 feet 9 inches; in 1, 5 feet 9½ inches; and in 1, 5 feet 10 inches. The statures of the females, who had the greatest diameter of head, were respectively 5 feet 4 inches and 5 feet 7½ inches. The greatest capacity of cranium,—the greatest size of brain,—did not, therefore, necessarily go along with the greatest height or stature, occurring, as it did, in some of the shortest members of the community. The greatest antero-posterior measurement of the arch of the cranium, from the nick of the nose or junction of the nasal with the frontal bones, to the occipital protuberance, was 16 inches in 2 males—1 a case of Dementia, and the other of Monomania; their heights being 5 feet 9 inches, and 5 feet 10½ inches. It was 15½ inches in 1 male, a case of Dementia, whose height was 5 feet 4½ inches; and 15 inches in 5 cases, 1 being a female, or, 3 of Monomania, and 2 of Dementia, with statures of 5 feet 7½ inches, 5 feet 9 inches, 5 feet 10 inches, 6 feet, and the female of 4 feet 10 inches. The shortest measurement was 11 inches in 5 cases, 4 females and 1 male; being 2 of Dementia, 2 of Mania and 1 of Monomania: the height of the male being 5 feet 7½ inches, and that of the females, 4 feet 11 inches, 5 feet 1 inch, and 2 of 5 feet 3 inches. A measurement of 13 inches was found in the greatest number of patients—34—or 13 males and 21 females. The average measurement in males was 13·27, and in females, 12·54 inches. The greatest lateral measurement of the arch of the cranium—from ear to ear, across the vertex—was 15½ inches in 1 male, a case of Monomania, with a height of 5 feet 10½ inches. It was 15 inches in 11 cases, 2 being females—5 of Dementia, 5 of Monomania, and 1 of Melancholia. It was least, or 11½ inches, in a case of Mania, a female; and 12 inches in 16 cases, 15 being females, or, 7 of Mania, 6 of Dementia, and 3 of Melancholia. It was 13 inches in the largest number of cases—37—10 males and 27 females. The average in males was 13·58, and

Antero-posterior measurement of arch of Cranium.

Lateral measurement of arch of Cranium.

in females, 12·89 inches. The greatest dimensions of the head in all directions never occurred in the same individual; or, in other words, he who had the greatest circumference of cranium was not he whose head measured most antero-posteriorly or laterally. Thus of the 8 males who had a circumference of head of 24 inches, 2 had an antero-posterior measurement of 12½ inches, 3 of 13 inches, 2 of 13½ inches, and 1 of 14 inches; and a lateral measurement of 15 inches in 4, 14 inches in 2, and 13 inches in 2. Of 2 females, who had a circumference of 19 inches, 1 had an antero-posterior measurement of 11 inches and the other of 12 inches; while both had a lateral measurement of 13 inches. Again, of 2 males who had an antero-posterior measurement of 16 inches—or the greatest size of cranium from before backwards—both had a circumference of 23 inches; while one had a lateral measurement of 15 inches, and the other of 15½ inches. Of 5 cases, that had the smallest size of cranium, measured from before backwards, 1 male had a circumference of 22 inches, and a lateral measurement of 13 inches, 3 females had a circumference of 22 inches and 1 of 19 inches; and 1 had a lateral measurement of 12 inches, 2 of 13 inches, and 1 of 13½ inches. And lastly, 1 male who had the greatest lateral measurement of the arch of the cranium—15½ inches—had an antero-posterior one of 16 inches, and a circumference of 23 inches. In this case the head most nearly attained its greatest dimensions in all directions; it was one of Monomania, with paroxysms of Mania. The female, who had the least lateral measurement—11½ inches—had an antero-lateral of 13 inches, and a circumference of 22 inches. The greatest height of males was 6 feet 1 inch—a case of Chronic Mania—with a smallish circumference of head—22 inches; the antero-posterior measurement of cranium 12·5 inches; and the lateral 14 inches. There were 2 males at 6 feet—both cases of Monomania. In one of them the circumference of head was 22½ inches, the antero-posterior and lateral measurements each 13 inches; and in the other the circumference was 23 inches, antero-posterior measurement 13 inches, and lateral 14½ inches. The greatest height did not thus coincide with the greatest cerebral development. The least height of males was 5 feet 1 inch, with a circumference of 21 inches, and antero-posterior and lateral measurements of 12 inches. The greatest height of women was 5 feet 8 inches,

Stature in relation to size of Head

with a circumference of 23 inches, an antero-posterior measurement of 12 inches, and a lateral of 15 inches. The lowest stature of females was 4 feet 8 inches, with a circumference of 21 inches, an antero-posterior measurement of 13½ inches, and a lateral of 12 inches. The greatest number of men measured from 5 feet 6 inches to 5 feet 10 inches in height; and of women from 5 feet 2 inches to 5 feet 5 inches. The average height of males was 5 feet 7 inches, and of females 5 feet 2 inches. The Tables appended to our Report further show the size of the face in relation to that of the head proper or cranium; but as this has a less intimate bearing on our present subject we shall here omit all notice of it. The difference between the sexes as to height of body and size of head is, however, of considerable interest. On the whole, the stature of the women is only 5 inches less then that of the men; their heads are also less in all dimensions. This points to a smaller cerebral development in the female than in the male. But it is not necessary here to show that quality and quantity of brain are two different things, both in health and disease; and that the highest order of mind —the greatest number of mental endowments—do not always bear a definite proportion to the largest size of head. The average circumference of head in males was 23·90, in females, 21·74; the average antero-posterior measurement in males 13·27, in females 12·54; the lateral measurement 13·58 in males, and 12·89 in females; the average distance from the nick of the nose to the nape of the neck across the side of the head and cheek was 11·42 in males, and 10·65 in females; and the average distance from ear to ear across the face by the hollow of the chin was 12·53 in males, and 11·71 in females. The difference between the sexes as to circumference was therefore 2·16 inches; antero-posterior measurement of arch of cranium ·73; lateral measurement ·69; side of face ·77; and front of face ·82. The difference was, therefore, greatest as to the circumference of the head—2·16 inches; and least in regard to lateral measurement or ·69. Among comparatively frequent peculiarities of conformation in individual cases, we may mention a pyramidal or conoid tapering form which we have noticed in certain cases of Monomania and Mania; an unsymmetrical development of the two sides of the head—one being flatter, smaller, or more irregular than the other; and lateral compression, giving rise to what

Difference between sexes as to stature of body and size of Head.

Peculiarities of conformation of Head.

has been called the carinated or keel-shaped skull. Among minor peculiarities, with which every student of Physiognomy is familiar, are the low receding forehead, and the prominent occiput. Many of these peculiarities of conformation are congenital: some are undoubtedly due to accidents during birth. But it scarcely admits of doubt that others of them may have been produced, diminished, or exaggerated, in progress of the growth of the individual. The effect of Hydrocephalus and other diseases in expanding the bones of the head is well known; and some authors assert that Atrophy of the brain, in adult age, is sometimes followed by a corresponding flattening and shrinking of the cranial bones. Again it has been remarked by authors that the coronal region is unusually developed in the vain, proud, or ambitious insane. This we have certainly noticed in isolated cases; but we are not prepared to say whether such a phenomenon is a mere coincidence, accidental and inconsequential, or whether there is any fixed relation between the habitual manifestation of particular propensities or emotions, or the evolution of particular intellectual capacity, and the development or undue fulness of particular portions of the cranium.

Configuration of Head in relation to development of Brain.

The etiology of insanity is a subject of great importance as bearing on its proper prevention and cure. Important lessons may be learned in the daily history of every asylum. The sections pertaining to *causes* in the Tables appended to this Report are comparatively valueless—as all such tables necessarily are—from the imperfect and unsatisfactory data on which they are founded; it were profitless, therefore, minutely to analyse them. But there are causes undoubtedly operating daily on the large scale—causes which society may do much to prevent or annul—and some of which, in ignorance, prejudice, or obstinacy, it does not exert itself to prevent or abolish; and to these we deem it not unworthy nor unnecessary briefly to direct attention. For we regard it as a duty—though, withal, frequently a disagreeable and thankless one—incumbent on the Superintendents of asylums, to point out to society the grand public lessons which the histories of such institutions teach. It is only one part of the duty and privilege of these officers—one part of the use of such institutions —to cure insanity. Not a less important duty or use is that of contributing, in however small a degree, to the prevention of insanity—

Etiology of Insanity.

Fallacies of Statistics.

to the purging from out society of the unhealthy or morbid elements which predispose thereto. No year passes without abundant proof of the heredity, or hereditary transmissibility, of insanity. Of 69 admissions, hereditary predisposition was proved in 17, 13 females and 4 males—the female sex, therefore, largely predominating in the proportion of more than 3 to 1. In one of these cases the mother was insane; in 2, the father; in 1, the father and brother; in 2, a brother; in 6, sisters; in 1, the maternal uncle; in 1, the paternal uncle; in 1, a half-uncle and aunt; in 1, a grandfather's cousin; and in 1, the family generally were eccentric or insane, according to the views taken as to what constitutes insanity and eccentricity respectively. With a view to illustrate the subject of hereditary predisposition more fully and trustworthily, we have examined our statistics for the last 31 years—from the opening of the Institution in 1827, to the present date—and we find, as the result, that of a total of 1130 cases admitted, it existed in 26·54 per cent., or rather more than one-fourth; or, if we deduct the cases in which no cause is stated—which gives us a total of 733, in 40·92 per cent. Of 300 cases, in which hereditary tendency is thus noted, 165 were females and 135 males—the former sex, therefore, greatly predominating. Esquirol estimates hereditary predisposition to occur in nearly one-fourth of the admissions, or 21 per cent.; Guislain at one-fourth, or even 30 per cent.; Dr Webster, from the statistics of Bethlem, at 32 per cent.; the statistics of the York Retreat show nearly one-third of the admissions; and Professor Holst of Christiania states it as high as 69 per cent. in Norway. It may be necessary to explain that our statistics make no distinction between collateral and direct relationships. And it may further be advisable to remind the reader that it does not necessarily follow, because progenitors have been insane or eccentric, that the *immediate* offspring should be equally so. There are well-established laws of transmissibility which we cannot here stop to explain or enumerate. The form of insanity chiefly transmitted appears to have been Dementia. The mother was noted to have been insane in 20 cases, and the father in 29. The mother's insanity was transmitted in 13 intances to daughters, and in 7 to sons; while the father's was transmitted in 16 cases to sons, and in 13 to daughters. This bears out

Hereditary transmission

Direct and collateral transmission

Form of Insanity chiefly transmitted.

the conclusions arrived at by the majority of British and foreign statists—that the mother's insanity is chiefly transmitted to daughters, and that of the father to sons. The father, however, according to our tables, was more frequently insane than the mother, in the proportion of 29 to 20 times. This does not quite accord with the generality of statistics, which show that the mother is more likely to transmit insanity than the father.

Effects of mother's and father's Insanity on offspring.

Intimately connected with this subject is the delicate and painful one of the inter-marriage of tainted persons, especially of tainted females—of women labouring under, or predisposed to, insanity—and whose offspring are more than likely to manifest insanity, or at least to bear about with them a strong predisposition. We cannot too strongly reprehend the practice in parents or friends of wilfully concealing from an intending husband or wife the fact of existing or prior insanity in the opposite contracting party. Such practise is not only cruel, but criminal; it is perpetuating and propagating insanity broad-cast; it is burdening the country with the helpless and diseased; it is—to use a phrase, which, if plain and homely, nevertheless embodies a great and wholesome truth—"deteriorating the stock" of society. One lamentable instance came under our notice during the year. A woman was brought here for the second time, whose house, on the evening preceding her admission, had presented the following scene:—In one apartment lay a dying husband cursing, with his last breath, the day he had been married, and lamenting bitterly that he had not been made aware that he was allying himself with a tainted woman. His simple and pathetic story was this: in his youth he had had an attachment for her as a girl; he spent some years abroad as a soldier; on his return, finding her still unmarried, he renewed his former attachment, and was permitted to propose marriage without being made aware, either by her or her friends, that, during his absence, she had had one or more attacks of insanity: they were married, and subsequent attacks soon opened his eyes to his wife's morbid tendency: from that day to the period of his death, he never ceased to allude to his alliance as the curse of his life. In an adjoining apartment, a son—an indolent "ne'er-do-weel," who had never exerted himself either for his own support or that of his parents—

Intermarriage of Insane persons.

Insanity as a barrier to marriage.

Concealment of Insanity with a view to marriage.

had just committed suicide, on being told that, in consequence of his father's approaching death, he would be compelled to work. A daughter had just come home to this scene of misery to be confined of an illegitimate child; while the mother was rushing from room to room, raving mad, and unable to comprehend the scene in which she was so prominent an actor. But, strange to say, similar marriages are sometimes deliberately solemnised among the educated and higher classes of society, when both parties have their eyes open. Such *mésalliances* are, however, much less seldom marriages of love than of convenience: there is probably, in general, money to be got on one or other side. The parties entering into such compacts are inexcusable on the plea of ignorance of the fearful results of such mal-assorted and unnatural unions. It is a delicate and difficult thing to interfere with civil liberty; but it admits of a reasonable degree of doubt whether there should not be some legal restriction in regard to such marriages. Their effects are most disastrous to society at large; and surely society, which bears the burden and suffers the penalty, has a right to enter some species of practical protest against proceedings, which are contrary to physiological, as well as to moral, law. The propagation of insanity by means of fatuous and facile female paupers is now amenable to civil law. This subject we may safely leave in the hands of the new Lunacy Board. Such females are comparatively seldom married: their lives are too frequently of the most irregular and dissolute character. More than one deplorable instance has occurred to our notice during the year.

Legal restrictions in marriages of the Insane

Celibacy as a cause of Insanity.

We are naturally led from the subject of marriages among the insane to consider celibacy as a predisposing cause of Insanity. Of 69 admissions during the past year, 49 patients have been unmarried, 17 married, and 3 widowed; or, in other words, the single have been considerably more than double the number of the married. But as the statistics of a single year may exhibit somewhat unusual or fallacious results, we have examined our statistics, bearing on this subject, for the last 31 years; and we find, as the result, that of a total of 679 cases, in which the social condition has been specially noted, 445 have been single, 196 married, and 38 widowed: that is, the single have constituted 65·54 per cent., and the married and widowed

together 34·46 per cent., of the whole admissions; or, in other words, the former have been nearly twice as numerous as the latter. It is but fair to state that the statistics of a single asylum may be as fallacious—in relation to society at large—as those of a single year in any given asylum. The statistics of other asylums do show different results. Those who are sceptical as to the value of statistics go the length of asserting that they may be made to prove anything! We trust society has a right to expect that this and similar inquiries and subjects will be elaborated by the new Lunacy Board for Scotland, one of whose most useful duties we take to be the drawing up of statistics from the returns which government compels the officers of asylums to furnish. Such is the public interest attachable to celibacy as a predisposing cause of insanity that we venture to compare our results with those arrived at by some of the first authorities—British and foreign—on the statistics of insanity, and to draw or deduce a few general conclusions therefrom. The statistics of Bethlem Hospital for the insane, London, according to Dr Hood, show that the married are more numerous than the single patients in the proportion of 1364 to 1194. This, however, is certainly an exceptional state of matters. Opposite results are given in Bucknill and Tuke's Manual of Psychological Medicine, and in the statistics of the majority of British and foreign asylums. In the Salpêtrière and Bicêtre during 20 years ending in 1822, according to M. Desportes, of 2490 patients, 1472 were single, and 956 married, widowed, or divorced. Jacobi's statistics of insanity in Germany show that, of 2015 patients, 1573 were single, and 422 married or widowed. Statistics then, on the whole, indubitably prove that celibacy predisposes to insanity, and also the converse—that matrimony is, to a certain extent, an antidote against insanity, or exercises a preservative influence. These propositions we commend to the attention of the "Times" and other journals which have recently, with such ability, discussed the advantages of early marriages and the disadvantages of prolonged, unnatural, and unhealthy celibacy! Parchappe remarks that celibacy, as a predisposing cause of Insanity, equally effects both sexes; but that matrimony is a greater preservative against insanity in males than in females. We do not here stop to inquire whether insanity in celibates is producible

Matrimony as a preservative against Insanity.

by, or traceable to, the restraints merely, or the vices, of celibacy. The subject is too delicate, difficult, and extensive to dilate upon at present. But its connection with what has been recently paraded in the "Times" as the "great social evil" is too evident to warrant us in omitting a mere allusion. Let it not, however, be supposed that we mean to infer or imply, in the 445 cases cited in our statistics, that the insanity was in them necessarily due to the condition of celibacy *per se:* let not the reader confound the *post* with the *propter* hoc. No doubt, in many cases celibacy was a result and not a cause: an effect of the same physical or mental condition which also caused the development of insanity. But deducting such, there still remains a sufficient number to enable us to assert that the state of "single blessedness" is not the most healthy one either as regards mind or body —nor the most natural one, view it as we may.

Sex in its relation to Insanity.

This year there has been a great preponderance in the admission of female over male patients—the numbers being—of females 39, and of males 30. Last year there was an excess of 1 female. These numbers, taken by themselves, would tend to prove that females are more liable to insanity than males. But of a total of 1061 admissions during 30 years, from July, 1827, 527 were females, and 534 were males—showing a slight preponderance in favour of males. Our statistics tend to prove, however, that recoveries have been more frequent, and deaths less frequent, among women. For, of 456 recoveries from 1827 to 1857, 263 were females, and 193 males; while of 197 deaths during the same period, 77 were females, and 120 males. Taking the general statistics of British and foreign asylums as a basis, it is found that males are slightly more predisposed to insanity than females; and experience therefore proves what *à priori* reasoning would lead us to expect—judging from the greater frequency of the causes of insanity in the one sex than in the other.

Age in its relation to Insanity.

The age of patients when admitted does not give an accurate idea of the age at the time of attack; for the interval elapsing between the attack and admission varies greatly. Of 69 admissions, 20 patients were under 30 years of age, 38 below 40, and 53 below 50, while there were only 16 above 50. This shows—as all statistics tend to show—that the liability to insanity is greatest in mid age, when the battle of

life is fiercest,—when the powers of intellect proper are strained, and the emotions and passions excited, to the utmost. Our tables will show that the greatest number of admissions occurred between the ages of 30 and 40—viz., 18; then between 20 and 30, and 40 and 50, 15 each; and lastly, between 50 and 60, 12. Of the recoveries, 23 in number—6 occurred under 30 years of age, 13 under 40, and 18 under 50, while only 4 patients were above the latter age: thus showing, that as is the liability to insanity, so are the chances of recovery greatest in mid age.

Liability to Insanity greatest in prime of life.

Chances of Recovery.

The period of admission is not a safe criterion or index to the period of attack; but the dates of admissions in the aggregate may afford approximative results, nevertheless, of some value. Our statistical tables for the last 31 years show that the months in which the greatest number of admissions took place were August, July, June, and March; while those during which the fewest admissions occurred were November, December, and February. Hence it may be broadly stated that the liability to insanity appears greatest during the hotter months of the year, and least during the colder—greater during hot than cold weather. This is borne out by the experience of asylums not only in Britain and on the Continent, but in India. Esquirol's experience in the Saltpêtrière was that the liability was greatest in May, June, July, and August, decreasing from the latter months to September or December. Parchappe comes to a similar conclusion. From this fact of the influence of season in predisposing to insanity, it may naturally be inferred that climate should act in a similar way; or, in other words, that insanity should be more prevalent in hot than in cold climates—in India than in Scandinavia. This, however, explain it as we may, is contrary to fact; for it is notorious that no country or climate is so pregnant of insanity as that of Norway, for instance. Again, in this Institution, the greatest number of recoveries occurred in September and August; next in March, October, and December; while the fewest occurred in November and February, the next months in order being April, May, and July. Esquirol's experience in the Saltpêtrière was that recoveries were more numerous in Spring and Autumn than during the other seasons or months of the year. Our table of Periods of Recovery also shows distinctly the preponderance

Season in its relation to Insanity.

Periods of admission.

Influence of hot months.

Climate in its relation to Insanity.

Period of recovery.

of recoveries among females, in the proportion of 263 to 192 males—[the numbers of the sexes admitted during the last 31 years being equal, or nearly so]. This preponderance of females in regard to recoveries holds good from year to year, and as a general rule—the disease in women being usually more acute, transient, and curable than in men.

Intemperance as a cause of Insanity.

In this Asylum, *Intemperance* has always figured comparatively low as a cause of insanity. During the past year, of 69 admissions, intemperance was assigned as the cause in only 4 cases; and in some of these it may have been wrongly so assigned. It apparently figures much higher among the recoveries, for of 22 cases discharged recovered during the year, intemperance was ascribed as the cause of the original attack in 6 instances. Taking our statistics for the last 31 years, we find intemperance or dissipation to have been the assigned cause in about 10 per cent. of the total of 1130 cases admitted; or, if we deduct the cases in which no cause is stated at all—which will leave a total of 733—in about 15 per cent. No distinction, however, is drawn—nor can it generally be drawn—between the influence of intemperance as an exciting, and as a predisposing, cause; for, undoubtedly, in different cases, it may be the one or other. Moreover, it is almost impossible to ascertain in how many cases it is really the cause, or a cause, and not the effect, or an effect. For instance, intemperance is frequently associated with disappointments in business, grief, and despair, and other depressing emotions; and it seems pretty certain that, in many of such cases, at least, intemperance and insanity are produced by the same moral causes—the intemperance exaggerating the insanity, or the insanity the intemperance. We fear that there is a great tendency in certain sections of society to exaggerate the importance of intemperance as a cause of insanity, in order to illustrate more powerfully their own peculiar views. There is no necessity for this; the relations of intemperance to insanity are sufficiently apparent, and illustrations of the evils to which it thus leads are sufficiently numerous, to render exaggeration unnecessary and even mischievous. It may be necessary to enter a caveat against a popular error, viz., that all cases of insanity from drink are cases of *Dipsomania*. This term is liable to be abused and misunderstood. Cases of insanity traceable

Fallacies.

Intemperance as an effect of Insanity.

Dipsomania and Mania à potu

mediately or immediately to drink—to intemperance—are comparatively common in all asylums; but cases of Dipsomania proper are much less so. The term is properly applicable only when the disease takes the form of incessant and uncontrollable appetite for stimulants, an appetite which no consideration, moral or intellectual, personal or public, can enable the infatuated victim to control or keep under.

Crime in its relation to Insanity.

Crime and Insanity are frequently associated as words, and are intimately related as things. One case has occurred during the year, interesting as showing the relation of crime to insanity. It was that of a boy of 16, who showed on different parts of the body unmistakeable evidences of a strongly developed scrofulous diathesis. He had been frequently convicted of theft, and of similar offences; had been committed to several Reformatories in different parts of Scotland; and, apparently, being found incorrigible, was latterly sent to a prison, from which he found his way—on the expiry of his term of imprisonment, we presume—into a workhouse. The solitary confinement of the prison was stated to have been the cause of his insanity, which took the form of Suicidal Melancholia; but we should rather say that, in this case, the propensity to theft and to vice generally, was the result of insanity—one of its features or symptoms—while insanity was only more fully developed under the influence of prison discipline. There is, undoubtedly, in society much crime, so-called, the result of insanity—in which event breaches of the law cease, in the eye of the law, to be criminal—that is, the offender is held to be irresponsible, and an object for care and cure, rather than punishment. Some authors go the length of asserting that all crime is the result of insanity, or is itself insanity; but this is an extreme and unnatural view of the case. We must allow, however, that the legal definitions and limitations of crime and insanity are extremely arbitrary and unsatisfactory.

Klepto-mania.

Crime and vice as a result of Insanity.

Anxiety as a cause of Insanity.

There are few more certain and frequent causes of insanity than that almost indefinable, but well-understood, state of mind denominated *anxiety*—from whatever source arising—the horrible alternation of hope and fear—that condition of inordinate mental tension in which depressing emotions predominate. Mere continuous mental labour, if it be not habitually excessive, and the claims of the body, as well as of the mind, to exercise, are attended to, and where there is no

overpowering anxiety, is seldom attended with danger to the mind. Hence we frequently find literary men attaining a ripe old age and preserving their intellect intact to the last—where their worldly circumstances have placed them above reach of want and penury—where fortune has smiled on them, and family joys have surrounded them. But the anxiety of the "*res angustæ domi*"—of "hope deferred"—of disappointed ambition, love, avarice—the grief for the loss of relatives—of worldly means—of worldly position and power: these depressing emotions operate speedily and powerfully—primarily on the mind and secondarily on the body—and insanity, premature old age, mental and physical decrepitude and death, are among their ruinous effects.

Moral treatment of Insanity.

Turn we now to the remedial means we employ—to the *moral treatment* of the insane: for under the head of medical treatment we have nothing to say, except that castor oil and colocynth pills, with opium, in some of its forms, constitute the essentials, as well as the bulk, of our materia medica. Drugs are comparatively little used: occupation, recreation, and education take their place, and prove efficient substitutes. In occupation, recreation, and education alike variety and novelty are extremely advisable—nay, necessary; but, in order to secure these, considerable difficulty necessarily frequently occurs.

Importance of variety & novelty in occupation, education, and recreation.

Without variety and novelty it is difficult to secure attention, application, or interest, on the part of the patients. Hence we endeavour to vary the means of instruction and amusement from session to session; what we have one winter we omit the next, supplying its place by something equally attractive and interesting, but, at the same time, new or dissimilar. During the past winter, classes have, in great measure, taken the place of the course of lectures of the preceding session.

Winter Classes.

In addition to the classes mentioned in our last Annual Report, two new classes have been instituted during the winter, both of them being conducted by teachers of eminence from Perth.

Class for Vocal Music on Tonic Sol-Fa System.

One was a class for vocal music on the Tonic Sol-Fa system under the management of Mr D. Kennedy, Junior. It was attended by from 30 to 40 pupils, each being provided with copies of the scales and with books of singing: the class met once weekly, in the evening: exercises were prescribed for the intervals: and at the end of the

Class Concert.

session a concert was given by the class, whose progress and proficiency were duly attested, alike by the teacher and by a number of strangers present at the demonstration. The interest taken in this class by the pupils was intense and genuine: the class-nights were looked forward to and remembered with no ordinary pleasure: the singing was marked by an energy, vivacity, and correctness as surprising as refreshing: and the whole experiment was set down by the patients themselves as a decided triumph.

Class Monitor.

One patient acted with great acceptance as monitor—giving the key note, copying the exercises and chants for his companions, and making himself "generally useful."

Drawing Class.

The other class was for drawing, under the tuition of Mr Aitken Stiell of Perth: as in the former case, it met once a week, in the evening: each pupil in the class [consisting of 20 pupils], had proper drawing materials, and was supplied with copies: and exercises were prescribed for the intervals. During the session the tables of the high and mid male galleries were seldom without drawing books and copies, exhibiting every degree of proficiency.

Proficiency of Pupils.

A wonderful facility was evinced by some patients, who were previously supposed quite incapable of any such exertion. Some of the copy books would do credit to any drawing academy in the kingdom;

Picture Gallery.

and the productions of a few of the pupils have been framed, and now adorn our galleries.

Sabbath evening Class.

The Sabbath evening class has more than doubled its number of pupils, who now amount to upwards of 30 persons of both sexes, and of all ranks in society. It has been conducted—under the supervision of one of the officers of the establishment—by a patient, who superintends and keeps a register of all the exercises.

Class Soiree.

At the close of the winter session a soiree was given, at which three medals were presented to the most distinguished pupils during the session. This class has been found peculiarly beneficial, not less from the inherent value of the exercises engaged in and the habits inculcated, than from forming a pleasant, as well as profitable, break in a day, which is unusually sombre and monotonous in an asylum.

Prize system among the Insane.

It may perhaps be supposed that emulation among the insane must be productive of injurious results. This is, however, speaking generally, a great mistake.

Emulation and competition.

Patients who are likely to suffer from competition or emulation are not admitted to such classes or exercises; but in those who have been pupils at the various classes

during the last three years, and in whom a worthy and proper emulation has been excited by their teachers, we have never seen a single bad effect. The teacher of the Sabbath evening class rejoices in his self-imposed and generous labours: he feels, and he frankly confesses, that, whereas he would be a burden, useless, and mischievous, among his relations, or at large, here he can be really useful to his fellowmen —here he has "scope and verge enough" for his energies and abilities: he regards the Asylum as his home—defends its character against all aspersions—is the "Caleb Balderstone" of the establishment, and has no desire to leave it: he takes the greatest pride in his pupils, and no Superintendent could take more interest in the per centage of recoveries. In some of the larger English Asylums the Chaplain acts regularly as Schoolmaster; and this is perhaps one of the best arrangements that could be made. In the Norwegian State Asylum at Christiania, which we visited last summer, we found that the Chaplain superintends the moral and intellectual exercises of the patients, subject always to the control of the Superintendent. We are strongly of opinion that no public asylum should be without apparatus or machinery for educating the educable portion of its community; and this will always be considerable where its population is drawn mainly or entirely from the pauper classes. Three lectures were delivered to large audiences during the session: the first by the Rev. Mr Paton, Chaplain of the Institution, on the "Literature of the Age"—the second by Mr D. Kennedy, Junior, of Perth, on "Scottish Melody," with illustrations—and the third by the Rev. Mr Russell of Newburgh, on "Words and Proverbs." To these gentlemen we have to offer our most cordial acknowledgments for their courtesy and kindness.

Pleasures of labour.

Schoolmaster.

Education of the Insane.

Lectures.

Our *Library* now contains several hundred volumes, and is constantly receiving accessions: it consists mainly of donations, or of books purchased by money-contributions. It has already proved of signal benefit to the inmates. The number of newspapers and serials circulating daily in the different departments of the Institution is greater than at any former period: this is also partly due to the attention of sympathising and liberal friends of the insane. Many patients receive newspapers and serials for their own special use. "Excelsior" is increasing in popularity. We have been repeatedly

Library.

Newspapers and Serials.

"Excelsior."

urged to publish more frequently or at greater length—such is the demand for it. But it may be advisable to take this opportunity of stating that it does not profess, and was never intended, to appear at stated periods: its issues will rather be "few and far between"—thrown off from our pens and our press when the spirit is in us, merely to attest our viability, and to chronicle the most prominent or important episodes or epochs in our history. It is the highest ambition of many of the patients to have their doings, sayings, and writings chronicled in the pages of our humble bifolial. One gentleman has catered most zealously for subscribers, and not without golden results. The editor has constantly on hand—for he is ever receiving—a quantity of MSS. on every conceivable subject, but chiefly relating to transactions occurring within our walls. Among recent subjects of inspiration we may mention Gheel Colonies and the treatment of Dipsomania. The *Museum* is slowly being enlarged; and the *Bazaar* is prospering quietly. Donations to the museum, bazaar, and library are regularly chronicled in "Excelsior." Our *Dorcas Society* sent a contribution of their workmanship to the Pitfour Bazaar for the erection of baths and washing-houses in Perth; and the ladies of our community are always ready to lend a favourable ear to appeals on behalf of charitable purposes.

Museum.

Bazaar.

Dorcas Society.

The *Concerts* of the winter season, which were 3 in number, were rendered unusually attractive and efficient by the proffered assistance of several professional singers from Perth and its neighbourhood, of whom we would specify as particularly worthy of our thanks, the Messrs Kennedy, Mr Gray, and Miss Fleming. At most of these concerts—as at most of our public amusements—visitors were present from town. This kind of association of the sane with the insane we have ever found most beneficial. The self-control exercised by the patients in presence of strangers is most marked: and there is a strong effort made so to behave as to entitle them to the privilege of associating and mixing themselves with the outer world. The inmates are proud of displaying the produce of their pens and pencils, or of narrating the history of their games or amusements to sympathising and intelligent visitors, in whom a display of affability and sociability never fails to educe a corresponding manifestation of confidence and love in

Concerts.

Assistance of Professional Musicians.

Association with the Sane.

Bals costumés — the visited. Two *Bals costumés* were given at Christmas, and were particularly brilliant and successful. As a variety, one *theatrical* and one *magic-lantern entertainment* were given in winter. During summer there were several open-air fêtes, with competitions in archery, quoiting, and other athletic games. The afternoon of every Saturday during spring, summer, and autumn,—"weather permitting,"—is devoted to cricket, which is an established favourite, and in which all classes of patients join. Bowls, quoits, and other out-of-door games are of almost daily occurrence in good weather throughout the year. These athletic games and exercises have undoubtedly contributed largely towards restoration to physical and mental health in many cases. Tea, whist, and other parties, have been given at irregular intervals throughout the year, but chiefly during the winter months.

Magic Lantern.

Athletic Games.

Cricket.

Pic-nics.

There have been *Pic-nics* during the summers of 1857 and 1858 to the following localities:—Rossie-Priory; Dunkeld House and the Falls of the Braan; Blairgowrie and Craighall-Rattray; Crieff and Drummond Castle; Dunsinnane Hill; Newburgh and Abernethy; Lindores Loch and Inchrye Abbey; Glen Farg and the West Lomond Hill; and Invermay. Our warmest thanks are due to his Grace the Duke of Atholl, not only for the privilege so kindly accorded of visiting the beautiful scenery about Dunkeld, but for his personal services and attentions on the occasion of our Pic-nic: also to Lord Kinnaird, Mr Belshes and General Belshes, Invermay, Mrs Clerk Rattray of Craighall-Rattray, Mr Wilson of Inchrye, Dr Lyell of Newburgh, and others who threw open their grounds for, or otherwise ministered to, our gratification. Several of the gentlemen patients have formed small fishing parties, and have done reasonable havoc among the trout of Invermay, and the perch and pike of the Loch of Lindores. On the occasion of one of the Pic-nics, the party visited the Abernethy Flower-Show. The patients take a special interest in the Perth and Bridgend Flower-Shows, inasmuch as the produce of the Asylum-grounds generally stands well in the prize lists, and contrasts favourably with the growth of more extensive and more pretentious gardens. As heretofore, parties of ladies and gentlemen, who are physically unable to walk far, or who are otherwise disqualified for joining walking parties, have had frequent drives to Stormontfield Salmon Ponds, Pitcaithly Wells, Bridge of

Fishing parties.

Flower Shows.

Drives and Walks.

Earn, Glencarse, Balthayock, Balbeggie, and Methven. Parties have also been sent to town to such amusements as the following:—Mrs Baker's Concert, Dr Mark's Juvenile Concert, Mr Kennedy's Farewell Concert, Hoffman's Organophonic Band, Jullien's Concert, Hengler's Circus, Maunder's Menagerie, and Tom Thumb's Levée. Some patients have gone, and go regularly, to visit their relatives—spending the day or otherwise. Others have had probationary residence in the country during the summer months.

Amusements in town.

Visits to relatives.

A tailor has been added to the staff, and is kept in constant employment in mendings alone; a supernumerary attendant acts as painter, glazier, and fireman; while a third is nearly wholly occupied as messenger and post-man. A patient has frequently acted as precentor in chapel; another has superintended the pointing and plastering of walls; a third has the charge of the byre department; a fourth of the piggeries; a fifth is carpenter to the establishment; a sixth, supervisor of wells: three patients are indefatigable in the shoe-making department; while another is self-constituted director of our amusements. These are but a few of the offices in or about the establishment occupied by patients, who, in their several capacities, work willingly and diligently *pro bono publico*,—for the benefit of their less able and more heavily afflicted companions. Much has been done during the year to embellish our rooms, galleries, and halls—to give them as much as possible a home-character—to remove all appearances of coldness and constraint. Valuable paintings, engravings, and drawings have been framed in the house, and suspended on our walls; engravings from the "Illustrated London News" have been coloured by a patient, and now adorn the lower galleries; and statuary has been introduced extensively, with the effect of adding materially to the amenities of the establishment. These have already exercised a most beneficial effect in improving the taste, and adding to the comfort, of the inmates. It is gratifying to be able to state,—as shewing the estimation in which paintings and statuary are held by the patients,—that no case of deliberate destruction thereof has yet occured.

Industrial Staff.

Offices held by patients.

Æsthetical element in our galleries.

Paintings.

Statuary.

The ingenuity of the charitable and wealthy is frequently at a loss how best to dispose of their fortunes after their decease. We would venture to suggest, as a most worthy and a novel object for their

Bounty fund

solicitude—one which may cause their names to be blessed by thousands of suffering fellow-mortals—the endowment of Reserve or Bounty Funds to Asylums for the Insane, funds which would enable the Directors or Superintendents of these institutions to give to deserving and needy patients of the pauper or poorer classes, on their discharge, small sums of money or supplies of clothing and necessaries to keep them comfortably until they should obtain suitable employment. Such an allowance would be an immense boon in many cases; the experiment has been tried in several of the English Asylums, and found to operate admirably. In too many cases the recovered pauper patient, on leaving the asylum, with all its comforts, returns to beggary and want—to a joyless home—to a reckless family. The fact of his having been in an asylum operates deleteriously in his applications for work; perhaps the labour market is over-stocked, and he finds it impossible to obtain employment. Starvation stares him in the face: to "hope deferred" is added settled despair: and it need not surprise us that, in these adverse circumstances, a relapse occurs—his attack, on this occasion, being more serious and of longer duration than on the preceding. On the other hand, with his little fund at command, he can afford time to look about him: he feels comfortable, happy, hopeful; and he can impart the same feelings to his family and friends; by waiting his time, he secures suitable employment, and henceforward everything prospers with him, or if it do not, it is not the fault of the Reserve-Fund.

Allowances to deserving and needy patients.

Every Superintendent, who has much to do with patients belonging to the higher ranks of life, must have had ample experience of petitions for curatory appointments, in cases where such patients have money or property requiring to be managed or taken care of, on their behalf, during their confinement in asylums. The Lord Ordinary of the Court of Session, to whom all such applications are made by the nearest relatives or guardians of the patient, invariably "grants warrant for serving the same"—that is, a copy of the petition to the Court, setting forth the nature and amount of his money or estate, and the necessity that has occurred for depriving him of its management, along with medical certificates as to his insanity—upon the patient, by means of a messenger, who presents it personally, in presence of a witness. The Lord Ordinary further "appoints him"—that is, the patient—"to lodge answers thereto—[referring to the proposed appointment of a *Curator bonis*]—"if so advised, within eight days from the date of service." Now we have no wish, and we shall not presume, to constitute ourselves umpires or judges of the legal bearings of this practice. We do not venture to assert that such a proceeding is legally unnecessary or absurd. But this we feel bound to assert—and we do so, hoping that a legal remedy may be found for the evil complained of—that this practice is almost invariably attended with bad, nay, sometimes with most serious, results to the patient. We have frequently seen the favourable progress of a case at once checked, and all that had been accomplished in the course of months or years of careful treatment undone and rendered nugatory by the abrupt and unexpected visit of the messenger-at-arms with his service, and the copy of the application to the Court of Session. Only recently, a case occurred in which such visit produced a crisis in the disease of the patient visited: up to that point and that period he had been progressing favourably: subsequently to that visit, and the annoyances to which it gave rise, the progress of the disease had been downward and decided. There are many evils or disadvantages flowing from this legal proceeding—the more prominent of which alone we would here allude to. The copy of the petition does not come through the usual channel—the Superintendent—through whose hands pass, and properly pass, all letters and documents, messages, &c., to or from patients. This fact, of itself, either gives rise to suspicion on the part of the patient, or it shows him that there are certain things over which the Superintendent has no control; and the authority of this officer is thus virtually set aside or superseded by that of the Court of Session. But it is the Superintendent and not the Court of Session that is responsible for the health and comfort of the patient: the former removes and keeps away everything which can irritate or disturb, and surrounds the patient with everything that can cheer and soothe. But on what principle can he be justly held responsible for the state of mind of his patient, when, in spite of all care and solicitude, documents of the most irritating and hurtful kind are put into the hands of such patient. This is a direct interference

Petitions for Curatory.

Anomalies of the Law.

Evils of personal service of copy application for Curatory.

by the Court of Session—by the law—with the management—with the regulations of our asylums—management and regulations which are founded on, and guided by, all experience, as well as humanity. The question we wish to raise is whether such interference is necessary for the ends of the law, and if so, whether it cannot be modified so as to avoid or lessen the injurious effects on the mental health of the patient, in regard to the care of whose mere money and lands the law is so jealous. We presume that the object of the law in causing a copy of the application for a curatory to be personally served on a patient is either, 1. To allow a person, who may believe himself to be improperly detained, an opportunity of defending himself, and opposing the application, on the plea of sanity and wrongous detention; or, 2. To allow a person who grants that he is quite properly detained an opportunity of nominating his own Curator—that is, of opposing the appointment of any individual nominated by his relatives or guardians, to whom he may have objections. If these be not the objects of the law, we are at a loss to know what they are, and should be glad to be informed. Now-a-days there is practically no danger of a person being illegally or improperly detained in a public asylum. The mere fact of his confinement in an asylum is, therefore, *primâ facie* evidence that a patient is legally and medically a fit subject for confinement—that he is of unsound mind, and in consequence thereof, is declared to be by law incompetent to manage either himself or his affairs. He has, or should have, no *locus standi*: he is irresponsible for his actions and sayings; and none of his transactions would legally hold good.

Alleged wrongous detention.

The Superintendents of public asylums are all men of education and status in society, who could gain nothing, but who might lose everything, by the improper detention of a patient. The admission of every patient is under warrant from the Sheriffs of counties, who previously satisfy themselves, by the opinion of two duly qualified medical men, approved of by themselves, if need be, that the case is a proper one for confinement. Should it, however, so happen, that any mistake has happened in the first instance, every patient has the privilege and right of appeal to the Sheriff, who has the power of instituting any investigation he may see fit in any case of alleged wrongous detention, and who may order liberation. Further, all Scotch Asylums are under

Supervision of asylums.

the supervision of the Commissioners in Lunacy, who, at stated periods, personally visit every patient, with the history of whose antecedents and admission they are, in all cases, familiar; and lastly, in addition, every public asylum is subject to regular inspection by its own Directors, by Justices of the Peace, and by other constituted authorities,—the aim of this complex system of supervision being to prevent improper detention, and to secure proper treatment. There is, therefore, we repeat, every guarantee that can be given that each patient under treatment in a public asylum in Scotland is properly detained and detainable therein. But in the case of a patient requiring a Curator for the management of his funds and property there are additional guarantees. The application to the Court is fortified by the certificate of two medical men as to the insanity of the patient and his incompetence to manage his own affairs; and the Court, if not satisfied therewith, can order such investigation, or require such reports or certificates, as it may see fit. It is quite right that the Court should be jealous when the liberty of the subject is concerned—it is quite right it should satisfy itself that the patient is insane—that the relations are acting *bona fide*, and from pure motives, in their application, and that the Curator nominated by them is a man who will independently, honourably, and honestly act in his client's interest. Let the Court, by all means, take its own ways and means of satisfying itself as to all these or any cognate points; but let it remove the anomaly of first depriving a man of a *locus standi* by declaring him insane, and then giving him one by serving upon him a petition for curatory, and requiring him to lodge answers, "if so advised!" What does the latter phrase mean: who are to be his advisers? In some cases the temperament or character is so facile that a patient may be advised to anything, and by anybody: he may thus be advised to do things altogether foreign to his own interests, or those of his nearest and dearest relatives: he may become the dupe of unprincipled swindlers. In a large proportion of cases there is a total alteration of character; and a patient will either put confidence in entire strangers, or in those he formerly detested and disliked, or he will withdraw his confidence from those he formerly loved and cherished most fondly. In the latter case he

probably opposes most obstinately the wishes of his nearest relatives, believing them to be his greatest enemies, and he may thus, also, from a pure spirit of opposition, be led by his own insane will and morbid judgment to act most contrarily to the best interests of himself, or of his family. Many patients are full of whims and fancies; they are fickle as the weather, taking likings, and showing dislikings, quite foreign to their healthy or normal character. If it is left to such patients to nominate a Curator, they will make a selection to-day which they will reverse to-morrow; the person named will, probably, be named from caprice—one ignorant, perhaps, both of the patient and his transactions. If a patient is deprived of all intelligence, then is the form of serving the copy-application to the Court absurd—an empty form—a farce—a "fiction of the law;" if he is not, the chances are that he either declares his perfect sanity, and on this plea opposes the application *in toto*, or he objects to the appointment of the particular person nominated and proposed by his relatives. If he be litigiously inclined, and this is not unfrequently the case, and if he can find any lawyer to take up his cause and oppose the application, he may do so at a ruinous expense. We question much whether any good purpose is served in cases of the appointment of *Curator bonis* for the Insane, by listening to the wishes, or attending to the opinions, of the patient. Our own experience is altogether adverse; for we have over and over again seen such a proceeding attended by the most unfortunate results. We have discharged our duty by drawing attention to the subject, which we leave with every confidence in the hands of the Court of Session, convinced, as we are, that all proceedings taken by it in regard to the protection of the Insane are dictated by a single and pure feeling—the interest and advantage of the patient requiring their judicial protection.

Gheel Colonies in Scotland.

A subject which has recently attracted much attention in Scotland, not only from those specially interested in the construction of asylums and the treatment of the insane, but also from the public generally, is that of colonising the insane, as is done at Gheel in Belgium. It has been suggested by some of those who have seen and admired the Gheel plan of treatment, that something of a similar kind should be introduced into Scotland; and certain sections of the Press have taken up

the suggestion encouragingly. In admiring the principle, however, there is a danger of overlooking the difficulties and disadvantages of the practice. It will be observed that the advocates of Gheel do not recommend it as applicable to all classes of the insane, but only to certain sections thereof—viz: to the quiet, well-behaved, industrious, and harmless. All parties are agreed that the violent and unruly, the suicidal, homicidal, and we may also add, the fugitive, should be placed in asylums proper. There can be no doubt as to the necessity of Asylums proper as Hospitals for the treatment of acute and troublesome cases. But we readily admit that, in our opinion, justice has not been done as regards treatment, to the incurable, but industrious, well-behaved, and harmless insane of Scotland. We have over and over again—and long prior to recent agitations regarding Gheel—advocated the advantages of the cottage, or home, principle of treatment as applicable to them, and have shown how this might be most advantageously associated with the present ordinary asylum system. We would introduce all that is admirable in the Gheel system, while we would avoid all that is to be condemned in it. Suitable occupation, amusement, and open air exercise *at home*—the advantage of homely surroundings—the society of kind relatives or friends—the possession of all the social ties that make life a pleasure instead of a burden—these we would place at the command of the classes of the insane we have indicated. The principles we advocate are not altogether new in Scotland: they have been, to a certain extent, already acted upon. Hitherto, many fatuous and idiotic, harmless patients have been allowed by the Board of Supervision to be kept at home by their own relatives, or they have been boarded with attentive peasants or cottars: and in many of these cases the patients have been altogether better placed than in asylums. Doubtless, there have been cases of abuse; but these have arisen from negligence on the part of the authorities, and ignorance of the proper treatment of the insane; these exceptional cases, however, must not be allowed to invalidate all we wish at present to urge—the principle of home treatment. Again, one of our Scotch Asylums has purchased cottages adjoining its grounds for residences to quiet, industrious patients: another is in the habit of sending patients during summer to sea-bathing or country quarters: and

Gheel Colonies applicable only to certain classes of Patients.

Home treatment.

Gheel principle being acted upon in Scotland.

all are in the habit of encouraging visits to relations and friends. All these are developments of the same grand principle. But, though long recognised, and hitherto acted on, to a considerable extent, its advantages have never been fully recognised by the public, without whose sympathy and assistance little on the great scale can be achieved. The subject is of special interest, at a time when Scotland is exerting herself to erect establishments for the proper treatment of her whole insane population on a scale commensurate with her necessities, and, we trust, her liberality and enlightment. In our opinion, a complete establishment for the insane should comprise, at least, the following departments :—

Model Asylums.

Their constitution.

1. An Hospital or Asylum proper for acute, troublesome, and dangerous cases : having every convenience for the treatment of insanity : with due arrangements for classification : and having sleeping apartments and day rooms on different flats or stories.
2. A Sanitorium for inebriates : for convalescents and patients on probation : and for harmless, quiet, and cleanly imbeciles.
3. Cottages for the quiet, harmless, and industrious, of the peasant class, who would live with married attendants.
4. A farm : work-shops, engine-house, and offices, &c.

Even with such ample arrangements, we should not think of forcing all the insane into asylums. Many chronic and incurable cases might be solely left to home management. Of course, we take it for granted that the Lunacy Commissioners satisfy themselves that such patients are properly housed and cared for—that they engage in suitable occupations—enjoy a reasonable measure of liberty, and so forth. But many others would undoubtedly be benefited by asylum discipline, and might, by their labour, contribute largely to their own maintenance. The experiment cannot easily be carried out in asylums containing a mixture of ranks or classes of patients; but, in the District Asylums of Scotland, which will soon be in progress, it might readily be tried —to what extent the insane, by their labour, can contribute to their own support, and to the relief of the burden of their maintenance on the rate-payers. We see no reason why a properly-constituted asylum should not be, to a certain extent, an industrial colony—embracing farming, weaving, carpentry, shoemaking, and other remunerative

Labour as a means of reducing rates of Board.

handicrafts. In proportion to the quantity and value of the work done, so would the rates of board be lowered, and the County exchequer relieved. If Scotland would agree to establish a Central National Institution for all her incurable, harmless, but industrious, insane, we are convinced the industrial, or colony, plan might be carried out with signal success. Such an establishment would also be comparatively inexpensive—requiring none of the complex provisions of an asylum proper. But, on the small scale, in asylums with a mixed population of 100 to 300, containing pauper patients labouring under every form of Insanity, we have no hope of seeing such a scheme carried out to the extent that is desirable. Asylums for acute cases are necessarily very expensive ; those for chronic cases might be of exceedingly cheap construction. Were Scotland to build separate establishments for the curable and acute, the violent and dangerous, cases—on the one hand —and for the chronic and incurable, quiet and industrious—on the other ; were she to construct District Asylums for the former, and a Central Institution or colony for the latter, she would probably find it to her advantage in more ways than one. In the latter case this Central Establishment would be sufficiently Gheel-like in its character, but its basis would be more satisfactory and safe. There is abundance of unreclaimed land in Scotland to work upon ; some of the Hebrides at once suggest themselves as an admirable field for such a colony, were it not for their inaccessibility. But we do not see how such an experiment is to be started—even had it the sanction of the Board of Lunacy —unless the latter could show that the plan will undoubtedly be cheapest for the ratepayer as well as best for the patient, or unless they could compel the country to erect such an establishment. The principle or plan we advocate can, and probably will, in some instances, be carried out on the small scale. But it is a pity, at so favourable a juncture, that Scotland is indisposed to deviate from the beaten track in regard to the construction of her asylums and the treatment of her insane, and that the golden opportunity should hence be allowed to pass. We much fear that the only form in which the Gheel system will at present be introduced into Scotland will be that of cottages attached to, or in the vicinage of, our public asylums. These may be inhabited by quiet and industrious patients under the charge of married attend-

Asylums as Industrial Colonies.

Central National Asylum for Incurables.

District Asylums should be devoted to acute cases only.

Cottages attached to Asylums.

ants, or others specially trained to their duties. . There will be a constant interchange of patients between the Hospital proper—the central building of the establishment—and the cottages or suburbs: to the cottages will be sent the convalescent, well-behaved, chronic and industrious cases; from the cottages will be sent the noisy, violent, idle, dangerous, and dirty. The greater, within certain limits, the number of separate buildings—the greater the facilities for classification—and the more efficient will be the working of the establishment. We look forward with hopefulness to the efforts of the Board of Lunacy to establish an improved series of National Asylums; and we trust that Scotland may yet be able to congratulate herself on her enlightened and liberal arrangements for the maintenance and cure of her insane!

APPENDIX

TO

REPORT OF MEDICAL SUPERINTENDENT,

CONTAINING

STATISTICAL TABLES

RELATIVE TO

GENERAL RESULTS, ADMISSIONS, RECOVERIES, DEATHS, &c.

I.—GENERAL RESULTS OF THE YEAR, 1857-8.

	Males.	Females.	Total.	Males.	Females.	Total.
Patients admitted from 1827 to 1857, ...				534	527	1061
Of these Recovered, ...	193	263	456			
,, Removed improved, ...	65	59	124			
,, ,, unimproved, ...	71	58	129			
,, Died, ...	120	77	197	449	457	906
Patients remaining June 1857, ...				85	70	155
,, admitted during the year June 1857, to June 1858,				30	39	69
Total number under treatment during 1857-8, ...				115	109	224
Of these Recovered, ...	10	12	22			
,, Removed improved, ...	7	2	9			
,, ,, unimproved, ...	3	1	4			
,, Died, ...	11	3	14	31	18	49
Patients remaining, June 1858, ...				84	91	175

Mean daily number of Patients under treatment during the year 1857-8, 164·358.

II.—ADMISSIONS.

	Males.	Females.	Total.
1.—*Age of Patients admitted.*			
Between 15 and 20, ...	3	2	5
„ 20 „ 30, ...	7	8	15
„ 30 „ 40, ...	9	9	18
„ 40 „ 50, ...	7	8	15
„ 50 „ 60, ...	2	10	12
„ 60 „ 70, ...	2	1	3
„ 70 „ 80, ...	0	1	1
2.—*Sex.*			
Males, ...	30	0	69
Females, ...	0	39	
3.—*Social Condition.*			
Single, ...	24	25	49
Married, ...	5	12	17
Widowed, ...	1	2	3
4.—*Occupation.*			
Butler, ...	1	0	1
„ , wife of, ...	0	1	1
Carpenter, ...	1	0	1
Carter, ...	1	0	1
Clerk in a Bank, ...	1	0	1
„ in Government Civil Service,	2	0	2
„ merchant's, wife of, ...	0	1	1
Clergyman, daughter of, ...	0	1	1
„ , Free Church Probationer, ...	1	0	1
Coachman, wife of, ...	0	2	2
Cork-cutter, „	0	1	1
Cottar, „	0	2	2
Draper's assistant, ...	1	0	1
Farmer, ...	2	0	2
„ , sister of, ...	0	1	1
„ , peasant, wife of, ...	0	1	1
Farm-servant, ...	2	7	9
„ , wife of, ...	0	1	1
Factory boy (tenter), ...	1	0	1
„ girl, ...	0	1	1
Fisherman, ...	1	0	1
Grieve or foreman, wife of, ...	0	1	1

II.—ADMISSIONS—[Continued.]

	Males.	Females.	Total.
Haberdasher, ...	1	0	1
Herd, ...	1	0	1
Landed Proprietor, ...	1	0	1
Mill-girl, ...	0	1	1
Muslin-sewer, ...	0	1	1
None, ...	1	6	7
Physician, daughter of, ...	0	1	1
Railway porter, ...	1	0	1
Sailor, ...	1	0	1
„ , wife of, ...	0	1	1
Secretary to a railway, ...	1	0	1
Sempstress, ...	0	1	1
Servant, domestic, ...	0	2	2
Shepherd, ...	1	0	1
Shipowner, sister of, ...	0	1	1
Shoemaker, ...	3	0	3
Weaver, ...	4	4	8
Winder of yarn, ...	0	1	1
Waiter in a hotel, ...	1	0	1
5.—*Form of Insanity.*			
Dementia, ...	2	3	5
General Paralysis, ...	3	0	3
Mania, Acute, ...	6	12	18
„ Chronic, ...	1	3	4
„ Puerperal, ...	0	1	1
„ Hysterical, ...	0	1	1
„ *à potu*, ...	1	0	1
„ Nymphomania, ...	0	2	2
Melancholia, ...	5	13	18
Monomania, ...	12	4	16
6.—*Causes assigned.*			
Accident, ...	0	1	1
„ , on a railway, ...	1	0	1
Annoyance about a legacy, ...	0	1	1
Beer drinking, ...	1	0	1
Blow on side, ...	0	1	1
Brain fever, ...	1	0	1
Catamenial irregularities, ...	0	1	1
Coup de Soleil, ...	1	0	1

	Males.	Females.	Total.
Death of children or other relatives,	0	3	3
Desertion by husband, ...	0	1	1
Disappointed ambition, ...	2	0	2
" love, ...	0	1	1
Embarrassment in business, ...	1	0	1
Emigration of children, ...	0	1	1
Excitement of meeting old friends, ...	0	1	1
Fever, ...	1	0	1
Finding house occupied by strangers,	0	1	1
Fright and starvation, ...	0	1	1
Injury by a waggon, ...	1	0	1
Ill-usage by husband, ...	0	1	1
Intemperance, ...	3	0	3
Jail discipline, ...	1	0	1
Love affairs, ...	1	1	2
Marriage of a fellow workman, ...	1	0	1
None assigned or known, ...	10	21	31
Over-exertion at work, ...	1	0	1
Over-studying of religious books, ...	1	0	1
Pride, ...	0	1	1
Reading exciting tales, ...	1	0	1
Religious excitement, ...	0	1	1
Scandal, ...	1	0	1
Scarlatina, sequelæ of, ...	0	1	1
Sedentary occupations, ...	1	0	1
7.—*Co-existent physical disease or deformities, &c.*			
Acné, ...	1	0	1
Catamenial irregularities, ...	0	2	2
Chronic vomiting ; masturbation, sequelæ of,	0	1	1
Constipation, ...	2	0	2
Dyspepsia, ...	0	1	1
Debility from abstinence, extreme, ...	0	3	3
" other causes, ...	0	1	1
Fever, sequelæ of, ...	1	0	1
Fractured ribs, ...	1	0	1
Hernia, ...	1	0	1
Lameness from injury, ...	1	1	2
None, ...	18	24	42
Paralysis, general, ...	2	0	2

	Males.	Females.	Total.
Paraplegia, ...	1	0	1
Pediculi, ...	0	1	1
Pregnancy, ...	0	1	1
Phthisis, advanced, ...	0	1	1
Ophthalmia Tarsi and Chronic Ophthalmia,	0	1	1
Scrofulous Diathesis,...	1	1	2
Suicidal wounds in abdomen, ...	1	0	1
" of genitals, ...	0	1	1
8.—*Duration of Disease prior to admission.*			
Under a week, ...	7	5	12
Between a week and a month, ...	3	6	9
" 1 and 6 months,... ...	13	17	30
" 6 " 12 "	2	5	7
" 1 " 2 years, ...	4	2	6
" 2 " 5 "	0	4	4
Congenital, ...	1	0	1
9.—*Re-admissions.*			
For 2d time, ...	3	6	9
" 3d "	1	1	2
" 4th "	0	2	2
" 6th "	0	1	1
10.—*Re-admissions or relapses : interval since last discharged.*			
A month or under, ...	0	1	1
Between 1 and 6 months, ...	0	3	3
" 6 months and a year, ...	0	1	1
" 1 and 5 years, ...	1	1	2
" 5 " 10 "	0	2	2
" 10 " 20 "	2	2	4
" 20 " 30 "	1	0	1
11.—*Suicidal and homicidal propensities.*			
Suicidal, ...	6	12	18
" and homicidal,...	1	0	1

II.—ADMISSIONS—[Continued.]

	Males.	Females.	Total.
12.—*Periods of Admission from 1827 to 1858, showing approximatively the relations of Season to the time of Attack.*			
January, ...	50	39	89
February, ...	47	31	78
March, ...	55	55	110
April, ...	41	55	96
May, ...	52	52	104
June, ...	62	49	111
July, ...	58	53	111
August, ...	57	58	115
September, ...	47	48	95
October, ...	33	47	80
November, ...	37	36	73
December, ...	35	40	75
	574	563	1137

III.—RECOVERIES.

	Males.	Females.	Total.
1.—*Age.*			
20 years or under, ...	0	2	2
Between 20 and 30, ...	2	2	4
„ 30 „ 40, ...	3	4	7
„ 40 „ 50, ...	2	3	5
„ 50 „ 60, ...	2	1	3
„ 70 „ 80, ...	1	0	1
2.—*Sex.*			
Males, ...	10	0	} 22
Females, ...	0	12	
3.—*Social Condition.*			
Single, ...	4	8	12
Married, ...	4	4	8
Widowed, ...	2	0	2

III.—RECOVERIES—[Continued.]

	Males.	Females.	Total.
4.—*Form of Insanity.*			
Dipsomania, ...	3	0	3
Mania, Acute, ...	2	3	5
„ *à potu*, ...	2	0	2
„ Puerperal, ...	0	1	1
Melancholia, ...	2	7	9
Monomania, ...	1	1	2
5.—*Causes assigned.*			
Accidental omission of Sacrament, ...	0	1	1
Blow on side by a ram, ...	0	1	1
Catamenial irregularities, ...	0	1	1
Death of relatives, ...	1	2	3
Disappointment in love, ...	0	1	1
Intemperance, ...	6	0	6
Opposition to wishes by relatives, ...	0	1	1
Puerperal state, ...	0	1	1
Quarrels with neighbours, ...	0	1	1
Unknown causes, or none assigned, ...	2	3	5
Railway accident—loss of arm, ...	1	0	1
6.—*Duration of disease prior to admission.*			
1 week or under, ...	3	3	6
Between 1 week and 1 month, ...	0	3	3
„ 1 and 3 months, ...	4	4	8
„ 3 „ 12 „	2	2	4
„ 1 „ 2 years, ...	1	0	1
7.—*Duration of treatment in Asylum.*			
3 months or under, ...	2	4	6
Between 3 and 6 months, ...	1	2	3
„ 6 „ 12 „	3	4	7
„ 1 „ 2 years, ...	3	0	3
„ 2 „ 5 „	1	2	3
8.—*Periods of Recovery from 1827 to 1858, showing approximatively the relations of Season to the time of Recovery.*			
January, ...	12	24	36
February, ...	12	17	29
March, ...	21	22	43

III.—RECOVERIES—[CONTINUED.]

	Males.	Females.	Total.
April,	17	13	30
May,	13	19	32
June,	21	19	40
July,	13	20	33
August,	24	24	48
September,	17	37	54
October,	13	29	42
November,	12	12	24
December,	17	27	44
	192	263	455

The Recoveries constitute 44·89 per cent. of the Discharges [including deaths.]
31·88 per cent. of the admissions.
13·38 per cent. of the mean daily number under treatment.
9.82 per cent. of the total number under treatment during the year.

IV.—DEATHS.

	Males.	Females	Total.
1.—*Age.*			
Between 20 and 30,	1	2	3
„ 30 „ 40,	1	0	1
„ 40 „ 50,	5	1	6
„ 60 „ 70,	2	0	2
„ 70 „ 80,	2	0	2
2.—*Sex.*			
Males—all incurable cases,	11	0	14
Females—all curable cases,	0	3	
3.—*Occupation or Rank.*			
Carpenter,	1	0	1
Carter,	1	0	1
Clerk, writer's,	1	0	1
„ , wife of,	0	1	1

IV.—DEATHS—[CONTINUED.]

	Males.	Females.	Total.
Farmer and factor,	1	0	1
Labourer,	1	0	1
Land Surveyor,	1	0	1
None,	1	1	2
Sailor,	1	0	1
Shoemaker,	1	0	1
Servant, domestic,	0	1	1
Waiter in a hotel,	1	0	1
Weaver,	1	0	1
4.—*Causes of Death.*			
Apoplexy, occurring in course of General Paralysis,	3	0	3
Dysenteric Diarrhœa, associated with Atonic Dyspepsia,	1	0	1
Erysipelas, Typhoid-gangrenous,	0	1	1
Exhaustion from protracted abstinence prior to admission,	0	1	1
Exhaustion, Senile,	1	0	1
Heart disease, associated with Bright's disease of kidney,	1	0	1
Hepatitis, associated with Enteritis and Bronchitis,	1	0	1
Liver, Cancer of,	1	0	1
Gastritis, Chronic,	1	0	1
Phthisis, Acute,	1	0	1
„ , Advanced,	0	1	1
„ , [Bursting of a vomica,]	1	0	1
5.—*Duration of Residence in Asylum.*			
1 month or under,	0	2	2
Between 1 and 6 months,	3	1	4
„ 6 months and a year,	1	0	1
„ 1 and 6 years,	3	0	3
„ 6 „ 12 „	1	0	1
„ 12 „ 15 „	1	0	1
„ 15 „ 20 „	2	0	2
6.—*Form of Insanity.*			
Dementia,	4	0	4
Dipsomania,	1	0	1

IV.—DEATHS—[Continued.]

	Males.	Females.	Total.
General Paralysis, ...	3	0	3
Mania, Acute, ...	0	2	2
" Chronic, ...	2	0	2
Melancholia, ...	1	1	2
7.—Periods of Death.			
a.—Months or Seasons of the Year.			
January, ...	1	0	1
March, ...	2	0	2
April,...	2	0	2
June, ...	1	0	1
July, ...	0	1	1
September, ...	1	1	2
November, ...	1	0	1
December, ...	3	1	4
b.—Hours of the Day.			
Between midnight and 6 A.M., ...	5	0	5
" 6 A.M. and noon., ...	4	1	5
" noon and 6 P.M., ...	1	2	3
" 6 P.M. and midnight, ...	1	0	1

The Deaths constitute 28·57 per cent. of the Discharges.
20·28 " of the admissions.
8·51 " of the mean daily number under treatment.
6·42 " of the total number under treatment during the year.

V.—TABLE

SHOWING THE STATURE AND CRANIOLOGICAL DEVELOPMENT IN 121 PATIENTS [48 MALES AND 73 FEMALES] CHIEFLY OF MIDDLE AGE.

	Males.	Females.	Total.
1.—Stature. *			
6 feet 1 inch, ...	1	0	1

* Of 125 Patients—48 males and 77 females.

TABLE V.—1. *Stature*—[Continued.]

