

Report on the Experience of the St. Marylebone Infirmary, since 1827, with respect to Admissions, Duration of Treatment, Mortality, and other Statistical Results, according to Age and Sex.
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IN 1838 a Committee was appointed by the Council of the Statistical Society for "collecting the statistics of life," as shown more especially in the leading medical charities of the country, and circulars were issued to 46 London institutions, and to about 80 similar charities in the provinces; amongst the former was the parochial infirmary of St. Marylebone. In consequence of this application conveyed to the guardians and directors of the poor for St. Marylebone, by the author of this paper, permission was given him by the guardians to examine the records of the infirmary, and report the results of his inquiry to the Committee. Circumstances beyond the control of the writer, prevented the preparation of a report of the experience of the infirmary, in due time for the use of the Committee. Since then the writer has been enabled to complete those analyses for which suitable materials were then placed at his disposal. He has, further, since been able to make use of returns made to the Poor Law Commissioners, and to the guardians, for various purposes, and at various times, all of which have more or less bearing on the subject of the statistics of life. Some time since, the author communicated to some leading members of the statistical section of "The British Association for the Advancement of Science," the fact that he was in possession of these materials; and undertook, with their sanction, to draw up a report to be presented to the ensuing meeting of the Association, if his other engagements should admit of his completing it in time, and if not at the next meeting, then at the meeting of the following year. He has subsequently had communication again with the members of the statistical section above alluded to, and with the treasurer of the Association, and has the honour now, with the sanction of those gentlemen, to present his report in as complete a condition as the materials at his disposal have admitted of.

Preliminary General Observations respecting the Infirmary.

The St. Marylebone Infirmary, or "Sick House," forms a portion of the parochial establishment for the relief of the poor of St. Marylebone. It adjoins, but is distinct from, the "Workhouse," having for the most part officers and servants of its own. Its professional staff consists of 3 honorary Physicians—an honorary Physician Accoucheur—2 honorary Surgeons—a House Surgeon—3 assistant House Surgeons—and 2 Dispensers—in all 12 persons. The admissions to its wards come partly from out of doors, and partly from the adjoining workhouse. It receives indifferently both sexes, all ages, and all diseases, except small-pox. The right of admission is legally limited to persons locally resident for a minimum time; but in practice the legal limit as to residence, is often, as I understand, over-stepped in favour of urgent sickness, and extreme destitution; and such transgressions of law, are happily now not only justifiable but inevitable, in consequence of the

recent advances in the mind of the more intelligent classes, towards a healthy state of opinion and feeling with regard to the poor.

As admission into this "Sick House" or Infirmary is, morally at least, a right of the locally resident sick poor of a very large and populous parish; the number of its inmates is subject to all the influences of season, weather, epidemic constitution, commercial activity, and other sources of fluctuation; so that most years the sick population has varied from 150 or 160 in the fine season (about June usually) to 300 or 320, 330, and upwards; the extreme in this direction happening usually in January. These numbers are exclusive of the much larger number of chronic or slight cases prescribed for in the forenoon, whether coming from the workhouse or their own homes, at the Infirmary, by the resident medical officers.

In common with other metropolitan asylums of sickness, general as well as parochial, the registers of the Infirmary were formerly kept in an old-fashioned and very imperfect manner, and were ill adapted to forward many of the objects of the medical statist. Since 1840, however, a better system has been in operation. At the suggestion of the writer, a form of registration has been adopted, substantially in accordance with the views of the London Statistical Society, and coinciding in most points with that recommended by the Committee on Hospital Statistics: so that hereafter the records of the Infirmary may be expected to furnish very valuable materials for numerical investigation of the laws of disease, more especially regarding the disorders of infancy and early childhood, and of extreme age, which are all comparatively little known in the wards of the general hospitals; also regarding the duration of several classes of incurable disease, organic or functional only, which are commonly either not admitted, or discharged after a short stay, and respecting which it is of the greatest importance, with a view to the extension of the practice of life assurance to its legitimate limits, that accurate statistical information should be obtained.

Materials for this Report.

The facts that collectively form the subject matter of this report, are contained in 11 chief tables, exclusive of subordinate tabulations illustrative of those 11 principal.

1. The first table presents a general view of the experience of the infirmary, as to annual admissions and deaths, with their ratios, in 17 years, commencing with July 1827, ending with June 1844, without distinction of sex, age, &c.

2. The second table gives the admissions of 8½ years, ending with March 1836, and distinguishing sexes and ages, but not years.

3. Table III. presents similar facts, similarly analysed and arranged, for 4½ years, ending with June 1840.

4. Table IV. gives the duration of treatment for 8½ years, ending March 1836, and stated in weeks and lunar months, with distinction of sex only.

5. Table V. gives the like facts in like order for 4½ years, ending June 1840.

6. and 7. Table VI. gives the average stay in the sick-house, according to sex and age, for the period 1827—1836; and Table VII. gives the like results for the subsequent period, 1836—1840.

8 and 9. Tables VIII. and IX. refer solely to the mortality, which is presented in two different aspects in each table, and for two different series of years, viz., 1827—1836, and 1836—40. A mortality is presented, 1. in its relation to the admissions of each sex at *each* age; and 2. to the whole mortality of each sex at *all* ages.

10. Table X. shows the distribution of the admissions and deaths over the months and seasons of 11 $\frac{3}{4}$ years ending in 1839.

11. Table XI. gives the admissions for 6 $\frac{3}{4}$ years ending in March 1844, distinguishing whether from W. H. (workhouse), or O. D. (out of doors); and whether under the physicians or surgeons.—The discharges, whether—1. cured,—2. relieved or incurable,—3. by desire uncured,—4. irregular,—5. to a lunatic asylum,—6. from the lying-in ward.—The deaths for the same period, whether under physicians or surgeons, each quarter. It gives, further, the average stay in the wards, whether of physicians or surgeons; also the gross quarterly amounts of out-patients prescribed for in the morning by the resident officers.

I regret that the shape in which the official records of the infirmary have been kept until very lately, has not admitted of any satisfactory analysis, including distinction of disease, or of trade or occupation.

Mr. Farr suggested to me that a table of mortality, in which the deaths should be classified according to duration of sickness, might be of much interest, and for benefit societies, and other assurance associations, might be of considerable value. I have to regret my inability to carry out the recommendation of so high an authority on this occasion.

