

**Annual report of the Metropolitan Asylums Board, 1898 : (in two volumes).  
Vol. 2, Thirteenth report of the Statistical Committee.**

**Contributors**

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**Publication/Creation**

London : printed by McCorquodale & Co., 1899.

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METROPOLITAN ASYLUMS BOARD.

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ANNUAL REPORT—1898

(IN TWO VOLUMES).

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**VOL. II.**

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THIRTEENTH REPORT

OF THE

STATISTICAL COMMITTEE.

WITH

APPENDICES.

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METROPOLITAN ASYLUM BOARD

MEDICAL RESEARCH COUNCIL

1908

ANNUAL REPORT—1908

(in two volumes)

VOL. II

THIRTEENTH REPORT

STATISTICAL COMMITTEE

APPENDICES

Printed and Published by the Stationery Office, London

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1898-9.

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HEAD OFFICE—Norfolk House, Norfolk Street, Strand, London, W.C.

STATISTICAL COMMITTEE

1982

MEMORANDUM FOR THE CHAIRMAN

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# METROPOLITAN ASYLUMS BOARD.

## REPORT OF THE STATISTICAL COMMITTEE FOR THE YEAR 1898.

*To the Managers of the  
Metropolitan Asylum District.*

8th May, 1899.

We submit our report for the year 1898 upon the statistics concerning:—

- (1) The notification of cases of infectious disease in the Metropolis ;
- (2) The work of the ambulance service ; and
- (3) The inmates of the various institutions under the Managers' control.

### i. INFECTIOUS DISEASES.

**Notification Statistics.** (1.) During the year there were notified in the Metropolis 37,316 (*45,417*)\* cases of infectious disease. Of these, 31,821 (*39,251*) were legally eligible for admission to the Managers' hospitals. The remainder—mainly cases of erysipelas, but including also 247 (*264*) cases of puerperal fever—were not eligible. Out of the 31,821 legally eligible cases, 20,849 (*22,964*)† cases, or 65·5 (*58·5*) per cent., were actually admitted.

Since 1890, the first complete year in which compulsory notification was in force, the proportion of admissions to the total number of legally admissible cases has been as follows:—

1890	...	33·6	per cent.	1895	...	50·3	per cent.
1891	...	36·7	„	1896	...	52·4	„
1892	..	43·2	„	1897	...	58·5	„
1893	...	36·9	„	1898	...	65·5	„
1894	...	52·2	„				

Table A, pp. 13-14, shows the number of notifications of, and deaths from, those notifiable diseases which are eligible for admission to the Managers'

\* Italic figures in brackets throughout are the corresponding figures for 1897.

† Including the cases detained for observation at South Wharf, see p. 90, but excluding Tottenham and other extra-metropolitan cases shown on p. 23.

hospitals, the ratio of such notifications and deaths to the population, the number of notifications of other notifiable diseases, and the grand total of cases notified during 1898.

Two points in this notification table are of special interest. In the first place, the increase in the ratio of diphtheria to scarlet fever, which has been a marked feature for some years past, has made further progress. In 1898 the number of diphtheria notifications actually exceeded those of scarlet fever in four different districts, viz., Westminster (St. James), Holborn, St. Saviour's, and Lewisham. In the second place, there were more cases of typhus than have been notified in any year since 1894. Of the 16 cases of typhus notified, eight occurred in Kensington (one being a nurse in the infirmary to which the typhus patients were admitted before their disease was recognised). There were three cases notified in St. George's, Southwark, and two in Islington. One case notified in Greenwich was a nurse at our own South-Eastern Hospital, where most of the cases were treated.

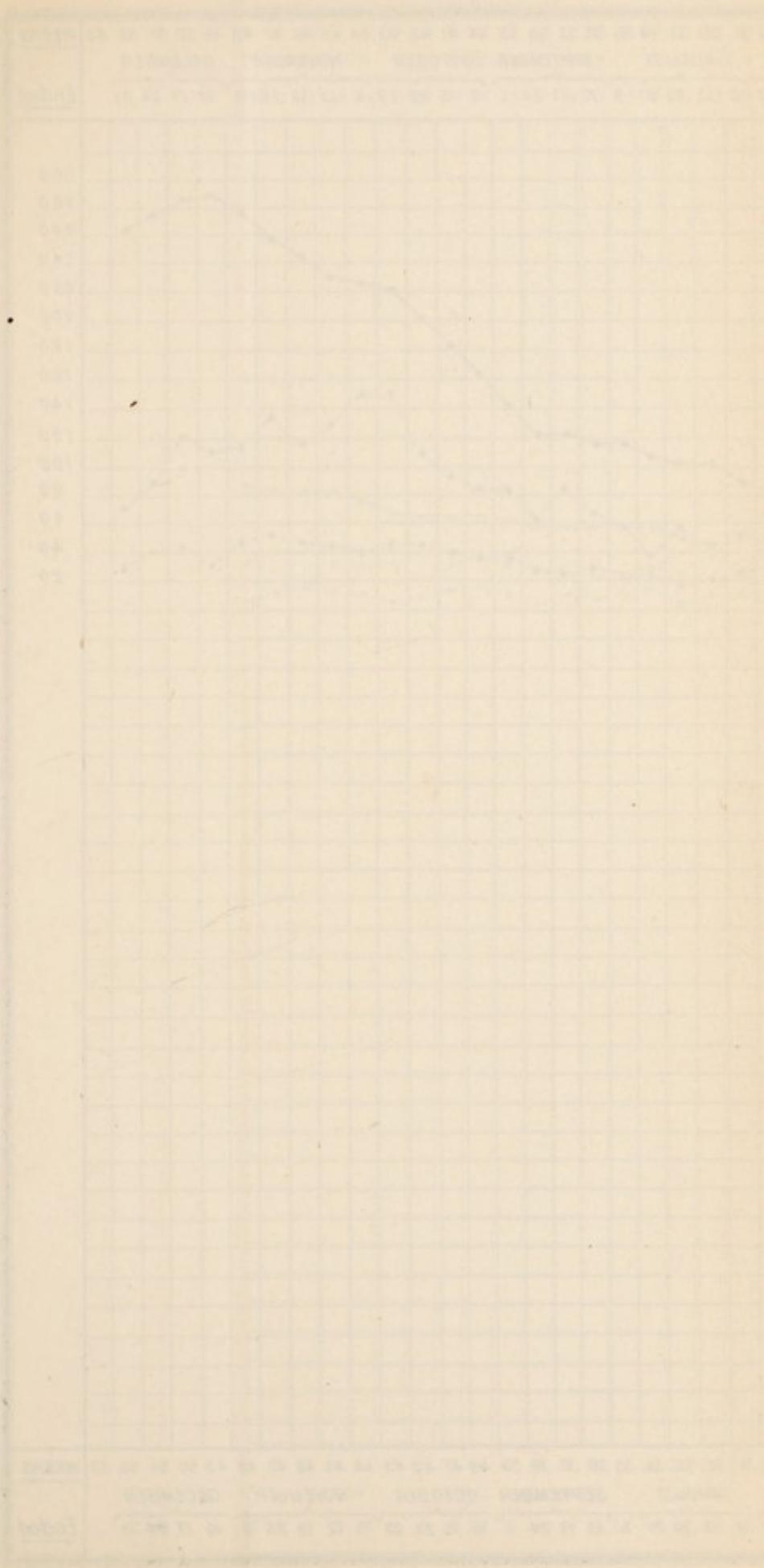
Under the Public Health (London) Act, 1891, notification of infectious disease has to be made to the medical officer of health for the district in which the patient resides, who is a servant of the sanitary authority—the vestry or district board, as the case may be. So the notification returns assign the diseases to the sanitary districts. But when the patients are admitted to our hospitals, we are by law required to assign them to the poor law, not to the sanitary, districts. And over a large part of London the sanitary and the poor law districts are not coterminous. The reason why the patients are assigned to the poor law districts is, that it is to the boards of guardians of the poor that the cost of the maintenance of the patients is charged, and upon them that the Managers make their precepts for all the other expenses known as “common charges.” The guardians in their turn claim repayment of the cost of the maintenance of the patients, and of a certain portion of the “common charges,” from a fund known as the Metropolitan Common Poor Fund. If the law were altered so that the Managers might charge the maintenance of patients and make their precepts direct upon the common poor fund, there would be nothing to prevent the patients admitted to the hospitals being assigned to the sanitary districts, and then a comparison of the notification statistics in table A with the admission statistics which we give in table III., p. 23, would possess its full scientific value.

Facing p. 15 we give three charts tracing the course throughout the year of scarlet fever, diphtheria, and enteric fever respectively. Each chart shows week by week (*a*) the notifications of the disease to which it relates, (*b*) the admissions, and (*c*) the number of patients under treatment.





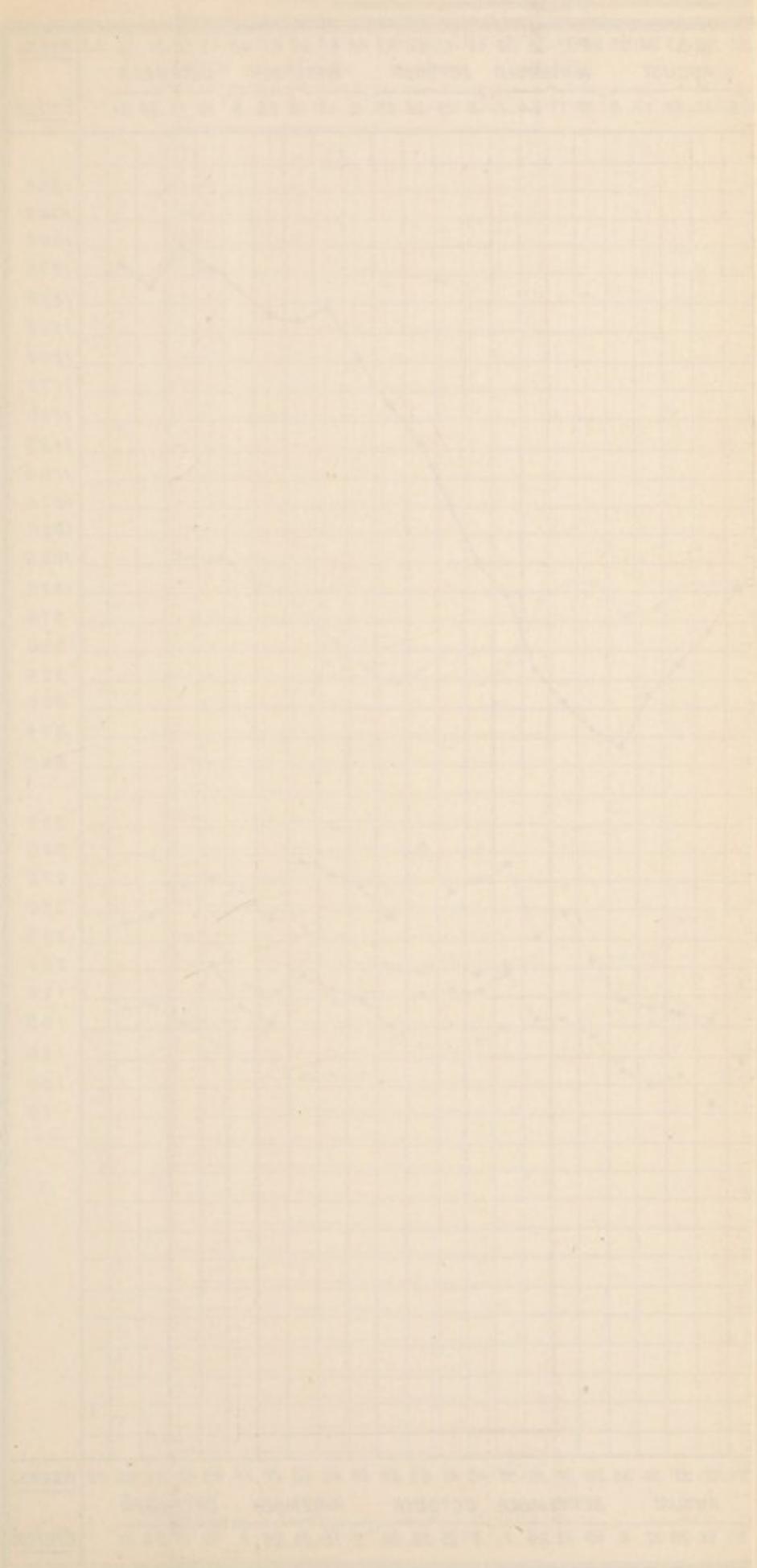
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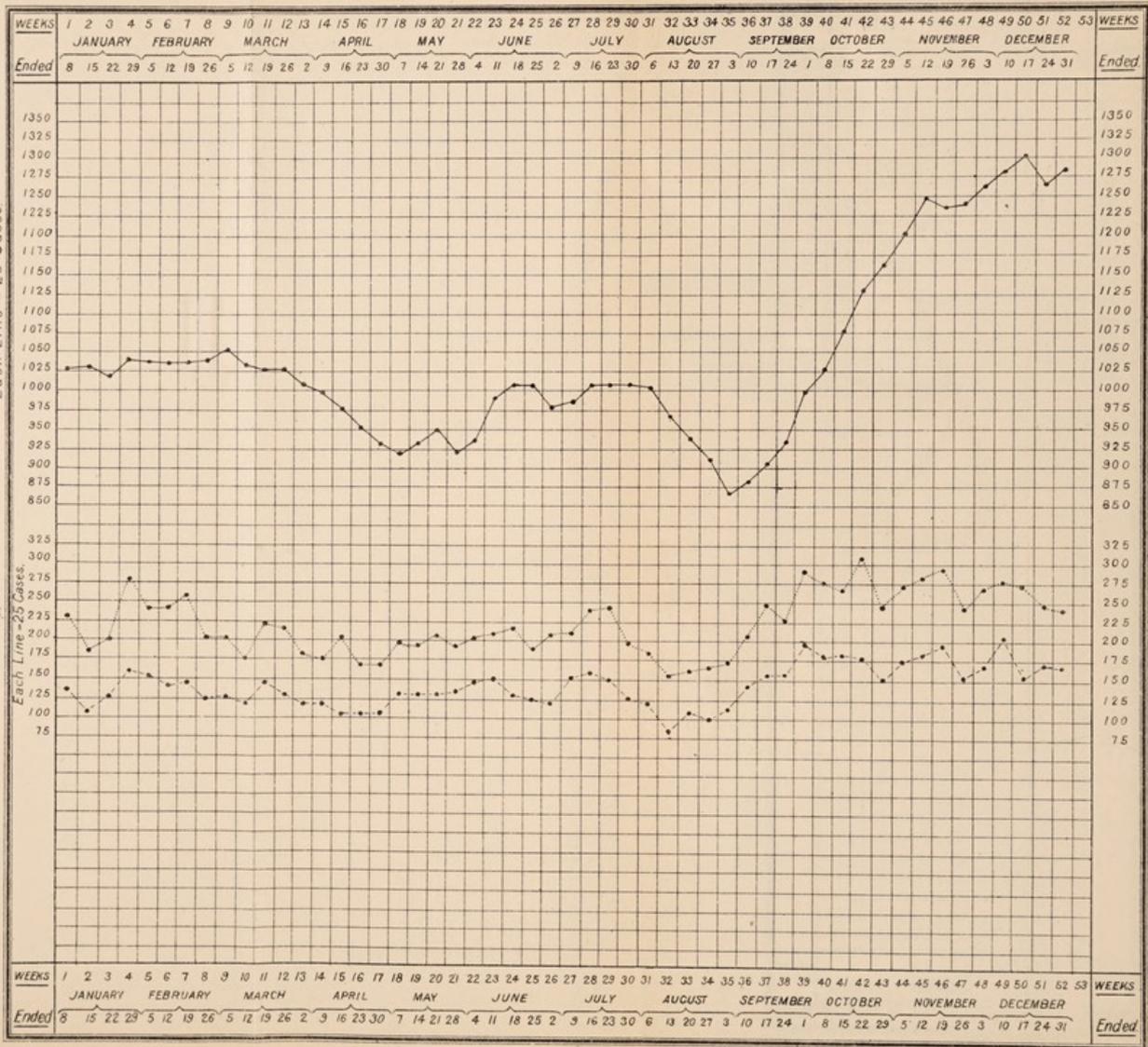
LUMS BOARD