	Males.	Females.	Total.
6 feet 0 inch, ...	2	0	2
5 " 11 inches, ...	1	0	1
5 " 10½ "	2	0	2
5 " 10 "	5	0	5
5 " 9½ "	2	0	2
5 " 9 "	4	0	4
5 " 8½ "	1	0	1
5 " 8 "	4	1	5
5 " 7½ "	5	1	6
5 " 7 "	5	1	6
5 " 6½ "	1	0	1
5 " 6 "	4	3	7
5 " 5½ "	1	1	2
5 " 5 "	4	8	12
5 " 4½ "	2	3	5
5 " 4 "	2	4	6
5 " 3½ "	0	1	1
5 " 3 "	1	12	13
5 " 2 "	1	13	14
5 " 1 "	1	6	7
5 " 0½ "	0	1	1
5 " 0 "	0	6	6
4 " 11 "	0	7	7
4 " 10½ "	0	1	1
4 " 10 "	0	5	5
4 " 9 "	0	2	2
4 " 8 "	0	1	1
Average Stature in Males, 5 feet 7 inches.			
" " Females, 5 " 2 "			
2.—Circumference of Head at widest part.			
24 inches, ...	8	0	8
23½ "	7	2	9
23 "	17	11	28
22½ "	3	5	8
22 "	11	26	37
21½ "	1	1	2
21 "	1	22	23
20 "	0	4	4
19 "	0	2	2
Average in Males, 23·90			
" Females, 21.74			

TABLE V.—[CONTINUED.]

	Males.	Females.	Total.
3.—*Antero-posterior measurement of Cranial Arch.*			
16 inches, ...	2	0	2
15½ "	1	0	1
15 "	4	1	5
14½ "	3	0	3
14 "	4	1	5
13½ "	3	7	10
13 "	13	21	34
12½ "	10	18	28
12 "	7	18	25
11½ "	0	3	3
11 "	1	4	5
Average in Males, 13·27			
" Females, 12·54			
4.—*Lateral measurement of Cranial Arch.*			
15½ inches, ...	1	0	1
15 "	9	2	11
14½ "	7	2	9
14 "	11	4	15
13½ "	6	9	15
13 "	10	27	37
12½ "	3	13	16
12 "	1	15	16
11½ "	0	1	1
Average in Males, 13·58			
" Females, 12·89			
5.—*Measurement of Side of Face.*			
13 inches, ...	0	1	1
12½ "	3	2	5
12 "	11	3	14
11½ "	17	6	23
11 "	12	19	31
10½ "	4	19	23
10 "	1	18	19
9½ "	0	3	3
9 "	0	1	1
8½ "	0	1	1
Average in Males, 11·42			
" Females, 10.65			

TABLE V.—[CONTINUED.]

	Males.	Females.	Total.
6.—*Measurement of Front of Face.*			
14 inches, ...	2	1	3
13½ "	2	1	3
13 "	12	3	15
12½ "	17	8	25
12 "	12	23	35
11½ "	2	22	24
11 "	1	8	9
10½ "	0	5	5
10 "	0	1	1
9½ "	0	1	1
Average in Males, 12·53			
" Females, 11·71			

TABLE V.—[CONTINUED.]

7.—RELATION OF CRANIOLOGICAL DEVELOPMENT TO THE FORM OF INSANITY.

		Mania.			Monomania.			Melancholia.			Dementia.			Total.		
		M.	F.	To.	M.	F.	To.	M.	F.	To.	M.	F.	To.	M.	F.	To.
1.—*Circumference of Head.*	24 inches.	1	...	1	1	...	1	1	...	1	5	...	5	8	...	8
	23½ ,,	...	1	1	1	...	1	...	1	1	6	...	6	7	2	9
	23 ,,	4	3	7	6	1	7	1	2	3	6	5	11	17	11	28
	22½ ,,	...	3	3	1	...	1	...	1	1	2	1	3	3	5	8
	22 ,,	2	11	13	2	2	4	1	2	3	6	11	17	11	26	37
	21½ ,,	...	...	...	...	...	...	...	...	...	1	1	2	1	1	2
	21 ,,	...	6	6	...	2	2	..	2	2	1	12	13	1	22	23
	20 ,,	...	2	2	...	...	...	...	1	1	..	1	1	...	4	4
	19 ,,	...	1	1	...	1	1	...	...	...	...	...	...	...	2	2
		7	27	34	11	6	17	3	9	12	27	31	58	48	73	121
2.—*Antero-posterior Measurement.*	16 inches.	...	...	...	1	...	1	...	...	...	1	...	1	2	...	2
	15½ ,,	...	...	...	...	...	...	...	...	...	1	...	1	1	...	1
	15 ,,	...	...	...	3	...	3	...	...	...	1	1	2	4	1	5
	14½ ,,	1	...	1	2	...	2	...	...	...	...	...	...	3	...	3
	14 ,,	...	...	...	2	...	2	1	...	1	1	1	2	4	1	5
	13½ ,,	...	3	3	1	...	1	1	1	2	1	3	4	3	7	10
	13 ,,	3	7	10	4	2	6	...	...	...	6	12	18	13	21	34
	12½ ,,	5	5	10	...	2	2	...	4	4	5	7	12	10	18	28
	12 ,,	6	7	13	...	1	1	1	2	3	...	8	8	7	18	25
	11½ ,,	...	2	2	...	1	1	...	...	...	...	...	...	...	3	3
	11 ,,	...	2	2	...	1	1	...	...	...	1	1	2	1	4	5
		15	26	41	13	7	20	3	7	10	17	33	50	48	73	121
3.—*Lateral Measurement.*	15½ inches.	...	...	...	1	...	1	...	...	...	...	...	...	1	...	1
	15 ,,	...	...	...	4	1	5	1	...	1	4	1	5	9	2	11
	14½ ,,	...	...	...	3	...	3	...	1	1	4	1	5	7	2	9
	14 ,,	4	2	6	...	...	...	1	...	1	6	2	8	11	4	15
	13½ ,,	...	2	2	3	1	4	1	2	3	2	4	6	6	9	15
	13 ,,	2	11	13	4	3	7	...	4	4	4	9	13	10	27	37
	12½ ,,	1	4	5	...	...	...	...	...	...	2	9	11	3	13	16
	12 ,,	...	7	7	...	...	...	...	3	3	1	5	6	1	15	16
	11½ ,,	...	1	1	...	..	...	...	...	...	...	...	...	...	1	1
		7	27	34	15	5	20	3	10	13	23	31	54	48	73	121

CHAPLAIN'S REPORT.

THE Chaplain has much pleasure in reporting favourably in his department. The attendance on his ministrations has equalled that mentioned in last year's Report. On Sabbaths, the Chapel is nearly full—on the male side quite full. The behaviour of the patients has been remarkably good, and their attention to the various parts of the service might be held up as an example worthy the imitation of many a congregation outside.

The Chaplain has repeatedly heard individuals reading along with him in a low tone, and, in case of his making a mistake or transposition, has been astonished to hear an involuntary correction escape the lips of one or more of his hearers.

This trifling circumstance he mentions as it seems to him to be an index to the remarkable attention of the patients to what he is at the time saying.

Such has been the care and vigilance of the various attendants in bringing out only the proper patients to Chapel, that only one individual has required to be removed during the past six months, and even on that occasion the service was not interrupted.

The large attendance at morning prayers on Tuesdays and Fridays, both of patients and officials, is highly gratifying.

So far, the duties of the Chaplain have been pleasant and easy. There is little difficulty in performing the Chapel duties of the Institution; but when you come to the private visitation, and to the subject of religious conversation with the patients in the galleries or in their wards, then the Chaplain's real difficulties commence.

A question which suggested itself formally to his mind on entering upon his duties was this. Is it advisable to converse on religious subjects with all the patients, and at all times, and under all circumstances? A minister out of doors, of course, carries his message to all, no matter of what stamp of intellect, or to what class of men each belongs. To each heart his duty is, to try to bring home the truth, that the end may, by God's blessing, be Salvation. Should the method of procedure on the part of the Chaplain of an Institution such as this, be on a like Catholic basis?

Many say "Yes, it should;" and the reason they give is, that religion is for all, and will comfort all; and they farther argue, that you have no title to rob a man of religious privileges, even though you may rob him of such as are political, social, or moral. After mature deliberation your Chaplain has come to the conclusion, that however painful it may be, and however harsh it may seem, yet that there are cases (not those of furious madmen) and times, in which religion should *not be* made a subject of conversation, and in which the patient should *not even be allowed to read the Bible*, or *to attend Chapel.*

So strong a statement of opinion requires reasons. The reasons which appear to warrant such a conclusion are as follows:—There are cases in which a misconception of true religion has been the predisposing cause of madness; and there are cases in which, though it has not been the primary cause, yet, in which, it has become the ruling mania. In such cases, to encourage conversation about religion, or to lead the individual's mind to dwell upon it in any way, is to add fuel to the flame of madness.

You remove all intoxicating liquors from the reach of the Dipsomaniac—you strive to divert the train of thought which is the mania of all others; and, by giving thought a new turn, you seek to drive the patient from his madness. Is it reasonable to reverse the process in this one case, and to try to cure by fostering the very mania itself, thus aiding in the development of the madman's delusion? One may meet with an argument as follows:—"Religion is an exception, and religious feeling can never be fostered wrongly. Religious dementia possesses the elements of a false religion, and this is the very reason why the patient should be preached to, and talked to, about religion; for, so

doing, you may overturn his delusion religion by the true, and thus accomplish his cure." This cannot be as long as the man is mad, for the very madness consists in his inability to discern truth from error. He thinks the false, the true—the delusion, the reality, and you have within him nothing to which you can appeal. Reason is in an abnormal state. Conscience—the judge—is incompetent to decide on evidence. The false is the true, the error right—the man's perverted faculties tell him so, and nothing will shake his erroneous belief. No "manifestation of truth commends itself to the man's conscience in sight of God." It is the manifestation of untruth which in the maniac does that.

We can speak from experience when we say, that to converse on religious subjects at all times and under all circumstances with the religio-maniac will produce one of two most pernicious effects; either it will excite to phrenzy, or, because you cannot sympathise with the deluded one, will make him only more sullen. He will withdraw himself into the microcosm of his delusion, to which he will more thoroughly than ever give himself up.

A disease of the mind is upon the religio-maniac. Fellow-man must do what he can to cure that disease. Therefore, he hands the madman over to the Physician that he may work a cure, waiting till he tells that the moral agent is fit again to reason. This brings us to a very serious matter, which, though it refers to the Physician, is important to the Chaplain too, inasmuch as he must depend on him for guidance in this portion of duty. The responsibility incurred shutting a man up from the management of self and property is serious, but shutting a man up from religious ordinances and communion (even though such be necessary) involves a far greater responsibility. It is handling a very terrible judgment, and very earnestly must the Physician watch the psychological re-organisation of each patient's mind, that till, and no farther than, the dawn-hour of recovered reason he may banish religion, which, before that hour, is to the man *madness*, and after it, the *greatest wisdom.*

A Chaplain's course, with regard to the various classes of the insane, seems, therefore, to be marked thus in respect of his intercourse with them. The mere imbeciles, teach as much as he can, in consideration

of the smallness of their powers of apprehension. The monomaniacs, whose mania is other than religion, treat as sane in regard to religion; but, with regard to the religious monomaniacs, leave them mainly to the Physician.

We know we have touched upon difficult ground. We know we take on us terrible responsibility in precluding or advocating the preclusion of any from religious privileges. But we must act for the best; and according to the little we know of mind's deep and subtle laws. We shut a man up from religion, to cure him of madness, that, when cured, he may appreciate, and be ruled by, true religion; in place of fostering, and may be, making coeval with life, a religious madness, which prevents him from comprehending aright all we attempt to teach. And while we act thus, and sorrowfully take away from a brother or sister that which is the greatest consolation of weary and careworn mortals, we are comforted ever by the thought that God will judge such according to what they have, and not according to what they have not. That is, not according to Reason—to them unknown; but, according to their sad Un-reason. We have dwelt thus long on this subject, from a sense of its importance, and because it has been a ground of much anxiety. The Religious Class mentioned in last year's Report still continues—conducted by one of the Ladies' Superintendants, aided by an upper-class patient. This class has been well, and regularly attended, and has afforded to many of the inmates not only pleasant thoughts in prospect and retrospect, but likewise useful employment in preparing for it, and much real instruction in holy things. We have during the winter had in full operation three other classes—a class for Drawing, one for Music, and one for the Practice of Psalmody. The working and effect of these classes has been very encouraging. They have supplied means for the diversion of many sad thoughts, and afforded many hours of amusement, while real progress has been made in the branches taught. In the study and practice of music especially have the patients taken delight and made progress. Our Lectures have not been so numerous this year as last. They have been only three in number; but we had in addition a novelty—the exhibition of many beautiful views by means of a Magic Lantern, kindly lent by a neighbouring parish clergyman.

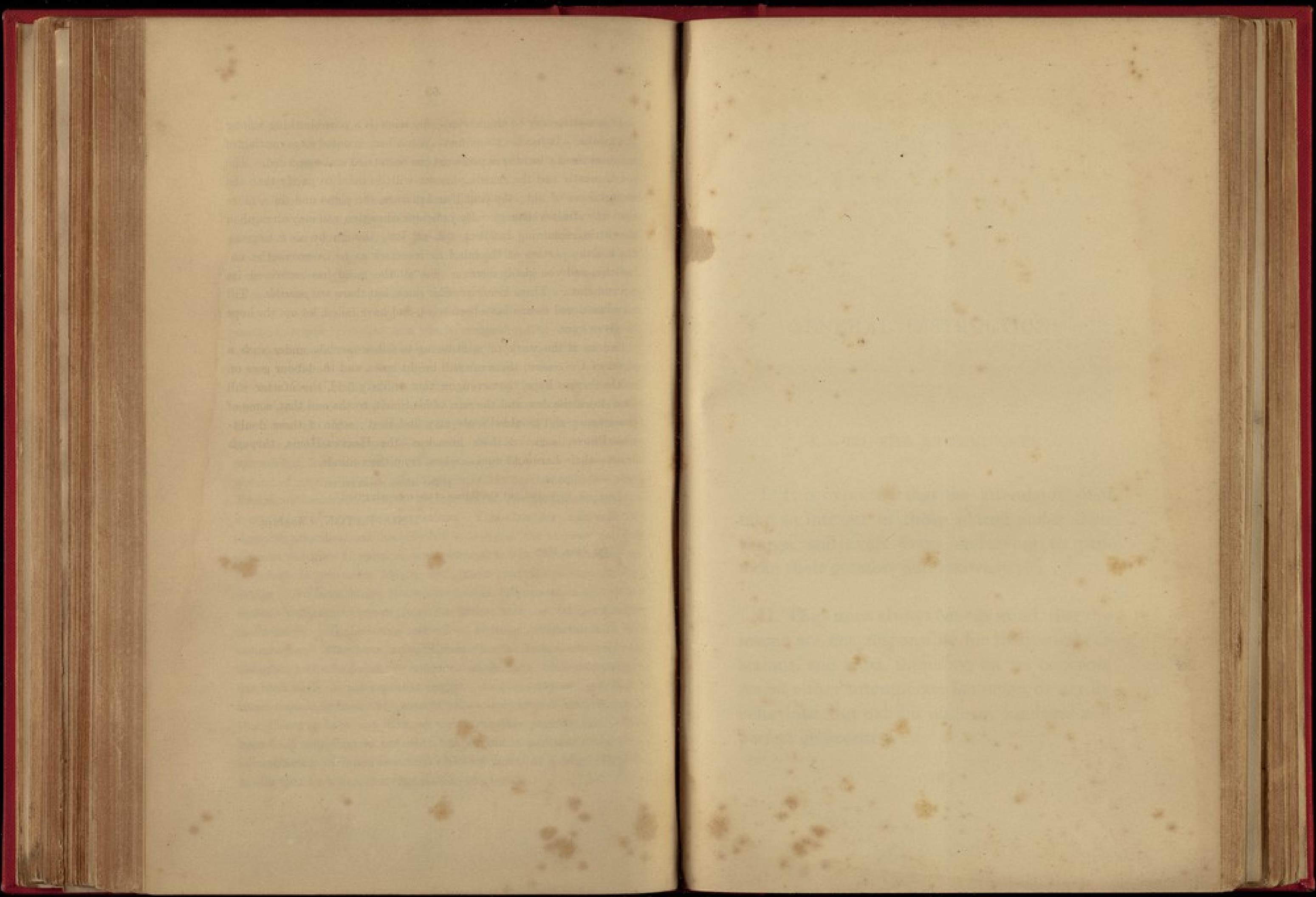
It is satisfactory to think that education is a possible thing among the insane. It has been doubted—it has been scouted as savouring of madness itself; but the experiment has been tried and succeeded. The music-master and the drawing-master will do more to pacify than the stern keeper of old; the pencil and picture, the piano and flute, more than any strait-waistcoat. By judicious education you may strengthen the little remaining intellect till, at last, though by slow degrees, the healthy portion of the mind so increases as to overcome the unhealthy, and you gladly discover that all the mind has recovered its normal state. There are *impossible* cases, but there are *possible*. Till all educational means have been tried, and have failed, let not the hope be given over.

Sad as is the work of ministering to fellow-mortals under such a cloud of Un-reason, there are still bright spots, and the labour goes on in the fervent hope, that even on this unlikely field, the Master will send down the dew and the rain of his Spirit, to the end that, some of these weary and troubled souls may find Rest; some of these doubters—Peace; some of these homeless—the Heaven-Home, through Jesus—their Lord and ours,—when, from their minds,

"The *ceiling clouds* retire,
And, lo! the throne of the redeeming God."

JNO. PATON, *Chaplain.*

9th June, 1858.



GENERAL INSTRUCTIONS

I.—TO THE ATTENDANTS.

I. It is expected that the attendants shall take an interest in those placed under their charge, and exert every endeavour to promote their comfort and recovery.

II. They must always bear in mind, that the insane are not responsible for their words or actions, and must, therefore, on no occasion, resent either intemperate language, or unruly behaviour, but exhibit uniform kindness and perfect self-control.

III. As patients will rather imitate the example of their attendants than follow their instructions, it is necessary that the example set by the latter be one of order, quietness, punctuality, personal neatness, and general propriety of behaviour.

IV. The recovery of the inmates being the grand object of the institution, those attendants will be most esteemed, and suitably rewarded, under whose charge, or through whose means, the greatest number recover.

V. The success of the after treatment of a patient depends very much on the impression made on his mind at the time of admission; no pains, therefore, must be spared, by kind attentions, on the part of the attendant, to inspire confidence on this occasion.

VI. When seclusion, the bath, or any other measure deemed necessary for the patient's welfare, to which he is unwilling to submit, is prescribed, persuasive means must first be tried; if these fail, the assistance of additional attendants is to be procured, so that the patient may perceive that it would be

useless to resist, and no struggle ensue. On these occasions, in particular, no taunts, irritating expressions, or threatening language, are to be used.

VII. The attendants are responsible for the personal cleanliness and neatness of those placed under their charge, and those inmates whose habits are uncleanly, or who are destructive to their clothing, must be presented in the same condition as those whose habits are more correct. Uncleanly habits will generally be corrected by those repeated attentions which are used with success in the care of children.

VIII. No patients are at any time to be left without observation, either in the airing or working grounds, or galleries, excepting when secluded by the physician's orders, and even then they must be visited frequently; this rule applies particularly to suicidal cases, whose safety can only be secured by unceasing vigilance.

IX. Attendants shall on no occasion lend their keys to patients, whether convalescent

or not, but must always bear them on their persons, and lock whatever doors they pass through, however frequently they may have occasion to do so.

X. There are few patients who may not be engaged in occupations or amusements of some kind, if their tastes in these respects are consulted by the attendants. In regard to occupation, it is ever to be borne in mind, that it is not the amount of work done, but the exercise of the bodily or mental powers of the inmates, which is the object to be kept in view; and thus, while the idle are to be encouraged, the powers of the willing are not to be overtaxed. Fatigue of body, and exhaustion of mind, are equally to be avoided.

XI. The delusions of a patient are, on no account, to be made the subject of merriment or amusement; they are, as a general rule, not to be contradicted, but when introduced by the patient, his attention is, if possible, to be directed to some other subject.

XII. An attendant is never to make a

promise to a patient which it is known cannot be performed.

XIII. At the Physician's visits, the attendants shall be prepared to report every peculiarity in the condition of the inmates since his last visit. Any accident is to be reported to him immediately. Every instance of neglect or concealment will be held as a decisive proof of incapacity and unfaithfulness.

XIV. When a patient escapes through inattention or carelessness, the attendant shall pay such proportion of the expense of bringing him back as the physician shall determine.

XV. When an attendant gets leave of absence, he shall see, before departure, that a substitute is in attendance, and shall return punctually at the specified time.

XVI. No male attendant shall enter the female department of the house, nor female attendant that of the males.

II. TO THE ASSISTANTS, OR CLEANERS.

The assistants shall, under the direction of the attendants, scrub the floors, make the beds, and attend generally to the cleanliness of the house. In the performance of their duties, they shall preserve order and regularity. No place shall be considered clean, which can be made cleaner, and a bad smell must not any where be perceived. In their intercourse with the patients they shall follow the instructions given above, to the attendants.

SPECIAL INSTRUCTIONS.

I. TO THE ATTENDANTS.

Six o'clock. The attendants shall enter on their duties at six o'clock, summer and winter, when they shall see that the patients rise and proceed to wash and dress themselves carefully. This duty is to be performed by the attendants for those patients who are unable to perform it for themselves. The male patients shall be shaved on alternate days.

Half past seven. By this hour dressing shall be completed, and those patients who are so disposed, shall then be engaged in light occupations.

At half-past eight o'clock breakfast shall be served, and it will be the duty of the attendants to see that this, as well as every other meal, is taken according to the ordinary usages of society. Grace shall be said at the commencement of the meal. The attendants shall sit at table with the patients, unless otherwise arranged. The dishes shall remain half an hour on the table.

At nine o'clock the inmates shall be conducted to chapel in a quiet and orderly manner. The attendants shall supply them with Bibles, &c. and besides setting an example of decorum, shall seat themselves near those whose propriety of demeanour can be least calculated on.

By ten o'clock all the patients shall be engaged in their out or in-door occupations or amusements. If possible, in the forenoon, patients of the higher, as well as the lower classes, are to be *usefully* employed.

At one o'clock the patients shall be brought from the working and airing grounds, and encouraged to engage in reading, and other light occupations. To those patients for whom it is prescribed the shower bath shall now be administered.

At two o'clock dinner shall be served, the table cloth, &c. being arranged ten minutes before. The attendants shall see that this meal is taken leisurely, and shall guard against accidents from choking, by taking care that the food is eaten in small morsels. They shall feed the paralytic, and those who cannot do this duty for themselves. Grace shall be said at the commencement and conclusion of this meal. The dishes shall remain forty minutes on the table.

At three o'clock, bowls, billiards, music, and other amusements for the higher class, out and in-door occupations for the lower, shall, as a general rule, be adopted. The out and in-door occupations shall last till six.

At six o'clock tea shall be served. The evening shall be devoted as much as possible to amusements among patients of all classes, reading, music, and dancing being, under due regulation, encouraged.

At eight o'clock supper shall be served. Grace shall be said at the commencement of this meal.

At half past eight o'clock, in each sitting-room a chapter of the Bible shall be read by the attendant.

At half-past nine o'clock in summer, and nine in winter, the patients shall be conducted to their sleeping apartments, or dormitories, and each shall be *seen* to undress, the clothes being immediately afterwards removed and examined, lest any thing improper should be concealed.

At ten o'clock the night attendants shall enter on their duties. They shall wear light shoes, to avoid noise, and, considering the responsibility which rests upon them, shall be careful to guard against accidents of every kind. The cause of any noise which is heard shall be immediately ascertained. They shall endeavour to soothe the agitated, give the prescribed medicines to the sick, and attend as much as possible to the wants of all. They shall make a report to the superintendent, matron, or head attendant in the morning, who shall embody it in their report to the Physician.

II. TO THE ASSISTANTS, OR CLEANER.

At half past five o'clock they shall commence to light the fires during the season they are used, and put in order the sitting and work-rooms.

Immediately on the patients' rising from bed, they shall arrange the beds according to a prescribed method, remove the canvass, and other beds which have been soiled, and proceed to clean the floors.

At the hours of meals they shall bear the dishes and food to and from the departments.

Attendants, as well as domestic servants, shall sign the following

OBLIGATION.

I hereby promise to obey the Rules of the Institution ; to promote, as far as I am able, its objects ; to be careful of its property ; to avoid gossiping about its inmates or its affairs ; and to endeavour generally, by my own con-

duct and demeanour, to sustain its respectability. I consider myself bound to perform any duty assigned, although not of a nature which I usually perform, should circumstances require my doing so. If any thing improper is done in my presence, or to my knowledge, in the Institution, I consider myself bound to report it to the Physician, or other superior office-bearer. I understand my engagement to be of a monthly nature, but acknowledge the Physician's right to discharge me, without warning, for acts of unkindness to the inmates, intemperance, disobedience to orders, or any transgression of the rules—my wages being forfeited if my conduct compromise the character of the Institution.

REGULATIONS

OF THE

LUNATIC ASYLUM

OF

ABERDEEN.

APPROVED OF, AND ORDERED TO BE PRINTED, AT A MEETING

OF THE MANAGERS,

HELD ON THE 24TH NOVEMBER, 1845.

ABERDEEN:
PRINTED BY D. CHALMERS AND CO.

1845.

LIST

OF THE

MANAGERS EX-OFFICIIS, AND MANAGERS FOR LIFE.

THE PROVOST OF ABERDEEN—*President.*

The FOUR BAILLIES.
,, DEAN OF GUILD.
,, TREASURER.
,, PROVOST who immediately preceded the present Provost.
,, TOWN-CLERK.

The CONVENER of the TRADES.
,, PROFESSOR of MEDICINE in Marischal College.
,, MODERATOR of the SYNOD of ABERDEEN.

All for the time being.

HENRY LUMSDEN.
ALEX. WEBSTER.
AL. BANNERMAN.
SIR CHARLES FORBES.
DR. W. HENDERSON.
ALEX. ANNAND.
HENRY D. FORBES.
P. FARQUHARSON.
SIR C. BANNERMAN.
ALEX. SMITH.
THOMAS BURNETT.
ALEX. M'KENZIE.
DUN. DAVIDSON.
ALEXANDER GRAY.
COL. HENDERSON.
DR. WILLIAMSON.
AL. CADENHEAD.
JOHN RAEBURN.
THOMAS SPARK.
ALEX. SIMPSON.
JAMES REID.
CLEMENTS LUMSDEN.

GAVIN HADDEN.
JAMES KILGOUR.
ROBERT BROWN.
JOHN CADENHEAD.
ALEX. CALDER.
GEO. HOGARTH, Junior.
MAJOR HOGARTH.
WM. HOGARTH.
JAMES ALLAN.
ALEX. GIBBON.
PATRICK PIRIE, Junior.
WM. DAVIDSON.
WM. ALLARDYCE.
WILLIAM ALLEN.
THOS. BLAIKIE.
AL. OGSTON.
WM. SIMPSON.
DR. GALEN.
GEO. THOMSON.
ROBERT CATTO.
GEORGE YEATS.
JAMES YOUNG.

ALEX. JOHNSTON.
DR. KEITH.
WM. IRVINE.
REV. J. STEWART.
JOHN WEBSTER.
ALEX. THOMSON.
DR. HARVEY.
ROBERT SMITH.
HENRY SHANK.
ANDREW ROBERTSON.
ROBERT LOW.
ROBERT SHAND.
JAMES NICOL.
RIGHT REV. BISHOP SKINNER.
JAS. FORBES, Argyllshire.
CHAS. WINCHESTER.
JAMES BREBNER.
SIR MICHAEL BRUCE, BART.
JOHN BLAIKIE.
FREDERICK HOLLAND.
WM. ELMSLIE.
HENRY L. HOLLAND.
WM. INNES.
NEWELL BURNETT.
CHARLES DOWNIE.
ALEX. INNES of Cowie.
JOHN ANDERSON, Junior.
THOMAS SANGSTER.
ALEX. PIRIE, Junior.
DR. EDWARD SMITH.
HENRY PATERSON.
REV. ROBERT FORBES.
D. R. MORICE.

MANAGERS ELECTED DECEMBER 1, 1845.

REV. JOHN WILSON.
THOMAS BEST.
DR. OGSTON.
DR. NICOL.
PRESIDENT of the SHIPMASTER SOCIETY.
DEACON EDDIE.
LESLIE CLARK.
ROBERT CATTO, Junior.
D. CHALMERS.
JOHN DUNCAN, Manufacturer.
REV. JAMES FOOTE.
ALEXANDER HADDEN.
JOHN MAITLAND.
PATRICK SIMPSON.

OFFICERS OF THE ESTABLISHMENT.

JOHN MACROBIN, M.D., *Physician.*
J. F. OGILVIE, M.D., *Resident Medical Officer & Superintendent.*
REV. ARCHD. STORIE, *Chaplain.*
THO. SPARK, and W. WALKER, } *Treasurers and Clerks.*
, *House Steward.*
Miss ELRICK, *Matron.*

REGULATIONS,

&c.

CHAPTER I.

GENERAL MANAGEMENT.

I. THE President and Managers of the Aberdeen Infirmary shall also be the Managers of the Lunatic Asylum, unless it shall be otherwise appointed by a Charter obtained from the Crown hereafter; but the Funds of the two Institutions shall be kept entirely separate and distinct, so that the Income and Expenditure of the one may not interfere with, or have any effect on that of the other.

II. A Physician, a Resident Medical Officer and Superintendent, a Chaplain, a House Steward, a Matron, and a Clerk or Treasurer, shall be attached to the Asylum, all of whom shall be elected or re-elected by a general meeting of the Managers, to be held annually on the third Monday of December, and who shall receive such salaries or allowances as may be determined by that meeting.

III. A general meeting of the managers shall be held twice a-year, in the Hall of the Asylum, upon the second Thursday of June, and the second Thursday of November, at two o'clock, on purpose

to examine into the general state of the institution, to correct any abuses that may have occurred, and to suggest any additional regulations or improvements in the management of it. But none of the present regulations shall be set aside or altered, without the sanction of another general meeting, to be called for the special purpose of deciding on the proposed alterations, and to be held not less than a month, nor more than six weeks, after the meeting at which the alterations were proposed.

IV. At the general meeting of Managers, held on the third Monday of December, a Committee, consisting of the President of the Court of Managers, along with sixteen members, shall be chosen by ballot, for the purposes of the general management of the Institution. And to every member so chosen, the Clerk shall immediately intimate his election in writing; and should any one so elected not declare his acceptance of the appointment, to the Clerk, within eight days, the Manager having the next greatest number of votes shall be taken in his place, and so on till the Committee be made up.

1. Of these sixteen members, two shall be Magistrates of Aberdeen for the time being—two Clergymen—two Advocates—and two Physicians or Surgeons; provided that such numbers of these professions be in the management, and willing to accept of the appointment.

2. If any vacancy should occur in the Committee during the year, the members of the Committee

shall be empowered to fill up the same from the respective classes of the Managers.

3. Not fewer than five shall be held to be a quorum, the President being always Convener, and when present, Chairman; and the Chairman shall have both a deliberative and a casting vote.

4. The powers of the Committee shall commence immediately after election, and shall continue until next election.

5. The Committee shall fix its own times of meeting—the meetings to be held at least monthly; the Convener having it always in his power to call an extra meeting, whenever he sees occasion, or on a requisition from any two of the Committee, or from any other Committee appointed by the Managers: notice of such extra meetings being circulated forty-eight hours before the time of meeting, unless in cases of importance demanding the immediate interposition of the Committee.

6. The Committee shall be empowered, in all questions of a professional nature, to call in the aid of such of the Managers as may be best qualified to afford them information.

7. The Committee shall resolve itself into four Sub-Committees; one of which shall meet weekly, (or oftener, if necessary), at the Asylum, and continue to act for three months; providing always that two Members of each retiring Sub-Committee shall continue to be Members of the New Sub-Committee, which will thus consist of six persons; the Members thus continuing, to be nominated by the Sub-Committee before they retire from their quarterly charge.

8. Two shall be a quorum of each Sub-Committee; and they shall report regularly to each Meeting of the Committee all business which they may have transacted since the preceding meeting.

9. The following duties shall be devolved on these Sub-Committees:—

(1.) To examine and warrant the Accounts.

(2.) To examine the Medical Reports.

(3.) To inspect the apartments, day-rooms, and grounds of the Asylum; and to inquire into the treatment of the patients of the Institution, both in regard to medicines, and accommodations of every kind.

(4.) To inspect the state of the Shop, and the Medicines procured for it, or prepared in it; and to suggest to the resident Medical Officer whatever may occur in regard to its economy and improvement.

(5.) To direct the modes of supplying Provisions, and to examine their quality, and their state when prepared for the use of the patients.

(6.) To inquire into the general conduct of all persons employed in the Institution, and to settle any disputes which may arise.

(7.) To warrant accounts for payment, and to examine the Treasurer's Accounts, at the end of each month.

(8.) To receive plans and tenders for any proposed Buildings, or alterations in those already built.

(9.) To give directions for, and superintend the execution of the plans agreed on by the general meetings.

(10.) To receive applications in behalf of patients for the Asylum, and to settle the rate of board to be paid for them when admitted.

(11.) To order the dismission of patients from the Asylum, when certified by the Physician as cured, or when their relations make application for their dismissal.

10. Besides receiving the reports of the Sub-Committees, and discussing their proceedings, it shall be part of the duty of the Committee to suggest plans of improvement in every department of the management of the Institution; to report to each general meeting the business transacted since the previous meeting; and to draw up an Annual Report of the state of the Institution, to be printed for the satisfaction of the public.

11. Each Sub-Committee shall appoint its own Chairman, who shall be Convener, and shall call a meeting when he sees occasion, or on the requisition of any member, at twenty-four hours' notice, unless in cases of emergency demanding immediate attention; and the Chairman shall have both a deliberative and casting vote.

12. Notwithstanding all these duties and powers are vested in the Committee, and to be discharged by them, it is hereby declared, that the said Committee, in their acts and deeds, are subject to the revision and controul of the General Meetings of

the President and Managers; and the following matters must still, as formerly, remain with, and be determined by, such general meetings, viz. :—The enactment of Bye-laws; the election and dismission of Office-bearers; the borrowing and lending of Money, affecting the Funds of the House; the buying, selling, or letting of Land, or Houses, on its account; and the ordering additional Buildings, or important alterations on those already built.

V. At the annual general meeting, a Committee of five Auditors shall be appointed, who shall, at the end of each four months, examine the Treasurer's books, compare the entries with the vouchers, and attest their correctness by their signatures.

CHAPTER II.

ADMISSION OF PATIENTS.

I. No Patient shall be received into the Asylum, without a written application from his or her friends or relations, attested by the Minister of the parish from which the Patient comes, (or, where that cannot be conveniently obtained, by some other responsible person), stating the nature of the case; together with a certificate of insanity, signed by a respectable Physician or Surgeon, (not acting for, or being employed in, the Asylum;) and also a mandate for the reception of such Patient, addressed to the Resident Medical Officer and Superintendent, and

subscribed by at least one Manager of the Asylum; together with a warrant from the Sheriff, agreeably to the Act of Parliament.

II. When a Patient thus received shall have been fourteen days in the Asylum, to give the Physician or Resident Medical Officer an opportunity of examining the case, the Clerk shall lay the application for admission, with the certificate of insanity, and the mandate and warrant for reception, before the next weekly meeting of the acting Sub-Committee of Managers, to whom the Physician shall report his opinion of the Patient's case; and they, being thus fully informed on the subject, shall have the power of finally admitting or refusing the Patient.

III. At the admission of every Patient, proper security shall be given for a due compliance with all the regulations of the Asylum, and particularly for payment of the board required by the Sub-Committee of Managers, which shall in no case, (unless in that of Patients admitted on particular funds), be less than at the rate of Fifteen Pounds yearly,* and

* The Funds of the Institution being insufficient, without the aid of Board from the Patients, to procure that accommodation, in lodging and airing ground, and that separation of different classes of Patients, according to their sexes, circumstances, and the state of their malady, which is so essential to their comfort and prospect of cure, the Managers are reluctantly obliged, at present, to refuse the admission of any Patient at a rate of Board under £15, except those who have a privilege of being admitted on lower terms, or gratuitously, agreeably to the expressed wish of benefactors; but they have it in view to admit a limited number of poor Patients, on lower terms, or gratuitously, as soon as the Funds will admit of their doing so.

which shall be paid in advance, quarterly, on the first days of May, August, November, and February; or at other periods, in particular cases, if the Sub-Committee may judge it necessary.

IV. Every Patient brought into the Asylum, except Paupers at £15 of Board, for whom the Institution provides Bedding, must be decently and comfortably clothed, and furnished with a suitable bed, or mattress, with a sufficient supply of bed clothes. And the bed and body clothes must be renewed as often as may be necessary, at the expense of those on whose recommendation the Patient was admitted, previous intimation being given by the Clerk when such necessity occurs.

V. When any Patient shall appear to the Physician to be so much recovered as to render a longer residence in the Asylum unnecessary, or to be in any other respect unfit to remain in it, he shall intimate the same to the acting Sub-Committee of Managers, who shall determine respecting the dismission of said Patient; and without this form of procedure, no Patient shall be dismissed from the Asylum.

VI. When the Sheriff, the Individual, or Society, by whom a Patient's Board is paid, is desirous to have the Patient removed from the Asylum, a petition to that effect, accompanied by the Physician's opinion in writing as to the propriety of the dismissal, must be lodged with the Clerk, when one of the

acting Sub-Committee of Managers shall have power to grant warrant to the Superintendent to deliver the Patient to the petitioner, or any one duly authorised by him.

VII. Visitors may be admitted to inspect the grounds and general arrangements of the Asylum, by procuring an order from one of the Managers, or the Physician, but shall not be allowed to enter the apartments occupied by the Patients. The friends and relatives of Patients may be permitted to visit them with the approbation of the Physician or Resident Medical Officer; and professional men or strangers desirous of obtaining information relative to the internal economy of the establishment, may be admitted, by application to either of these Gentlemen, at such times as they may judge most proper for the purpose.

VIII. Any Clergyman shall be at liberty, with the approbation of the Physician or Resident Medical Officer, to visit any Patient in the Asylum, between the hours of ten and two o'clock, conforming to such orders and regulations as the Managers from time to time may enact.

IX. When any Patient shall be dismissed, or shall die, before the close of a quarter, the Monthly Committee shall have power to decide whether any, and what portion, of the sum advanced for Board, shall be refunded.

CHAPTER III.

THE PHYSICIAN.

£100.

I. The Physician shall have the superintendence of the Patients—subject always to such regulations as may, from time to time, be established by the Managers or their Committee. He shall visit the Asylum at least once in the twenty-four hours, or more frequently, if necessary; and in regard to the treatment of the Patients, shall give the requisite instructions to the Resident Medical Officer and Matron, who shall be considered responsible for the due execution of the same.

II. He shall have the power of dismissing any of the assistants with whose conduct he is dissatisfied, (he being responsible to the Managers for any exercise of this power;) and shall report the circumstance, and his reason for it, to the next meeting of the Sub-Committee.

III. When any case of danger or difficulty occurs, he shall call to his aid, in consultation, one or more of the Physicians of the Infirmary, or any of the medical members of the Committee of Management.

IV. He shall have power to order for the Patients such diet and treatment as he may judge necessary for their cure, without reference to the Board paid; it being understood, that, with respect to diet, he is not to exceed the regular allowances

of the establishment, unless in cases where the general health of the Patient may require more liberal treatment, or when the friends of the more affluent may wish to indulge them in additional comforts at their own expense; and this he shall have power to grant or refuse, according to his opinion of their probable effect upon the Patient.

V. He shall, when required, furnish such reports or certificates of the states of the Patients under his charge, or of any individual Patient, as may be wanted by the Sheriff of the County, or his Substitute; by the managers of the Asylum, or their Committees; or by the Managers of the Pauper Lunatic Fund for the Parish of St. Nicholas, or for the Parish of Old Machar; or for the Presbytery of Aberdeen, or for any Presbyterial or Parochial Fund within the bounds of the Synod of Aberdeen, regarding those Patients receiving benefit from these funds respectively; or by the Relations of Patients, or by those individuals on whose applications such Patients were admitted, regarding them only—Duplicates of such Reports being laid before the next meeting of the Sub-Committee.

VI. He shall, on the death of a Patient, forthwith report the same, in writing, to the Sheriff-Substitute at Aberdeen, stating the name and age of the Patient—how long he or she has been in the Asylum—and whether the death has occurred under ordinary or extraordinary circumstances. If the latter, the Report shall bear what the circumstances are, so far as known to the reporter; and shall

also forthwith report the circumstances, in writing, to the Convener of the Weekly Committee.

VII. A weekly Report of the number of Patients in the Asylum, and of the situation of each, shall be drawn up and certified by the Physician and Resident Medical Officer, and presented to each regular meeting of the acting Sub-Committee; and such alterations as may occur, from time to time, in the state of the Patients, shall be regularly noted in it, for their information.

VIII. The Physician and Resident Medical Officer shall make such periodical investigation of the state of each Patient, curable and incurable, as may enable them to judge of their condition in all particulars; and the results of this investigation shall be entered in the case books of the Asylum, and laid before the Acting Sub-Committee.

IX. The Physician and Resident Medical Officer shall be in attendance at the Asylum during all meetings of the Managers or Committees.

X. No alteration shall be made in the general economy of the Establishment, nor any articles (except medicines) purchased for the use of the House, without the approbation of the Acting Sub-Committee.

CHAPTER IV.

THE RESIDENT MEDICAL OFFICER AND SUPERINTENDENT.

£200

I. He shall reside constantly in the Asylum; and

in particular, he must never be absent during the night.

II. If, however, absence for twenty-four hours, at one time, should be absolutely necessary, he must apply to the Acting Sub-Committee for their permission; and the Physician, or a Substitute approved of by him, must supply his place.

III. Under the direction of the Physician, he shall have the general care and superintendence of all the Patients, and male Assistants in the Institution; and he shall furnish satisfactory information regarding each Patient in the House to the Physician; and, under his direction, shall enter, in the Journals kept for that purpose, a daily report of the symptoms and treatment of each Patient under cure.

IV. On the reception of every Patient, he shall endeavour to obtain satisfactory answers to the following Queries; and if these be not furnished, as far as circumstances will permit, within fourteen days thereafter, the Patient shall not be finally and fully admitted into the Hospital:—

1. What is the name and age of the Patient? Single or married, of what station in life, or employment? Quiet, sober, industrious; or dissipated, idle, vicious, quarrelsome?
2. Is there reason to believe the disease hereditary? Or is it joined with Epilepsy, Palsy, or any other violent and distinct malady?
3. Is the natural disposition of the Patient cheer-

ful or melancholy? Has any peculiarity been observed in the behaviour previous to the derangement? Or any thing remarkable in the constitution? What bodily ailments was the Patient most subject to?

4. How long has the Patient laboured under derangement? Did it come on gradually or suddenly? Have any changes worthy of notice occurred in the symptoms? Has the Patient ever recovered, or been convalescent, and again relapsed?

5. Can the derangement be attributed to any moral cause, such as religious enthusiasm, terror, love, disappointment, misfortunes, &c.?

6. Can it be traced to any physical cause; such as severe bodily injury, particularly about the head, to fever, exposure to the sun, residence in warm climates, abuse of intoxicating liquids, or the administration of powerful drugs of any kind?

7. If in females, did it supervene in consequence of obstruction, pregnancy, child-birth, nursing, or any nervous excitement?

8. What particular train of thought is the Patient most addicted to? Have any changes in this respect been remarked in the progress of the disorder? And what are they? Have any spectral illusions, fancied sounds, or false perceptions of external objects, accompanied the disease?

9. Is there any particular subject that irritates the mind of the Patient, or produces a train of thinking more than usually incorrect? Have any means been found effectual for banishing such thoughts for a time, or diverting them into a more rational channel?

10. Has the Patient at any time attempted suicide? or to destroy or hurt others? or displayed malice or ill-will against any individual?

11. Have remedies been tried? what were they? how long were they continued; and with what effect?

N.B.—These queries shall be printed separately, and copies given to those applying for the admission of a Patient.

V. From the answers obtained to the above queries, and from his own observation, he shall draw up an account of each case, to be fully and distinctly entered in a case-book; in which the subsequent history and treatment of the case shall also be inserted, during the residence of the Patient in the Asylum.

VI. From these Reports, and such other Registers as the Managers shall direct to be kept, he shall draw up a tabular view of all that relates to the Patients, embodied in a Report, which he and the Physician shall annually prepare, and lay before the General Meeting of the Managers in June; and which, after being approved by them, shall be printed and circulated for the information of the public, along with a state of the Funds.

VII. The case-books are to be furnished at the expense of the Institution, and are to be considered as its exclusive property; and no volume is on any pretence to be taken out or removed; nor shall any one have access to these books, except the Sheriff of the County, or his Substitute, and the Managers, or such as may obtain, for some specific purpose,

a written order from the acting Sub-Committee; and in all these cases the inspection of the books must be in presence of the Physician, or the resident Medical Officer.

VIII. He shall keep in the Asylum a supply of Medicines adapted to the cases of the Patients; and shall himself compound and dispense the Medicines; taking especial care that, in this, and in every thing else, relating either to the individual treatment of the Patients, or the medical economy of the house, the intentions of the Physician be fully carried into effect.

IX. The Patients, both male and female, shall be employed in useful and amusing work, as much as is possible, according to the instructions of the Physician for that purpose; and the Resident Medical Officer and Superintendent and the Matron are very particularly charged to leave no mild and humane endeavours untried, to forward these salutary measures; while the Committee of Management are empowered to grant from the Funds of the Institution the means necessary for carrying them into effect, with facility and safety.

X. He shall have the particular charge of the male patients, and shall be provided with the necessary Assistants, who shall act under his direction, and for whose conduct he shall be responsible; and he shall be bound to obey such farther regulations as may be agreed on by the Managers, and delivered to him properly authenticated.

XI. He shall have the power of engaging and dismissing the Male Servants and Assistants, with the approbation of the Physician; and if any difference of opinion shall occur, either with regard to the engaging or dismissing them, between the Physician and him, it shall be referred to the decision of the Sub-Committee.

XII. He shall, at least every morning and evening, examine the apartments of the male Patients, their public rooms, and their airing grounds; and shall, with the utmost vigilance and impartiality, observe the conduct of all the Assistants, and check the slightest appearance of negligence, improper indulgence, or severity; and every night, before retiring to rest, he shall inspect the whole House, with great care, and shall enter a report of his inspection in a book provided for that purpose.

XIII. During meals, he shall frequently visit the different halls; observe the state of the provisions, as to cooking, cleanliness, equality of distribution, &c.; the conduct of the Servants, and the demeanour of the Patients.

XIV. He shall be careful in seeing that the Assistants shift the linen of the Male Patients, when necessary; and that they be kept clean by frequent washing, subject to due consideration of the health in individual cases.

CHAPTER V.

THE CHAPLAIN.

£40

I. He shall regularly visit the Institution every *Sunday*, and shall conduct Divine Worship with as many of the Patients, as, in the opinion of the Physician, shall be capable of attending with propriety, and as many of the Office-bearers and Servants of the house, as can be spared from attendance on the Patients, or other indispensible duties.

II. He shall also give his attendance at the Asylum, in cases of sickness and funerals, when required.

III. He shall not be permitted to hold private conversation with any of the Patients, without the approbation of the Physician; and he shall, in all things, conform himself to such orders and regulations as the Managers may, from time to time, establish.

CHAPTER VI.

THE CLERK AND TREASURER.

£112.

I. He shall punctually call, and be in attendance on, all the general meetings of the Managers, and also all meetings of Committees, bringing along with him the necessary books and papers in his custody, and writing down an account of the proceedings of every such meeting, which shall be authenticated by the signature of the President or Chairman, and afterwards regularly inserted into a minute-book.

II. In particular, he shall attend the weekly meetings of the acting Sub-Committee held at the Asylum, and present to the members all such Accounts as may be due for articles furnished to the House, that the same may be warranted for payment. He shall also at other times visit the Asylum, as often as he may find convenient, and shall report to the Sub-Committee of Managers whatever he may find in any department requiring their notice.

III. He shall give directions, according to the instructions of the acting Sub-Committee, to the House Steward and Matron, regarding the purchase of provisions or other articles for the use of the Asylum, and shall pay for the same, upon receiving the warrant of the Sub-Committee.

IV. He shall receive all payments whatever made for behoof of the Asylum, whether as Board for the Patients, or as Donations and Legacies, and shall give discharges for the same, which he is hereby authorised to do; he always finding security, to a reasonable amount, for all his intromissions with the funds; and lodging in Bank, from time to time, such sums of money as he may receive on account of the Institution.

V. He shall have the sole custody of the Minute and Account Books, Papers, and Writings of every kind, belonging to the Asylum, according to an In-

ventory thereof; and every Manager shall have a right to inspect the same, whenever he thinks proper.

VI. He shall keep an exact account of the Income and Expenditure of the Establishment, as well as of such Donations and Legacies as may be received from time to time; regularly entering the same in a book, which shall at all times be open to the inspection of the Managers. And he shall annually, before the general meeting of the Managers, in June, make up an Abstract of the Accounts, at the sight of the General Committee of Management, which, along with the Report of the Physician, shall be submitted to that meeting, and when approved of, shall be published.

VII. He shall officially conduct all Correspondence relating to the Asylum, and shall regularly engross all letters written by him, on its account, in a book to be kept for the purpose, unless the acting Sub-Committee shall authorise him to omit any, on account of their unimportance.

VIII. He shall make out a list of all the Patients in the Asylum, separating them into distinct classes, according to the rate of board paid for each. The Matron shall be furnished with a copy of said list, so that she may be enabled to comply strictly with the regulations of the Institution, as to the diet for the respective Classes; reserving to the Physician or Resident Medical Officer power to prescribe such alteration of the diet of any Patient as he or they may find necessary for the health of such

Patient—but no such alteration shall be made until either of the Medical men sanction the same, by a written order, entered in a book to be kept for that purpose.

CHAPTER VII.

THE HOUSE STEWARD.

I. He shall on no account be absent from his duty in the Asylum by day or night, unless when necessarily engaged on the business of the House, or when attending Public Worship; and especially he shall in no case leave the same during the absence of the Resident Medical Officer.

£50

II. He shall receive, take charge of, and give out all stores of every kind, and shall purchase, under the direction of the Weekly Sub-Committee, such articles as are not furnished by contract.

III. He shall carefully examine all articles contracted for, when they are received, and shall have power to reject any which he may judge not to be in terms of the contract.

IV. He shall have the charge of all the furniture in the House, and of the bedding on the male side of the House, and shall account for the same by Inventory.

V. He shall have the charge of the body clothes of the male Patients, and shall see that they are properly kept in repair, and renewed, when necessary.

VI. He shall always have at least two spare beds and bedding, in preparation, in case of any unexpected occurrence.

VII. He shall keep a strict account of all articles received or given out for use in the Asylum, and shall exhibit to the Sub-Committee, weekly, a statement of the provisions or other articles received and expended.

VIII. He shall be responsible for providing whatever may be ordered by the Physician or Resident Medical Officer, for the use of any of the Patients.

IX. He shall be bound to obey such further regulations as may be agreed on by the Managers, or any of their Committees, and delivered to him properly authenticated.

CHAPTER VIII.

THE MATRON.

I. She shall have the female Patients under her more immediate care; and shall take charge of the bedding, linens, Patients' clothes, and such articles of furniture as shall be committed to her, by inventory. She shall oversee the domestic house-work, in the kitchen, and in all other parts of the House and premises.

£70

II. She shall devote her whole attention to the

business of the Asylum, nor shall she make any engagements which may interfere with her duties to the Institution, nor leave the House at any time while the Resident Medical Officer and Superintendent is absent.

III. She shall have the power of engaging and dismissing the Female Servants and Assistants employed in the Asylum, who shall be subject to her control in all their domestic duties; and she shall be responsible for the faithful observance of all such instructions as may be given to her by the Physician or Resident Medical Officer, in regard to the treatment and care of the Patients.

IV. She shall keep a regular book of disbursements, to be laid before the Sub-Committee of Managers at their weekly meetings; and shall be careful to consult the interests of the Asylum, by the most frugal and judicious management of everything entrusted to her.

V. She shall be responsible for the general cleanliness of the House, the management of the kitchen, and the cooking and dressing of the victuals, as well as for every thing relating to the female department of the Institution.

VI. She shall examine the rooms or apartments of the female Patients twice every day, and shall take care that the medicines ordered for them be properly administered; and if she shall perceive any

thing improper, she shall take the earliest opportunity of reporting it to the Physician or the Resident Medical Officer, and when necessary to the acting Sub-Committee.

VII. She shall be particularly attentive in directing and superintending the Diet of the Patients—carefully following such instructions as may be given to her in that respect. She shall consider herself subject to the general regulations herein before prescribed for the Resident Medical Officer and Superintendent, as far as the same are applicable to her department of the house; and shall conform to all such regulations as may, from time to time, be established by the Managers or their Committees.

VIII. She shall have the charge of the body clothes of the female Patients, and shall take care that they are kept in proper repair, and renewed, when necessary.

IX. She shall take care that the linen of the female Patients be shifted when necessary, and that they be kept clean by frequent washing, subject to the orders of the Physician or Resident Medical Officer, in regard to individual Patients.

X. She shall devote her time as much as possible to the female Patients, and shall endeavour by every means in her power to promote their comfort and welfare.

CHAPTER IX.

ASSISTANTS.

I. None of the Assistants shall use any force with any of the Patients, except in subjecting them to necessary and unavoidable restraint. And in case of such necessity occurring, in the absence of the Physician or the Resident Medical Officer, a report of the same shall be made to one of them as soon as possible.

£18 to £24.

II. The Assistants and Servants shall at no time attempt to deceive or terrify the Patients, or irritate them, by mockery, mimickry, or wanton allusions to any thing in their present appearance, or past conduct. They shall exercise the greatest vigilance over the Patients, and always have a careful eye to their behaviour, both in their day-rooms and in their exercising grounds. They shall never manifest vindictive feelings towards any Patient, but forgive all petulance, abusive language, or sarcasm; treating with equal tenderness those who give the most and those who give the least trouble. And whatever peculiarity they may observe in any Patient, they are immediately to mention it to the Matron or Resident Medical Officer; and every instance of negligence or concealment will be held as a decisive proof of incapacity or unfaithfulness.

III. All persons in the employment of the Insti-

tution are cautioned, in the strongest manner, against selling any article to any of the Patients; receiving money or presents from visitors, or the friends of any of the Patients, or from the Patients themselves, or perquisites of any sort; or conducting themselves to any of the Patients in such a manner as to excite envy, jealousy, or ill-will, among the rest.

IV. No person shall be allowed to give to any of the Patients any article whatever, without the approbation of the Physician or Resident Medical Officer; or to convey out of the Asylum a letter from any Patient which has not been previously inspected by one of them: and the Resident Medical Officer and Superintendent is hereby directed in future to admit no person into the Asylum who shall have been found acting contrary to this regulation.

V. All the Patients shall retire to rest every night, at eight o'clock, from the first of October till the first of April; and, during the remainder of the year, at nine o'clock. And all those whose state admits of their leaving their apartments, shall be brought into the day-rooms before nine o'clock every morning.

VI. The Assistants and Servants, of both sexes, shall, on every occasion, pay the strictest attention to all the orders of the Physician and Resident Medical Officer; and shall give immediate notice to them when any thing material shall occur.

Women Servants from £3. 15 - to £5 -
Gardener — £26. —
Tailor - £26. —

CHAPTER X.

THE PORTER.

I. He shall reside in the Lodge, and be always ready to admit such persons as have necessary business in the Asylum; but persons having no particular business, who may be desirous to view the Asylum, are not to be admitted without a written order from one of the Managers or the Physician, or unless accompanied by one of their number, or any officer of the Institution. He shall be particularly attentive to prevent any improper articles from being brought into, or carried out from, the Asylum. He shall not allow the Servants of the Institution, or other persons, to congregate and assemble in the Lodge, for any purpose whatever: any person wishing to hold communication with the Servants in the House, shall be referred to the Resident Medical Officer or the Matron.

£10

II. When he may, at any time, be necessarily absent, he shall give notice to the Resident Medical Officer, in order that some proper person may take charge during his absence, so that the Gate may never be left without an efficient attendant.

III. In carrying into effect the above instructions, and generally in every thing connected with his duty as Porter, he shall be subject to the directions of the Resident Medical Officer, to whom he

shall apply in any case of doubt or difficulty; and to whom he shall immediately report when any thing occurs detrimental to the interests of the Institution.

CHAPTER XI.

GENERAL RULES.

I. No person shall have access, unattended, to the private apartment of any Patient of the opposite sex.

II. Any person in the employment of the Asylum who shall be found intoxicated, shall be immediately dismissed, and declared incapable of being again received into the service of the Institution.

The present Rates of Board are the following,—subject, however, to alterations, according to circumstances, as the Managers may see fit:—

Class	£	s.	d.	
1st or Lowest Class,	£0	8	6	℔ *Week.*
2d . . . Do.	0	10	6	Do.
3d . . . Do.	0	15	0	Do.
4th . . . Do.	1	1	0	Do.
5th . . . Do.	1	11	6	Do,
6th . . . Do.	2	2	0	Do.
7th . . . Do.	3	3	0	Do.

And upwards, according to the accommodations, &c. required.

NOTE.—Paupers belonging to the County and Presbytery of Aberdeen are admitted at £15 per Annum; all other Paupers, at 8s. 6d. per Week.

MEMORIAL TO THE LATE LORD HERBERT.

REPORT

OF THE PROCEEDINGS AT

THE PUBLIC MEETING

HELD AT

WILLIS'S ROOMS, KING STREET, ST. JAMES'S,

On THURSDAY, 28*th* NOVEMBER, 1861.

HIS ROYAL HIGHNESS

THE DUKE OF CAMBRIDGE, K.G.

IN THE CHAIR.

LONDON:
PRINTED BY R. CLAY, SON, AND TAYLOR.
1862.

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THE LATE LORD HERBERT.

THE much lamented death of Lord Herbert occurred on Friday, the 2d August, 1861. He died in the 51st year of his age.

Failing health had obliged him to resign his seat in the Cabinet as Secretary of State for War. He had held that office from the formation of Lord Palmerston's Administration, and had devoted all the energy of his highly gifted and cultivated mind to the moral and physical care of the British soldier. Lord Herbert's successful efforts in his work are well evidenced in the following pages.

On Lord Herbert's decease, his friends and constituents in Wiltshire evinced their regret for his loss, and their sympathy for his family, by holding a public meeting at Salisbury, and agreeing to erect a suitable memorial to him in that county. The subscriptions at Salisbury will be appropriated to the erection of a bronze statue of Lord Herbert in that city, and to the support of the Convalescent Hospital at Charmouth, which is a branch of the Salisbury Hospital, and a local Institution to which Lord Herbert was a liberal benefactor, and in which he took much interest.

There were, however, many beyond the sphere of his own county, who desired to testify their sense of the loss which the NATION had sustained by his untimely death. The Army, Lord Herbert's coadjutors in the Cabinet, and many political and private friends to whom he had endeared himself, expressed their anxiety to perpetuate his memory by some appropriate memorial in the metropolis. Early in the month of November the paper on the next page was circulated, and published in the public journals; and a meeting was held, of which a report is herewith given, and at which it was resolved to appropriate the subscriptions which might be received—

First. To the erection of a statue of Lord Herbert in London.

Second. To apply the surplus to the endowment of Exhibitions or Gold Medals in connexion with the Army Medical School at Chatham, which was founded under Lord Herbert's auspices.

(Advertisement.)

A Public Meeting will be held at Willis's Rooms, King Street, St. James's, on Thursday, the 28th of November, at which

HIS ROYAL HIGHNESS THE DUKE OF CAMBRIDGE

will preside, for the purpose of adopting such measures as may result in an appropriate Memorial to the late lamented

LORD HERBERT.

The following Noblemen and Gentlemen have expressed their desire to support his Royal Highness on the occasion :—

Field Marshal the LORD SEATON, G.C.B. &c.
General the VISCOUNT GOUGH, K.P. G.C.B. K.S.I.
General the LORD CLYDE, G.C.B. K.S.I.
General SIR JOHN BURGOYNE, Bart. G.C.B.
Lieut. Gen. SIR GEORGE BOWLES, K.C.B.
Lieut. Gen. SIR J. F. LOVE, K.C.B. K.H.
Lieut. Gen the Right Hon. J. PEEL, M.P.
Lieut. Gen W. T. KNOLLYS.
Lieut. Gen. SIR HARRY JONES, G.C.B.
Lieut. Gen. SIR J. L. PENNEFATHER, K.C.B.
Lieut. Gen. the EARL OF CARDIGAN, K.C.B.
Major Gen. the Hon. SIR JAMES YORKE SCARLETT, K.C.B.
Major Gen. SIR RICHARD I. DACRES, K.C.B.
Major Gen. SIR HOPE GRANT, G.C.B.
Major Gen. SIR T. A. LARCOM, K.C.B.
Major Gen. SIR EDWARD LUGARD, K.C.B.
Major Gen. EYRE.
Major Gen. SIR ALEXANDER TULLOCH, K.C.B.
Major Gen. J. LAWRENSON.
Major Gen. the LORD FREDERICK PAULET, C.B.
Major Gen. SIR ROBERT VIVIAN, K.C.B.
Colonel SIR THOMAS TROUBRIDGE, Bart. C.B.
Colonel the Hon. PERCY HERBERT, C.B.
JAMES BROWN GIBSON, M.D. C.B. Director General of Military Hospitals.
The Rev. G. R. GLEIG, Chaplain General.

The Right Hon. VISCOUNT PALMERSTON, K.G. M.P.
The Right Hon. the LORD CHANCELLOR.
The Right Hon. the EARL GRANVILLE, K.G.
His Grace the DUKE of ARGYLL, K.T.
The Right Hon. the CHANCELLOR of the EXCHEQUER.
The Right Hon. SIR GEORGE GREY, G.C.B. M.P.
The Right Hon. the EARL RUSSELL.
His Grace the DUKE of NEWCASTLE, K.G.

The Right Hon. SIR G. C. LEWIS, Bart. M.P.
The Right Hon. SIR CHARLES WOOD, Bart. G.C.B. M.P.
His Grace the DUKE of SOMERSET.
The Right Hon. T. MILNER GIBSON, M.P.
The Right Hon. EDWARD CARDWELL, M.P.
The Right Hon. CHARLES PELHAM VILLIERS, M.P.

The DUKE OF WELLINGTON, K.G.
The DUKE OF SUTHERLAND.
The DUKE OF BUCCLEUCH, K.G. K.T.
The MARQUIS OF LANSDOWNE, K.G.
The MARQUIS OF WESTMINSTER, K.G.
The EARL OF DERBY, K.G.
H.E. the EARL OF CARLISLE, K.G. K.P.
The EARL OF SHAFTESBURY.
The EARL OF TANKERVILLE.
The EARL STANHOPE.
The EARL SPENCER.
The EARL OF CLARENDON, K.G. K.P. &c.
The EARL OF CARNARVON.
The EARL OF MALMESBURY, G.C.B.
The EARL OF POWIS.
The EARL OF ST. GERMANS, G.C.B.
The EARL DE GREY & RIPON.
The EARL SOMERS.
The EARL OF BESSBOROUGH.
The EARL GROSVENOR, M.P.
The LORD JOHN MANNERS, M.P.
The LORD HARRY VANE, M.P.
The VISCOUNT SYDNEY.
The VISCOUNT EVERSLEY.
The LORD STANLEY, M.P.
The VISCOUNT ENFIELD. M.P.
The LORD ELCHO, M.P.
The VISCOUNT CASTLEROSSE, M.P.
Rear-Admiral LORD CLARENCE PAGET, C.B. M.P.
The LORD BISHOP OF LONDON.
The LORD BISHOP OF OXFORD.
The LORD BISHOP OF SALISBURY.
The LORD LYTTELTON.
The LORD HARRIS, K.S.I.
The LORD DE TABLEY.
The LORD BROUGHAM & VAUX.
The LORD DUFFERIN & CLANEBOYE.
The LORD OVERSTONE.
The LORD BELPER.
The LORD EBURY.
The LORD LYVEDEN.

THE SPEAKER OF THE HOUSE OF COMMONS.
THE RIGHT HON. WILLIAM COWPER, M.P.
THE HON. ALGERNON EGERTON, M.P.
THE HON. ARTHUR KINNAIRD, M.P.
THE RIGHT HON. THE LORD MAYOR.
THE RIGHT HON. SIR W. G. HAYTER, BART. M.P.
THE RIGHT HON. SIR JOHN McNEILL, G.C.B.
THE RIGHT HON. H. U. ADDINGTON.
THE RIGHT HON. T. E. HEADLAM, M.P.
THE RIGHT HON. H. A. HERBERT, M.P.
THE RIGHT HON. SPENCER H. WALPOLE, M.P.
THE RIGHT HON. J. STUART WORTLEY.
VICE-CHANCELLOR SIR WILLIAM PAGE WOOD.
SIR JOHN SHELLEY, BART. M.P.
SIR STEPHEN GLYNNE, BART.
SIR WILLIAM ALEXANDER, BART.
SIR EDMUND ANTROBUS, BART.
SIR HARRY VERNEY, BART. M.P.
SIR FRANCIS GOLDSMID, BART. M.P.
SIR JAMES DUKE, BART. M.P.
REAR-ADMIRAL SIR FREDERICK GREY, K.C.B.
THE SOLICITOR-GENERAL.
SIR BENJAMIN HAWES, K.C.B.
SIR RODERICK MURCHISON, G.C.ST.S.
SIR THOMAS PHILLIPS.
T. G. BARING, ESQ. M.P.
CAPT. CRAWFORD CAFFIN, R.N. C.B.
R. W. CRAWFORD, ESQ. M.P.
RAIKES CURRIE, ESQ.
CAPT. DRUMMOND, R.N. C.B.
CAPT. DOUGLAS GALTON, R.E.
HENRY H. GIBBS, ESQ.
G. G. GLYN, ESQ. M.P.
THOMSON HANKEY, ESQ. M.P.
PETER HOARE, ESQ.
KIRKMAN D. HODGSON, ESQ. M.P.
R. S. HOLFORD, ESQ. M.P.
R. MONCKTON MILNES, ESQ. M.P.
W. G. PRESCOTT, ESQ.
HENRY C. ROBARTS, ESQ.
BARON LIONEL DE ROTHSCHILD, M.P.
DAVID SALOMONS, ESQ. ALD. M.P.
MARTIN T. SMITH, ESQ. M.P.
H. GERARD STURT, ESQ. M.P.
TRAVERS TWISS, ESQ. D.C.L.
WESTERN WOOD, ESQ. M.P.
COUNT P. E. DE STRZELECKI, C.B. D.C.L.