TABLE I.—*Admissions and Deaths in each Year from 1827 (June 31st) to 1844 (July 1st); in all 17 Years.*

Years.	Admissions.	Deaths.	Ratios per Cent.
1827	1554	99	6.33
(last 6 months) }			
1828	2989	221	7.4
1829	2837	246	8.67
1830	2707	249	9.2
1831	3131	292	9.33
1832	2437	237	9.7
1833	2605	308	11.0
1834	2620	259	9.9
1835	2154	288	18.33 nearly.
1836	2358	358	15.25 "
1837	2480	444	18.0 "
1838	2569	360*	13.66 "
1839	2713	322	11.8
1840	2789	319	11.4
1841	3143	382*	12.15
1842	2353	335	14.3
1843	2978	377	13.0
1844	1615	171	10.6
(6 months) }			

* The mortality of each of those years (1838 and 1841) has been erroneously given by the registrar of the district. (See Report for 1843, page 500.) I have ascertained the fact by personal inquiries.—J. C.

From this table it appears that the admissions of those 17 years (*i.e.* 16 complete years, 1828—1843, and two half years), amounted col-

lectively to about 46,000, (46,028), and that they varied from 2154 (in 1835), which was the minimum received in any one year of the period, to 3143 (in 1841), which was the maximum of annual admissions. The extreme limit of fluctuation as to receptions, seems to have amounted to about 1000 persons. The annual average of admissions, was about 2700 ($2707\frac{1}{2}$).

From the same table, it appears that the deaths for the 17 years ending with June 1844, were 5367; that the annual deaths on an average were $315\frac{2}{3}$; and that the proportion borne by the deaths in the aggregate to the admissions collectively, was 11·6 per cent.

Of late years the mortality appears to have risen very considerably, viz., from less than 7 per cent. in 1827, on the admissions, to 18·33 on the admissions of 1835, since which the mortality has not been lower in any year than 11·4 per cent., while on the 8 years, 1836—1843, the mortality has averaged 14·2 annually.

If we divide the 16 complete years (1828—1843) into two series of eight years each, ending with 1835 and 1843 respectively, we shall have for the former series (1827—1835) an—

Annual average of admissions	. . . . .	2,685
„ „ deaths	. . . . .	262·5
Lowest mortality on admissions (1828)	. . . . . per cent.	7·4
Highest „ „ (1835)	. . . . . „	18·33
Average „ „	. . . . . „	9·7

Whereas, for the latter series (1836-1843), we shall have the following, viz.—

Average annual admissions	. . . . .	2,674
„ „ deaths	. . . . .	362·12
Lowest mortality on admissions (1840)	. . . . . per cent.	11·4
Highest mortality „ (1837)	. . . . . „	18·0
Average mortality annually	. . . . . „	13·50
Difference (numerically) in favour of the latter series, nearly	. . . . . }	30·0

The causes of the increased mortality of late years are of course various: one of them is suggested by this table;—the domestic accommodations in the workhouse have, it may be presumed, sensibly fallen short of late years, relatively to the pauper parochial population, causing a more vigilant scrutiny of claims and sedulous sifting of cases, and a generally diminished facility of admission for less urgent sickness.

I perceive by the last Report of the Census Commissioners, and the Report of the Registrar-General for 1843, that Marylebone must have increased some 14 or 15 per cent., in the period 1831—1844. I perceive also that the expenditure on account of the parochial poor has risen much of late. It was, for example, according to the Registrar-General, 26,438*l.* in 1839, 29,917*l.* in 1840, 35,517*l.* in 1841, and 41,476*l.* in 1842; being near 40 per cent. increase in 4 years; yet the admissions of the former 8 years (1828—1835) exceeded those of the latter series (1836—1843) by 97. It is probably in accordance with the view above suggested, that we find the smaller number of receptions of the second series yield, nevertheless, nearly 800 (797) more deaths. But other causes have concurrently contributed to the increase of mortality, especially grievous commercial fluctuations and depression, and an epidemic constitution, to which we owe the frightful rather than destructive spasmodic cholera, the far more mischievous influenza of various

years since 1831, and the low spotted fevers and generally adynamic and unfavourable character of disease of the same period. But on these topics I am not probably an unexceptionable commentator, having been myself on the professional staff of the parish, as physician to the parochial sick-house or infirmary since some time in 1834; nor do I in fact feel myself sufficiently at liberty to discuss satisfactorily the causes of the increased mortality exhibited above. I shall content myself with affirming that it has *not* arisen from any paucity of qualified medical officers, or any deficiency in the sick-house of any means or appliances, whether medicinal or dietetic, usually resorted to, or that have been judged necessary by the physicians or surgeons in the service of the guardians.

TABLE II.—*Admissions for 8½ Years, ending with March 1836, according to Sex and Age.*

Age.	Males.		Females.	
	Number.	Ratio.	Number.	Ratio.
Under 5 years	452	3·82	475	4·37
5 to 10 ,,	1,547	13·09	1 452	13·37
10 — 15 ,,	2,026	17·09	1,129	10·39
15 — 20 ,,	1,042	8·81	1,099	10·12
20 — 30 ,,	1,753	7·41	2,015	9·27
30 — 40 ,,	1,418	6·	1,315	6·5
40 — 50 ,,	1,151	4·86	1,045	4·81
50 — 60 ,,	1,065	4·5	863	3·97
60 — 70 ,,	881	3·72	860	3·93
70 — 80 ,,	{ 387	..	{ 479	..
80 — 90 ,,	{ 96 } 486	0·83	{ 118 } 610	5·05
90 — 100 ,,	{ 3	..	{ 13 }	..
Totals . . .	11,821	100	10,863	100
Under 15 ,,	4,023	34·5	3,056	28·1

TABLE III.—*Admissions for 4¼ Years, ending with June 1840; distinguishing in like manner Ages and Sexes.*

Age.	Males.		Age.	Females.	
	Number	Per Cent.		Number.	Per Cent.
Under 1 year	126	{ 2·5 }	Under 1 year	104	{ 1·8 }
1 to 5 years	287	{ 5·8 } 8·3	1 to 5 years	274	{ 4·8 }
5 — 10 ,,	860	{ 17·5 nearly	5 — 10 ,,	1,040	{ 18·4 }
10 — 15 ,,	890	{ 18·	10 — 15 ,,	650	{ 11·7 }
15 — 20 ,,	262	5·3	15 — 20 ,,	348	6·5
20 — 30 ,,	443	9·	20 — 30 ,,	764	13·4
30 — 40 ,,	531	10·8	30 — 40 ,,	634	11·4
40 — 50 ,,	438	8·8	40 — 50 ,,	520	9·2
50 — 60 ,,	450	9·2	50 — 60 ,,	450	8·
60 — 70 ,,	413	8·4	60 — 70 ,,	486	{ 8·6 }
70 — 80 ,,	189	3·8	70 — 80 ,,	255	{ 4·5 }
80 — 90 ,,	22	{ 212 } 4·1	80 — 90 ,,	58	{ 1·03 }
90 — 100 ,,	1	{ 4·1 } 16·3	90 — 100 ,,	7	{ 0·12 }
	4,912	..		5,590	100·00

The results given in these two tables, have been obtained at different times; and it is partly for this reason, that I now present them separately.