MEMORANDUM FOR THE BOARD



# METROPOLITAN ASYLUMS BOARD.

*CASES OF DIPHTHERIA notified and admitted during each week of 1898, together with the mean number under treatment each week, (uncorrected for mistakes in diagnosis).*



The number of notifications in the charts relating to scarlet fever and diphtheria are based upon the figures in the following table:—

TABLE A1.—Cases of Scarlet Fever and Diphtheria notified, Number admitted, and Percentage of Admissions to Notifications for each week during 1898.

WEEK ENDED		SCARLET FEVER.			DIPHTHERIA.		
		Notifications.	Admissions.	Percentage of Admissions.	Notifications.	Admissions.	Percentage of Admissions.
1898.							
1	January 8	350	234	66·86	231	134	58·01
2	" 15	271	207	76·38	191	111	58·12
3	" 22	344	245	71·22	200	122	61·00
4	" 29	334	243	72·75	278	161	57·91
5	February 5	294	204	69·39	240	153	63·75
6	" 12	299	228	76·25	238	135	56·72
7	" 19	331	228	68·88	260	145	55·77
8	" 26	281	194	69·04	200	124	62·00
9	March 5	262	172	65·65	202	127	62·87
10	" 12	259	196	75·68	174	122	70·11
11	" 19	328	252	76·83	221	143	64·71
12	" 26	269	187	69·52	216	133	61·57
13	April 2	330	233	70·61	182	121	66·48
14	" 9	305	230	74·92	174	120	68·97
15	" 16	297	209	70·37	203	108	53·20
16	" 23	305	235	77·05	169	105	62·13
17	" 30	314	196	62·42	169	109	64·49
18	May 7	288	203	70·49	195	131	67·18
19	" 14	311	221	71·06	191	131	68·59
20	" 21	298	216	72·48	207	130	62·80
21	" 28	324	251	77·47	196	142	72·45
22	June 4	300	213	71·00	204	147	72·06
23	" 11	304	196	64·47	210	149	70·95
24	" 18	299	218	72·91	216	132	61·11
25	" 25	295	218	73·90	184	125	67·93
26	July 2	256	196	76·56	208	119	57·21
27	" 9	326	226	69·33	213	152	71·36
28	" 16	336	249	74·11	242	155	64·05
29	" 23	389	267	68·64	244	150	61·47
30	" 30	321	226	70·40	198	126	63·64
31	August 6	278	220	79·14	187	119	63·64
32	" 13	250	197	78·80	154	86	55·84
33	" 20	228	184	80·70	159	112	70·44
34	" 27	228	178	77·92	163	109	61·35
35	September 3	282	233	82·62	174	116	66·66
36	" 10	346	271	78·32	204	144	70·59
37	" 17	281	234	83·27	245	157	64·08
38	" 24	337	282	83·68	227	155	68·28
39	October 1	398	293	73·62	288	196	68·06
40	" 8	450	351	78·00	275	179	65·09
41	" 15	457	346	75·71	266	182	68·42
42	" 22	464	374	80·60	305	177	58·03
43	" 29	443	328	74·05	244	151	61·88
44	November 5	408	311	76·23	271	174	64·21
45	" 12	481	332	69·02	281	178	63·35
46	" 19	431	311	72·16	292	186	63·70
47	" 26	296	228	77·03	241	155	64·32
48	December 3	326	257	78·83	269	168	62·45
49	" 10	328	269	82·01	276	204	73·91
50	" 17	355	249	70·14	272	153	56·25
51	" 24	279	218	78·14	248	168	67·74
52	" 31	328	221	67·38	246	166	67·48
		16,894	12,480	73·87	11,543	7,388	64·00

This table is also of interest as showing the great variation from week

to week in the percentages of cases admitted to hospital. These variations, from 62·42 to 83·68 in the case of scarlet fever and from 53·20 to 73·91 in the case of diphtheria, we cannot explain. In only one instance has a plausible explanation offered itself. This was for the week ended on December 31st, when the scarlet fever admission rate fell to 67·38 as compared with 78·14 per cent. in the previous week. The fall appears to have been due to the fact that as many as 43 cases were notified from one orphan asylum, but only three of the most severe cases were sent to our hospitals.

The following table, A<sub>2</sub>, shows the number of cases of infectious disease admissible to the Managers' hospitals which were notified during the years 1890 to 1898:—

TABLE A<sub>2</sub>.—*Number of cases of admissible Diseases\* notified during the years from 1890 to 1898.*

YEARS.	Scarlet Fever.	Diphtheria.	Enteric.	Typhus.	Smallpox.	TOTALS.
1890	15,330	5,870	2,877	35	60	24,172
1891	11,398	5,907	3,372	27	114	20,818
1892	27,095	7,781	2,465	20	423	37,784
1893	36,901	13,026	3,663	22	2,813	56,425
1894	18,440	10,655	3,360	21	1,192	33,668
1895	19,757	10,772	3,506	14	979	35,028
1896	25,647	13,362	3,190	6	225	42,430
1897	22,848	12,803	3,103	4	104	38,862
1898	16,894	11,543	3,024	16	32	31,509

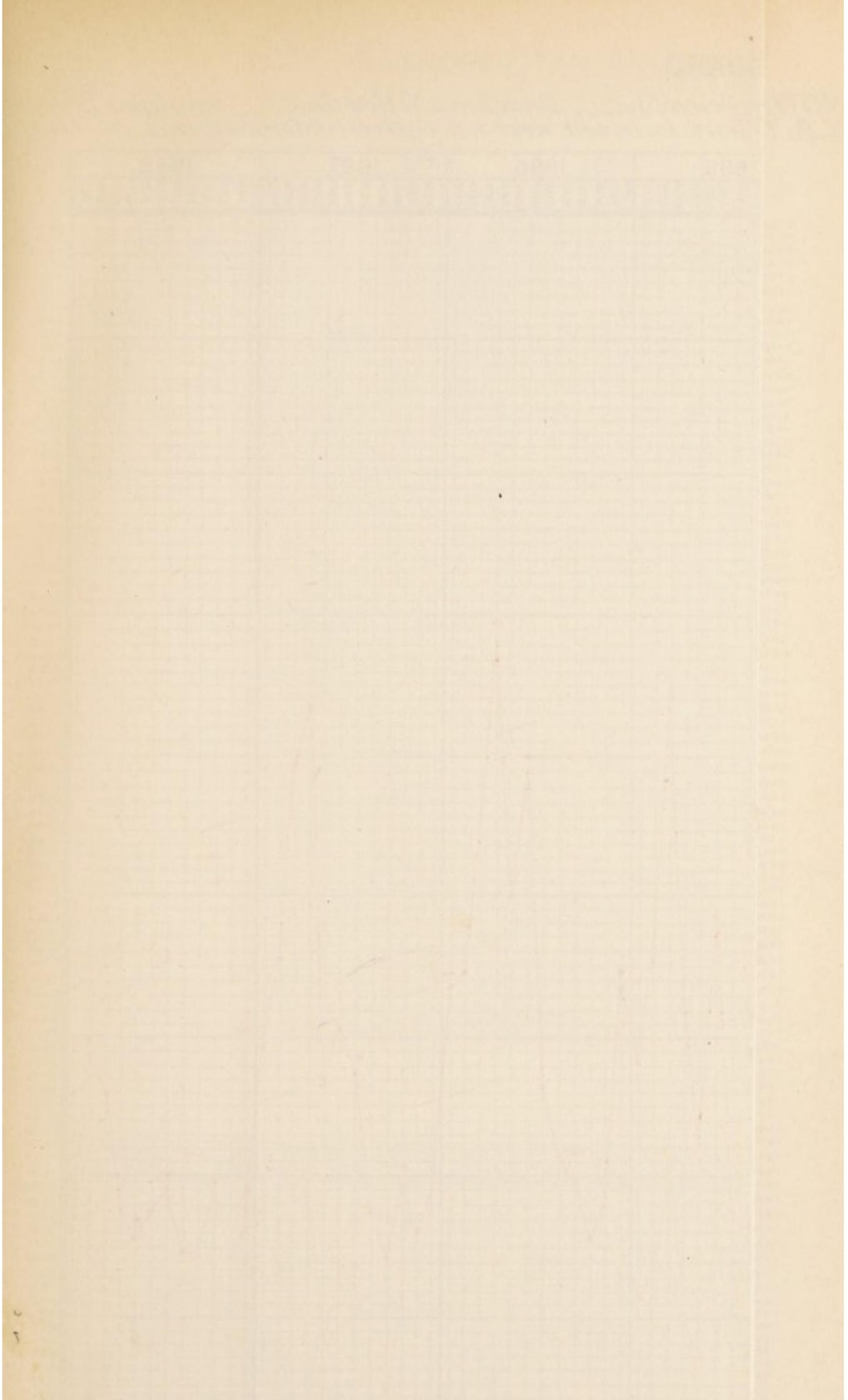
The proportion which the hospital admissions bear to the total number of cases is of great importance to the Managers in considering the question of the amount of accommodation which should be provided to meet the wants of the Metropolis. And the proportion this year is of exceptional importance as in 1898 for the first time since 1892 we have practically been able to receive all cases offered. In this connection the following table will be of interest:—

TABLE A<sub>3</sub>.—*Percentage of Admissions to Notifications of each admissible Disease during the years 1890 to 1898.*

DISEASES.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Scarlet Fever ...	42·82	46·84	48·80	39·68	63·94	58·20	62·65	66·99	74·07
Diphtheria ...	17·87	25·07	30·19	24·52	38·89	41·55	39·92	51·64	62·48
Enteric Fever ...	22·49	27·34	25·27	20·01	20·24	24·13	27·02	30·36	36·97
Typhus Fever ...	42·86	70·37	60·00	36·36	61·90	42·86	33·33	50·00	87·50

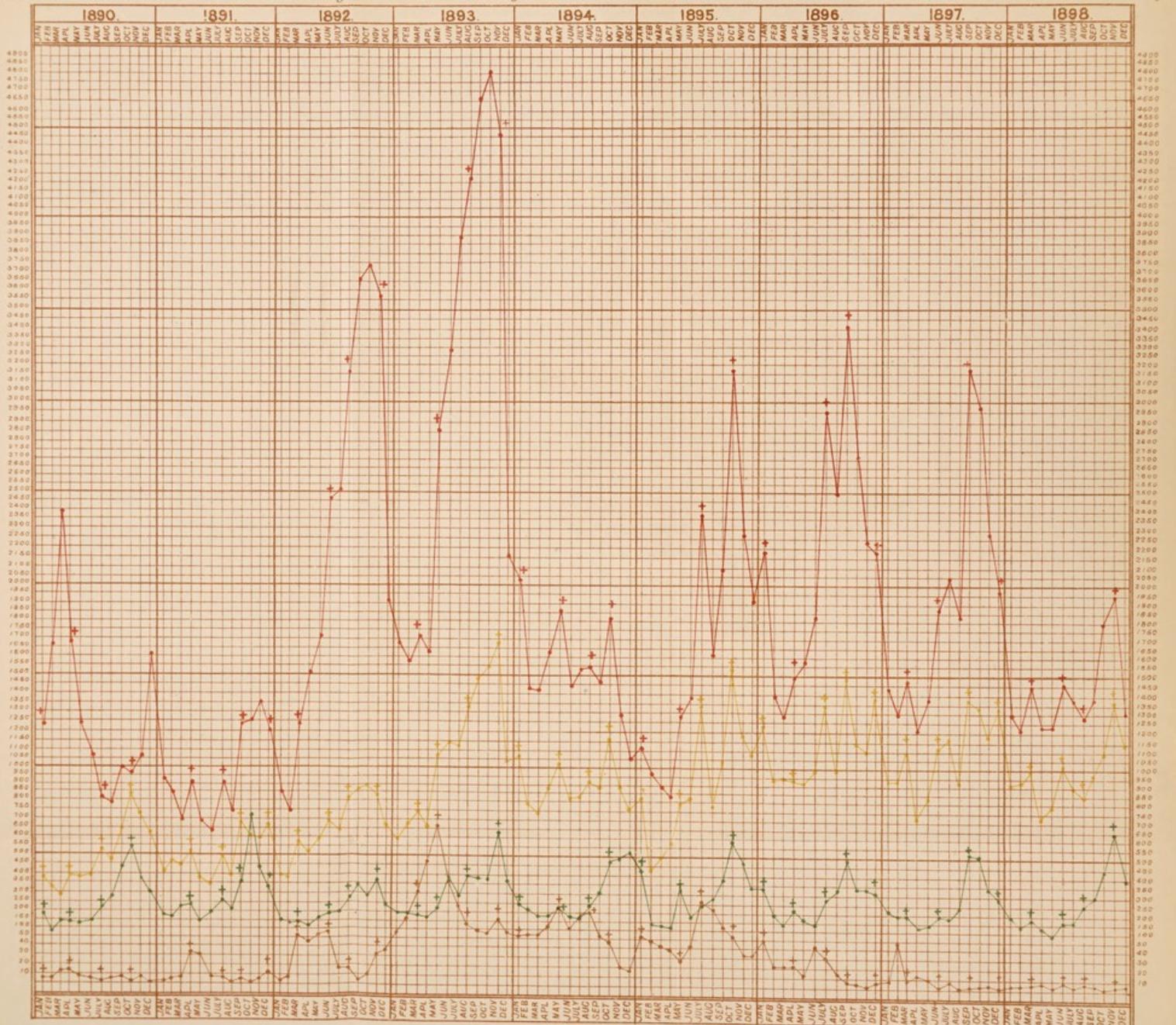
N.B.—These percentages are not corrected for cases of mistaken diagnosis discovered after admission to hospital, and therefore do not correspond exactly with the percentages obtained by taking the corrected admissions as shown in the Table on p. 21.