J. STANDISH HALY, *Secretary*.

REPORT OF THE PROCEEDINGS.

[*Extracted from* THE TIMES *of November* 29, 1861.]

EVER since the untimely death of Lord Herbert, his friends have desired to perpetuate, by some suitable memorial, the frank, genial, and winning qualities of the man, the patriotism and devotion of the statesman, and the success which crowned his labours for the sanitary improvement and re-organization of the British army. The list of noblemen and gentlemen who expressed their desire to support his Royal Highness the Duke of Cambridge at a public meeting, and to participate in doing honour to Lord Herbert's memory, is of itself a record of which the noblest family and the oldest historic title might be proud, for in it are found the names of men of the highest lineage, statesmen of the greatest influence and most opposite political opinions, and military commanders, who knew what the lamented statesman had achieved for the British soldier. Many of these noblemen and gentlemen were prevented by illness and other causes from being present at a meeting held at Willis's Rooms yesterday, for the purpose of adopting such measures as may result in an appropriate memorial to Lord Herbert; yet seldom has the metropolis witnessed so brilliant and illustrious an assembly to do honour to the memory of a deceased Minister of the Crown as that which met yesterday under the presidency of his Royal Highness the Duke of Cambridge. The large room was crowded to excess.

His Royal Highness took the chair shortly after 1 o'clock, and was accompanied by General Sir John Burgoyne, Bart. G.C.B., General Sir John Aitchison, K.C.B., Lieut. Gen. the Right Hon. J. Peel, M.P., Lieut. Gen. the Earl of Cardigan, K.C.B., Major Gen. the Hon. Sir James Yorke Scarlett, K.C.B., Major Gen. Sir Richard J. Dacres, K.C.B., Major Gen. Eyre, Major Gen. Sir Alexander Tulloch, K.C.B., James Brown Gibson, Esq. M.D. C.B. Director General of Military Hospitals, Rev. G. R. Gleig, Chaplain General, the Viscount Palmerston, K.G. M.P., the Earl Granville, K.G., the Chancellor of the Exchequer, the

Earl Russell, the Duke of Newcastle, K.G., the Right Hon. Sir G. C. Lewis, M.P. (Secretary of State for War), the Earl of Carnarvon, the Earl De Grey and Ripon, the Earl Somers, the Earl of Bessborough, the Earl Grosvenor, M.P., the Lord Bishop of Oxford, the Lord Harris, K.S.I., the Lord Lyveden, the Right Hon. Wm. Cowper, M.P., the Hon. Arthur Kinnaird, M.P., the Right Hon. H. U. Addington, the Right Hon. T. E. Headlam, M.P., the Solicitor-General, Raikes Currie, Esq., Thomson Hankey, Esq. M.P., W. G. Prescott, Esq., David Salomons, Esq. Ald. M.P., Travers Twiss, Esq. D.C.L., Colonel North, M.P., the Right Hon. S. Estcourt, M.P., W. H. Bodkin, Esq., Sir Ranald Martin, Count P. E. De Strzelecki, C.B., J. Standish Haly, Esq. &c. &c.

Several ladies occupied seats in the body of the hall, among whom were the Baroness Brunnow, the Hon. Miss A'Court, Mrs. Gladstone, Lady Lyveden, the Hon. Mrs. and Miss Kinnaird, the Lady Mayoress, Lady Mayne.

His Royal Highness the Duke of Cambridge on taking the chair was loudly cheered.

His Royal Highness spoke as follows :—

My Lords, ladies, and gentlemen, it becomes my duty to open the proceedings of this day, and I must begin by expressing my gratification, valuing as I do the memory of my late lamented and distinguished friend, to see myself surrounded on the present occasion by so large, so respectable, and so influential a meeting.

Some short time after the painful event which has brought us together this day, the friends of the late Lord Herbert came to me, and asked me whether I should object to concur with them in calling such a meeting as that now assembled, with a view to express the tribute of their respect, and that of the public at large, to the memory of him who had so lately passed from among us. I could, of course, have personally no hesitation in complying with their request and cordially entering into that arrangement, but I hesitated to do so till I had conferred with my noble friend who sits on my right, whose judgment I thought on a matter of this sort ought to be consulted before my own. Lord Palmerston at once replied to me in a manner which induced me to go on with the proposal which I was anxious to entertain, and the result has been the assembling of this meeting, which I hope may tend to further the object—the painful, yet grateful object—we have in view, to perpetuate the memory of our dear departed friend.

It would ill become me to detain you with any general observations on the occasion which has called us together. Such observations will come with much better effect from the distinguished statesmen and soldiers I see around me who will be called upon to address you. I would only observe, so far as I am concerned, that this meeting has no political bearing whatever; otherwise, you can easily see that I, as a soldier, could hardly have felt myself justified in presiding on the occasion. I am surrounded by men of all parties, all anxious only to testify their respect, esteem, and regard for one of the most conscientious and able public servants that, I believe, this country has ever seen; one whose private worth and excellence of character we all so highly appreciated, and whose loss we so deeply deplore.

Personally I only became intimately acquainted with the late Lord Herbert during the more recent period of his public career. I knew his merits—I had heard of them ever since I entered public life, but, individually, my connexion dates with him from a comparatively recent period. There are others who sit around me who from a much earlier period are, no doubt, able to speak far more to his merits than I should be able to do; but this I may say, that from the day I first entered into official connexion with the late Lord Herbert to the very last day I may say of his life—for he literally died while he was performing the duties of his situation—I never found other than one anxious feeling to do his duty by his country; to do it in a manner most efficient for the public service, and most agreeable to those whom he had to control, and with whom he was individually connected.

As regards the service with which I am more immediately identified, the late Lord Herbert had the clearest views on military matters of any civilian I ever met with; and I can only say that his anxious desire was, whenever I had to confer with him on such subjects, to promote the interests and welfare of the British army, and in so doing to serve his country, by keeping that army in a state of efficiency, discipline, order, and regularity, such as it is desirable those great bodies should always maintain.

Ladies and gentlemen, I have already said I did not mean to detain you long; I can only say, as far as I am personally concerned, and as far as we military men are concerned, we feel the deepest sorrow at the loss which, as a profession, we have sustained in the severance by death of our connexion with one so amiable, estimable, and valuable; and I am sure anything we can do to testify our esteem, respect, and admiration for the personal worth and public and private character of the late Lord Herbert we shall only be too happy to do, in order to alleviate the pain which so sudden a bereavement has caused to the large circle of his family and immediate friends—thinking it but a due and proper tribute of respect to one whom living we so highly valued, and who was removed so suddenly, so unexpectedly, from among us.

I now leave the Resolutions in hands far more able than I am to do justice to the objects you have in view; and I have to request my noble friend Viscount Palmerston to present to you the first Resolution.

VISCOUNT PALMERSTON:—

Your Royal Highness, my Lords, ladies, and gentlemen, the Resolution which I take leave to submit for your acceptance is to the following effect:—"That this meeting desires to express its deep sense of the loss which has befallen this country by the untimely death of Lord Herbert, and is anxious to pay a fitting tribute to his eminent public services as a minister and statesman, and to the self-sacrificing zeal with which he discharged his official duties."

Your Royal Highness, I have, perhaps, more claims than you have put forward for presenting myself upon the present occasion, because, not only do I stand in the relation of official colleague to the late lamented Lord Herbert, but I may boast a personal, and, I may say, a hereditary friendship.

It is, your Royal Highness, a wise and useful thing that nations should record by marks of honour their respect for the memory of those who during their lifetime have performed great public services to their country. And this is a custom not only in our own nation, but in almost all civilized nations of the world. The custom has prevailed here even in cases in which the public man to whose memory honour is done, having been engaged in the stern battles of public life, has had to encounter violent antagonism, has made to himself political adversaries, and has excited political enmities which have utterly ceased when the grave has closed over him. Even in these cases, I say, conflicting political parties and men who were engaged in the strife of political warfare have united to bury those hostile recollections in the grave, and to do honour to the zeal, to the patriotism, to the public services of the man whom they had while in life upon details opposed.

But there are other cases, and the present is one of them, in which it has been the happy lot of a public man so to perform his public duty, so to serve his country to the best of his judgment and ability, that while he maintained his opinions, and stood firmly by his principles, he yet contributed to carry on the discussions and the combat in such a manner, that while on the one hand he secured vast numbers of political and personal friends, on the other he has been fortunate enough not to make a single personal enemy. This was the happy fortune of Lord Herbert. He stood prominently forward among the public men of his day. He was endowed by nature with qualities eminently calculated to fit him for the highest public functions. In the House of Commons he was marked out by singular powers and by immense popularity. He possessed that eloquence which persuades and delights. He was able to wield those arguments which

convince every impartial mind. He had the power to wield—though he forbore to do it in any manner to wound unnecessarily the feelings of others—he had the power to wield the keenest sarcasm required for the purposes of debate; but the arrows of his wit, though keen and sharply pointed, never were tinged with gall. His noble bearing bore evidence of the high lineage from which he sprang; and though he felt all that became a descendant of a great and illustrious race, yet he bore his honours with meekness, and showed the same kindness and sympathy for all which might have been shown by a person not endowed by fortune and nature with all the eminent qualities which he possessed. It might, indeed, be said of him—one might apply to him that description of another young man who fell prematurely in the performance of his public duties—

> "His mind each Muse, each Grace adorned his form,
> And grateful Science claimed him for her own."

But the science to which my late noble friend, in the latter part especially of his life, most devoted his anxious study, was that peculiarly connected with the service which he so ably conducted—I mean the military service of the country. There never was a man who brought to bear upon an interesting and important subject stronger intellect, more anxious desire, more indefatigable, and persevering labour than my noble friend did to everything that concerned the welfare, the comforts, and the health of the army. He would naturally have been led by the kindness and generosity of his nature to take a deep interest in any measures which depended upon him by which the comfort, the health, and the lives of any portion of his fellow-subjects might be affected. But he felt that he had a duty moreover to perform. He felt it of the utmost importance to the country that those brave men who engage in her service should be well cared for while well—should have every comfort and enjoyment compatible with the nature of their duties; and when ill, when unfortunately the labours and exposure connected with their duty might send them to hospital, that they should be treated in the best possible manner to insure their earliest and most complete recovery. He laboured with your Royal Highness in that field of exertion; and those who know the state of our army, and can measure the vast improvements which, under Lord Herbert and the Duke of Cambridge, have of late years been made in everything connected with the comforts of the army, in the field, in barracks, in camp, and in hospital, will duly appreciate the great merit that is due to my noble and departed friend. On this subject I may, perhaps, be permitted to say that they did not labour alone. They were not the only two; there was a third engaged in those honourable exertions, and Miss Nightingale, though a volunteer in the service, acted with all the zeal of a volunteer, and was greatly assistant, as I am sure your Royal Highness will bear witness, to the labours of your Royal Highness and of Lord Herbert.

Well, then, I say that it appears to me that here is a fitting occasion upon which to follow that useful and honourable course of bearing testimony to the merits of a public man gone from us. In the House of Commons his loss was great indeed. We had hoped that he might live many years to take a prominent and leading part in the deliberations of that assembly—to do good service to his country, whether in office or out of office; that his health and strength might have been equal to his great mental powers and attainments, and that he long would have survived to attract the admiration of his fellow-countrymen. These expectations were, unfortunately, disappointed. There were, no doubt, early premonitions of that malady which ultimately took him from us, but his zeal for the performance of his public duties, whether in Parliament or in office, was unconquerable. He shut his eyes to those symptoms which might, in a man less anxious for public duty, have been a warning to retire betimes—a malady which might, perhaps, even then have been subdued; but he went on labouring to the utmost of his physical powers from day to day, and I grieve to say, though it ought undoubtedly to enhance his claims upon the respect and honour of his fellow-countrymen—I grieve to say that by his unparalleled devotion to his public duties he neglected those opportunities which might possibly have saved him to his country, and he fell as much a victim to the performance of a nation's duty as if he had fallen in the field of battle.

I will not, your Royal Highness, and ladies and gentlemen, longer trespass on your attention to induce you to concur in that which I am persuaded you all felt before you entered this room, as being a fitting step to be taken. I can only say I believe the record which we propose to be made to the memory of Lord Herbert will not be less honourable to the nation that makes it, than it will be to the memory of the man to whom the nation, or a portion of the nation, shall award it.

The noble Viscount resumed his seat amid much cheering.

General Peel, M.P., in seconding the Resolution, said :—

I feel highly honoured in being requested by the committee to second the Resolution, not that I consider any seconder necessary except as a matter of form, for the Resolution will be cordially agreed to, and the noble lord has so eloquently and so feelingly portrayed the character of Lord Herbert, that anything I could say would only weaken the force of his appeal. But I feel it a privilege to express thus publicly the regard I entertained for Lord Herbert. I had the honour of his friendship from his first appearance in public life. There was something about Lord Herbert that no language can describe, that at once secured for him the attachment of all who had the honour of his acquaintance. I know nothing which could more correctly describe him than to say he was a perfect specimen of an English gentleman. But it is not on account of his private qualities and virtues that we are assembled here to-day to take such measures as may lead to the erection of some monument to his memory. The special good which entitles him to our recollection was the unwearied exertions he took to improve in every way in his power the condition of the British soldier. He was not actuated herein solely by a sense of official duty or official responsibility. These are influences that govern the conduct of public men in this country, who all act to the best of their ability. But Lord Herbert went far beyond this. Out of office and in office he never failed to take advantage of every opportunity to improve the condition of the British soldier, and he never lost sight of the object he had in view. To this I can bear testimony. When I had the honour of holding the office in which he succeeded me, I was constantly in the habit of consulting him upon everything relating to the sanitary condition of the army. I knew I could not better perform my duty and carry out the recommendation of the Army Sanitary Commission than to take the advice of one who took so prominent a part in the deliberations of that Commission, and on every occasion I received from him the most valuable and ready assistance. Nor were the topics on which I consulted him confined to such matters as barrack accommodation or the sanitary arrangements of the army. Everything connected with the health of the army is, I hold, not only a matter of duty, but is also a matter of economy on the part of every Government. The British soldier has a right to expect from his own Government that they will provide everything that tends to his comfort when he is well, and to his recovery when he is sick. Lord Herbert thought, and thought truly, that these objects were very much promoted by such amusements and recreations as would relieve the dull monotony of barrack life, so as, if possible, to wean the soldier from the temptations of the tap-room and the canteen, and enable him to pass his time in a rational and proper manner, and thereby raise the character of the British soldier. You have all had an opportunity within the last few days of reading an account of the assistance given by Lord Herbert in establishing the Soldier's Institute at Chatham, which has these objects in view. It must be a matter of the greatest interest and pleasure to the soldiers of our army to know the mark of honour which is about to be paid to his memory for those exertions on their behalf, and to know that the record of those efforts is about to be perpetuated in a manner that may induce others to follow Lord Herbert's example. Believing that this effect will be produced by what we are about to do, I have great pleasure in seconding the Resolution.

The Resolution was then put and carried unanimously.

The CHANCELLOR of the EXCHEQUER :—

The Resolution I am to submit to your notice runs as follows :—" That a subscription be raised for the purpose of erecting a statue to the late Lord Herbert, and also for the endowment of exhibitions or gold medals in connexion with the Army Medical School at Chatham, to be given, at the end of each course of instruction, to the candidate or candidates for admission who evince the highest proficiency in the knowledge of the art of preserving the health of the troops at home and in the field."

I trust that this meeting will be of opinion that the terms of this Resolution are well chosen, so as to give a just direction to the feelings we all entertain on the subject that has brought us together. The purpose of erecting a statue is one that appropriately connects itself with the character and personal qualities of Lord Herbert, and the endowment of exhibitions or gold medals for the Army Medical School having for its object to give the utmost possible efficiency and vigour to the medical education of the army—a purpose that will, I hope, be thought eminently appropriate in connexion with one peculiar sphere to which Lord Herbert devoted his unwearied activity.

This is not an occasion on which it is necessary to enter into elaborate details upon the subject, or to relate the almost innumerable efforts and works of Lord Herbert for the improvement of the condition of the army, and, indeed, for every object of public and Christian benevolence. In every sphere in which he moved—and he moved in many—he has left behind him ample evidence, not only of the opulence and means with which he was endowed by Providence, but also of the boundless munificence and remarkable wisdom with which those means were applied to the benefit of his fellow-creatures. I think that his friends and neighbours in Wiltshire have done well in taking care that, besides the objects treated in the present Resolution, there should also be a proposal for contributing to a convalescent hospital, that is to be open without distinction of class ; because, great as were the services of Lord Herbert in connexion with the army, it was not to the army alone that they were devoted, but every one who was in need—every one on whom he conferred his bounty and assistance—was, in his view, entitled to his utmost endeavours in their behalf.

As respects the army, let me endeavour to sum up, not the details, but the leading lines in which the course of his exertions was directed. A time of crisis came, for which no one was responsible, but which was, perhaps, the necessary consequence of so long a period during which the active services of the army had been happily disused. If no one was responsible, certainly no one was less responsible than Lord Herbert, because, from the first moment that his official connexion with the army

began, it was a course of unwearied effort at improvement and reform, and that improvement and reform directed alike, and without distinction, to the physical, the moral, and religious condition of the soldier. But when that time of crisis came, he seems to have felt that it constituted a peculiar call to enter upon a vocation in which he was to earn distinction, and of which his countrymen engaged in the army were to reap the utmost benefit. I am not here to draw invidious distinctions between the comparative claims of those who were his fellow-labourers in the same honourable field. My noble friend who moved the first Resolution directed attention to one name in particular that ought never to be mentioned with any elaborate attempt at eulogy; for the name of Miss Nightingale is indeed a power that has become a talisman to all her fellow-countrymen. The modesty of my right hon. friend (General Peel) who seconded the Resolution prevented him from adverting to the fair claims that may be made on behalf of those who have filled responsible situations, whether it be, Sir, yourself, as the professional head of the army, or whether it be those who, as politicians or advisers of the Crown, have, under that sense of responsibility, gladly co-operated, and who freely accepted from the hands of Lord Herbert those important and salutary changes which he in a great degree matured and prepared for their acceptance. It would be most unjust to exclude others from our view, especially if we were to exclude those numerous members of the medical profession, both within the army and beyond its limits, whose skill, time, and utmost endeavours have been devoted to that sacred cause. It would not be invidious and unjust to any of them, if I say that Lord Herbert was the great standard-bearer in that work—that he devoted himself to it with almost unequalled self-devotion—and that, through the bounty of Providence and the remarkable nature of his personal gifts and qualities, he had a power of helping it forward that hardly any one else, even with equal will, possessed. To him, therefore, in a principal degree, we owe that important Commission for Inquiring into the Sanitary State of the Army, that has produced results, destined, I hope, to endure for many generations. To him, in a principal degree, and with the co-operation of others, we owe the Commission for Inquiring into Barracks and Hospitals. To him we are indebted for the re-organization of the medical department of the army. To him we owe the Commission for Inquiring into and Remodelling the Medical Education of the Army. And, lastly, we owe to him the Commission for presenting to the public the vital statistics of the army in such a form, from time to time, that the great and living facts of the subject are brought to view; for statistics in a case of this kind are not mere matter of form only, nor do they simply afford gratification to an honourable and useful curiosity, but they are the means by which all the realities of the case are kept before the face of the nation and the military authorities, and by which, therefore, we have the

best guarantee in our power against the recurrence of the evils that Lord Herbert struggled to overcome. We see the fruits of these Commissions; for, from year to year, from month to month, and almost from week to week, we have one measure or another carrying these inquiries into practical effect. And it is touching to record, that the very day which removed Lord Herbert from the gaze of his admiring countrymen the General Hospital at Woolwich, organized on the system that he has been the means of introducing, was for the first time opened for the benefit of the army. I think that I speak on the highest authority, upon authority far higher than my own, when I state the significant fact that the mortality of the British army has, in consequence of the measures in which Lord Herbert, at so great a cost to himself, took so commanding a share, been reduced by no less than one-half. That is to say, one-half of the men die now who died in the British army, under the same circumstances, before these measures were adopted. I think this summary is enough to satisfy those who are incredulous, if any such there are, as to the reality of the services that we are here met to commemorate.

And if it be true, as it has been asserted here to-day, that Lord Herbert was untimely in the hour of his death, at least it may be said, with equal truth, that he was happy in the whole course of his life, and in every incident of his character and position. Great as are the works of Lord Herbert, there is something, if possible, of still greater interest to those who enjoyed the privilege of knowing and loving him from his youth upwards, and that was the character of Lord Herbert. On their recollection it will ever remain engraven, in some sort, as a model of imitation; yet hardly for that sort of imitation which aims at reproducing its original, for I do not use the language of exaggeration when I say that characters of that kind and stamp are of rare production, and that seldom indeed is it given to men to exhibit before their fellow-creatures such a combination of every mental and moral as well as social gift. Even more remarkable, I presume to say, in their recollection than his great eloquence, than his administrative power, or than his unequalled social fascination, were those qualities underlying the surface that, even in this assembly, although I tread on tender ground, stamped him not less and not more with the character of an eminent citizen than that of an eminent Christian. In Lord Herbert there were such gifts, and so peculiar, that even here they may be placed on record. He, it must be admitted, was the gentlest man that ever undertook to confront the difficulties of public affairs. It is true, that he was strong as well as gentle. But how rare in the world we inhabit is the genuine union of gentleness with strength. It is difficult for an ardent lover of his country, like Lord Herbert, not to confront abuses, and not to endeavour to remove and mitigate great public evils. But he confronted them, not like others, with perhaps honest anger and fervid indignation, but he confronted them, in the main, by that winning gentleness that subdued far more than resistance, and he achieved far greater triumphs for the benefit of his country than were ever achieved by the spirit of anger and wrath. That gentleness was combined with a modesty such as I, for one, never knew equalled in any station of life. It would, perhaps, have been intelligible and excusable if so remarkable a combination of personal gifts and outward circumstances had produced on him some degree of intoxication. But, on the contrary, his modesty was such, that I doubt whether there lives the man among all his colleagues, among all his friends—and here, whatever our political differences, we are all friends—I say, I doubt whether there lives the man who ever heard Lord Herbert, I will not say boast, but even recite to any one as his own, one of the services that he performed. Men think it pardonable, if they have achieved great works for their country, if they sometimes refer to one or the other. But the language of Lord Herbert was not, "I did this," or "I did that." Eager and enthusiastic as he was in the discharge of his duty, when that duty was performed he cared little for the reward, and less than little to seek that reward by any assertion of self. That modesty of his was deeply founded in the humility of the man. I declare it to be my belief that, in some manner, by the general purity of his nature, and by his high principle and conscience, he contrived to hide from himself the signal character both of his virtue and his works.

We are here for a purpose of great public utility. While we testify to the past, we are also, I believe, making provision for the future. To us common men, it is but in a limited sense that we can be exhorted to imitate men so uncommon; yet to every one of us it is, in some degree, open to profit by these high and noble examples of human excellence. In a country in which its noble and high-minded youth have, in so many instances, exhibited a remarkable combination of gifts and power, let us hope that no small effect will be produced on our countrymen by the scene before us—by this crowded hall, under auspices so high as those of his Royal Highness, and by an assembly where every rank, every class, every political party, is combined with one heart and soul to do honour to departed virtue. I trust that many will thus be hereafter incited to follow Lord Herbert in his career of self-denial and public duty, in which we may all in some degree follow him, by perceiving that it is not only within the conscience, not only within the hopes of an unseen world, but likewise here and now, and amid the applause of a grateful country, that here in England public services and distinguished virtues are remembered.

His Royal Highness the Duke of Cambridge said, in the absence of Lord Clyde, who was unfortunately prevented from

attending, the Resolution would be seconded by Sir John Burgoyne.

GENERAL SIR JOHN BURGOYNE:—

Nobody can deplore more than I do the absence of Lord Clyde, but I esteem it a very high honour to be called on to take part with the distinguished individuals here present in the proceedings of this day. I can only attribute it to the fact of my being the oldest military man on this platform.

Notwithstanding the able and brilliant encomiums that have been bestowed on the late Lord Herbert, I cannot reconcile it to my conscience to stand up in this meeting without testifying, in a very few words, to the great respect I entertain for the memory of the late Secretary of State for War. Placed as I am at the head of one of the branches of the War Department, it has fallen to my lot to have frequent intercourse with the late Lord Herbert. It would be needless for me to testify to the high qualities and attributes which he possessed, and which have been so ably described by others; but there was one characteristic he had which struck me particularly as a man of business—indeed, I never left his presence without being sensible of it—that, with a high degree of firmness of purpose, he always united an amount of courtesy in his manner that greatly tended to stimulate the zeal and gain the cordial co-operation of everybody that was under him. Lord Herbert was pre-eminently the soldier's friend. His hobby appeared to be to promote the health and comfort of the soldier, and his pet was Miss Nightingale, who had for many years devoted herself to the same pursuit.

For myself, I will only say I shall be greatly disappointed if the army generally do not largely contribute to the special objects of this Resolution.

The Resolution was carried unanimously.

The BISHOP of OXFORD, who was loudly cheered, said:—

May it please your Royal Highness, ladies and gentlemen, the Resolution which has been committed to me is—"That the following noblemen and gentlemen be requested to act as members of the committee to collect subscriptions." I will not take up your time by reading the list, but will assume it as read. Your Royal Highness, however, will allow me to say, as touching this special Resolution, that it seems to me to bring before our notice one especial feature of the character of Lord Herbert which this meeting may, perhaps, listen to still. That committee, headed by your Royal Highness, begins with a list of the most distinguished men in the British army; it is then followed by a compartment of the great statesmen of the day; and then comes a third class, including clergymen and gentlemen of every rank and of every pursuit among us; marking the way in which the character of this man addressed itself to every good citizen, to every rank, to every labour of virtue, of gentleness, and of kindness.

It is not for me, Sir, to speak about what he has done as to the British army. Suffer me, however, to say that I do not for one moment consider there is anything in the Christian ministry alien from the best interests of a Christian army. I have no such mawkish feeling in my nature. An unjust war is the greatest of iniquities; but a just and a defensive war is the last and the greatest appeal to the God of Truth.

But, Sir, I will leave that subject to those who have so well handled it, as they were so well entitled to deal with it, and for the few moments I shall occupy your time, I will rather refer to what in some respects is peculiarly fitted to illustrate another part of the character of this man; it is this—the many-sidedness of his character, mixed with its remarkable reality, always struck me as one of the distinguishing features of the man. Its many-sidedness in this way—devoted as he was to that master-subject of reforming many of the arrangements of our army, there never was any one reasonably considered plan for mitigating the sufferings of others which did not meet at once in him a ready response. And there was this peculiarity about it—it was not that general glow of universal benevolence which is anxious to impart great unascertained advantages to masses as masses; but it was a real, trouble-taking, thorough sensibility of sympathy with the individuals that made up the masses. For instance, the exertions of Lord Herbert as to the Charmouth Infirmary may be known to some present; but I doubt whether there be any, certainly they are few, who know that, before joining with others in that undertaking, he had singly founded and maintained at Mudiford, in Hampshire, a hospital for scrofulous children. Yet this was one of the special features of his most lovable character. Human infirmity in its every form, human suffering in its every exhibition, appealed at once to the sympathy of his most humane heart. In man, in woman, or in child, it awoke at once in him the responsive note of unity of sorrow with the sufferer.

Nor was this all. Another feature of his character was here strikingly exhibited. His reality led him to deal unsparingly to himself with all the minutest details of any work of love he had undertaken; and so, having learnt that at the institution at Kaiserwerth, in Germany, great relief had been administered by the use of one particular bath, he rested not till he had himself secured the bringing from the distant asylum the ingredients needful for securing the like healing for these English little ones whom he had made his care.

It was my lot, at his desire, to take some part in that scheme of emigration he was so much engaged in for the benefit of the poor sisters of our race in this great metropolis who were—I will not say driven—but

perilously induced to the very edge of vice by the strong necessity of obtaining the means of living. That same manly heart of his which made him the soldier's friend made him also the woman's protector. And how did he do it, Sir? Not by coming and making an occasional speech, which his ready utterance made no difficulty to him, but by taking into that full hand even the details of administration; and I, for one, can well recollect, when called on to confirm some young persons on board one of the emigrant ships, accompanying him on a pouring day through one of the murkiest purlieus of the Thames, he himself sitting in the cabin, and, just before the sailing of the vessel, writing the last recommendatory letter which was to be in their new land their only introduction.

Yes, it was such sights as this which made one's heart rejoice while we loved the man, which thus lifted us up to communion with the best, the most loving, the most devoted examples of our common race. It ought never to be forgotten that all this labour and all these acts of self-devotion were undertaken by a man who had everything this world could give to withdraw him from these things. It was the simplicity of his nature, so beautifully spoken of by his friend the Chancellor of the Exchequer—the unostentatiousness of his nature, that struck one with so much surprise. However overpowering his work might appear to be, seeing him in the midst of it, if you mingled with him outside the room of business, there was nothing about him that told you how hard-worked he was. There was no allusion to the great amount of labour he had to undergo; and here was the indication of his inner feeling—he was as remarkable for the joyousness of his life as for the depth of his sensibility.

There was a man, who was gifted by a gracious Providence with every mental attribute—gifted, I may say, with every moral gift—gifted with a fine person, which bespoke the man with whom you had to deal—the full, open eye, the noble, manly bearing—a person which seemed to cast off the very physical stains of the atmosphere around him, as if the purity of his inner nature breathed through the outward tabernacle—it was this man, who, instead of yielding himself, I will not say to ignoble and selfish indulgence, for it would have been none to him, but, instead of indulging himself in all that art could give to beautify life, and all that the most refined sensibility could enjoy, spent himself freely for every suffering brother, to mitigate the adverse lot of every tempted sister.

Yes; and he has left among us memorials that will endure for ages. He was the founder of hospitals, he was the builder of churches, he was a maintainer of schools, and his right hand knew not what his left hand gave. Day after day, now there comes the secret witness from most unsuspecting quarters, "My sorrows have been alleviated up to this time by him who has been taken from us; am I to be left to sink because he is gone?" And this has been, to those who stood the closest to him,

the first intimation that that hand of liberality had ever been opened in those quarters.

Truly, truly has it been said, that though taken too early for us, he has not been taken too early for himself; for I do believe that there was the deep under-foundation of a Christian faith, giving its utterance to all these words of gentleness, giving action to all these deeds of kindness, which made that life so beautiful as well as so useful; and these, Sir, I believe, have gone up as a memorial before God for our departed friend.

They who, like myself, were honoured for many years, even from his sweet youth up, with the blessing of his intimate acquaintance, know well that life has lost one of its most blessed lights when he was removed from them—a heart that never failed to feel with you in sorrow, a head that never failed to suggest to you something noble and useful.

And yet we may let him go, anxious, indeed, as we should be, to embalm that grateful memory in a nation's thanks; but knowing that, after all, when we have done our best, there is ever a yet more abiding record, as we venture humbly to believe—a record which shall endure for ever, where works done from love to God and love to man shall never be forgotten.

EARL DE GREY and RIPON, in seconding the Resolution, said:—

I feel that I can add nothing to that which you have already heard addressed to you, but I am glad to have this opportunity of bearing my testimony to the spirit in which my lamented chief laboured in the office with which I had the honour of being connected with him for eighteen months. Day by day, and hour by hour, I was a witness to that zeal which never failed, even before the advancing ravages of that illness which brought him prematurely to his grave—to that energy which was guided by the calmest and strongest judgment—and yet more to that buoyant disposition which enabled him to pass through the arduous duties of an arduous office without those working with him having ever seen a cloud ruffle the surface of his genial nature. It was in such a spirit of untiring and cheerful devotion that he laboured for the benefit of the British army and for his country—it was such a spirit that enabled him to improve the physical and moral condition of the soldier, to organize and raise that volunteer force which has added a new means of defence to the country, to fortify and place in security our forts and arsenals. The right rev. prelate alluded to one characteristic of my noble friend when he told you that there was no trace visible to those who met him outside of the great labours in which he was engaged; but permit me to say that that characteristic he brought into the office itself, and it was by his unvarying courtesy and the equanimity of his temper that he was enabled to do so much in the short space of time he was

permitted to remain here. He had the secret of winning the hearts of all who served under him, and it was by the confidence he placed in those who did their duty well, that he inspired all who came near him with a portion of his own self-sacrificing and devoted spirit. I will only say that it is to me a proud, though a melancholy satisfaction, that my official connexion with Lord Herbert has induced the managers to invite me to take part in this proceeding. I know the spirit with which he was animated. I was acquainted with those qualities which made us love the man and respect and admire the statesman; and I feel confident that though as regards Lord Herbert, his monument is not to be built in stone or bronze, but written on the heart of the British soldier whom he served—of the country in whose service he spent his life, yet it is a wise and judicious act of his countrymen to raise to him a record of their respect and admiration, leaving it to others who come after him to imitate the noble career to which he devoted himself.

The Resolution, which requested the noblemen and gentlemen therein named to collect subscriptions, and devise the best means of carrying into effect the Resolutions of the meeting, was then put from the chair and passed unanimously.

The DUKE of NEWCASTLE, in rising to propose the last Resolution, said:—

He might be allowed to sum up the virtues of one of his oldest and best friends by bearing testimony to the amiability of his disposition, his great social qualities, the geniality of his temperament, his amenity, gentleness, manly frankness, and, above all, the excellence of his private character, which had brought many to that meeting independently of Lord Herbert's public virtues. His right hon. and gallant friend (General Peel) had said that they were not met to commemorate the private virtues but the public character of Lord Herbert. That was true, but no one would more readily recognise that those private virtues added greatly to the estimation in which his public character was held, and by those private virtues the public were very much guided in their estimate of a public career. For proof of this assertion he had only to look at that meeting, and see how the acerbity of political warfare had been softened by Lord Herbert's amiability. Whatever monument might carry his name down to a future generation, no testimony could be more grateful than the aspect of that platform, upon which were seen a Prince in the chair who belonged to no party, the leading men of two rival Administrations, and men of every profession and class. He hoped it would not be indelicate if he drew aside the portals of domestic life, and pointed to one sacrifice, which was the

greatest Lord Herbert had made. The deceased was in his life the centre of a large, loving, and domestic circle. He was beloved, not only by those who were born into his house, but by those whose happiness it was to have formed a connexion with his family. Those domestic affections he had been ready to sacrifice, and on his death-bed he felt that they were one of the greatest sacrifices he had made to the service of his country. He thought a proper discretion had been used in not reading any of the numerous letters that had been received from those who were unable to attend the present meeting. But he would ask permission to read a few lines from one of Lord Herbert's oldest friends—from one who was no longer living, but who had felt the greatest regard and affection for Lord Herbert, and who at the risk of his life had travelled across the length and breadth of the land to be present at his funeral. He referred to Sir James Graham, who, in a letter to his friend Mr. Sotheron Estcourt, speaking of Lord Herbert, said—"He so lived and so truly applied the means that a bountiful Providence placed at his disposal, that he will be long remembered both in his public and private station. I think a statue of him, if by an eminent artist, in Salisbury, will be a most suitable monument, under the shadow of the cathedral spire, which points to that Heaven where his hopes were centred, and where I trust he has received his great reward." This letter was written by one who himself now slept in a country churchyard, and who could no longer agitate the Senate by his eloquence. The noble duke, after apologizing for diverging from the immediate object of his Resolution, proposed that the thanks of the meeting be presented to his Royal Highness the Duke of Cambridge for his cordial co-operation, and for his kindness in taking the chair.

EARL GROSVENOR, in a few appropriate words, seconded the motion.

The Resolution was carried by acclamation.

His ROYAL HIGHNESS said, it had afforded him much satisfaction to express publicly his sense of the great ability and good qualities of Lord Herbert, and his own devotion to the memory of one whom he regarded as a sincere and devoted friend. He had thus performed a most painful yet most pleasing duty, and had now only to express his gratitude for the compliment that had been paid to him in the Resolution just agreed to.

The proceedings then terminated.

Several smart members of the corps of Commissionaires were in attendance in the room, who rendered useful service in the preliminary and other arrangements of the meeting.

From "THE TIMES," *November* 29th, 1861.

The service done to the State by the late Lord Herbert has been recognised by a concurrence of testimonies and tributes almost without parallel, but the true value of Lord Herbert's exertions can be measured only by their results. It is a case not so much for panegyric or eulogy as for dry statistics. When we state that at the close of the year 1859 a number of soldiers equal to an entire battalion were living and vigorous who but for Lord Herbert's efforts would have been lying in their graves, and that this is the estimate of a single year, and for England only, we shall have offered, perhaps, the most impressive evidence that could be given of the claims established by the departed statesman to the gratitude of his countrymen.

For many a long year the sanitary condition of the soldier had been utterly neglected. Here and there, it is true, some eminent commander would take the matter into his own hands, and secure, by judicious arrangements, the efficiency of the troops under his care, but, as a general rule, the soldier was left to take his chance, and a very poor chance it was. He was ill-lodged, ill-fed, and exposed to an infinity of avoidable risks. On active service his position was worse still, insomuch that the casualties of war were really created not by the sword of the enemy, but by the ravages of preventible disease. Unhealthy and crowded camps, ill-managed and defective hospitals, insufficient supervision, and ill-ordered establishments were the true causes of military mortality. Fever and dysentery slew their tens of thousands, while even at home the army, instead of containing the healthiest classes of society, was visited by sickness and mortality far exceeding the ordinary or natural rate. Soldiers are men in the prime of life, selected for their unblemished constitutions and vigorous frames, kept much under beneficial control, and assured by State provision against anything like privation or want. Nevertheless, in this class of men, thus favourably situated, 17 out of every 1,000 died annually on their own native soil, whereas the mortality among corresponding classes in civil life was but 8 in 1,000. Of every two soldiers, therefore, who died, one died from causes which it was reasonable to suppose might be removed, and the removal of these causes was the good work to which Lord Herbert devoted himself.

As early as the close of the Revolutionary Wars the subject had forced itself upon the notice of the authorities. In those days a good deal of evil was quietly accepted as unavoidable, but when 30 men out of 100 were found to perish in a year—as was occasionally the case on a West India station—it did seem that something might be done. A little inquiry

showed that if the barracks of the troops were but removed from the plains to the hills the most destructive epidemics might be at once escaped, and that discovery was not left unheeded. How slight, however, and unsubstantial was the progress accomplished in this direction may be inferred from the terrible history of the Crimean War and of the hospitals at Scutari. Those were the events which impelled Lord Herbert to concentrate his efforts on the great task of improving the condition of the soldier; but as the subject expanded under his eye it became evident that much was to be done at home as well as abroad; that barracks as well as hospitals must be re-organized, and that the soldier required to be preserved in health as well as nursed in sickness. The work to be done was not merely medical work. The object, indeed, was not so much to cure invalids as to diminish invaliding. Why should these strong, picked, hearty men, sink in such numbers from fever and consumption? Why should soldiers in barracks die at twice the rate of hard-worked, under-fed, and ill-clothed farm labourers? Those were the questions asked, and inquiry soon furnished answers. The men fell sick and died because their barracks admitted no effectual ventilation; because they were all night breathing foul air, because their diet was so monotonous as to be nauseating, and because all this had a natural tendency to set them drinking. To remove these sources of disease it was necessary to make barracks wholesome, to introduce good sanitary regulations, to improve military cookery, and generally to give the soldier a little more enjoyment of his life. If Lord Herbert did not survive to complete this good work, he lived long enough to promote it so effectually that the record of results is scarcely credible.

As a matter of fact, we can state that the mortality of the British Army has actually been reduced at home and on some foreign stations by 50 per cent. The one death out of two that was held preventible has actually been prevented. At the last meeting of the British Association Dr. Farr read a paper in which the statistics of this subject were most perspicuously given. The mortality prevailing in the Foot Guards had been 20 in 1,000; it fell in 1859 to 9. In the Infantry of the Line at home the rate had been 18 in 1,000; it fell to 8. The number of deaths annually occurring among all arms of the service at home used to be 17 in 1,000; the average number among all the troops at Aldershot and Shorncliffe in the years 1857-8-9 was 5 in 1,000. From the colonies also some striking results are reported. In Newfoundland the military death-rate has fallen from 11 in 1,000 to 4; in Nova Scotia and New Brunswick, from 16 to 7; in Canada, from 17 to 10. At the Cape the deaths have been reduced by about 25 per cent. In Bermuda they have dropped from 34 in 1,000 to 14. In the Mediterranean also improvements have been effected, though not to the same extent. The mortality in Gibraltar has been greatly lessened, and that station no longer figures as an unhealthy

one, but the death-rate in Malta and the Ionian Islands is still higher than it should be. Over the Indian Army the Secretary at War had no direct control, but the sanitary condition of that vast force has been made the subject of formal inquiry, and, as the mortality in Ceylon has been already reduced from 42 in 1,000 to 32, we may reasonably anticipate good results for India.

It must be allowed that such facts as these speak loudly indeed to the value of Lord Herbert's work. Here are results—actual and unmistakeable results. The old rates of mortality with which we have compared the rates of 1859 are not obsolete or exceptional returns. They are formed by an average taken from the ten years ending in 1846, and furnish therefore a fair specimen of times just gone by. It is not pretended that the mortality of 1859 expresses a standard permanently established. Circumstances may possibly raise the figures once more, but the contrast between the two periods we have given is so very broad and distinct that there can be no question about the substantial improvement accomplished. To this improvement we may now look with satisfaction and thankfulness. The State can no longer be charged with indifference to the welfare of its defenders. The British soldier is now the object of far greater solicitude than he could have been even in his own home. His health is maintained by judicious regulations, his ailings and liabilities are carefully watched, and all the sympathies of the public attend the efforts of the authorities for the further improvement of his position. The question, indeed, is not one of sentiment. It involves the highest principles of national wisdom and economy. Lord Herbert's last work was the application of these principles to the organization of the Chinese Expedition, and we saw the results in the extraordinary efficiency of the army and the rapid success of the war, no less than in the lightness of the sick-lists and the wonderful preservation of life.

From the "STANDARD," *November* 29th, 1861.

The meeting at Willis's Rooms on Thursday shows that party feeling in this country is not quite so embittered as some have represented it. At all events, it does not seem that Conservative statesmen are as unforgiving and implacable as they are sometimes painted. It is not long since the Minister at War of Lord Palmerston's Cabinet died. He had once been a Conservative, but was conspicuous in the fatal defection from the ranks of that party which spread like an epidemic disease among the personal followers of the late Sir Robert Peel. In his devotion to the constitutional theory, in his affection for the Church, Sidney Herbert

was still a Conservative, though he took his place among the Whigs. The contemplation of his worth and his talents did not by any means reconcile us to his change of sides. He was an able administrator, a true gentleman, and a thoroughly conscientious man. More was the pity, it was said, that he did not co-operate with those with whom he could best sympathise.

But all this is past. Lord Herbert is dead, and we know that he died prematurely because, from a strong sense of duty, he persisted too long in the arduous labours of his office. He atoned, as it were, by a long penance of work for the good of the soldier, for his part in the responsibility of that terrible calamity of the Crimean winter for which he blamed himself, but from which others now excuse him. For every soldier who perished in those bitter trenches, or died in that ill-fed camp of hunger and disease; for every wounded man who groaned away his soul in those hospitals for the want of lint and linen to cover his wounds, the remorseful Minister of the Government of Lord Aberdeen determined that if he lived to do it he would save the life of at least one British soldier by his earnest attention to the sanitary arrangements of the army. The Government of Lord Palmerston, in offering him again the Ministry of War, held out to him the opportunity he coveted—the chance of usefulness to which he seems to have postponed all political considerations whatever. With a feeble frame, undermined by an insidious disease, he went on till the over-stretched bow snapped at its fullest tension. It was, then, for our army, it was for our country, that he gave his life and lost it. This being so, then, whether he were Whig or Tory, Radical or Conservative, it is all one to us. Detraction cannot touch him now, and political controversies are of little importance to the dead.

It was thus that the leading men of both political parties took their share in Thursday's demonstration. General Peel seconded a resolution proposed by Lord Palmerston. Lord Malmesbury stood on the platform near Lord Russell. Lord Derby approves of the Memorial equally with the present Prime Minister. The amiability and attractive manners of the deceased statesman had doubtless done much to attach to him all who came in contact with him. But even had his character been wanting in its polished refinement—had he been what he was not, a bitter partisan or a rough political gladiator, we are sure that the statesmen on the opposite side of the House would have been just as ready to pay their tribute to the merits and services of the man.

These services consist mainly in his devotion to the work of the re-organization of the army and of providing for the health of the soldiers. The first and most important step which Sidney Herbert took in this latter direction was to procure a parliamentary commission to inquire into the sanitary state of the army. By the labours of this commission a very

grievous fact was elicited. This was that the death-rate among soldiers in the British army was twice, and sometimes three times, as great as that among civilians of the same age. This inquiry was followed by an investigation into the state of barracks and hospitals, and by a provision for the periodical publication of the vital statistics of the army at home and abroad; so that from time to time we may learn what good has been done, and whether there has been any halting in the work of improvement. The Minister also re-organized the medical department of the army, at the same time that he endeavoured to carry out various suggestions as to the health and comfort of the soldier made by high medical authorities. Under his auspices the various military hospitals underwent a complete renovation, and a new hospital; combining all the recent improvements, was, by a singular coincidence, opened at Woolwich the very day he died.

The benefit of Lord Herbert's reforms is proved by the gratifying fact stated by Mr. Gladstone, that the mortality in the army is now just half of what it was. A battalion of troops is thus saved every year to the country! Every one knows that a generous and heroic lady, with whose name all Englishmen are familiar, and whose illness is a national sorrow, had very much to do with the initiation of those reforms with which Lord Herbert's name is now associated. We must not, too, forget to allow to the intelligent members of the medical staff of the army the credit in the great work which falls of right to their share. There are men who have deserved well of their country and of mankind who have never had statues erected to them, or scholarships founded in their name. Such a man was Dr. Thompson, who died in consequence of his attendance on the wounded Russians through the night after the Alma. We are not likely to forget such a man as this. *Exegit monumentum ære perennius.* The friends of heroes in a humbler rank can hardly complain of the tribute which is accorded to those higher in place and station. This recognition is one of the attributes of rank. Before objections can be taken fairly to such a distinction as an injustice, it must be proved that statues and memorials are of some use to the dead.

These latter remarks have been suggested by the grumblings of one of those organs which are supposed to represent the state of feeling in the army. While coldly approving of the Herbert Memorial, it quarrels with each one of the grounds on which it is proposed. It seems inclined to deny all merit to Lord Herbert because he sometimes did what was distasteful, or what seemed unwise and wrong. We are told that his sanitary reforms were pressed upon him by the House of Commons, and against his will. The private soldiers, it is said, owe little thanks to the man who refused to allow any increase of accommodation for the married in barracks or camps, until tents for married soldiers at Aldershot were constructed at the command of the Queen. They bear him a grudge,

too, for having perpetuated the discipline of flogging. The officers in the army are not pleased with him for having resisted the grant of pensions for wounds, by which resistance he exposed the Government to the humiliation of a defeat in the House. The medical officers, too, are chafing under the suspension of the army medical warrant of 1858, the provisions of which should certainly be carried out.

It is scarcely possible that a man in Lord Herbert's position should have avoided giving occasional offence to those placed under his control. The indictment preferred against him is not heavy. Agreeing in much of it, we think it but a trifling set-off against the services which he has rendered. The proposers of the testimonial have laid themselves open to attack by proposing a subscription among all ranks of the army—a proceeding which is contrary to the army regulations, and would render its promoters liable to a court-martial. We trust that it is now placed upon a better footing.

From the "MORNING POST," *November* 30, 1861.

It has been finely said by the German poet, Aloys Blumauer, that there are two kinds of human greatness, each well becoming the man whom Heaven has gifted with it; but in the greatness which each wears as a royal robe, the aims and attributes are as different as if different threads and dyes were worked and interwoven in the texture. One species of greatness is surrounded by a blaze of light, whilst the eye feels refreshed in resting on the mild, calm tints of the other. One dazzles like the orb of day, but scorches not less surely than it warms; the other, like a soft crescent moon, sheds a mellow hue over darkness. One, rushing like the torrent spray, is dashed in foam over broken rocks; the other pursues its tranquil course almost unobserved by the dwellers in the plain on which it bestows fresh verdure. One rears proud mausoleums to itself, to ambition, and to glory, whilst the favourite trophies and triumphs of the other are the tears of grateful human hearts. The one would fain be praised, be observed, and be renowned; but though its renown often stretches from pole to pole, the mortals whom it truly befriends are possibly but few, and the light encircling it casts a lurid glare; but the other—calm greatness, the self-sustained and self-controlled greatness—ever steadily pursuing its course in the paths of duty, whilst shrinking from the noise of vulgar plaudits, is found to have graven countless benefits and blessings on the hearts of the individuals whom it succoured, or the story of the country which it loved and served.

The meeting held on Thursday, at Willis's Rooms, to take the requisite steps for raising an appropriate Memorial to the late Lord Herbert,

cannot be better described than as the spontaneous tribute of the Prince of the blood royal who presided at that meeting, of the Prime Minister and the eminent statesmen of all political parties who shared in it, and as reflecting and representing public opinion throughout the country, of the whole British nation, to this second kind of greatness, this calm, steady, undazzling virtue, embodied in the private and public life of him whose memory it was designed to honour. Rarely have the choicest boons of nature, and the chief distinctions of fortune and of rank, been lavished with greater abundance on a single individual, and more rarely still have the talents received from Heaven been so faithfully and conscientiously turned to account, and employed under the deep and enduring conviction that he to whom they had been given was ever in his great Master's eye. There was no species of social, or literary, or political distinction to which the late Lord Herbert might not have aspired. He might have played in the world of fashion the brilliant and seductive, but really worthless part performed by the Grammonts of a former age, or the D'Orsays of more recent times. He might have made good the hereditary claims to intellectual distinction which descended to him from one of the most graceful poets and one of the subtlest sceptics of the seventeenth century. Of one respecting whom the Duke of Cambridge observed that he had the clearest view on military matters that he almost ever met with in a civilian, it is not too much to affirm that, had he chosen the profession of arms, he would, if the occasion ever required it, have displayed the administrative resources in conducting a campaign of a Napier or a Soult. He who at his first entrance into public life was marked out by the late Sir Robert Peel as the future Prime Minister of England might by his voice and decision have turned the scale of parties, had he not preferred giving up to mankind the abilities and influence which mere party would too gladly have monopolised. But Lord Herbert was something far better and far greater than a mere leader of fashionable society, or a mere scholar and writer, or a mere military administrator, or a mere party chief. All his gifts and graces were harmoniously blended in the execution of the great task which he had set before himself—the improvement of the military service of his country. Lord Palmerston, whose earliest official duties, more than half a century ago, were connected with our military administration during the last years of the war against the first Napoleon, and who has had the best opportunities of observing the career of every statesman employed in similar functions from that to the present day, summed up the public services of Lord Herbert in the comprehensive sentence—"There never was a man who brought to bear upon an interesting and important subject a stronger intellect, a more anxious desire, and more incessant and indefatigable labour, than did my late noble friend in everything that concerned the welfare, the comfort, and the health of the army." It is at such a moment as the present, when we are, it may be, on the eve of a great crisis in our country's history, when both our military and naval energies will be invoked and called into action, that we must gratefully appreciate the self-sacrificing toils of him who worked while it was day, for the night cometh when no man can work. This grateful appreciation was not wanting in any of the addresses delivered at the meeting of Thursday. In the words of General Peel, we are told that "there can be no truer description of him than to say that he was the perfect specimen of an English gentleman." In the words of Mr. Gladstone: "Great as are the works of Lord Herbert, his character was greater still;" and amongst the peculiar personal gifts which Mr. Gladstone left on record was his unequalled gentleness, the fact that he was the gentlest man that ever undertook to confront the difficulties of public affairs. In the words of Sir John Fox Burgoyne: "he was pre-eminently the soldier's friend." The Bishop of Oxford says of his benevolence that it had this peculiarity about it—"it was not that general glow of universal benevolence which is anxious to impart great and unascertained advantages to the masses as masses; but it was a real trouble-taking, a thorough sensibility, a sympathy with the individuals that made up the mass." Lord de Grey observed, that "Lord Herbert's monument is not to be made of stone or bronze, but will be written on the heart of the British soldier, whom he served." The last speech made at the meeting, that of the Duke of Newcastle, possessed a double interest, for the speaker, in addition to the tribute of his own veneration for the memory of Lord Herbert, was enabled to unite that of another eminent public man just removed from this life—the late Sir James Graham—than whom, perhaps, there was no more competent judge of administrative capacity and zeal. Indeed, the tone and spirit of all the speeches at this memorable meeting were honourable to the living not less than to the dead, evincing as they did that not merely around Lord Herbert's tomb every feeling of party animosity was extinguished, but that during the hottest party struggles of his life, the purity of his motives, and the uncontested nature of his public services had never ceased to excite the sympathy and command the esteem of his party antagonists quite as much as of his political associates.

From the "MORNING CHRONICLE," *November* 30, 1861.

Seldom have so many of our public men assembled to pay a tribute of respect to a departed statesman as met together on Thursday, to take the initiative in raising a Memorial to the late Lord Herbert. If that noble-

cannot be better described than as the spontaneous tribute of the Prince of the blood royal who presided at that meeting, of the Prime Minister and the eminent statesmen of all political parties who shared in it, and as reflecting and representing public opinion throughout the country, of the whole British nation, to this second kind of greatness, this calm, steady, undazzling virtue, embodied in the private and public life of him whose memory it was designed to honour. Rarely have the choicest boons of nature, and the chief distinctions of fortune and of rank, been lavished with greater abundance on a single individual, and more rarely still have the talents received from Heaven been so faithfully and conscientiously turned to account, and employed under the deep and enduring conviction that he to whom they had been given was ever in his great Master's eye. There was no species of social, or literary, or political distinction to which the late Lord Herbert might not have aspired. 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He who at his first entrance into public life was marked out by the late Sir Robert Peel as the future Prime Minister of England might by his voice and decision have turned the scale of parties, had he not preferred giving up to mankind the abilities and influence which mere party would too gladly have monopolised. But Lord Herbert was something far better and far greater than a mere leader of fashionable society, or a mere scholar and writer, or a mere military administrator, or a mere party chief. All his gifts and graces were harmoniously blended in the execution of the great task which he had set before himself—the improvement of the military service of his country. Lord Palmerston, whose earliest official duties, more than half a century ago, were connected with our military administration during the last years of the war against the first Napoleon, and who has had the best opportunities of observing the career of every statesman employed in similar functions from that to the present day, summed up the public services of Lord Herbert in the comprehensive sentence—"There never was a man who brought to bear upon an interesting and important subject a stronger intellect, a more anxious desire, and more incessant and indefatigable labour, than did my late noble friend in everything that concerned the welfare, the comfort, and the health of the army." It is at such a moment as the present, when we are, it may be, on the eve of a great crisis in our country's history, when both our military and naval energies will be invoked and called into action, that we must gratefully appreciate the self-sacrificing toils of him who worked while it was day, for the night cometh when no man can work. This grateful appreciation was not wanting in any of the addresses delivered at the meeting of Thursday. In the words of General Peel, we are told that "there can be no truer description of him than to say that he was the perfect specimen of an English gentleman." In the words of Mr. Gladstone: "Great as are the works of Lord Herbert, his character was greater still;" and amongst the peculiar personal gifts which Mr. Gladstone left on record was his unequalled gentleness, the fact that he was the gentlest man that ever undertook to confront the difficulties of public affairs. In the words of Sir John Fox Burgoyne: "he was pre-eminently the soldier's friend." The Bishop of Oxford says of his benevolence that it had this peculiarity about it—"it was not that general glow of universal benevolence which is anxious to impart great and unascertained advantages to the masses as masses; but it was a real trouble-taking, a thorough sensibility, a sympathy with the individuals that made up the mass." Lord de Grey observed, that "Lord Herbert's monument is not to be made of stone or bronze, but will be written on the heart of the British soldier, whom he served." The last speech made at the meeting, that of the Duke of Newcastle, possessed a double interest, for the speaker, in addition to the tribute of his own veneration for the memory of Lord Herbert, was enabled to unite that of another eminent public man just removed from this life—the late Sir James Graham—than whom, perhaps, there was no more competent judge of administrative capacity and zeal. Indeed, the tone and spirit of all the speeches at this memorable meeting were honourable to the living not less than to the dead, evincing as they did that not merely around Lord Herbert's tomb every feeling of party animosity was extinguished, but that during the hottest party struggles of his life, the purity of his motives, and the uncontested nature of his public services had never ceased to excite the sympathy and command the esteem of his party antagonists quite as much as of his political associates.

From the "MORNING CHRONICLE," *November* 30, 1861.

Seldom have so many of our public men assembled to pay a tribute of respect to a departed statesman as met together on Thursday, to take the initiative in raising a Memorial to the late Lord Herbert. If that noble-

man was treated with some degree of injustice during his life, every one seems to have resolved that his merits shall now be fully recognised. The First Minister of the Crown connects his name with the warmest eulogiums, the Commander-in-Chief speaks of him in terms of the sincerest admiration, and the Chancellor of the Exchequer bids us regard him as a model for imitation in almost every particular. Never was Sterne's thought, that death opens the gates of fame and shuts the doors of envy, more strikingly illustrated. Even the jealousies and animosities of political life fade in the presence of the grave. The Earl of Malmesbury was one of those present at the recent meeting; and although it was scarcely to be expected that Mr. Disraeli would take any prominent part in the undertaking, yet it is understood that he will participate in it in the way which is open to the general public—that is, by contributing to the common fund.

The addresses delivered by the eminent men who addressed the meeting were, upon the whole, worthy of the occasion, and they curiously bring out the different styles and characteristics of the speakers. Lord Palmerston, as usual, goes straight to his point, and awards praise in the frank and manly manner with which he performs every public act. Mr. Gladstone is more elaborate, more minute, and more polished, but his speech forms a very noble panegyric on a great man. The single-heartedness, the devotion to duty, the unceasing anxiety to serve his country, that distinguished Lord Herbert, are set before us in an impressive, if not a new light; and the Bishop of Oxford does not draw less upon our admiration when he assures us that the late War Minister was a founder of hospitals, a builder of churches, the maintainer of schools, the supporter of numerous poor persons, and that his right hand never knew what his left hand gave. This is testimony which the greatest of the empire might wish could be borne to them; and every one who knew Lord Herbert feels that it is not the language of courtly compliment, but a just and unexaggerated description of the man. Never did England have a servant more disinterestedly attached, and more heartily desirous of promoting her welfare—never was there one who cared less for the ordinary rewards of office, or who was moved so little by the promptings of ambition. This is just such a man as the nation delights to honour. Even in the midst of the excitement occasioned by a probable collision with America, we are sure that the country will respond in a proper spirit to the appeal now made to them. It is very true that all the money required could be raised easily, and in a few days, among those who knew Lord Herbert, or who are engaged in public life; but this would not be to erect a "national" memorial. It is desired that every person who chooses should have an opportunity of testifying respect to the memory of a most excellent man: a dozen statues might be placed in our public

streets without asking the general public for a penny; but Lord Herbert worked, and died through working, for the great body of his countrymen, and not for any particular section of them. Lord Palmerston puts this point before us in so clear and emphatic a manner, that we cannot refrain from asking our readers to ponder over it. Referring to the premature death of Lord Herbert, the Premier says:—"He shut his eyes to those symptoms that might to a man less zealous of his public duty be a warning to retire in time from public life, so that, perhaps, the malady might be subdued, but he went on labouring to the utmost of his physical powers from day to day; and I regret to say—although it undoubtedly enhances his claims to the respect and gratitude of his fellow-countrymen—I regret to say that by his unparalleled devotion to the performance of his public duties, he neglected those opportunities of rest which might have saved him to his country; and he fell as much a victim to the performance of public duty as if he had fallen on the field of battle."

There can be no doubt that this will be the view taken throughout the land. Few, who can allow themselves the pleasure of contributing towards perpetuating the name of an Englishman who reflects honour on his country, will abstain from co-operating in the present design.

The memorial is to be of a twofold form—a statue will be erected to Lord Herbert, and an endowment of exhibitions or gold medals is to be established "in connexion with the Army Medical School, at Chatham, to be given, at the end of each course of instruction, to the candidate or candidates for admission who evince the highest proficiency in the knowledge of the art of preserving the health of the troops at home and in the field." The proposition is an exceedingly judicious one. Lord Herbert himself would undoubtedly have wished the memorial to be confined to the encouragement of the Army Medical School, since he had no object so much at heart as the personal comfort of the soldier. If soldiers only knew how much they are indebted to the late Minister, they would be foremost in coming forward now to pay honour to his name. Most of our readers must be well acquainted with the efforts he made to improve the sanitary condition of the army, and how ardently he was supported in those efforts by Miss Nightingale. Had he lived, he would assuredly have done very much more for the rank and file of our forces; as it is, some of the best institutions for the relief of the sick soldier have their origin in him. It is highly appropriate, therefore, that his name should still be linked with the schools of medicine. But with regard to the statue, we own that we have some misgivings. The reproachful figure of Havelock seems to warn us off any more caricatures of our public men. We are almost inclined to ask whether it would not be better to leave the statue proposal out of the plan. Lord Herbert is not likely to be forgotten; even if such a thing were probable, better so than be stuck up as a target for small jokes, and

as another example of the incompetency of our sculptors. Sir Robert Peel at Cheapside, and Wellington everywhere, Napier and Jenner in Trafalgar-square, and a host of other witnesses, seem to rise up protestingly against the first part of the suggested memorial. On the other hand, we cannot deny the fact that if ever man deserved a statue as a mark of national respect it was Lord Herbert. Surely there must be some one of our English sculptors adequate to produce such a work without discrediting his countrymen. It would be ignominious, indeed, to be compelled to seek assistance from abroad—let us have no foreigner's hand in this thoroughly English undertaking. We may consider it absolutely certain that money enough and to spare will very soon be forthcoming—the names on the committee give us confidence that it will be expended with care and judgment. And if the statue can be placed in the Houses of Parliament or in Westminster Abbey, the site would be a fitting and appropriate one. It is an instructive commentary on the vicissitudes of a public life, that the services this memorial is designed to commemorate were rendered at the very time when Lord Herbert lay under some degree of unpopularity, and was exposed to severe animadversions from a portion of the press.

From the "MORNING HERALD," *November* 30, 1861.

It is not always that "the good that men do is interred with their bones." The brilliant meeting held on Thursday, at Willis's Rooms, to do honour to the memory of Lord Herbert could hardly have been gathered together in honour of any living statesman. Not perhaps that the merits of the living men would have been less, or have won abstractedly a less just recognition, but that the circumstances under which they would make their appeal would fail to be seconded by considerations so hallowed and exalting. Just as Mr. Gladstone suggested the happiest characteristic of the deceased peer when he said, "that by the genuine purity of his nature, by his high principle and conscience, he covered and hid from himself the signal character both of his virtues and his works," we are willing to believe that it may be alleged of many of that distinguished audience, that the chief feeling which had stimulated them to concur in a tribute so pre-eminent was the consciousness that "honour's voice" could not "provoke the silent dust," nor "flattery soothe the dull, cold ear of earth," and that when the higher feelings were brought into play, living worth was found to have a less claim on their homage than that whose gratitude was for ever silenced by the most solemn of all eventualities.

Yet it may not be said that Lord Herbert was one of those to whom

post-obit justice strives with tardy step to atone for a neglect and wrong wreaked during his life. We have unfortunately in our history had too many instances of great men the victims still more than the benefactors of their age, who have been claimed, like Homer, after their death, by the enthusiastic rivalry of parties who, while they were living, were content to see them begging bread through their cities. We may proudly claim, as regards the late lord, that in every sense he was made "to see good in his day." The warm appreciation of his many excellencies which always characterised those who knew him in private life, where, as the Duke of Newcastle said, "he was the centre of a large, loving, and sensitive domestic circle, comprising not only those who were born in his house, but those who had the good fortune to form connexions with his family;" that appreciation had long before his death extended to the nation, and to all the political parties that divided it. Though the most unobtrusive of politicians, the public had come by degrees to acquire confidence in that character and those qualifications as a statesman which had early won the sagacious regard of Sir Robert Peel. Like Bishop Atterbury, though honoured by one party, he was not the less esteemed by the other. It has been said by one who was himself a great statesman, that a few feathers of ostentation are essential to all public men, and that he who is content to be only real needs the highest qualities of genius and attainment. The late Lord Herbert had less about him of the adventitious and the assumed than Lord Bacon would have thought wise. The estimate of himself suggested by his manner would have given a very erroneous cue to his real deserts. Though there be scarcely any exaggeration in the glowing panegyric in which Lord Palmerston, Mr. Gladstone, and General Peel claimed for him at the meeting, "every gift under heaven"—though his character was indeed "of that kind and stamp that are of very rare production"—though it be seldom that it is given to man to "exhibit such a combination of moral and intellectual excellence," and though his administrative powers were almost beyond comparison, and helped by so high an order of eloquence that he was able, as Lord Palmerston tells us, "to wield the keenest sarcasm required for the purposes of debate," and to be one of the most effective speakers in the House, he was, nevertheless, we are told, the gentlest man that ever undertook to confront the difficulties of public affairs. "That gentleness," continues Mr. Gladstone, "was combined with modesty such as I, for one, have never known to be equalled, I think I may almost say, in any station of life." But this almost poetic tenderness of disposition, set off by the sterling strength of his intellectual ability, was not without its advantages. "Corruption wins not more than poverty," says Shakspeare; and Lord Herbert's character enabled him to confront the public evils that stood in his way "with a winning gentleness," says one of his colleagues, "which subdued far more of resistance, and

achieved far greater triumphs for the benefit of his country, than could a spirit of anger and wrath."