From the former table (No. II.) it appears that of 11,821 males admitted, 4,023, or 34·5 per cent., were under 15 years of age, and 487, or between 4 and 5 per cent. were above 60 years of age, the rest having been distributed in a regularly decreasing rate amongst the ages between 15 and 60. It appears, likewise, that of 10,863 females admitted at all ages, 3056, or 28·1 per cent., were under 15, and 660, or nearly 6 per cent., above 60; the intervening ages receiving their shares of the admissions in a gradually decreasing proportion, from 15 to 60. From the latter table (No. III.) it appears that of 4912 male admissions, 2163, or 43·8 per cent. were under 15, while 625 or 12·5 per cent. were over 60; and on the female side, of 5590 admissions, 2068, or 36·7 per cent., were under 15, and 796, or 14·1, above 60; so that in the former period, about 17·0 per cent. males, and 18·0 per cent. females, of the admissions at all ages, were under 10 years of age; while in the second period we have 25·8 per cent. males, and 25·0 per cent. females, under 10 years of age. And above 60 we have a similar numerical preponderance in favour of the second period, viz., 12·5 of the males at all ages above 60, and 14·1 of the females. This difference between the two periods, if not accidental, gives countenance to the supposition above alluded to, of increased stringency of poor law administration of late years.

TABLE IV.—*Duration of Treatment in Weeks or Months, with distinction of Sex, 1827 to 1836.*

Duration of Treatment.	Females.		Males.	
	Number.	Per Cent.	Number.	Per Cent.
Under 1 week	2,404	22·13	3,134	26·50
1 to 2 weeks	2,154	19·83	2,649	22·40
2 — 3 „	1,556	14·32	1,612	13·64
3 — 4 „	1,114	10·25	1,143	9·67
4 — 5 „	820	7·54	777	6·57
5 — 6 „	553	5·09	539	4·56
6 — 7 „	408	3·75	376	3·18
7 — 8 „	299	2·75	300	2·54
8 —12 „	719	6·62	622	5·26
3 — 4 months	343	3·16	275	2·33
4 — 5 „	167	1·54	154	1·30
5 — 6 „	102	·94	88	·75
6 — 7 „	55	·51	47	·40
7 — 8 „	47	·43	30	·26
8 — 9 „	27	·25	13	·11
9 —10 „	15	·14	19	·16
10 —11 „	14	·13	13	·11
11 —12 „	4	·4	7	·6
12 —13 and over	62	·58	23	·20
	10,863	100·00	11,821	100·00

From this table it appears that in the period 1827—1836, about 26·5 males, and 22·13 females were discharged or died in the first week after admission; that 72 per cent. males, and 66·5 females were

discharged, or died, within the first lunar or calendar month after admission; and that of the males 94, and of the females 92 per cent. were discharged or died within three lunar months after their admission.

TABLE V.—*Duration of Treatment in Weeks, with distinction of Sex, 1836 to 1840.*

Duration of Treatment.	Males.		Duration of Treatment.	Females.	
	Number.	Per Cent.		Number.	Per Cent.
Under 1 week	1,173	23·9	Under 1 week	1,014	18·13
1 to 2 weeks	976	19·8	1 to 2 weeks	1,129	20·2
2 — 3 „	673	13·7	2 — 3 „	884	15·8
3 — 4 „	542	11·3	3 — 4 „	604	12·2
4 — 5 „	421	8·6	4 — 5 „	444	8·
5 — 6 „	225	4·6	5 — 6 „	310	5·5
6 — 7 „	181	3·68	6 — 7 „	228	4·
7 — 8 „	130	2·64	7 — 8 „	178	3·18
8 —12 „	323	6·57	8 —12 „	401	7·17
12 —24 „	205	4·2	12 —24 „	318	5·6
24 and over .	60	1·2	24 and over .	77	1·3
Over 52 weeks	3	0·06	Over 52 weeks	3	0·05
	4,912	100·00	..	5,590	100·00

TABLE VI.—*Duration of Treatment, according to Age and Sex, 1827 to 1836.*

Age.	Males.		Females.	
	Number of Cases.	Average Duration.	Number of Cases.	Average Duration.
Under 5 years	3,134	30 days	2,404	35 days
5 to 10 „	2,649	21	2,154	23
10 — 15 „	1,612	17	1,556	24
15 — 20 „	1,143	19	1,114	30
20 — 25 „	777	26	820	33
25 — 30 „	539	28	553	32
30 — 35 „	376	31	408	36
35 — 40 „	300	34	299	36
40 — 45 „	622	32	719	31
45 — 50 „	275	34	343	34
50 — 55 „	154	33	167	39
55 — 60 „	88	33	102	39
60 — 65 „	47	37	55	38
65 — 70 „	30	37	47	39
70 — 75 „	13	34	27	38
75 — 80 „	19	30	15	34
80 — 85 „	13	20	14	38
85 — 90 „	7	15	4	23
90 — 100 „	23	42	62	58
General Totals and Averages . .	11,821	27·90	10,863	32·4

TABLE VII.—*Duration of Treatment in Days, according to Age and Sex, 1836 to 1840.*

Age.	Males.			Females.		
	Number.	Total Days.	Average Duration in Days.	Number.	Total Days.	Average Duration in Days.
Under 1 year	126	3,716	29·5	104	3,543	34·
1 to 5 years	237	10,703	37·	274	9,228	33·5
Total under 5 years . . .	413	..	33·2	378	..	33·7
5 to 10 years	860	23,409	27·2	1,040	28,646	27·4
10 — 15 „	890	19,381	21·7	650	13,520	20·7
15 — 20 „	262	6,693	21·3	348	10,692	28·8
20 — 30 „	443	13,276	30·	764	25,270	33·
30 — 40 „	531	16,978	32·	634	22,200	35·
40 — 50 „	438	12,513	28·8	520	19,533	37·5
50 — 60 „	450	14,239	31·3	450	17,047	37·7
60 — 70 „	413	12,876	31·	486	16,041	33·
70 — 80 „	189	4,654	24·6	255	8,853	34·5
80 — 90 „	23	551	23·25	65	2,154	{ 33· 32·4
90 — 100 „						
Totals . . .	4,912	138,989	..	5,590	176,727	..

From Table V. it appears that of the patients admitted in the second period, 23 per cent. males, and 18·13 females, were discharged or died within the first week of treatment; that 68·7 males, and 67·5 females, were discharged or died in the first lunar month after admission; and that of the males 93 per cent., and of the females 98·5, were discharged by cure, or otherwise, within three lunar months after admission.