\* Cases of membranous croup are not included in this table. See note, pp. 13-14.



## METROPOLITAN ASYLUMS BOARD.

**NOTIFICATION CHART,**—Monthly notifications, Scarlet fever, Red line—Enteric fever, Green line—Diphtheria, Yellow line—Smallpox, Brown line.  
*N.B.* The crosses indicate months including five weeks. The figures on which the Chart is based were not corrected for mistakes in diagnosis.



From the point of view of hospital provision, the diseases of greatest interest to the Managers are scarlet fever and diphtheria. So few typhus fever cases now occur that they may be disregarded; and any cases of enteric fever which the Managers may from time to time be unable to accommodate in their own hospitals can generally be received into one or other of the large general hospitals. Smallpox is not included in the table, as it is not dealt with in the infectious hospitals in London, and the considerations which govern the provision to be made for it are essentially different from those which apply to the other diseases.

If we then confine consideration to the two diseases specified, we find that the proportion of scarlet fever admissions has risen from 42·82 to 74·07, and of diphtheria from 17·87 to 62·48. The rise in the percentage of diphtheria admissions has been, it will be seen, exceptionally great and rapid.

The chart facing this page traces the course of scarlet fever, diphtheria, enteric fever, and smallpox month by month during each year from 1890 to 1898. It brings out one fact with great clearness, namely, that, notwithstanding that the Managers have more than doubled their accommodation for fever cases during the past few years, it is still necessary to make further provision, as the present accommodation would prove inadequate should scarlet fever and diphtheria again become as prevalent as they were in the year 1893.

SPOTTED  
MAPS. Maps spotted to show the distribution of the principal fevers throughout the Metropolis during 1898 will be found in the pocket at the end of this volume.

In all, there are seven maps, dealing with five diseases.

*Scarlet Fever* cases are spotted on four maps—one for each quarter of the year.

In the *Diphtheria* map, the prevalence of the disease in certain localities is well defined, particularly in the south-western and south-eastern districts.

On the *Enteric Fever* map, few considerable aggregations of cases are apparent.

*Smallpox* and *Typhus Fever* cases are shown on one map, the former being represented by spots and the latter by crosses.

AGE AND SEX  
DISTRIBU-  
TION. Tables A<sub>4</sub> and A<sub>5</sub> exhibit the age and sex of cases notified as scarlet fever and diphtheria respectively during the year. It will be seen that both diseases are most prevalent amongst children; over two-thirds of the cases being under ten years of age. But whereas scarlet fever is most prevalent amongst children from five to ten years of age, diphtheria is most so amongst those under five years.

TABLE A4.—*Ages of cases notified as Scarlet Fever during 1898.*

AGES.	Males.	Females.	Total.
Under 1 ... ..	120	116	236
1 to 2 ... ..	332	305	637
2 ,, 3 ... ..	576	542	1,118
3 ,, 4 ... ..	775	806	1,581
4 ,, 5 ... ..	874	934	1,808
<b>Total under 5 ... ..</b>	<b>2,677</b>	<b>2,703</b>	<b>5,380</b>
5 to 10 ... ..	3,194	3,500	6,694
10 ,, 15 ... ..	1,212	1,567	2,779
15 ,, 20 ... ..	480	474	954
20 ,, 25 ... ..	189	281	470
25 ,, 30 ... ..	102	132	234
30 ,, 35 ... ..	62	87	149
35 ,, 40 ... ..	35	34	69
40 ,, 45 ... ..	13	18	31
45 ,, 50 ... ..	12	8	20
50 ,, 55 ... ..	2	5	7
55 ,, 60 ... ..	2	4	6
Upwards ... ..	4	3	7
Unrecorded ... ..	49	44	93
Sex unrecorded ... ..	...	...	1
<b>Total ... ..</b>	<b>8,033</b>	<b>8,860</b>	<b>16,894</b>

TABLE A5.—*Ages of cases notified as Diphtheria during 1898.*

AGES.	Males.	Females.	Total.
Under 1 ... ..	135	104	239
1 to 2 ... ..	360	308	668
2 ,, 3 ... ..	433	462	895
3 ,, 4 ... ..	594	543	1,137
4 ,, 5 ... ..	631	615	1,246
<b>Total under 5 ... ..</b>	<b>2,153</b>	<b>2,032</b>	<b>4,185</b>
5 to 10 ... ..	1,679	2,062	3,741
10 ,, 15 ... ..	618	784	1,402
15 ,, 20 ... ..	291	405	696
20 ,, 25 ... ..	182	312	494
25 ,, 30 ... ..	112	213	325
30 ,, 35 ... ..	87	163	250
35 ,, 40 ... ..	63	117	180
40 ,, 45 ... ..	23	51	74
45 ,, 50 ... ..	10	27	43
50 ,, 55 ... ..	4	28	32
55 ,, 60 ... ..	5	9	14
Upwards ... ..	11	9	20
Unrecorded ... ..	41	42	83
Sex unrecorded ... ..	...	...	4
<b>Total ... ..</b>	<b>5,285</b>	<b>6,254</b>	<b>11,543</b>

**Ambulance Work.** (2.) The Ambulance Committee's annual report will be found on pp. 45 to 53.

For many years three ambulance stations, namely, the Eastern Station at Homerton, the Western Station at Fulham, and the South-Eastern Station at Deptford, were sufficient for the work of the land ambulance service. But the work has increased so much in recent years—and there is every evidence of a still further increase—that the provision of additional ambulance stations became absolutely necessary. The Managers accordingly decided to erect stations adjoining the Brook Hospital, the North-Western Hospital, and the South-Western Hospital. The first named was opened on August 18th, 1896, the second on September 1st, 1897, and the third on May 2nd, 1898.

During the year 20,959 (22,916)\* fever, diphtheria, and smallpox patients were conveyed to the various hospitals of the Managers; 6,437 (8,941) convalescent patients were transferred to the Northern and Gore Farm Hospitals; and 6,671 (8,917) recovered patients were brought back from those hospitals to London. Further, 326 (361) private persons were removed on payment to other places than the Managers' hospitals; 71 (752) were taken from the out-patient departments of general hospitals to their homes, owing to there being no vacant beds in the Managers' hospitals (the 71 patients were admitted the following day); and 133 (186) enteric patients were removed from their homes to the general hospitals, where arrangements for their reception had been made by the Managers.

Altogether, 35,043 (42,758) removals were effected by the land ambulance service during 1898, and the various vehicles made 23,120 (26,055) journeys, and ran 214,677 (271,411) miles.

The steamboats of the river ambulance service conveyed 955 (1,283) passengers to and from the hospital ships at Long Reach; of that number 6 (69) were patients taken to the hospital ships, 5 (55) were recovered patients brought back to London, and 944 (1,159) were visitors, staff, workmen, &c.

**Hospital Accommodation.** (3.) FEVER AND DIPHTHERIA.—During the year the new diphtheria and isolation wards at the Western Hospital and the new scarlet fever wards at the South-Western Hospital were brought into use. The wooden hut at the South-Eastern Hospital has been demolished, and one of the wards at the North-Eastern Hospital has been set apart for use as a temporary discharge room. The new Grove Hospital at Tooting was not ready for use at the close of the year.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

The *normal* accommodation at the fever hospitals open at the end of the year was as under :—

HOSPITAL.	No. of Beds.
Eastern Hospital .. .. .	356
North-Eastern Hospital (temporary buildings) ..	386
North-Western Hospital (including some temporary buildings) .. .. .	460
Western Hospital .. .. .	454
South-Western Hospital .. .. .	366
Fountain Hospital (temporary buildings) .. ..	402
South-Eastern Hospital (including small temporary buildings) .. .. .	435
Park Hospital .. .. .	548
Brook Hospital .. .. .	488
Northern Hospital (including temporary buildings)	752
Total .. ..	4,647

Further accommodation will be provided at :—

Eastern Hospital, new isolation block .. .. .	6
Grove Hospital, nearly completed .. .. .	520
Northern Hospital, new isolation block (nearly completed) .. .. .	12
North-Eastern Hospital, additional beds when reconstruction shall have been completed ..	128
Southern Convalescent Hospital (plans not yet approved), say .. .. .	700
Total .. ..	1,366
Grand Total .. ..	6,013

This accommodation is capable of further increase in times of pressure by the use of extra beds in the wards of several of the hospitals. In addition there is the Gore Farm Hospital, which can furnish 750 beds for convalescent fever cases, but only so long as it is not required for its proper function of a smallpox convalescent hospital.

SMALLPOX.—For this disease the Managers possess 300 beds at the hospital ships, and are about to erect further buildings, capable of containing 400 beds, on the Joyce Green estate, adjoining the ships. Gore Farm, if at any time the Managers are compelled to reclaim it for its original purpose, can, for smallpox convalescents, furnish about 1,192 beds more.

(4.) FEVER.—On the last day of 1897 there were 4,668 (*4,566*)\* patients in the fever hospitals then open.

By May 28th, 1898, the number under treatment had fallen to the minimum, 3,120 (*May 7th, 1897, 3,136*) After that date, with

**Hospital  
Statistics.**

\* Italic figures in brackets throughout are the corresponding figures for 1897.

the exception of temporary falls in April and August, the number rose until November 21st, when the maximum, 4,745 (*December 9th, 1897, 5,023*),\* for the year was attained, and it then declined until the end of the year, when 4,377 (4,668) patients remained under treatment.

The following was the distribution of patients amongst the various hospitals on November 21st:—

HOSPITAL.	BEDS OCCUPIED.					
	Scarlet.	Diphtheria.	Typhus.	Enteric.	Other Diseases.	TOTAL.
Eastern Hospital ... ..	79	189	...	34	...	302
North-Eastern Hospital...	357	...	...	...	...	357
North-Western " ...	300	94	...	60	...	454 <sup>em</sup>
Western " ...	223	153	3	27	...	406 <sup>em</sup>
South-Western " ...	148	93	...	22	...	263
Fountain " ...	237	97	...	...	...	334
South-Eastern " ...	162	167	...	44	1	374
Park " ...	207	169	...	38	...	414
Brook " ...	295	191	...	29	...	515
Northern " ...	602	78	...	...	...	680
Gore Farm " ...	646	...	...	...	...	646
TOTALS ... ..	3,256	1,231	3	254	1	4,745†

Tables I. to VIII. and the accompanying chart summarise the several fever hospital tables given on pp. 64 to 89.

TABLE I.—Admissions, Discharges, and Deaths at Fever Hospitals during 1898.

DISEASES.	Re- main- ing on Dec. 31, 1897.	Admitted during 1898.		Total under treatment during 1898.	Discharged during 1898.		Died during 1898.	Mortality per cent.	Re- main- ing on Dec. 31, 1898.
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.			
Scarlet ... ..	3,565	12,125	5,544	15,690	12,257	5,544	514	4·12	2,919
Diphtheria ... ..	895	6,566	850	7,461	5,335	850	991	15·37	1,135
Enteric ... ..	106	869	...	975	601	...	143	17·73	231
Typhus ... ..	...	9	...	9	8	...	1	11·11	...
Totals ... ..	4,566	19,569	6,394	24,135	18,201	6,394	1,649	8·36	4,285
Other diseases ...	102	1,488	2	1,590	1,351	2	147	9·84	92
Grand Totals	4,668	21,057	6,396	25,725	19,552	6,396	1,796	8·47	4,377

NOTES.—The mortalities returned as above include all deaths occurring from intercurrent diseases, particulars of which will be found in the annual reports of the Medical Superintendents.

The mortality rates are calculated according to the Registrar-General's formula—i.e., by dividing the deaths, multiplied by 100, by half the sum of the admissions, discharges, and deaths for the year.

Cases of enteric fever admitted into general hospitals under arrangements made with those hospitals by the Managers are not included in this table. If they were, the number of admissions would be increased by 133.

The total number of patients treated during the year was smaller by 1,710 than in the previous year, the lesser number of scarlet fever cases accounting for the whole reduction; but the death-rate—8·47—is slightly

\* Italic figures in brackets throughout are the corresponding figures for 1897.

† The total number of patients under treatment is greater than the total normal accommodation in the fever hospitals as given on the preceding page. The extra accommodation was obtained by placing extra beds in the wards of some of the hospitals and by utilising Gore Farm Hospital.

higher (8.19).\* It is, however, satisfactory to note that although there was an increase in the number of diphtheria cases treated of 1,064, the death-rate from this disease was the lowest on record.

TABLE II.—*Monthly Admissions, Discharges, and Deaths at Fever Hospitals during 1898.*

MONTH.	ADMISSIONS.									DISCHARGES.		DEATHS.	
	Scarlet.		Diphtheria.		Enteric.		Other Diseases.		Total (acute cases).	Recovered.	To other Hospitals of Board.		
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.	Typhus.	Direct from Homes.					From other Hospitals of Board.
Jan. ...	993	460	491	73	51	...	...	143	...	1,678	1,958	533	177
Feb. ...	828	445	495	35	31	...	...	89	...	1,443	1,730	480	147
March	880	359	503	64	37	...	6	141	...	1,567	1,696	423	177
April	863	291	430	50	25	...	1	142	...	1,461	1,517	340	155
May ...	934	336	515	40	21	...	...	128	...	1,598	1,549	376	135
June ...	850	325	521	70	30	...	...	126	...	1,527	1,344	395	130
July ...	1,014	421	557	87	48	...	...	108	2	1,727	1,460	510	124
Aug. ...	876	367	402	76	78	...	...	117	...	1,473	1,548	443	116
Sept. ...	1,141	485	599	69	96	...	...	97	...	1,933	1,366	554	134
Oct. ...	1,471	768	691	80	148	...	1	121	...	2,432	1,458	848	158
Nov. ...	1,237	762	664	110	175	...	1	156	...	2,233	1,837	872	151
Dec. ...	1,038	525	698	96	129	...	...	120	...	1,985	2,089	622	192
Totals	12,125	5,544	6,566	850	869	...	9	1,488	2	21,057	19,552	6,396	1,796

The total monthly admissions were lowest in February (*April*), and highest in October (*October*).