In entering the War Office it became his business and first duty—for it was, indeed, the first necessity of his country—to evoke order out of chaos, and intelligent action out of confusion and antiquated routine. During the first seven months of the Crimean campaign our soldiers died at the rate of sixty per cent., and even at home, in a state of peace, it was found that though the army was composed of picked young men, the weak being rejected as recruits, the sickly or disabled being invalided, the mortality was still double that of any other equal portion of the English population. The late peer made it his mission to reform this frightful anomaly, and it is his high merit that in a great measure he achieved his aim, the glory being enhanced by the consideration that he deliberately died in the attempt. The four commissions he set afoot, on the state of the barracks and hospitals, on the re-organisation of the medical department, on the education of the army, and on the annual preparation of the vital statistics of the army, have already achieved infinite service, and the exposures they have made of evils, and the suggestions they have given of improvements, are daily operating in changes which are affecting the well-being of the soldier in every department of the service. The mortality of the army has been reduced to almost normal proportions. On the day on which he was buried the General Military Hospital of Woolwich, organised on the principles he had settled upon, was opened to the army. Thanks to his initiative, we have just now finished at Chatham the important institution which opens to all soldiers in that garrison a club under their own management, where, at very moderate charges, they may unite all the comforts of a home with all the advantages of a mechanics' institute; and it may be said generally, whether as regards the intellectual, the military, the moral, or social well-being of the soldier, that through his labours, if the army be not on the precise footing its enlightened friends wish, it is at all events placed in circumstances where none of its well-attested grievances can long be unredressed.

It is not to be concealed that the meeting of Thursday had its interest not a little heightened by the recent news which make it not impossible that the soldier may be soon again in active request, and that we may be early reaping, in his increased comforts and lessened risks, some of the advantages of the reforms introduced by the late Minister of War. As the Bishop of Oxford reminded the audience, that "while an unjust war was the greatest of evils, a just war was the last and best appeal to the God of truth," there can be no doubt that his hearers recognised much of the importance of the moment in the aptness of the memento. We believe that we were never better prepared for such an emergency, and this chiefly through Lord Herbert's reforms. But we earnestly pray that we may be spared the necessity of putting them to so cruel a test as of being forced to make this most terrible of all a nation's appeals; praying, however, still more earnestly, to be spared those dishonours of a tame submission to reiterated wrongs, which may be even worse for a nation than the calamity by which we seek to avoid them.

From the "DAILY NEWS," *Dec.* 2, 1861.

It would seem impossible that any description of a man's character could be fuller, or any appreciation of his gifts and virtues more thorough, than that which we read in the speeches in honour of Lord Herbert at the meeting at Willis's Rooms, last Thursday. Yet we miss in those collective addresses any accurate estimate of the precise service to which he proposed to devote his life. All that was said of his powers, his devotedness, and the charm of his character and manners is true, and was grateful to the feelings of those who knew him; but the public, who regarded him in connexion with public affairs, have not found in the words of his eulogists any clear representation of Lord Herbert's aims and proposed services as a minister and a citizen.

With him began military administration in England. We need not go back beyond the Crimean War to show that there was then nothing worthy the name of administration at the War-office. We used to hear of the great services of the Duke of York in the military department; but there never was a time, nor an occasion, when the British army was not at the mercy of accidents in some direction or other; when its forces were not wasted by mismanagement; when its precious lives were not extinguished by thousands by disease and misadventure in barrack, camp, and field; when its affairs were not conducted in a desultory way, or left to chance; when, in short, military administration in England was not a chapter of accidents, and found to be so on occasion of any unforeseen trial.

The last time this was discovered by the people of England was when they had to call a coroner's inquest on their first Crimean army. Lord Panmure tided over the crisis by the most lavish use of the most lavish means ever afforded to a broken-down department. He brought our second army through; but the military department remained what it had been. It must be re-created. It was Sidney Herbert who saw most clearly what had to be done; and to him we owe, in the first place, whatever has been done towards instituting a real military administration.

It is but little that has been done towards that particular object; but whose fault is that? Much has been done towards saving the life and health of our soldiery, elevating their character, and ameliorating their

lives; but in other directions, much has been proposed that has never been accomplished—much promised that has been withdrawn; and the main object—the re-organization of the War-office—seems to be no nearer than when Sidney Herbert first meditated the method of it. Perhaps some of those who on Thursday spoke his praises may be unaware of what he desired and strove to accomplish, but there were others who must have known how and why he was baffled, and even dishonoured in the eyes of Parliament and the country, by having engaged for more than he was permitted to effect. There must have been some present who were, or ought to have been, conscious that the labours so lauded had been held vexatious, troublesome, inconvenient to the department; that the devotedness so extolled over his grave had been rebuked or mortified when he was in life; that the zeal for which the people were called on to praise him had survived so many attempts to quench it as to prove itself unquenchable but by death—the death which follows upon over work when the work is mixed up with anxieties and failures. There must be some who at this hour know how it is that Sidney Herbert's intentions and promises about the purchase system remain unfulfilled; and by what gallantry of spirit it was that he took on himself the blame of failures which disappointed him more than any of us.

Looking in somewhat of an orderly way at what he achieved, we are better able to understand what he failed to effect, and why; and, as it is of importance to the country that the case should be understood, in order to its being effectually dealt with, we may just glance at the list of Sidney Herbert's effective services in the military department.

Lord Panmure's Sanitary Commission, on the return of the army from the Crimea, was conducted by Sidney Herbert. His Report was the beginning of the internal reform of the army. Out of it arose, at his suggestion, four commissions, which occasioned reforms in as many departments of the military service. One undertook the subject of barrack and hospital reform; one the re-organisation of the medical department; one the reform of the medical statistics of the army; and the other the organization of a School of Army Hygiene at Chatham. Sidney Herbert conducted all these commissions while waiting for his proper office as War Minister. These four commissions were worth more than might be supposed by persons who regard them as working merely towards the health of the army. They have reduced the mortality of our soldiery one-half; but that is only a part of their value. They established the essential principles of administrative reform, and thus half achieved other reforms which appear to have no connexion with the life and health of our army.

The new Warrant for the Army Medical Service, which gave new virtue, capacity, and dignity to our army physicians and surgeons in a body, was the work of Sidney Herbert. He proposed it, and drew it up, and got it issued by General Peel. Who it was that afterwards tampered with it, and succeeded for a time in undoing a work of singular importance and benefit, will be known some day, perhaps soon. Meantime, the medical statistics of the army have become the best in Europe, and wil save hosts of lives, and advance medical science for all time to come. The regulations by which the medical and sanitary re-organization was made effective in our whole military department were issued by him two years since, in a model code, of which foreign governments are eager to obtain possession. The school at Chatham was opened by him in October, 1860. Last January he completed the new arrangement of the Purveyor's Department, by which the sick and wounded are made secure of all needful provision in all situations. Later still he completed his reforms of the hospital service, so that the scandals of Scutari can never recur. The General Hospital at Woolwich will properly bear his name, in memory of this signal service. It is his doing that there are already two hundred camp cooks trained at Aldershot, and that there will be wholesome and economical cookery in the army henceforth. Whatever exists, and will exist, in the form of soldiers' institutes, soldiers' homes, day rooms, reading rooms, is his work; and whatever sobriety, cultivation of intellect, and improvement in manners which may result from such institutions must be attributed to him. The unheard-of lowness of the mortality and sickness of our army in China, and the reforms in the health, temper, and spirits of our troops in India, were his work. Instead of sixty dying in the hundred, as in the Crimea in 1854, only three per cent. died in China; and if we can keep up an army of requisite strength in India, it will be by his having shown us how to deal with the causes of mortality there.

What he did in re-organizing our national defences—the Militia, the Volunteers, and the Indian Army—the people of England are more aware of than of his services in the War-office. What they have chiefly to attend to, in justice to his memory, is that every step he took in his office was in the direction of reform, in a department in which it is singularly difficult to achieve reforms.

What he did *not* do was to re-organize the War-office. Hence his failures, hence his mortifications, hence such censures as he incurred, hence the anxieties, which are worse to bear than any amount of labour. Why he did not achieve this central work, why he had to account for promises unfulfilled, why he was baffled and humbled, and beset by difficulties, will have to be explained. His nature was modest; his spirit was generous; his temper was above the reach of irritation; and he was therefore a safe subject for thwarting. He was one who might be trusted to uphold dignities, and take censures upon himself. But the people of England must now look to these things for themselves; and they will choose to know the precise operation of the Horse Guards upon the War-

office; and why engagements of vital importance to the character of our military service remain unfulfilled; and how much the breath of praise over the dead is worth when it comes from those who contravened the efforts, and played fast and loose with the honour, of the statesman who rests from his labours. When the true history of Sidney Herbert's life becomes known, it will disclose some passages of some other men's lives which it concerns Englishmen to be acquainted with. Meantime the more he has done for us the more resolute we must be to obtain what he desired, but failed to achieve. His best monument will be the carrying out of his work in a thoroughly honest, just, and able administration of military affairs.

From the "COURT CIRCULAR," *Nov. 30th.* 1861.

We rejoice to see the very enthusiastic and praiseworthy efforts that are making to pay some appropriate tribute to the memory of the much-lamented and revered statesman, the late Lord Herbert. Under the auspices of his Royal Highness the Duke of Cambridge, a very numerously attended public meeting was held on Thursday last, at Willis's Rooms, and in addition to His Royal Highness, who presided, were Lord Palmerston, Earl Russell, Earl de Grey and Ripon, the Duke of Newcastle, the Earl of Carnarvon, the Chancellor of the Exchequer, and numerous members of the nobility and aristocracy, including several ladies, all of whom manifested the warmest interest in the proceedings. The speech of the Duke of Cambridge was indeed a truthful and eloquent panegyric, and breathed a spirit of affection at remembrance of the many estimable virtues which adorned the private and public career of the departed nobleman, when he alluded to the gratifying object for which they were assembled—that of perpetuating the memory of a dear departed friend. No statesman ever endeared himself to all more than did Lord Herbert; in the performance of his official duties he showed the most profound regard to all that contributed to the well-being of the army, and at the same time tended to uphold the honour and dignity of the country. To satisfactorily perform the important duties of the position he so worthily occupied was his constant aim, and he succeeded in winning for himself by his kind, courteous, and agreeable manners, the esteem, respect, and admiration of all those over whom he had control. In discharging his arduous duties he ever exhibited great clearness of views, and the British army, through every grade, lament the untimely death of one who was justly entitled to the proud distinction of being designated the Soldiers' Friend." Well might his Royal Highness express the sorrow felt by all classes of the army; for, in his capacity as Commander-in-Chief, he not only frequently came in contact with Lord Herbert, but he also well knew the great regard in which he was held throughout every branch of the British service. His concluding remarks bear ample testimony to Lord Herbert's personal worth, when he said, as regards "the military men whom I represent on this occasion, I am sure anything we can do to testify our admiration, and respect for his personal, public, and private character we are ready to do, hoping that by so doing we may alleviate the pain which his sudden bereavement has caused, not only to his family and immediate friends, but the grief and sorrow which all have felt in seeing one so beloved pass so soon and so unexpectedly from the world." All the speakers united in expressing the deep admiration they felt towards Lord Herbert, and the remarks made by the Duke of Newcastle were very touching, particularly when he read a letter penned by the late Sir James Graham, in reference to the Herbert Memorial, in which he said: "He so lived and so applied the means with which a bountiful Providence had blessed him, that he will be remembered both in his public and in his private station. A statue of him at Salisbury would be the most suitable monument to his memory, under the shade of that cathedral whose spire points to those mansions where his hopes are centred, and where he now enjoys his reward."

The following Memoir of Lord Herbert is extracted from the *Times* of August 3d, 1861.

Death yesterday cut off in Lord Herbert one whom nature had intended for a Prime Minister. It is quite certain that, had he lived, he would before long have attained that honour, if not by virtue of extraordinary intellectual qualities, yet by force of character, by charm of manner, and by aptitude for business. He was one of the most winning statesmen of his time, and, by aid of a great social faculty, rose above men who were on other grounds superior to him. What was most remarkable in him was his anxiety to do everything well. His labours were unceasing; he never spared himself; he gave up life and luxury for toil and trouble; and if he did not die in harness, it was in harness that he earned his death. It was not merely in the fulfilment of duty that he was thus self-sacrificing; he was equally unsparing of himself in the discharge of those social observances which men usually bend to the convenience or humour of the moment. With great manliness of character there was curiously intermingled an extraordinary desire to please. He studied and strove to please, and heightened by all the arts of style the natural

attractiveness of his character. He had in his favour every social advantage—high birth, a great estate, a happy home, a handsome person, irresistible manners, many accomplishments, a ready address. He made the most of all this, so that his good nature seemed to be always overflowing, his frankness to be always unbounded, and his power of pleasing to be always undivided. So he won upon all comers, and won most upon those who knew him best. Men would give up to Sidney Herbert what they would grant to no one else. He inspired no jealousy; for his superiority was less the result of brilliant parts than of that indefinable charm from which there is no appeal. Add his power of work and of public speaking to his rare power of making friends, and you have the possible Prime Minister. That power and love of work, we grieve to say, has killed him, as it has killed many another statesman, before his time. He gave up the enjoyments of wealth and a brilliant home for the great game of politics, and has been known to pass a whole summer and autumn in London, with only perhaps a day and a night at Wilton. He drove a good constitution too hard, and at Christmas last began to feel that sentence of death had been passed upon him. There is some reason to think that even then, had he given up all work, he might have recovered. All that he did was to leave the House of Commons, and to try the comparative repose of the peerage, still retaining his office as Minister for War. The consequence has been fatal. He dies of overwork at the age of fifty-one—a great loss to society, a still greater loss to his party.

Sidney Herbert was born at Richmond in 1810, the second son of the eleventh Earl of Pembroke, whose title he would have inherited had he lived. His mother was the only daughter of Simon, Count Woronzow, so that in blood he was half Russian. He was educated at Harrow and at Oriel College, Oxford, where he took his degree with honours in 1831. In the following year he entered the House of Commons as member for South Wilts, which constituency he represented from the date of the Reform Bill to the present session, when he passed to the Upper House. He began as a Conservative, and his maiden speech was delivered in 1834, against the second reading of a bill to admit Dissenters to the universities. Four years later we find him take the lead in opposing Mr. Grote and the ballot; and from this period to 1841, he took an active part, under Sir Robert Peel, in battering the lame government of the Whigs. When Peel entered upon office, Mr. Herbert was appointed Secretary to the Admiralty, and so remained until, in 1845, he was made Secretary for War, with a seat in the Cabinet. Thus it was under Peel that he had the first training as a minister in military affairs. But his connexion with Sir Robert Peel's cabinet was chiefly interesting for its influence on his conduct as a disciple of Free Trade. The doctrine of Free Trade was the Peelite bond of union. They opposed it hand-in-hand, and they were converted in a lump. Theoretically, indeed, the principles of Free Trade had long been accepted by our statesmen, and Mr. Sidney Herbert, even before Peel's rise to power, could taunt the Whigs for their presumption in claiming to be the original discoverers and owners of Free Trade principles—"those principles having been enunciated years ago by a cabinet of which Mr. Huskisson and Mr. Peel were prominent members." But the policy which was allowed in theory was in practice qualified with exceptions; Mr. Herbert refused to accept Free Trade as an inflexible mathematical rule, and, practically, Protection was the order of the day. Towards the close of 1845, came the new order of things. Slowly, but surely, the light had been breaking in upon Peel. The commercial reforms which he had introduced forced him on, during a season of great distress, to the total abandonment of Protection. The point is worth notice in this article, because, in the spring of 1845, Mr. Herbert was put forward by Sir Robert Peel to oppose Mr. Cobden's motion for a select committee to inquire into the effects of the corn laws on the farmers. When that motion was made, the usual speakers of the Treasury bench were silent. Peel never opened his mouth, but laid the burden of reply on the Secretary for War. The doubt had then entered into Peel's mind, and instead of taking the responsibility of reply upon himself, he laid it on a young minister—a member of his cabinet—whom he had not yet admitted into his innermost confidence. Some ten months afterwards Mr. Sidney Herbert had to eat his own words, to declare that Mr. Cobden was right, that he himself was wrong, and that Free Trade in corn is the only wise policy. Nor did he find any reason to repent the course he then took. When taunted long afterwards with the suddenness of his conversion, he said,—"To the latest day of my life I shall feel a pride in the course I then took. It is true that we were exposed to much obloquy; it is true that we were exposed to much misrepresentation, and that we had to make a choice—a difficult one at any time, and a bitter option to take—a choice between party ties and the feelings of personal honour, as wrapped up in party ties, on the one hand, and the welfare of the country on the other; and if those principles for which we then sacrificed office, and have undergone since, what I admit to have been a necessary political ostracism, are to be attacked, no effort shall be wanting on my part to do my utmost to maintain those principles, and to preserve unimpaired, unreversed, unrevised, and unmodified the blessings which I believe to have been given by those measures to the great body of my fellow-countrymen."

The ostracism of the Peelites ceased when Lord Aberdeen's Government was formed. In that Administration, Mr. Sidney Herbert returned to his old post as Secretary for War. How the War Department broke down under the pressure of the Russian campaign is an old story which

need not now be revived. Mr. Sidney Herbert's reputation has survived that disaster. Whatever his faults or the faults of the system which he administered, no one has ever accused him of deficient industry or a lack of sympathy. While the Crimean disaster was still the subject of controversy, Mr. Herbert was for a few weeks Colonial Secretary in Lord Palmerston's first Administration; but when two years ago Lord Palmerston had to construct a Cabinet for the second time, the War Department was handed over to undoubtedly the best man for the post, the Minister whose loss we are deploring, and whose conduct as Secretary for War, a few years back, gave rise to much angry criticism. It is an unwieldly, half-organized department, but Lord Herbert, so far as his health would permit, was getting it into a little order. His term of office has been signalized by three great events—by the creation of an imposing Volunteer force, which he has had to organize and control; by the amalgamation of the Indian with the Royal army, which he has also had to superintend; and by the ascertained pre-eminence in the field of our rifled cannon. It is not likely that, for years to come, another Secretary for War will, in time of peace, have to deal with any changes that can be compared to these. He was fully alive to the magnitude of the questions which he had to decide, and no minister could have brought to bear upon them more intelligence or more zeal. Lord Herbert married, on the 12th of August, 1846, Elizabeth, daughter of the late Lieutenant-General Charles Ashe a'Court, by whom he leaves six children, four sons and two daughters, his eldest son, George Robert Charles (now Lord Herbert), having completed his eleventh year last month.

ADVERTISEMENT *of the* COMMITTEE.

MEMORIAL TO THE LATE LORD HERBERT.

President.

HIS ROYAL HIGHNESS THE DUKE OF CAMBRIDGE.

Trustees.

THE RIGHT HON. THE CHANCELLOR OF THE EXCHEQUER.
THE HON. ARTHUR KINNAIRD, M.P.
PETER HOARE, Esq.
W. G. PRESCOTT, Esq.

AT a PUBLIC MEETING held at WILLIS'S ROOMS, King Street, St. James's, on THURSDAY, the 28th instant,

HIS ROYAL HIGHNESS THE DUKE OF CAMBRIDGE
IN THE CHAIR,

It was Moved by THE VISCOUNT PALMERSTON, K.G. M.P.;

Seconded by LIEUT.-GEN. THE RIGHT HON. J. PEEL, M.P.; and carried unanimously—

"That this Meeting desires to express its deep sense of the loss which has befallen this country by the untimely death of Lord Herbert; and is anxious to pay a fitting tribute to his eminent public services as a Minister and Statesman, and to the self-sacrificing zeal with which he discharged his official duties."

It was Moved by THE RIGHT HONOURABLE THE CHANCELLOR OF THE EXCHEQUER;

Seconded by GENERAL SIR JOHN BURGOYNE, BART. G.C.B.; and Carried unanimously—

"That a Subscription be raised for the purpose of erecting a Statue to the late Lord Herbert;—and also for the Endowment of Exhibitions or Gold Medals, in connexion with the Army Medical School at Chatham, to be given at the end of each course of instruction to the Candidate or Candidates for Commission, who evince the highest proficiency in the knowledge of the art of preserving the health of Troops at Home and in the Field."

It was Moved by THE RIGHT REV. THE LORD BISHOP OF OXFORD;

Seconded by THE EARL DE GREY AND RIPON; and Carried unanimously—

"That the following Noblemen and Gentlemen be requested to act as Members of the Committee, to collect Subscriptions, and to devise the best means of carrying into execution the Resolutions of this Meeting."

President.—HIS ROYAL HIGHNESS THE DUKE OF CAMBRIDGE.

FIELD MARSHAL, THE LORD SEATON, G.C.B.
GENERAL THE VISCOUNT GOUGH, K.P. G.C.B. K.S.I.
GENERAL THE LORD CLYDE, G.C.B. K.S.I.
GENERAL SIR JOHN BURGOYNE, BART. G.C.B.
LIEUT. GEN. SIR GEORGE BOWLES, K.C.B.
LIEUT. GEN. SIR J. F. LOVE, K.C.B. K.H.
LIEUT. GEN. THE RIGHT HON. J. PEEL, M.P.
LIEUT. GEN. W. T. KNOLLYS.
LIEUT. GEN. SIR HARRY JONES, G.C.B.
LIEUT. GEN. SIR J. L. PENNEFATHER, K.C.B.
LIEUT. GEN. THE EARL OF CARDIGAN, K.C.B.
MAJOR GEN. THE HON. SIR JAMES YORKE SCARLETT, K.C.B.
MAJOR GEN. SIR RICHARD I. DACRES, K.C.B.

Major Gen. Sir Hope Grant, G.C.B.
Major Gen. Sir T. A. Larcom, K.C.B.
Major Gen. Sir Edward Lugard, K.C.B.
Major Gen. Eyre.
Major Gen. Sir Alexander Tulloch, K.C.B.
Major Gen. J. Lawrenson.
Major Gen. the Lord Frederick Paulet, C.B.
Major Gen. Sir Robert Vivian, K.C.B.
Colonel Sir Thomas Troubridge, Bart. C.B.
Colonel the Hon. Percy Herbert, C.B.
James Brown Gibson, M.D. C.B. Director General of Military Hospitals.
The Rev. G. R. Gleig, Chaplain General.

The Right Hon. Viscount Palmerston, K.G. M.P.
The Right Hon. the Lord Chancellor.
The Right Hon. the Earl Granville, K.G.
His Grace the Duke of Argyll, K.T.
The Right Hon. the Chancellor of the Exchequer.
The Right Hon. Sir George Grey, G.C.B. M.P.
The Right Hon. the Earl Russell.
His Grace the Duke of Newcastle, K.G.
The Right Hon. Sir G. C. Lewis, Bart. M.P.
The Right Hon. Sir Charles Wood, Bart. G.C.B. M.P.
His Grace the Duke of Somerset.
The Right Hon. T. Milner Gibson, M.P.
The Right Hon. Edward Cardwell, M.P.
The Right Hon. Charles Pelham Villiers, M.P.

The Duke of Wellington, K.G.
The Duke of Sutherland.
The Duke of Buccleuch, K.G. K.T.
The Marquis of Lansdowne, K.G.
The Marquis of Westminster, K.G.
The Earl of Derby, K.G.
H.E. the Earl of Carlisle, K.G. K.P.
The Earl of Shaftesbury.
The Earl of Tankerville.
The Earl Stanhope.
The Earl Spencer.
The Earl of Clarendon, K.G. K.P. &c.
The Earl of Carnarvon.
The Earl of Malmesbury, G.C.B.
The Earl of Powis.
The Earl of St. Germans, G.C.B.
The Earl de Grey and Ripon.
The Earl Somers.
The Earl of Bessborough.
The Earl Grosvenor, M.P.
The Lord John Manners, M.P.
The Lord Harry Vane, M.P.
The Viscount Sydney.
The Viscount Eversley.
The Lord Stanley, M.P.
The Viscount Enfield, M.P.
The Lord Elcho, M.P.
The Viscount Castlerosse, M.P.
Rear-Admiral Lord Clarence Paget, C.B. M.P.
The Lord Bishop of London.
The Lord Bishop of Oxford.
The Lord Bishop of Salisbury.
The Lord Lyttelton.
The Lord Harris, K.S.I.
The Lord De Tabley.
The Lord Brougham and Vaux.
The Lord Dufferin and Claneboye.
The Lord Overstone.
The Lord Belper.
The Lord Ebury.
The Lord Lyveden.
The Speaker of the House of Commons.
The Right Hon. William Cowper, M.P.
The Hon. Algernon Egerton, M.P.
The Hon. Arthur Kinnaird, M.P.
The Right Hon. the Lord Mayor.
The Right Hon. Sir W. G. Hayter, Bart. M.P.
The Right Hon. Sir John McNeill, G.C.B.
The Right Hon. H. U. Addington.
The Right Hon. T. E. Headlam, M.P.
The Right Hon. H. A. Herbert, M.P.
The Right Hon. Spencer H. Walpole, M.P.
The Right Hon. J. Stuart Wortley.
Vice-Chancellor Sir William Page Wood.
Sir John Shelley, Bart. M.P.
Sir Stephen Glynne, Bart.
Sir William Alexander, Bart.
Sir Edmund Antrobus, Bart. M.P.
Sir Harry Verney, Bart.
Sir Francis Goldsmid, Bart. M.P.
Sir James Duke, Bart. M.P.
Rear-Admiral Sir Frederick Grey, K.C.B.
The Solicitor-General.
Sir Benjamin Hawes, K.C.B.
Sir Roderick Murchison, G.C.St.S.
Sir Thomas Phillips.
T. G. Baring, Esq. M.P.
Capt. Crawford Caffin, R.N. C.B.
R. W. Crawford, Esq. M.P.
Raikes Currie, Esq.
Capt. Drummond, R.N. C.B.
Capt. Douglas Galton, R.E.
Henry H. Gibbs, Esq.
G. G. Glyn, Esq. M.P.
Thomson Hankey, Esq. M.P.
Peter Hoare, Esq.
Kirkman D. Hodgson, Esq. M.P.
R. S. Holford, Esq. M.P.
R. Monckton Milnes, Esq. M.P.
W. G. Prescott, Esq.
Henry C. Robarts, Esq.
Baron Lionel De Rothschild, M.P.
David Salomons, Esq. Ald. M.P.
Martin T. Smith, Esq. M.P.
H. Gerard Sturt, Esq. M.P.
Travers Twiss, Esq. D.C.L.
Western Wood, Esq. M.P.
Count P. E. De Strzelecki, C.B. D.C.L.

It was Moved by His Grace the Duke of Newcastle, K.G.; Seconded by The Earl Grosvenor, M.P.; and Carried unanimously—

"That the thanks of this Meeting be presented to his Royal Highness the Duke of Cambridge for his cordial co-operation in promoting the objects of this day's proceeding, and for his kindness and valuable aid in taking the Chair."

The Committee have to acknowledge the following Subscriptions:—

HIS ROYAL HIGHNESS THE DUKE OF CAMBRIDGE, K.G. . . £100 0 0

	£	s.	d.
The Viscount Palmerston, K.G. M.P.	100	0	0
The Right Hon. the Lord Chancellor	21	0	0
The Right Hon. the Earl Granville, K.G.	50	0	0
His Grace the Duke of Argyll	20	0	0
The Right Hon. the Chancellor of the Exchequer (in addition to £50 sent to the Salisbury Fund)	50	0	0
The Right Hon. Sir George Grey, G.C.B. M.P.	50	0	0
The Right Hon. the Earl Russell	20	0	0
His Grace the Duke of Newcastle, K.G.	100	0	0
The Right Hon. Sir Geo. Cornewall Lewis, Bart. M.P.	50	0	0
The Right Hon. Sir Charles Wood, Bart. G.C.B. M.P.	50	0	0
His Grace the Duke of Somerset	25	0	0
The Right Hon. T. M. Gibson, M.P.	20	0	0
The Right Hon. E. Cardwell, M.P.	50	0	0
Gen. the Lord Clyde, G.C.B.	50	0	0
Gen. Sir William Gomm, G.C.B. and Lady Gomm	10	0	0
Gen. Sir J. Burgoyne, Bart. G.C.B.	5	0	0
Gen. Sir De Lacy Evans, G.C.B. M.P.	10	10	0
Gen. Sir John Aitchison, K.C.B.	5	0	0
Lieut. Gen. Sir George Bowles, K.C.B. (in addition to £20 sent to the Salisbury Fund)	20	0	0
Lieut. Gen. Sir Fredk. Love, K.C.B.	5	0	0
Lieut. Gen. Sir W. G. Moore, K.C.B.	10	0	0
Lieut. Gen. Sir C. Yorke, G.C.B.	10	0	0
Lieut. Gen. the Rt. Hon. J. Peel, M.P.	25	0	0
Lieut. Gen. Knollys	10	0	0
Lt. Gen. Sir Henry Bentinck, K.C.B.	10	0	0
Lieut. Gen. J. D. Rawdon	10	10	0
Lieut. Gen. Sir Harry Jones, G.C.B.	5	0	0
Lieut. Gen. Mansel, K.H.	5	0	0
Lieut. Gen. the Earl of Cardigan, K.C.B.	10	0	0
Lieut. Gen. Sir J. L. Pennefather, K.C.B.	5	0	0
Lieut. Gen. Cameron, K.C.C.I.	5	0	0
Lieut. Gen. E. F. Gascoigne	5	0	0
Major Gen. T. Marten, K.H.	5	0	0
Major Gen. the Hon. Sir James Yorke Scarlett, K.C.B.	20	0	0
Major Gen. Sir T. A. Larcom, K.C.B.	10	0	0
Major Gen. Sir E. Lugard, K.C.B.	10	0	0
Major Gen. Charles Warren, C.B.	5	0	0
Major Gen. Eyre	5	0	0
Major Gen. Sir Alex. Tulloch, K.C.B.	7	7	0
Major Gen. Lawrenson	10	0	0
Major Gen. the Lord F. Paulet, C.B.	10	0	0
Major Gen. C. Stuart	5	5	0
Major Gen. Sir Fred. Abbott, C.B.	2	2	0
Major Gen. Sir R. Vivian, K.C.B.	5	5	0
Major Gen. Norcliffe, K.H.	5	0	0
Major Gen. Bloomfield	5	0	0
Major Gen. J. R. Crawford	5	5	0
Major Gen. the Hon. G. F. Upton, C.B. M.P.	10	0	0
Major Gen. the Hon. Arthur Upton	10	0	0
Major Gen. Lawrence, C.B.	10	0	0
Major Gen. C. C. R. Hay	5	0	0
Major Gen. J. W. Angerstein	10	10	0
Major Gen. Dupin	5	0	0
Major Gen. F. H. Seymour	5	0	0
Major Gen. Foster, R.E.	5	0	0
Major Gen. W. N. Hutchinson	2	2	0
Major Gen. the Hon. A. Dalzell	3	0	0
Brig. Gen. Haly, C.B.	5	5	0
Col. the Hon. Percy Herbert, C.B.	10	0	0
Col. the Hon. W. P. Talbot	5	0	0
Col. Wilbraham, C.B.	5	0	0
Col. J. H. Lefroy, R.A.	5	0	0
Col. G. A. Maude	5	0	0
Col. W. M. S. Macmurdo	1	0	0
Captain Crawford Caffin, R.N. C.B.	5	0	0
Col. Sir Thomas Troubridge, Bart. C.B.	5	0	0
Col. Sidney North, M.P.	10	10	0
Col. W. B. Higgins	2	2	0
Lieut. Col. the Hon. C. H. Lindsay.	1	1	0
Lieut. Col. Heaton	1	0	0
Major Deshon	1	0	0
Rev. G. R. Gleig, Chaplain General	10	0	0
J. B. Gibson, Esq. M.D. C.B.	10	0	0
The Duke of Buccleuch, K.G.	100	0	0
The Marquis of Lansdowne, K.G. (in addition to £100 sent to the Salisbury Fund)	25	0	0
The Marquis of Bristol	25	0	0
The Marquis of Westminster, K.G. (in addition to £100 sent to the Charmouth Hospital)	50	0	0
The Marquis of Breadalbane	20	0	0
The Earl of Derby, K.G.	25	0	0
H. E. the Earl of Carlisle, K.G.	20	0	0
The Earl of Shaftesbury	10	0	0
The Earl of Tankerville	10	10	0
The Earl of Cowper	10	0	0
The Earl Stanhope	10	0	0
The Earl Spencer	50	0	0
The Earl of Clarendon, K.G.	30	0	0
The Earl of Carnarvon	25	0	0
The Earl of Malmesbury, G.C.B.	10	0	0
The Earl of Powis	100	0	0
The Earl of St. Germans, G.C.B.	50	0	0
The Earl of Ducie	10	0	0
The Earl De Grey and Ripon	100	0	0
The Earl Somers	25	0	0
The Earl of Lovelace	10	0	0
The Earl of Ellesmere	20	0	0
The Earl of Home	25	0	0
The Earl of Rosebery	10	0	0
The Earl of Southesk	50	0	0
The Earl of Meath	10	0	0
The Lord Burghley, M.P.	5	0	0
The Earl Grosvenor, M.P.	10	0	0
The Lord John Manners, M.P.	10	0	0
The Viscount Sydney	25	0	0
The Lord Stanley, M.P.	20	0	0
The Lord Elcho, M.P.	20	0	0
The Right Rev. the Lord Bishop of Oxford (in addition to £20 sent to the Salisbury Fund)	5	0	0
The Right Rev. the Lord Bishop of Salisbury (in addition to £25 sent to the Salisbury Fund)	5	0	0
The Lord Vernon	10	0	0
The Lord Digby	10	0	0
The Lord Northwick	10	0	0
The Lord Manners	10	0	0
The Lord Harris, K.S.I.	20	0	0
The Lord Hatherton	10	0	0
The Lord Cremorne	20	0	0
The Lord Ashburton	100	0	0
The Lord Dufferin and Claneboye, K.C.B.	15	0	0
The Lord Overstone	25	0	0
The Lord Belper	20	0	0
The Lord Ebury	20	0	0
The Lord Dunsany	5	0	0

	£	s.	d.
The Right Hon. the Speaker of the House of Commons	50	0	0
The Right Hon. Wm. Cowper, M.P.	10	0	0
The Hon. Arthur Kinnaird, M.P.	20	0	0
The Hon. F. Leveson Gower, M.P.	10	0	0
The Hon. H. B. W. Brand, M.P.	10	0	0
Col. the Hon. Douglas Pennant, M.P.	50	0	0
The Hon. John Ashley	10	0	0
The Hon. Geo. Denman, Q.C. M.P.	5	5	0
Rear Admiral the Hon. Sir Henry Keppel	1	0	0
The Right Hon. the Lord Mayor	10	10	0
The Right Hon. H. U. Addington	10	0	0
The Right Hon. Spencer H. Walpole, M.P.	10	10	0
The Right Hon. J. Stuart Wortley	10	10	0
The Hon. Mrs. Stuart Wortley	3	3	0
The Right Hon. T. S. Headlam, M.P.	10	10	0
The Right Hon. Edward Ellice, M.P.	25	0	0
The Right Hon. Henry Corry, M.P.	10	0	0
The Rt. Hon. Sir J. McNeill, G.C.B.	10	0	0
The Rt. Hon. H. A. Herbert, M.P.	20	0	0
The Right Hon. F. Peel, M.P.	10	0	0
The Vice-Chancellor Sir Wm. Page Wood	25	0	0
The Solicitor-General	50	0	0
Sir Stephen Glynne, Bart.	5	0	0
Sir Geo. Chetwynd, Bart.	10	0	0
Sir William Alexander, Bart.	10	0	0
Sir Walter James, Bart. and Lady James	50	0	0
Sir Harry Verney, Bart. M.P.	10	10	0
Sir John V. B. Johnstone, Bt. M.P.	10	0	0
Sir Francis Goldsmid, Bart. M.P.	50	0	0
Sir Arthur C. Magenis, K.C.B.	10	0	0
Sir Benjamin Hawes, K.C.B.	5	5	0
Sir Thomas Phillips	5	0	0
Sir John Kingston James	2	2	0
Sir Richard C. Kirby, C.B.	10	10	0
Sir James Clark, Bart. M.D.	10	0	0
Sir Wm. G. Armstrong	10	0	0
Sir Roderick I. Murchison	10	10	0
Sir Ranald Martin	5	5	0
Sir Joseph Paxton, M.P.	10	0	0
The Count P. E. de Strzelecki, C.B.	10	0	0
Samuel Petrie, Esq. C.B.	5	5	0
Dr. McWilliam, C.B. R.N.	1	1	0
David Salomons, Esq. Ald. M.P.	10	0	0
George William Hope, Esq. M.P.	21	0	0
T. W. Evans, Esq. M.P.	10	0	0
Wm. Scholefield, Esq. M.P.	10	0	0
Chas. Salisbury Butler, Esq. M.P.	10	10	0
Thomson Hankey, Esq. M.P.	20	0	0
T. G. Baring, Esq. M.P.	25	0	0
J. Milnes Gaskell, Esq. M.P.	10	10	0
George Grenfell Glyn, Esq. M.P.	10	10	0
C. W. Packe, Esq. M.P.	10	10	0
Robert Hanbury, Esq. M.P.	10	10	0
Henry Ker Seymer, Esq. M.P.	5	0	0
Western Wood, Esq. M.P.	5	5	0
H. Gerard Sturt, Esq. M.P.	5	0	0
R. Monckton Milnes, Esq. M.P.	10	0	0
Messrs. N. M. Rothschild and Sons	50	0	0
Messrs. Hoare	100	0	0
J. Scott Robinson, Esq. War-Office	5	5	0
The Officers and others in the Purveyor-in-Chief's Department, War-Office—one day's pay	36	2	4
Yard Eastley, Esq. Paignton, Devon	2	2	0
S. C. Hall, Esq. F.S.A.	3	3	0
Ernest Hart, Esq.	5	5	0
Dr. Williams, F.R.S. (in addition to £10 sent to the Salisbury Fund)	40	0	0
W. H. Bodkin, Esq.	3	3	0
Benjamin Edgington, Esq.	5	5	0
Lieut. Colonel Capper	5	5	0
J. H. Gordon, Esq.	1	0	0

	£	s.	d.
W. Pilkington, Esq.	5	5	0
Henry Currie, Esq.	50	0	0
H. Barnard, Esq.	5	5	0
Henry Roberts, Esq. F.S.A.	1	1	0
T. S. Cowie, Esq.	5	0	0
Edmund Wilder, Esq.	5	5	0
John Wallace Hozier, Esq. Cornet, Royal Scots Greys	10	0	0
Eustace Meredith Martin, Esq.	3	0	0
C. W. Lancaster, Esq.	2	2	0
G. D. Ramsay, Esq.	5	0	0
T. F. Wetherell, Esq.	1	1	0
Travers Twiss, Esq. D.C.L. Q.C.	10	0	0
Lady Inglis	1	1	0
W. G. Prescott, Esq.	21	0	0
Surgeon Wyatt (Coldstream Guards)	5	0	0
Miss Gertrude Knollys	1	1	0
W. T. Haly, Esq.	5	0	0
Rev. John Peat, M.A.	0	10	6
Francis Robert Bonham, Esq.	5	0	0
Henry C. Roberts, Esq.	5	0	0
Henry Thomas Hope, Esq.	20	0	0
William Bowman, Esq. F.R.S.	5	5	0
G. L. Prendergast, Esq.	1	1	0
J. L. Parsey, Esq.	1	1	0
Captain Goddard	1	1	0
S. D. Sassoon, Esq.	5	0	0
Captain Dyott	0	10	6
Raikes Currie, Esq.	21	0	0
T. B. Parker, Esq.	1	1	0
W. H. Burrell, Esq.	5	0	0
J. T. Hammack, Esq.	1	1	0
Capt. R. P. Oldershaw	1	1	0
J. M. Maynard, Esq.	7	0	0
T. T. Wing, Esq. Bedford	2	0	0
Thos. Dyke Acland, Esq.	5	0	0
Nathaniel Basevi, Esq.	2	2	0
Rev. Arthur Martineau	1	1	0
W. S. Dugdale, Esq.	20	0	0
Miss Florence Nightingale (in addition to £20 sent to the Salisbury Fund)	30	0	0
H. H. Gibbs, Esq. (in addition to £100 sent to the Salisbury Fund)	25	0	0
Capt. Gibbs, 2d (Queen's Royal) Regiment	5	5	0
T. L. Ward, Esq.	10	0	0
Admiral Meynell	10	0	0
R. F. Burnett, Esq.	21	0	0
Fred. J. Nichol, Esq.	21	0	0
Charles Mills, Esq.	10	10	0
W. Gladstone, Esq.	5	5	0
W. Farr, Esq. M.D. F.R.S.	1	1	0
Wm. Jones Loyd, Esq.	10	10	0
Capt. C. B. Piers	2	2	0
R. R. Newman, Esq.	3	3	0
Wm. Gibbs, Esq.	50	0	0
Alfred Leggatt, Esq.	5	0	0
Dr. Sutherland	5	0	0
The Rev. H. G. Henderson	1	1	0
T. G. Balfour, Esq. M.D. F.R.S.	5	5	0
Alexander Grant, Esq.	1	0	0
Rev. Fitzherbert A. Marriott	2	0	0
Capt. Douglas Galton, R.E.	10	10	0
John Noble, Esq.	10	10	0
James W. Farrer, Esq.	5	0	0
Miss Bailward	20	0	0
Mrs. Hamilton	10	0	0
Vice-Admiral Roberts Gawen (in addition to £105 sent to the Salisbury Fund)	5	0	0
Burton Borough, Esq. (in addition to £50 sent to the Salisbury Fund)	5	0	0
Mrs. Burton Borough (in addition to £10 sent to the Salisbury Fund)	1	0	0
W. F. Nightingale, Esq.	10	0	0
G. C. Legh, Esq.	10	0	0

	£	s.	d.
J. Stewart Hodgson, Esq.	10	10	0
The Rev. J. M. Lewes	1	0	0
Rev. P. Riordan, R.C.C.	5	0	0
George Foggo, Esq. Bombay	5	0	0
W. A. Shaw, Esq.	3	3	0
Charles Hammersley, Esq.	10	10	0
S. K. Salting, Esq.	10	0	0
Charles Telford, Esq.	5	0	0
R. H. Granville, Esq.	1	1	0
R. M. Skinner, Esq.	5	0	0
Wm. Rathbone, Esq.	25	0	0
Wm. Rathbone, jun. Esq.	25	0	0
E. M. C.	2	2	0
Miss F. Cole	1	0	0
Collected by the Officers of the Medical Department at Chatham, by Lieut. Colonel Evans Gordon, A.D.C.:—			
Deputy Inspector Gen. Gommde	2	2	0
Deputy Inspector Gen. Longmore	2	2	0
Deputy Inspector Gn. Maclean, M.D.	2	2	0
Professor Parkes	5	0	0
Professor Aitken	1	11	6
Surgeon Major J. C. Dempster, M.D.	1	4	0
Assistant Surgeon Philip Frank	1	1	0
Surgeon Major Maclean	1	1	0
Surgeon Major Summers	1	1	0
Dr. Macdiarmid, Staff Surgeon	0	10	0
Wm. Alex. MacKinnon, Staff Assist. Surgeon	1	1	0
H. Walker, Staff Assist. Surgeon	0	10	0
Henry Macarthur, Staff Assist. Surgeon	0	10	0
E. J. Hifferman, Assist. Surgeon	0	11	0
J. G. Killet, Staff Assist. Surgeon	0	11	6
A Macintyre, Assist. Surgeon	0	10	0
John Warren, Staff Assist. Surgeon	0	10	0
Staff Surgeon Barrow	1	1	0
T. Fitz Gerald, Esq.	0	11	6
R. White, Esq.	0	10	0
Robt. Scott, Staff Assist. Surgeon	0	11	6
M. F. Jones, Staff Assist. Surgeon	0	11	6
C. Dempster, Staff Assist. Surgeon	0	11	6
P. Davidson, M.D. Staff Assist. Surg.	0	11	6

	£	s.	d.
Messrs. F. and W. Willis	1	1	0
Thos. Newman Hunt, Esq.	10	10	0
Harcourt Johnstone, Esq.	2	0	0
Master Herbert Plesse	1	1	0

Subscriptions will be received by the following Bankers:—

CITY.

MESSRS. CURRIE & CO. Cornhill.
MESSRS. PRESCOTT, GROTE & CO. Threadneedle Street.
MESSRS. SMITH, PAYNE & SMITH, Lombard Street.
MESSRS. GLYN, MILLS & CO. Lombard Street.

WEST END.

MESSRS. COUTTS & CO. Strand.
MESSRS. HOARE, Fleet Street.
MESSRS. RANSOM, BOUVERIE & CO. 1, Pall Mall East.

J. STANDISH HALY, *Secretary.*

4, ST. MARTIN'S PLACE, TRAFALGAR SQUARE,
March 17th, 1862.

London: R. Clay, Son, and Taylor, Printers.

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Statement

REPORT

ON THE STATE OF

THE ARMY MEDICAL OFFICERS' BENEVOLENT SOCIETY,

Laid before the Fortieth Annual General Meeting at the Thatched House Tavern, St. James's Street,

ON SATURDAY, THE 25TH DAY OF MAY, 1861.

W. H. JUDD, Esq. Surgeon-Major, in the Chair.

Statement of the Receipts and Expenditure from 1st of January to the 31st of December, 1860.

Dr.

1860.	£.	s.	d.
To Balance brought forward	1,489	2	8
.. Donations	32	18	0
.. Subscriptions	54	11	0
.. Half-year's Dividend on £14,840 12s. 6d. 3 per cent. Consols, less Income Tax, 241s. 1d.	210	11	1
.. To ditto, on £15,394 12s. 10d. less Income Tax 198s. 8d.	228	9	8
	£2,015	12	5
To Balance brought forward	£418	10	5

Cr.

1860.	£.	s.	d.
By Donations as per printed Report of 1860	525	0	0
.. Secretary's Salary	50	0	0
.. Printing, Postage, Books, and Stationery	14	0	0
.. Investment in the 3 per cent. Consols, producing £1,054 6s. 4d. Stock, (@ 94¾, including Brokerage	1,000	0	0
.. Refund of Building Subscriptions to Paymaster J. A. Pope, 67th Foot	2	2	0
.. Ditto to the Executors of Assistant Surgeon C. N. English, 84th foot	3	0	0
.. Ditto, ditto, of Surgeon Dwyer, 14th Foot	3	0	0
.. Balance carried forward	418	10	5
	£2,015	12	5

We certify that we have carefully examined this Account for 1860, and that we have reason to believe the same correct. The Vouchers have been produced for the Expenditure, in accordance with the sums granted to the Individuals at the General Meeting in May, 1860.

(SIGNED) J. A. BOSTOCK, Surgeon Major, THOS. HUNTER Dep. Insp. Gen. } Auditors, 23rd April, 1861.

A List of Applications in the present year, viz., 1861, was then brought before the Meeting: and each case having been separately considered, it was resolved, That the Meeting approve and confirm the proposed Donations, recommended by the Committee of Management, to the following Applicants, viz.

	£	s.	d.
The 5 Orphans of Surgeon D. O. Davies	40	0	0
The 3 Orphans of Staff Surgeon N. O'Connor	30	0	0
The 3 Orphans of Staff Surgeon W. M. Ford	20	0	0
The Orphan of Assistant Surgeon Sheils 67th Foot	15	0	0
The Orphan of Staff Surgeon G. H. Reade	8	0	0
The 2 Orphans of Surgeon R. R. Dowse 70th Foot	20	0	0
The 3 Orphans of Assistant Surgeon T. B. Backhouse	30	0	0
The 5 Orphans of Surgeon J. M. Drysdale 33rd Foot	20	0	0
The Orphan of Surgeon G. P. Purdon 32nd Foot	12	0	0
The Orphan of Surgeon J. Russell 38th Foot	18	0	0
The 2 Orphans of Assistant Surgeon D. Lucas 51st Foot	10	0	0
The 2 Orphans of Surgeon A. B. Cleland 69th Foot	15	0	0
The Orphan of Staff Assistant Surgeon A. R. Ridgeway	10	0	0
The Orphan of Sir James Pitcairn, M.D.	30	0	0
The 5 Orphans of Staff Surgeon J. P. Trench	30	0	0
The Orphan of Surgeon C. C. H. Grant, R.N.C.	10	0	0
Carried forward	£325	0	0
Brought forward	325	0	0
The 5 Orphans of Dep. Insp. Gen. W. C. Cruickshank	15	0	0
The Orphan of Surgeon J. C. Coghlan 76th Foot	10	0	0
The 2 Orphans of Surgeon N. Dartnell 53rd Foot	30	0	0
The 4 Orphans of Staff Surgeon J. F. Trigance	15	0	0
The 3 Orphans of Assistant Surgeon R. B. Gahan 9th	10	0	0
The Imbecile Orphan of Staff Surgeon John	10	0	0
The Orphan of Purveyor's Clerk Collier	5	0	0
The 2 Orphans of Staff Surgeon J. Moffit	10	0	0
The Orphan of Purveyor J. Stoodley	10	0	0
The Imbecile Orphan of District Surgeon F. Coull	10	0	0
The 4 Orphans of Staff Surgeon Hoffman	25	0	0
The 8 Orphans of Surgeon S. T. Todd	30	0	0
The Orphan of Deputy Inspector Sweeny	15	0	0
Total	£513	0	0

DONATIONS OF FIVE POUNDS AND UPWARDS RECEIVED SINCE LAST MEETING.

	£	s.	d.
Dr. Andrew Fergusson, Inspector General	10	0	0
Dr. Jno. Clarke, Deceased	10	0	0
Dr. Linton, C.B., Inspector General	10	0	0
Lady M'Grigor (Annual)	5	5	0
Surgeon Major Williams	5	0	0
The Apothecaries' Company (Annual)	5	5	0

The thanks of the Meeting were then presented to the Chairman, Mr. W. H. JUDD, when the Meeting separated.

THIS SOCIETY WAS INSTITUTED IN MAY, 1820.

PRESIDENT.

Dr. JOSEPH SKEY, M.D., Inspector General.

VICE-PRESIDENTS.

Sir ANDREW SMITH, K.C.B. *Retired Director General.* | Sir JOHN HALL, K.C.B. Inspector General. | W. H. JUDD, Esq., Surgeon Major.

TRUSTEES.

Sir ANDREW SMITH, K.C.B. | Dr. A. STEWART, Inspector General. | JOSEPH HARRINGTON, Esq.

BANKERS.

Sir C. CHARLES R. M'GRIGOR, Bart., and WALTER M'GRIGOR, Esq. 17, Charles Street, St. James's.

WHO WILL RECEIVE SUBSCRIPTIONS.

COMMITTEE FOR 1861.

A. S. BOSTOCK, Esq. Surgeon Major | THOMAS COTTON, Esq. Staff Surgeon, H.P. | Dr. CARSON, Staff Surgeon Major.
Dr. T. G. LOGAN, Inspector General | Dr. HENRY DAVIES, Surgeon, H.P. | GIDEON DOLMAGE, Esq. C.B. Staff Surgeon, H.P.

AUDITORS.

Dr. THOMAS HUNTER, Dep. Ins. Gen. | J. G. FITZGERALD, Esq. Staff Surgeon.

SECRETARY.

GEORGE SOMERS CLARKE, Esq. 3, Bedford Place, Russell Square.

N.B.—Any error in the following List will be readily corrected on being notified to the Secretary.

	Donations £	s.	d.	Annual £	s.	d.
Mrs. James Arthur....	10	10	0			
Mrs. J. J. Bigsby......	10	10	0			
Mrs. Borland	10	10	0			
Mrs. Bruce	50	0	0			
Miss Burdett Coutts ..	10	10	0			
Mrs. Charles Collier ..	8	8	0			
Mrs. Cowen	5	0	0			
Mrs. A. J. M. Connell..	5	0	0			
Mrs. Cross	10	0	0			
Mrs. John Davey	5	0	0			
Lady Fellowes	5	0	0			
Mrs. Ford............	5	5	0			
Mrs. Thomas Gunning	10	10	0			
Mrs. Joseph Harrington	5	5	0			
Mrs. Hadaway	5	0	0			
Mrs. Robert Hartle ..	5	0	0			
Mrs. Summers Higgins	10	0	0			
Mrs. Josephine Higgins	5	0	0			
Mrs. John Howell	10	10	0			
Mrs. Charlotte Howell	5	5	0			
Mrs. David Maclagan..	5	5	0			
Lady Meade..........	5	5	0			
Mrs. Charles Maclean	5	0	0			
Mrs. Alexander Melvin	5	0	0			
Miss Pollock	5	5	0			
Mrs. Isaac Robinson..	10	10	0			
Mrs. Sievwright	5	0	0			
Lady Smith	5	5	0			
Mrs. E. Starkie	5	0	0			
Mrs. Strattan	5	5	0			
Lady Tierney	10	0	0			
Mrs. Tudor	10	0	0			
Mrs. Edward Tegart ..	10	10	0			
Mrs. John Thomson ..	10	10	0			
Miss Warren	21	13	4			

Honorary Member.

THOMAS ARTHUR STONE, Esq.

The following List includes certain Donations intended for the Museum and Library Building Fund, but were ultimately given by the respective Donors to the Benevolent Society.

	Donations £	s.	d.	Annual £	s.	d.
Apothecaries, the Worshipful Society of				5	5	0
Abercrombie, John, Surgeon H.P..............	5	5	0			
Alexander, Archibald, Surgeon 4th Light Dgns.	10	0	0	1	1	0
Allen, Robert, Surgeon 17th H.P.				1	1	0
Anderson, Thomas, Surgeon H.P..............	10	10	0			
Anderson, A., M.D., Surgeon H.P.	5	5	0	1	1	0
Anderson, G., Surgeon Major................	5	0	0	1	1	0
Anderson, R. C., Surgeon Major, 13th Dragoons	3	0	0			
Annesley, John, Esq., H.E.I. Company's Service	10	10	0			
Atkinson, T., M.D., Deputy Inspector General	8	16	0			
Barker, F. O., Staff Surgeon	19	9	6	1	1	0
Barry, William, M.D., Dep. Inspector General	17	5	0			
Barry, James, M.D., Deputy Inspector General	13	0	0			
Bartley, John, M., M.D., Surgeon 1st Dragoons	4	4	0			
Bassano, F. Matthias, Apothecary to the Forces	5	5	0			
Battersby, Dr., Deputy Inspector General	2	2	0			
Bawtree, E. W., Staff Surgeon	5	0	0			
Bell, William, M.D., Inspector General	15	10	0			
Berry, Titus, Staff Surgeon H.P.	10	10	0			
Bleck, W. T., Surgeon 11th	3	0	0			
Bone, G. F., Surgeon Royal Artillery	1	1	0			
Borland, James, M.D., Inspector General, H.P.	21	0	0			
Bostock, I. A., Surgeon Major	3	0	0			
Boyes, C. R., Deputy Inspector General	.		.	1	1	0
Brodie, Sir B. C., Bart.	20	0	0			
Brown, Frederick, M.D., Surgeon H.P.	13	0	0			
Browne, Alexander, M.D., Surg. 37th Regt. H.P.	31	10	0	1	1	0
Browne, John, C., H.P.	3	0	0			
Browne, Dr. G., Guards, Surgeon Major H.P...	5	0	0			
Burrell, Dr. William H., Staff Surgeon	10	0	0			
Burton, E. I., Surgeon Major	21	0	0			
Cahill, Alexander, Surgeon H.P.	.		.	1	1	0
Campbell, James, Surgeon 28th H.P.	10	10	0			
Campbell, N. S., M.D., Staff Surgeon 2nd Class	5	5	0			
Carnegie, John, M.D., Surgeon H.P.	52	10	0			
Carr, J. K., Surgeon 32nd Foot	3	0	0			
Carroll, James, Surgeon 9th Foot	3	0	0			
Cavet, James, Surgeon H.P.	.		.	1	1	0
Cay, C. V., Coldstream Guards	3	0	0			
Chalmers, W. K., Surgeon 19th	6	0	0			
Chalmers, J. W., Surgeon Major 35th	3	0	0			
Chambers, J. W., M.D., Surgeon Major 35th ..	10	0	0			
Chapman, J. S., Deputy Inspector General	5	5	0			
Clarke, George Somers, Secretary............	.		.	1	1	0
Coghlan, John, Surgeon, 86th H.P	25	5	0			
Collier, Charles, Dep. Inspector General, H.P.	5	5	0			
Collins — Surgeon 2nd West India Regiment..	5	5	0	1	1	0
Connell, A. J. N., M.D., Surgeon H.P.........	10	0	0	1	1	0
Cotton, Thomas F., Staff Surgeon............	10	10	0	2	2	0
Crawford, T., Surgeon 18th	2	0	0			
Crisp, Henry, Surgeon 63rd	14	14	0			
Crocker, Alfred, Surgeon 3rd Foot	1	1	0			
Cowen, A. H., Surgeon, ...	5	0	0			
Cunningham, Alexander, Surgeon H.P.	5	5	0			
Currie, S., Deputy Inspector General	6	0	0			
Dane, R., M.D., Deputy Inspector General	.		.	2	2	0
Daun, Robert, M.D., Deputy Inspector General	17	17	0			
Davies, Dr. Henry, Surgeon H.P..............	.		.	1	1	0
Davy, John, M.D., Inspector General H.P.	10	10	0			
Dawson, William, M.D., Inspector General....	12	0	0	1	1	0
De Lisle, Dr., Surgeon Royal Artillery	4	8	0			
Dealy, Charles, Surgeon, 81st H.P.	26	5	0			
Dempster, John, M.D., Dep. Inspector General	21	0	0			
Dobson, William, Surgeon 15th Foot	5	0	0			
Dolmage, G., Deputy Inspector General H.P...	5	0	0			
Donald, John, Staff Surgeon	4	4	0	1	1	0
Dowse, R. R., Inspector General	.		.	1	1	0
Ducat, Charles, M.D.	12	0	0			
Dumbreck, D., C.B., Inspector General H.P. ..	5	0	0			
Eddie, W. C., Cape Rifle Regiment, H.P.......	10	0	0			
Executors of Sir C. M. Clark, Bart,, deceased..	20	0	0			
Ditto Dr. Gillkrest, Insp. Gen. do.	3	0	0			
Farrell, Charles, M.D., Inspector General	10	10	0			
Fergusson, Andrew, M.D., Inspector General ..	41	14	0			
Finnie, William, Surgeon H.P.	5	0	0			
Foaker, James, Esq., deceased, per Executors..	30	0	0			
Foaker, F., Surgeon Major	1	1	0			
Foaker, G. N., Surgeon	1	1	0			
Foaker, E., Surgeon........................	1	1	0			
Fox, Thomas, M.D., Deputy Inspector General	10	10	0			
Franklin, Henry, C.B., Inspector General	30	10	0			
Fraser, Peter, Surgeon H.P.	10	10	0			
Fraser, James, 2nd Life Guards..............	3	0	0			
Fraser, J. A., Deputy Inspector General	3	0	0			
Fraser, — 2nd Staff Surgeon................	1	0	0			
French, James, M.D., C.B. Inspector General..	25	0	0	1	1	0
Galbraith, G. T., Staff Surgeon	1	0	0			
Garrett, George, M.D., Surgeon H.P.	5	5	0	1	1	0
Gaulter, T. C., M.D., Staff Surgeon 2nd Class..	10	10	0			
Gibb, A., Surgeon Depot Battalion	6	5	0			
Gibson, James B., M.D., Director General	10	5	0	1	1	0
Gordon, C. A., M.D., Deputy Inspector General	2	12	0	1	1	0
Gordon, Archibald, C. B., M.D., Dep. Insp. Gen.	10	10	0			
Gordon, H. G., Surgeon 60th	3	0	0			
Gordor, Theodore, per Executrix	15	0	0			
Graham, John, Apothecary to the Forces......	.		.	1	1	0
Grant, J., Staff Surgeon	5	5	0			
Grattan, C., Staff Surgeon H.P..............	5	0	0			
Griffith, John, Staff Surgeon H.P.	10	0	0	1	1	0
Gulliver, George, Surgeon Royal Horse Guards	5	5	0			
Hadaway, S. M., Deputy Inspector General....	7	12	0	1	1	0
Hair, Archibald, M.D., Surg. H.P., R. H. Guards	10	10	0			
Hall, Sir John, K.C.B., M.D., Inspector General	7	7	0	1	1	0
Harrington, Joseph, Purveyor	.		.	1	1	0
Harrington, Sydney, Purveyor	.		.	1	1	0
Hartle, Robert, Deputy Inspector General	10	10	0	1	1	0
Hefferman, N., M.B., Surgeon 11th	6	10	0	1	1	0
Henderson, James, M.D., Deputy Insp. General	16	15	0			
Henderson, Duncan, M.D., Surgeon 5th Foot..	.		.	1	1	0
Higgins, Mr. Lewis	5	0	0			
Home, William, M.D., Surgeon Major	11	1	0			
Humfrey, W. C., Inspector General	4	16	0			
Hunter, Thomas, M.D., Dep. Insp. Gen. H.P.	10	0	0	1	1	0
Hunter, R. H. A., Staff Surgeon Major	6	6	0			
Huthwaithe, T. C., Batt. Surg. Gren. Grds. H.P.	8	5	0			
Ingham, C. T., Surgeon	15	14	0			
Innes, F. W., Esq., Surgeon 84th	10	0	0			
Jee, J. Esq., Surgeon 78th	4	4	0			
Johnson, Sir E., Surgeon 98th Foot, H.P.	5	0	0			
Judd, W. H., Surg. Major Scots Fusilier Guards	5	0	0			
Kirkland, Sir John, General Agent	10	10	0			
Knox, George, Surgeon H.P.	22	7	0			
Lamont, W. R., Surgeon	3	0	0			
Langley, W. L., M.D., Surgeon Major	.		.	2	2	0
Lawson, R., Deputy Inspector General........	7	12	0	1	1	0
Leigh, A., Surgeon 60th	5	0	0			
Lewins, R., Staff Surgeon	3	0	0			
Lewis, J. R. M., Surgeon Royal Artillery	3	0	0			
Lightbody, John, H.P........................	2	2	0			
Linton, W., C.B., Inspector General	21	0	0			
Lister, D., Surgeon 35th	10	0	0			
Lloyd, W., M.D., Surgeon H.P.	5	5	0			
Logan, T. G., M.D., Inspector General........	8	8	0			
Lorimer, William, Surgeon H.P. 49th	10	10	0			

	DONATIONS. £	s.	d.	ANNUAL. £.	s.	d.
Maclagan, David, M.D., Physician to the Forces	5	5	0			
Maclachlan, Dr., Deputy Inspector General, Chelsea Hospital	5	5	0			
Maclean, Dr. Charles, Inspector General	10	0	0			
Mahoney, Dr., Inspector General	10	10	0			
M'Diarmaid, J. D., Staff Surgeon	10	10	0	1	1	0
M'Grigor, Jas., Deputy Inspector General, H.P.	.		.	1	1	0
M'Grigor, Sir Charles, Bart., Army Agent	25	10	0			
M'Grigor, Lady	.		.	5	5	0
M'Grigor, Walter James, Esq.	5	0	0			
McIlree, L. D., Deputy Inspector General	6	0	0			
McKinnon, D. R., Surgeon	10	0	0			
McLean, G. G., H.P. 35th	3	3	0			
M'Munn, R. A., M.D., Staff Surgeon 1st Class	10	10	0			
M'Wharrie, R., Surgeon 59th	3	0	0			
Mandeville, E. T. W., Surgeon 7th Foot	2	2	0			
Mein, Pultney, Surgeon H.P.	10	0	0			
Melvin, Alexander, Inspector General	5	0	0	1	1	0
Menzies, Duncan, Deputy Inspector General	2	2	0	1	1	0
Mitchell, James, (late 48th Foot)	5	5	0			
Mockler, E., Deputy Inspector General, H.P.	6	0	0			
Moore, J., Esq., (late Surgeon 1st Life Guards)	20	0	0			
Moorhead, E., M.D., Surgeon 29th	8	0	0			
Mostyn, Thomas, Surgeon 27th	10	10	0			
Mouat, James, C.B., Deputy Inspector General	.		.	1	1	0
Mullins, J., Staff Surgeon Highland Regiment	3	0	0			
Murray, Denis, M.D., Staff Surgeon	30	0	0			
Murray, A. W., Staff Surgeon 2nd Class	5	0	0			
Murtagh, John, Surgeon 6th Foot, H.P.	15	0	0			
Neale, M., Surgeon 18th Dragoons	2	2	0			
Nevison, J. F., Surgeon H.P.	5	0	0			
Odell, Dr. William, Surgeon Major	2	2	0			
Paterson, J., Surgeon H.P.	16	0	0			
Pearson, R. A., M.D., Surgeon 87th	15	0	0			
Peile, R., M.D., Deputy Inspector General	10	10	0			
Perston, David, M.D., Surgeon	15	15	0			
Pickering, John, M.D., Royal Military College	5	5	0	1	1	0
Pollock, William, M.D., Surgeon H.P.	10	10	0			
Pyper, Robert, Surgeon, H.P.	5	5	0			
Rambaut, John, Surgeon Royal Canadian Rifles	2	10	0			
Reid, F., M.D., Surgeon 5th Foot	5	0	0	1	1	0
Richardson, S., Batt. Surgeon Scots Fusiliers	5	0	0			
Robertson, Peter, Surgeon to the Forces, H.P.	5	0	0			
Robertson, William, Staff Surgeon	5	0	0			
Roe, P. H., Surgeon Major	3	0	0			
Rogers, W. R., Surgeon H.P., 10th Hussars	5	0	0			
Ross, W. B., M.D., Assistant Surgeon H.P.	.		.	1	1	0
Sandham, B. L., Staff Surgeon	10	0	0			
Saunders, George, Assistant Surgeon 47th	.		.	1	1	0
Savory, John, Esq.	10	5	0			
Schembrie, J., Apothecary	1	18	0			
Scott, Daniel, M.D., Inspector General	30	0	0			
Sergeant, Thomas, per Sir J. Pitcairn	5	0	0			
Shortt, John, M.D., Deputy Inspector General	17	0	0	1	1	0
Sievewright, F., M.D., Staff Surgeon	5	5	0			
Sillery, R., Staff Surgeon	4	16	0			
Sinclair, J. H., M.D., Surgeon 51st Regiment	5	0	0			
Skey, Joseph, M.D., Inspector General, H.P.	80	0	0	1	1	0
Smith, William, Surgeon 64th	10	5	0			
Smith, Sir Andrew, M.D., K.C.B.	—			1	1	0
Smith, H. F., Deputy Inspector General	12	0	0			
Smith, R., Staff Surgeon	2	0	0			
Smyth, R. D., Surgeon 14th Dragoons	15	0	0			
Somerville, Wm., M.D., Pr. Ins. Ar. Med. Dep.	10	10	0	1	1	0
Spenser, R., Staff Surgeon, H.P.	15	15	0			
Stephenson, George A., Surgeon 3rd Dragoons	5	0	0			
Stewart, Arthur, M.D., Inspector General	21	0	0			
Stewart, Alexander, M.D., Inspector General	25	15	0			
Stewart, James, Surgeon Ceylon Corps	2	2	0			
Stewart, Joseph, Surgeon Major	6	0	0			
Stewart, J. E., Surgeon H.P.	7	12	0			
Stone, T. A., Esq.	36	15	0			
Swettenham, W. K., Surgeon	3	0	0			
Taylor, J. B., C.B., Inspector General	1	1	0			
Taylor, George, Deputy Inspector General	.		.	1	1	0
Thompson, Thomas, M.D., Inspector General	5	5	0			
Thorn, A., per Executor	5	0	0			
Tice, J. C. L., C.B., Deputy Inspector General	11	5	0			
Tighe, James Lowry, Surgeon H.P.	11	11	0	1	1	0
Wallace, W., H.P. 14th	10	10	0			
Wallace, William, Surgeon 14th Foot	.		.	1	1	0
Warren, J. L., M.D., Surgeon H.P. 7th Dragoons	5	5	0	1	1	0
West, Sir Augustus, M.D., Dep. Inspector Gen.	12	12	0			
White, Moses, Staff Surgeon H.P.	17	17	0			
Whyte, Charles, Inspector General H.P.	11	6	0			
Widmer, Christopher, Staff Surgeon	10	10	0	1	1	0
Wilkins, William M., Surgeon 41st	18	10	0			
Wilkins, H. M., Surgeon H.P.	8	16	0			
Winterscale, John, Surgeon 2nd Dragoons	5	5	0			
Wood, J. G., Surgeon Major	7	1	0	1	1	0
Woolriche, Stephen, Inspector General	21	0	0			
Wyer, John, Surgeon H.P.	21	10	0	1	1	0
Young, James, Surgeon 13th Dragoons	10	10	0			
Young, W. H., Surgeon 28th	30	0	0			

Printed by J. Miles & Co, 105, Wardour Street, Oxford Street,—W.