Tables VI. and VII. give the duration of treatment in another shape, and from a different point of view. In these tables the admissions for the two series of years are classified according to age and sex, and average stay in the house. From the former table (No. VI.), it appears that the shortest stay made by any class of males was 17 days, which was the time of residence of those between 10 and 15 years of age; on the female side the shortest stay was that of the class 5 to 10, viz., 23 days. In each sex the longest stay made by any of the first four quinquennial periods was by the class 0—5 years of age, viz., 30 days for the males and 35 days for the females, whereas the other quinquennial periods were thus, viz. :—

Age.	Males.	Females.
	Days.	Days.
5 to 10 years	21	23
10 — 15 „	17	24
15 — 20 „	19	30

The following gives the contrasted results for the rest of life:—

Age.	Males.	Females.
	Days.	Days.
20 to 30 years	27.	32.5
30 — 40 ,,	32.5	36.
40 — 50 ,,	33.	32.5
50 — 60 ,,	33.	39.
60 — 100 ,,	34.9	42.9

In every class, with one exception (*viz.*, class 40 — 50 years of age), the female average stay was from $3\frac{1}{2}$ to 8 days in excess as compared with that of the male corresponding classes.

From the 7th table a nearly similar excess on the females in duration of treatment or stay in the wards is observable, being, however, conspicuous principally in the ages after 15. From this table it appears that the 0 — 5 years of age in each sex was between 33 and 34 days in the house (*viz.*, males 33.2, and females 33.7 days); that between 5 and 10 the stay of the sexes was equal (*viz.*, males 27.2, and females 27.4 days); that the classes 10 — 15 differed little (*viz.* males 21.7, and females 20.7 days); but that of the classes 15 — 20, the females staid a week longer than the males (*viz.*, 28.8 and 21.3 days); and after 20 years of age there is an excess at every age on the side of the females, varying from 1 to 10 days. Above 60 the case stands thus, *viz.*, 60 — 100, males 26.3 days, females 33.5 days. The excess of adult females in these two tables is referable, I presume, mainly to the relatively high value of male labour and low value of female; to the comparative impatience of official authority and hospital discipline of the males; and to the preponderance of widows above widowers amongst the population.

TABLE VIII.—*Mortality on the Admissions at each Age, and on the Mortality at all Ages—1827 to 1836.*

Age.	Males.			Females.		
	Deaths.	Deaths to Admissions.	Deaths to whole Deaths.	Deaths.	Deaths to Admissions.	Deaths to whole Deaths.
Under 5 years	64	Per Cent. 14.15	Per Cent. 5.57	87	Per Cent. 18.31	Per Cent. 7.52
5 to 10 ,,	23	1.48	2.8	28	1.92	2.42
10 — 15 ,,	26	1.28	2.26	26	2.2	2.25
15 — 20 ,,	24	2.30	2.09	37	3.36	3.20
20 — 25 ,,	34	} 141 8.04	} 12.28	{ 37 } 159	7.89	13.74
25 — 30 ,,	107					
30 — 40 ,,	168	11.84	14.63	151	11.48	13.05
40 — 50 ,,	167	14.50	14.54	146	13.97	12.62
50 — 60 ,,	187	17.55	16.28	170	19.69	14.69
60 — 70 ,,	194	22.02	16.89	183	21.27	15.82
70 — 80 ,,	120	31.	10.45	137	28.6	11.84
80 — 90 ,,	} 34	34.7	2.96	33	25.19	2.85
90 and upwards						
General totals and averages	1,148	9.71	100.00	1,157	10.65	100.00
60 — 100 years	..	29.3	10.10	..	25.	9.90

TABLE IX.—Mortality on the Admissions at each Age, and on the Mortality at all Ages—1836 to 1840.

Age.	Males.			Females.		
	Deaths.	Deaths to Admissions.	Deaths to whole Deaths.	Deaths.	Deaths to Admissions.	Deaths to whole Deaths.
Under 1 year	26	Per Cent. 20·6	Per Cent. 3·8	18	Per Cent. 17·3	Per Cent. 3·
1 to 5 years	26	9·05 } 7·6	3·8	34	12·4 } 8·7	5·7
5 — 10 „	12	1·3	1·8	24	2·29	4·
10 — 15 „	13	1·46	1·8	8	1·22	1·3
15 — 20 „	18	6·87	2·6	13	3·7	2·
20 — 30 „	63	14·2	9·4	68	8·86	11·4
30 — 40 „	123	20·1	18·3	72	11·3	12·
40 — 50 „	101	23·	15·	76	14·61	12·
50 — 60 „	98	21·5	14·	83	18·4	14·
60 — 70 „	110	26·5	16·3	100	22·7	16·8
70 — 80 „	69	36·5	10·4	70	27·4	11·8
80 — 90 „	11	50·	1·7	25	43·	4·2
90 — 100 „	1	100·	0·015	3	42·9	0·05
Totals . . .	671		100·	594		100·
0 — 5 years	52	12·5	7·7	52	13·7	8·
60 — 100 „	191	37·6	9·5	198	45·3	10·9

TABLE IX. a.—Mortality according to Age of both Sexes. Comparative View of the Results of the 8th and 9th Tables.

Ages.	Mortality on Admissions.		
	First Observation.	Last Observation.	Differences.
Under 5 years .	16·26	14·85	— 9·0 per cent.
„ 10 „ .	1·70	1·84	+ 8 „
„ 15 „ .	1·79	1·34	— 25 „
„ 20 „ .	2·83	5·20	+ 50 per cent nearly.
„ 30 „ .	7·95	11·52	+ 30 per cent.
„ 40 „ .	11·66	17·24	+ 32 „
„ 50 „ .	14·23	18·96	+ 25 „
„ 60 „ .	18·62	19·88	+ 6 „
„ 70 „ .	21·64	23·53	
„ 80 „ .	29·80	29·33	+ 16 „
Above 80 „ .	29·94	48·27	
Mortalities above 60 of the two Series of Years	=27·12	=33·70	

In the former table we observe for the class 0 — 5 of each sex a mortality very heavy and not equalled in the subsequent ages under 45 to 55; that of the males 0 — 5, was 14·15 on the admissions and 5·57 on the mortality at all ages; while the mortality of the females was still heavier, having been (females 0 — 5) 18·31 on the admissions and 7·52 on the whole female mortality; while the highest mortality under 50 for either sex was (males 40 — 50) 14·5 per cent. on the admissions. Over 60 the mortality on the admissions was—males 29·3, females 25·; and to the whole mortality at all ages it was, males 10·1, females 9·9.