The accompanying chart shows the monthly admissions of each kind of fever from and including the year 1887.

During the twenty-seven years which have elapsed since the first of the Managers' fever hospitals was opened, the scarlet fever admissions fell to the minimum for the year ten times in February, four times in March, seven times in April, four times in June, once in September, and once in December (1888); while the maximum number of admissions was reached once in January (1888), twice in July, four times in September, twelve times in October, six times in November, and twice in December. The enteric fever admissions fell to the minimum for the year three times in March, eight times in April, eight times in May, seven times in June, and once in July; and rose to the maximum once in May, four times in September, twelve times in October, nine times in November, and once in December.

Diphtheria cases were not admitted to the Managers' hospitals until

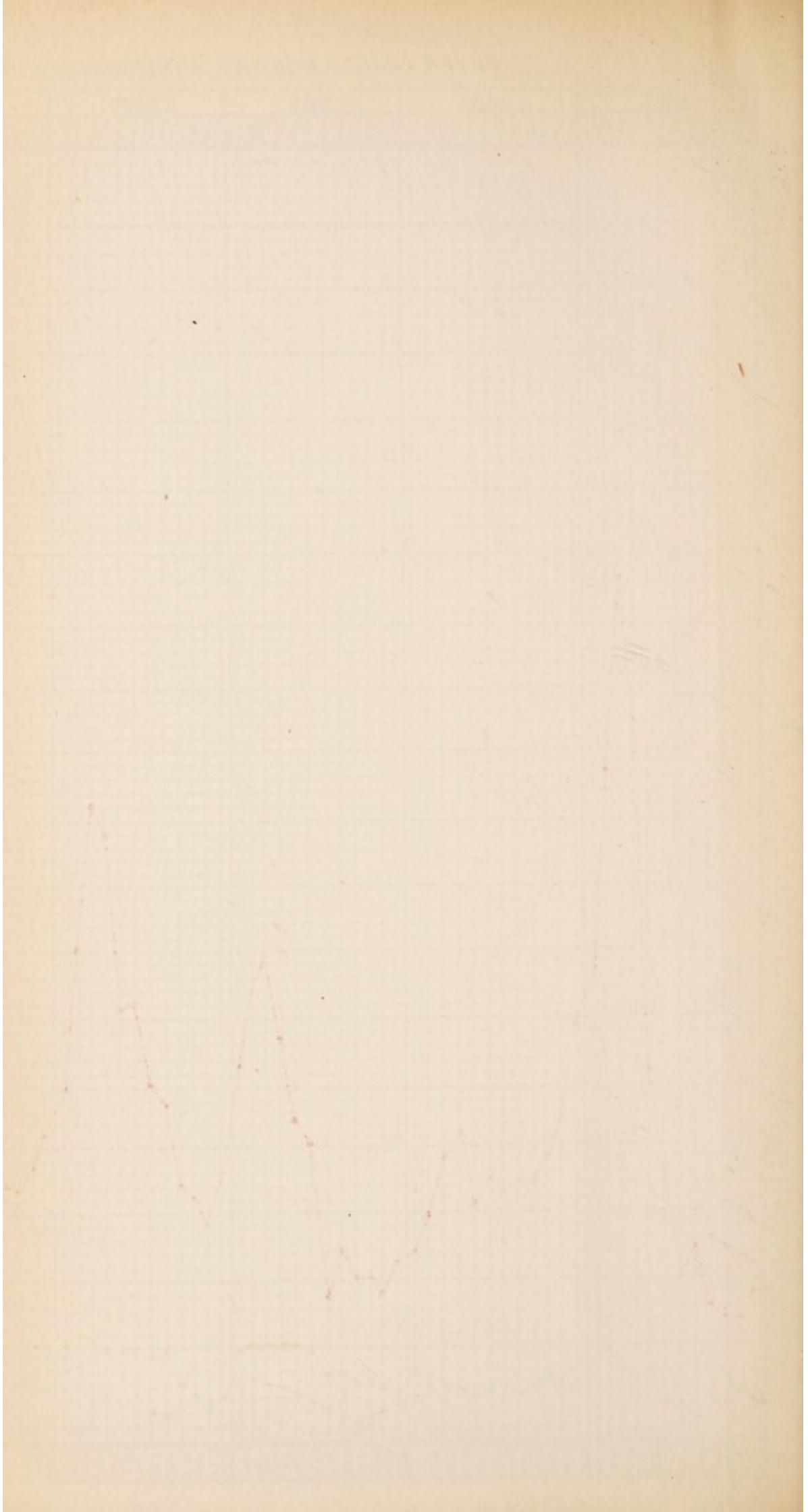
\* Italic figures in brackets throughout are the corresponding figures for 1897.

### METROPOLITAN ASYLUMS BOARD.

FEVER CHART - MONTHLY ADMISSIONS - *Scarlet fever-Red line* - *Enteric fever-Green line* - *Typhus fever-Brown line* - *Diphtheria-Yellow line*



NOTE.—Diphtheria cases were not admitted into the Board's Hospitals until the 23rd October, 1888.



October 23rd, 1888. Since then the minimum admissions have occurred twice in January, four times in February, three times in April, and once in August; while the maximum admissions took place once in July, once in August, twice in September, once in October, twice in November, and three times in December.

The maxima of scarlet fever, diphtheria, and enteric fever admissions must not, however, be regarded as indicating with accuracy the greatest seasonal prevalence of these diseases, for the reason that on several occasions the accommodation in the Managers' hospitals became completely exhausted, and consequently any further rise in the number of admissions was impossible.

TABLE III.—*Admissions and Deaths of Patients at Fever Hospitals during 1898, divided according to Parishes or Unions.*

PARISH OR UNION.	Scarlet.	Diphtheria.	Enteric.	Typhus.	Other Diseases.	Total Admissions.	Total Deaths.
Kensington ... ..	372	130	38	8	35	583	56
Fulham ... ..	918	423	29	...	74	1,444	123
Paddington ... ..	193	140	28	...	29	390	46
Chelsea ... ..	261	186	14	...	31	492	49
St. George's, Hanover Square ...	256	114	13	...	25	408	23
Westminster... ..	74	45	6	...	11	136	12
St. Marylebone ... ..	258	144	26	...	31	459	51
St. Pancras ... ..	790	272	51	...	75	1,188	125
Hampstead ... ..	131	51	12	...	14	208	18
Islington ... ..	854	254	56	...	104	1,268	94
Hackney ... ..	685	460	90	...	96	1,331	125
St. Giles & St. George, Bloomsbury	39	8	7	...	11	65	4
Strand ... ..	21	13	4	...	7	45	5
Holborn ... ..	560	371	20	...	76	1,027	83
London, City of ... ..	63	38	3	...	9	113	15
Shoreditch ... ..	333	148	27	...	86	594	47
Bethnal Green ... ..	248	139	22	...	44	453	37
Whitechapel ... ..	204	108	11	...	31	354	25
St. George-in-the-East ... ..	105	62	15	...	19	201	18
Stepney ... ..	139	80	15	...	23	257	29
Mile End Old Town ... ..	220	100	9	...	28	357	23
Poplar ... ..	344	203	46	...	51	644	54
St. Saviour's... ..	831	559	39	1	131	1,561	131
St. Olave's ... ..	573	201	23	...	49	846	72
Lambeth ... ..	657	447	36	...	83	1,223	95
Wandsworth and Clapham ...	1,031	820	66	...	102	2,019	184
Camberwell ... ..	609	326	29	...	82	1,046	67
Greenwich ... ..	399	248	87	...	51	785	65
Woolwich ... ..	640	214	27	...	28	909	57
Lewisham ... ..	167	213	12	...	35	427	41
Port and Tower of London ...	...	...	1	...	1	2	...
Tottenham ... ..	150	49	7	...	16	222	13
Beyond Metropolitan Area ...	...	...	...	...	...	...	...
Totals ... ..	12,125	6,566	869	9	1,488	21,057	1,796

In several districts mentioned in the foregoing table III. the admissions were considerably in excess of those of the previous year, the most notable instances being, as regards scarlet fever cases, Fulham, 918 (779)\*; St. Pancras, 790 (687); and Woolwich, 640 (424); and as regards diphtheria cases, Fulham, 423 (250); Hampstead, 51 (33); Hackney, 460 (284); St. Saviour's, 559 (343); Lambeth, 447 (293); Wandsworth, 820 (487); Woolwich, 214 (180); and Lewisham, 213 (116).

SCARLET FEVER.—TABLE IVA.—Admissions, Deaths, and Mortality per cent. of Scarlet Fever Patients during 1898, divided according to age and sex.

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 1 ...	54	15	27·8	64	11	17·2	118	26	22·0
1 to 2 ...	221	41	18·6	187	34	18·2	408	75	18·4
2 „ 3 ...	399	50	12·5	342	37	10·8	741	87	11·7
3 „ 4 ...	597	54	9·0	576	53	9·2	1,173	107	9·1
4 „ 5 ...	643	31	4·8	715	42	5·9	1,358	73	5·4
Totals under } 5 years ... }	1,914	191	10·0	1,884	177	9·4	3,798	368	9·7
5 to 10 ...	2,364	57	2·4	2,586	53	2·0	4,950	110	2·2
10 „ 15 ...	964	12	1·2	1,125	10	0·9	2,089	22	1·1
15 „ 20 ...	357	2	0·6	315	2	0·6	672	4	0·6
20 „ 25 ...	141	2	} 2·8 }	160	...	} 0·6 }	301	2	} 1·6 }
25 „ 30 ...	73	3		80	...		153	3	
30 „ 35 ...	38	1		57	1		95	2	
35 „ 40 ...	12	...		23	1		35	1	
40 „ 45 ...	8	...		7	...		15	...	
45 „ 50 ...	5	1		7	...		12	1	
50 „ 55 ...	2	1		...	...		2	1	
55 „ 60 ...	1	...		1	...		2	...	
And upwards	1	...		...	...		1	...	
Grand Totals	5,880	270		4·6	6,245		244	3·9	

N.B.—The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

The total admissions of scarlet fever cases in 1898 were 12,125 (15,113): the female were 365 (583) in excess of the male admissions.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

The total mortality, calculated on the admissions, was 4·2 (*4·1*)\* per cent.

The following table is compiled from the Summary Tables since 1892, the year when the Public Health (London) Act, 1891, came into operation, permitting the admission, free of charge, of any person reasonably believed to be suffering from fever, diphtheria, or smallpox.

TABLE IVB.—Admissions, Deaths, and Mortality per cent. of Scarlet Fever Patients in the years 1892 to 1898, divided according to age and sex.

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 1... ..	497	125	25·2	426	109	25·6	923	234	25·4
1 to 2... ..	1,677	339	20·2	1,558	314	20·2	3,235	653	20·2
2 ,, 3... ..	3,030	456	15·0	2,895	420	14·5	5,925	876	14·8
3 ,, 4... ..	4,196	458	10·9	4,264	470	11·0	8,460	928	11·0
4 ,, 5... ..	4,505	345	7·7	4,855	323	6·7	9,360	668	7·1
Totals under } 5 years }	13,905	1,723	12·4	13,998	1,636	11·7	27,903	3,359	12·0
5 to 10... ..	18,155	552	3·0	20,178	576	2·9	38,333	1,128	2·9
10 ,, 15... ..	8,323	109	1·3	8,987	95	1·1	17,310	204	1·2
15 ,, 20... ..	2,723	38	1·4	2,683	37	1·4	5,406	75	1·4
20 ,, 25... ..	1,067	13	1·2	1,309	20	1·5	2,376	33	1·4
25 ,, 30... ..	493	8	1·6	737	7	0·9	1,230	15	1·2
30 ,, 35... ..	253	7	2·8	400	7	1·8	653	14	2·1
35 ,, 40... ..	103	2	1·9	163	4	2·5	266	6	2·3
40 ,, 45... ..	53	4	} 8·1 }	87	3	} 2·8 }	140	7	} 5·1 }
45 ,, 50... ..	31	3		30	1		61	4	
50 ,, 55... ..	19	2		17	...		36	2	
55 ,, 60... ..	6	...		5	...		11	...	
And upwards	2	...		3	..		5	...	
Grand Totals... ..	45,133	2,461	5·5	48,597	2,386	4·9	93,730	4,847	5·2

N.B.—The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

The relation of age and sex to mortality is clearly indicated by the above table. The disease is most fatal to children under five years of age, and notably so to infants in the first and second years of life, More females than males have been admitted, but the mortality per cent. amongst the latter is greater than amongst the former by 0·6.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

DIPHTHERIA.—TABLE VA.—Admissions, Deaths, and Mortality per cent. of Diphtheria Patients during 1898, divided according to age and sex.

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 1 ...	68	25	36·8	59	18	30·5	127	43	33·9
1 to 2 ...	214	68	31·8	176	58	33·0	390	126	32·3
2 ,, 3 ...	270	68	25·2	292	79	27·1	562	147	26·2
3 ,, 4 ...	384	77	20·1	365	77	21·1	749	154	20·6
4 ,, 5 ...	414	87	21·0	410	71	17·3	824	158	19·2
Total under } 5 years }	1,350	325	24·1	1,302	303	23·3	2,652	628	23·7
5 to 10 ...	1,106	142	12·8	1,324	168	12·7	2,430	310	12·8
10 ,, 15 ...	379	16	4·2	423	25	5·9	802	41	5·1
15 ,, 20 ...	121	5	4·1	154	...	...	275	5	1·8
20 ,, 25 ...	60	2	3·3	98	...	...	158	2	1·3
25 ,, 30 ...	43	...	2·2	60	...	1·9	103	...	2·0
30 ,, 35 ...	25	1		46	1		71	2	
35 ,, 40 ...	13	...		26	...		39	...	
40 ,, 45 ...	3	...		17	...		20	...	
45 ,, 50 ...	1	...		6	...		7	...	
50 ,, 55 ...	...	...		3	1		3	1	
55 ,, 60 ...	2	1	1	...	3	1			
And upwards	2	...	1	1	3	1			
Grand Totals	3,105	492	15·8	3,461	499	14·4	6,566	991	15·1

N.B.—The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

The total admissions were greater in number by 893 cases than in 1897, and the death-rate, 15·1 per cent., was 2·3 below that of the previous year, and was the lowest on record.