RULES AND REGULATIONS

OF THE

Army Medical Officers'

BENEVOLENT SOCIETY,

INSTITUTED 1820.

REVISED 1848.

London:

PRINTED BY T. WINN, 10, SUN STREET, BISHOPSGATE.

1848.

ARMY MEDICAL OFFICERS'

Benevolent Society.

PRESIDENT.

Sir CHARLES MANSFIELD CLARKE, Bart.

VICE-PRESIDENTS.

Dr. RENNY, Inspector General.
JOHN WARREN, Esq., Inspector General.
Sir JAMES FELLOWES, Inspector General.

TRUSTEES.

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Dr. GEORGE GREGORY.
Dr. A. STEWART, Deputy Inspector General.

BANKER.

C. R. M'GRIGOR, Esq., 17, Charles Street, St. James's.

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RULES AND REGULATIONS,

&c. &c.

CHAPTER I.

OBJECTS OF THE SOCIETY.

1. THE ARMY MEDICAL OFFICERS' BENEVOLENT SOCIETY shall consist of Commissioned Officers of the Medical Department of the Army, and such Honorary Members as they may appoint. It is instituted with the view of affording relief to those Orphans of Commissioned Officers of the Medical Department of the Army who may be left under circumstances of peculiar distress; or, who may be enabled, by a small addition of income, at a certain period of their lives, to procure a better education than their limited means would otherwise admit.

2. Orphans, whose Mothers are still living, will be admitted to participate in the benefits of the Fund, provided the Mother's income be inadequate to their education; but Orphans who have lost both Parents, will, if otherwise destitute, be considered to have a claim superior to those whose Mothers are still living.

3. Where there is an equality of claim, the preference will be shown to those Orphans, whose Fathers contributed to the Fund.

4. The objects of the Society's bounty will be *selected* from among those whose claims are the strongest; but it is expressly provided that relief to Orphans is not to extend beyond the age of 21, except in special cases of mental or bodily decrepitude, when the Committee are authorized to recommend to the General Meeting to afford relief from the Fund, provided the total amount of the sums so recommended and awarded, does not exceed, in any one year, the sum of £50.

CHAPTER II.

MODE OF RAISING THE FUND.

1. The Army Medical Officers' Benevolent Fund is raised and supported by means of Donations, Voluntary Subscriptions, and Legacies.

2. Donations will be thankfully received from all Officers of the Army, whether belonging to the Medical Department, or otherwise; and from all persons whatsoever, who may be desirous of promoting the benevolent objects of the Society.

3. The names of all Donors to the Fund will be carefully registered in a book kept for that purpose, and noticed in the printed Report of the proceedings.

4. An Annual Subscription of One Guinea is the lowest which entitles the Subscriber to any share in the management of the Fund: the same continued or made up at any time to Fifteen Guineas, or Ten Guineas given at once, will entitle the Donor to such privilege for life, subject to the provision of Article 1, Chapter III.

5. It is hoped that the Opulent in the Department will follow the good example of many of their deceased brethren, and bear in remembrance this Society in their testamentary dispositions. To give permanency to their benevolent intentions, it is hereby expressly provided that all Legacies whatsoever are to be immediately added to the *accumulating Fund.*

6. The funded property of the Society to be considered inviolate. The annual interest thereof, together with such proportion of the Donations and Subscriptions as the Committee may suggest, and the General Meeting sanction, to be distributed annually. All surplus receipts to be forthwith added to the funded stock of the Society.

CHAPTER III.

MANAGEMENT OF THE FUND.

1. The management of the Fund is vested in the Life and Annual Subscribers, who will hold a meeting in the month of May in each year, for appointing Officers, and regulating the concerns of the Society. It is provided, however, that none but those who are serving, or have served, in the Medical Department of the Army, shall be entitled to any share in the management and regulation of the Society's affairs.

2. The immediate direction is entrusted to a President, Vice-Presidents, three Trustees, a Committee (elected from among the ordinary Members), and a Secretary.

3. The President, Vice-Presidents, and Trustees, are elected for life, and are officially Members of the Committee. The other Members of the Committee will be chosen annually, at the General Meeting, in May, from among such of the ordinary Members as may then be resident in, or in the immediate neighbourhood of, London.

4. The Committee to consist of seven, of whom two shall go out annually by rotation.

5. At the Annual General Meeting, two Auditors (not Members of the Committee) to be appointed for examining and reporting on the accounts of the ensuing year.

CHAPTER IV.

DISTRIBUTION OF RELIEF.

1. The relief afforded by this Fund is to be in the form of Donation, and never in that of Annuity, even for a limited number of years.

2. The amount of relief to be afforded in each particular instance is to be judged of annually, and proportioned to the pe-

culiar circumstances of the case, the extent of means of which the Society may be possessed, and the number of claimants.

3. Certificates of Claims to be sent in on or before the first of March in each year; in default of which no relief can be afforded by the Fund, except under the circumstances of peculiar urgency specified in Article 5, Chap. 5.

4. The distribution of relief will take place annually, at the General Meeting of Subscribers, in the month of May.

5. The amount of relief granted in each case by the Annual General Meeting, to be paid either in one sum, or by half-yearly or quarterly instalments, at the discretion of the Committee.

CHAPTER V.

OF THE COMMITTEE.

1. The Committee, appointed as aforesaid (Chap. III), are to conduct the concerns of the Fund, subject, however, at all times, to the controul of the General Meeting.

2. The duty of the Committee is to inquire into the correctness of the Statements put forth in the respective Certificates of Claims; to report thereon in writing to the Annual General Meeting; and to recommend to the General Meeting, the amount of relief proper to be afforded in each case. It is the duty of the Committee also to see that the Donations, Subscriptions, and Legacies are funded, or otherwise applied, according to the present Regulations, or the Instructions of a General Meeting; to draw up Annual Reports of the state of the Fund; and, in general, to take such measures as may appear calculated to promote the interests of the Fund.

3. The Committee are to meet for these purposes on the first Thursday in January, April, July, and October, in each year, at two o'clock.

4. At all Meetings of the Committee, three constitute a quorum.

5. In cases of urgent and unforeseen distress, the Committee to have the power of issuing small sums on their own authority; provided always, that the total amount of the sums so appropriated does not in any one year exceed Ten Pounds.

6. The Chairman of the Committee has a casting vote, when the votes are equal, independent of his vote as a Member of the Committee.

7. The President, or any two of the Committee, to have the power of calling an extraordinary Meeting of the Committee, at any time, stating in the summons the object of the Meeting.

CHAPTER VI.

OF THE SECRETARY.

1. The Secretary is to enter into a book, the names of all Donors and Subscribers, with the amount of the sums respectively paid by them, and the dates of such payment.

2. He is to attend all Meetings of the Committee, as well as all General Meetings, and to issue such summonses for the same, as may be requisite.

3. He will follow such instructions as he may receive from the Committee, and pay, on the 1st of every month, or oftener, into the Banker's hands, all monies received by him.

4. He will take receipts for all monies disbursed by him, and enter the same in a book, which is at all times to be open to the Members of the Committee and Auditors, for examination.

CHAPTER VII.

OF THE GENERAL MEETINGS.

1. Due notice of the Annual General Meeting is to be given by the Committee, at least one month previous to its being held.

2. At this Meeting a full statement of the Income and Expenditure of the Society is to be submitted, together with the Report of the Auditors, and the recommendation of the Committee, both as to the number of applicants for relief, and the extent of aid to be afforded in each case. These the General Meeting will subsequently consider and determine upon.

3. A detailed Report of the Income and Expenditure of the Society, and of the proceedings of the General Meeting, together with a list of the Donors and Subscribers, and of the persons to whom relief has been awarded, to be afterwards printed for circulation.

4. At all General Meetings of the Subscribers to the Fund, a majority of the votes of those present is to determine the question, the Chairman having an additional or casting vote.

5. Gentlemen (not being Commissioned Officers of the Army) may be elected by the General Meeting as Honorary Members, on the recommendation of the Committee.

The Committee recommend to such Members of the Society as may be inclined to become Benefactors, by will, the following form:—

"*I give and bequeath to the President, Vice-Presidents, Treasurer, and*
"*Members of the Society for the benefit of Orphans of Officers of the*
"*Medical Department of the Army, in Trust, the Sum of*
"*which I desire may be paid out of my personal Estate, and applied to*
"*the purposes of the said Society.*"

N.B.—Devises on Houses or Lands, or Money charged on Land, or to be laid out in Land, are void by the Statute of Mortmain.

All Communications regarding the Fund, to be addressed to the SECRETARY.—Donations and Subscriptions may be paid to C. R. M'GRIGOR, Esq., Banker, 17, Charles Street, St. James's, and to the SECRETARY.

The Medical Staff Library
From the Author.

POLITICAL ECONOMY

OF

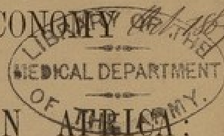
BRITISH WESTERN AFRICA;

WITH THE

REQUIREMENTS

OF THE SEVERAL COLONIES AND SETTLEMENTS.

(THE AFRICAN VIEW OF THE NEGRO'S PLACE IN NATURE.)



BEING AN

ADDRESS TO THE AFRICAN-AID SOCIETY.

BY

JAMES AFRICANUS B. HORTON,

M.D. EDIN.;

STAFF ASSISTANT-SURGEON OF H.M. FORCES IN WEST AFRICA; ASSOCIATE OF KING'S COLLEGE, LONDON; FOREIGN FELLOW OF THE BOTANICAL SOCIETY OF EDINBURGH; CORRESPONDING MEMBER OF THE MEDICAL SOCIETY OF KING'S COLLEGE, LONDON; FELLOW OF THE NOETIC SOCIETY OF EDINBURGH, &C., &C.

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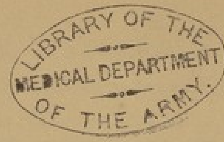

TO

LORD ALFRED SPENCER CHURCHILL,

CHAIRMAN OF THE AFRICAN-AID SOCIETY, VICE-PRESIDENT OF THE INSTITUT D'AFRIQUE, &c., &c.,

These Pages

ARE MOST RESPECTFULLY DEDICATED,

BY

HIS MOST OBLIGED AND HUMBLE SERVANT,

THE AUTHOR.

TO F. FITZGERALD, ESQ.,

SECRETARY OF THE AFRICAN-AID SOCIETY.

MY DEAR SIR,—Whilst economists and politicians, statesmen and philanthropists, are endeavouring to point out the Christian wants and political requirements of the natives of British West Africa, it will not be surprising to you should I now forward what, in the opinion of an African, are the chief political wants of this Coast, in conformity with the wish expressed by you in your letter to me, dated the 23rd July, 1864.

For the last six years I have made it one of my duties to study how the interest of the colonies, together with their material advancement, might be best promoted with as little expense as possible to the Home Government; and in availing myself of this opportunity of forwarding my conclusions in the form of an Address to the African-Aid Society, I must confess to a certain misgiving as to whether what I have stated about the political economy and requirements of British Western Africa does not fall short of what might be conceded with advantage to these countries and their peoples. I cannot help feeling a certain embarrassment in asking you to bring the contents of these pages before that Society, when I find that I am addressing those to whose wisdom and experience in political matters I have been accustomed to look up; but I feel re-assured by the consideration that, as the most accomplished audience is ever the most indulgent, they would detect and give the full value to every important suggestion which they may observe in the Address.

Lord Alfred Churchill, in a letter to the editor of the *African Times*, published in the August number, has advised the people of Africa to consider themselves as having the right, in common with other British subjects, to petition either directly to the House of Commons, or by memorial to Her Majesty, whose ears will never be closed to their just and reasonable prayer, whether the colour of their skin be what it may. The African-Aid Society and their journal have given the people of Africa great political liberty; they have made them to feel the power and capacity of action and forbearance, the non-existence of any obstacle that their will cannot overcome when they have the desire to act, as well as the entire absence of any superior power that would compel them silently to

suffer what is unjust when they feel a desire to proclaim their wrongs.

It will be necessary for the Government to be very circumspect in the selection of her officials for the Coast; and that the Governor-General, in particular, should be a man who possesses a happy tact and natural sagacity combined with experience, so as to hit the right course, since to him will be given the ground-plan of the future political Government; he should make it his first object to discover those salutary measures which are necessary, and endeavour to counteract those noxious influences which may sap the healthy action of the community; he must make himself perfectly acquainted with the internal affairs of each colony—its revenue and expenses, its commerce and agriculture—with the national character of the inhabitants of each section of the Government; he should form a correct judgment of the character of every prominent official in his Government; and he should possess a talent for comprehensive and rapid observations in the selection of fit instruments for different appointments.

It must be stated that in no part of the British colony on the Coast is the prejudice of colour so much exhibited as at present at Sierra Leone The existence of clanship is there carried to a fearful extent. During the Government of Colonel Stephen John Hill, he endeavoured, with no mean success, to break down that clanship which existed amongst the natives, and about which the Europeans complained so bitterly, and before he left there was an agreeable unity between all classes. *O si sic omnes!!* But at present there is a strong clanship amonst the Europeans, which is sanctioned and encouraged, and which has a most pernicious effect on the social wellbeing of the colony. The Governor-General should therefore be easily accessible to the prayers of all Her Majesty's subjects, and be ready to extend the same privileges to the educated natives which he gives to the educated Europeans, endeavouring to break down that prejudice of colour which, unhappily, is predominant at the seat of his Government.

I am, my dear Sir, your obedient servant,

AFRICANUS HORTON.

Bathurst, River Gambia, August, 1865.

POLITICAL ECONOMY OF WESTERN AFRICA.

THE hypothesis based on the ingenious demonstrative analogies of the manners, customs, and tenets of the inhabitants at present occupying this globe, as compared with those a few centuries ago, may be safely regarded as a truism—viz., that mankind by the knowledge of metallurgy and other useful arts emerge from a primitive state of barbarism, and have gradually brought to themselves the benefits of a civilised life. Of this primitive state or mythic epoch but little is furnished us in history, and very little is actually known; but from analogical references we are led to believe the speculative traditions of the ancient Romans,* that "mankind, as the state of political community now exists, advance from a rude and helpless state to the formation of political society;" and entirely disapprove of the Greek mythological legend, that "mankind emerge from a state of innocence and bliss."†

Bearing in mind the foregoing, it will be my province to prove the capability of the African for possessing a real political Government and national independence, and that a more stable and efficient Government might yet be formed in Western Africa, under the supervision of a civilised nation, in conformity with the present Resolution of the Committee of the House of Commons.

In viewing the map of West Africa, and tracing out those political communities which are not due to the agency of more civilised politicians, we affirm that there are amongst them fixed and established Governments, although rude and barbarous; that the obedience to the supreme power in many cases is implicit, the right of property is enforced by adjudicature; and, although the power of the supreme head has been used with extreme despotism, as in Dahomey and Ashantee, yet still it is as true a political Government as that of France or England. By nature the African is a social being, possessing the capacity of commanding and obeying, and that type of improvement which advances as the reason is cultivated, which are the essential elements both of a political Government and a political community; and therefore they bear no relation whatever to those gregarious species of animals—apes, monkeys, &c. — to which some fantastic writers have likened them.

* Æschylus, Prou. 451—515; Diod. i. 8; Lucian, Amore, c. 33, 34.
† Hesiod, Op. et Di. 109; Ovid, Met. i. 88—112.

Examining Western Africa in its entirety, we find it to be composed of a number of political communities, each ruled by a national Government, formed in many cases of distinct nationalities occupying determined territory; but some national communities are broken up into innumerable fractional sections, governed by rebel chiefs, or satraps; others depend upon a political body whose sovereign chief rules over life and property; and others, again, are under well-regulated civilised government. But in order to develop among these different nationalities a true political science, it is necessary that the inhabitants should be made acquainted with the useful arts, and the physical conditions which influence other more civilised and refined political Governments.

What, it may be asked, are the different forms of government now in existence on the West Coast of Africa? The two principal forms are the monarchical and the republican.

In the purely native community we observe the recognition of power, vested in a single individual, variously called by the different tribes, but to which we apply the name of *basileus*, or king; surrounded by a number of headmen, who pledge themselves to do his will. Some of these *basileus*, such as those of Ashantee and Dahomey, have implicit power over life and property, and therefore are held in dread by their subjects. Of the tribes who are governed by these autocrats we may well apply the language of Merivale,* when speaking of the Asiatic races, that "they acquiesced in their own immemorial despotisms to which they have been abandoned. To them the names of liberty and equality, invoked in turn by their neighbours, are unintelligible; their sympathies are centred always in men, and not in government. A desperate and successful warrior commanded all their devotions, and for them the foundation of laws lay in the bosom of the autocrat.

"Not being acquainted with letters, they have no history; successive events once out of sight are for ever lost; they pass away like the spectres in a phantasmagoria, leaving no other trace behind them than a dreamy recollection of some distant circumstances that had taken place. They satisfy the curiosity of their generation by the oral narration of legendary tales, heroic myths, &c., descriptive of deeds of wonders at an uncertain and undated antiquity, and which forms the only channel by which their thoughts can be transmitted from one country and one age to another. Not knowing anything of the useful arts, their Governments are feeble and unenterprising, and their military organization impotent and inefficient; amongst the higher classes in some of them the head wives occupy important positions in the domestic circle, whilst all the other women occupy a degraded position.

"Proper legislative science is entirely unknown to them; they possess no means by which a continuous and profitable revenue can be brought into their imperial coffers; no proper determina-

* History of the Romans under the Empire, Vol. ii. p. 141.

tion of political causes, and, consequently, no established principle which might be made to form a guide to the Legislature in the making of new laws or the alteration of old ones, and thus for ages they have shown no improvement in the executive administration; and possess no proper legal status, and no generalised principle of international law. There is an entire absence of any domestic history amongst them; by them a society is never contemplated, either in its constituent elements or mutual relations; in its private recesses or habitual intercourses. A fact, an anecdote, a speech, or remark, which would illustrate the condition of the common people, or of any rank subordinate to the highest, is considered too insignificant to be suffered to intrude upon a relation which concerns only grandees and ministers, thrones and imperial powers. Some towns there are which are governed entirely by chiefs, who exercise uncertain rule over the inhabitants—who are regarded more as a father of the community than a political head; they are not nomadic in their nature, but constitute themselves into a political society of the most primitive style."

In the Colonies the monarchial form of Government in substance is observed; the different political heads are English, French, Dutch, and Spanish. The French occupy Senegal, Grand Bassa, and the Gaboons; the Dutch, a portion of the Fantee Territory; and the Spanish, Fernando Po. It is not my intention here to touch on the political bearings of these several Governments on the Coast, except that in whose interest we are principally concerned—viz., the English, who occupy the Gambia, Sierra Leone, Cape Coast (or the greater part of the Gold Coast), and Lagos.

The republican form of Government is that found in the Liberian State; under the auspices of the Colonization Society of America, a colony of American negroes was formed, which was ruled according to the American Constitution. The subjects having proved their capacity for self-government, powers were vested in their hands, and they formed themselves into a Republic.

The Liberian Government had its trials to encounter, but they have proved that they are perfectly competent to carry on their own Government; and having mastered a great many of the vicissitudes and drawbacks which a Government brought to existence in the form in which they have been brought must expect to meet with, they bid fair to occupy an important place in regenerated Africa.

But it was necessary that they should have made limited scientific experiments on the subject-matter of many branches of their political science, not for the purpose of determining abstract truth, but of establishing every portion of their executive administration on a firm and healthy footing. Being a new political assembly, when once they have chosen the subject of their experimentation, they should gradually examine and note the true relation of each phenomenon as it presents itself, their true political

causation, and what influence, ordinary and extraordinary, it has on the body politic of the nation; for when once a practical mistake has been made which acts extensively on the institutions and affects their political economy, it acts like an "electric affinity with the rotten parts of the social fabric, and dissolves them by combination."

Thus the Liberian statesmen have not long ago fallen into a grave error in the practical experiment which they made in their financial department. The materials employed were sound and valuable, but they were not used with that due correction and allowances which are essential for material success. They issued out during one of their political crises a certain limited amount of paper currency which was easily redeemable by the Government. The political success of this provisional experiment operated so greatly on their better judgment that, instead of acting like the pilot steering a vessel through an unknown and dangerous channel, the Executive launched out an excessive number of this medium—the greenbacks become at a very great discount—the strength of the Government is tried—it finds itself incapable of supporting the crisis; it now becomes its weakest point, and like the mechanical aphorism, nothing is stronger than its weakest point, so they find that no effect of theirs is capable of preventing a crisis:—

Multa quæ nunc ex intervallo non apparent bellum aperiet. *

The merchants receive the notes from the people at a fearful discount, and then pay them to the Government for duty and taxes at their full nominal value; the specie is exported to foreign countries, none is to be found in the State exchequer; and all Government *employés* are paid in greenbacks.

The British portion of the Government of Western Africa is in a transition state, and it is Mr. Cardwell, Her Majesty's Principal Secretary of State for the Colonies, to whom we must now look as the guardian of the practical policy of the Colonies of Western Africa in its internal and foreign relations; and now that he has carried us through the distress, danger, difficulty, and doubts attendant on the late Parliamentary Committee,† every African who deserves to have his nationality based upon a stable footing, must regard him as the statesman, whom we might liken to the steersman at the helm of a ship, who, by his attentive and vigilant observations, will guide the national policy to a successful end, and we hope that before his term of office is expired he will see

* Livy, xxviii., 44.

† Select Committee of the House of Commons on Africa (Western Coast), nominated March 3, 1865: The Right Hon. E. Cardwell, Secretary of State for the Colonies; Mr. Chichester Fortescue, Under Secretary of State for the Colonies; Sir Francis Baring; Lord Stanley; Mr. Seymour Fitzgerald; Sir John Hay; Mr. Charles Buxton; Mr. W. E. Forster; Mr. Gregory; Mr. Cheetham; Mr. Cave; Mr. C. B. Adderley; with power to send for persons, papers, and records. Five to the quorum. Members subsequently added to the Committee: The Marquis of Hartington, Mr. Henry Seymour.—*African Times*, Vol. iv., p. 114.

erected on the foundation he may have laid down a superstructure worthy of the name of a Liberal Government.

The new laws and measures which the Government, according to the resolutions of their Committee,* are now about to enact, giving to the educated natives experience in the form of government, will be a most important step in the advance of African history, and must be regarded for the present as provisional and tentative experiments until confirmed by proofs of practical success. It will be the place of the executive authorities to watch carefully and cautiously its operation, reporting faithfully on its progress, so that correct data may be drawn from it, just as the report furnished to the American Colonization Society, which subsequently led to the investment of authority on the inhabitants, thus virtually giving them a nationality.

In order that these propositions may be operative and effective, it is necessary that a proper executive machinery should be provided to give that impulse to native industry—to encourage that habit of independence and business—to excite that interest amongst the inhabitants of each locality for public affairs and political education, which the are intentions of the majority of the members of the late Committee.

Those who have gone to such extremes in opposition to the views entertained by Mr. Cardwell,† and our worthy supporter,

* *Resolutions of the House of Commons Committee on Western Africa*:—

1. That it is not possible to withdraw the British Government wholly or immediately from any settlements or engagements on the West African Coast.

2. That the settlement on the Gambia may be reduced by M'Carthy's Island, which is 150 miles up the river, being no longer occupied; and that the settlement should be confined as much as possible to the mouth of the river.

3. That all further extension of territory, or assumption of government, or new treaties offering any protection to the native tribes, would be inexpedient; and that the object of our policy should be to encourage in the natives the exercise of those qualities which may render it possible for us more and more to transfer to them the administration of all the Governments, with a view to our ultimate withdrawal from all, except, probably, Sierra Leone.

4. That this policy of non-extension admits of no exceptions as regards new settlements, but cannot amount to an absolute prohibition of measures which, in peculiar cases, may be necessary for the more efficient and economical administration of the settlements we already possess.

5. That the reasons for the separation of West African Governments in 1842 having ceased to exist, it is desirable that a central Government over all the four settlements should be established at Sierra Leone, with steam communication with each Lieutenant Government.

6. That the evidence leads to the hope that such a central control may be established, with considerable retrenchment of expenditure, and, at the same time, with a general increase of efficiency.

7. That in the newly-acquired territory of Lagos, the native practice of domestic slavery exists still to a certain degree, although it is at variance with British law; and that it appears to the Committee that this state of things, surrounded as it is by so many local difficulties, demands the serious attention of the local Government, with a view to its termination as soon as possible.—*African Times*, Vol. v., p. 6.

† Speech in the House of Commons, Tuesday, February 21, 1865.

Lord Alfred Churchill,* and many others, as to run down the capacity of the African race, and liken them to the anthropoid apes, ought to know that the African, in common with the most enlightened people, may be animated with feelings of philosophical speculations; and this is proved in the existence of a written language amongst them, designed entirely by themselves. The origin of this idea, if their mythological legend is reliable, was from the wonder excited by some messengers of the Quiah tribe, carrying a letter from an educated person of a more civilised nation to an individual at a distance, the reading of which conveyed to him the information of what had taken place in their own town. Possessing clearly a philosophical turn of mind, they became curious to discover the contrivance which so struck their observation, and from that time began to put in writing on leaves and barks of trees the language of their country.

Under the above considerations it is necessary that we should premise that the framers of the ordinance regulating the form of Government should not expect to meet perfection in the working of their plans; since it is a well-known fact that no Government can be copied from a plan. Our Legislature, therefore, must receive with caution the report of the ill-disposed, who will herald any seeming failure in their scheme, and should reply to them in the words of Lord Holland: "Attempts to form a perfect constitution have uniformly failed, and those institutions have thriven best which have sprung out of the necessity of the occasion. Constitutions are, in fact, productions that can neither be created nor transplanted; they are the growth of time, not the invention of ingenuity; and to frame a complete system of government depending on habits of reference and experience, is an attempt as absurd as to build a tree or manufacture an opinion.

"The chief objection to a constitution complete in all its parts is, that in the course of the last twenty years the experiment has been tried under various circumstances, and among different people, and that in no one instance can it be said to have succeeded. A constitution so drawn raises expectations which are not easily realised, and the disappointment produces either indifference to all law, or, on the contrary, a fresh endeavour, by the exaggeration of every principle of liberty and the subversion of every practical provision in the Constitution, to attain an ideal perfection, of which, perhaps, no human society is capable. Securities are devised against dangers which never exist, and inconveniences are soon felt which were not foreseen, and which no means are left for providing against. These difficulties must be submitted to, or, if removed, the alteration shakes the confidence of the public in the stabilities of law, the fundamental nature of which has been represented to them as their only security."†

It cannot be denied by even the most casual observer, that the British portion of Western Africa has made a very rapid stride in

* Speech in the House of Commons, Tuesday, February 21, 1865.
† "Sketch of a Constitution for the Kingdom of Naples," 1815.

improvement since Sierre Leone has been formed. Fancy a lot of slaves—unlettered, rude, naked, possessing no knowledge of the useful arts—to be thrown into a wild country, to cut down the woods and build towns; fancy these ragged, wild natives under British, and, consequently, civilised influences, after a lapse of a few years, to become large landowners—to possess large mercantile establishments and money—to claim a voice in the legislative government, and to give their offspring proper English and foreign education; and dare you tell me that the African is not susceptible of improvement of the highest order, that he does not possess in himself a principle of progression and a desire of perfection far surpassing many existing nations—since it cannot be shown in the world's history any nation with so limited advantage that has shown such results within fifty years. But we find that Captain Burton* and many others,† have unblushingly advanced the *theoreticum absurdum*, the jejune and barren generalisation or apophthegm, that British civilisation and Christian influences have demoralised the native African—that, in fact, these institutions were the chimera of a mistaken philanthropy; whilst the very advance of the African is a positive proof that they make it their principle that their great and leading object should be to "illustrate the provision made by nature in the principles of the human mind and in the circumstances of man's external situation, for a gradual and progressive augmentation in the means of national wealth; to demonstrate that the most effectual plan for advancing a people to greatness is to maintain that order of things which nature has pointed out," by encouraging the development of the useful arts, of agriculture, of education in the masses, which will be produced by the governed having a voice in the governing body, and which will lay in the minds of the rising generation a solid foundation of the fundamental principles of political government.

I claim the existence of the attribute of a common humanity in the African or negro race: that there exist no radical distinctions between him and his more civilised *confrère*; that the amount of moral and intellectual endowments exhibited by him, as originally conferred by nature, is the same, or nearly so, as that found amongst the European nations; and it is an incontrovertible logical maxim that the difference arises entirely from the influences of external circumstances. Truly—

Natura una et communis omnium est.

This dictum has been the theme of many writers in many ages. Sir William Temple,‡ in his essay upon the "Origin and Nature of Government," thus expresses himself: "The nature of man seems to be the same in all times and places, but varied like their statures, complexion, and features, by the force and influence of the several climates where they are born and bred, which produce in them, by

* "Wanderings in West Africa," p. 267.
† Lord Stanley, Speech in the House of Commons, Tuesday, Feb. 21, 1865. Dr. Hunt "On the Negro's Place in Nature," p. 57.
‡ Works, Vol. ii., p. 29, ed. 8vo.

a different mixture of the humours and operations of the air, a different and unequal course of imaginations and passions, and consequently of discourses and actions."

Aristotle propounded the same idea in his Rhetoric* :—

Ομοια γὰρ ὡς ἐπι το πολυ τὰ μέλλοντα τοῖς γεγονόσι.

I might adduce a great many examples to prove that the natural tendency of the now civilised Europe was exactly the same as the natural tendency of the now uncivilised Africa; but I shall here only give a simple proof to show that they are not dissimilar to that of the ancient inhabitants of Britain. The inhabitants of the Gold Coast and other parts, to this day, paint their bodies with exquisite taste and beauty, although it is now gradually falling into disuse. History informs us that these were the wants and desires of the first inhabitants of England, and Dr. Johnson, in his "Life of Sir F. Drake,"† has said: "It is observable that most nations amongst whom the use of clothes is unknown paint their bodies. Such was the practice of the first inhabitants of our own country. From this custom did our earliest enemies, the Picts, owe their denomination. As it is not probable that caprice or fancy should be uniform, there must be doubtless some reasons for a practice so general, and prevailing in distant parts of the world which have no communication with each other."

To prove that right-minded men in England are alive to this truth, I need only quote the words of Lord Alfred Churchill‡ at the late meeting of the Aborigines' Protection Society: "I think it right to state, from having paid some little attention to the West Coast of Africa, and being on the Committee of the House of Commons for investigating affairs there, that I believe, from what I have heard, that the negroes on the West Coast only require a fair chance, when it would be found that their intellect and their capacity for self-government would be developed in a manner which at present we have little idea of. I believe there is nothing in their physical development, or in the formation of their brain, which would in any way incapacitate them from holding the highest position which civilised beings can aspire to. It is quite possible that it may take some time—some generations, perhaps—before this can be effected; but by Christianising them, and giving them instructions in industrial pursuits, I believe it will only require some two or three generations to make them, under favourable circumstances, equal to Europeans."

The late Sir George Cornewall Lewis, in his "Treatise on Politics," has laid down the general aphorism, which might be well appropriated to the forthcoming measures of the Government—viz., that when the average and predominant operation of a political form or institution is good, it may be frustated by the badness of those who use it. We hope, therefore, that we shall not have to liken the persons on whom the execution of the scheme of the

* Rhet. ii., 20 sec. 88.
† "Life of Sir Francis Drake." Works, Vol. vi., p. 347.
‡ *African Times*, Vol. v., No. 49, p. 9.

Government depends to the tools of a refined maker placed in the hands of a clumsy or ignorant artisan; since they may, from their moral defects, convert wholesome food into poison through the want of skill, intelligence, patience, and habits of sustained attention and mutual forbearance.

The tyro of African advancement will not look to them as the cause of the failure, but will entirely throw aside the legal maxim—

Quilibet præsumitur bonus, donec probetur contrarium—

and lay the whole blame, unheard, on the incapacity of the African race to support such a Government.

It cannot be expected that this legislative improvement will meet with disinterested preference from all the different Governments on the Coast. It might produce displeasure amongst those who from 1842 had independent actions, which has become a time-honoured custom to them; and we do not blame them, since habit is second nature; but they must remember that no legislative changes could be made without producing some inconvenience, and it is only by these means that they can make great progress in their political history, and an advancement in civilization; that the world would have been stationary through successive generations had no changes taken place; and that the greatness of England is dependent on the gradual and successive changes in her political economy; and we must recommend to them the words of Lord Bacon in his "Essay on Innovation"*—"It is true that what is settled by custom, though it be not good, yet at least it is fit, and those things which have long gone together are, as it were, confederate within themselves; whereas new things piece not so well, but though they help by their utility, yet they trouble by their inconformity; besides, they are, like strangers, more admired and less favoured. All this is true, if time stood still; which contrariwise would so sound, that a froward retention of custom is as turbulent a thing as an innovation, and they that reverence too much old things are but a scorn to the new." As well as that of Niebuhr †—"The noblest and most salutary forms and institutions, whether in civil or moral societies, when bequeathed from generation to generation, after the lapse of centuries will prove defective. However exquisitely fit they may have been, when they were first framed, it would be necessary that the vital power in States and Churches should act instinctively, and evince a faculty of perpetually adapting itself to the occasion." Man is a dissatisfied animal, and his *nisus*, or natural tendency, is to improve the *status quo*. This progressive tendency always actuates him to that, and the colonists must rest satisfied now with what they have obtained, and wait patiently until the time when their improvement will necessitate an adoption of a better and a more independent form of Government, and then their rulers will consider

* "De Augmentis," Vol. viii., p. 375.
† "History of Rome," Vol. i., p. 622.

the means best fitted for the attainment of this end, and what practical, not ideal, form of Government will be best suited to their condition, whether republican or monarchical.

Before concluding this portion of the subject—which, to use Dr. Hunt's terminology, I may appropriately call the "Negro's Place in Nature"—I must say a few words on some grave errors in generalization which men of science with restricted observation have arrived at respecting the capacity of progression of the African race. Thus it has been argued that their physical and mental peculiarities have undergone no change since they have been observed by civilised nations. "The type," says Sir George Cornewall Lewis, "is as unchanged as that of the greyhound, since the time of the Romans."* Hume, in his Essay on "Natural Characters,"† says that, "There scarcely ever was a civilised nation of that complexion (negro), nor even any individual eminent either in action or speculation . . . . In Jamaica, indeed, they talk of one negro as a man of parts and learning, but it is likely he is admitted for slender accomplishments, like a parrot who speaks a few words plainly."

Leaving unnoticed many genuine evidences of civilization to be found now-a-days, amongst the coloured inhabitants of Barbadoes and other West Indian islands, and bearing in mind that mankind (in all ages) in different communities, when subject to proper cultivating influences, do not show an equable rate of advance within a given period, I shall endeavour to point out what improvements have taken place amongst the negroes in any one of the colonies on the West Coast of Africa only within the last fifty years.

As Sierra Leone is the head-quarters of the British possession there, I shall select it as the subject of the example, and will commence from the liberated Africans, who were there freed from the fetters of slavery. Prior to their being kidnapped they were governed by kings, or chiefs, who had a complete sway over life and property; they possessed no written laws, and no proper religion, but worshipped wood, stones, and other material substances; they were extremely cruel to each other; polygamy was carried on to a fearful extent; the lower class were kept in a state of slavery; warfare was carried on in a most cruel style, and all conquered populations were enslaved; they lived in huts, made either with mud or cane; they made only one kind of cloth; they live either wholly naked, or partially so; they tilled the ground, and the Cramantees, from having gold as the medium of commerce, knew weights and measures.

On their arrival at Sierra Leone, landed naked and in a state of abject rudeness and poverty, without the least knowledge of civilization, they are placed under Government supervision for a few months. Then a portion of land is given them, to cut down the woods, and build towns; then commence cultivation; mis-

* "Treatise on Politics," Vol. ii., p. 432.
† Hume "On Natural Character," Part i., Essay 21.

sionary schools are then established; gradually they begin to read and write; commerce, by degrees, forms a part of their occupation; they slowly begin to throw off their air of serfdom, which they had imbibed from previous treatment, and become interested in the nature of their Government, so as to require improvement in its administrative and judicial departments. The worship of the living and true God is strictly observed by them, and they manifest great sympathy for the condition of their countrymen. They soon begin to inquire how their children are to be educated, and what are the best means at their disposal for doing so. These, as they grow up (which is the generation at present occupying Sierra Leone), seek after and obtain justice; preach loudly the Christian ethics—viz., mutual charity, forgiveness of one another, fraternity, and equality. Science and literature are taught in some of the schools; the generation feel themselves to possess great liberty, physically and mentally; philanthropic views are extensively circulated amongst them; they build large and expensive dwelling-houses; buy up the former abodes of their European masters; carry on extensive mercantile speculations; seek after the indulgences of civilised life, and travel in foreign countries to seek after wealth. English newspapers are very much circulated amongst them, and are read with eagerness; and they require a voice in their legislative administration. They look out for a better form for the administration of the Government, and desire to attain it, and they use the best means for attaining their wish, which form the essentials for political progress.

In the examination of the world's history, we are led forcibly to entertain the opinion that human affairs possess a gradual and progressive tendency to deterioration. Nations rise and fall; the once flourishing and civilised degenerates into a semi-barbarous State; and those who have lived in utter barbarism, after a lapse of time become the standing nation. Yes, "how wonderful are the vicissitudes which history exhibits to us in the course of human affairs; and how little foundation do they afford to our sanguine prospects concerning futurity! If in those parts of the earth which were formerly inhabited by barbarians, we now see the most splendid exertions of genius, and the highest forms of civil policy, we behold others, which in ancient times were the seats of science, of cultivation, and of liberty, at present immersed in superstition, and laid waste by despotism. After a short period of civil, of military, and of literary glory, the prospect has changed at once; the career of degeneracy has begun, and has proceeded till it could advance no further; or some unforeseen calamity has occurred, which has obliterated for a time all memory of former improvements, and has condemned mankind to retrace, step by step, the same path by which their forefathers had risen to greatness. In a word, on such retrospective views of human affairs, man appears to be doomed, by the condition of his nature, to run alternately the career of improvement and of degeneracy; and to realise the beautiful but melancholy fable

of Sisyphus, by an eternal renovation of hope and of disappointment."*

Such being the tendency of all national greatness, the nations of Western Africa must live in the hope, that in process of time their turn will come, when they will occupy a prominent position in the world's history, and when they will command a voice in the council of nations.

It remains now for me to enter into some detail respecting the wants and requirements of the different colonies on the West Coast of Africa, which the Resolution of the Committee of the House of Commons necessitates, and which would lead to those results which all wishers for the political advancement of the African race anticipate.

I shall, therefore, commence on the requirements of—

SIERRA LEONE.

I.—*The first Improvement which is loudly Called for, is the Establishment of a Legislative Assembly at Sierra Leone, with Representatives from the Three different Colonies—viz., Gambia, the Gold Coast, and Lagos.*

The Government of Sierra Leone is *de facto* a self-supporting Government, and the amount of improvement exhibited by the inhabitants entitles them to have a voice in their administrative establishment. "Nothing in defence could be urged that this or that measure is in advance of the colony; the colony was quite ripe for such improvements, the revenue was large, and the intelligence of the people advancing. The time had arrived for an extension of immunities; other colonies of later years and with a much less revenue and intelligence were politically in advance of this; they had their representatives in the Legislative Halls of a sufficient number to represent their interests. . . With respect to an extended franchise, it is most desirable that the Legislative Council of the colony should be opened to three or four members from the people, made eligible for their seats by being elected and sent there by the people as their representatives. It should be remembered that the people were ready and willing to keep up taxation in order to support the institutions of the colony, and I do not see why they do not have a voice in the administration of affairs. In short, it was the very principle of the British Constitution that those who were liable to be assessed should have a voice in the administration."†

The representative members should be nominated by the citizens

* Stewart's "Elements of the Philosophy of the Human Mind," Vol. i. chap. 4, § 8.

† Speech of Alexander Walker, Esq., in the Chamber of Commerce, Sierra Leone. Published in the *Observer*, Vol. i., p. 163.

by public votes, and a proper legislative Act will be required to guide the franchise; and the following rate of members might be recommended for the acceptance of the Government:—

Of Sierra Leone—
Freetown should send 6 members in the Legislative Assembly, viz.:
The City (proper) 2 " " "
Kissy Road . 2 " " "
Pademba Road 2 " " "
Kissy and Wellington should send 2 members in the L. Assembly.
Hastings, Allentown, and Grafton 2 " "
Waterloo—Benguema, and Campbell Town . . . . 2 " "
Kent, York, Russell . . . 2 " "
Wilberforce, Murray Town, Aberdeen . . . . . 2 " "
Gloster—Leicester and Regent . 2 " "
Bathurst and Charlotte . . 2 " "
Of the Gambia—Bathurst to be divided in two sections—
1. Front Street and Jolloff Town 2 " "
2. Soldier Town, New Town, and M'Carthy's Island . . 2 " "
Of the Gold Coast—
Cape Coast and Dix Cove . . 2 " "
Anamaboe, Winnebach, and suburbs 2 " "
James Town and Christiansborg . 2 " "
Of Lagos—
Lagos and Badagry . . . 2 " "

II.—*General Improvement in the Educational Department of the Colony.*

It cannot be denied that the greatest regenerative influence in this department is the Church Missionary Society. They support at present a college at Fourah Bay, a grammar school in Freetown, and a large female educational institution, besides several village schools. They have, infinitely more than the Government and than any other religious body, done a great deal for the diffusion of useful knowledge in the colony, and to their untiring exertion is due that degree of improvement which is now to be observed in the colony of Sierra Leone. It is evident from their yearly report that they could not continue this support for a long time, whilst the colony has grown to be self-supporting, and a large field is open to them elsewhere to do good; and therefore it requires that the people and the local Government should take up the work they have so admirably done.

We want a University for Western Africa, and the Church Missionary Society has long ago taken the initiative and built an expensive college, which should now be made the focus of learning for all Western Africa. The yearly expenses now of that society

for education are 4,700*l*.,* which falls short of their former expenditure, whilst the total sum expended by the local Government for this purpose is not far above 400*l*. The result is, that the educational department of the colony is greatly on the decline every year, and more support is consequently required; but the local authorities refuse to do so, although they gladly spend 14,000*l*. yearly merely for police.

A superficial consideration of the theory of the local Government for the limitation of its efforts in this important direction—viz., that extensive funds have long been, and still are being, appropriated for that object from other sources, and, consequently, it could not do so until the aid is withdrawn!!!—is so alluring and attractive that it requires a long residence in the colony to prove that it is most unsound; and should the recommendation of the Chamber of Commerce, that a portion of the revenue be yearly voted for general education, be not adopted, it will be one of the greatest barriers to the general improvement contemplated by the Imperial Government.

Fourah Bay College should henceforth be made the University of Western Africa, under the auspices of the local Government. A systematic course of instruction should be given to the students in every branch—in Humanity, *Belles Lettres*, Political Economy, &c.—by lectures; which plan I consider is the best mode of conveying literary and scientific instruction, and thus impart good moral principles in the minds of the youths under education.

In every village there should be a parochial establishment, assisted by the Government, and not dependent entirely on the paltry sums collected at the school. The schoolmasters should be better paid, so that a better class of men might be obtained as teachers, and the schools visited yearly by Government agents, to see that the rules and regulations are properly carried out.

The native pastorate† is the Established Church of Western Africa, at least of Sierra Leone, and the local Government should

* Col. Ord's Report on the Condition of the British Settlements West Coast of Africa—Sierra Leone.

† The native pastorate is unfortunately placed under a most difficult condition by their parental head, and it strikes the wonder and admiration of every one who studies its working how they have been able to exist. It is most likely that the parent committee's idea is that the pastorate should begin under hard and trying difficulties, so that when a greater laxity of privileges is granted them, the whole working of the system will go on with greater ease and success. At present, with the exception of Kissey and Regent parishes, all the most flourishing churches are under the supervision of the parent committee, and are not included in the pastorate; it has no representative church in Freetown, under the immediate control of the bishop of the diocese; and as the whole of the wealth of Sierra Leone is at Freetown, it is a great drawback to their financial success. Having no immediate interest in that body, we find that the wealthy merchants are lukewarm and sparingin their donations; Kissy-road, Pademba-road, Wilberforce, and Waterloo are still under the parent committee. But we hope that ere twelve months have elapsed the committee will adopt the wise and all-important step of handing over one or other of the two parishes at Freetown to the native pastorate.

now bring it under the same pale, and allow it those grants and privileges which are necessary to keep up the Church of the State. Col. Ord in his report said that the colony had voted a sum in aid of the Establishment, when it is positively known, and the Secretary also assured me, that they received not a farthing towards their support from the local authority.

The sum of 4,000*l*. voted yearly will be sufficient for some time to supply the wants and requirements of the ecclesiastic and educational department of the colony—viz., 1,000*l*. for the native pastorate, and 3,000*l*, for educational establishments. Of the latter, 1,000*l*. will be ample for the part payment of principals and Regius professors, who should be selected by the Church Missionary Society, and should also derive a fractional amount from their lectures. Two sections should be formed, and the lectures delivered during each of them, and the students pay a certain sum for their tickets to each lecture, as is done in other universities.

III.—*The Formation of a Municipal Council.*

The time is perfectly ripe when Sierra Leone should have a town corporation, since the existence of such a body in a country is a true sign of advance in political matters, and we hope that no narrow-minded prejudice will prevent its immediate establishment. The Gold Coast once formed themselves into a corporate body, through the recommendation of Sir Benjamin Pine, which worked a great deal of good amongst the population, but which was made null and void by Mr. Andrews during his short career as Governor of that place. Sierra Leone, from its rate of mortality and the necessity for a vigilant sanitary police, requires a town council and a medical registrar. It will root out the pernicious causes of the diseases in the colony, will relieve the police-court of a great many of its cases and officers, and consequently will save the colony a fair sum of money. The benefit derived from the summonses, fines, &c., after paying all expenses, should be used entirely for renovating the town, clearing it of filth and dirt, &c. We hope that this will be the first measure taken by the Executive authorities. One writer has remarked that there should be a certain amount of knowledge prescribed to those who emulate the appointment of Lord Mayor, alderman, and councillors; this I entirely approve of, as it will have a most beneficial result.

IV.—*The Transfer of the Registrar of Births, Marriages, and Deaths from the Legal to the Medical Profession, and the Establishment of a Health Officer.*

The beneficial result which will arise from this transfer cannot be overrated. Ever since the formation of this office, the population have been kept perfectly ignorant of the *rationale* of the registration—viz., the rate of mortality, the different causes of death, the proportion of births to deaths, the amount of legitimate or illegitimate births; the causes of periodic endemic diseases—in fact, there has never been a generalised summary published, half-

yearly or yearly, for the benefit of the people. It is certainly impossible for the legal mind to classify diseases, to trace their causes and to point out their remedy. This truth is acknowledged in England, where none but medical men have the appointment. The books in the office as it now stands are almost a dead letter to the population, but which might hereafter be used for references, and may serve as a means for drawing up a comparative statement of the health of the colony at various periods.

A medical officer of health should also be attached to the registrar's office; and I think no place requires this appointment more than Sierra Leone. The officer thus appointed should be made to give a half-yearly report to the Town Corporation of the state of the colony; and should recommend the best means of averting any danger. A legal mind could not cope with these facts; and now that no plea can be made against the non-existence of efficient public medical men in the colony, I think that the Executive cannot do better than give the office to Dr. Smith, a Sierra Leone bird, and a promising general practitioner.

V.—*The Extension of Colonial (British) Protection to the Merchants in the Rivers in the Neighbourhood of Sierra Leone, and consequently the Extension of the Custom-Office to those Places.*

It must be very provoking to think that nearly within gunshot of the barracks at Freetown, British merchants could receive no protection from the Government; that they could be tried and flogged by the natives, and their goods confiscated, without receiving any redress from the local authority, as is exemplified in the late outbreak in Mellicourie River. Proper steps should now be taken to prevent such disturbances, and the merchants, I think, are perfectly ready to pay into the colonial coffer duties on goods landed in those rivers, should they be guaranteed protection.

Most of the chiefs of those places have broken faith with the Government, have maltreated British merchants, have been conquered by our arms in different engagements, and have asked protection from us. Will it not be right that we should give them that which will be a boon to the colony? I think it is time that these trading ports should be made an integral part of Sierra Leone, since the merchants do more extensive business there than in the colonies.

Gallinas, the Searcies, and Mellacourie, should be united to the colony, whose territorial boundary will then be considered properly remodelled, and the administration of the Government will be more efficient and economical; the colony can guarantee the merchants there sufficient protection if a plan like the following be adopted:—

Let a Militia force of 100 men be enrolled and paid by the colonial Government at the rate of 1*l*. 10*s*. per month, which should include rations, &c.; let the men be furnished with bed, blankets, and rug; let them be properly officered, and distributed at the rate of thirty to each station; let the officer who will be the commandant be properly paid, and be made also the Custom-house

officer in those rivers, with strict orders not to interfere in the native quarrels, but to protect British property. Each vessel as it proceeds up the river should hand over its manifest to the safe care and keeping of the commandant—should give him also an inventory of the goods in the vessel, with their true value, and a written declaration attesting their truth, and a bond signed; that, should it prove false, they were to be liable to a heavy fine. They should be required to pay an *ad valorem* duty of three per cent. on all goods except tobacco and rum; it should be made optional to those who are well known in the colony to pay to the commandant in cash the amount of the duty, or give an order to their principal at Freetown.

That all vessels coming within the territorial boundary to trade should be made to pay the *ad valorem* duty, the commandant might be provided with a boat, &c., and such other arrangements should be made as the Executive thinks necessary.

Granting that the Governor-General has at his disposal an intercolonial steamer, according to the Resolution of the House of Commons Committee on Western Africa, the steamer should be sent monthly to these stations for the conveyance of letters and orders, and for the collection of the revenue from customs. The very fact of this monthly visitation will have a moral check over any outbreak amongst the natives.

What will be the result of these measures?—

1. That the revenue of the colony will be increased from 40,000*l*. to at least 60,000*l*. yearly.
2. That the British merchants will have proper protection.
3. That the influence of the colony will be greatly extended.
4. That merchants who have hitherto been afraid to venture on the river trade will now make a beginning.
5. That the resources of the country will be better developed.
6. That the political situation of the colony will be greatly on the advance.

VI.—*The Abolition of the System of Sending the Liberated Africans to the West Indies, and the Re-introduction of the Apprenticeship System.*

According to the present system of the Mixed Commission Department the recruits, as soon as they are landed from the slave-ships, are sent to the Government yard at Kissy, where they are kept for two, three, or even four years, until they have escaped three chances of being sent to the West Indies. In the Government yard they are kept in total ignorance and idleness, although they are fed and clothed. They are not permitted to go to any school, nor are they taught any useful mechanical works in the establishment; the consequence is, that when they leave, they are seldom of any use to themselves or any one else. This system requires a radical change, and the colony requires their recruits more within the colony than out of it.

There should be formed an industrial establishment at the moun-

tain village of Gloster, under the supervision of the Church Missionary Society, paid from the Imperial chest, where paid carpenters, shoemakers, masons, blacksmiths, wheelwrights, &c., are to be continually kept at work. The superintendent should be a practical German mechanic, a type of those of the Basle Missionaries at Accra. The recruits should first be sent to the Normal School at Kissy, where, after learning to read and write for one year and a-half, they should be sent to the Industrial School at Gloster to be put to a trade, and be kept there for four or five years, and so these useful arts might thus be taught with great advantage to the colony.

The establishment might be made partially self-supporting by each department of trade being made to receive works from without through the superintendent; the tailors should be made to sew the gaol clothes; the carpenters can be put to Government building and repairs, &c. The female recruits should be placed at Charlotte School, and after a year and a-half of training in needlework, reading, and writing, be distributed amongst different families.

VII.—*The Formation of a Dry Dock in Freetown.*

The material for forming a dry dock is abundant in Freetown, and as there are no docks in the whole of Western Africa, I think that if a proper one is formed it will be well patronised, and bring a good revenue to the Government. This will of course require a good outlay, which will be returned to the local Government in kind in the course of a few years.

Krew Bay would be the most fitting place that could be selected, and a yearly grant of 3,000*l.* or more will soon erect an extensive dock, which will be serviceable to men-of-war and merchant vessels, and which will increase the knowledge of shipbuilding in the colony.

VIII.—*The Building of a Sea-front Promenade.*

There is no town on the Coast in which the sea-frontage gives so dull and unhappy an appearance as Freetown, especially during the rainy season. We find here a tumble-down building, there a half-finished store; here broken rocks and upheavals of the earth, there an inroad of the sea into the town. We find nothing in a regular form, but every thing pell-mell. We propose that an agreeable walk be made along the sea-frontage, which might be made either a private or public thoroughfare, and that seats be properly arranged in it; if private, that each family pay to the Government the sum of one or two guineas a-year for the privilege of using it.

IX.—*A System of General Supply of Water to Freetown should be Adopted.*

This must either be done by Government, or by a private company, but as the former is better able to do it, we hope that it will not be long before it will make a beginning. In dealing with the subject of the water supply in the Chamber of Commerce, Mr.

Walker remarked that it will not only be ornamental, but extremely useful in a sanitary point of view; it will supply the wants of the thousands who weekly attend the market, and will more effectually clear the cesspools of their filth and dirt, and consequently improve the general health of the colony. It is a project that will be most easily accomplished, as Freetown is a gradual slope from the hills, and several beautiful streams run down through the town from the mountains. With very small outlay, reservoirs, with pipes, could be easily laid down, and the water conducted into the different parts where it will be required.

X.—*An ad valorem Duty of 4½ per cent., or 10¾d. in the Pound, to be charged for Merchandise, with the Exception of Spirits and Tobacco.*

It has been recommended to the Executive authority by the Chamber of Commerce,* that a uniform *ad valorem* duty of 2½ per cent. should be charged on all goods, except spirits and tobacco. This, I think, is too small, and would tend to reduce the revenue a great deal, whilst it is the interest of the colony to have it increased. A uniform duty will, no doubt, tend to facilitate the business of the Customs and merchants; and will also procure a saving to the Customs department, and, therefore, we recommend for adoption the payment of an *ad valorem* duty of 4½ per cent., or 10¾d. in the pound.

XI.—*Proper Measures for the Encouragement of Agriculture and Good Building, as Recommended by the Chamber of Commerce, should be Adopted.*

XII.—*The Raising of a sufficient Amount of Money for rapidly Carrying out those Improvements which are Essential to the Health and Industrial Development of the Colony.*

It will be observed, from the reading of the above pages, that the colony will require a large amount of money at once to carry out these useful improvements, over and above the present revenue. A loan has been suggested by many, but the colony will be obliged to pay a large interest until the capital is paid; and this will necessitate an increase in the taxes. In my opinion this can at present be dispensed with if the amount required be not far over 40,000*l.*, and let the colony be her own debtor.

Let a colonial paper currency to that amount be issued, and made equal in value to the specie in circulation, and redeemable in ten or more years; let the Legislature be stringent in preventing any depreciation of its value; let the large mercantile establishments take it up and have it circulated, and let the Government redeem every year from two to four thousand pounds; and in a few years those large improvements indicated will be made, which, in the course of a short time, will pay their own expenses without any outlay from the colonial chest. A similar plan was, some

* Chamber of Commerce Report, January, 1865.

years ago, adopted in the building of a large wharf (if my memory be correct) in Jersey, with great success.

It might be remarked that whilst I condemn the practice in Liberia of a wholesale issue of paper currency,* I recommend the same thing at Sierra Leone. But there is a great difference between the two countries. The former, having a very small revenue, issued an amount of this medium far above her capacity for redemption, and not for the building of any public works which would pay their own cost, but to avert a crisis. The latter, on the contrary, has a large revenue, which is above her expenses, and a few years ago she had in her chest about 15,000*l.* over and above her expenditure. The paper currency, if adopted, will be for building public works, which will be made to pay their own expenses, without costing a farthing to the Government. Thus, if water be conveyed to the town and supplied to the different houses, the people will be taxed for it, and the money derived from it will go towards reclaiming the paper currency, until it becomes an independent source of revenue. I shall, therefore, recommend the adoption of this measure as the most practical that could be found suited for the colony of Sierra Leone, and do not venture at present on a loan for these improvements. I shall, however, in another place point out where a loan might with the best advantage be contracted.†

There are many other improvements‡ which might be recommended, but which I must leave for the deliberation of the Legislative Assembly, which every one hopes will soon be formed, and must go on in the consideration of the requirements of the

GAMBIA.

I.—*An Increase in the Duty on Ground-nuts from One Penny to Twopence per Bushel.*

The Government of the River Gambia has been almost in a state of bankruptcy for the last two years, and this is mainly to be attributed to a mistaken legislature. Prior to this period, the merchants paid an *ad valorem* duty of four per cent. on all articles except tobacco, spirits, &c. Subsequently, however, a duty of three farthings (! ! !) a-bushel on ground-nuts, now increased to one penny, was substituted, as the French mercantile firms at Bathurst were purchasing ground-nuts with specie, and thus escaped the duty which the English houses who import largely dutiable goods had to pay. The duty on ground-nuts, instead of being only one penny, might, with advantage to the colony and without any pressure on the merchants, have been placed at twopence per bushel, which would in a short time pay off the liabilities of the colony, and would leave a small yearly balance for carrying out sanitary improvements.

It will, I must confess, be very difficult for the present Executive head to carry out in Council such a useful step, as the mercantile interest is so well represented in Council, that he will meet with strong opposition.

II.—*The Formation of a Municipal Council at St. Mary's.*

This will have a most satisfactory effect on the general population, and would tend to improve the general health of the colony; a town mayor is very much needed at Bathurst.

The appointment of a Municipal Council will be useful in clearing out the rubbishes from the town; in completing the different drains; and in making proper roads to the different villages. With its appointment should be the re-establishment of the assistant-colonial surgency, which has been imprudently abolished, when the colonial surgeon alone is insufficient for the amount of work required to be done. The assistant-colonial surgeon should also be made inspector of cesspools or sanitary officer, since if there be any place on the whole Western Coast which requires an active sanitary officer, St. Mary's does.

III.—*The Formation of a Militia Force for the Protection of the River Trade.*

As the abandonment of the Island of M'Carthy, 180 miles in the interior, and the encouragement of the inhabitants of a self-supporting system, form a prominent feature in the resolution of the late committee, the merchants at Bathurst, who have derived such great advantage from the trade, should now undertake to have in the rivers such a sufficient native force as will give a moral protection to their trade without meddling with the native Government; they have in the colony steady and able young men to form efficient officers (such as the Lloyds, Hughes, Stubbs, &c.), if properly paid. The merchants would thus only lay out a trifle out of their yearly profits. With the sum of 2,000*l.* they could could maintain an efficient force of sixty men, which would be sufficient for all the purposes they might require, viz. :—

* *Vide* above, Liberia, p. 10. I am glad to be informed that Liberia is now making an effort for the redemption of her paper currency.

† *Vide* below, Gold Coast.

‡ Mr. Rosenbush, in a letter to F. Fitzgerald, Esq., remarked that the greatest requirement of the colony is agriculture, and he recommends the establishment of a model farm by convict labour. "At present," he said, "the characteristic feature of the inmates of the gaol is to make the institution a kind of refuge;" availing themselves of the "temporary leave of absence," they go out, but invariably soon return, on account of being worthless for honest employment. In a model farm they would first work to maintain themselves, and, secondly, become acquainted with agriculture, which might induce many to remove to parts where they are not known, and endeavour to regain an honest position in life. The expense of one could scarcely be more than the amount which the establishment of the Colonial Government now costs, and the firm would very soon become self-supporting. It should be open for inspection of everybody, in order to stimulate others to follow the useful employment of agriculture.—*African Times*, August, 1865, p. 14.

Expenditure	£
Two Sergeants at 2*l.* 10s. per month	£60
Four Corporals at 2*l.* per month	80
Sixty Privates at 1*l.* 10s. per month	1,080
	£1,220
One Captain, at per year	350
Two Subalterns at 250*l.* each	500
Total . . .	£2,070

The sum thus made up, yearly :—	£
Messrs. Forster and Smith	£300
Thos. Brown, Esq. . .	300
David Brown, Esq. . .	300
T. F. Quin, Esq. . . .	300
M. Morrell	300
C. Chön, Esq.	300
W. F. Goddard, Esq. . .	200
C. Vermic and Co. . .	100
J. Melbury, Esq. . . .	80
J. Dodgin, Esq.	50
Total . . .	£2,230

Thus, 2,230*l.* against 2,070*l.* of expenditure.

Of the sixty men, thirty can be stationed at M'Carthy's Island; twenty at Alberda, and ten at Bathurst; which would secure the interest of the merchants along the whole trading course of the river. The non-commissioned officers should be those who were pensioned from the West India Regiment, a goodly number of which are to be found at Bathurst.

The captain commanding should have the sole charge of the northern district, subject only to the orders of the mercantile Council at Bathurst. He should hold the post of civil commandant, and should receive the pay of 200*l.*, instead of the present 130*l.* One of the subalterns to be at Alberda, and the other at Bathurst. By these means the merchants will have their interest well secured in the rivers, and if their officers keep from interfering in the natives' quarrels their trade will be greatly increased.

IV.—*The Postal Regulations of the Rivers should be Re-organised.*

Unquestionably the postal arrangement along the River Gambia is the most irregular along the whole Western Coast of Africa, and although there is a steamboat lying at Bathurst harbour, expressly for the use of the river, the delivery of letters is in the most precarious and laxed state.

There is by far a greater degree of regularity in the postal arrangements between the newly-acquired territory of Sherbro than has ever been observed in the stations on the River Gambia. One who resides there is required to have a friend at Bathurst to receive his letters and papers before he can expect to receive them, or they may remain at the post-office for several months until claimed. On the Gold Coast, twice a-week, letters leave the post-office at head-quarters for the different out-stations, and the Government is well supplied with the conditions of its outposts. This postal arrangement, or what might properly be called disarrangement, is a great drawback to the improvement in the colony, and the sooner it is remedied the better will it be to all concerned.

V.—*The Appointment of Two Representatives to the Legislative Assembly at Sierra Leone.*

The requirements of the

GOLD COAST.