At the ages intervening between 5 and 60, there was a tolerably close approximation between the sexes in most instances; the largest difference being 4·3 per cent. and in the class above 60. In both sexes the mortality on the admissions was much lowest at the quinquennial ages, viz., from 5 to 20, being as under:—

Age.	Males.	Females.
	Per Cent.	Per Cent.
5 to 10 years	1·48	1·92
10 — 15 ,,	1·28	2·2
15 — 20 ,,	2·30	3·36

After 20 the mortality on the admissions increases steadily with either sex from about 8 per cent. at 30, to above 25 per cent. at above 60. In Table IX. (the latter of those under present consideration) we perceive that the mortality on the admissions under 1 year of age was 20·6 males, and 17·3 females per cent., while the mortality from 0 — 5 was—males 12·5, females 13·7. In either sex the proportion of the whole mortality falling in between 0 (or birth) and 5, was about 8 per cent. After 5 the mortality of either sex falls to near the minimum, being lowest of all at 10 — 15, viz., 1·46 for the males and 1·22 for the females. After 15 it rises rapidly to the maximum, which, of course, occurs after 60, viz., males 37·6, females 45·3 per cent.; the male deaths over 60, being 9·5, and the female deaths 10·9, of the whole mortality of each sex.

In a subordinate table (IX. *a*) I have thrown together the results of Tables VIII. and IX., with a view to show the increase of mortality of late years, and the mode of its distribution over the ages. From this it appears that the augmented pressure has been borne principally by the adults. At every age, except 0 — 5 and 10 — 15, there is a considerable balance against the ages after 15, and this amounts in different instances to 6 per cent. (50 — 60), 8 per cent. (5 — 10), 16 per cent. (above 60), 25 per cent. (40 — 50), 30 per cent. (20 — 30), 32 per cent. (30 — 40), and even to 50 per cent. (15 — 20). These tables seem to show that of late years some diminution must have occurred in the facilities of procuring admission into the sick-house for slighter cases and less urgent stages and forms of disease, or else that the causes of disease and death, after 15, have latterly attained enormous force in some way that I am unable to see. There has been in the whole period of observation no important change in the hands, resources, or domestic management of the sick-house, with the exception of improvements in economical and other details.

From the following table, which, though not covering the whole of the second series of years, may still be regarded as fairly exemplifying the experience of the Infirmary with respect to season and its effects, it appears that the month of largest admissions was January, which averaged (on 12th January) 264, while the month of least admissions was September, which averaged 194 on 12th September. Next to January came March, with 250·5 admissions; then October, with 229; then December, with 226; then November (220); then August (218); then April (217); and then February (without correction = 214). After September the lowest were—June (197); then May (204·5); then July (210).

TABLE X.—Average Admissions, Deaths, and Mortality, in the Months and Quarters, of Eleven Years and two-thirds, ending in 1839.

Months.	Averages of		Ratio of Admissions to Deaths.	Number of Months.	Mortality per Quarter on Admission.	Order according to	
	Admissions.	Deaths.				Admissions.	Deaths.
January .	264	37	{ :: 7·1 : 1 =14 per cent.	12 Jan.	1st Quarter =12 per cent.	1	1
February .	214	29	{ :: 7·3 : 1 =13·5 per cent.	12 Feb.		8	2
March .	250½	24	{ :: 10·5 : 1 =9·5 per cent.	11 Mar.		2	9
April . .	217	26¾	{ :: 8·1 : 1 =12·2 per cent.	11 Apr.	2nd Quarter =11·3 per cent.	9	3
May . . .	204½	23·1	{ :: 8·8 : 1 =11·3 per cent.	11 May		7	5
June . . .	197	20½	{ :: 9·6 : 1 =10·3 per cent.	11 June		11	6
July . . .	210	21	{ :: 10 : 1 =10 per cent.	12 July	3rd Quarter =9·6 per cent.	10	7
August .	218	20¾	{ :: 10·5 : 1 =9·5 per cent.	12 Aug.		6	9
September	194	22¾	{ :: 10·5 : 1 =9·5 per cent.	12 Sept.		12	9
October .	229	22¼	{ :: 10·07 : 1 =10 per cent.	12 Oct.	4th Quarter =10·6 per cent.	3	8
November	220	27¼	{ :: 9·9 : 1 =10·1 per cent.	12 Nov.		5	7
December	226	18¼	{ :: 8·3 : 1 =12 per cent.	12 Dec.		4	4

Taking the months in the usual groups or seasons, and allowing for the inequality in the number of the months (column 5), we have the following average of admissions, viz. :—

1st Quarter, January to March . . .	728·5 per cent.
2nd Quarter, April to June . . .	618·5 ,,
3rd Quarter, July to September . . .	622 ,,
4th Quarter, October to December . . .	675 ,,

According to these figures, there was an excess in the admissions for the first quarter of the year, and without any correction on account of February, over each of the middle quarters, of 14 to 15 per cent., and an excess for the last quarter over each of the two preceding quarters of about 7 per cent. When we direct attention to the mortality of the months, we find the results different, in some cases widely, from that of the admissions. As to deaths January stands again at the head, viz., 1 in 7·1, or nearly 14 per cent. on the admissions. Next comes February (which taken at 28 days was but the 8th in the order of admissions), with a mortality of 1 in 7·3, or 13·5 per cent. ; then follows April, with 1 death to 8·1 admissions, or 12·2 per cent. Next to April was December, with deaths 1 to 8·3 admissions, or about 12 per cent. No other month gave more than 10 per cent. mortality, except May, which gave 11 per cent. Now taking the mortality in quarters, we obtain the following results, viz. :—

1st Quarter, January to March . . .	12 per cent.
2nd Quarter, April to June . . .	11·3 ,,
3rd Quarter, July to September . . .	9·6 ,,
4th Quarter, October to December . . .	10·6 ,,

TABLE XI. Abstracted from Returns made Quarterly to the Board of Guardians Quarterly Admissions, whence, and to what Wards; the Discharges, whether Cured Number in the Wards, Medical and Surgical; the Average Stay in the Wards,