In former reports we have issued a table compiled from the Summary Tables in the year reported on and the previous Annual Reports since 1888, in which year diphtheria cases were first admitted to the Managers' hospitals. We think it will be more interesting to the Managers if we this year issue two tables, one for the period 1888–1894, when the antitoxic serum treatment of diphtheria was not generally practised in the Managers' hospitals, and the other for the period 1895–1898, since that treatment has been adopted.

TABLE VB1.—Admissions, Deaths, and Mortality per cent. of all Diphtheria Patients in the years 1888 to 1894 (before antitoxic serum was generally used), divided according to age and sex:—

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 1 ...	102	65	63·7	97	58	59·8	199	123	61·8
1 to 2 ...	357	226	63·3	331	208	62·8	688	434	63·1
2 „ 3 ...	482	271	56·2	484	261	53·9	966	532	55·1
3 „ 4 ...	613	317	51·7	646	291	45·0	1,259	608	48·3
4 „ 5 ...	601	232	38·6	722	284	39·3	1,323	516	39·0
Totals under } 5 years }	2,155	1,111	51·6	2,280	1,102	48·3	4,435	2,213	49·9
5 to 10 ...	1,733	456	26·3	1,990	590	29·6	3,723	1,046	28·1
10 „ 15 ...	573	61	10·6	757	80	10·6	1,330	141	10·6
15 „ 20 ...	305	16	5·2	477	18	3·8	782	34	4·3
20 „ 25 ...	188	9	4·8	355	16	4·5	543	25	4·6
25 „ 30 ...	119	9	7·6	235	10	4·3	354	19	5·4
30 „ 35 ...	70	2	2·9	113	7	6·2	183	9	4·9
35 „ 40 ...	44	3	6·8	66	2	3·0	110	5	4·5
40 „ 45 ...	28	3	17·2	34	3	17·5	62	6	17·4
45 „ 50 ...	11	...		23	4		34	4	
50 „ 55 ...	11	4	8	2	19	6			
55 „ 60 ...	6	2	9	1	15	3			
And upwards	2	1	6	4	8	5			
Grand Totals	5,245	1,677	32·0	6,353	1,839	28·9	11,598	3,516	30·3

N.B.—The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

TABLE VB2.—Admissions, Deaths, and Mortality per cent. of all Diphtheria Patients in the years 1895 (when antitoxic serum was first generally used) to 1898.

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 1 ...	205	75	36·6	158	63	39·9	363	138	38·0
1 to 2 ...	676	253	37·4	574	218	38·0	1,250	471	37·7
2 „ 3 ...	889	263	29·6	928	258	27·8	1,817	521	28·7
3 „ 4 ...	1,257	305	24·3	1,204	289	24·0	2,461	594	24·1
4 „ 5 ...	1,236	287	23·2	1,350	304	22·5	2,586	591	22·9
Totals under } 5 years }	4,263	1,183	27·7	4,214	1,132	26·9	8,477	2,315	27·3
5 to 10 ...	3,351	536	16·0	4,054	672	16·6	7,405	1,208	16·3
10 „ 15 ...	1,071	65	6·1	1,361	89	6·5	2,432	154	6·3
15 „ 20 ...	313	15	4·8	494	16	3·2	807	31	3·8
20 „ 25 ...	169	7	4·1	305	4	1·3	474	11	2·3
25 „ 30 ...	106	3	2·8	230	3	1·3	336	6	1·8
30 „ 35 ...	74	3	4·1	155	8	5·2	229	11	4·8
35 „ 40 ...	36	1	2·8	78	3	3·8	114	4	3·5
40 „ 45 ...	12	...	10·0	41	2	5·1	53	2	6·5
45 „ 50 ...	9	1		17	...		26	1	
50 „ 55 ...	4	...	9	1	13	1			
55 „ 60 ...	2	1	7	...	9	1			
And upwards	3	1	4	1	7	2			
Grand Totals	9,413	1,816	19·3	10,969	1,931	17·6	20,382	3,747	18·4

N.B.—The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

The difference in the mortality rates during the two periods is most striking, and most particularly so as regards young children. Amongst cases in the first year of life the rate has fallen from 61·8 to 38·0, in the second year from 63·1 to 30·8, in the third year from 55·1 to 28·7, in the fourth year from 48·3 to 24·1, and in the fifth year from 39·0 to 22·8. Amongst cases from

5 to 10 years of age it has fallen from 28.1 to 16.2, but in later years the differences are not so marked. The total mortality has fallen from 30.3 to 18.4. The mortality per cent. of females is in each table less than that of males.

ENTERIC FEVER.—TABLE VI.A.—*Admissions, Deaths, and Mortality per cent. of Enteric Fever Patients during 1898, divided according to age and sex:—*

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 5 ...	17	1	5.9	17	...	...	34	1	2.9
5 to 10 ...	43	1	2.3	56	4	7.1	99	5	5.1
10 ,, 15 ...	82	2	2.4	81	11	13.6	163	13	7.9
15 ,, 20 ...	100	16	16.0	71	14	19.7	171	30	17.5
20 ,, 25 ...	77	23	29.9	51	7	13.7	128	30	23.4
25 ,, 30 ...	77	18	23.4	47	11	23.4	124	29	23.4
30 ,, 35 ...	31	5	16.1	33	5	15.2	64	10	15.6
35 ,, 40 ...	28	3	10.7	20	6	30.0	48	9	18.4
40 ,, 45 ...	18	5	38.5	9	4	44.4	22	9	40.9
45 ,, 50 ...	2	2	50.0	7	3	40.0	9	5	43.7
50 ,, 55 ...	3	1		2	...		5	1	
55 ,, 60 ...	1	...		1	1		2	1	
And upwards	...	...		...	...		...	...	
Totals ...	474	77	16.2	395	66	16.7	869	143	16.4

N.B.—The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies. It does not include Board's cases admitted into general hospitals.

There were 205 more cases of enteric fever admitted than during 1897, and the total death-rate was 2.3 per cent. lower than in that year.

The following table is compiled from the Summary Tables in this and previous Annual Reports:—

TABLE VI.B.—*Admissions, Deaths, and Mortality per cent. of Enteric Fever Patients in the years 1871 to 1898. (See note (2) below.)*

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 5 ...	202	24	11.8	172	21	12.2	374	45	12.0
5 to 10 ...	805	71	8.8	774	65	8.4	1,579	136	8.6
10 ,, 15 ...	1,451	146	10.1	1,234	194	15.7	2,685	340	12.4
15 ,, 20 ...	1,356	208	15.3	1,210	242	20.0	2,566	450	17.5
20 ,, 25 ...	937	209	22.3	857	159	18.1	1,794	368	20.5
25 ,, 30 ...	733	179	24.4	583	123	21.1	1,316	302	22.9
30 ,, 35 ...	407	113	27.8	367	74	20.2	774	187	24.2
35 ,, 40 ...	219	61	27.9	237	59	24.9	456	120	26.3
40 ,, 45 ...	131	35	26.7	112	29	25.9	243	64	26.3
45 ,, 50 ...	57	26	45.6	76	19	25.0	133	45	33.8
50 ,, 55 ...	27	11	41.6	32	6	28.6	59	17	35.1
55 ,, 60 ...	13	6		9	5		22	11	
And upwards	8	3		8	3		16	6	
Grand Totals	6,346	1,092	17.2	5,671	999	17.6	12,017	2,091	17.4

N.B.—(1) The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

(2) The total number does not correspond with Table VIII., p. 32, because there are excluded from this table a number of patients who were admitted into hospitals which also received convalescent patients from other hospitals, and in taking the ages of patients for the purposes of this table, it was impossible from the returns in the possession of the Committee to identify the two classes.

The number of cases of enteric fever under five years of age is comparatively small.

The lowest death-rate is amongst patients between 5 and 10 years of

age; it then increases with each quinquennium, until it attains a percentage of 33·8 amongst patients between 45 and 50 years of age and of 35·1 amongst the patients of ages from 50 to 60 and upwards.

The male sex is evidently more liable to attack by this disease; but the female mortality per cent. is greater by 0·4. There are striking variations in the relative mortality in the sexes at different age-periods. Between the ages of 10 and 20 the death-rate is much greater amongst females, but the case is entirely reversed in all later age-periods.

Nine cases of typhus fever were admitted during the year 1898 and they are entered in the following table:—

TYPHUS FEVER.—TABLE VIIA.—Admissions and Deaths of Typhus Fever Patients during 1898, divided according to age and sex.

AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 5 ... ..	...	...	1	...	1	...
5 to 10 ... ..	...	...	...	...	...	...
10 ,, 15 ... ..	...	...	...	...	...	...
15 ,, 20 ... ..	...	...	1	..	1	...
20 ,, 25 ... ..	1	...	1	...	2	...
25 ,, 30 ... ..	...	...	2	...	2	..
30 ,, 35 ... ..	2	1	1	...	3	1
35 ,, 40 ... ..	...	...	...	...	...	..
40 ,, 45 ... ..	...	...	...	...	...	...
45 ,, 50 ... ..	...	...	...	...	...	...
50 ,, 55 ... ..	...	...	...	...	...	...
55 ,, 60 ... ..	...	...	...	...	...	...
And upwards ... ..	...	...	..	...	...	...
Totals ... ..	3	1	6	...	9	1

N.B.—In the above table four cases were treated at the Western and five at the South-Eastern Hospital.

The following table is compiled from the Summary Tables in this and previous Annual Reports:—

TABLE VIIIB.—Admissions, Deaths, and Mortality per cent. of Typhus Fever Patients in the years 1871 to 1898 inclusive, divided according to age and sex. (See note (2) below.)

AGES.	MALES.			FEMALES.			TOTAL.		
	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Mortality per cent.
Under 5 ... ..	40	1	2·5	49	1	2·1	89	2	2·3
5 to 10 ... ..	108	1	0·9	139	—	—	247	1	0·4
10 ,, 15 ... ..	172	5	2·9	207	11	5·3	379	16	4·2
15 ,, 20 ... ..	165	10	6·1	199	18	9·1	364	28	7·7
20 ,, 25 ... ..	126	28	22·4	125	22	17·7	251	50	20·1
25 ,, 30 ... ..	77	21	27·3	85	15	18·1	162	36	22·5
30 ,, 35 ... ..	78	26	32·9	86	22	25·9	164	48	29·2
35 ,, 40 ... ..	57	26	45·6	76	21	27·6	133	47	35·3
40 ,, 45 ... ..	75	46	61·3	95	35	36·8	170	81	47·6
45 ,, 50 ... ..	43	21	48·8	55	21	38·2	98	42	42·9
50 ,, 55 ... ..	23	16	69·6	38	21	55·3	61	37	60·7
55 ,, 60 ... ..	14	9	64·3	18	15	83·3	32	24	75·0
And upwards ... ..	17	13	76·5	22	15	68·2	39	28	71·8
Totals ... ..	995	223	22·4	1,194	217	18·3	2,189	440	20·1

N.B.—(1) The above table includes deaths within 48 hours after admission, as well as deaths from intercurrent maladies.

(2) The total number does not correspond with Table VIII., p. 32, for similar reasons to those given in note (2) to Table VI., on p. 28.

Young children appear to be less liable to attack by typhus fever than adolescents or adults. At all ages more females than males have been admitted. The death-rate of females per cent. is less by 4.1 than that of males. The mortality in both sexes is greatly influenced by age. Up to the twentieth year the rate does not exceed 7.7 per cent.; but in the quinquennium 20 to 25 it suddenly rises to 20.1 per cent., and thenceforward rapidly increases with advancing age.

SMALLPOX. Table I. on pp. 93-95 shows the number of smallpox patients admitted from each parish or union during each month of the year 1898, and the total admissions for the year.

The total number of smallpox cases admitted was five. All were discharged. But, in addition to these numbers, there were of non-smallpox cases one admitted to the hospital ships, eight detained at the observation shelters at South Wharf (excluding one who remained under treatment from the previous year), and 22 were returned direct to their homes.

Full information as to the cases admitted to the hospital ships will be found in the report of the Medical Superintendent, Dr. Ricketts, on pp. 91-92, and as to the cases detained at the South Wharf shelters in the report of the acting medical officer of the river service, Dr. Ricketts, on p. 90.

Tables II.A., II.B., and II.C., on pp. 96-107, supply detailed particulars concerning the vaccination of the smallpox patients admitted.

Table II.C. (which is a combination of Tables II.A. and II.B.) shows that vaccination cicatrices were present in all five cases.

CASES OF MISTAKEN DIAGNOSIS. *Fever.*—In the course of the year 1898 no fewer than 1,488 (1,417)\* patients, or a percentage on the total admissions of 7.2 (6.02), were, after admission at the fever hospitals, found not to be suffering from the diseases mentioned in the medical certificates upon which they were removed to hospital. The largest number of cases thus admitted to any one hospital was, as in previous years, at the Eastern Hospital, where the proportion was 240 (329) out of 2,480 (3,074) admissions, or 9.2 (10.7) per cent. of the total. As regards scarlet fever cases the percentage was 4.7 (3.1), diphtheria cases 8.3 (11.3), and enteric fever cases 23.3 (44.1).

Amongst the 603 (466) cases wrongly certified as scarlet fever there were 73 (62) of measles, 129 (113) of tonsillitis, and 120 (66) had no obvious disease. Amongst the 600 (643) cases wrongly certified as diphtheria were 34 (31) of

\* Italic figures in brackets throughout are the corresponding figures for 1897.

measles and 450 (511)\* of tonsillitis. Amongst the 265 (293) cases wrongly certified as enteric fever were 12 (14) of influenza, 55 (69) of pneumonia, and 6 (4) of bronchitis.

*Smallpox.*—Of the patients admitted to the smallpox hospital ships, 1 (2) was not suffering from smallpox. Particulars of this case are given in the report of the Medical Superintendent, on p. 91.

In the case of smallpox the original medical certificate is checked by the examination of a medical officer of the Board at the London wharves. If therefore we take the total number of cases originally certified in London as smallpox and removed to the wharves, we find that the mistaken diagnoses numbered 30 (52) out of 36 (121), or 83·3 (42·9) per cent.; and these are the figures properly to be compared with those given above in the case of fever. It is evident that the ordinary practitioner in London practically never sees either smallpox or typhus.