The Government of the Gold Coast has always been regarded as the most difficult and intricate of all the Governments on the Coast; but if it be closely and quietly investigated, it will be found that most of the ado which has from time to time been the cause of these misunderstandings between the natives and the Government had been occasioned by the Executive authority exceeding the charter of the settlement.

The British Gold Coast is merely a protectorate, the natives having their own kings, using their own laws, and performing their time-honoured customs; beyond the Fort gate we have not a foot of ground in the country. After the turbulent period, previous to 1830 and the peace proclaimed between Ashantee and the natives through British influence, the inhabitants submitted themselves to the British Government, not as subjects, but as independent nations, in alliance with, and protected by, the United Kingdom of Great Britain and Ireland, without any stated laws respecting their Government; and the chiefs have always looked upon our Sovereign as a kind of feudal superior, against whose enemies they were bound to fight when called upon, and who was in turn bound to aid them in case of trouble from within or without. The treaty between the British Government and the native chiefs distinctly stipulates that the natives are to be governed by their own laws, except in certain cases plainly specified. But we find that each Governor rules according to his own idea at the time being, and much of the difficulty has arisen from excessive interference with the powers of the native kings and chiefs. I shall, however, detail what course, if pursued, will make it the most simple Government on the Coast.

I.—*That the Governor-General of the West Coast of Africa should Negotiate with the Dutch Governor for the Purchase of the Territory on the Gold Coast.*

It has always been remarked, with great truth and justice, that of all the Governments on the Coast of Africa, none is more inimical to the moral and intellectual improvement of their subjects than the Dutch Government; and whilst valid improvements might be traced in the English and late Danish possessions, the Dutch subjects are in total ignorance, and are left entirely to follow their own superstitious ideas. No missionary is permitted to live amongst them, nor are there any schools worth noticing for the benefit of the rising generation.

Through their rule (misrule, I should say) they have prevented

our Government from raising a sufficient amount of revenue that would soon quadruple the present expenses of the Government, and supply the means of making roads into the interior ; increase the stability of the local Government, and make a great improvement in every portion of its Executive administration. Without the Dutch, a revenue of 60,000*l.* could with ease be raised from the Gold Coast, but so long as they occupy those forts they will always remain the greatest barrier to improvement.

The Dutch Government and Chambers dislike the yearly vote of 12,000*l.* for the expenses of their settlements, which bring them nothing whatever in return, except some 400 slaves, for which they pay 40 dollars a-head yearly, to recruit their East Indian force in Java. Let the Governor-General propose to pay the Dutch the sum of 50,000*l.*, in three instalments, or at once, for their settlements ; let this amount be placed in the market, at certain percentage, through one of the leading banks, and a loan contracted, the greater part of the new impost to be placed towards the paying of that amount, and I have no doubt that, within ten years, the whole of the debt will be cleared. It is the cry of the merchants, as well as chiefs, in the British territory, that this should be done, and the Dutch subjects will hail it with enthusiasm.

II.—*That the Kings of Cape Coast and Accra should be made ex-officio Members of the Legislative Council.*

This will be a great step towards carrying out the proposal of the House of Commons Committee, and much of the misunderstanding and difficulties to which the Governor has hitherto been liable will be averted. At present, Cape Coast has got an educated Christian king, and I consider this the most fortunate thing that could have happened to the Gold Coast at this crisis.

At James Town, Accra, King Cudjoe is a drunken, illiterate old man, who could not, with dignity, be installed into such a high post; but at Christiansborg, King Dawoonah, who now rules, is an educated man, who has spent several years in Denmark, and has travelled in the Danish man-of-war to different parts of the West Indies. It was the custom of the Danish Government to give a sound education to the Prince and heir of the throne of Christiansborg, and so enlarge their views about Government. Dawoonah had all these advantages, and therefore no king could be more suited than him to be appointed a member of the Legislative Council in the Eastern district.

III.—*An Assemblage or a Congress of Kings should be Held at Cape Coast, and one at Accra, for the Consideration of Matters relative to the Good of the Protectorate.*

The great difficulty found in the Gold Coast is caused by the Executive ignoring the authority of the kings ; thus, during the Government of Mr. Andrews, a king of an important district was heavily fined, and almost imprisoned, through the misrepresentation of one of his subjects ; a petty commandant had power to

summon a distant king from any part of his imperial rule, have him brought to his petty police-court, and fined heavily for some charge his subjects might bring against him. This Mr. Pine has endeavoured to prevent; and such treatment to the kings every one must acknowledge as most injudicious, unreasonable, and impolitic, as well as most damaging to the British influence on the Coast. The effect is that the Governor, instead of being loved, is hated and abused, and his proclamations are trampled under foot.

I say, therefore, that a congress of the kings of the protectorate should be assembled for the consideration of subjects relative to the benefit of the protectorate, one at the head-quarters of the western district—viz., Cape Coast, and the other at Accra, the head-quarters of the eastern district.

At Cape Coast should assemble the Kings of Wassan, Dix Cove, Denkera, Assen, Mansoo, Anamaboe, Abrah or Abacrampa, Mankasin, Agimacoo, Western Akim, Essicoomah and Akiunfudie; presided over by the Governor—at Accra, the Kings of Crobboe, Aquapem, Aquamboe, Adda, Eastern Akim, Goomon and Winnebah ; presided over by the Governor.

I shall here only detail the subjects for consideration, without attempting to enlarge on their necessity :—

1. That the King of Cape Coast be admitted head of all the kings of the western district.

The advantage of this is that in cases where there is an obstreperous king of the western district the Governor has only to apply to the King of Cape Coast, who would more easily see his instructions carried out with very little expense than the Governor of Her Majesty's Forts and Settlements.

2. That the King of Accra (at present Dawoonah, King of Christiansborg, Accra) be admitted the head of the kings of the eastern district.
3. That the kings should bind themselves to defend one another against a common enemy.
4. That should any quarrel arise amongst themselves, the aggrieved party should inform the king-in-chief, who should, if necessary, call together the other kings ; and the guilty party should suffer the penalty inflicted by their decision, subject, however, to the approval of the Governor of Her Majesty's Forts and Settlements.
5. That the extradition of all political offenders and political refugees of the King of Ashantee be strictly enforced.
6. That there should be made a broad road from one town to the other by the male subjects of each town, in default of which a fine is to be inflicted.
7. That the kings should be prevented from executing capital punishment; but when any one has shed innocent blood, he has to be forwarded to the British authority, where he has to undergo his trial, and if found guilty, to be forwarded to the place where the crime was perpetrated, and there hanged.
8. That the commandants be prevented from sending a summary summons against a king to appear in his court, such being deroga-

tory to the regal authority. That in any case of complaint he should report the same to the Governor, who should give it his early attention.

9. That the king's person should be regarded as sacred, and that he should on no account be arrested by any warrant, either from a commandant or from the Supreme Court, except he rebels against existing authority.

10. That immediate obedience should be required of every king to the Governor's summons, or that of the king-in-chief, in default of which a heavy fine to be inflicted.

11. That the inhabitants should have a right of appeal from the king's court to the Commandant or Stipendary Magistrate Court, but no judgment of the king's court to be set aside unless the case is thoroughly sifted, and a report filed in the king's court.

In such a case the appellant should be required to deposit a certain amount for costs, unless he pleads *in forma pauperis*.

12. That the kings should forward to the Governor the names of their magistrates or other officers of their court, as well as whatever changes they might from time to time, as circumstances may necessitate, make.

This refers especially to the seaport towns, Cape Coast, Dix Cove, Anamaboe, Winnebah, and Accra.

13. That in those places above-named the king should not sit as magistrate, but that his court should be formed of educated men; and that in any difficult cases reference should be made to him in person.

14. That proper means should be adopted to keep intact a friendly relationship with their powerful enemy, the King of Ashantee.

IV.—*That there should be Placed a Resident Consul from the Gold Coast Government at Coomassie.*

The frequent disputes which have arisen between the Ashantee potentate and the Governor of Cape Coast have pointed out that the best means for keeping the two powers in peace and amity is to have a consular agent at Coomassie, and none but a native of good education who could speak the language fluently should be appointed. Hitherto the policy of the Governors with the king is generally carried by the former sending a letter by an interpreter, who understands very little English, and in many cases could scarcely understand the language made use of in the letter: he therefore interprets it according to his own idea of the sentence, and in a great many cases puts an entirely wrong meaning to it.

These mistakes of interpreters are of everyday occurrence in the court, and great palavers on the Coast when the interpreters are unlettered, and are generally corrected by the educated natives. The consul should be allowed a clerk; should be paid from two hundred and fifty to three hundred a-year; should have four months' leave of absence at the end of every two years, with his expenses paid to the Coast. He should be paid out of the revenue

of the colony, and his actions be under the immediate control of the Governor.

V.—*That the King of Coomassie be induced to Send a Resident Ambassador to Cape Coast.*

His chief business will be to seek after the interest of the Ashantee traders on the Coast; to attend immediately to any complaint they may bring to him from being maltreated by any of the kings or their subjects. The result of these two acts will be that trade will be greatly increased; that there will be greater faith and cordiality between the two Governments, and that the social and political advancement of the colony will be greatly enhanced.

The Governors should always bear in mind this Latin maxim: "Cessante causâ, cessat effectus," or, "Sublata causâ, tollitur effectus." (Withdraw the cause and the effect is destroyed.)

VI.—*That an Improvement should be Made in the Educational Department of the Government.*

At present the Colonial Government only supports a small school at Cape Coast, where the boys learn scarcely anything more than to read and write. In former years they gave the children very good education, having efficient masters; but those now-a-days do not even know the rudiments of grammar; the pay is so trifling that the educated would not think of offering themselves for the post. The Wesleyans have schools in the different towns, but they are always known to be deficient in giving instruction in the higher branches of education.

The Basle missionaries at Accra have done much, as they combine industrial pursuits with good, sound education.

The local Government should form schools in the different outposts, with properly-paid educated teachers from Sierra Leone or elsewhere, and a grammar-school at Cape Coast. The necessity for these improvements is very evident.

VII.—*That there should be Formed an Industrial School at Cape Coast.*

The Gold Coast is greatly wanting in good mechanics. There are no good carpenters or masons to be found; nor are there any shoemakers, grainers, painters, tailors, joiners, coopers, or wheelwrights. The Basle missionaries have endeavoured to supply the deficiency and teach some of these branches, but they are wanting in funds; and therefore it should be taken up by the Government, and a large establishment formed at Cape Coast, with one of these German mechanics at the head.

VIII.—*The Gold Coast should Send yearly Six Members to the Legislative Assembly at Sierra Leone.*

IX.—*The Remodelling of the King's Court into the principle of a Municipal Council.*

Through the recommendation of Sir Benjamin Pine, when Governor

of the Gold Coast, a municipal council, with the requisite officers, was formed at Cape Coast and Accra, which did a great deal of good in improving the health of the town by clearing out rubbish from the streets, by preventing nuisances being committed there, by stopping many barbarous customs to which the people were addicted, and by making proper drains. Mr. Andrews, however, when Governor, abrogated their power, and ultimately recommended to the Secretary of State for the Colonies its total abolition, which was carried; and thus a useful institution, through the caprice of one individual, was abolished.

But it is not my intention here to recommend the re-establishment of that corporate body, but that the king's court should be so remodelled as in principle to form a miniature municipal court, as this will be the best means for initiating the inhabitants into the form of self-judicial government. In fact, the King of Anamaboe, Coffee Affray, has anticipated this suggestion. "He does not settle palavers now," says the Hon. George Blankson, "but hands the case over to his judges, who are Messrs. Ferguson, Quansah, and Insaidoo Morgan." Now these three men are tolerably educated, and have large interest in the country. The king appointed Wm. Gharty, merchant, and president of the Gold Coast Temperance Society, his treasurer.

After paying all expenses, the regulation stipulates that the residue of the income is to be appropriated to the purpose of sanitary police, making roads, &c. Anamaboe, therefore, has given the initiative to the whole Gold Coast, and this plan should be recommended to the Kings of Cape Coast, Winnebah, and Accra.

The requirements of

LAGOS.

The colony of Lagos is an embryo colony, and its wants and requirements are yet to be studied. It will now be the place of the Governor to grant to the inhabitants privileges, as they show themselves ripe for it; but the improvements which are now called for, and which can with justice be conceded, are :—

1. To improve the drain of the town.
2. To open a good road towards Abeokuta.
3. To have trials by juries instituted.
4. Lagos should send two members to the Legislative Assembly at Sierra Leone.

THE REPUBLIC OF LIBERIA.

Whilst the British Government is planning out valuable measures, which will produce an entire change in the political government of her colonies along the West Coast of Africa, it is hoped that she will not forget that she still retains her glorious name of being the mother of nations. At the birth of the young Republic of Liberia, she stretched out most graciously a helping hand to her, and assisted the regenerated inhabitants to develop the vast re-

sources of their beauteous land, and to prepare themselves by active industry and well-spent lives to prove that they were capable of self-government and a higher state of intelligent existence.

There was perfect harmony between the young Republic and Her Britannic Majesty's Government. A consular agent was placed at Monrovia, which had the two-fold effect of representing British interest and exhibiting a laudable example to the other European powers. British vessels traded there, and British men-of-war are now and then in their harbour; and although at present the Republic has the sympathy of the British Government at heart, yet still it must be admitted that the withdrawal of the consular agency from Monrovia has operated very much against their interest.

The Honourable Mr. Cardwell, whom Providence has placed as Her Majesty's Principal Secretary of State for the Colonial Department in these difficult times for Africa, has proved by his defence of the past policy of the Government, and the good effect produced by missionary operations on the African race, that he is determined to give a new impetus to what is good, whilst at the same time repressing what is evil. We are confident that, if properly represented to him, he would recommend the re-establishment of the Consulate in Liberia; and I hope that the friends of African advancement will take an early opportunity of memorialising him on this subject.

The annexation of Sherbro to Sierra Leone, and the contemplated suppression of the office of Judge of the Mixed Commission Court in that colony, left vacant by the death of Mr. Skeleton, will place at the disposal of the Government a saving of nearly 3,000*l.* a-year, from which source the consular agent in Liberia could be paid without any pressure on the Imperial funds.

In bringing my remarks on the political economy of British Western Africa to a close, I must here adopt the remarks of a great writer, that the ambition of Great Britain in these days is to see her colonies attain one by one to the position of wealth and power, and to form themselves into nations; "it is her desire to have independent nations, once her feeble offspring, associated with her in the great work of the world's natural development, and the spread of Christian civilisation . . . . . to raise the degraded natives of Africa from the debased and degraded state to which they have fallen, both morally and physically—to free them from the bloody and demoralising influence of beastly superstition, —from polygamy—from domestic slavery—from the paralysing effects, as regards productive industry, of customs and institutions which, by the insincerity they create, as well as the licentious and foolish extravagance they prescribe and encourage, prevent the creation of that capital by which alone the works necessarily attendant on civilisation can be executed."

The African must expect to receive on the Coast from those, perhaps, who might be expected to support him, no ordinary degree

of abuses when he shows a degree of intelligent knowledge of his requirements; but he must never allow that to induce him to press his claims with arrogance, as that will be the best means of defeating his object; and I must only reiterate the advice of Mr. Fitzgerald, who urges upon the educated Africans of the Coast to put their shoulders to the work; "to prove by the effort they themselves make, that they too desire, and are striving, and will strive for the Christian and industrial regeneration of Africa; and to do this with the modesty, not at all incompatible with manly self-reliance, and a due sense of the innate dignity, which should characterise men who have been helped out of their degradation and brought at once into the ranks of a Christian civilisation which has taken eighteen centuries to be developed," by doing which, there will be encouraged the exercise of those qualities which will gradually lead to the attainment of the power of self-government, and the contemplated improvement by the House of Commons Committee will go on *tuto, cito, et jucunde.**

* Safely, quickly, and with ease.

LONDON: W. J. JOHNSON, PRINTER, 121, FLEET-STREET.

Army Med School

NOTES

ON THE

PREVENTION AND TREATMENT OF CHOLERA

BY

C. MOREHEAD, M.D., F.R.C.P.,

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"NOTES on the Prevention and Treatment of Cholera" were, in November last, sent by me to the Epidemiological Society, in the hope that the moot and important questions adverted to might be discussed by that scientific body. The Paper, however, was sent to the *Lancet* and appeared in that Journal on the 20th January. In the *Lancet* of the 10th February, a criticism of my "Notes," by Dr E. A. Parkes, was inserted. On the 19th February a reply to this criticism was addressed by letter to the Editor, but was rejected, on account of its length. A short summary was substituted, and published in the *Lancet* of the 7th instant. But as the abridged letter very imperfectly treats of questions of great practical importance at the present time, I adopt this method of making known the original letter, which is as follows.

Edinburgh, 10th April 1866.

TO THE EDITOR OF "THE LANCET."

SIR,

The questions relating to Cholera, on which I am apparently at variance with Dr Parkes, are—1. Predisposition. 2. Sir Hugh Rose's general order. 3. The treatment of the sick from Cholera in tents. 4. Cholera discharges. 5. Impure water as a cause.

These are large subjects, and not to be adequately discussed within the limits which you can assign me. I shall notice them in succession as briefly as possible; and, in order that the risk of being misunderstood may be lessened, I would beg that what I now write may be regarded in connection with the "Notes" published in your issue of the 20th January last, and the chapter on Cholera in my "Clinical Researches."

1. The question is not whether robust health is a safeguard against Cholera, for it must be universally admitted that no condition of health is proof against an intense degree of a special exciting cause, such as that of Cholera; but it is whether general feebleness of health predisposes, that is, increases the susceptibility to attacks. Dr Parkes thinks that it does not, and refers to his own experience in support of this opinion. On the other hand, I believe that Cholera is no exception to the general law, that asthenic and cachectic states favour the action of all *exciting* causes of disease—special and ordinary—aggravate the type, and thereby increase the mortality; and, further, a little reflection, I think, suffices to shew that, in the present state of sanitary science, this doctrine affords the only certain and safe basis on which to rest the practice of sanitary art. On occasions of Cholera prevailing in Bombay, the frequent occurrence of attacks among the general inmates of the large civil native hospital, under my charge, fixed my attention anxiously on the etiology of Cholera. The useful deductions from the facts recorded, fell far short of my expectations, but of the following there was no doubt: *—"The greater number of attacks was in cachectic or debilitated individuals: the influence of predisposition was very apparent."

Nor is Dr Parkes correct in saying, that in the literature of Cholera there is a want of trustworthy evidence to prove that weakly persons are most liable. Dr Munro, in his excellent Report on the visitation of Cholera in the 93d Highlanders writes thus†—"All the sufferers from Cholera, with very few exceptions, were persons who had suffered previously during the season from fever, or were in a

* "Clinical Researches," second edition, p. 205.

† Army Medical Reports for 1862, pp. 421 and 422.

weakly state of health, or laboured under some debilitating cause. The exceptions were so very few that I could name them." Again, "The women attacked were either pregnant or weakly from other causes." Again, "The children that took Cholera were all in bad health, suffering from teething, prolonged diarrhœa or fever."

This will suffice, for may it not be that the difference between us is rather verbal than real, and that on a doctrine of etiology so important, I am not at variance with an Observer, for whom I have much personal regard, and whose works I value very highly. Dr Parkes, in his Practical Hygiene, after stating that general feebleness of health gives no predisposition, adds almost in the following line—"Great fatigue, and especially if continued from day to day, predisposes, of this there seems no doubt." I would ask, what is the effect on the human body of great fatigue continued from day to day, but to enfeeble it, or, in other words, to produce general feebleness of health, or, as I express it, an asthenic state.

2. In respect to Sir Hugh Rose's general order, I had hoped that my opinion was expressed with sufficient clearness. When Cholera occurs at a station where the sanitary conditions are defective, it is—when the season is not manifestly adverse—often an important and necessary step to move the troops into camp under canvas; hence it is very wise to direct that officers should be thoroughly acquainted with the ground twenty miles round stations; and, further, that suitable and ample camp equipage should be always in store, and that supernumerary trained hospital servants, of all classes should be always available. On the other hand, in the rainy and hot seasons of many parts of India, and in the cold season of some, movement into camp will often prove the greater evil, for though it takes place from an infected locality, there can never be, certainty that it will not be made into one still worse. It will, moreover, induce more or less of the conditions of marching life which, it has been long known, are in these seasons predisponent of Cholera, generally characterised by a high rate of mortality. Further, the nature and laws of the exciting cause, that is, the poison, of Cholera are unknown. That there are various hypotheses, more or less probable, is true; but to enforce dogmatic rules of practice,

founded on uncertain knowledge, is unwise, for two reasons. Firstly, the rules are as likely to be injurious as beneficial; and, secondly, they are obstructive of progress—that is, the conversion of the uncertain into the certain. How can medical officers, fettered by a military order, be enlightened investigators of the unsettled questions of science involved in the order?

My reference to the 93d Highlanders, in proof that the rigid enforcement of Sir Hugh Rose's order, will, in India, increase the rate of mortality of the sick from Cholera, without affording good evidence that the ratio of attacks to strength is lessened, is objected to.

Let us examine some of the leading facts: In November 1861, the 93d Regiment was moved to Peshawur, a station not free from malarious influences; but the barracks and hospital were good, and the sanitary system, and hospital organisation, established by Dr Munro, were admirable at all points. The regiment was healthy up to the beginning of July 1862—then followed four distinct outbreaks of Cholera, the first from 7th to 17th July; the second from 26th July to 10th August; the third from 9th to 16th September; and the fourth from the 12th October to the 3d November.

From the 7th July to the 16th October, head-quarters remained at Peshawur. On the 16th October the regiment marched out of the station. On the 3d November it made its exit from the Peshawur valley—Cholera ceased; and on the 8th November the Indus was crossed. Between the 11th July and the end of September, detachments of the regiment were judiciously sent to Cherat, a spot on the Kuttuck Hills, due south of Peshawur, and 3000 feet above the valley, so that, up to the end of September, 463 men had benefitted by the cool atmosphere of this high altitude; and of these, 247 returned within the same period. In July, August, September, and October, the weather was hot and oppressive in the day, followed chiefly in the two latter months by damp and chilly nights.

I cannot, within the limits of a letter, attempt to analyse this report. Two or three short extracts will suffice. Dr

Munro, writing of the 4th Company, says,* "Not a case occurred in this Company until after the departure of head-quarters, and not until it left the shelter of a roof, and encamped on the regimental parade ground." Again,† "As long as the regiment remained in Peshawur, the officers, shut up within their well-wooded-compounds, escaped entirely; but almost immediately after going into camp (three days) in October, five officers were attacked, and of these four died." Again,‡ "We remained at Chumkunnie (the first camp) five days. Cholera broke out amongst us on the morning of the 17th, and day after day the number of cases, both Cholera and remittent fever increased. From the 17th to the 21st, 53 cases of remittent fever were admitted to hospital, 18 cases of Cholera, and 10 died during the same period."

At this stage of the march, an interesting and significant fact appears. On the 21st October the regiment moved from Chumkunnie to Oormoor a distance of four miles, but here Cholera and fever increased; seven officers were attacked, and within twenty-four hours the command of the regiment devolved upon four different officers. The admissions and deaths from Cholera among the men were more numerous than ever; and all, officers and men, with scarcely an exception, laboured under the influence of the choleraic poison. Seventy men, however, had been left behind at Chumkunnie, as an artillery guard; but after the departure of the regiment for Oormoor, there was no case of Cholera amongst them, and only three of choleraic diarrhœa. It may be inferred from these results that Oormoor was a worse locality than Chumkunnie; and what does this teach, but that we cannot be safe with this haphazard dealing with a powerful agent, whose laws of action we are imperfectly acquainted with. But the fact suggests more than this, for surely some account must be taken of the exposure, the fatigue, the despondency, the uncertainty inseparable from marching at that season and under these circumstances, compared with the absence, in part at least, of these influences on the men who remained at rest at Chumkunnie. At all events, in this immunity of men left in a used cholera camp, and

* P. 414. † P. 414. ‡ P. 415.

the sufferings of those moved from it, there is a fact strikingly at variance with the movement theory, and suggestive of the truth that our knowledge is still very uncertain. But the question of whether the ratio of attacks to strength, and of deaths to attacks, were increased or lessened by moving the regiment on the 16th October, requires facts not furnished by the report, viz., the number of the men attacked between 7th July and 16th October (101 days) with the ratio to the strength, and the number of deaths, compared with the number of attacks with head-quarters, between 16th October and 3d November (17 days), and their ratio to strength, and the number of deaths. The report does not give the precise figures, but there is sufficient to justify the conclusion that the ratios of attacks and deaths were both greater during the seventeen days of camp and marching life, than during the 101 days that the regiment remained stationary in barracks at Peshawur, occasionally suffering from cholera. The fact, that, after the 3d November, there was no return of Cholera in the regiment, cannot with reason be attributed to its being moved out of the valley of Peshawur; for this last outbreak continued from the 12th October to the 3d November, twenty-two days, whereas the duration of the three previous outbreaks was respectively ten, fifteen, and seven days. Moreover, with November commences the cold and healthy season of the year.

The opinion that the indiscriminate movement of troops struck with Cholera in India is injudicious and hurtful, is not advanced by me without some personal experience. Towards the end of May 1859, Cholera attacked the Artillery, the 61st Regiment, and the German Legion in the military cantonment of Poona. These troops occupied a consecutive line of barracks in a direction from east to west. The buildings, with the exception of one block, were the oldest and worst constructed at the station, and had long before been condemned. They were, moreover, crowded, but the exigency of the times had continued to render their occupation an unavoidable measure. The 61st Regiment, after distinguished services before Delhi and Lucknow, were marched to Bombay for embarkation to Europe; but an unlooked for contingency led to their temporary detention, and with this view they

were sent to Poona, where they arrived in May, disappointed and depressed. The German Legion consisted of badly selected volunteers who had been ill cared for at the Cape, and a considerable number of whom left that colony, tainted with scurvy and syphilis, and reached India in that condition, and were sent to Poona towards the end of 1858. They were ill equipped and over drilled—but not intemperate. Under the Indian ration and the Deccan cold season, the scorbutic taint disappeared, and the men gained in strength and flesh, but in February, March, and April there was much sickness from febricula. The Regiments at the station exempt from Cholera were the 31st Infantry, and the 6th, and 14th Dragoons, situated at considerable distances from the others, in more open positions and in better barracks. The 31st, and 6th Dragoons had been healthy throughout the cold and hot seasons, and though the 14th Dragoons had, as the 61st, been marched to Bombay for embarkation, and also temporarily detained, the circumstances were different. The 14th returned from service to their families and to a favourite station, which for many years of their Indian life had been their home. The 61st had served exclusively in the Bengal Presidency, and found themselves in a new place and among strangers.

When Cholera attacked the 61st Regiment and the German Legion, the monsoon threatened to break, the sky was overcast, and the atmosphere had the oppressive sultriness which generally precedes the first burst of the south-west monsoon. The camp equipage in store was scanty and incomplete. The question of movement into tents was carefully considered, and with me, as Superintending Surgeon of the Division present at the station, much of the responsibility rested. Bearing in mind the atmospheric state, its probable transiency, the state of moral and physical predisposition of the affected troops, and knowing that heavy rain impended, and that cold and wet are not unfrequently determining causes of Cholera, it was decided not to move the troops, but to do the best that the means admitted of in barracks and hospital. The disease soon began to decrease, and in a few days had entirely disappeared. Had this result attended a movement into camp, it would doubtless have been attributed to this measure. On the other hand, had, as I believe

would have been the case, the movement been followed by protraction of the disease and a greater mortality, this result would, in accordance with the logic of the present day, have been attributed to the intensity of the Cholera poison overpowering the prompt and judicious measures with which it had been opposed. I have no note of the numbers attacked or the ratio of deaths in this instance, but doubtless the mortality was high, for the conditions necessary to successful treatment did not exist; and it is the recollection of what I then witnessed, viewed in connection with my previous experience under more favourable circumstances, which dictated this sentence in my "Notes." "Therefore in all communities, from time to time visited or threatened by Cholera, there should not only be an efficient sanitary system of prevention, but also a well-considered method of treatment and hospital organization officially recognized and ready to be brought into practice when the necessity occurs."

This visitation of Cholera is instructive, on another account, for it contradicts a dictum at present current, viz., that outbreaks of Cholera in European troops are always preceded by Cholera in the adjacent native communities. On the occasion in question, though Cholera had prevailed in some parts of the Deccan in March, April, and May, there was none in the villages adjacent to the Poona cantonment, nor in the native Bazaar about a hundred yards distant from the German Legion, nor in the native regiment interposed between the 61st and 31st, nor in the city of Poona distant about a mile west from the affected troops.

3. I object to the dogma that, "in India, it should be a rule to treat every Cholera patient in a tent," because there cannot be the careful nursing and protection necessary to the treatment of the stage of collapse, and that consequently this rule, if acted on, will, in the long run, augment the mortality rate of the sick from Cholera. Dr Parkes forgets that the question is not, whether a tent or a well-constructed building admits of the greatest amount of ventilation; but whether it does so in combination with the protection from heat, wet, and cold, which the right treatment of Cholera demands.

Every competent Physician conversant with the western coast of India, Lower Bengal, and the south-western face of the sub-Himalayan range during the south-west monsoon, and with Central India, the north-western provinces, Upper Scinde, and the Punjab in the hot season, and with Upper Scinde, and the Punjab in the cold season, will demur to the rule that every Cholera patient should be treated in a tent in India. In this dictum, Dr Parkes seems to me to commit the error which runs through and vitiates the entire report of the Royal Indian Sanitary Commission, viz., the treating this great country of mountains and valleys, of extensive river plains and table lands, with its varied elevations and peculiar seasons, its inland and littoral climates, as if it were the camp at Aldershot or Curragh.

Since the issue of Sir Hugh Rose's order, which includes the treatment of Cholera sick at all seasons under canvas, I have, in conversation and correspondence, predicted that the strict observance of the order must lead to an increase in the rate of mortality to attacks from Cholera in the troops in India. Writing in 1860, I observed,* "As an approximate statement we may estimate the mortality from Cholera in India at from 30 to 45 per cent. in regimental hospitals, 50 to 55 in European general hospitals; and 60 to 65 in general hospitals for the civil native population of large towns, as Jamsetjee Jejeebhoy Hospital in Bombay." The mortality in the 93d Highlanders in 1862 was 80 per cent. in the officers, and 64 in the men; and I read, in the *Times* of the 12th February, that the rate of mortality from Cholera in Bengal was 75 in 1863. It would seem that from these statistics the Sanitary Commission of Bengal draws the extraordinary conclusion, that the intensity of this disease is gradually increasing, rather than the true and logical one, that the system of management in these last years has been injurious. This Commission says, "The main object ought always to be the prevention of fresh cases, rather than the medical treatment of those attacked." Is not this very much as if the Humane Society were to neglect the methods of recovering the apparently drowned, which science and experience have

* "Clinical Researches," second edition, p. 216.

of late years approved; and on discovering that the deaths from drowning had increased, to conclude that treatment was of no use and that to leave the apparently drowned on the river bank and to confine their efforts to preventing persons falling into the water was the helpless condition to which they were reduced. The rate of mortality from Cholera has always fluctuated, within certain limits, with the locality, the season of the year, the period of the epidemic, and the constitutional state of the community: on this all are agreed, and on these points there was no change during the thirty years of my service in India. The cases seen shortly after my arrival in 1829, were not less severe than those which I witnessed before leaving in 1859. This is not a question of statistics but of clinical observation, not to be decided by columns of figures and a Sanitary Commission but by experienced physicians in the wards of an hospital.

Apart, however, from fluctuation in the mortality from the causes just stated, the ratio is also very materially affected by the treatment and management of the attacked.

Let me not be misunderstood. The treatment of the preliminary diarrhœa and of the subsequent stage of reaction is in general fairly understood. It is the management of the important stage of collapse which is in question, and in this there are two kinds of error. The first, excessive interference, by which the dangers of reaction, and the deaths in that stage, are increased. The second, the neglect of careful protection, watching, rest, and nursing, which is inseparable from tents and marching life in India. The distinction between these two extremes is well represented in the instance of the apparently drowned, by, on the one hand neglect of all methods, and on the other, the hot-baths, tobacco enemata, and suspension by the heels of bygone days.

All I ask for the collapsed in Cholera is the assiduous application of principles akin to those which science, experience, and humanity have secured for the apparently drowned, being convinced that it is as much required, and will prove saving of life in the one case as in the other.

4. Dr Parkes remarks on my silence regarding the dis-

posal of Cholera discharges. I certainly do not accept Dr Snow's theory, but, nevertheless, I cannot plead guilty to neglect on this point. Dr Parkes overlooks the fact that my "Notes" dealt with principles, not details; and when I wrote that the treatment should be conducted "with care and judgment in a well constructed and ventilated hospital, with strict attention to cleanliness by a well disciplined establishment," I conceive that the removal of the discharges was fully enjoined. Then I further remembered that, in 1855, I had written as follows:*—"My present impression on this point (the portable or contagious property of the Cholera poison) is, that if any of the spread of Cholera be due to human intercourse, the degree is very limited; but my practice with reference to it has always been to pay great attention to scrupulous cleanliness and ventilation around Cholera patients, and to place them widely apart from each other; for, setting aside the suspicion of communicability, nothing is so likely as exhalation from the discharges and bodies of the sick to produce that impure state of the atmosphere, which is undoubtedly an efficient condition in favouring the spread of the disease." Further, as bearing on my supposed neglect of this part of sanitary detail, I may be permitted to add that the abolition of cesspools, and the principle of dry scavenging, with twice daily removal of excreta, were enforced in Jamsetjee Jejeebhoy Hospital long before the plan was thought of, I believe, in the jail at Lahore; and afterwards, in 1858, when serving as Superintending Surgeon at Poona, I endeavoured to introduce the same system in the hospitals there, but with partial success. Such as it was, however, I find, from Mr Hanbury's Report,† that, on the transfer of the 33d Regiment from Poona to Deesa, in the early part of 1859, Dr Muir urged its adoption with good effect on the authorities at that station.

5. On the question of purity of water as a sanitary measure, and of impure water as a cause of Cholera, I am said to have spoken too lightly. My observation was, "Impure water is doubtless a sanitary evil, and calls for prompt and decided removal," and in proof that these

* "Clinical Researches," second edition, p. 206.

† Army Medical Reports for 1861, p. 316.

words were not heedlessly written, I may state that several years before attention was much given to this subject, I had a large and carefully constructed filtering apparatus erected close to the tank from which my hospital was supplied, and no water, especially in the hot season, was used till after it had passed through the filter.

I believe that impure water, habitually used, favours predisposition to disease, as other defective vital stimuli do, and that, in proportion to the degree and kind of impurity, it may become in Cholera seasons a *determining* cause. These principles, in my judgment, meet all the authentic and trustworthy facts; and I look in vain in the voluminous records of the Indian Sanitary Commission and in Dr Parkes' Practical Hygiene, for any attempt at a scientific and consistent explanation of the causation of Cholera by impure water.

I am,

SIR,

Your obedient Servant,

C. MOREHEAD.

Edinburgh, February 19, 1866.

Andrew Smith Esq M D
Inspector General Army Medical Department
with the Authors Compts

THE

PATHOLOGY AND TREATMENT

OF

CHOLERA ASPHYXIA.

BY

ROBERT REID, M. D. T. C. D.,

FELLOW OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

SECOND EDITION.

"Si quid novisti rectius istis,
Candidus imperti; si non, his utere mecum."

HORACE.

DUBLIN:

HODGES AND SMITH, GRAFTON-STREET,

BOOKSELLERS TO THE UNIVERSITY.

1855.

DUBLIN:
Printed at the University Press,
BY M. H. GILL.

The frequent recurrence of Cholera Asphyxia, since it first made its appearance in these countries, has induced me to submit the following pages to the consideration of the Medical Profession. It must be obvious to any reader, that the circumstances here stated are the *results* of observations which have been carefully considered from the time the disease made its first appearance, in 1832, to the present day. To have entered into the detail of individual cases would have extended this publication far beyond the limits proposed; the object being to give a concise epitome of the pathology and treatment of the disease in general.

ROBERT REID, M.D.T.C.D.

Corrig Avenue, Kingstown,
8th January, 1855.

Cholera
Asphyxia

THE

…OGY AND TREATMENT

OF

…LERA ASPHYXIA.

… disease called Cholera Asphyxia, …ed almost every region of the earth …the last few years, has forcibly attracted the anxiety and exertions of the medical profession towards ascertaining its nature and most appropriate mode of treatment. Although much information relative to the symptoms of the disease has been accumulated, yet the facts which have been sufficiently established are recorded in the various publications on the subject in a manner so unconnected and isolated, that they afford little assistance towards discovering the best mode of curing the disease, and consequently the treatment has been often worse than empirical.

Sir William Chrighton says: "It is a most melancholy confession, but one not the less true, that, after cholera has spread its devastations from Ceylon to

THE

PATHOLOGY AND TREATMENT

OF

CHOLERA ASPHYXIA.

THE formidable disease called Cholera Asphyxia, which has visited almost every region of the earth within the last few years, has forcibly attracted the anxiety and exertions of the medical profession towards ascertaining its nature and most appropriate mode of treatment. Although much information relative to the symptoms of the disease has been accumulated, yet the facts which have been sufficiently established are recorded in the various publications on the subject in a manner so unconnected and isolated, that they afford little assistance towards discovering the best mode of curing the disease, and consequently the treatment has been often worse than empirical.

Sir William Chrighton says: "It is a most melancholy confession, but one not the less true, that, after cholera has spread its devastations from Ceylon to

Archangel, from Orenburgh to Berlin, we are almost as far from a rational *methodus medendi*, as we were when it first appeared on the banks of the Ganges." This remark is still applicable, for it must be confessed that no rational mode of treatment has heretofore been pointed out. To attain so desirable an object, the physician must study the phenomena which the disease presents, by cautiously reflecting upon the trains in which those phenomena present themselves. Under such circumstances the following pages are submitted to the consideration of the medical profession as the result of the information obtained from publications on the subject, and deduced from personal observation of the disease.

There cannot be a derangement of the vital powers, from the most trifling to the most severe, that will not exhibit some symptoms which may also be met in this Cholera. The symptoms of a disease are a number of phenomena which must be exhibited in a certain series, and without which the disease is not. It is therefore evident from the medical records of this country, that a disease similar to the one under consideration has not been before observed in Ireland. Dr. Elliotson states, "that in the hospital he has been attending for fourteen years, he has never seen, until now (1832), a disease like the cholera; in it you have no bile discharged except at the beginning or close: a person in the way of catching this disease may have merely purging; but the diarrhœa is characterized by white fæces." In three epidemics

which have occurred in Dublin since the year 1811, I have had most extensive opportunities for observation during my attendance at the hospitals to which I was attached, and I can safely assert that no case of disease similar to Cholera Asphyxia came under my notice.

The difference of opinion which has occurred among medical practitioners, relative to the infectious nature of this disease, may be attributed in a great measure to the want of discrimination in the first observers. Genuine Cholera has been known from time immemorial in India, and the term expresses accurately the nature of the disease ; but this term has been extended to an affection, one of the most essential characteristics of which is a total suppression of biliary secretion. By thus confounding two diseases so different in their natures under one denomination, the practitioners who know that true Cholera is not infectious extend that opinion to the affection under consideration. One of the strongest statements in support of the opinion that Cholera Asphyxia is not contagious may be seen in the medical reports from Dantzic. When these reports are examined with attention, it will be found that the symptoms in the first stages differ considerably from the disease at present in this country. As it is stated, there was increased and vitiated biliary discharge, evinced by the vomiting and purging of greenish matter. Dr. Baum says it made its appearance without communication with any unhealthy place ; and that the disease had been

preceded by a remarkable change of weather, the temperature often differing in some hours' time nearly ten degrees R. He mentions also that immense quantities of fish were caught, which were sold at so low a price that the people lived almost entirely upon them during the months of April and May, prior to the appearance of the disease. Under such circumstances, it is obvious that the citizens of Dantzic may have been afflicted with disease quite independently of any other which happened at the same time to be spreading its ravages through Europe.

By considering the circumstances which have been observed during the whole course of this Cholera, from its origin in the East Indies to its arrival in these countries, it may justly be inferred that the disease is propagated by communication between those having the malady, and individuals who by habits or constitution are disposed to take the infection. By calculating upon this supposition, I was enabled to prognosticate the time Cholera would arrive several months prior to the appearance of the disease in this city. Certain states of the atmosphere may have a powerful influence in developing the disease in those affected ; and a remarkable instance is related where a number of passengers were crowding the deck of a ship when a severe storm arose from the east: fourteen persons were affected with Cholera on the side exposed to the storm, while not an individual showed symptoms of the disease among those of the opposite side, the cold wind in this case,

thus changing the disease in those affected from the latent to some of the active stages. When it is considered, however, that the disease spread at the same rate through all the varieties of climate from the torrid zone and over the snows of Russia, it cannot be supposed that any state of the atmospheric air alone is capable of communicating it. It may be interesting to examine how far exposure to a damp atmosphere may render individuals liable to take the disease, for it is well known that it traverses along the sea coast and the course of large rivers, in preference to inland situations. The severity of the disease in the town and castle of Clare, in Ireland, is an example of the power of such a situation in propagating this disease and increasing its malignity. It cannot be inferred that the disease arose spontaneously from the state of this place, for this Cholera spread through the Russian empire when the ground was covered with snow. When it made its appearance in Dublin and in Liverpool, a remarkable fact was observed, which corresponds with the nature of the disease as observed in other countries. When the cold easterly winds prevailed, the number of new cases were increased in Dublin; and a similar result took place in Liverpool when the westerly winds prevailed, showing the influence of the sea breeze in developing this disease here, as in the eastern countries. Other circumstances have also the power of developing this disease, such as deep mental impression, or sudden alarm ; an instance of the latter occurred at Youghal,

in the county of Cork, soon after the disease appeared there: a man was standing on the deck of a ship, apparently in perfect health, when a seaman fell from the mast-head, and was killed beside him ; the man was immediately taken ill, and died in a few hours of Cholera Asphyxia.

By examining in this manner all the various circumstances which have been assigned as the causes of the disease, they will be found reduced to the single one of a conducting medium of communication with previously infected individuals. It may be asked, how did the disease first arise in the East Indies, and may not the same occur in other places? When, however, the peculiar complication of circumstances is considered, which may have been necessary to the first formation of this morbific miasm, it will be found that the chances of a combination exactly similar in any other place are infinitely small.

In the progress of the disease towards these countries, it has been ascertained that strict quarantine has effectually resisted its advance: examples of this occurred in Egypt and in Persia. The permanent character which the disease has now assumed, renders all quarantine measures ineffectual, which cannot be persevered in as long as the disease exists.

Having taken a general view of the contagious disposition of Cholera Asphyxia, I am enabled from personal observation to state a few facts of a local nature. The disease under consideration first appeared at Ennis, in the county of Clare, in Mill-street,

a day or two after a party of people with luggage, &c., stopped there on their way from Limerick, where the inhabitants at the time were severely afflicted with Cholera. From this street it quickly spread through the town. Out of twelve nurses attached to the Cholera Hospital, seven were infected during the first three weeks, two of whom died, having obstinately refused to take any medicine ; of three apothecaries, one died, and his wife died also, who lived in the hospital ; of four physicians, two got the disease, and one died from the second attack. In these cases the disease appeared to have been propagated by personal communication. Several well-authenticated facts prove that in this country the morbific poison may be communicated under some circumstances by substances which have had contact with the infected. Thus, an officer died at Island-bridge in this city, whose sheets were taken, after death, by a man and his wife, who lay in them for some days, when both these individuals took the disease and died. When Cholera appeared at Athy, an officer's wife, who dreaded the disease, fled to Carlow, where she was shortly after attacked by the disease and died. She was the first person affected in that town. Her bedclothes were stolen after her death, and the people who committed the theft died. The disease then spread through the town. The first case observed in Athlone occurred in a pedlar, who died, and was buried, with all his goods, among which was a quantity of hair ; a girl, the daughter of a man who traded

in this commodity, dug up the hair, which she carried home ; she took the disease, and died : soon after this several cases appeared in the town. A very important circumstance has been communicated to me by Captain Vignoles, who commanded the police in the county of Clare ; he stated that since I left Ennis (to which place Dr. John Ferguson and myself were sent by the Central Board of Health in Ireland, in order to render our assistance to the inhabitants of that town), the same places from which patients had been transmitted to the Cholera Hospital still continued to supply fresh cases ; although the inhabitants had been several times in succession changed without any communication with the preceding occupants. Many instances of this kind came to my knowledge during the epidemic fever which occurred in this city in 1826–7.* I have lately been informed, by authority upon which I can rely, that a woman afflicted with this Cholera was brought to an inn at Glenarm, where she died; but the owners, having a large party at the inn during the night, were anxious to conceal this death. The consequence was, that several people were dancing in the room where the old woman lay concealed: no less than seventeen individuals shortly after died out of the number who constituted the dancing party in this room that night.

* *Vide* "Clinical Observations" made during this Epidemic, which I read before the Association of the King and Queen's College of Physicians in Ireland, and published in the fifth volume of their Transactions.

Heberden states that two conditions are necessary to the communication of the disease, viz.: a predisposing state of the body, and the presence of the morbific principle. From these and other facts, I therefore conclude that the contagious nature of the disease is placed beyond a doubt in this country.

In a "Treatise on Tetanus and Hydrophobia," published in 1817, I have stated "that the essential symptoms of disease often excite others, which at first appear more conspicuous than themselves, owing to the peculiarity of constitution or circumstances of the patient; yet the physician is obliged to work upon them, and thus deduce the nature of the disease, like the unknown quantity in algebraical calculations." There is not, perhaps, any disease to which this remark is more directly applicable while investigating the nature and the course of its symptoms, than that which forms the subject of these pages. The observation of the celebrated French physician, that as all other diseases end in death, Cholera Asphyxia begins with it, although stated as a general result of what he had seen in those affected with the disease, yet upon strict investigation it will be found applicable to each particular function, during the progress of the disease in every individual. When Cholera Asphyxia is allowed to take its own course without the interference of medical treatment, it will be found that all the symptoms arise, not from excitement, but as the consequences resulting from the absence or suppression of the function which in a state of health

regulated that organ, the deranged actions of which attract the notice of the physician. Thus the discharge from the alimentary canal, which is so generally observed in the first stages of this disease, is found to consist not only of the usual contents of the stomach and intestines, but also of fluids which had made progress through the general frame. The vessels having been deprived of that vitality which enabled them to urge on their contents, allow their fluids to pass into the elementary canal, as if by mere percolation. The fluids thus escaping from the general frame, the skin on the external surface becomes corrugated, particularly in the hands and feet. Frequently the entire body appears remarkably diminished in bulk, so as scarcely to be recognised by persons who were acquainted with the individuals when alive. It appears, therefore, that the cause of this disease tends to suppress vital actions, for the various secretions cease to be performed, or are performed imperfectly. The first symptoms which indicate that the constitution of the individual yields to the disease are derangements in the functions of that portion of nerves which I have denominated the ganglionic system ; and as the nerves relating to this system are so intimately connected with the heart and arteries as to form almost a nervous tissue round the vessels, the general circulation must be very soon affected. As the disease advances, the impediment to the spinal functions becomes more evident, and the power of motion is diminished. The muscular irritability being thus left uncontrolled, irregular muscular spasm takes place in various parts. The cerebral system* is the last which yields to the destroying influence of this dreadful malady, the patient retaining his intellectual faculties almost to the moment when life ceases.

By thus investigating the nature of the disease, it will be found that these phenomena can only be attributed to the influence of an animal poison, which, being communicated to the human frame, continues for a period in a latent state, until it can acquire sufficient force to overcome the vital powers of the constitution. From some observations which I have have had an opportunity of making, it appears that the latent period may be extended to six weeks.

* For a full explanation of the terms ganglionic, spinal, and cerebral functions, *vide* a Treatise published in 1817 on Tetanus and Hydrophobia, and a paper on Fever, which I presented to the Association of the King and Queen's College of Physicians in Ireland, and published in the third volume of their Transactions. I may state here that Dr. Marshall Hall has for some years after these publications been lecturing in London, and endeavouring to explain the division of the nervous structures according to the above arrangement; although he has employed the very terms which I had adopted several years before, he had not the candour to acknowledge from whence he derived his information, although all the journals and reviews of the day entered very largely into the consideration of my paper in the third volume above alluded to. I had intended to take notice of a publication by Dr. Hall, wherein he claims to be the discoverer of this distribution of the nerves, but found it such a tissue of inconsistency that I gave up the attempt.

This poison, however, seems, like that of fever, capable of having its virulence increased considerably by condensation ; thus, when the disease occurs in situations where numbers of individuals are crowded together, and where proper ventilation and other circumstances are not attended to, as in gaols and prison-ships, the disease is apt to spread with the utmost rapidity and fatality.

The plan of treatment which I have found most successful in relieving those suffering under this cholera has been founded upon the views of the nature of the disease which have been stated in these pages. The rapidity with which the disease runs through the various stages towards a fatal termination renders it necessary for the physician not only to treat the stage of the disease immediately presenting itself to his investigation, but at the same time he should, if possible, anticipate the stage he may expect soon to follow. As far as I have been able to ascertain, the disease appears to have three distinct stages, which require peculiar management. It is of the utmost importance towards a successful treatment, for the physician to be aware that different functions of the frame may be in different stages of the disease at the same time ; for although the virulence of the disease may, in some cases, be rapidly fatal, yet careful observation will prove that the poison is progressive in its effects. By keeping this fact in view, the physician is enabled to combine his remedies in such a manner as to produce the most decisive influence

in checking the disease. The first stage is that in which the natural secretions are evacuated: these are generally increased, as if the natural powers of the organs were exerted to throw off an offending matter. The timely administration of a mustard emetic, followed by a warm purgative, such as spirits of turpentine and castor-oil, with a few drops of camphorated tincture of opium, has frequently succeeded in relieving the patient entirely of the disease. The choice of emetics demands the most serious consideration. The great debility attendant on the disease prohibits the employment of any emetic medicines which tend, by their secondary effects, to debilitate. The most intractable cases I have met were treated, in the first instance, by emetics of large doses of ipecacuanha. In such cases, when other medicines were afterwards given to the patients, they produced as little effect as if they were poured into an empty cask. Although large doses of ipecacuanha prove so extremely detrimental, I have found a combination with opium, in the form of Dover's powders, of the greatest service, so as in many cases to arrest the farther progress of the disease; and by restoring the action of the liver, by means of tincture of myrrh or other medicine, the patient has soon become convalescent. In this first or ganglionic stage, an attempt may be made to correct or destroy the animal poison, the cause of the disease.

From the accounts which were published respecting the influence that the hydrochloruret of lime

evinced in destroying animal effluvia, I was induced to try the efficacy of this substance in neutralizing the animal poison generated in fever; and having found it fully to answer my expectations, when tried on an extensive scale in the Fever and Dysentery Hospital of Kevin-street, during the epidemic of 1826–27,* I have continued to prescribe it in many other diseases, with decided advantage. The utility of this valuable medicine appeared to me, therefore, to be clearly indicated as a powerful agent in the treatment of the disease which at present occupies our attention. I therefore directed it in this and the subsequent stage, with the view of correcting or controlling the primary cause of the disease, and have generally found from one to three doses of the mild solution of the chloruret of lime in water fully to answer all the purposes intended.†

While the physician thus attacks the source from

* *Vide* "Clinical Observations," to which I have before referred.

† The solution I direct is made by putting a small quantity of the chloruret of lime into a bottle of water, which, being well corked, is to be shaken. When the sediment has subsided, the clear liquor is to be poured off and preserved in well-corked phials. In prescribing this, care should be taken not to use any acid which, by uniting with the lime, might extricate the chlorine. There is a solution, said to be a concentrated solution of chloride of lime, which appears to contain a quantity of free chlorine. The physician should be aware that this solution, when given to a patient, is liable to cause a most alarming sense of suffocation, which, without timely assistance, might prove fatal.

whence the morbid phenomena arise, he should carefully direct his attention towards supporting the vital powers of the constitution. The function which seems to have the most general influence throughout the frame is that of the heart and arteries; life is preserved as long as the action of these organs is continued. It was, therefore, necessary to consider what means were most efficacious in keeping up the action of the heart and arteries. The known effect of extract of elaterium in exciting the pulse held out a promise of its utility in the present case. The rapidity with which the disease now runs its course also pointed out the importance of combining any medicines which may be deemed expedient, so that the desired effect may be speedily produced upon the frame. The usual mode of prescribing medicine, either in form of pills or diffused through a watery medium, is objectionable. The state of the alimentary canal in this stage of the disease is such that the effect of medicine in either of these forms would be extremely uncertain. Having observed that olive oil, when applied to the tongue, or almost to any other part of the frame, quickly communicates its peculiar flavour, it appeared to me that if it were possible to impregnate this fluid with the active qualities of elaterium, a valuable remedy would be obtained, whose quick action might be equal to oppose the rapid progress of the disease towards the fatal termination. I therefore directed some extract of elaterium to be rubbed with olive oil, which, being

filtered through paper, it was found that the oil had imbibed the active principle of that medicine, and, when applied to the tongue, quickly produced the peculiar effects of elaterium. Having thus far succeeded, I considered it possible to combine in such a manner the powers of different medicines adapted to the treatment of this disease; and, for obvious reasons, made choice of columbo and capsicum in addition to the elaterium, as the most appropriate combination of medicine for general service, which, by curbing the rapid progress of the disease, and thus prolonging life, would allow the physician time to treat the various organs which happen to be affected. There were now two powerful agents at my command for the treatment of this disease, and ample opportunities were soon afforded to put them to the test of experience. Having found these medicines answer the intentions for which they were directed, beyond my most sanguine expectations, I communicated the circumstance to several medical friends, who have assured me that this compound oil has had the desired effect in several hopeless cases. I have no hesitation in attributing much of the success which attended our labours at Ennis to the operation of this remedy.

A remarkable circumstance is worthy of notice, respecting the action of the solution of hydrochloruret of lime and the compound oil, when given in combination, in this stage of the disease. When the circumstances of the case would clearly point out

the propriety of giving an emetic to the patient, the combination of these medicines has produced that effect the instant it has reached the stomach. I have been often astonished at the immense quantity of liquid which has thus been thrown off. When the vomiting induced by the medicine has ceased, and while the stomach is still empty, if the same dose be immediately repeated, it then lies easy on the stomach, and produces the general effects which are to be expected from the medicine. By studying the effects of the compound oil on the general economy, it will be found that, by supporting the action of the heart and arteries, it tends to restore the natural secretions through the entire frame.

With respect to the employment of other medicines during this stage of the disease, it must entirely depend upon the state of the patient at the time he comes under the treatment of the physician. Several very valuable remedies have been praised or dispraised, according as they happened to produce a beneficial effect by their proper application, or the reverse. Even the local circumstances of the patient appear to modify the disease in such a manner that the medicines directed by experiment, and found beneficial at one time or in one place, will, under other circumstances, disappoint the expectations of the practitioner. From the excessive diminution in the fluids of the general frame during the first or ganglionic stage, a very injurious effect is produced upon the spinal system: besides giving a disposition

to spasm, the vessels become incapable of urging on the small quantity of fluid which remains in the frame ; and where partial spasm occurs in the veins, extensive patches appear in various parts of the surface. These patches have a deep blue colour, which may be attributed to the want of oxidation of the blood in the lungs ; for the membranes of these organs, by the deficiency of fluid, become similar to dry parchment, and cease to allow the influence of the atmospheric air to be transmitted through them to the blood. In such case the good effect of syrup of squills or other expectorant may prove of great advantage. But the most dangerous symptom, and one which I have observed to be the most rapidly fatal in this stage, occurs when spasm attacks the muscles of respiration, which seems to arrest altogether the function of respiration, already enfeebled by the progress of the disease. Indeed, it may be said that the patient dies by suffocation. A remarkable instance in proof occurred some years ago. A celebrated pugilist, a black man, named Sutton, had a most beautifully formed chest. Some artists wished to take a plaster cast from this person, and, everything being prepared, the artists began pouring the plaster on the man, when one of the bystanders observed a fatal anxiety on his countenance, although he was incapable of giving expression to his sufferings: had the proceedings not been instantly broken up, he would quickly have become a corpse.

It would extend these pages far beyond the limits

proposed were I to enter into minute details of the symptoms which indicate the treatment best adapted for their relief. When the physician reflects upon the nature of the disease in the manner I have already pointed out, he will be enabled to direct his remedies with almost the certainty of success, when the constitution of the patient has not been broken down by other causes previously to his having become infected with this disease. The great difficulty arises from the necessity of directing the attention not only to the morbid phenomena immediately present, but also to those which may be expected quickly to succeed them, and which require to be treated as if by anticipation. This stage admits of the greatest variety of treatment, as every organ of the frame is liable to the attack of the disease, which becomes modified according to the number or state of the organs affected. Thus, when the liver has been accustomed to the influence of spirituous potations to excess, but does not evince tenderness on pressure, although the patient may have a copious evacuation from his bowels of the rice-water matter every minute, a full dose of rhubarb, with thirty or forty drops of the compound oil, and a small quantity of camphorated tincture of opium, will quickly suppress these discharges, and cause a natural evacuation to take place in six or eight hours afterwards. In robust patients, and those accustomed to great bodily exercise, in whom the functions of the liver have been healthy until the attack of the present disease,

after the first steps in the treatment have been taken, and that vomiting and purging still continue, a solution of carbonate and muriate of soda will quickly allay these troublesome symptoms, and restore the patient to health. In this state bleeding from the arm will be found highly advantageous, when indicated by a sensation of weight and oppression about the precordia. When judiciously employed, this remedy seems to facilitate the operation of medicines given internally. I have met many cases in whom the medicines which have been given appeared to lie dormant until the patient was bled, soon after which they produced their peculiar effects in the proper manner. The indiscriminate use of the lancet has, however, induced several practitioners to pronounce that there is no dependence to be placed upon it in this disease. When the spasms are severe in the external muscles, great relief is obtained by rubbing the affected parts with a liniment formed of camphorated spirit of wine, spirit of turpentine, and a little oil, to which spirit of ammonia is sometimes a useful addition. These facts ought to be sufficient to prove the absurdity of routine practice, such as "saline treatment," mercurial treatment, or any treatment adopted without discrimination.

When the spinal system seems to be severely affected, as indicated by the spasms, accompanied with loss of strength in the frame, advantage may be obtained from the employment of the cajeput oil. I

am inclined to attribute much of its efficacy in such cases to the impregnation of copper which this oil, when brought to this country, is found to contain, and have had, therefore, a minute portion of subacetate of copper added to the compound olive oil, for the purpose of employing it in cases where the cajeput oil may be expected to be useful.

The third stage, or that when the cerebral system yields to the disease, is generally considered that of collapse. In this all the powers of life seem to be exhausted in the parts affected. The general appearances of the patient have been already described in every book upon the subject. Although the motions of respiration still continue, yet the function is not performed, for the membranes interposed between the blood and the atmospheric air becoming dry, like parchment, cease to transmit the influence of the atmosphere to the blood, and the patients die without the mucous rattle which is heard in other diseases prior to dissolution. When it was observed that the blood ceased to undergo the necessary changes in the lungs, the inhalation of oxygen gas was recommended to the Prussian Government by Dr. Jehllsenger, and by Sir Anthony Carlisle to the British. Dr. Baum tried it in two cases, and states "that both terminated very soon fatally, although there had been apparent grounds for a favourable prognosis in these cases."* This is an example of the inutility of attempting to supply, by artificial

* Extract from Hamett's "Medical Reports."

means, any substance which by analysis may be found deficient in the blood during disease, without attending to all the circumstances which are necessary to its proper union with that fluid. The inhalation of this gas with aqueous vapour may tend to obviate the parched state of the membranes; but when it is recollected that the substances which cause the union of oxygen with the blood, perhaps by *disposing affinity*, may also be absent, the physician will perceive how many circumstances it will be necessary to be aware of, so as to afford full prospect of success in the application of any remedy. The occasional failure of all the different *treatments* may be viewed in a similar manner.

Although the influence of the cerebral system upon the internal organs, which are attacked by the disease, may be suppressed, yet the external senses and intellectual powers remain, for a considerable time, apparently unaffected. There is, however, a feeling of dread in the minds of those afflicted with Cholera Asphyxia, which seems almost peculiar to the disease. When this feeling predominates, the cerebral system ceases to oppose the disease, which, under such circumstances, makes a progress amazingly rapid towards a fatal termination. I attended a lady who was afflicted with this Cholera in a very decided manner: on my second visit it appeared that the medicines which were ordered did not sufficiently produce the effect expected from their operation. Her spirits were so depressed that she shed tears in describing

the symptoms of her complaint. I observed that she was a woman of energy, with a fine cultivated mind; and therefore explained to her fully how important it was for her to exert her natural resolution, and keep up her spirits. She at once showed her determination, dried her eyes, and related a droll anecdote. From this moment the medicines she had taken acted with the utmost satisfaction, and her progress towards recovery was rapid. A lady, after attending a friend who died of this disease, became affected with it herself, in a very severe form. She was taken ill at some distance from home, but being aware of the nature of her complaint, she called upon her attorney, regulated her affairs with the utmost composure, and then went to bed. All the remedies directed produced the desired effects, and she was soon restored to health: thus proving the utility of rousing the brain to active energy, by which the influence of the cerebral system throughout the frame became in some measure restored. When the disease was making rapid and fatal progress at Ennis, in the county of Clare, the shops being shut, and most of the inhabitants having fled, the frequent scenes of the dead and dying spread a mournful gloom over those who remained, each expecting himself to be the next attacked. I directed the military bands to play the liveliest tunes through the town, the inhabitants endeavouring to take all possible amusement in the streets; and Captain Vignoles, whose valuable and philanthropic services must be long remembered in Ennis with grati-

tude, with his usual energy, thought of employing the children, from four years old and upwards, in repairing the streets. This afforded some appearance of bustle in the town, and the little creatures seemed to take pleasure in the work. I have the happiness to state, that not one of them was sent to the hospital during my attendance. These circumstances clearly evince the good effects of cheerful occupation in diminishing the liability of persons to this disease.

The great debility in every function after recovery from the collapsed state demands the most careful attention on the part of the physician. The debility of the cerebral system is so excessive, that mental impression which under other circumstances would have little effect is sufficient to destroy the patient. Many cases occurred to my observation, where the patients who had been cured of the disease have expired without a struggle, merely on account of seeing others die beside them. That such was the fact appeared evident; for when I observed a few such occurrences to take place in hospital practice, I directed that patients when cured should be immediately transferred to the convalescent wards. By adopting this arrangement, no fatal case among such patients afterwards occurred.

When the blood has been deprived of its stimulant property, by which the extreme vessels are excited to action, the propriety of external warmth and rubbing the parts thus affected is plainly indicated. The process of rubbing should be performed as much

as possible in the course of the venous circulation, and I have found the turpentine liniment greatly to contribute towards restoring the circulation in the parts. Practitioners should also be aware that however beneficial cold or iced water may be when given internally, the most injurious effects arise from external cold or the admission of cold air. I have known many fatal cases result from nurses incautiously opening windows, and thus allowing the patients to be exposed to a stream of cold air.

There is a circumstance liable to occur in this stage of the disease, which it is very important for the physician to bear in mind. The patient is exhausted by his sufferings, and life, to all appearance, becomes extinct. After lying for a time apparently lifeless, the vital actions are gradually restored, and the patient, to the surprise of his attendants, revives. In the cases of this kind which came under my observation, the revival might be attributed to the slow but steady effects of the compound olive oil, which had been previously given to the patients.

It appears that when the various organs have been, by proper treatment, relieved from the morbid suppression of their functions caused by the disease, that a kind of reaction then takes place. This is usually denominated consecutive fever. Were all the organs of the frame equally affected by Cholera Asphyxia, this reaction would only take place in sufficient force to re-establish that balance of activity which constitutes health. This seems to be the case when the

physician is enabled to foresee the state of the organs impending after the original disease has been removed. I have pointed out that the effects of the animal poison are progressive in the human frame. The action of some organs may be altogether suppressed, while other organs may have the influence of the ganglionic, spinal, or cerebral nerves suspended separately. The physician may therefore, by observation, during his treatment of the former stages of the disease, be enabled to judge to what organ it may be expedient for him now to direct his attention. I have already observed that the ganglionic system is first and chiefly affected in Cholera Asphyxia; it is thus reasonable to suppose that this system would be latest in restoring its healthful influence. It is therefore improbable, that what is called inflammatory action should take place in any organs of the frame. Indeed I have not met a single instance of the kind among a large number of cases which came under my observation. All the cases of this stage which I have had to treat consisted of genuine congestive fever. It is of course unnecessary here to enlarge upon the mode of treating such fever.*

When congestion takes place in the substance of the nervous centre, situated in the spinal column, the patient complains of a feeling of great general debility. This is accompanied with intermission of the

* *Vide* treatment at large in a "Treatise on Fever" by me, in the third volume of the Transactions of the College of Physicians in Ireland.

pulse, and the catamenia, when present, is discharged like liquid pitch. These symptoms are attended with great danger, as the patient may expire without a groan, and appear only as if in a deep sleep. In such circumstances I have found the most efficacious treatment to consist in applying leeches to the neck, and the compound olive oil and tincture of myrrh in mixture repeated every hour or half hour until some steadiness is observable in the pulse.

From what has been observed of the circumstances and nature of Cholera Asphyxia, I am convinced that it is amenable to scientific treatment, and that there is every probability of its affording another splendid triumph to medical science, in addition to those which have of late years been accomplished.

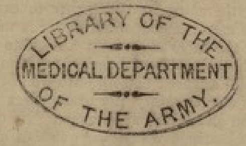
THE END.

ON

ETHNO-CLIMATOLOGY;

OR

THE ACCLIMATIZATION OF MAN.



ON ETHNO-CLIMATOLOGY; OR THE ACCLIMATIZATION OF MAN.