	Admissions.			Discharges.				Lying-in Ward.	Total Out Patients.	Sent to a Lunatic Asylum.	
	From W. H.	From O. D.	Total.	Cured.	Incurable, or Relieved.	By Desire, Uncured.	Irregular.				Total.
1837											
Oct. 1 to Dec. 31.	351	242	593	363	93	12	2	470	21	1,161	4
1838											
Quarter to 31 Mar.	438	221	659	411	97	20	2	530	25	1,347	..
„ 30 June	381	225	607	435	140	25	..	600	20	1,125	6
„ 30 Sept.	386	224	610	395	138	19	1	553	16	1,096	9
„ 31 Dec.	434	258	692	344	122	30	..	496	22	1,161	3
Totals .	1,639	929	2,568	1,585	497	84	3	2,179	83	4,729	18
1839											
Quarter to 31 Mar.	465	177	642	396	82	22	2	502	29	1,084	4
„ 30 June	416	198	614	493	87	29	1	610	30	1,133	3
„ 30 Sept.	547	196	743	570	82	24	2	678	24	1,205	..
„ 31 Dec.	481	233	714	532	73	17	..	622	32	1,548	4
Totals .	1,909	804	2,713	1,991	324	92	5	2,412	115	4,970	11
1840											
Quarter to 31 Mar.	507	248	755	535	91	8	1	635	37	1,622	5
„ 30 June	388	227	615	502	118	11	..	631	27	1,537	3
„ 30 Sept.	422	233	657	516	121	10	..	647	37	1,961	7
„ 31 Dec.	423	339	762	597	148	11	1	757	44	2,316	1
Totals .	1,740	1,047	2,789	2,150	478	40	2	2,670	145	7,436	16
1841											
Quarter to 31 Mar.	555	442	997	667	154	14	2	837	53	2,769	11
„ 30 June	378	268	946	411	97	11	..	509	40	1,832	10
„ 30 Sept.	318	228	546	446	82	7	2	537	38	2,386	11
„ 31 Dec.	458	176	634	365	66	..	..	431	52	2,864	8
Totals .	1,709	1,114	3,123	1,889	399	32	4	2,314	183	9,851	40
1842											
Quarter to 31 Mar.	493	223	715	373	85	..	..	458	70	3,416	9
„ 30 June	298	253	551	415	82	..	..	497	54	2,657	17
„ 30 Sept.	277	230	507	354	89	..	..	443	47	2,799	..
„ 31 Dec.	376	204	580	379	84	..	..	463	43	2,573	8
Totals .	1,444	910	2,353	1,521	340	..	..	1,861	214	11,445	34
1843											
Quarter to 31 Mar.	528	212	740	457	78	..	4	539	59	2,506	3
„ 30 June	484	191	675	438	92	16	3	549	47	2,153	11
„ 30 Sept.	553	185	738	417	83	25	1	526	39	2,253	8
„ 31 Dec.	558	237	825	478	92	12	2	584	45	1,929	12
Totals .	2,153	825	2,978	1,790	345	53	10	2,198	190	8,841	34
1844											
Quarter to 31 Mar.	629	318	947	647	100	12	2	761	50	2,261	15
„ 31 June	427	241	668	330	127	16	1	474	41	..	16
Totals .	1,056	559	1,615	977	227	28	3	1,235	91	..	31

according to a Plan adopted at the recommendation of the Author, and giving the or otherwise; the Deaths, whether under Physicians or Surgeons, the Average Medical or Surgical; and other particulars.

Admissions.		Discharges.		Deaths.		Average No. in the House.		Average Stay.		
Physicians.	Surgeons.	Physicians.	Surgeons.	Physicians.	Surgeons.	Physicians.	Surgeons.	Physicians.	Surgeons.	
351	242	273	197	72	4	79	105	Days. 25	Days. 62	1837 Oct. 1 to Dec. 31.
411	248	296	234	117	4	112	145	27	40	1838 Quarter to 31 Mar.
385	222	337	263	82	8	89	133	25	50	„ 30 June.
381	229	322	236	65	5	77	96	21	40	„ 30 Sept.
426	266	293	203	63	16	103	124	22	37	„ 31 Dec.
1,603	965	1,248	936	327	33	95	124½	23¾	41¾	Totals.
362	280	287	215	82	12	118	157	25½	38½	1839 Quarter to 31 Mar.
356	258	339	271	73	13	109	152	27½	43	„ 30 June.
425	318	399	279	70	8	121	159	20¾	32½	„ 30 Sept.
415	299	359	327	57	7	103½	86½	21½	26½	„ 31 Dec.
1,558	1,155	1,384	1,092	282	40	113¾	138½	24	34¾	Totals.
377	378	365	355	76	10	122	98	27½	22¾	1840 Quarter to 31 Mar.
271	344	248	383	66	4	91	113	31½	24¾	„ 30 June.
326	312	259	388	53	15	102	137	29½	27	„ 30 Sept.
418	343	332	425	87	8	113	141	28½	30½	„ 31 Dec.
1,392	1,377	1,204	1,551	282	37	107	122½	29¾	25¾	Totals.
496	501	329	508	123	11	121	152	26½	31½ = 31·5	1841 Quarter to 31 Mar.
304	342	219	300	79	7	108	117	22½	26	„ 30 June.
267	379	237	290	47	8	89	91	19¼	24½ = 24·5	„ 30 Sept.
413	329	286	224	94	13	94	100	21	22*20 h = 22·8	„ 31 Dec.
1,480	1,451	1,071	1,322	343	39	103	115	22	26	Totals.
265	254	313	248	95	18	119	99	20½	31*10h. = 31·4	1842 Quarter to 31 Mar.
296	255	255	242	69	8	105	84	26¼	28½ = 28·85	„ 30 June.
291	233	225	218	50	9	84	84	24½	34	„ 30 Sept.
333	247	219	244	76	10	99	92	28¾	29¼ = 29·25	„ 31 Dec.
1,185	989	1,012	952	290	45	101¾	89¾	23½	30¾ = 30·75	Totals.
456	266	328	223	110	16	112	101	24	29½ = 29·5	1843 Quarter to 31 Mar.
373	250	311	262	73	11	103	83	24½	34	„ 30 June.
302	319	283	294	70	10	87	104	29½	26	„ 30 Sept.
366	338	250	332	81	6	108	118	29½	27¾	„ 31 Dec.
1,497	1,173	1,172	1,111	334	43	102½	101½	26¾	26·8	Totals.
469	242	348	206	75	8	134	101	26½	33½	1844 Quarter to 31 Mar.
345	310	245	163	77	11	119	132	31½	30	„ 31 June.
814	552	593	369	152	19	126·5	116·5	29	31·75	Totals.

From the table given on the two foregoing pages, I subjoin the admissions and deaths for the quarters respectively of the 6½ years ending with June 1844 :—

	Both Sexes,—all Ages.		
	Admissions.	Deaths.	Ratio.
Seven First Quarters . . .	5,455	757	13·8
Seven Second Quarters . . .	4,676	581	12·4
Six Third Quarters . . .	3,801	410	10·8
Seven Fourth Quarters . . .	4,800	594	12·3

According to this table the largest admission and mortality were both in the first or January quarters, and the least admission and mortality were both in the third or July quarters. The other two groups of quarters, viz., the second and fourth, had almost the same rates of mortality, viz., 12·4 and 12·3 per cent. The principal difference between this table and the preceding is a higher rate of mortality in every quarter of this latter table. In each we observe the highest and lowest rates fall on the same quarters, viz., the first quarters highest and the third quarters lowest. In each the second quarters stand next to the first in mortality, and the fourth quarters between the second and fourth.