(5.) FEVER.—The return on p. 32 shows the annual admissions and deaths of patients at the Managers' fever hospitals, with the mortality per cent. since the establishment of the first hospital in 1870, together with extracts from the Registrar-General's annual summaries showing the annual mortality per 1,000 persons living of the population of the Metropolis from scarlet, typhus, and enteric fevers and diphtheria.

The decreasing percentage of the mortality amongst scarlet fever patients treated in the Managers' hospitals continues to be a noticeable feature.

More noticeable is the decline in the percentage mortality amongst diphtheria patients from 40·74 in 1889 to 29·29 in 1894; to 22·85 in 1895 (when the antitoxic serum treatment was first adopted); to 21·2 in 1896; to 17·69 in 1897, and 15·37 in 1898.

**Statistics  
since Estab-  
lishment  
of the  
Managers'  
Hospitals.**

\* Italic figures in brackets throughout are the corresponding figures for 1897.

TABLE VIII.—Showing the Admissions and Deaths of Patients and Mortality per cent. at the Managers' FEVER HOSPITALS during each Year since the opening of the first Hospital on January 25th, 1870, together with the Annual Mortality per 1,000 persons living of the Population of the Metropolis from Scarlet, Typhus, and Enteric Fevers and Diphtheria, extracted from the Registrar-General's Annual Summaries.

YEAR.	ADMISSIONS.					DEATHS.					Mortality per cent. of Patients treated in Managers' Hospitals.				Annual Mortality per 1,000 of estimated Population.						
	Scarlet.	Diphtheria	Typhus.	Enteric.	(Other Diseases.)	Total.	Scarlet.	Diphtheria	Typhus.	Enteric.	Other Diseases.	Total.	Scarlet.	Diphtheria	Typhus.	Enteric.	Scarlet.	Diphtheria	Typhus.	Enteric.	
1871)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1872) (15 months to Dec. 31st, 1872),...	108	...	134	279	343	864	11	...	30	57	...	168	10.78	...	23.62	21.96	0.58	0.11	0.12	0.27	
1873...	92	...	401	381	271	1,145	6	...	91	56	...	211	6.55	...	23.15	15.13	0.28	0.08	0.05	0.24	
1874...	804	...	536	435	359	2,134	89	...	106	63	...	342	12.15	...	19.62	14.87	0.19	0.09	0.08	0.27	
1875...	1,182	...	65	299	269	1,815	160	...	16	78	...	308	13.69	...	23.35	24.68	0.77	0.12	0.09	0.26	
1876...	671	...	139	288	294	1,392	90	...	28	78	...	248	12.13	...	19.31	20.34	1.06	0.17	0.04	0.23	
1877...	479	...	170	372	186	1,207	54	...	36	79	...	202	12.10	...	23.07	22.93	0.65	0.11	0.04	0.22	
1878...	79	...	168	484	233	1,564	91	...	47	100	...	278	14.34	...	26.25	20.26	0.49	0.09	0.04	0.25	
1879...	1,469	...	48	385	196	2,098	211	...	11	74	...	335	15.27	...	21.56	19.73	0.49	0.15	0.04	0.28	
1880...	1,949	...	28	248	239	2,454	242	...	6	43	...	328	12.30	...	20.68	15.63	0.72	0.15	0.02	0.23	
1881...	1,477	...	219	415	211	2,322	168	...	34	86	...	334	11.10	...	16.95	21.47	0.82	0.14	0.02	0.19	
1882...	1,850	...	148	515	354	2,867	189	...	27	104	...	380	10.37	...	16.92	20.71	0.55	0.17	0.02	0.25	
1883...	1,920	...	45	486	269	2,720	234	...	11	74	...	385	12.38	...	21.15	15.64	0.51	0.24	0.01	0.25	
1884...	1,845	...	29	493	180	2,547	234	...	5	98	...	392	12.27	...	20.00	18.82	0.36	0.24	0.01	0.23	
1885...	1,353	...	53	220	229	1,855	180	...	7	36	...	219	9.47	...	12.17	15.82	0.18	0.23	0.01	0.15	
1886...	1,780	...	10	333	74	2,197	151	...	4	47	...	224	9.04	...	42.10	14.85	0.17	0.21	0.00	0.15	
1887...	5,900	...	35	441	161	6,537	489	...	4	61	...	613	9.54	...	11.59	14.59	0.35	0.23	0.00	0.15	
1888...	4,408	99	1	450	194	5,152	501	46	...	72	60	679	9.89	59.35	...	14.64	0.30	0.32	0.00	0.17	
1889...	4,518	722	23	296	219	5,772	366	275	6	41	48	736	8.85	40.74	31.57	15.15	0.19	0.39	0.00	0.13	
1890...	6,537	942	16	498	341	8,334	510	316	5	93	81	1,005	7.86	33.55	25.66	19.68	0.21	0.33	0.00	0.15	
1891...	5,262	1,312	18	755	462	7,809	357	397	1	106	102	963	6.67	30.63	5.88	14.52	0.14	0.34	0.00	0.13	
1892...	13,093	2,009	19	430	725	16,276	839	583	2	65	140	1,629	7.28	29.35	9.76	13.20	0.27	0.46	0.00	0.10	
1893...	14,548	2,848	2	544	732	18,674	901	865	1	110	105	1,982	6.11	30.42	50.00	20.54	0.37	0.76	0.00	0.16	
1894...	11,598	3,666	6	534	863	16,667	717	1,035	1	96	150	1,999	5.92	29.29	16.67	18.13	0.22	0.62	0.00	0.15	
1895...	11,271	3,635	3	661	1,277	16,847	591	820	...	119	142	1,672	5.45	22.85	...	18.17	0.19	0.54	0.00	0.14	
1896...	15,982	4,508	9	600	1,174	22,273	666	948	2	96	109	1,821	4.29	21.20	25.0	15.84	0.21	0.60	0.00	0.13	
1897...	15,113	5,673	2	664	1,417	22,869	619	987	...	124	140	1,870	4.07	17.69	...	18.64	0.18	0.51	0.00	0.12	
1898...	12,125	6,566	9	869	1,488	21,057	514	991	1	143	147	1,796	4.12	15.37	11.11	17.73	0.13	0.39	0.00	0.13	
Totals	138,013	31,980	2,336	12,369	12,760	197,458	9,130	7,263	482	2,180	2,064	21,119	6.68	23.49	20.63	17.79	...	...	...	...	

NOTE.—1. From December 1st, 1870, to the end of September, 1871, smallpox cases only were admitted to the Board's Hospitals.  
 2. The deaths of fever patients include all cases dying within 48 hours after admission, and also those deaths due to intercurrent maladies.  
 3. Diphtheria cases have only been admitted into the Managers' hospitals since October 23rd, 1888.  
 4. The mortality rates of patients in the Managers' hospitals are calculated according to the Registrar-General's formula.

(6.) The following table shows the admissions and deaths of patients in the Managers' smallpox hospitals during each year since the opening of the first hospital at the end of 1870.

TABLE IX.—Admissions, Deaths, and Mortality per cent. of Smallpox Patients since December 1st, 1870, together with the Annual Mortality per 1,000 persons living of the Population of the Metropolis from Smallpox, extracted from the Registrar-General's Annual Summaries.

YEAR.	ADMISSIONS.			DEATHS.			Mortality per cent. of Patients treated in Managers' Hospitals.	Total Annual Mortality per 1,000 of estimated Population.
	Smallpox.	Other Diseases.	Total.	Smallpox.	Other Diseases.	Total.		
Dec. 1st, 1870, to Feb. 3rd, 1871...	582	...	582	97	...	97	20·81	...
1871-2 (Feb. 4th, 1871, to Jan. 31st, 1872) ...	13,139	6	13,145	2,460	...	2,460	18·95	2·42
1872-3 (year ended Jan. 31st, 1873)	2,359	3	2,362	467	1	468	17·84	0·54
1873-4 (year ended Jan. 31st, 1874)	174	17	191	35	..	35	17·02	0·03
1874 (11 months ended Dec. 31st)	112	8	120	10	...	10		0·02
1875 ... ..	89	22	111	22	...	22	17·02	0·01
1876 ... ..	2,134	16	2,150	372	1	373		21·64
1877 ... ..	6,516	104	6,620	1,214	4	1,218	17·92	0·71
1878 ... ..	4,558	96	4,654	824	9	833	17·99	0·39
1879 ... ..	1,628	60	1,688	273	5	278	15·69	0·12
1880 ... ..	1,982	50	2,032	286	2	288	15·95	0·12
1881 ... ..	8,551	120	8,671	1,417	14	1,431	16·61	0·62
1882 ... ..	1,799	55	1,854	260	3	263	12·96	0·11
1883 ... ..	598	28	626	93	...	93	16·06	0·03
1884 ... ..	6,363	204	6,567	940	3	943	15·98	0·31
1885 ... ..	6,146	198	6,344	1,052	3	1,055	15·80	0·35
1886 ... ..	99	33	132	22	2	24	14·28	0·01
1887 ... ..	56	3	59	3	...	3		0·00
1888 ... ..	62	5	67	8	...	8	0·00	
1889 ... ..	5	...	5	..	...	...	...	...
1890 ... ..	22	5	27	3	...	3	14·28	0·00
1891 ... ..	63	1	64	8	...	8		0·00
1892 ... ..	325	*23	348	35	...	35	11·29	0·01
1893 ... ..	2,376	*118	2,494	180	2	182	7·64	0·05
1894 ... ..	1,117	*120	1,237	102	7	109	8·87	0·02
1895 ... ..	941	*81	1,022	64	1	65	6·36	0·01
1896 ... ..	190	*41	231	9	1	10	4·01	0·00
1897 ... ..	70	*26	96	13	1	14	18·44	0·00
1898 ... ..	5	*9	14	...	...	...	...	0·00
Totals ... ..	62,061	1,452	63,513	10,269	59	10,328	16·26	...

The following table is founded on the returns of the Registrar-General, and will be of interest to the Managers in relation to the history of smallpox in the Metropolis:—

\* Most of these were patients who were detained for observation at South Wharf.

YEARS.	Estimated Population in the Middle of each Year.	DEATHS FROM SMALLPOX.		
		Annual Total.	Annual Rate per Million of Population.	Rate per Million on Averages of Five Years.
1838	1,766,169	3,817	2,161	—
1839	1,802,751	634	352	—
1840	1,840,091	1,235	671	—
1841	1,878,205	1,053	561	—
1842	1,917,108	360	188	787
1843	1,954,041	438	224	399
1844	2,033,816	1,804	887	506
1845	2,073,298	909	438	460
1846	2,113,535	257	122	372
1847	2,202,673	955	434	421
1848	2,244,837	1,620	722	521
1849	2,287,302	521	228	389
1850	2,330,054	499	214	344
1851	2,373,081	1,062	448	409
1852	2,416,367	1,159	480	418
1853	2,459,899	211	86	291
1854	2,503,662	694	277	301
1855	2,547,639	1,039	408	340
1856	2,591,815	531	205	291
1857	2,636,174	156	59	207
1858	2,680,700	242	90	208
1859	2,725,374	1,158	425	237
1860	2,770,181	898	324	221
1861	2,815,101	217	77	195
1862	2,860,117	366	128	209
1863	2,905,210	1,996	687	328
1864	2,950,361	547	185	280
1865	2,995,551	640	214	258
1866	3,040,761	1,391	457	334
1867	3,085,971	1,345	436	396
1868	3,131,160	597	191	297
1869	3,176,308	275	87	277
1870	3,221,394	973	302	295
1871	3,267,251	7,912	2,421	688
1872	3,319,736	1,786	537	708
1873	3,373,065	113	33	676
1874	3,427,250	57	16	661
1875	3,482,306	46	12	602
1876	3,538,246	736	207	161
1877	3,595,085	2,551	709	194
1878	3,652,837	1,417	387	266
1879	3,711,517	450	120	287
1880	3,771,139	471	124	309
1881	3,824,964	2,367	617	391
1882	3,862,876	430	110	271
1883	3,901,164	136	34	201
1884	3,939,832	1,236	307	238
1885	3,978,883	1,419	347	283
1886	4,018,321	24	5	160
1887	4,058,150	9	2	139
1888	4,098,374	9	2	132
1889	4,138,996	—	—	71
1890	4,180,021	4	1	2
1891	4,221,452	8	2	1.4
1892	4,263,294	41	10	3
1893	4,306,411	206	48	12
1894	4,349,166	89	22	16
1895	4,392,346	55	13	19
1896	4,421,955	9	2	19
1897	4,463,169	16	4	18
1898	4,504,766	1	0.2	5.4

**Staff Illness in the Fever and Smallpox Hospitals.**

(7.) On pp. 35-38 is a summary of the returns submitted by the medical superintendents of the several hospitals, showing the total number of members of the staff who were off duty during the year on account of illness.



No.	DISEASE		SYMPTOMS	NATURE OF LESION
	Male	Female		
1	...	...	...	...
2	...	...	...	...
3	...	...	...	...
4	...	...	...	...
5	...	...	...	...
6	...	...	...	...
7	...	...	...	...
8	...	...	...	...
9	...	...	...	...
10	...	...	...	...
11	...	...	...	...
12	...	...	...	...
13	...	...	...	...
14	...	...	...	...
15	...	...	...	...
16	...	...	...	...
17	...	...	...	...
18	...	...	...	...
19	...	...	...	...
20	...	...	...	...
21	...	...	...	...
22	...	...	...	...
23	...	...	...	...
24	...	...	...	...
25	...	...	...	...
26	...	...	...	...
27	...	...	...	...
28	...	...	...	...
29	...	...	...	...
30	...	...	...	...
31	...	...	...	...
32	...	...	...	...
33	...	...	...	...
34	...	...	...	...
35	...	...	...	...
36	...	...	...	...
37	...	...	...	...
38	...	...	...	...
39	...	...	...	...
40	...	...	...	...
41	...	...	...	...
42	...	...	...	...
43	...	...	...	...
44	...	...	...	...
45	...	...	...	...
46	...	...	...	...
47	...	...	...	...
48	...	...	...	...
49	...	...	...	...
50	...	...	...	...

There were 4,192 (4,064)\* persons employed at the fever hospitals during the course of the year (including those employed at the Gore Farm Hospital), of whom 212 (201), or 5·0 (4·8) per cent., fell ill with fever or diphtheria, and 3 (1) died; while 1,237 (989), or 29·5 (24·1) per cent., suffered from other forms of illness.