By JAMES HUNT, Ph.D., F.S.A., F.R.S.L., Foreign Associate of the Anthropological Society of Paris, Foreign Honorary Secretary of the Ethnological Society of London, etc., etc.

(Reprinted from the Transactions of the Ethnological Society, Vol. 2, New Series.)

ONE of the most important and practical duties of the ethnologist at the present day is the endeavour to discover the laws which regulate the health of man in his migrations over the world. The generally received opinions on this important subject are, however, vague and unsatisfactory.

From some cause, it is the popular belief that man stands entirely alone in the animal kingdom with regard to the influence exerted on him by external causes. We are told that man can thrive equally well in the burning heat of the tropics and icy regions at the poles.

I purpose, therefore, in this paper to examine how far the supposition of man's cosmopolitan power is warranted by an induction from the facts at present known to us. We can gain nothing in climatology from *à priori* arguments, as it is entirely an experimental science; and hitherto we have not been able to foretell with any certainty the exact effect which any climate would exert on an individual or a race. No one who reflects on the important bearings which the question of man's cosmopolitanism introduces will be inclined to doubt the gravity of the question, and its claims to the serious attention, not only of ethnologists, but of all who are interested in the great problem of man's future destiny. This question, then, has equal claims on the attention of the philosopher and the statesman. Our data may be at present insufficient to found an exact science of Ethno-Climatology, but I trust to be able to show that there exist the outlines of a great science, which bids fair to prevent that waste of human life which has hitherto characterized the reckless policy

of British colonization. Dr. Boudin, who is well known for his researches on this and kindred subjects, has recently called the attention of the Anthropological Society of Paris to the question, and laments the great inattention which public men have hitherto given to such an important and grave subject. He very justly observes*:—"The problem is certainly one of the most important in the science of ethnology; for it governs the great questions of colonization, of recruiting men destined for distant expeditions, and of fixing the duration of the sojourn of foreign troops at certain stations, so as to render them effective in war. This question touches public health and social economy." Nor will it be necessary for me further to ask attention to the subject of acclimatization, when it is considered how largely the British nation is practically interested in having a correct and physiological system of colonization. I therefore bring this subject under consideration, with a desire of calling public attention to the powers of acclimatization possessed by the races of man in general, and by Europeans in particular. It is asserted that to man belongs the exclusive privilege of being the denizen of every region; for with plants and animals such is not the case. This explanation has as often been accepted as satisfactorily showing that man enjoys privileges over the animal and vegetable kingdoms. That races of men are found in every climate is perfectly true; but a slight examination into the differences and peculiarities of the races of men will show that this argument is not so forcible as at first sight it appears. Theorists have often indulged in boasting of the superiority of man over the animal kingdom in his migrations over the world; but these writers have forgotten that it is civilization which greatly aids man to adapt himself (for a time) to every climate. We have heard much, too, of the acclimatization of animals; but the amount of what has been really effected has been also greatly exaggerated.

No one will attempt to deny that, physically, mentally, and morally, there does exist a very considerable difference between the denizens of different parts of the earth; and it is not proposed to inquire whether the various agents which constitute climate, and their collateral effects, are sufficient to produce the changes we find in physique, mind, and morals; but, simply taking the various types of man as they now occur on the earth, we have to determine whether we are justified in assuming that man is a cosmopolitan animal, and whether the power of acclimatization be possessed equally by all the races of man known to us.

The conditions which prevent or retard the acclimatization of man are physical, mental, and moral. It is, however, impossible to discuss the effect of climate only on man; because we find that

* Mémoires de la Société d'Anthropologie de Paris, tome premier, 1860, p. 93.

food is inseparably connected with climate, and that both are modified by the physical conformation of the districts inhabited. The exercise or neglect of mental culture must also be considered. It is therefore nearly impossible to decide to which class we must ascribe certain effects; but there can be little doubt that all these causes act in harmony, and are insensibly bound together. In speaking, therefore, of climate, I use the word in its fullest sense, and include the whole cosmic phenomena. Thus, the physical qualities of a country have an important connection with climate; and we must not simply consider the latitude and longitude of a given locality, but its elevation or depression, its soil, its atmospheric influences, and also the quantity of light, the nature of its water, the predominance of certain winds, the electrical state of the air, etc., atmospheric pressure, vegetation, and aliment, as all these are connected with the question of climate.

Now we find man scattered over the globe, and existing and flourishing under the most opposite circumstances. Indeed, there seems no part of the earth in which man could not, for a period at least, take up his dwelling. When Capt. Parry reached the 84° of north latitude, it was the ice, and not the climate, which prevented him from reaching the pole. Man may live where the temperature exceeds the heat of his blood, and also where mercury would freeze; so man may exist where the atmospheric pressure is only one-half of what it is at the level of the sea. Men have been found permanently residing 12,000 feet above that level.

There is a difference between the climate of the north and south hemispheres under apparently the same circumstances. Thus, the European cannot live for any length of time at a great elevation in the northern hemisphere. The highest inhabited place of Europe has generally been considered to be the *Casa Inglese*, a small building on the lava of Ætna, near the foot of the uppermost crater, 9,200 feet above the level of the sea. There is, however, a house in the Theodule Pass, between Wallis and Piedmont, at an elevation of 10,000 feet.* These buildings are, however, only inhabited during the summer months. In the southern hemisphere there are permanent inhabitants in regions from 10,500 feet to 12,000 feet above the level of the sea. Dr. Tschudi, who has himself resided in these regions, describes what is known as the "Puna sickness," which is what may be called a mountain-sickness, and very much resembles sea-sickness. The Peruvians live and thrive well at elevations of from seven to fifteen thousand feet above the level of the sea—heights said by some observers to be often destructive to the whites. This difference between the

* Perty, Vorschule der Naturwissenschaften, 1853.

north and south hemispheres is caused, perhaps, by the difference in attraction at the north pole. In the northern hemisphere the ascent of a high mountain causes a rush of blood to the head, and in the southern there is an attraction of blood to the feet; hence the cause of the sickness, felt on ascending a mountain in that hemisphere.

An examination of the human race shows us that every family presents different modifications, which are doubtless connected in some way with the nature of the cosmic influences by which they are surrounded. We know that some plants and animals are peculiar to certain regions, and that if transplanted to other climates they degenerate or die; such is the case with man. In every climate we find man organized in harmony with the climate; and if he is not in harmony, he will cease to exist. The general scale of power for enduring change is in certain respects in unison with the mental power of the race, and is also dependent on the purity of blood. Uncivilized and mixed races have the least power, and civilized pure races the greatest. Every race of man, however, has certain prescribed geographical salubrious limits from which it cannot with impunity be displaced. Such, at least, is the lesson I have drawn from existing data. It is civilization which chiefly enables the European to bear the extremes of climate. Indeed, a people must be civilized to some extent before they desire to visit distant regions. The Esquimaux, for instance, is perfectly happy in his own way, and has no desire to move to a warmer climate. His whole body and mind are suited for the locality; and were he moved to a warm climate, he would certainly perish. The whole organism of the Esquimaux is fitted solely for a cold climate; nor is such a supposition problematical and inexplicable by known physical laws. On the contrary, the physiological explanation of such a phenomenon is quite simple. Thus, the European going to the tropics becomes subject to dysentery, and the negro coming to Europe, to pulmonary complaints. Europeans who have recently arrived at the tropics are instantly known by their walk and general activity. This, however, soon subsides, the organic functions become disturbed, the pulse and circulation are more active, the respiration less so, while the muscular fibre loses its energy; the stomach also becomes very weak. The action of the skin becomes abnormal, while the heat acts on and excites the liver.

It is often stated that tropical climates stimulate the organs of generation, but this is contrary to experience. That there is a low state of morality, and that the inhabitants of these regions are essentially sensual, cannot be denied; just as the cold region is distinguished by the gluttony of its inhabitants, and temperate regions by increased activity of brain.

The geography of disease has a most important bearing on this subject. It is somewhat strange that man suffers more from epidemics than animals, and this is probably owing to his neglect of the laws of diet, which require to be adapted to every climate. Thus we find that the temperate zone, which ought to be by far the healthiest, has more diseases than either the hot or the cold zones. The cold zone has but a small number of diseases; and in the torrid zone the number is not large, although the diseases are generally very malignant. Attempts have been made to classify diseases into three categories,—those of hot, cold, and temperate regions. Such a classification is, however, arbitrary and most unsatisfactory; for the same climate may be found in each of the three regions. In the tropics there are temperate and cold regions, just as there is equatorial heat in the temperate zone. Dr. Fuchs* distinguishes these three regions of disease. The first he calls the Catarrhal region. This is so denominated, because catarrh of the respiratory organs predominates in it. "Catarrh", he says, "is the common cause of disease in the north temperate zone, between 1,300 and 3,000 feet above the level of the sea; in the central temperate zone, between 2,000 and 7,000; within the tropics, between 7,000 and 14,000 feet; in the cold zone, near the level of the sea". The other two regions he calls the Entero-mesenteric region, in which gastric complaints predominate; and the Dysenteric region, in which there is no scrofula or tubercular disease. Without entering into the value of this classification, medical statistics seem to prove that there are three zones:—1st, the cold or catarrhal zone; 2nd, the tropical or dysenteric zone; and 3rd, the temperate or gastric and scrofulous zone. This last zone, however, seems to be subject to the diseases of the other two zones, which prevail respectively according to the seasons. The scrofulous zone ceases at an altitude of 2,000 feet above the level of the sea; here there is no pulmonary consumption, scrofula, cancer, or typhus fever.

It has been suggested that the perfection of the races in the temperate zone depends on the conflict to which they are subjected by the irruption of diseases from the other zones; the unfavourable climatic conditions producing a human organism capable of resisting them. Dr. Russdorf† says, "The climatic conditions of the temperate zone act in the formation of blood in such a manner that a large quantity of albumen is present in it. This richness in albumen is manifestly requisite to produce and nourish the powerful brain which distinguishes the Caucasian

* Medicinische Geographie. By Dr. C. Fuchs, 1853.

† Vorträge zur Förderung der Gesundheitslehre (The Influence of European Climate). By Dr. C. von Russdorf. Berlin: 1854.

race; for the brain mainly consists of albumen combined with phosphorated fatty matter". "It is the brain of the Caucasian which determines his superiority over the other races; it is the standard of the power of the organism; it might be termed the architect of the body, as its influence upon the formation of matter is paramount. The effect of the atmosphere upon the formative activity of the organism and upon the metamorphosis of matter is so great, that it is, for instance, on the influence of the oxygen absorbed by the skin and the lungs that the metamorphosis of the albumen into muscle, etc., directly depends. The atmosphere of the temperate zone favours such a change of matter that the blood remains rich in albumen, so that a large brain can be nourished. But this richness in albumen is also the cause of many characteristic diseases, when this substance is under the process of inflammation morbidly excited in the tissue of the organs, and destroys their anatomical structure or organic mechanism. That general condition, in which the consumption of the albumen by the organic metamorphosis is deficient, is well known as the scrofulous predisposition of the European, which is unknown among the inhabitants of the tropics and the cold zone."

Two questions, then, await a solution: 1st. Can any race of men flourish, unchanged both mentally and physically, in a different ethnic centre from that to which it belongs?

2nd. Can any race of man move from its own ethnic centre into another, and become changed into the type of that race which inhabits the region to which it migrates?

Now, races of men moving from one region to another must either degenerate and become extinct, or flourish with the same distinctive characters that they have in their own regions, or they must gradually become changed into new types of men suited to their new positions.

That new races of men are being formed at this time is highly probable, as where, for instance, we have in a particular region a class of men with the same temperament and character. This may, as in the case of America, give rise to a new race, but still belonging to the European type, just as we have in this country the distinctive class of the Quakers, etc. But this change in the so-called Anglo-Saxon race could have been effected without removing them out of their own region. If these men had congregated together in Europe, we should have had a group of men with different feelings and opinions from our own. The congregation of a number of men and women of similar character would always tend to increase or intensify the special characteristics of the descendants of such people. Some writers, in their anxiety to prove that climate has nothing to do with the varieties of man, deny that there is any change in the European inhabitants of

America; but recent researches give strong evidence that there is a change in mind, morals, and physique; and while this change is not to be entirely ascribed to the climate, there still is good presumptive evidence that the Europeans have changed in America, especially in North America. In the children of the colonists there is a general languor, great excitability, and a want of cool energy. As they grow up, they neglect all manly sports. This general excitability and want of coolness and continuous energy is seen in the whole Yankee race. The women become decrepid very early, and consequently cease to breed while still young. It is also affirmed that the second and third generations of European colonists have small families. Some fifteen years ago Dr. Knox stated publicly that he believed the Anglo-Saxons would die out in America if the supply of new blood from Europe was cut off. Such an assertion was, indeed, startling for any man to make; it seemed to bear on the face of it a palpable absurdity. But, as time has passed on, this statement certainly became less baseless, and is now, at least, an hypothesis as worthy of our attention as any other explanation of this difficult question. Emerson has recently remarked on this extraordinary statement of Dr. Knox, that there is more probability of its truth than is generally thought. Emerson* says, "Look at the unpalatable conclusions of Knox,—a rash and unsatisfactory writer,—but charged with pungent and unforgetable truths". He continues, "The German and Irish millions, like the negro, have a deal of guano in their destiny. They are ferried over the Atlantic, and carted over America to ditch and to drudge, to make corn cheap, and then to lie down prematurely to make a spot of green grass on the prairie".

I do not purpose to give any categorical answers to the queries suggested, but simply to bring forward some facts, and to give the opinions of some men who have paid attention to this and allied questions. Thus I trust to lay a basis for further investigation, and induce more labourers to enter the field for the purpose of developing this important question.

We must not take latitude simply as any test of climate; for the general climatological influences are very different in various regions. Thus it has been noticed that the west coast is colder than the east in the southern hemisphere; while, in the northern, the east is colder than the west.† In the French Antilles, the temperature is between 62° Fahr. to 77° Fahr., on the shore, and descends to 55° Fahr. or 60° Fahr. at eight hundred metres above

* The Conduct of Life. By R. W. Emerson, p. 10.

† See what Darwin says respecting the fig and grape ripening in South America much better on the east than on the west coast.

the level of the sea. At Fernando Po, the greatest heat known was from 83° to 100° Fahr.; generally it is about 73° Fahr. So French Guiana is said not to have a higher temperature than Algeria. Some parts of Australia and New Zealand are nearer the equator than Algiers, and yet the temperature and salubrity are very different. The effect of light is also most important, and is not merely confined to the skin, but affects the whole organism. The presence of light modifies the qualities of the air; it also acts on the nervous system. If we look at the analogy of the effect of the absence of light on organized beings generally, we shall readily understand the influence which it exerts on man. Europeans, indeed, who live in darkness, have colourless skin, the muscles soft, and the whole body bloated. It is, therefore, a question which yet has to be decided, how far the Esquimaux's ill-formed frame may be produced by the want of light. And here we find that insensibly our attention is called to the vexed question of the unity or plurality of origin of mankind; for it is on the assumption of unity of origin that the cosmopolitan powers of man have been imagined to exist. With that subject we have at present nothing to do, as it does not essentially affect our subject, which is based on actual facts, and not on theories.

When we see that plants and animals vary in different climates, we are led to expect that man will also vary with the climate. Plants growing like trees in the tropics, become dwarfed in cold climates. It would, indeed, be strange that, as all animals vary, man should remain unchanged. But, while admitting that man exists in harmony with external circumstances, we do not admit that one type of man can be changed into another. As the rose will under no change of external circumstances become a blackberry, so neither will a dog become a wolf, nor a European an African Negro. We shall, therefore, principally confine our attention to the inquiry whether man migrating from one region to another gradually degenerates. If there is degeneration going on, it is simply a question of time as to how soon the race will become extinct. I shall, therefore, contend that any race migrating from one centre to another does degenerate both mentally and physically. Indeed, the psychical change produced in man by climatological influence is as soon visible as the change produced on his physical frame. When, for instance, the European goes to Africa, he, for a short time, retains his vigour of mind; but soon he finds his energies exhausted, and becomes listless, and nearly as indifferent to surrounding events as the natives. There is, however, a considerable difference in the effects produced both on individuals of the same race, and on the different races of men. Some are affected immediately on their arrival, and then appear to become partially acclimatized; often

disease increases until it becomes very serious; again, others are attacked, without any warning, with either inflammation of the brain or liver. Others, again, do not appear at first to be at all affected; but gradually the strength gives way, the countenance becomes despondent, and chronic disease of the liver or stomach results.

Neither can the inhabitants of tropical regions generally withstand the influence of removal to a cold climate. Much, however, depends on race; for the different races of man have different degrees of adaptability for change of climate. We cannot, however, yet decide the exact powers of each race, as ethno-climatology is a new study, and a long series of observations is required before a satisfactory answer can be given.

Before I proceed to indicate the sort of evidence we can get from that most valuable of all modern sciences, statistical science, I think it will be well that I should quote some few authorities to show that there is an agreement between the most recent writers on this subject and the lesson we learn from statistics. Dr. A. S. Thomson, who has paid great attention to this subject, observes, "There is little doubt that the tropical parts of the world are not suited by nature for the settlement of natives of a temperate zone. European life is but with difficulty prolonged, much sickness is suffered, and their offspring become degenerate and cease to propagate their species in a few generations; and should necessity force Europeans to perform the drudgery of labouring in the field, their lives will be rendered still shorter, and their existence little better than a prolonged sickness." Dr. Thomson has entered into the various attempts of the Portuguese, Dutch, English, French, and Danes to colonize India. He has also dwelt on the attempts of the Dutch and Spaniards at colonization in the Indian Archipelago; and also on the state of European colonies in tropical Africa and tropical America. His conclusion is, "that man can only flourish in climates analogous to that under which his race exists, and that any great change is injurious to his increase and also to his mental and physical development."

Sir Alexander Tulloch well observes, that military returns, properly organized and digested, serve as the most useful guides "to point out the limits intended by nature for particular races, and in which alone they can thrive and increase"—boundaries which neither the pursuit of wealth nor the dreams of ambition should induce them to pass, and proclaim in forcible language that man, like the elements, is controlled by a power which hath said, "Hither shalt thou come, but no further."

Let us glance at the attempts of the French to colonize the north of Africa.

The mortality of the civil population in France is about twenty-five in a thousand; while the average mortality of the civil population in Algiers, in 1853, was 43·5, and in 1854, 53·2 in a thousand. In all the localities of Algiers, without "exception" says M. Boudin, "the mortality of the European population exceeds by far, not merely the normal mortality of England and France, but even that of the cholera years in these two countries." Notwithstanding these facts, the population is annually increasing by the influx of immigrants. As regards other colonies, the following table, quoted by M. Boudin from the official report of the Ministry of Algeria, published in 1859, speaks for itself:—

	Births.		Deaths.
Guadeloupe - - - -	20,095	...	20,675
Guiana - - - - -	2,333	...	2,830
Réunion - - - - -	18,934	...	20,775

This would be more satisfactory had the proportion of the women to men been also given.

But, before I proceed on this side of the question, I would call attention to the statement frequently made by the President of this Society. On one occasion, for instance, Mr. Crawfurd* said, "It has been confidently asserted that the British possessions in India are an unfit residence for the permanent dwelling of Englishmen, although within the same latitudes with the warm parts of America, and portions of it even more distant from the equator." "No less an authority," continues Mr. Crawfurd, "than the late Duke of Wellington gave it as his opinion that Europeans, especially in Lower Bengal, most of which is without the tropics, would die out in the third generation; but it is certain that this was an hypothesis of His Grace unsupported by facts." Mr. Crawfurd further contends that the Duke of Wellington's observation was made at an unfavourable time, and that at present the case is very different. Now all recent facts and observations prove that the Duke of Wellington was right. From numerous private inquiries of residents in India, I have obtained confirmation of this opinion. We have, moreover, the most extensive writers and observers on tropical diseases giving exactly similar opinions.

Sir Ranald Martin† says, "Of those Europeans who arrive on the banks of the Ganges, many fall early victims to the climate, as will be shewn hereafter. That others droop, and are forced ere many years to seek their native air, is also well known. That

* "On the Effects of Commixture, Locality, Climate," etc. Vol. i, Transactions of the Ethnological Society, new series, p, 89, 1861.

† Influence of Tropical Climates, etc., 2nd edit., by Sir J. R. Martin, p. 137, 1861.

the successors of all would gradually and assuredly degenerate if they remained in the country cannot be questioned; for already we know *that the third generation of unmixed Europeans is nowhere to be found in Bengal.*"

William Twining also made the same assertion many years ago.

Another recent authority on India,* Mr. Julius Jeffreys, says, "Few children of pure English blood can be reared in the plains of India, and of that few the majority have constitutions which might cause them to envy the lot of those who die in their childhood. The mortality of barrack children is appalling, especially in the months of June, September, and October. At Cawnpore from twenty to thirty have died in one month. *In short, the soldiery leave no descendants of unmixed blood.*" Major-General Bagnold† has also said, that the oldest English regiment, the Bombay "Toughs", notwithstanding that marriages with British females are encouraged, have never been able, from the time of Charles II to this time, to raise boys enough to supply the drummers and fifers. Dr. Ewart‡ says, "Our race in process of time undergoes deterioration, physically and intellectually, with each succeeding generation, and ultimately ceases to multiply and replenish the earth." He also says, "that there is a certain deterioration of our race always under present circumstances tending to extinction in this country."

It remains, therefore, with Mr. Crawfurd and those who agree with him to accept these facts, or explain what has become of the descendants of the half million of people who have gone to India. It is generally supposed that there is a process of acclimatization going on with Europeans living in the tropics; but the reverse is rather the case. It is true that the mortality is sometimes greater at first, but this is owing to the clearing out of the weakened and other defective constitutions which had been broken down by disease or intemperance. When this has taken place, there appears to be an improvement; but after the first year there is a gradual decline in health, and sickness and mortality greatly increase. *We have exhaustion and degeneracy, but no real acclimatization.* Although Europeans suffer less on going to colder regions, still we observe the same fact in that case. Dr. Armstrong and others have observed that Europeans resist the cold of the polar regions better the first year than they do the second, and that every subsequent year they feel the effects of climate more.

* The British Army in India. By Julius Jeffreys, F.R.S. 1858, p. 172.
† Indigenous Races of the Earth. Article "Acclimatization". By Dr. Nott, p. 557.
‡ Digest of the Vital Statistics of Europeans in India. By Joseph Ewart, M.D. 1859.

This fact can be amply proved by statistics. As age increases, so does mortality in any place out of the native land of a people.

Dr. Farr gives the average per thousand of England and Wales, as—

Ages	20—24	25—29	30—34	35—39	40 and upwards.
Mortality	8·42	9·21	10·23	11·63	13·55

Now, if we compare this with a part of a valuable table prepared by Sir Alexander Tulloch,* we at once can estimate some of the deleterious effects of change to different climates on Europeans, from January 1, 1830, to March 31, 1837.

Stations.		18 to 25.	25 to 33.	33 to 40.	40 to 50.
Gibraltar	Mediterranean	18·7	23·6	29·5	34·4
Malta	Mediterranean	13·	23·3	34·	56·7
Ionian Islands	Mediterranean	12·2	20·1	24·4	24·2
Mediterranean stations generally		15·5	22·2	28·1	33·
Bermudas	North America	16·	42·	42·	76·
Nova Scotia c.	North America	14·	22·5	30·8	41·5
Canada	North America	19·7	27·8	37·8	35·
Windward and Leeward command		50·	74·	97·	123·
Jamaica		70·	107·	131·	128·
Cape of Good Hope		9·	20·6	29·7	32·
Mauritius		20·8	37·5	52·7	86·6
Ceylon		24·	55·	86·4	126·6
Bombay		18·2	34·6	46·8	71·1
Madras		26·	59·3	70·7	86·5
Bengal		23·8	50·3	50·6	83·3

A modification of the same results is found from 1837 to 1847.

	Age. 20—25.	Age. 25—30.	Age. 30—35.	Age. 35—40.	Age. 40 and upw.
Mediterranean stations	16·3	15·1	16·4	23·4	34·4
Canada and Nova Scotia	13.1	17·7	19·2	20·3	35·6
Jamaica	60·	50·	73·	83·	97·

The following very useful table I have collated from the valuable Army Report for 1859. It would be very desirable if some tables were given to show the different periods that men had been located at each station.

Although this table is valuable, it must be borne in mind that it is only for one year. Troops are so continually changing stations, that we must only receive the suggestive evidence of such a table for what it is worth. It will be seen that there are no deaths in some stations at forty years of age and upwards; this

* Report of the Commissioners on the Re-organization of the Indian Army. 1859, p. 179.

is, however, simply because it frequently happens that there are no men in a regiment above that age.

Annual Ratio of Deaths per Thousand Living, at the following Ages, in 1859.

	Under 20.	20—24.	25—29.	30—34.	35—39.	40 and upwards.
Healthy districts in England and Wales	5·83	7·30	7·93	8·36	9·	9·86
England and Wales generally	7·41	8·42	9·21	10·23	11·63	13·55
Household Cavalry	...	3·38	6·85	9·05	16·13	15·04
Dragoon Guards and Dragoons	5·07	4·0	12·96	15·0	15·86	34·48
Foot Guards	7·92	7·34	7·80	12·07	26·47	9·71
Infantry Regiments	5·82	7·21	7·80	11·97	18·31	15·50
Depôt Battalions	6·31	20·13	12·39	20·11	37·97	44·78
Bermuda..............................	...	10·0	5·35	24·15	48·08	...
Nova Scotia, etc..................	10·20	5·06	2·51	36·15	...	...
Newfoundland	...	...	...	...	13·51	...
Canada	8·85	8·94	11·54	4·42	15·27	10·38
Mediterranean generally	9·28	12·01	20·78	25·64	12·15	55·55
Cape of Good Hope	...	7·93	14·69	9·31	14·78	·60
Australian Colonies	...	1·94	6·91	7·06	26·59	23·81
Negro in W. Indies, W. and L. command..................	9·71	11·24	32·41	39·02	6·25	..
Ceylon Rifles	10·99	8·23	8·72	9·68	11·05	14·49

With officers and the civil servants in Bengal, we also find that the mortality greatly increases with length of residence, notwithstanding the great advantage which they have of being able to return to their native country. "Out of 1184 deaths among officers," says Sir Ranald Martin,* "the proportion occurring annually in each rank, and at each age, has been as follows :—

Percentage of Deaths.	Colonels, average age 61.	Lieut.-Colonels, average age 51.	Majors, average age 45.	Captains, average age 36.	Lieutenants, average age 18 to 33.	Cornets and Ensigns, average age 18 to 31.	General average at all ages.
Died annually per thousand of each class	59·4	48·4	41·0	34·5	27·5	23·4	31·2

"The mortality among the civil servants, for a period of forty-six years, from 1790 to 1836, exhibits almost precisely the same results, viz. :—

* Loc. cit. p. 96.

Percentage of Deaths.	Above 50 years of age, and 30 of service.	Age 40 to 50, service 25 to 30.	Age 40 to 45, service 20 to 25.	Age 35 to 40, service 15 to 20.	Age 30 to 35, service 10 to 15.	Age 25 to 30, service 5 to 10.	Age 20 to 25, service 1 to 5.
Died annually per thousand of each class	48·6	36·4	35·4	23·4	16·6	20·8	19·9

"Between ten and fifteen years service is the period when leave of absence is allowed to those who choose to return to Europe for three years, which of course must have a material tendency in reducing the mortality of that class".

The high mortality of our own army at home may also be greatly ascribed to the weakening influence of the climates of many of our foreign stations. The annual mortality per thousand, was—

		Age. 20—24.	Age. 25—29.	Age. 30—34.	Age. 35—39.	Age. 40 & upw.
Infantry.	From 1837 to 1846	17·8	19·8	12·8	21·	23·4
	In 1859	7·21	7·80	11·97	18·31	15·50
Depôt battalions, in 1857		10·13	12·39	20·11	37·97	44·78
England and Wales generally		8·42	9·21	10·23	11·63	13·55

In the useful army statistical report from which these facts are taken, this high mortality of the depôt battalions is acknowledged to be "attributable to the number of men serving in them whose constitutions have been impaired by foreign service, and many of whom have been sent home to the depôt labouring under chronic disease contracted abroad".*

We can best estimate the deleterious influence of climate by comparing the relative mortality of native and foreign troops. Everywhere we see the same law. At Gibraltar, the deaths per thousand of the Malta Fencibles (although nearly all old men) was, in 1859, 8·19, while with the British troops it was 18·08 per thousand. On the west coast of Africa there are no white troops to compare with the black troops. The army report says, "The force consisted entirely of blacks, with the exception of four or five European sergeant-majors, of whom three died in the course of the year—two of fever at the Gambia, and a third of dysentery at Accra".

The deaths of black troops at Sierra Leone, in a thousand, was 14·02; at the Gambia, 25·44; and on the Gold Coast, 25·06. The mortality of the white troops serving at Ceylon, from 1837 to 1846, was 41·74 per thousand; and in 1859 the mortality decreased to 35·06 : while, with the so-called black troops, the

* Statistical, Sanitary, and Medical Report for 1859, p. 28.

deaths in a thousand, from 1837 to 1846, were 26·71; and in 1859, 10·19. The ratio of mortality with the Ceylon Rifles (Malays) is the same as that of the male population of this country. In the same report we find, under the head of China, what are called "native troops", which we discover to be Bengal Native Infantry, etc. The mortality of these troops from India is at the rate of 53·73 per thousand, without reckoning those who died subsequently from disease contracted in China; while, with the British troops serving in China, the mortality slightly exceeded that of the Indian troops, being 59·35 per thousand: no less than 42·58 of this number having died of miasmatic disease. Sir T. G. Logan, in his report on the Sanitary State of the Army, says, "The topographical character, however, of Hong Kong was acknowledged to preclude improvement to any considerable extent in the health of European troops, and its retention as the chief military station of the command could not be thought desirable in a sanitary point of view. The principal medical officer's report refers to the circumstance that the annual expenditure of men by death and invaliding had been averaged at 20 per cent., being more than double of what it is India; and that, notwithstanding every means had been taken, and no expense spared, to preserve the health of the troops, the results were still very unsatisfactory".

But the great mistake which most writers on the diseases of tropical countries commit is the neglect to ascribe the large amount of disease to the true source, viz., the inadaptability of Europeans to tropical countries. Nearly every medical writer on the diseases of India tries to prove that the large mortality is produced by some preventible cause; but a little inquiry into the diseases which attack the natives and Europeans will destroy this delusive hope. First, then, with a given strength of Europeans and natives we find that, with the three sorts of FEVERS, intermittent, remittent, and continued, there are in

Bengal	3·76 deaths of Europeans to	1	Native.
Bombay	2·54 „ „	1	„
Madras	1·23 „ „	1	„

The admissions for fever among Europeans were from

		Percentage of admissions to strength.	Deaths.
Bengal...	1812 to 1815	84·85	6·50
	1850 to 1854	100·25	100·06
Bombay	1811 to 1814	66·34	2·21
	1850 to 1854	63·10	0·78
Madras	1829 to 1832	29·52	1·21
	1848 to 1851	28·46	0·52

While with the native troops the following is the result:—

		Percentage of admissions to strength.	Percentage of deaths to admissions.
Bengal from	1826 to 1838	41·30	1·32
	1839 to 1852	53·16	0·96
Bombay	1803 to 1828	53·18	1·80
	1828 to 1853	46·55	1·18
Madras	1827 to 1835	21·27	1·46
	1842 to 1852	28·5	1·01

The large amount of deaths among the native soldiers may be greatly ascribed to the inadaptibility of our English pharmacopœia. Since our contact with the natives they are every year becoming more liable to all sorts of diseases, but especially fevers and bowel diseases. The high mortality amongst the natives must, therefore, be greatly ascribed to our inability to check disease in them. The deaths to the number of admissions are even greater amongst the natives than amongst Europeans. This, in itself, is pretty good evidence for the assertion that a healing art has yet to be discovered for their constitutions.

Then with DYSENTERY and DIARRHŒA, the proportion of deaths of Europeans to natives is in

Bengal	11·67 of Europeans to	1	Native.
Bombay	8·73 „	1	„
Madras...............	6·53 „	1	„

The contrast is sufficiently great with fevers and dysentery; but it is still more marked with HEPATITIS:—

In Bengal,	60 to Europeans die of HEPATITIS to	1	Native.
Bombay,	44 „ „	1	„
Madras,	30 „ „	1	„

Even in those hot-beds of disease, the Indian jails, we find the inmates are far more free from hepatitis than our own troops in Bombay: the Europeans are attacked thirteen times oftener than the natives; in Bengal, forty-three times; and in Madras, our soldiers one hundred and seventy-eight times oftener.

Some writers have endeavoured to show that this disease is produced in Europeans by intemperance. But Dr. Morehead* says, "The evidence that intemperance in drinking exerts a particular influence in the production of hepatitis is by no means conclusive"; and he also says, "The occurrence of hepatitis on the other hand, in its severest form, is not an unusual event in persons of temperate habits,—a statement which practitioners in India generally will, I am sure, amply confirm".

With CHOLERA, the ratio of mortality is in

Bengal	6· Europeans to	1	Native.
Bombay	2·6 „	1	„
Madras..................	1·18 „	1	„

There is also another fact which demands attention, viz., the in-

* Diseases of India. By C. Morehead. 2nd edit., 1861, p. 363.

crease of mortality in cases of persons attacked with this disease. Whatever may be the cause, there seems to have been far higher mortality in Bengal since 1838, and in Madras since 1842, than before. Thus, the relative mortality to the cases treated in Bengal has risen in each period of five years, from 1818 to 1853, from 26·71, 31·17, 21·80, 26·91, 55·53, 45·22. and 41·92 per cent.; and in Bombay, during the same time, from 18·53, 22·71, 30·58, 18·87, 37·33, 45·46, and 43·17; and in Madras, from 1829 to 1851, from 27·11, 27·63, 48, and 62·31.

There has been an increase of mortality of natives to cases treated, in Madras, of 7·26 per cent.; in Bengal, the mortality is about the same; and a decrease of three per cent. in Madras.

With phthisis (CONSUMPTION) the per centage of mortality to a given strength is

In Bengal ... 11 deaths of Europeans to 1 Native.
Bombay ... 4 " " 1 "

Thus, the deaths of Europeans, from phthisis, even exceed the native prisoners in our Indian jails.

In the various OTHER DISEASES which have not been mentioned, the mortality is far higher, being, in Bengal, as three Europeans to one native, and in Bombay, as 3·2 Europeans to one native.

Many writers have observed that, with the natives, those most free from disease are those who toil all day in the burning sun, with no covering at all on the head. Ignorance as to the difference of race has induced some commanders to attempt thus to *harden* the Europeans, with results something frightful to contemplate.

One of the regiments that had been the longest in India, the Madras Fusiliers, is stated to have been reduced in this way from eight hundred and fifty to one hundred and ninety fit for duty. Many similar cases have been produced by needless exposure. Mr. Jeffreys says, that Her Majesty's 44th Regiment in 1823 were nine hundred strong, and a very fine body of men. The commanding officer insisted that confinement of the men during the day was effeminate, and continued drilling them after the hot season had begun. But the men suffered the penalty of the officer's ignorance. "For some months," says Mr. Jeffreys,* "not less than one-third, and for some weeks one-half, of the men were in hospital at once, chiefly with fever, dysentery, and cholera. I remember to have seen, for some time, from five to ten bodies in the dead-room of a morning, many of them specimens of athletes." Experience has shown that it is not the absolute exposure to the sun from which Europeans suffer; it is the subsequent effects which are to be dreaded. On a march, the European will appear to be equal to the thick-skinned native; but afterwards he soon learns that such is not the case.

* The British Army in India. By Julius Jeffreys, F.R.S. 1858, p. 43.

The European soldier is also unfitted to stand the effects of a cold climate after some years residence in India, and dreads to return home to encounter the cold and hardships of English peasant-life. With officers, who can return to enjoy all the comforts and luxuries of civilization, the case is different. The few soldiers who remain in India have more or less chronic diseases, which, says Mr. Jeffreys, "would render the attainment of anything like longevity out of the question".

Seventy-seven per cent. of the European troops in Bengal are under thirty, twenty-three per cent. above that age; or ninety-four per cent. are under thirty-five, the remaining six above that age.

From Dr. Ewart* we learn that the European army has hitherto disappeared in Bengal in about ten and a half years; in Bombay, in thirteen and a half; in Madras, in seventeen and a half; or in all India, in about thirteen and a half years. We find the per-centage of deaths to strength amongst European regiments, in Bengal, 6·94; in Bombay, 5·52; in Madras, 3·88.

Thus we find that, on adding all these diseases of European troops together, we get a mortality of at least seven per cent. for the whole of India, while with the native troops the mortality does not amount to a half per cent. Sir A. Tulloch says, that "The total loss from all causes has been at least seventy per thousand"; and that "the proportion invalided annually may be taken at about twenty-five per thousand more, and twenty-five per thousand to men not renewing their engagements"; making altogether twelve per cent., or one hundred and twenty per thousand. He further observes, that the number of recruits raised during peace, from 1845 to 1849 inclusive, was less than twelve thousand per annum; and that, with a force of eighty thousand men in India, we shall require nine thousand and six hundred of them for India, "unless", as he observes, "means can be adopted to reduce mortality and invaliding".

Mr. Jeffreys says the mortality of troops in India amounts to ten per cent. He observes, "The casualties amongst the troops have, *during peace*, amounted per annum to at least one thousand in every ten thousand; in England and her healthy colonies they have ranged from about ninety to a little above two hundred". Such being the undisputed fact, there is no doubt, as Sir A. Tulloch has observed, that "The selection of healthier stations for our troops than those they have hitherto occupied is no longer a matter of choice, but one of necessity, as we cannot hope to keep up the large European army required to hold India, without the

* A Digest of the Vital Statistics of the European and Native Armies in India. By Joseph Ewart, M.D., Bengal Medical Staff. 1859, p. 20.

strictest attention to this important measure". The late Sir H. Lawrence devoted much of his life to the solution of this question in a practical manner. There is no doubt that removing our military stations to the hills is a measure demanding serious attention. Sir Ranald Martin is of opinion that, in Bengal and the north-west provinces, the malaria might be escaped at an elevation of from two thousand five hundred to four thousand feet. That this would be advantageous is quite probable; but we shall not find in the hills the same climate we have in this country. We may escape the influence of malaria-diseases, just as we escape the yellow fever in the West Indies, at an elevation of from two to three thousand feet. The report for the re-organization of the Indian army gives the mortality from 1815 to 1855, exclusive of casualties, at a hundred thousand men, "the greater portion of whose lives", the report says, "might have been preserved had better localities been selected for the military occupation of that country". But are there any places even in the hills in which Europeans can be reared without gradually becoming degenerated? This is a serious question, to which science can as yet give no positive reply. Looking at the wisdom which is displayed in the general distribution of mankind, we shall be inclined to answer in the negative. It has been presumed that, because yellow fever is in a great measure escaped in Jamaica at an elevation of about two thousand five hundred feet, that this elevation would be sufficient to escape malarious diseases in other parts of the world; but such is not the case. If we ascend to any great height, we often get out of the region of malaria, and into the region of bowel-diseases. It is also affirmed* that "intermittent fever originates in some of the Himalayah stations. At Aboo, also, during the malarious months, ague is very prevalent. Dr. Cooke (Bombay service), in his annual report of the Khelat agency, states that 'Khelat, the highest inhabited spot of the Beloochistan table-land, standing seven thousand feet above the level of the sea, is also malarious'."

It has also been said by Sir John Lawrence, Brigadier-General Chamberlain, and Lieutenant-Colonel Edwards, that, besides our soldiers not liking to live in the hills, the natives have not the power of believing in what they cannot see; and they join in asserting that "there are sick men whom the hills make worse, and healthy men whom they make sick".† General Sir A. Tulloch also affirms‡ that the stations at an elevation of 8,000 or

* Diseases of India. By Dr. Moore, Bombay Medical Service, and in charge of the Sanitarium for European troops at Mount Aboo. 1861, p. 48.
† Papers connected with the Reorganization of the Indian Army. 1859, p. 6.
‡ Minutes of Evidence on the Reorganization of the Indian Army, p. 266.

9,000 feet "are less healthy than was expected, because the men suffered from what is called a hill-diarrhœa, which reduces them very much indeed". Many other authorities and facts tend to show that it is a great fallacy to assume that temperature and climate are at all the same thing. There may be the same ethnic climate, with vast difference of temperature. China, for instance, has very different temperatures; but this has hardly a perceptible effect on the race.

Dr. Ewart, like many other writers on this subject, has a theory which he believes would enable Europeans to be reared in India. He says, "The average standard of health of our race in this country would bear comparison with that of any race on the face of the civilized world, or of any people in Europe, provided the sources of malaria were dried up."

Although this is wholly a gratuitous assumption, we still have evidence to show that a very slight change is sufficient to make a considerable change in the health of soldiers. Mr. M'Clelland* says, "that out of a European force of little more than one thousand, there were four or six funerals daily; and this great mortality was checked by a change to the hills, which were only only one hundred or one hundred and fifty feet high." It is probably a mistake, however, to attribute this favourable change in the mortality to the climate; it was doubtless far more due to the influence on the brain and nervous system. If the cause which produces *ennui* amongst all classes of European residents in India could be eradicated, then perhaps the case might be different. A number of plans have been proposed to enable the European to live in India. In 1853-4, the expenditure for cinchona bark and quinine amounted to £11,686. It is now proposed to give quinine as a prophylactic for fevers, and there will be a demand for £46,744 worth.† But the process that is now seriously proposed by Desmartis,‡ in harmony with his theory of inoculation, is to tranfuse a small quantity of blood taken from the natives into the veins of Europeans visiting such places as India, Brazil, or the West Coast of Africa! I would only beg to express a hope that in transfusing this blood they will not also transfer any of the mental or moral characteristics of these indigenous races into the European. If any process, however, can be devised to make Europeans like the natives, then we must remember that, instead of being able to hold down one hundred and fifty millions of people with about one hundred thousand men, we should want a very different number. It is only possible

* Medical Topography of Bengal, etc. 1859, p. 135.
† Ewart, p. 47.
‡ Quelques mots sur les Prophylaxies. Par S. P. Desmartis, Paris, 1859.

to hold India as long as Europeans remain the superior race. It has been asserted that, although they cannot bear the sudden change to a tropical climate, they can gradually become accustomed to the change. It seems a fair test of the influence of climate on race, to study its effects on the children of those who have become accustomed to the change, or, as it is sometimes falsely called, "acclimatized". Here there can be no question as to the effects of climate. We have seen what is the result of attempting to raise European children in India, and nearly the same result meets us elsewhere. Speaking of the effect of climatic influence on such children in Ceylon, Sir Emerson Tennant* observes, "If suitably clothed, and not injudiciously fed, children may remain in the island till eight or ten years of age, when anxiety begins to be excited by the attenuation of the frame and the apparent absence of strength in proportion to development. These symptoms, the result of relaxed tone and defective nutrition, are to be remedied by change of climate either to the more lofty ranges of the mountains or more providently to Europe."

Many writers, who contend that Europeans can become completely acclimatized, contradict themselves in their statements respecting the rearing of children. Mr. Robert Clarke, who has some eighteen years experience on the Gold Coast and at Sierra Leone, goes so far as to say,† "It is questionable whether persons of colour are better able to bear up against the influence of climate than persons of pure European blood, provided the latter are sober in their habits. There can be no doubt that Europeans, on their first arrival in West Africa, are in greater danger of losing their lives than the former; but when once they have become acclimatized, they seem generally to withstand the influence of the climate better than coloured people, provided, I repeat, they are temperate in their habits." If this be so, we should not expect to find great mortality amongst children born of "temperate, acclimated Europeans." But Mr. Clarke says,‡ "Great difficulty is experienced in rearing European children. They in general thrive admirably until teething begins. It is at this epoch they are frequently harassed with intermittent fever, which by repeated occurrence causes enlargement of the spleen and functional disturbance of the stomach and bowels, when they soon became cachectic, and unless removed to a more genial climate drop into an early grave."

Some authors think that the question of the European propagating himself in the tropics has been settled by the fact that, for

* Ceylon. By Sir James Emerson Tennant. 1860, p. 79.
† Reports of H.M. Colonial Possessions for 1858, Part II, p. 33.
‡ Topography and Diseases of the Gold Coast, 1861, p. 48.

three centuries, the Spanish race has lived and thrived in tropical America. Mr. Crawfurd says,* "The question whether the European race is capable of living and multiplying in a tropical or other hot region seems to have been settled in the affirmative on a large scale in America. Of the pure Spanish race there are at present probably not fewer than six millions, mostly within the tropics." But it is a wholly gratuitous assumption, unsupported by facts, to suppose that anything like this number of the Spanish race exists in America. If we were to read for Mr. Crawfurd's "millions" the word "thousands", we should perhaps be nearer the truth. In Mexico it is estimated that there are not more than ten thousand of the pure race,† reckoning both creoles and immigrants. What a small proportion is this to those who left their native land and have never returned again! For three hundred years Spain has poured out her richest blood on her American colonies, almost at the price of her own extinction, without the slightest prospect of being able to establish a Spanish race in Central America. Never was there a greater failure than the attempt of the Spaniards to colonize tropical America. Those who have watched the gradual change of the Spanish colonies must be convinced of the fallacy of quoting this as a case of successful colonization of tropical countries by Europeans. When the continual influx of new blood from Spain was taking place, the change was not so much observed; but now emigration has ceased the pure Spanish race is diminishing rapidly. All recent observations show that the Indian blood is again cropping out in a most remarkable manner. Instead of the Spaniards flourishing, there seems every prospect of their entire extinction, unless fresh blood is sent from Europe. The extinction of the Spanish race in America was likewise predicted more than twenty years ago by Dr. Knox. There is no doubt that this result has been greatly owing to the mixture of Spanish and Indian blood.

The laws regulating the mixture of human races do not directly concern the question of acclimatization; it has been found, however, that there is a different vitality between the offspring of the Spaniard and the Indian female, from that between the Englishman and the Indian woman. So also there is a different power of life between the offspring of the Portuguese and English with the negro woman. It can hardly be questioned that the Spanish race, like all other dark Europeans, are better suited for warm climates than the white Europeans. M. Boudin gives some

* Transactions of the Ethnological Society, vol. i, 2nd series. 1861, p. 88.
† It has since been asserted in the Cortes, by Don Pachero, that the pure Spanish race in Mexico does not amount to more than eight thousand. In 1793, Humboldt estimated the pure Spanish race in New Spain to consist of 1,200,000.

statistics to show that the Spaniards and Italians also suffered less in the great Russian campaign. Perhaps this may be explained by other causes.

On several occasions the Spaniards have attempted to colonize the beautiful island. Fernando Po, but have entirely failed. The last trial was made in 1859, when three hundred and fifty colonists were sent out, provided with every necessary; but at the beginning of 1861 they had nearly all died, the few remaining returning home entirely broken down in health.

On the change effected in Europeans by a residence in Ceylon, Sir J. Emerson Tennant observes,* "The pallid complexion peculiar to old residents is not alone ascribable to an organic change in the skin from its being the medium of perpetual exudation, but in part to a deficiency of red globules in the blood, and mainly to a reduced vigour in the whole muscular apparatus, including the action of the heart, which imperfectly compensates by increase of rapidity for diminution of power." This author very properly warns all habitual dyspeptics from a long sojourn at Ceylon. Gouty patients are, however, owing to the greater cutaneous excretion, entirely cured. We find that Europeans die mostly of cholera and inflammation of the liver, while negros die of pulmonary consumption. Ceylon is hot for Europeans, and cold, especially in the forests, in comparison to the coast of Guinea.

Of the island of Cuba, Mr. Tylor has just written,† "The climate of the island is not unfavourable for a mixed negro and European race, while to the pure whites it is deadly. It is only by intermarriage with Europeans, and continual supplies of emigrants from Europe, that the white population is kept up."

In the reports of the colonies for 1858 and 1859, we only find the births and deaths of the different populations of one colony given. From these we learn that, at Antigua, in

1858	the births of	white	population were	50	deaths	75
1859	„	„	„	91	„	140
1858	„	black	„	952	„	979
1859	„	„	„	1005	„	894
1858	„	coloured	„	238	„	226
1859	„	„	„	250	„	205

Although this classification (of white, black, and coloured‡) is not very scientific, yet it would be of very great utility to get such simple returns from all our colonies, with the per-centage of women.

* Loc. cit. p. 78.

† Anahuac; or Mexico and the Mexicans. By Edward B. Tylor. 1861, p. 12.

‡ The coloured population are sometimes called brown. These terms are generally used to signify a mongrel breed of some sort.

Our experience of other races than the European is limited. Mr. Crawfurd contends that the Chinese become easily acclimatized in nearly all regions; and Pruner-Bey says, "that the Turanian is, in physical respects, the true cosmopolite."

I have already stated that latitude is no test of climate; so I would now state that, as neither heat nor cold is the cause of the physical differences of mankind, so neither is it mere heat or cold which affects man injuriously. That the Chinese have a large range of temperature is true, but they have not the great power of being acclimatized that many imagine. Fifty thousand Chinese have gone to Australia, and the same number to California, and perhaps about twenty or thirty thousand to Cuba, and six thousand to the Mauritius. This is a misfortune for both Australia and California; but there is hope for Cuba, as the Chinese are said not to be able to work there. Mr. Tylor says,* "Fortunately for them, they cannot bear the severe plantation-work. Some die after a few days of such labour and exposure, many more kill themselves; and the utter indifference with which they commit suicide, as soon as life seems not worth having, contributes to moderate the exactions of their masters. A friend of ours in Cuba had a Chinese servant who was impertinent one day, and his master turned him out of the room, dismissing him with a kick. The other servants woke their master early next morning with the intelligence that the Chinese had killed himself in the night to expiate the insult he had received."

We are at present quite unable to say whether the Chinese will ever become acclimatized in California or Australia. It is to be hoped, however, that they will not. The Chinese have taken no women with them to either place; but in Australia some of them are living with native women, and this may be the means of producing a hybrid race of Chinese-Australians. Whether this may stay the current of extinction which seems settling on the Australians, or whether it may aid in their destruction, are questions beyond the limits of this paper. Of the Indian immigrants to the Mauritius, we learn that the deaths exceeded the births by three hundred and eleven, but we are not told of the per-centage of women.

The mortality generally of the colony was—

In 1854	7	per cent.
1855	3·5	„
1856	5·0	„
1857	2·5	„
1858	2·7	„

* Loc. cit. p. 13.

In Trinidad, the total Indian population was, in 1859, thirteen thousand four hundred and forty-seven, and the deaths 2·7 per cent.; but amongst the arrivals from Madras, the mortality was 7·7 per cent.

In 1859, the mortality of the Calcutta coolies was 2 per cent.

Of the Malays, all we know is, that the Dutch took some to the Cape, and the race still remains there, but whether pure or mixed we know very little; we also are not informed if their numbers are increasing or decreasing. Of the Red Indians we only know that, on being removed from their native soil, they soon perish; it is uncertain how much of this must be ascribed to the climate or how much to the inability of the race to alter their manners and customs.

The royal family of the Sandwich Islands, who visited England in 1827, all died, as did most of their attendants, of tubercular disease, after only three months visit.

So the Andaman Islander taken to Calcutta by Dr. Mouat was soon affected by the climate, and obliged to be sent back to his native land to save his life.

But perhaps the negros offer the strongest proof of the fallacy of saying that all races of men are cosmopolitan. We have ample and positive evidence that they cannot perpetuate themselves beyond about the fortieth degree of north or south latitude. Indeed, in their own region the ascent of a high mountain will kill them, sometimes nearly instantly. Thus, out of the eight Africans who ascended with Beecroft the Saint Isabel Mountain,* at Fernando Po, no less than five died.

The negro seems to thrive in the southern states of America; but it is far from probable that he is suited to all tropical countries. Sir A. Tulloch and Dr. Bennett Dowler coincide in opinion that the negro will die out in the West Indies and the Mauritius. At Cuba, Mr. Tylor says,† "there are fifteen thousand slaves imported annually;" he also adds, "that the Creoles of the country are a poor degenerate race, and die out in the fourth generation." The race is only kept up in Egypt and Algiers by constant immigration.

In the Mauritius, the deaths in five years exceeded the births by upwards of six thousand, in a population of sixty thousand.

Dr. Boudin says, "In Ceylon, in 1841, there was not a trace of the nine thousand negros imported by the Dutch government before the English domination. Of the five thousand negros imported by the English since 1803, there remained only, in

* The greatest height at which this mountain was ever estimated was that by Consul Hutchinson, who thought it was twelve thousand feet.

† Loc. cit. p. 12.

1841, about two hundred to three hundred, although females were imported to preserve them."

Of the 4th West Indian Regiment placed, in 1819, in garrison at Gibraltar, nearly all perished of pulmonary disease in fifteen months.

The statistics of the mortality of negros in the different States have clearly shown the influence of climate. The farther they go north, the higher becomes the rate of mortality: they seem to die of consumption, just like the monkeys and lions in the Zoological Gardens.

It is difficult to determine the exact amount of influence exerted by race in resisting particular diseases. It has, however, been shown that the negro race, on the West Coast of Africa especially, is exempted from yellow fever, and that a very small portion of African blood is sufficient to resist the influence of this disease.

All the dark races seem less liable to yellow fever than the white man. Both the Red Indian and the Southern European are more exempt than the Englishman.

Mr. Clarke* says, that when the yellow fever broke out at Sierra Leone in 1837-8-9, 1847, and 1859, he never knew of a single negro or even of a man of mixed blood being attacked. He also says, that in 1837 and 1839 small-pox broke out among the negroes, and disappeared at the same times as the yellow fever appeared. With the plague the dark races are affected far more than the white, being the reverse of the law with the yellow fever. Dr. Nott contends that the predisposition to yellow fever is just in proportion to the lightness of the skin; and that with plague the reverse is the case.

The Jewish race, and not the Chinese race, are, however, nearest to being cosmopolitan. It is asserted that they live and thrive all over the world. If, however, we come to examine the evidence of this fact, we find that many of the people reputed to be Jews have no claim whatever to that questionable honour; such, for instance, as the many reputed cases of black Jews.

Dr. Boudin, although an advocate for the non-cosmopolitan powers of man generally, makes an exception in favour of the Jewish race, and says that this race has settled the question that one race is cosmopolitan.

The statistics which have been published respecting the Jews in different countries, seem to show that the Jew is subject to different physiological laws to those of the people by whom he may be surrounded. This phenomenon may, however, be explained by other physiological laws. M. Boudin supports his views from the difference in the statistics of disease and death of

* Remarks on the Topography and Diseases of the Gold Coast, p. 28. 1861.

the Jews and the other colonists in Algeria. But the conditions of these two are very different. The Jews have been in Algeria for a considerable time, while the colonists are going there daily. Had M. Boudin proved that a number of Jews and Frenchmen went to Algeria at the same time, and that the Jews became more easily acclimatized, it might go some way towards showing the advantage of the Jewish race over the Frenchman, if we could not explain the phenomenon on other grounds. Had M. Boudin proved satisfactorily that the Jew was cosmopolitan, we should not easily be induced to admit that this was inexplicable by physiological laws. I do not pretend to enter into any of the causes which may have enabled the Jew to appear favoured; but we must not hurriedly admit that there are exceptional laws in favour of any one race. On the same plea that M. Boudin has claimed an exception in favour of the Jews, we may also advocate one on the part of the Gipsies. The chief cause, however, of the apparent superiority of the Jews over some other races is the fact that they are a pure race. All pure races support the influence of change better than mixed races. The nomadic Arabs, as long as they remain pure, can also live in very different temperatures and climates. The Chinese are also generally a pure race, and it is possible that the nearer the race approach the original type, the greater power they have in enduring change of climate. But enduring change of climate is not acclimatization. A process of acclimatization should enable a race to perpetuate itself in a new region, without supplies of new blood from its own region, and without, of course, mixing with the indigenous races of the invaded country. The historical records of migrations of nations do not give us sufficient evidence to make us believe in different laws from those which are in existence at this time.

I am fully sensible of the great difficulty there is at present of defining the exact limits of the various ethnic centres. When I speak, therefore, of the European centre, I would also observe that this region is not necessarily confined to the portion of the earth we call Europe; on the contrary, I should include the whole of those original inhabitants of the Mediterranean, such as the Phœnicians, as belonging to the European centre. The modern Jews,* for instance, who are most probably lineal descendants of the old Phœnician merchants, are vastly superior to any purely Asiatic race. Never was the Jew more calumniated than by saying that he is an Asiatic! We all know the destinctive characteristics of the various Asiatic races, and nowhere do we find a people at all resembling the Jews. The only explanation

* I do not include in this term the fair-haired, blue-eyed race found in the Levant, and who are called Jews by Mr. Layard and Dr. Beddoe.

I have ever heard given of this contradiction is that by Mr. Burke. That gentleman contends that there is a hierarchy not only in ethnic centres, but similarly in their climates; and that any race coming from an inferior centre to a higher centre is thereby improved, other conditions being equal, and provided of course that the change be not too violent. Thus he points out the fact that the Jew has not degenerated in Europe, but has greatly improved in spite of all disadvantages. He also very truly observes, that no one will contend that the climate of Palestine will suit an Englishman as that of England suits a Jew. We have, however, evidence to show that the climate of Palestine *does not* suit a Jew—a pretty good test that it is not his native land. Many writers have noticed this, but I will only quote the impartial evidence of Eliot Warburton, who says,* "It is a curious but well-ascertained fact that the Jews do not multiply at present in the native city of their race; few children attain to puberty, and the mortality altogether is so great, that the constant reinforcements from Europe scarcely maintain the average population."

The great majority of the Jewish race is in Europe. The entire number of Jews, according to M. Boudin, is computed to be four millions three hundred thousand; and of these there are in Europe three millions six hundred thousand; in Africa four hundred and fifty thousand, in Asia two hundred thousand, and America forty-eight thousand, Australia two thousand. Thus more than three-fourths of the entire number of Jews are in Europe, and only a fraction of $\frac{2}{43}$ in Asia. Mr. Burke conceives it possible that even the Negro might be improved in the long run by coming to Europe under favourable circumstances, "though this," says Mr. Burke, "would not apply to the lower and unprogressive portions of the type, but to its advancing sections." Our researches have rather tended to show, however, that although they may not degenerate like Europeans going to an inferior centre, that they still are incapable of becoming acclimatized anywhere in Europe, and we much doubt if even out of Africa. We are unable in the present state of our science to do more than *see that ethnic centres do exist, without being able to define their exact limits or their number.*

In a former part of this paper I incidentally touched on the influence of the mind in conquering physical agents. Maltebrun, Goethe, and Kant, have all given their testimony in favour of the power of the mind in resisting disease. And this subject becomes important with reference to some statistical facts respecting the difference in mortality between the officers and men in India and

* The Crescent and the Cross, 1851, 8th edit., p. 334.

elsewhere. Thus with bowel-complaints in India, there were in Bengal only three more deaths of European officers in a ratio of ten thousand than in the same number of sepoys; and in Madras eighteen fewer deaths took place than in a similar number of sepoys.* Dr. Cameron also affirms that the ravages of cholera did not affect the officers or other Europeans in a like grade of life; and he says that "the small mortality amongst the officers of European regiments in Ceylon is very remarkable."† Indeed, the whole medical records teem with instances of the influences which the mind possesses in the production and removal of disease. It is possible that much may be done to enable our troops to exist in India and elsewhere, by attention to the necessity that exists for mental as well as physical exercise. Much might also be effected, were the differences of temperaments more studied, and a judicious selection made of those fitted for hot, and those for cold, climates.

Two questions were asked of Sir Ranald Martin, who is a great advocate for hill-stations and for other reforms in the army; his answers‡ are important:—

"1st. But is there no such thing as acclimatization?

"A. No, I believe not.

"2nd. Physically, you do not think that acclimatization exists?

"A. I think it does not."

These answers express the result of my own inquiries into this subject.

I have endeavoured to show from such facts as are at hand, that man cannot be *rapidly* displaced from one region and located in another without injury. This must be admitted, but it may be answered that it can be done *slowly*,—that if it cannot be done in one generation, it may be done in time. Now it is quite evident that "time is no agent" in this case; and unless there is some sign of acclimatization in one generation, there is no such process. A race may be living and flourishing in its own centre, but sometimes a very slight change into a new region will produce the most disastrous results. The Spaniards, for instance, cannot with impunity migrate into the new region on the opposite coast. In Egypt we see exemplified perhaps the most remarkable proof of what I have stated. From time immemorial Egypt has been ruled by foreign races, but not one has left any descendants. Mr. Warburton§ has briefly expressed himself on this point in these words:—"The Turk never or rarely intermarries with Egyptians, and it is a well-known fact that children born of other women in this country, rapidly degenerate or die; there are few indigenous Turks in Egypt. Through the long reign of the Mamelukes there was not one instance, I believe, of a son succeeding to his father's power and possessions." These Mamelukes were generally adopted Circassian slaves, who adopted others in their turn; and they had plenty of Circassian women imported to perpetuate their race, but with no better results than have met all other invaders. Of the English residents at Cairo the same writer observes:—"The English seem to succumb, for the most part, to the fatal influence of this voluptuous climate, and, with some admirable exceptions, do little credit to the proud character of their country."

The English also, when sent to any part of the Mediterranean, suffer far more than in England. It has been proposed to locate British troops at these stations for a time, before they proceed to India. The caution that a warm climate requires change of habits might do good, but we strongly suspect that if troops were located in the Mediterranean for a few years before proceeding to India, the mortality would be far higher when they arrived there. If also, with a view of colonizing India, we were to send a colony, for a generation or more, to dwell in the Mediterranean, we should get a degenerate race who would have few of the qualities of the British race. Wherever we go, we may apply the question in a similar manner. The distribution of mankind over the globe is the result of law, order, and harmony, and not of mere chance and accidental circumstances, as too many would have us believe. From the earliest dawn of history, races of men existed very much as they do now, and in the same locations. Jewish history, both monumental and written, tells us that the Jew has not changed for the last three thousand years, and the same is the case with all other races who have kept their blood pure. I would, therefore, say that it is as difficult to plant a race out of its own centre, as it is to extinguish any race without driving it from its natural centre. The Tasmanians and American Indians have both been extinguished by removal from their native soil; and this is nearly the only process yet discovered of extinguishing any race of man. The object of this paper, however, is simply to suggest to ethnologists and geographers the necessity of a further investigation of the important question of acclimatization.

* Ewart, p. 122. † A note in Sir E. Tennant's Ceylon, p. 82.
‡ Minutes of Evidence on the Reorganization of the Indian Army, p. 172.
§ Loc. cit. p. 67.

HISTORICAL ACCOUNT,

EXTRACTS FROM SCHEME,

AND

RULES AND ORDERS,

FOR THE INTERNAL REGULATION AND MANAGEMENT OF

St. Bartholomew's Hospital,

AT

CHATHAM,

IN THE COUNTY OF KENT.

FOUNDED, 1078.
RECONSTITUTED, 1858.
REOPENED, 1863.

ROCHESTER:
PRINTED BY W. T. WILDISH, ST. MARGARET'S BANK.

1863.

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BOARD OF MANAGEMENT

OF

ST. BARTHOLOMEW'S HOSPITAL.

Patron and Governor:

THE VERY REV. THE DEAN OF ROCHESTER.

Brethren:

THE REV. W. H. DRAGE.
T. H. DAY, ESQ.
GEORGE ESSELL, ESQ.
THE REV. J. W. SHERINGHAM.

Trustees:

THE PATRON AND GOVERNOR
THE BRETHREN
THE CHAIRMAN OF NORTH AYLESFORD BENCH OF COUNTY MAGISTRATES
THE MAYOR OF ROCHESTER
THE INCUMBENT OF ST. MARY, CHATHAM
THE COMMANDING ROYAL ENGINEER, CHATHAM
THE CAPTAIN SUPERINTENDENT, CHATHAM
} For the time being.

WM. MANCLARK, ESQ.
J. R. BAKER, ESQ.
M. BULMER, ESQ.
R. GEORGE, ESQ.
E. HOMAN, ESQ.
H. SAVAGE, ESQ.
THE REV. DANIEL COOKE
J. E. BEVERIDGE, ESQ.
G. H. DRAWBRIDGE, ESQ. M.D.
THOS. HILLS, ESQ.
W. H. NICHOLSON, ESQ.
JOHN WHITTLE, ESQ.

Officers of the Charity:

Chaplain - - -	THE REV. ROBERT SORSBIE.
Clerk - - -	WM. WEBB HAYWARD, ESQ.
Receiver - - -	FREDERICK FURRELL, ESQ.
Bankers - - -	MESSRS. DAY, NICHOLSON, & STONE.
Honorary Consulting Physician - -	J. S. KNIGHT, ESQ., M.D.
Honorary Consulting Surgeon - -	JOHN LANGSTON, ESQ.
Honorary Dentist - -	JAMES ROBERTSON, ESQ.
House Surgeon - -	HENRY GORDON SHEA, ESQ., M.D.
Dispenser - - -	MR. GEORGE HOOD RYLE.
Steward - - -	MR. ROBERT TAYLOR.
Matron - - -	MRS. MARY ANN PRITCHETT.

HOUSE COMMITTEE FOR 1863.

—o—

THOS. H. DAY, ESQ.

Wm. MANCLARK, ESQ.

THE REV. DANIEL COOKE.

J. E. BEVERIDGE, ESQ.

EDWARD HOMAN, ESQ.

COLONEL TWISS, Commanding Royal Engineer.

THE CAPTAIN SUPERINTENDENT, CHATHAM DOCKYARD.

THE CONSULTING PHYSICIAN.

THE CONSULTING SURGEON.

THE HOUSE SURGEON.

HISTORICAL ACCOUNT.

This Hospital was established near unto the City of Rochester and within the liberties of the same City, in the year 1078, by Gundulph Bishop of Rochester, for the reception of poor and leprous persons; under a Patron (The Prior of the Abbey of Rochester who became at the Reformation Dean of the Cathedral Church of Rochester,) and the Brethren of the Hospital, appointed by him.