Some years since, my brother, George Clendinning, B.M. (now withdrawn from the profession) made an analysis of the old journals of the infirmary for 14 years ending in 1835, in aid of inquiries I had then on foot, and obtained results which appear to differ from the preceding. The following table shows the contrasted results. The sum total of deaths from all causes was in the 14 years 3756; and in the 6½ years (adding ½th to the third quarter's deaths), the total loss by deaths was 2410 :—

	G. C.	J. C.
	Mortality to whole Mortality.	Mortality to whole Mortality.
First Quarters . . .	28·6 per cent.	31· per cent.
Second Quarters . . .	20·6 ,,	24·1 ,,
Third Quarters . . .	20·7 ,,	19·8 ,,
Fourth Quarters . . .	30 ,,	24·6 ,,

Sufficient reason, however, for this difference exists to explain it without impugning either the calculations of my brother or myself. It is this: we divided the year differently. He took the natural groups of months constituting seasons, beginning with March, April, and May as the spring quarter, and so of the rest of the year; whereas I took the civil year, beginning, of course, with January as the first month of the first quarter. My results analysed on my brother's plan would give (on a total mortality something above 3400) 23·4 for spring, 21·2 for summer, 22·2 for autumn, and 32·8 for winter, per centages of mortality.

From this same table* it appears that in the 6½ years there were admitted under the physicians, exclusively of the physician accoucheur, 9880 patients, and under the surgeons 7904, together = 17,784, or 2634 annually of both classes; and that the admissions from the W. H. (workhouse)

* See Table XI, pp. 304 and 305.

were 12,001, and those from O. D. (their own homes) were 6430; together = 18,431. It will be observed that the total of admissions under the physicians and surgeons falls short of those from W. H. and O. D. together by between 600 and 700 (658). This difference represents principally "casuals" or cases officially admitted to the W. H., but placed in the first instance for a time in the sick-house or infirmary under observation. Such are usually not entered in the common way as patients unless found to labour under some complaint, but are commonly transmitted to the other side in a day or two after admission. On the $6\frac{3}{4}$ years the admissions under the physicians were nearly 57 per cent., and those under the surgeons 43 per cent., of the whole regular admissions. The cures on both classes (physicians' and surgeons' patients) together were nearly 66 per cent. on the admissions, and 80 per cent. on the discharges of all sorts, exclusively of deaths.

The relieved or incurable (which, by the bye, ought not to be thus confounded) were, on both classes of patients, nearly 15 per cent. (14·6 on the admissions, and 17·5 on the discharges,) exclusively of deaths.

The discharges "by desire, uncured" were about 1·8 per cent. on the admissions; the irregular were something less than $\frac{1}{2}$ th per cent. The puerperal cases (which are not included in any of the totals above given) were about 150 per annum; they amount at present to 200 per annum. The puerperals (or lying-in cases) were until lately received on the W. H. side, and counted, therefore, O.D. cases: the mode of recording them formerly in use still continues, and they are not above included in the admissions under the physicians.

A presumable and increasing disproportion between the domestic accommodations of the parochial establishment and the general parochial population has been already adverted to, and the apparent increase of mortality in the wards of the infirmary has been conjecturally referred in part to that circumstance, and the necessity thence arising for narrowing the way into the infirmary and exercising a less indulgent superintendence and control as regards the granting of "doctor's orders" (*i. e.* the overseers' orders to the resident medical officers to examine applicants for medical relief, whether at their homes or at the infirmary), and a less lenient system of admission into the sick-house or infirmary. With a view to test the accuracy of that supposition, I have calculated the proportion of the admissions coming from the W. H. and O. D. (their own homes) respectively; and the following table gives the result so far as materials exist and are at my disposal:—

	Admissions per Cent.		Difference.
	From O. D., (or their homes.)	From W. H.	
1837, last 3 Months .	40 nearly.	59·3	+19·3
1838 " " .	36·	63·8	+27·8
1839 " " .	30·	70·7	+40·7
1840 " " .	37·5	62·4	+24·9
1841 " " .	45·	54·7	+ 9·7
1842 " " .	39·	61·2	+22·2
1843 " " .	28·	72·	+44·
1844, first 6 Months .	34·6	65·4	+30·8

According to this table, the proportion between the admissions into the sick-house from the W. H. and from O. D. (their own homes) has been nearly stationary. If we take the eight terms of the table in the fourth column (differences), and divide them into two sets of four each, we shall find the upper four terms of difference amounting to 112·7, and the lower four terms to 106·7, being not far from equality. The domestic accommodations of the W. H. have not been stationary, yet their enlargement has been inadequate, amounting to some 150 beds only, I think. The site of the W. H. is the property of the Duke of Portland, held on lease terminating some 30 years hence; which circumstance naturally creates an unwillingness to undertake a large outlay for new buildings.

Mortality.

The mortality in the 6½ years on the admissions into the physicians' wards amounted to 21 per cent., and that occurring in the surgical wards to 3·1 per cent.; the mortality on both to 12 per cent. The mortality of those London hospitals which admit the general run of diseases, and therefore, most nearly correspond in their practical working with the infirmary, which admits all sorts without any other exception than small-pox, is well known to vary little from 10 per cent. The annual loss of life in the wards of the Middlesex, North London, St. George's, Westminster, and London Hospitals, amounts usually to between 9 and 11 per cent. St. Bartholomew's and St. Thomas's, which receive a large per centage of venereal cases, yield a smaller gross mortality; St. Bartholomew's, for example, contains in its foul wards some 150 beds. Now the mortality in those wards must fall short of 1 per cent., since the mortality of the Lock Hospital is usually under that proportion: the gross mortality of that noble institution must, consequently, be very materially lightened by the admission of, perhaps, 1000 or 1200 venereals annually; and this is, I think, confirmed by the fact (if I am rightly informed) that the mortality of St. Bartholomew's, if we exclude the foul wards, does not differ in any material degree from those of other hospitals.