The table also shows that 137 (154) persons were employed on the hospital ships during the year, none of whom contracted smallpox, but 10 (23), or 7·3 (14·9) per cent., suffered from other diseases.

In our report for the year 1892 we pointed out that nurses and other members of a hospital staff could be brought with almost absolute impunity into contact with smallpox, provided they were properly protected by vaccination; and the evidence of each succeeding year has confirmed us in that opinion.

(8.) We submit a table showing the average daily number of patients under treatment at the several hospitals and the average daily number of staff employed during 1898, and the respective proportions of nursing staff and total staff to patients.

At the hospitals for acute cases the proportion varied from one nurse to 3·5 (3·2) at the Eastern Hospital and 3·5 (4·0) at the North-Western Hospital to one nurse to 2·6 patients at the Park Hospital, and the total staff at the two former hospitals was as one to 1·5 (1·6) and 1·0 (1·9) patients respectively, and at the latter hospital as one to 1·3.

At the Northern Convalescent Hospital one nurse sufficed for 6·3 (7·6) patients—the total staff being as one to 2·2 (2·8); whereas, at the Gore Farm Hospital the proportion was one nurse to 4·0 (5·4) patients, and the total staff as one to 1·3 (1·7) patients.

*Table showing the Average Daily Number of Patients under treatment and Average Daily Number of Staff employed at each of the Board's Fever Hospitals during the year 1898, and the respective proportions of Nursing Staff and total Staff to Patients.*

HOSPITAL.	Average daily number of Patients.	Average daily number of Staff employed.				Proportion of Nursing Staff to Patients.		Proportion of Total Staff to Patients.	
		Medical.	Nursing.	Other Staff.	Total Staff.	Staff.	Patients.	Staff.	Patients.
Eastern Hospital ...	324	5	94	118	217	1	3·5	1	1·5
North-Eastern Hospital ...	297	4	104	123	231	1	2·8	1	1·3
North-Western ,, ...	371	4	105	140	249	1	3·5	1	1·0
Western ,, ...	330	4	107	108	219	1	3·0	1	1·5
South-Western ,, ...	249	5	88	122	215	1	2·8	1	1·1
Fountain ,, ...	297	4	94	99	197	1	3·1	1	1·5
South-Eastern ,, ...	325	5	109	120	234	1	2·9	1	1·4
Park ,, ...	326	4	123	121	248	1	2·6	1	1·3
Brook ,, ...	431	6	147	170	323	1	2·8	1	1·3
Convalescent Hospitals:—									
Northern Hospital ...	532	3	84	147	234	1	6·3	1	2·2
Gore Farm ,, ...	364	3	90	190	283	1	4·0	1	1·3

\* Italic figures in brackets throughout are the corresponding figures for 1897.

## iii. IMBECILITY.

**Accommodation for Imbeciles.**

(1.) At the present time the Managers possess the following accommodation for imbecile patients:—

	Males.	Females.	Total.
<b>ADULTS—</b>			
Leavesden Asylum ... ..	900	1,100	2,000
Caterham ,, ... ..	945	1,100	2,045
Darenth ,, ... ..	450	602	1,052
	2,295	2,802	5,097
<b>CHILDREN—</b>			
Darenth Schools and } Pavilions* ... .. }	...	...	1,000
			6,097

This accommodation is no longer sufficient for the requirements of the Metropolis. Arrangements are now in progress for the erection on a site at Tooting Bec of an asylum infirmary, with 750 beds.

**Asylum Statistics.**

(2.) The reports of the medical superintendents of the asylums for adult imbeciles and of the schools for imbecile children will be found on pp. 108-141.

The annual figures for the combined imbecile establishments are as under:—

	Asylums.			Schools.			Grand Totals.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
On January 1st, 1898, the several Asylums and Schools contained ... ..	2,278	2,744	5,022	636	341	977	2,914	3,085	5,999
There were admitted during the year from the several Parishes and Unions (including re-admissions)	199	255	454	61	34	95	260	289	549
Transferred ... ..	19	25	44	...	...	...	19	25	44
The total number under treatment being ... ..	2,496	3,024	5,520	697	375	1,072	3,193	3,399	6,592
Of that number there were Discharged... ..	59	53	112	21	6	27	80	59	139
Transferred ... ..	...	...	...	19	25	44	19	25	44
And there died ... ..	175	201	376	27	15	42	202	216	418
	234	254	488	67	46	113	301	300	601
Leaving under treatment on December 31st, 1898 ...	2,262	2,770	5,032	630	329	959	2,892	3,099	5,991

The total number remaining under treatment in the asylums and

\* The pavilions accommodate a number of patients over 16 years of age who have been transferred thereto from the schools.

schools at the end of 1898 showed a decrease of 8 as compared with the number at the end of 1897.

*Tables I. to XIII.* are summaries of the separate tables for the three adult asylums given on pp. 117 to 140.

ADULT IMBECILES.—*Table I.* (p. 118) show admissions, re-admissions, discharges, and deaths for the year 1898.

Of the admissions, 448 (387)\* were admitted for the first time, 6 (3), were re-admissions, and 44 (57) were patients transferred from the imbecile schools.

Of the patients discharged, 5 (2) were not insane, 36 (18) had recovered, 17 (20) had improved, and 54 (45) had not improved.

The number of patients who died was 376 (358).

The average number resident was 5,016 (5,025); the highest number resident on any one day was 5,057 (5,059); and the lowest number was 4,977 (4,977).

*Table II.* (p. 118) shows admissions, re-admissions, discharges, transfers, and deaths since the opening of the first asylum in September, 1870, up to the end of 1898. The total admissions during this period of over 28 years were 19,811, of whom 17,937 were admitted for the first time, 151 were re-admissions, and 1,723 were transfers from one asylum to another. This latter number does not balance with the transfers shown amongst the discharges, as it includes a number of patients received from Hampstead Asylum when it was closed in 1876, as well as a number of children over 16 years of age received from the imbecile schools. Of the discharges, 47 were not insane, 854 had recovered, 1,067 had improved, 1,199 had not improved, and 370 were transfers from one asylum to another. The deaths numbered 11,242.

*Table III.* (p. 119) shows the admissions, discharges, transfers, and deaths, with the mean annual mortality and proportion of recoveries per cent. of the admissions, for the year 1889, and for each subsequent year.

The total percentage of recoveries during the past year was 9.9 (4.0), and the percentage of deaths on the average daily number resident was 7.5 (7.1).

*Table IV.* (p. 121) gives the classification, under the usual denominations of mental disease, of the mental condition of the patients admitted during the year 1898, and *Table V.* that of the patients resident on the last day of that year. Of the total number of 5,032 (5,022) resident, 1,440 (1,389) are classified as suffering from imbecility, 1,390 (1,232) from

\* Italic figures in brackets throughout are the corresponding figures for 1897.

dementia, 583 (638)\* from dementia and epilepsy, 415 (458) from imbecility and epilepsy, 292 (275) from chronic mania, 278 (266) from idiocy, 169 (198) from senile dementia, and 130 (160) from melancholia.

*Table VI.* (p. 124) is intended to show the causation of the insanity of the patients admitted during the year. The information it affords has not been obtained entirely from the formal certificates of admission, but has been supplemented and corrected by information elicited from the relatives or friends when visiting the patients.

*Table VII.* (p. 127) shows the causes of death during the year 1898, together with the ages of the decedents, calculated from the ages stated in the orders of admission.

There were 376 (358) deaths during the year, 24 (46) having been caused by dementia and exhaustion, 58 (50) by heart disease, 26 (24) by epilepsy, 78 (11) by phthisis, 17 (24) by pneumonia, and 70 (53) by senile decay.

*Table VIII.* (p. 131) shows the history of the annual admissions since the opening of the asylums, with the discharges and deaths, and the numbers of each year's admissions remaining on December 31st, 1898.

Of the 498 (447) patients admitted during the year 1898, 12 (6) had at the close of the year been discharged as recovered, 7 (6) as improved, and 19 (9) as not improved, and 24 (36) had died.

Of the 5,032 patients remaining under treatment, 2,260 had been resident over ten years.

*Table IX.* (p. 134) shows the length of residence of those discharged as recovered and of those who have died during the year 1898.

Of the 376 (358) deaths, 63 (71) were of patients who had been resident upwards of 20 years.

*Table X.* (p. 133) shows the age of patients resident on December 31st, 1889, and on the same day in each subsequent year, calculated from the ages stated on the orders of admission.

Of the 5,032 (5,022) patients remaining on December 31st, 1898, 1,847 (1,838) were over 50 years of age, 6 (4) being over 90 years.

*Table XI.* (p. 136) shows the ages of the patients admitted, discharged, and dying during the year 1898, calculated from the ages stated on the orders of admission.

Of the 454 (390) patients admitted direct from the parishes and unions, 56 (47) were upwards of 70 years of age.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

The total discharges numbered 112 (85).\*

The total deaths numbered 376 (358), of whom 280 (266) were upwards of 40 years of age, and 95 (91) upwards of 70 years.

*Table XII.* (p. 137) shows the departments where patients were employed on December 31st, 1898. Out of a total of 2,262 (2,278) males, 842 (857), and out of 2,770 (2,744) females, 888 (856) were usefully employed in and about the asylums.

*Table XIII.* (p. 139) shows the occupations previous to admission, and condition as to marriage, of the patients admitted during the year 1898.

Of the 218 (253) males admitted, 30 (48) were described as labourers, 53 (57) had no settled occupation, and of 40 (41) the occupation was unknown; 147 (146) were stated to be single, 38 (42) married, 23 (34) widowers, and as regards 10 (31) the condition as to marriage was unknown.

Of the 280 (194) females, 35 (23) were servants, 16 (11) charwomen, 84 (80) were without settled occupations, and of 78 (41) the occupation was unknown; 163 (95) were stated to be single, 41 (36) to be married, 71 (39) widows, and in 5 (24) cases the condition as to marriage was unknown.

IMBECILE CHILDREN.—The whole of the patients under treatment at the Darenth Schools and Pavilions being under one administration, there is no occasion for us to summarise the statistics, which will be found attached to the report of the Medical Superintendent, Dr. Taylor, pp. 141 to 150.

#### iv. TRAINING SHIP "EXMOUTH."

**Statistics.** The number of boys admitted during the year was 323 (325) (including 45 (34) who were admitted from extra-metropolitan parishes and unions), while the number discharged was 306 (298).

Of the latter number, 123 (129) entered the royal navy, 112 (112) the mercantile marine, 32 (28) the army as musicians, and 39 (29) were returned to their respective parishes and unions. There was 1 (2) death.

At the end of the year there remained 563 (547) boys under training, of whom 63 (39) were chargeable to extra-metropolitan districts.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

## v. GENERAL SUMMARY.

In conclusion, the Committee submit the following brief summary of the number of persons who have been under the care of the Managers in their several institutions since the opening of the first hospital in 1870 :—

NUMBER OF PERSONS. (Re-admissions are not included.)	Admitted direct from Homes or Parishes and Unions.	Remaining in the various Institutions, Dec. 31st, 1898.
Fever Patients (including 218 cases of relapsing fever treated in 1870) ... }	197,676	4,377
Smallpox Patients... ..	63,513	Nil.
Imbeciles ... ..	22,103	5,991
Boys on Training Ship "Exmouth" ... ..	6,851	563
Children at Homes... ..	278	167
Totals ... ..	290,421	11,098

## vi. MEDICAL SUPPLEMENT.

In continuance of the arrangement begun in 1896, there will be found at the end of this volume a Medical Supplement, edited by two of the Board's medical superintendents (Dr. E. W. Goodall and Dr. F. M. Turner), who have been appointed for that purpose by their colleagues. In this supplement there are included, in the first place, reports based on the records of the fever hospitals for 1898, dealing with the following subjects of a medical rather than of a general statistical nature :—

1. Complications and co-existent infectious diseases.
2. Post-scarlatinal diphtheria.
3. Antitoxin treatment of diphtheria.

There are also included papers by members of the Managers' medical staff on various subjects of interest in connection with the treatment of infectious disease. We think that the publication of these papers will not be without value in making generally available to the medical profession the vast stores of experience accumulated in our hospitals, and will, at the same time, tend to keep the hospitals themselves constantly on the watch for further possibilities of improvement.

(Signed) N. A. JEPHSON,  
*Chairman.*

## APPENDIX I.—INFECTIOUS DISEASES.

i. REPORT OF THE AMBULANCE COMMITTEE FOR  
THE YEAR 1898.

16th January, 1899.

**Prevalence  
of Infectious  
Diseases  
during 1898.**

In submitting our annual report, we desire, in the first place, to draw attention to the prevalence in the Metropolis during the past year, as compared with the immediately preceding year, of the infectious diseases with which the Managers are most concerned, namely, smallpox, scarlet, enteric, and typhus fevers, and diphtheria.

Of smallpox 32 (104)\* cases were notified, of scarlet fever 16,894 (22,848), of enteric fever 3,024 (3,103), of typhus fever 16 (4), and of diphtheria (including membranous croup) 11,855 (13,192).

The percentage of these cases removed to the Managers' hospitals was, as regards scarlet fever, 74.07 (66.9), enteric fever 36.9 (30.3), typhus fever 87.5 (50.0), and diphtheria 62.4 (51.6). All notified cases of smallpox were sent to the South Wharf, although only six cases were sent on to the hospital ships. No correction has been made in the foregoing figures for mistakes in diagnosis. It will be observed that the percentage of hospital admissions of each disease continues to increase.

133 cases of enteric fever were sent into the general hospitals. If they could have been received into the Managers' hospitals, the percentage of admissions of this disease would have been raised to 41.3.

**Hospital  
accommo-  
dation.**

In our last report we anticipated that the Grove Hospital at Tooting and the additional wards for diphtheria cases at the Western Hospital would be completed and brought into use during the past year.

Our anticipation has not been realised so far as the Grove Hospital is concerned. But the new wards at the Western Hospital were opened for the reception of patients in October, and proved of the greatest service. Without them it is very probable the Managers would have been compelled to again refuse admission to some patients. Indeed, before the new wards were quite ready for use all the available accommodation for diphtheria cases was exhausted, and the removal of a few patients was delayed. It will, however, be satisfactory to the Managers to know that in no instance was admission ultimately refused.

By a resolution of the Managers, passed on April 10th, 1897, we were instructed to report to the General Purposes Committee from time to time whenever, in our opinion, the incidence of infectious disease in the Metropolis might necessitate the re-allocation and re-appropriation of beds in the several fever hospitals of the Board; and the General Purposes Committee were empowered to take such action

\* Italic figures in brackets throughout are the corresponding figures for 1897.

thereon as they might deem necessary under the circumstances. With the view of facilitating the action of the last-named committee at the proper time, we, at the beginning of the year, advised that committee to instruct the committees of management of the several fever hospitals where cleaning and repairing works were in progress to keep one or more of the last wards cleaned unappropriated and at the disposal of the committee.