The Charity has recently been restored and remodelled, by a Decree of the Court of Chancery, and is now under the Management of the Dean of Rochester as Patron and Governor, Four Brethren appointed by him, Three *ex officio* Trustees, Two Trustees appointed by the Lords Commissioners of the Admiralty, and the Secretary of State for War respectively, and Twelve Trustees, appointed by the Court of Chancery, with power for them to appoint additional Trustees, as mentioned hereafter.

A Hospital and Dispensary has been built, for the reception and relief of Poor Persons, of the Parishes of Chatham, Frindsbury, Gillingham, Rochester Cathedral Precinct, Saint Margaret, and Saint Nicholas, Rochester, and Strood; on property belonging to the Charity opposite Fort Pitt, on the North side of the New Road, and in the Parish of Saint Margaret, Rochester, with an entrance for Patients, and to the Dispensary from the High Street of Chatham.

The Building consists of a Hospital, with Wards for 50 In-Patients, including Operating Room and Accident Wards, a Dispensary, Waiting Room for Out-Patients, Board Room, Rooms for the Consulting Physician, and Consulting Surgeon, Chaplain's Room, and suitable Apartments for the Residence of the House Surgeon, Pupils, Dispenser, Steward, and Matron, and for the Nurses, and other Servants of the Establishment; in connection with the Building, but separated entirely from the General Wards, has been erected a Lock Wing with Wards for 30 female Patients; towards the erection and Annual maintenance of which, the Admiralty and War Departments respectively contribute.

The Trustees confidently Appeal to the Public, to contribute towards the support of an Institution much required by the wants of the neighbourhood, and calculated to alleviate to so great an

extent the sufferings of the Poorer Classes. And they rely that those who have been blessed by Divine Providence with means to do so, will afford them aid, and by their Donations and Subscriptions, enable the Trustees to carry out efficiently the objects of the Charity.

Provision has been made for an increase of beds in accordance with the 25th Clause of the Scheme regulating the Charity; by which Donors may nominate additional Trustees, to the extent of one Trustee for each complete sum of £1,000 raised by such means. It will thus be seen that even one person by himself, or a few persons joining together, may give donations, and thereby become enabled to nominate a Trustee of this important Charity.

Attention is particularly called to clause 41 of the Scheme, by which Subscribers will have the right to nominate one In-Patient and two Out-Patients, for every £1 1s. subscribed. There is no restriction as to the parishes from which the *Out*-Patients are recommended; but with regard to the *In*-Patients a preference will be given to those from the Parishes particularly mentioned in the Scheme.

Donations and Subscriptions are earnestly requested, and may be paid to the Bankers of the Trustees MESSRS. DAY, NICHOLSON, AND STONE, of Rochester and Chatham, or to the Steward at the Hospital.

OBJECTS OF THE HOSPITAL,

AND EXTRACT FROM SCHEME,

As approved by the Court of Chancery 16th January, and 24th February, 1858, and 23rd February, 1861.

24.—There shall be erected upon some part of the Charity Estate, or upon some other site in or near to the City of Rochester, or Parish of Chatham, to be purchased for that purpose with the sanction of the Court of Chancery, and according to plans and specifications to be also approved of by the said Court, suitable premises for a Hospital and Dispensary for the relief of the sick Poor, to be called "ST. BARTHOLOMEW'S HOSPITAL," such Hospital Building shall contain Wards for at least Fifty Beds for In-Patients, a Dispensary, a Board Room, a Waiting Room for the Out-Patients, suitable apartments for the Residence of the House Surgeon, Dispenser, Steward and Matron, and for the Nurses and other Servants of the Establishment, and all other necessary and proper accommodation for the Inmates and Patients of the Hospital, and shall be fitted up and furnished in a fit and proper manner, but with due regard to economy.

25.—The Trustees shall be at liberty to receive Donations from any person or persons towards the erection of the said Hospital, but such Donations shall be applied solely in enlarging the same, so that it may contain more than Fifty Beds, and the Trustees may, in consideration of such Donation, appoint any person or persons, to be nominated by the Donors at a General Meeting, to be additional Trustees of the Charity, provided that no more than one such person shall be appointed as a Trustee for each complete sum of £1,000 raised by such Donations.

38.—The Hospital shall be open for the reception and relief of the Poor of the Parishes and Vills of Chatham, Frindsbury, Gillingham, the Precinct of Rochester Cathedral, Saint Margaret Rochester, Saint Nicholas Rochester, and Strood, who are suffering from any

kind of Disease; excepting that no parish pauper, no lunatic, no person having the small pox, or confirmed consumption, or ulcerated legs of long standing, or the itch, or any female far advanced in pregnancy (except in cases of severe accident requiring surgical aid), shall be admitted into the Hospital. If there shall at any time be a vacancy for a Patient in the said Hospital, and there shall not be any applicant for admission thereto from any of the Parishes or Vills aforesaid, the House Committee shall be at liberty to admit as an In-Patient any person from any of the neighbouring parishes or places, being duly qualified as aforesaid. No persons shall be admitted as In-Patients, nor remain in the House if admitted, if their cases are equally capable of relief as Out-Patients. Except in case of recent accident, and such extraordinary cases as shall render prompt admission essential to the preservation of life, limb, organ, or member, no person shall be admitted a Patient of the Hospital without the written recommendation of some one of the persons following, that is to say, any one of the Trustees of this Charity, the Consulting Physician, the Consulting Surgeon, the Dean or any of the Canons of Rochester Cathedral, the Vicar of any of the Parishes of St. Margaret Rochester, Saint Nicholas Rochester, Frindsbury or Gillingham respectively, the Incumbents or perpetual Curates of Strood, or of Saint Mary Chatham, or the Incumbent of any of the Districts in the said Parishes respectively, (and to the extent hereinafter defined), the Trustees of Richard Watts' Charity at Rochester, and any such Subscriber to the Hospital as hereinafter mentioned; nor, except in such cases of recent accident or other extraordinary cases as above mentioned, shall any person be admitted a Patient of the Hospital otherwise than by the House Committee at their Weekly Meetings, at which all persons having letters of recommendation shall attend to be examined by the Physician or Surgeon in attendance, who shall report to the Committee as to the fitness of the cases to be admitted, either as In-Patients or Out-Patients of the Hospital.

Printed forms of Letters of Recommendation shall be prepared and delivered by the Steward to persons applying for the same.

In the event of there being more applications for admission to the Hospital as In-Patients than there may be vacancies in the Hospital, those cases considered most urgent by the Physician or Surgeon in attendance shall have the preference.

No Patient shall be allowed to remain in the Hospital more than two months, except under special circumstances.

Out-Patients shall be seen and prescribed for at the Hospital, at a certain hour, to be fixed by the House Committee, on every day in

the week, except Sunday and the stated regular day of Meeting of the House Committee.

40.—The Trustees of Richard Watts' Charity at Rochester, shall in respect of the Annual Donation of £1,000, directed by the Court of Chancery to be paid out of the income of that Charity in aid of the funds of the Hospital, have the right of recommending to the House Committee any persons duly qualified as aforesaid for admission to the Hospital, either as In or Out-Patients, and such persons shall be admitted or treated accordingly; provided that the total number of In and Out-Patients, on the Books of the Hospital who shall have been recommended by the Trustees of Richard Watts' Charity shall at no time exceed Twenty.

41.—The Trustees shall be at liberty to receive Subscriptions in aid of the funds of the Charity, which Subscriptions shall be carried to the General Income Account of the Charity; and they shall allow to Subscribers the right to recommend Patients duly qualified as aforesaid for admission to the Hospital, of whom one In-Patient and two Out-Patients shall be admitted for every Guinea so subscribed.

Additional Clause, 23rd February, 1861.

Her Majesty's Government having granted £4,700 in aid of the funds of the Hospital. The Trustees shall appropriate a portion of the Building as a Lock Ward to contain 30 beds; and be at liberty to expend £16,200 in erecting, fitting up, and furnishing the Hospital and Dispensary.

FORM OF BEQUEST.

To such persons who are disposed to contribute by Will in aid of this Charity, the following Form of Bequest is suggested.

"I give and bequeath to the Dean of Rochester for the time being "Patron of ST. BARTHOLOMEW'S HOSPITAL near unto the City of "Rochester, in the County of Kent, the sum of £ upon "trust to pay the same to the Trustees or the Stock Committee for "the time being of the said Hospital, and to be applied towards the "enlargement thereof. And I declare that the receipt of the said "Dean shall be a sufficient discharge to my Executors and Trustees "and I charge the said sum of £ on my personal estate and "not out of any part of my Lands, Tenements, or Hereditaments."

If the bequest is of £1,000 or upwards the following words may be added.

"And I appoint to be an "additional Trustee of the said Charity."

N.B. Devises and bequests of Lands and buildings or Bequests of money secured by Mortgage of or otherwise charged on Land or Buildings are void by the Statute of Mortmain.

RULES AND ORDERS.

Part First.

GENERAL RULES.

1.—The Trustees shall, at their first General Meeting in every year, appoint five of their own body who may be willing to undertake the duties, to form, together with the Consulting Physician, the Consulting Surgeon, and the House Surgeon, a Committee, to be called the House Committee, who shall be authorized to transact all business connected with the Management of the Hospital for the ensuing year; and in the event of any vacancy occurring among the Trustees acting on the House Committee, by death, resignation or otherwise, such vacancy shall be filled up at the next General Meeting of the Trustees, or at a Special Meeting to be called in manner directed by the Scheme, for the management and regulation of the Charity.

2.—So long as Her Majesty's Government shall contribute towards the support of the Hospital, at the rate of £750 per annum at the least, the Lords Commissioners of the Admiralty, and the Secretary of State for War respectively, shall nominate one person, being the holder for the time being of some official appointment at Chatham or Rochester, who shall be additional Trustees of the Charity, and additional Members of the House Committee.

3.—The House Committee shall transact the ordinary business of the Hospital, for which purpose they shall meet at the Hospital at least once in every week, on a stated regular day and hour, which shall be fixed at their first meeting after the Annual Election of the Trustees to act on such Committee; and no business except the discharge, and admission of Patients, shall be proceeded with except in the presence of three members of the Committee. The House Committee shall have the exclusive power of admitting Patients to the Hospital, except

in the case of recent accidents, and such extraordinary cases, as shall render prompt admission essential, to the preservation of life, limb, organ or member.

4.—It shall be the duty of the House Committee, to see that the Hospital is properly supplied, with provisions of all descriptions necessary for the use of the Patients, and Inmates. They shall also provide all drugs, medicines, wines, spirits, surgical instruments, and appliances, required for use in the Hospital and Dispensary.

5.—The House Committee shall be empowered in case of necessity, to employ such person or persons, to perform the duties of House Surgeon, Dispenser, Steward, or Matron, as occasion may require; or until any vacancy in either of the said offices, shall be filled up by the Trustees. They shall also have the right of appointing the Nurses, and other inferior Servants, of the Hospital.

6.—The House Committee, shall make such Rules, and Orders, for the internal regulation and management of the Hospital, (not being inconsistent with or repugnant to the Scheme of the Charity or any of the provisions thereof) as they may think necessary; and they may from time to time alter, or vary, the same; provided that any such Rules, or Orders, or any alteration or variation therein, shall be submitted to the next General Meeting of the Trustees, for approval and confirmation.

7.—The House Committee shall once at least in every month audit the accounts of the Steward. They shall cause to be laid before every General Meeting of the Trustees, minutes of all such business transacted by them, since the previous General Meeting, as requires confirmation, or in their judgement ought to be so submitted; and also a Report showing the state, and condition, of the Hospital; and they shall at the last General Meeting of the Trustees in every year, cause to be laid before them, a full and detailed account, of the expenditure in respect of the Hospital and Dispensary for the preceding year.

8.—The Steward shall attend the House Committee at their weekly Meetings, and enter minutes of their proceedings in a Minute Book, to be provided for that purpose; he shall also enter in such Minute Book all Rules, and Orders, made by the House Committee for the internal management of the Hospital.

9.—None of the Officers or Servants of the Hospital shall at any time, either directly or indirectly, have, take, or receive of or from any of the Patients, or their Friends any fee, payment, gratuity, or reward, whatsoever, on pain of dismissal.

10.—The Honorary Medical Staff of the Hospital shall consist of a Consulting Physician who shall be a Fellow or Licentiate [now called a Member] of the College of Physicians of London who is practising in the City of Rochester or the neighbourhood, a Consulting Surgeon who shall be a Fellow of the College of Surgeons of London, who is practising in the City of Rochester or the neighbourhood, and a Surgeon Dentist who is practising as such in the City of Rochester or the neighbourhood, and they shall be respectively appointed by the Trustees.

11.—The Chaplain is appointed by the Dean of Rochester and must be a Clergyman of the Church of England in Priest's Orders, and he shall not hold any other Ecclesiastical Benefice with cure of souls.

12.—The other Officers of the Hospital, shall consist of a House Surgeon, a Dispenser, a Steward, and a Matron and such Nurses, and other inferior Servants, as the House Committee may, at any time think necessary.

13.—The House Surgeon shall be a Fellow or Member of the College of Surgeons of London, and the Dispenser shall be a person legally qualified to act as an apothecary.

14.—The House Surgeon, Dispenser, Steward, and Matron, shall be appointed by the Trustees.

15.—The Resident Officers, Nurses, and other Servants of the Hospital shall attend the daily prayers in the Hospital and Divine Service at least once every Sunday in St. Bartholomew's Chapel; unless their absence is sanctioned by the House Surgeon or Matron.

16.—The several Officers of the Hospital shall hold their respective Offices only during the pleasure of the Trustees, who shall be at liberty to place and displace them, or any, or either,

of them, as and when they shall see occasion, but no Officer shall be dismissed except for gross misconduct, unless the Trustees shall have previously called on him or her to resign his or her Office, provided always, that no Officer of the Hospital shall be removed or dismissed, unless two-thirds of the Trustees present at any General Meeting, or at a Meeting specially convened for that purpose, shall concur in such removal, or dismissal, and unless such removal, or dismissal be confirmed by two-thirds of the Trustees, at a Special Meeting subsequently called at an interval of not less than a fortnight, nor more than one lunar month.

17.—The House Surgeon, Dispenser, Steward and Matron for the time being, shall respectively reside in and occupy the apartments provided for them in the Hospital, and shall not dwell elsewhere; and they shall respectively have such occupation in respect of his, her, or their official character and duties respectively, and not as tenants, and shall respectively be compelled to deliver up possession of such premises, at such times, and to such persons as the Trustees may direct; and no Officer shall permit or suffer any other person or persons to use or occupy the apartments appropriated to him or her respectively as a residence; and the said Officers shall be provided with board, washing, firing, and lights, at the expense of the Charity, and in such manner as the Trustees shall think fit.

18.—The Hours for Meals of the Officers of the Hospital shall be as follows:—Breakfast 8 o'clock, Dinner 2 o'clock, Tea 6 o'clock, and Supper 9 o'clock, subject to alteration by the House Committee. The Surgeon, House Pupils, Dispenser, and Matron, will take their Meals together.

19.—The Scheme for the regulation and management of the Charity has been printed, and a copy thereof shall be given to every Official Trustee, and to every other person on his appointment as a Trustee, and to every Medical Officer, Steward, and Matron of the Hospital, and every Medical Officer, Steward, and Matron shall, on accepting and before entering on the duties of his or her Office, by writing signed at the foot of one of such printed copies (to be kept by the Trustees), certify that he or she has read the same, and that he or she undertakes, and agrees, to conform to, and comply with, and be bound by the

provisions thereof, so far as the same apply to the office accepted by him or her respectively.

20.—The House Committee shall meet at the Hospital every Wednesday at 10 o'clock in the forenoon to discharge and admit patients, and for the transaction of the General Business of the Hospital.

21.—Every Annual Subscription shall become due on the 29th day of September, and shall be paid in advance, but shall not be considered to be in arrear until the 1st day of November next ensuing, when the Steward shall specially apply for the same.

22.—Subscribers will be entitled to recommend in every year One In-Patient, and Two Out-Patients duly qualified, for every Guinea subscribed; and there is no restriction whatever as to the Parishes, from which the Out-Patients are recommended, but no Subscriber's recommendation shall be acted upon, whilst his subscription shall be in arrear.

23.—The Trustees of Richard Watts' Charity in respect of their Annual Subscription of £1,000 have the right of recommending to the House Committee any persons duly qualified either as In or Out-Patients, and such persons shall be admitted and treated accordingly, provided that the total number of In and Out-Patients on the books of the Hospital who shall have been recommended by the Trustees of Richard Watts' Charity shall at no time exceed 20.

24.—The Patients recommended by the Trustees of Richard Watts' Charity, must be residents within the City of Rochester, or the limits, liberties, or precincts thereof.

25.—The recommendations of Subscribers shall always have a preference; and the recommendations of other persons will be postponed, until all subscribers' recommendations have been acted on. Forms will be sent by the Steward to all Subscribers, and to the Clerk to the Trustees of Richard Watts' Charity.

26.—The Wards attached to the operating room shall not be used except for accidents, and four beds shall, at each weekly Meeting of the House Committee, be left vacant for casualties, and sudden cases of emergency.

27.—The outer doors of the Hospital shall be locked every evening at 9 o'clock, between the 29th of September and the 25th of March, and at 10 o'clock between the 25th of March and the 29th of September.

28.—None of the Household of the Hospital shall be absent from it after the time of locking up, unless by the special permission of the House Surgeon.

SALARIES.

29.—The Stipend of the Chaplain shall be £150 per annum; payable by the Trustees quarterly, on the four most usual quarterly days of payment in the year.

30.—The Salaries allowed to the other Officers of the Hospital shall be as follows, in addition to lodging, board, washing, firing, and lights, that is to say, to the House Surgeon £120 (with the privilege of taking Two Pupils with premiums for their instruction, such Pupils having their lodgings, board, washing, firing, and lights provided in the Hospital on payment by the House Surgeon of £25 each annually to the Trustees), the Dispenser £60, the Steward £50, and the Matron £30, such Salaries to be severally paid by the Trustees quarterly on the four most usual quarterly days of payment in the year.

31.—Any Officer appointed or ceasing to hold his Office during the interval between two quarterly days, shall be paid in proportion only up to the quarter day next following, his, or her, appointment, or from the quarter day next, preceding the time of his or her ceasing as aforesaid.

32.—Neither the House Surgeon, Dispenser, Steward, nor Matron, shall resign, his or her, office, without giving to the Trustees, through their Clerk, three calendar months' notice of his, or her, intention, under the penalty of losing Three months' Salary, unless cause to the satisfaction of the Trustees be shewn to the contrary.

33.—The Nurses and other inferior Servants of the Hospital shall be paid such Wages, and maintained in such manner, as the House Committee shall determine.

RULES AND ORDERS

FOR THE OFFICERS, SERVANTS, AND IN, AND OUT-PATIENTS.

Part Second.

THE CHAPLAIN.

1.—The Chaplain shall perform, or cause to be performed, by a Clergyman of the Church of England, Divine Service according to the ritual of the Established Church, in the Chapel belonging to the Charity at least twice every Sunday, and twice on Christmas Day and Good Friday, each of such services being a full service including a Sermon.

2.—He shall read Prayers every morning and evening in the room appointed for that purpose at the Hospital, to all the Officers, and Servants, and to such of the Patients as are able to attend, at such stated hours as shall be fixed by him, and approved of by the House Committee.

3.—He shall visit the sick in the Hospital daily, and by every means in his power, especially by the visitation of individual patients, afford to all the Inmates of the Hospital religious instruction, and consolation at such times, and in such manner, as shall not interfere with the Medical treatment of the Patients.

4.—He shall administer the Sacrament of the Lord's Supper in the Chapel, at least once a month.

5.—He shall also administer the Sacrament of the Lord's Supper, from time to time, in the Wards, to such Patients as may be desirous to receive the same, and are unable to attend the Chapel.

6.—He shall instruct the Matron to cause him to be acquainted immediately, should any of the Patients at any time desire his attendance.

7.—He shall at his discretion deliver to the Patients leaving the Hospital cured, or benefited, a form of thanks to Almighty God.

8.—No books or tracts shall be allowed to circulate in the Wards of the Hospital, without being first approved of by the Chaplain.

9.—In the event of the Chaplain being absent, he shall provide a substitute, to perform his duties in the Hospital, subject to the approval of the House Committee.

THE CONSULTING PHYSICIAN AND CONSULTING SURGEON.

1.—The Consulting Physician and the Consulting Surgeon shall attend the weekly Meetings of the House Committee, and examine such persons as have brought letters of recommendation and give their opinion in writing, as to the fitness of the applicants for admission to the Hospital.

2.—They shall also attend at the Hospital, to give their advice to In and Out-Patients, in cases of importance, every Monday and Friday, at 10 o'clock in the Forenoon.

3.—They shall also give their immediate attention in cases of extreme urgency, whenever required.

4.—The Consulting Physician shall not interfere with the treatment of the Patients under the care of the Consulting Surgeon, unless requested by him to do so.

5.—No amputation or other important operation shall be performed, except in cases not admitting of delay, without a previous consultation with the Consulting Surgeon, and no operation shall (except as aforesaid) be performed by the House Surgeon, unless with the sanction of the Consulting Surgeon.

6.—The Consulting Physician and the Consulting Surgeon respectively shall inspect the Medicines, Drugs, and other Medical necessaries and the Surgical Instruments, as often as they think fit, to see if they are of proper quality, and description, and duly taken care of by the House Surgeon and Dispenser.

7.—The Consulting Physician and the Consulting Surgeon respectively, if they have pupils under their care, shall be each allowed to take one such pupil into the Hospital and Dispensary.

8.—The Consulting Physician and the Consulting Surgeon, may each appoint a substitute to perform their several duties, during their unavoidable or necessary absence, such substitutes to be approved of by the House Committee.

THE HONORARY DENTIST.

1.—The Honorary Dentist shall attend the Hospital once a week, on a stated day and hour fixed by him, and communicated to the House Surgeon.

2.—And he is also expected to attend any case in the Hospital, when requested to do so, by the House Surgeon, or other Medical Officers.

THE HOUSE SURGEON.

1.—The House Surgeon shall have the general supervision of the Hospital; he shall visit the Wards once every day to examine and prescribe for the Patients, and oftener in case of need; he shall on every day of the week, except Sunday and the stated regular day of meeting of the House Committee, at some stated hour, attend and prescribe for the Out-Patients of the Hospital, and shall prepare and deliver to the Dispenser prescriptions in writing for the several Patients, both In-Patients and Out-Patients, under his care.

2.—In cases of accident or emergency he shall give his immediate attendance; and if in his opinion the accident or case shall be of so severe a character as to call for the admission of the person as an In-Patient, he shall have power to admit him or her, provided that the fact of such admission shall be communicated to the House Committee at their next Weekly Meeting.

3.—In all cases of extreme urgency, or difficulty, the House Surgeon shall immediately call in the assistance of, either the Consulting Physician, or Consulting Surgeon, as may be required.

4.—The House Surgeon shall have the care of the Surgical Instruments belonging to the Hospital, and upon his appoint-

ment shall sign a list thereof, to which list it shall be his duty to add any new instruments, that may be purchased under the orders of the House Committee.

5.—The House Surgeon shall keep a Register of all cases admitted into the Hospital, specifying the name of the person giving the recommendation, and the name, age, date of admission and disease of the Patient, the nature of any operations performed and the result.

6.—He shall also keep a similar Register of all Out-Patients treated at the Hospital, and shall construct quarterly returns from both the said lists, to be laid before the Trustees.

7.—He shall also keep a book, in which copies of all prescriptions shall be entered.

8.—The House Surgeon shall not engage in private practice, either in or out of the Hospital; and he shall not absent himself from, or sleep out of, the Hospital, without the consent of the House Committee previously obtained; and in case of his absence from the Hospital, the House Committee shall see that the discharge of his duties is efficiently provided for.

9.—The House Surgeon shall likewise report to the House Committee at every meeting, on all such cases as in his opinion are in a fit state to be discharged from the Hospital; and the Consulting Physician, or Surgeon, present at the Meeting shall thereupon examine such general Patients, and report to the Committee, who shall, if they think proper, discharge such patients accordingly.

10.—The House Surgeon shall from time to time report to the House Committee what Surgical Instruments, Drugs and Medicines, are required for the use of the Hospital, and Dispensary.

11.—He shall on no account lend any of the Surgical instruments belonging to the Hospital, without making a memorandum to whom, and when, lent, and shall take particular care that they are returned as soon as possible and fit for use.

12.—He shall be responsible for the state of the Dispensary, and Medical Department generally, and shall see that they are kept clean and in good order.

13.—He shall receive from the Porter the letters of recommendation of the In, and Out-Patients, and communicate any information required thereon, to the Steward.

14.—He shall have the power of discharging any Patient guilty of improper conduct, the same, being reported to the House Committee at their next Meeting.

15.—The House Surgeon shall take especial care that all In-Patients on their admission, before being received into their respective wards, shall be washed, or take a bath in the reception room, and that their body clothes, are fumigated.

16.—He shall cause to be fixed tickets above the bed of each Patient, one specifying the Patient's name, the date of admission, the name of the person recommending, and the name of the Medical Officer under whose care he or she may be, and the other specifying the diet prescribed.

17.—The House Surgeon shall have the privilege of taking two pupils, called House Pupils, with a premium for their instruction, and such pupils shall have their lodging, board, washing, firing and lights in the Hospital for which he shall pay annually to the Trustees £25 each.

18.—He shall see that no Pupils, of the Consulting Physician, and the Consulting Surgeon, remain in the Hospital after their business is done.

19.—He shall regulate the duties of the Nurses in the Wards, and report to the House Committee, any misconduct, which may occur in the Hospital.

THE PUPILS.

1.—The Out Pupils, taken into the Wards, by the Consulting Physician, and Consulting Surgeon, under these Rules and Orders, shall behave themselves respectfully to the Trustees, House Committee, and Officers of the Hospital, and with tenderness and propriety to the Patients, and they shall conform in all things to the Rules, and Orders for the internal regulation and management of the Hospital.

2.—The Out Pupils may attend at the Hours appointed for going round the Wards, and they shall remain in the Hospital and Dispensary, only during the time employed by the Medical Officers in prescribing for, and dressing their Patients.

3.—The Medical Officers shall be responsible for the conduct of their respective pupils.

4.—The Pupils of the House Surgeon shall be denominated House Pupils, and shall carefully obey the directions, and act under the Superintendence of, the House Surgeon.

5.—The House Pupils shall be in readiness to attend the Medical Officers, and to go round the Wards with them, upon being required so to do.

6.—The House Pupils shall never absent themselves from the Hospital without permission from the House Surgeon.

7.—The House Pupils shall have their lodging, board, washing, firing, and lights provided in the Hospital, and they shall take their meals with the House Surgeon, Dispenser, and Matron.

8.—They shall not receive visitors into their respective Apartments, unless, with the knowledge and permission of the House Surgeon.

9.—The names of all Pupils shall at the time of their first attendance at the Hospital, and at the time of their finally leaving the same, be communicated to the House Committee at their next Weekly Meeting, for record in their minute book.

10.—All Pupils shall be liable to dismissal by the House Committee, for impropriety of conduct, subject to the subsequent confirmation, by the Trustees.

11.—Every Pupil before entering upon his duties shall sign the rules and orders at the foot or end thereof, and certify that he has read the same and that he undertakes to conform to and comply with, and be bound by the provisions thereof, so far as the same apply to him.

THE DISPENSER.

1.—The Dispenser shall have the charge of all medicines, drugs, and other medical necessaries required for the use of the Patients,

2.—He shall accompany the House Surgeon in his daily visit to the Wards, and render him any assistance he may require.

3.—He shall compound and dispense, the In and Out-Patients' medicines, according to the written prescription of the Physician and Surgeons, with written, or printed, directions in what manner they are to be taken or used, and in all new cases, or alterations in the medicine prescribed for the In-Patients, he shall verbally instruct the Nurses, respecting the same.

4.—He shall make out every week a Diet Roll for each Ward, and shall insert daily therein, opposite to each Patient's name, the particular diet and extras (if any), prescribed.

5.—He shall visit the Wards every evening, and ascertain that the Patients have been supplied with, and have taken, the medicines prescribed for them.

6.—He shall keep a book, containing an account of all medicines, drugs, and other necessaries, brought into the Dispensary, with the prices according to the bills of parcels delivered, and shall see that the articles are of good quality.

7.—He shall also keep a book, containg a daily account of all wines and spirits delivered to him by the Steward, upon his requisition, containing the quantities delivered to each Patient, or used in the Dispensary, and shall take care that none of the articles placed in his charge, are wasted, or misapplied; and such books shall always be made up, and laid before the House Committee, at their weekly Meeting.

8.—The Dispenser shall reside in the Hospital, and shall not leave the same without the leave of the House Surgeon, and he shall not sleep out of the Hospital, without the consent of the House Committee previously obtained; who shall take care that the discharge of his duties is efficiently provided for during his absence.

9.—He shall not follow any other employment, whilch olding his appointment.

10.—He shall inform the House Surgeon, from time to time what drugs, medicines, and other necessaries, are required for the Dispensary; in order that the same may be reported to the House Committee.

11.—He shall not dispense any medicines which have not been ordered by direction of the Medical Officers, or of the House Surgeon.

12. He shall keep the Medical Stores in good condition and order; and he shall use with care and economy the Drugs committed to his charge.

13.—He shall keep and hang up in the Dispensary, a list of those drugs which are wanted, and he shall be able at any time to report to the House Surgeon the average consumption of any particular Drug.

14.—The Dispenser shall not permit either borrowing or lending of Drugs, on any pretence whatever.

15.—He shall cause the Diet Roll to be given to the Steward every day, not later than ten o'clock.

16.—He shall cause the general dressings for the Surgical Patients, to be prepared every morning, and kept in readiness.

17.—He shall personally superintend the Dispensary during the whole period of the application of the Out-Patients for Medicine, and give to each Out-Patient, printed directions with respect to the manner of using the Medicine.

THE STEWARD.

1.—The Steward shall attend the House Committee at their weekly Meetings; and enter minutes of their proceedings in a minute Book, to be provided for the purpose; he shall also enter in such minute Book, all Rules, and Orders, made by the House Committee, for the internal management of the Hospital.

2.—He shall, together with the Matron, have the general domestic superintendence of every part of the Hospital, and shall take care that all regulations for the domestic management thereof, are strictly complied with.

3.—He shall visit all the Wards daily (being accompanied by the Matron, or one of the Nurses, in visiting the Female Wards), and see that all rules are attended to, and order and regularity preserved.

4.—He shall have the charge of all provisions, wines, spirits, and stores required for the use of the Hospital; and shall take care that they are of good quality, and proper weight and measure, and that they agree with the bills of parcels.

5.—He shall not deliver out of store any article in his charge, in larger quantities than are required for immediate use; and shall only deliver out wine, or spirits, upon the written requisition of the Dispenser, and shall enter in a book, the quantities of every article received, and the amounts delivered out by him.

6.—He shall visit the kitchen and other offices as occasion may require, to see that the different departments are properly conducted, and that no provisions are wasted.

7.—He shall enter in a Book, to be kept for that purpose, an account of all money, clothes, or other articles, belonging to any Patients, who deposit the same in his charge, and give a receipt for such monies; and he shall return all such deposits to them when discharged, or in case of death, to their representatives.

8.—The Steward shall at the second Meeting of the House Committee in every month, lay before them an account of the Expenditure of the Hospital, and Dispensary, for the preceding month.

9.—He shall once in every year, prepare a full and detailed account of such expenditure for the preceding year, ending at Michaelmas; which shall be audited by the House Committee, and laid before the Trustees, at their last General Meeting in every year.

10.—He shall perform such other duties as the House Committee shall prescribe, and shall not sleep out of the Hospital, without their consent previously obtained.

11.—The Steward and Matron shall never be absent from the Hospital, at one and the same time.

12.—The Steward shall not divulge the proceedings of the House Committee, or report anything which may be said at their meetings.

13.—He shall give security to the Trustees by himself, and two sureties, to be approved of by them to the amount of £100.

14.—He shall collect, and receive, Subscriptions to the Hospital, and pay the same weekly, to the Bankers of the Trustees, and deliver a list thereof to the Clerk to the Trustees.

15.—He shall prepare and deliver to the persons applying for the same, forms of letters of recommendation for admission, and treatment, as In, and Out-Patients.

16.—He shall forward to the Subscribers, and the persons entitled to recommend In and Out-Patients, the necessary letters of recommendation.

17.—He shall keep an Alphabetical list of the Subscribers, with the amount of their Subscriptions, shewing who have paid, and who are in arrear, and how many Patients each Subscriber has recommended, within the year.

18.—Whenever a Patient shall be refused admission, or discharged for irregular conduct, the Steward shall send a letter to the person who recommended such Patient, stating the reason of such refusal, or discharge, according to the form in the appendix.

19.—The Steward shall give to the general Patients on their leaving the Hospital, letters of thanks to the Subscribers, or persons who recommended them.

20.—He shall see that the beer, and porter, is duly served out to the different Wards, and for the Officers' and Servants' dinners.

21.—He shall see that the servants sit down to their meals at the appointed times, and shall have the management of the Men Servants in the Establishment, and see that the Garden is properly kept, and the Store Rooms and premises clean, and the out offices in good order.

22.—He shall keep the keys of the outer doors, and see that they are brought to him every evening, at the appointed hours for locking up.

THE MATRON.

1.—The Matron shall exercise a general superintendence over every part of the Hospital, especially over the Wards, and the domestic arrangements of the Establishment; and shall see that the Nurses and other Servants, perform their several duties with care, attention, and punctuality.

2.—She shall visit the Wards at such hours as she may deem necessary, to ascertain that the medicines delivered to

the Nurses, are regularly administered to the Patients, and that their comforts are properly attended to

3.—She shall have the charge of all the furniture, wares, bedding, linen and other articles of a like nature belonging to the Hospital, and shall every quarter make out an Inventory thereof, stating the condition in which they are, which Inventory shall be laid before the House Committee.

4.—She shall receive charge of all the daily provisions, delivered out of store, or brought into the Hospital; and see that they are of good quality, and proper weight, and measure, and shall keep an account thereof.

5.—She shall see that the diets prescribed for the several Patients are properly prepared and served and that the meals of the Officers of the Hospital are properly prepared at the stated hours, fixed by the House Committee and shall perform such other duties appertaining to her office, as the House Committee shall prescribe.

6.—The Matron shall never be absent from the Hospital without one of the Medical Officers undertaking to remain in the House, during her absence nor during the absence of the Steward and she shall not sleep out of the Hospital, without the consent of the House Committee previously obtained.

7.—The Matron shall not receive any Patient into the Hospital, without the authority of the House Committee, or the House Surgeon, excepting in cases requiring immediate help, or by the special direction of one of the Medical Officers.

8.—She shall superintend the working of the Laundries, and see that the Laundresses perform their duties, faithfully and efficiently.

9.—She shall take care that the Patients' breakfast at eight o'clock between the 25th of March, and the 29th of September, and at nine o'clock between the 29th of September, and the 25th of March; that they dine at two o'clock, and have tea at seven o'clock, except when otherwise directed by the House Surgeon.

10.—She shall take care that the persons and body-linen of the Patients be kept clean; she shall make frequent inspection of the bedding and bed linen; which last shall be changed every other week, or oftener, if necessary; she shall take care that

every Patient has clean sheets, on his, or her entrance, and that no wearing apparel be suffered to lie about the Wards.

11.—She shall cause the entrances, passages, staircases, and apartments of every kind, to be regularly cleansed and ventilated; she shall take care that the Reception Rooms, and Wards, are kept constantly clean.

12.—She shall take care that a certain number of mattrasses, blankets, and rugs, in use, be washed or exposed in the airing ground, when the weather is fine, so that the same may be thoroughly purified; and that this necessary work may be done without confusion and with expedition, the mattrasses, blankets, and rugs, shall have numerical marks, corresponding with those of the beds to which they respectively belong.

13.—Whenever a Patient is discharged, the mattrass shall be washed, and when circumstances require it, shall be new stuffed, and the blankets, bed-linen, and rugs shall be washed.

14.—The shirts of the Patients shall be changed twice a week, and their night caps and stockings once a week, or oftener, if necessary.

15.—She shall be careful that the sitting and day rooms of the Nurses, and the Nurses' Rooms and Sculleries, are kept clean and tidy; and that the Nurses commence duties and retire to rest, at the periods stated in the rules.

16.—She shall see that the Female Patients be employed in doing the work of the establishment; provided such work be not considered by the House Surgeon, inconsistent with their recovery.

17.—The Matron shall have the entire management of the Female Servants, and also of the Nurses, subject to the directions of the House Surgeon, as to the treatment of the Patients, and in case of misbehaviour or negligence of the Servants, or Nurses, she shall report the same to the House Committee.

18.—She shall superintend the cooking, weighing, and distribution of provisions received from the Steward; and see them duly appropriated, and from time to time inform the Steward in writing, what linen, provisions, and other articles within her department, will be required for the establishment.

19.—She shall see that such Patients as are able, attend the daily prayers in the Hospital and the Chapel, once at least, on every Sunday.

THE NURSES AND SERVANTS.

1.—All the Nurses shall have their lodgings, board, washing, and all other necessaries, found and provided in the Hospital.

2.—The Nurses and Servants shall behave with tenderness to the Patients, and with civility, and respect, to the Officers of the establishment.

3.—They shall not at any time, either directly or indirectly, have, take, or receive, of or from any of the Patients or their friends, any fee, payment, gratuity, or reward whatever, on pain of dismissal.

4.—They shall not absent themselves from the Hospital, without the permission of the Matron, or in her absence, of the House Surgeon.

5.—They shall not allow liquors or provisions of any sort to be brought to the Patients, from without the Hospital; unless by permission of the Medical Officer, or House Surgeon.

6.—The Nurses and Servants shall breakfast at eight o'clock, dine at one o'clock, take tea at five o'clock, and sup at nine o'clock.

7.—The Nurses and Servants shall obey the orders of the House Surgeon, as their Master, and the Matron, as their Mistress.

8.—The Nurses and Servants shall attend the daily prayers in the Hospital, and the Chapel, once at least, on every Sunday, unless prevented by necessary duties; and they must endeavour by their example, to enforce on the Patients, the propriety of religious observances.

9.—The Servants shall have their lodging, board, washing, and all other necessaries, provided in the Hospital.

10.—The Servants shall take their meals together in the Servants' Hall.

11.—The Nurses shall administer the medicines duly, according to the directions, and return as soon as possible all empty phials &c., to the Dispensary.

12.—They shall be very attentive to the state and symptoms of the Patients, in order that they may be able to report them distinctly, and if alarming symptoms come on, they shall immediately give notice to the House Surgeon.

13.—They shall always attend to their respective wards, during the time the Medical Officers are visiting their Patients; they shall be ready to wait on the Medical Officers at the usual hour, with proper dressings, and bandages; and shall at all times have a sufficient supply of the same, in case of emergency.

14.—They shall pay great attention to the cleanliness of the beds and linen of the Patients, and be particularly careful not to allow any foul linen, or bed clothes, to remain in the Wards, or any dirt, rags, or tow, to be thrown out of the windows, or down the water closets.

15.—They shall prevent the Patients who are sufficiently well to sit up, from lying down with their shoes on, or taking their food on their beds, they shall see that their hands, and faces, are daily washed, and that their persons are in other respects, kept clean and neat.

16.—They shall report to the House Surgeon, or Matron, the names of any Patients who leave their wards, or absent themselves from the Hospital, without permission; or who disobey the rules hung up in the Wards, or otherwise misbehave.

17.—They shall immediately deliver up to the Steward, all the effects of any Patient, who dies in the House.

18.—They shall return to the Matron, such provisions as are left after breakfast, dinner, or supper, and shall acquaint the Matron, every day at ten o'clock, what diet is ordered in their respective Wards.

19.—They shall have their meals in their sitting rooms, and fetch the same for themselves.

20.—The Nurses shall commence cleaning their respective Wards at six o'clock in the morning, between the 25th of March, and the 29th of September; and at seven o'clock in the morning, between the 29th of September, and the 25th of March.

21.—The day Nurses shall enter upon their duties each morning at six o'clock, and retire to rest not later than ten

o'clock in the evening, and they are required to keep their own apartments and sculleries, neat and clean, as well as to have their beds made, before nine o'clock in the morning.

22.—They must be careful that the Sculleries, Sinks, and Waterclosets, be regularly scoured every day; and they shall take care that those Patients who are capable of going to the lavatory, do so, and that all other Patients be either washed by them, or supplied with washing materials, if so far able to assist themselves.

23.—In the evening before leaving the Wards, they shall see that each Patient is furnished with a clean utensil, and that all soil and offensive matter be carried away.

24.—The Night Nurses shall enter upon duty at eight o'clock in the evening, and shall retire to rest, not later than two o'clock in the afternoon.

25.—They shall see that all soil and dirt that may have accumulated during the night, be removed before eight o'clock each morning.

26.—They are to assist the Day Nurses, under the direction of the Matron, in the general business of the Ward during the early part of the day; and they must keep their own Apartments and Sculleries neat and clean, and take care that their beds be made.

27.—They shall preserve order and quiet in the Wards during the night. They are not permitted to sleep or lie down, nor to occupy their time with business apart from a Nurse's duties, and they are not permitted to leave the department in their charge during the night, except on special duty.

28.—They shall see that the Gas be kept low, that no more than one burner be lighted, except in case of accident or emergency, and that the gas in the staircases and passages adjoining their respective Wards, be turned off at day light.

29.—They shall, in case of any accidents requiring admission during the night, at once call the Porter and the House Surgeon,

THE PORTER.

1.—The Porter shall reside in the Hospital, and be provided with board, washing, and all other necessaries therein.

2.—He shall take charge of the furnaces, under the direction of the Steward.

3.—He shall take the mattrasses and bedding after the discharge of each Patient; shake, beat, brush, and air the same, and return them to the Wards.

4.—He shall clean the knives, and assist in cleaning the windows of the Hospital, according to a system to be laid down by the Steward.

5.—He shall see the Hospital cleared of all visitors to Nurses and servants, at half-past eight in the evening.

6.—He shall not absent himself on any pretence whatever, without the sanction of the House Surgeon or Steward.

7.—He shall obey the general orders of the Medical Officers, House Surgeon, Dispenser, Steward, and Matron, and shall perform the work required of him.

8.—He shall water the road in front of the Hospital, whenever required.

9.—He shall attend to the Garden, and see that the same is kept in good order.

10.—He shall answer the outer gate and doors, at night and admit the applicants if necessary, to the Hospital, calling up the Accident Nurse, and reporting the same immediately to the House Surgeon.

11.—The Porter shall make such enquiries as may be necessary, of all persons coming to the Hospital, and examine all baskets and bundles, for the purpose of preventing the introduction of spirits, beer, wine, or any other objectionable article.

12.—He shall not admit any visitors to Nurses or Servants, before ten in the morning, or after eight in the evening, in the summer; and six in the evening in the winter; without the permission of the House Surgeon, and shall keep a book with the names of all such persons, and the time of their coming to and leaving the Hospital.

13.—He shall not allow any Nurse or other Servant to leave the Hospital, without a permit from the Matron, or in her absence, from the House Surgeon.

14.—He shall receive the recommendation of Out and In-Patients, and receive the Out-Patients on their arrival in the morning, furnish each with a number, see that each Out-Patient enters the Consulting Room in proper rotation, and in a quiet and orderly manner, and that the clothes of the In-Patients are fumigated, and the Consulting Rooms, Operating Room, and Waiting Rooms are clean.

15.—He shall take out and deliver, all the notes and messages given him by the House Surgeon, Dispenser, Steward, or Matron.

16.—He shall lock the outer doors at the appointed times, and deliver the keys to the Steward.

17.—He shall attend the Chapel, once at least every Sunday.

THE LAUNDRIES.

1.—There shall be a Laundress, who shall have her lodging, washing, and all other necessaries, found and provided in the Hospital.

2.—The Laundress shall be under the immediate control of the Matron, and shall be held responsible for the good order and government, of the department under her charge.

3.—She will have the sole charge of the Laundry Books, and enter therein a note of all Linen and other articles, brought from the various departments of the Hospital. She will examine each article, to see if it be marked with the number, or letter of the Ward from which it has been brought, and return any that are not so marked. If the articles brought to the Laundries bear the wrong mark, she will at once return them to the Ward, or department of the Hospital, to which they properly belong.

4.—She will count the Articles sent to the Laundries, in the presence of the Nurse, and see that the number sent agree, with the list sent with them.

5.—She will be careful to return to each department, the Articles sent to the Laundry during the week; and see that the number returned, agrees with the lists sent and with the Laundry Book.

6.—She will see that all clothes are properly washed, and if the work be performed in a slovenly manner by any one of the Assistants, she will require such Assistant to do it over again by working extra hours. Should a similar circumstance again occur, the Laundress will make it known to the Matron. The work at the Laundries will commence each morning regularly, at six o'clock.

7.—The Laundress will not allow a Patient, on any pretence whatever, to enter the Laundries; nor will she encourage, or permit Nurses, and others, to remain after their business is finished.

8.—She will preserve order and propriety of conduct, among the Assistants; and forbid the use of improper language in the Laundries, at all times.

9.—She shall see that every part of the Laundries be kept clean, and that the drains be daily swept out. If any thing should occur, to prevent the proper working of the washing apparatus, she is to give immediate notice of the same to the Steward.

10.—She shall forbid the Assistants bringing spirits into the Laundry.

11.—She will devote her whole time and attention to the duties of her office, and by every means in her power, endeavour to prevent extravagance and waste. She will not absent herself, from the Hospital premises without the permission of the Matron.

12.—She shall attend the Chapel of the Hospital, on Sundays.

13.—The Assistants at the Laundries shall not reside in the Hospital, but shall be from time to time engaged and discharged by the Matron.

14.—They shall be under the immediate control of the Laundress, who will allot to each Assistant her daily amount of work. They shall devote their whole time and attention to the duties of their office, and shall not absent themselves from

the Laundries (except for taking their meals,) without the permission of the Laundress.

15.—They are required to work ten hours daily.

16.—Should the Laundress have occasion to find fault with the work of any of the Assistants, she is required to see that the same be done over again, by the Assistant working extra hours.

17.—The Assistants are strictly prohibited from carrying spirituous liquors into the Hospital, on pain of dismissal; and any Assistant found guilty of intemperance, will be dismissed the Hospital, and the wages due to her will be forfeited.

18.—They shall not go into the Hospital at any time, except by the express order of the Laundress, and for purposes connected with her establishment.

IN AND OUT-PATIENTS.

1.—The Hospital is for the reception and relief of the Poor of the Parishes and Vills of Chatham, Frindsbury, Gillingham, the Precinct of Rochester Cathedral, Saint Margaret, (Rochester), Saint Nicholas, (Rochester), and Strood, who are suffering from any kind of disease; excepting that no parish pauper, no lunatic, no person having the small pox, or confirmed consumption, or ulcerated legs of long standing, or the itch, or any female far advanced in pregnancy, (except in cases of severe accident requiring surgical aid), shall be admitted into the Hospital.

2.—If there shall at any time be a vacancy for a Patient in the said Hospital, and there shall not be any applicant for admission thereto from any of the Parishes or Vills aforesaid, the House Committee shall be at liberty to admit as an In-Patient any person from any of the neighbouring Parishes or Places, being duly qualified as aforesaid.

3.—No persons shall be admitted, as In-Patients, nor remain in the House if admitted, if their cases are equally capable of relief as Out-Patients.

4.—Except in case of recent accident, and such extraordinary cases as shall render prompt admission essential to the preservation of life, limb, organ, or member, no person shall be admitted as a general Patient of the Hospital, without the written recommendation of some one of the persons following, that is to say, any one of the Trustees of this Charity, the Consulting Physician, the Consulting Surgeon, the Dean or any of the Canons of Rochester Cathedral, the Vicar of any of the Parishes of Saint Margaret, (Rochester,) Saint Nicholas, (Rochester), Frindsbury, or Gillingham respectively, the Incumbents or Perpetual Curates of Strood, or of Saint Mary, Chatham, or the Incumbent of any of the Districts in the said Parishes respectively, the Trustees of Richard Watts' Charity at Rochester, and any Subscriber to the Hospital.

5.—Except in such cases of recent accident or other extraordinary cases as above mentioned, no person shall be admitted a general Patient of the Hospital, otherwise than by the House Committee, at their weekly Meetings, at which all persons having letters of recommendation shall attend, to be examined by the Physician or Surgeon in attendance, who shall report to the Committee as to the fitness of the cases to be admitted, either as In-Patients or Out-Patients of the Hospital.

6.—Printed forms of letters of recommendation shall be prepared and delivered by the Steward to persons applying for the same.

7.—In the event of their being more applications for admission to the Hospital as general In-Patients than there may be vacancies in the Hospital, those cases considered most urgent by the Physician or Surgeon in attendance, shall have the preference.

8.—No general Patient shall be allowed to remain in the Hospital more than two months, except under special circumstances; and the House Surgeon shall at every Meeting of the House Committee, report to them on all such cases as shall have been in the Hospital for a period of two months and upwards; and the Committee shall thereupon have power to discharge them; but if in the opinion of the Medical Officers of the Establishment, further treatment in the Hospital shall in any such case be likely to be of essential benefit to the Patient, the Committee shall be at liberty to allow the Patients to continue in the Hospital for such longer period as they may think necessary.

9.—In the event of any Patient being discharged for irregularity or misconduct, the Steward shall immediately inform the Subscriber, or Person by whose recommendation such Patient was received or treated.

10.—Any Patient discharged for irregularity or misconduct, can never be admitted again, except by special direction of the House Committee.

11.—All general Patients when discharged, shall leave their letters of recommendation with the Steward at the Hospital; and receive from the Steward letters of thanks to the Subscriber or person who recommended them. The letters of thanks of Patients recommended by the Trustees of Richard Watts' Charity shall be delivered to their Clerk.

LOCK PATIENTS.

12.—The Lock Patients will be admitted by the House Surgeon every morning except Sunday, at nine o'clock, without any recommendation or tickets.

13.—Their names and numbers will be taken by the Porter, and they will on no account be allowed to leave the Hospital, until in the opinion of the House Surgeon, it is fit for them to do so.

14.—The House Surgeon will discharge the Lock Patients when cured, as he thinks proper; without reference to the House Committee.

OUT-PATIENTS.

15.—The Out-Patients will be seen and prescribed for at the Dispensary of the Hospital, on Mondays, Tuesdays, Thursdays, Fridays, and Saturdays, at 10 o'clock in the forenoon. They are not restricted as to the Parishes from whence they come.

16.—The Consulting Physician and the Consulting Surgeon will be in attendance on Mondays, and Fridays, and the House Surgeon every day.

17.—The Out-Patients shall not loiter about in the Dispensary or trespass in the Grounds, on pain of being discharged for irregular conduct.

18.—They shall attend at the time appointed by the Medical Officers, and if they absent themselves twice together, without reasonable cause (to be allowed by their respective Medical Officers), they shall be discharged.

19.—They shall continue to attend on the same day of the week, unless directed to the contrary; and it is expected that they present themselves in as clean and decent a state, as their circumstances will admit.

20.—They shall be assisted with advice and medicines only, and be in no other way chargeable to the Charity.

21.—They shall provide themselves with bottles &c., for their medicines.

22.—When unable to attend on the appointed days, they shall send other persons to report the reason of their absence, and to receive such medicines as are prescribed for them, or they will be dismissed for non-attendance.

23.—Out-Patients are not allowed to remain on the books longer than 4 months, and are not again admissible until the expiration of 8 months, from the date of their discharge, unless recommended by the Medical Officers for further treatment.

24.—A Copy of the Rules for the Out-Patients shall be hung up in the Waiting Room of the Dispensary.

IN-PATIENTS.

25.—In-Patients provided with recommendations as aforesaid, shall be admitted to the general Wards, at the weekly meeting of the House Committee every Wednesday at ten o'clock in the forenoon.

26.—The In-Patients shall punctually observe the directions of the Medical Officers, House Surgeon, Dispenser, Steward, Matron, and Nurses.

27.—They shall every morning wash their hands and faces, and those who do not use either the cold or warm bath, shall have their feet washed, at least once a week.

28.—They shall be decent and regular in their conduct, they shall not curse, swear, nor use any improper language.

29.—They shall not play at cards, or dice, or make use of spirituous liquors, nor smoke, nor chew tobacco, in the Hospital.

30.—They shall not cut, scratch, or deface the walls, windows or furniture, nor waste nor abuse any article belonging to the Charity.

31.—They shall not give any reward or gratuity of any kind, to any Nurse, or other person belonging to the Hospital.

32.—They shall all be dressed before twelve o'clock, every morning.

33.—They shall not sit up after eight o'clock in the winter, nor after nine o'clock in the summer, and all who are judged able by the Medical Officers, shall rise by seven in the summer, and by eight in the winter.

34.—They shall not go out of the Hospital, without leave of their respective Medical Officers, or from the House Surgeon; nor pass the night out of the House, on any account whatever, neither shall they introduce or admit any visitor into the House without leave of the House Surgeon, or Matron.

35.—No Patient shall go from his or her ward or apartment into any other, without leave from the House Surgeon, or Matron.

36.—Such Patients as are considered able by their Medical Officers, shall assist the Nurses and Servants in nursing the other Patients, and in doing such other business as the House Surgeon, or Matron shall direct.

37.—Such general Patients as are considered by the House Surgeon, capable of attending prayers in the Hospital, are expected to do so; and also to attend the Chapel of the Hospital, at least once every Sunday.

38.—The general Patients will be allowed to go into the Convalescent Wards, at such times, and for so long, as the House Surgeon shall consider desirable.

39.—Such of the general Patients as are able, and have obtained leave from the House Surgeon, shall be permitted to go into the grounds every day, when the weather is favorable; being careful not to injure any thing.

40.—Any Patient being dissatisfied, may state his or her complaint to the Matron, who shall report it to the House Committee.

41.—All Patients on coming into the Hospital, shall leave their money and valuables with the Steward; who shall give a receipt for the same.

42.—A Copy of the Rules for In-Patients shall be kept hung up in each Ward.

VISITORS.

43.—Visitors will be allowed to go over the Hospital, between the hours of two and four, in the afternoon, on application and with the permission of the Matron, or in her absence, of the Steward.

44.—Friends of In-Patients will be permitted to visit them between the hours of four and six in the afternoon, on Sundays; and between the hours of two and four in the afternoon, on Tuesdays and Fridays, on the like application, and with the like permission; and in case of dangerous illness at such other times as the House Surgeon, or in his absence the Dispenser, shall approve.

N.B Any quantity of old Linen or Cotton sent by Ladies to the Matron at the Hospital, will always be esteemed a valuable present to the Charity.

APPENDIX.

FORMS FOR LETTERS &c.

No. 1.

RECEIPTS OF ANNUAL SUBSCRIPTION.

Rochester 186

Received of £ for years' Annual Subscription to St. Bartholomew's Hospital from 29th September, 186 to 29th September, 186

£

Steward.

No. II.

FOR SUBSCRIPTION

Sir, (or Madam)

I am to inform you that your subscription of £ for the year from 29th September, 186 to 29th September, 186 is in arrear and to request the same may be forthwith paid to me at the Hospital.

I remain,
Sir (or Madam)
Your Obedient Servant.

St. Bartholomew's Hospital,
New Road, Rochester,
186

Steward.

No. III.

RECOMMENDATORY LETTER.

To the House Committee of St. Bartholomew's Hospital

186

Gentlemen.

I recommend the bearer of the Parish of and__________ desire that may be admitted an Patient of the Hospital if not disqualified.

I remain, Gentlemen,

Your obedient Servant

Age
How long ill
Proper

Subscriber or other person entitled to recommend

Receiving Surgeon

N.B. The Patient must attend at the Hospital with this Letter on a Wednesday, at the hour of ten precisely if desired to be an In-Patient, and on Monday, Tuesday, Thursday, Friday or Saturday at the same hour if desired to be an Out-Patient.

No. IV.

FORM OF AN ANSWER WHEN THE HOSPITAL IS FULL

186

Sir, (or Madam),

I am to inform you that A. B., recommended by you for an In-Patient, cannot yet be received into the Hospital for want of room; but, according to the Rules, is now entered on the books as an Out-Patient, and will be received into the Hospital on the vacancy.

I remain,

Sir, (or Madam)

Your obedient Servant

St. Bartholomew's Hospital,
New Road,
Rochester.

Steward.

No. V.

FORM OF ANSWER WHEN THE PERSON IS NOT A PROPER OBJECT FOR ADMISSION.

186

Sir, (or Madam),

I am directed to inform you that A. B. of the Parish of recommended by you, is not a proper object for this Hospital, according to its established Rules.

I remain

Sir, (or Madam)

Your obedient Servant

St. Bartholomew's Hospital,
New Road,
Rochester.

Steward.

No. VI.

WHEN RECOMMENDATIONS ALREADY USED.

Sir, (or Madam)

I have to inform you that your recommendations for the year from 29th September, 186 , to 29th September, 186 , having been used, A. B. of the Parish of recommended by you cannot be admitted to the Hospital at present the Hospital being full.

I am,

Sir (or Madam)

Your obedient Servant,

St. Bartholomew's Hospital
New Road,
Rochester.
186

Steward.

No. VII.

WHEN A PATIENT IS DISCHARGED FOR IRREGULAR CONDUCT.

Sir (or Madam,)

I am directed to inform you that A. B. having been guilty of irregular conduct, is therefore discharged, and cannot be again admitted to the benefit of the Hospital, except under special circumstances as approved by the House Committee.

I remain,
Sir (or Madam)
Your obedient Servant,

Steward.

St. Bartholomew's Hospital,
New Road,
Rochester.

No. VIII.

THANKS OF PATIENT TO ALMIGHTY GOD.

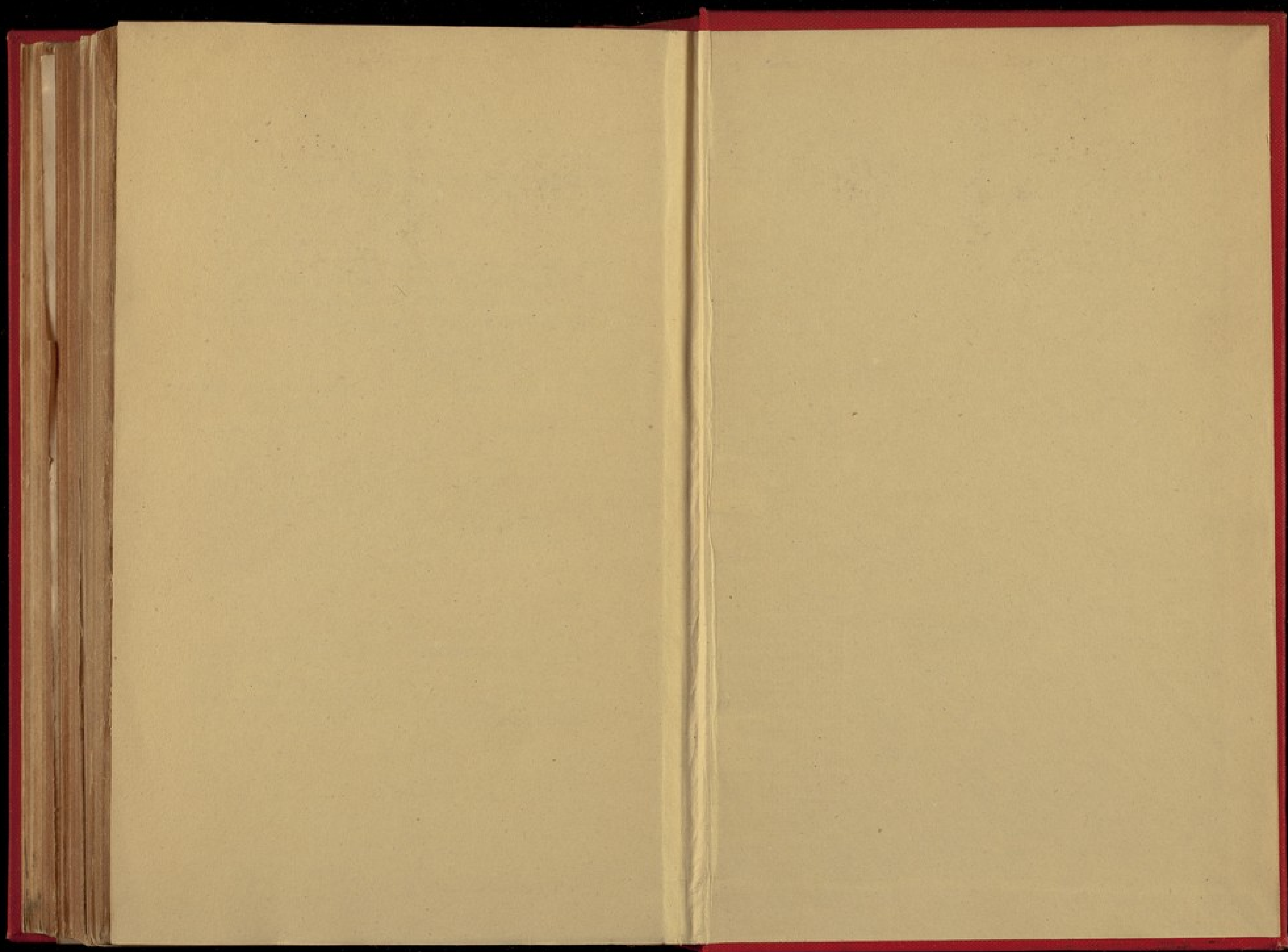
A. B. desires to return thanks to Almighty God for benefits received at St. Barthomew's Hospital.

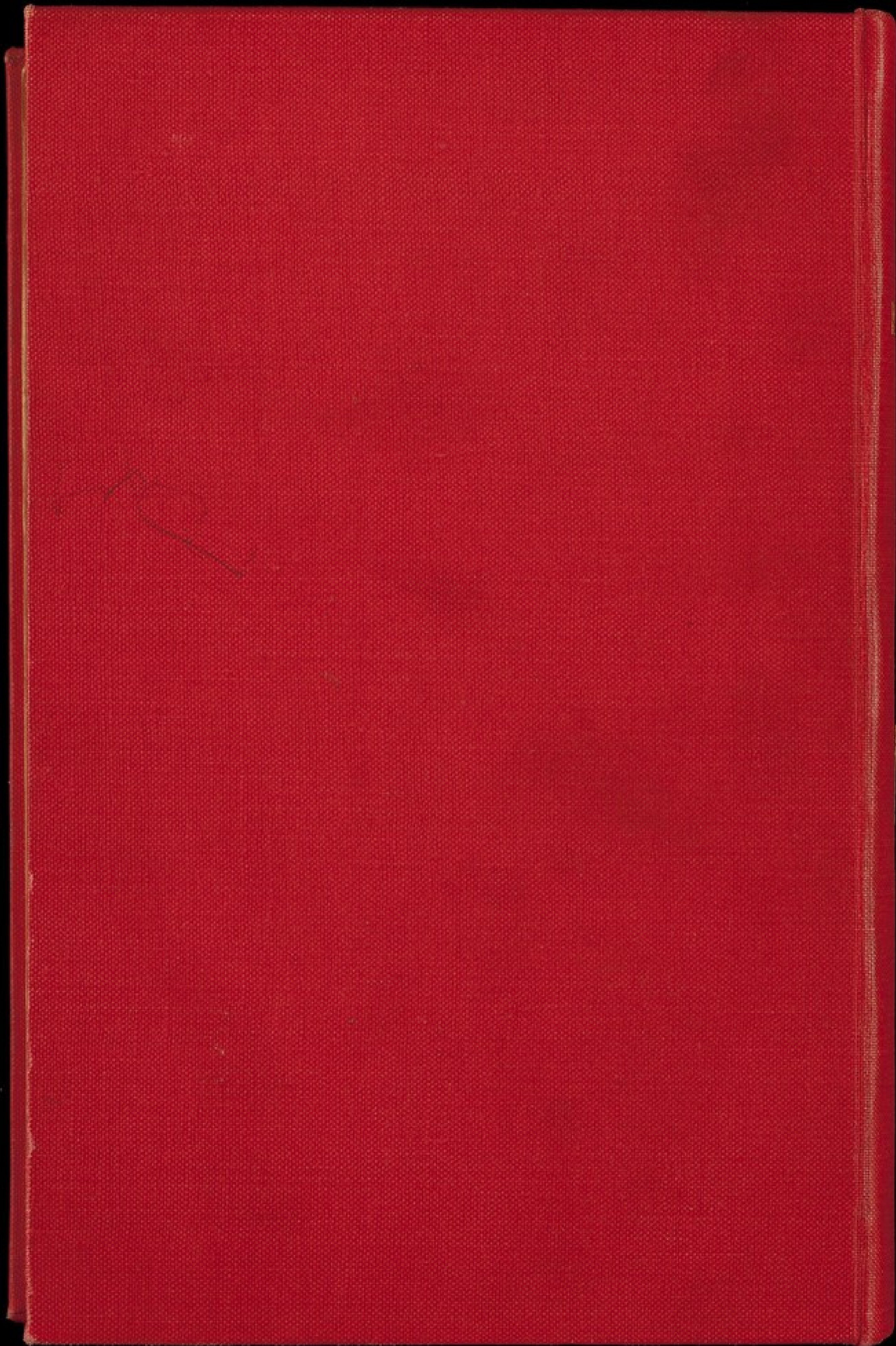
No. IX.

THANKS OF PATIENT TO SUBSCRIBER RECOMMENDING.

A. B. begs to return thanks to
for the recommendation in pursuance of which he (or she) has been admitted as an Out (or in) Patient at St. Bartholomew's Hospital.

FINIS.





PAMPHLETS

75

474

75