But the chief reason of the relatively high mortality of the infirmary is the admission into its wards, indifferently, of all cases of pauper sickness, whatever may be the ages between birth and decrepitude—whatever be the stages in point of advancement, or the durations in months or years, or the nature and ulterior prospects (excepting only small-pox)—provided the applicant has a legal or apparent claim for parochial medical relief. It is not necessary to dwell on the invariably high relative mortality amongst nurslings and persons of extreme age under disease. But with respect to chronic organic diseases, which are *de jure* and *de facto* received as readily as any other cases into the infirmary, I shall stop for a moment to observe that 20 to 30 per cent. of our whole mortality is attributable to tubercular disease of the lungs, against the admission of which, as such, the doors of general hospitals are nearly closed according to rule, and, practically speaking, may be said to be held ajar, to be opened for their admission or gently closed in their faces, according to the exigencies or humour of the hour. The admissions of pulmonary tubercular disease mostly in advanced stages, and as such, into the infirmary, were in 1840 = 121 cases, and in 1842 = 129 cases. (I have not, unfortunately, the figures for any other year at hand, but as regards

such cases those were ordinary years.) Of these 94 died each year, leaving only some 30, who were sufficiently improved to be able to return to their occupations, or, as happened in a few instances, who preferred to retire from the infirmary in order to die at home in the bosoms of their families.

An additional circumstance contributing to our superior mortality is the retention of patients, if wishing to stay, until complete recovery, or death. Without assuming anything as between rate-payers and rate-receivers, I may say that, in point of fact, the man that is sick and poor and in possession of parochial rights does usually obtain admission into the infirmary, if he seek it, and that once admitted he usually remains there, if willing, until recovered or sufficiently relieved, or beyond human pain or help. The influence of this indefinite duration of treatment in the infirmary over the per centage of mortality need not be insisted on.

The surgical mortality of the infirmary, it has been stated, is somewhat less than half that of the surgical wards of our general hospitals, viz., between 3 and 4 per cent. instead of some 10 per cent. The reason is twofold :—1. Accidents are, in point of fact, comparatively, rarely received in the infirmary; and, exclusively of accidents, surgical practice always yields a much lighter amount of deaths than medical practice. Now accidents are a peculiarly favoured class of cases in our hospitals, and are provided for with an extra facility of admission into their wards, which is beneficial to all parties, but is not extended to other, often graver though less striking affections. Owing, then, to the high mortality of the class “accidents” amongst surgical complaints, the surgical mortality in our hospitals is comparatively much augmented, while on the contrary the surgical mortality of the Infirmary is relatively much lowered by the scanty admission of such cases. To this if we further add that about one-half of the patients admitted on the surgeons’ side consists of persons (mostly children from the W. H. schools) suffering from chronic cutaneous affections, yielding no mortality of their own, viz., porrigo, psora, impetigo, lepra, &c., the account of our surgical mortality will stand thus;—viz. on one-half of the surgeons’ cases there is, usually and properly speaking, no mortality; on the other half of their admissions the amount of deaths must be about 6 per cent.

Number of Patients and Duration of Treatment.

There remain but two topics for remark, viz., the average number under treatment and the average stay. From the table so often referred to (No. XI.), it appears that the average number of physicians’ patients under treatment during the $6\frac{3}{4}$ years was 103·5, and the average of surgeons’ patients 114; the number varied little during the period. If we add together the four upper terms (1837, 38, 39, and 40), and in like manner add together the four lower terms (1841, 42, 43, and 44), and divide each by 4, we find the daily averages as follows: for the former $3\frac{1}{4}$ years, physicians’ 98·6, surgeons’ 122·5; for the latter $3\frac{1}{2}$ years, physicians’ 108·3, surgeons’ 105·5. The physicians’ daily patients, however, rose in the latter years about 10 per cent., and the surgeons’ daily patients declined about 15 per cent. in the same period.

It appears from this table that the average stay (in the house or under treatment) varied little during the $6\frac{3}{4}$ years on the physicians’ side, and was for the whole $6\frac{3}{4}$ years = 25·5 days; but that the average stay on the surgeons’ has been reduced nearly 30 per cent., viz., from 41·6 days,

which is the average of the former four terms (1837, 38, 39, and 40), to 29·3 days, which is the average for the latter four terms (1841, 42, 43, and 44).

Summary.

It appears from the columns of the 11th table, taken in connexion with each other:—1. That during the 6½ years which it covers, there passed through the Infirmary every month nearly 220 (219·5) patients;—2. That of these about 140 (after deduction for “casuals”) were from the W. H. (workhouse), and 79 from O. D. (their own homes);—3. That 127 of them were admitted under the physicians (exclusively of the puerperals), and about 92 under the surgeons;—4. That 144 of them eventuated in cures, 26 of them in deaths, and the remainder proved incurables, or voluntary retirements, or “irregulars.”—5. It appears further, from Table III. (page 296), that of those 219·5 about 96 were males and about 122 probably females;—6. And that about 16 were under 5 years of age, 86 under 15 years of age, and 34 over 60 years of age.—7. It appears also that about 11 were cases of pulmonary tubercular disease, and nearly 8 were discharges from the vesanial wards.*

On the Relative Liability of the Two Sexes to Insanity. By JOHN THURNAM, M.D.

[Read before the Statistical Section of the British Association at York, September 28th, 1844.]

THE opinion which appears to have recently obtained, that insanity is more prevalent amongst women than amongst men, has, I believe, originated in an erroneous method of statistical analysis. Dr. Esquirol, who appears to have inclined to this view, was at great pains in collecting information as to the proportion of *existing* cases of insanity in the two sexes in nearly every country of the civilized world; and, having found that, taking the average of different countries, the proportions were those of 37 males to 38 females, he concluded that his inquiry refuted the opinion which has prevailed since the time of Cælius Aurelianus,† that women are a little less subject to insanity than men.‡ In this view Esquirol is followed by Drs. Copland, Brown, and Millingen; and indeed, by every recent writer on insanity. It is, however, well known that, in all European countries, the proportion of adult females in the general population exceeds that of males. In England and Wales, according to the census of 1821, there was an excess, at all ages above 15 or 20 years, of about 4 per cent.; and, according to the more accurate census of 1841, an excess of 4 per cent. at all ages, and of about eight per cent. at all ages above 15 or 20 years. Of this general law, Esquirol was aware; but he does not appear to have known that, from 20 to 50 years of age, when, in this country at least, insanity chiefly occurs for the first time, there is a still greater excess of females; an excess which is higher from 20 to 30 years of age than it is subsequently; it being 12 per cent. from 20 to 30, 6 per cent. from 30 to 40, and 4 per cent. from 40 to 50, years of age. Thus, assuming

* For some years the expences of the sick-house (so far as they can be distinguished from those of the workhouse generally) have amounted to about 5s. weekly per patient, all ages and both sexes included.

† Cælius Aurelianus, “*De Morbis Acutis et Chronicis*,” Amstel. 1709, 4to., pp. 326, 339.

‡ Prichard, “*On Insanity*,” 1835, p. 162. Esquirol, “*Maladies Mentales*,” 1838, tome i., p. 37; ii., p. 676.