Subsequently, from time to time, we advised the committee as to the appropriation of these wards, as also of others which had to be specially disinfected.

By these means, by the opening of the new diphtheria wards at the Western Hospital, by placing additional beds in certain wards at the Park Hospital, and by bringing into use two new scarlet fever wards at the South-Western Hospital, the Managers were able to increase the number of diphtheria beds from 1,080, the highest at which it stood in 1897, to 1,319, and the enteric beds from 188 to 317. The scarlet fever beds were reduced from 3,886 in 1897 to 3,810.

### LAND SERVICE.

**Ambulance Stations.** The third of the new ambulance stations—namely, the South-Western—commenced work on May 2nd, 1898. The Managers now possess six stations, which provide a total accommodation for 138 men, 150 horses (including 45 which could be accommodated in coachhouses capable of use as stables), and 147 vehicles, besides quarters for the superintendents and housekeepers and the domestic servants, and for nurses employed on smallpox duty. We believe that these stations will probably be found sufficient to meet all demands which may be made on the ambulance service for some years to come.

**Work of the Stations.** Appendices A and B show the work performed by the six stations during the past year.

The following table briefly summarises the year's work of each station :—

STATION.	Number of Removals.	Number of Journeys.	Miles Run by Vehicles.
Eastern ... ..	6,971	4,586	37,542
North-Western ... ..	5,329	3,509	26,503
Western ... ..	7,887	4,564	43,153
South-Western (opened May 2nd)	2,756	2,208	20,355
South-Eastern ... ..	8,060	5,328	57,041
Brook ... ..	4,040	2,925	30,083
Totals ... ..	35,043	23,120	214,677

The following were the greatest numbers of patients removed to hospital in a single day by the several stations :—Eastern Station, on October 10th, 34 (*32*)\* patients; North-Western Station, on November 7th, 18 (*24*) patients; Western Station, on February 15th, 31 (*40*) patients; South-Western Station, on November

\* Italic figures in brackets throughout are the corresponding figures for 1897.

7th, 29 patients; South-Eastern Station, on September 5th, 27 (39)\* patients; and Brook Station, on October 22nd, 22 (23) patients.

The heaviest week's work was, for the Eastern Station, that ended on October 15th, when 179 (381) removals (including transfers, &c.) were effected, and 1,037 (2,175) miles were travelled; for the North-Western Station, that ended on November 12th, when 86 (101) removals were effected, and 912 (1,002) miles were travelled; for the Western Station, that ended on January 29th, when 219 (322) removals were effected, and 1,284 (2,033) miles were travelled; for the South-Western Station, that ended on November 12th, when 89 removals were effected, and 964 miles were travelled; for the South-Eastern Station, that ended on October 29th, when 200 (363) removals were effected, and 1,462 (2,279) miles were travelled; and for the Brook Station, that ended on October 22nd, when 102 (164) removals were effected, and 1,114 (1,323) miles were travelled.

It may be interesting to state the average length of the journey at the different ambulance stations:—

	Removals from Home.	Transfers.	Average of every kind of Journey.
	Miles.	Miles.	Miles.
Eastern ... ..	7·4	18·0	8·1
North-Western ... ..	6·7	18·0	7·5
Western ... ..	7·9	28·6	9·4
South-Western ... ..	8·5	21·9	9·2
South-Eastern ... ..	9·8	19·7	10·7
Brook ... ..	9·3	28·5	10·2

Also, that whilst in the case of a "removal from home" one patient is, as a rule, taken; in the case of a "transfer" the number of patients conveyed would appear to be, at the

Eastern,	about 9	South-Western,	about 6
North-Western,	„ 10	South-Eastern,	„ 6
Western,	„ 10	Brook,	„ 10

**Staff.** The health of the staff, both male and female, has on the whole been well maintained. At the Eastern Station 9 (19) members have been off duty, one of whom suffered from diphtheria, and others with minor disorders, involving in the aggregate a loss of service of 74 (118) days. At the North-Western Station 8 (1) members have been off duty for an aggregate of 72 (6) days. At the Western Station 7 (9) persons were off duty for an aggregate of 116 (94) days. At the South-Western Station 3 persons were off duty for an aggregate of 37 days. At the South-Eastern Station 4 (4) persons were off duty for a total of 44 (13) days. At the Brook Station 9 (11) persons were off duty for an aggregate of 131 (89) days.

There were 50 (39) resignations, 14 (7) discharges, and 69 (55) appointments of the staff during the year; three persons left without notice, and nine persons were transferred from one station to another.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

**Removals to the Managers' Hospitals.** On reference to Appendix A it will be seen that the total number of fever patients removed to the Managers' hospitals during the year was 20,923 (22,795)\*. The removals of smallpox patients numbered 36 (121).

The average daily removals of fever patients in the first six months of the year was 51 (51), and during the last six months 63 (74). During the two months October and November the daily average was as high as 76, and on the 10th October no fewer than 127 patients were removed from their homes to the Managers' hospitals.

The aggregate removals during the year, including the transfer of patients from one hospital to another, numbered 35,043 (42,758).

**Smallpox Patients admitted.** Thirty-six† patients certified as suffering from smallpox were received at South Wharf from 17 out of the 30 poor law districts in the Metropolis. The monthly removals were as follow:—

January ... ..	2	July ... ..	3
February ... ..	5	August ... ..	5
March ... ..	6	September ... ..	1
April ... ..	5	October ... ..	2
May ... ..	3	November ... ..	—
June ... ..	3	December ... ..	1

In only 6‡ cases was the diagnosis confirmed by the medical officers who inspected the patients at the wharves.

**Non-Smallpox Cases.** All of the 30 (48) patients who were, in the opinion of those officers, not suffering from smallpox were returned to their homes, except two, who were taken to a fever hospital.

**Fever Patients.** At the commencement of the year there were 4,668 (4,540) patients in the Managers' fever hospitals, distributed as follows:—

Hospital.	Scarlet.	Diphtheria.	Typhus.	Enteric.	Other Diseases.	Total.
Eastern Hospital ...	96	230	—	18	—	344
North-Eastern Hospital	358	—	—	—	—	358
North-Western Hospital	288	84	—	28	1	401
Western Hospital ...	221	101	—	9	—	331
South-Western Hospital	201	88	—	13	—	302
Fountain Hospital ...	246	118	—	—	—	364
South-Eastern Hospital	238	129	—	30	—	397
Park Hospital ... ..	195	43	—	—	—	238
Brook Hospital ... ..	334	147	—	16	—	497
Northern Hospital ...	786	80	—	—	—	866
Gore Farm Hospital ...	570	—	—	—	—	570
Totals ... ..	3,533	1,020	—	114	1	4,668

\* Italic figures in brackets throughout are the corresponding figures for 1897.

† Notifications in respect of four of these cases do not appear to have reached the medical officers of health.

‡ Including one case found on further examination after admission to the hospital ships not to be smallpox.

The number under treatment fell to the minimum 3,120 (3,136)\* for the year by May 28th; after this date the number rose slowly during June and up to July 26th, when the number stood at 3,462, it then again declined to 3,154 on August 27th, after which date it continuously rose until it attained the maximum, 4,745 (5,023) for the year on November 21st.

**Patients conveyed to other places than the Managers' Hospitals.** Under the powers conferred by section 79 (3) of the "Public Health (London) Act, 1891," 326 (361) persons suffering from dangerous infectious disorders were conveyed in the Managers' ambulances during the year 1898. Of these 52 (16) were stated to have measles, 50 (69) scarlet fever, 120 (134) enteric fever, 42 (72) diphtheria, 56 (61) erysipelas, 3 (5) puerperal fever, 1 membranous croup, 1 chickenpox, and 1 hip disease.†

The total sum received by the Managers under this section of the Act during 1898 was £103 16s. (£108 7s. 6d.), of which £22 7s. 6d. (£24 12s. 6d.) was in respect of the services of nurses. In a considerable number of cases payment was remitted on account of the want of means of the patients.

#### RIVER SERVICE.

**Steamers.** The three ambulance steamboats—"Maltese Cross," "Albert Victor," and "Geneva Cross"—and the ambulance steam launch "White Cross" have been maintained in working order. The latter vessel being capable of accommodating a few recumbent patients, we came to the conclusion that one of the large steamboats ought to be dispensed with, and the Managers in the course of the year, on our recommendation, sold the "Red Cross."

The distance run collectively by the steamers was 3,966·5 (6,221) miles, and they conveyed 955 (1,233) patients and other passengers, and 52 tons 18 cwts. (69 tons 5 cwts.) of stores, &c., to and from the hospital ships at Long Reach (see Appendix C, p. 53).

As in former years, several barges and other craft have come into collision with the Managers' steamers while lying at their moorings. The damage sustained has been in every instance made thoroughly good, and the total amount recovered in respect thereof during the year was £55 17s. 6d. (£1,366 10s. 11d.), making a total of £4,043 14s. 6d. recovered since 1885, in which year the present system of insurance against damage of all kinds, without the usual restrictive clauses, was first adopted.

**Wharves.** The wharves and piers, and the houses and other buildings in connection therewith, at Fulham, Rotherhithe, and Blackwall continue to be maintained in a satisfactory state of repair.

**Staff.** There have been 2 (8) discharges on reduction of the staff, and 3 resignations and 3 appointments during the year.

\* Italic figures in brackets throughout are the corresponding figures for 1897.

† This was a case of a patient discharged from the Gore Farm Hospital and certified the next day for admission into a general hospital.

## APPENDIX I.—INFECTIOUS DISEASES.

## COST OF AMBULANCE SERVICES.

The total expenditure during the year ended at Michaelmas last is as under:—

	Ordinary.	Special.	Total.
	£ s. d.	£ s. d.	£ s. d.
For the Eastern Station ... ..	4,451 0 9	Nil	4,451 0 9
„ North-Western Station ... ..	3,375 0 7	...	3,375 0 7
„ Western Station ... ..	4,395 17 1	...	4,395 17 1
„ South - Western Station } (opened May 2nd, 1898)	1,480 15 1	1,200 0 0	2,680 15 1
„ South-Eastern Station ... ..	5,102 6 2	...	5,102 6 2
„ Brook Station ... ..	3,342 11 7	...	3,342 11 7
	<u>22,147 11 3</u>	<u>1,200 0 0</u>	<u>23,347 11 3</u>
River Service ... ..	4,840 13 6	1,415 6 2	6,255 19 8
„ Medical Department ... ..	1,135 7 6	Nil	1,135 7 6
	<u>£5,976 1 0</u>	<u>£1,415 6 2</u>	<u>£7,391 7 2</u>

## Expenditure out of "Loan Account"—

	£ s. d.
North-Western Station—On account of erection of station	1,521 14 6
River Service—On account of erection of shelter at South Wharf... ..	705 14 0
Ditto On account of construction of new ambulance steam launch "White Cross" ... ..	272 15 9
South-Western Station—On account of erection of station	4,729 7 6
	<u>£7,229 11 9</u>

With regard to the ambulance nurses, who have, as in previous years, been drawn from the hospitals in proximity to the ambulance stations, it may be mentioned that, for purposes of account and comparison as between the different institutions of the Board, the cost of their services has been assumed to be fairly represented by a fixed charge of 2s. 6d. per journey, and in the aggregate these charges amount to no less a sum than £2,819 (*£3,029 12s. 6d.*)\* for the past year.

(Signed) JACKSON HUNT,  
*Chairman of the Committee.*

\* Italic figures in brackets throughout are the corresponding figures for 1897.

APPENDIX A.—LAND AMBULANCE SERVICE.

*Number of Patients removed by the Ambulances of the Board.*

	From 1881 to 1891	1892	1893	1894	1895	1896	1897	1898	TOTALS.
<b>FEVER :—</b>									
From homes to Hospitals ...	42,848	16,118	18,496	16,573	16,725	22,152	22,795	20,923	176,630
Convalescents to Northern and other Hospitals ...	11,879	7,682	6,813	5,159	5,037	9,998	8,941	6,437	61,946
Recovered cases from Northern Hospital to Town Hospitals for discharge ...	10,460	4,572	5,670	4,090	4,464	5,899	5,259	4,226	44,640
Recovered cases discharged from Northern Hospital conveyed from Eastern and Western Hospitals to South- Eastern Hospital ...	...	100	60	221	82	154	111	1	729
Recovered cases from Gore Farm Hospital to Town Hospitals for discharge ...	446	2,205	1,536	1,375	...	3,629	3,658	2,445	15,294
Recovered cases from Gore Farm Hospital conveyed from the South-Eastern and the South-Western Hospitals to other Hospitals	..	183	126	112	...	31	181	125	758
Other transfers between Hos- pitals... ..	...	...	...	7	61	1	10	2	81
From Hospitals to homes ...	*2,818	220	279	251	256	377	350	317	4,868
From General Hospitals to homes, owing to want of room in the Managers' Hospitals ... ..	...	...	468	143	724	1,287	752	71	3,445
Enteric Fever cases from homes to General Hospitals ...	...	...	170	216	241	109	186	133	1,055
<b>Total Fever Patients ...</b>	<b>68,451</b>	<b>31,080</b>	<b>33,618</b>	<b>28,147</b>	<b>27,590</b>	<b>43,637</b>	<b>42,243</b>	<b>34,680</b>	<b>309,446</b>
<b>SMALLPOX :—</b>									
From homes to Hospitals and Wharves ... ..	14,070	306	2,389	1,186	1,045	265	121	36	19,418
From Hospitals to Wharves...	4,953	200	331	8	...	...	...	...	5,492
Other transfers between Hos- pitals ... ..	...	5	1	1	3	...	...	...	10
From Hospitals and Wharves to homes ... ..	10,358	10	44	77	77	39	33	1	10,639
<b>Total Smallpox Patients ...</b>	<b>29,381</b>	<b>521</b>	<b>2,765</b>	<b>1,272</b>	<b>1,125</b>	<b>304</b>	<b>154</b>	<b>37</b>	<b>35,559</b>
Conveyance of Patients to other places than the Mana- gers' Hospitals ... ..	256	432	593	269	326	433	361	326	2,996
<b>Grand Totals ... ..</b>	<b>98,088</b>	<b>32,033</b>	<b>36,976</b>	<b>29,688</b>	<b>29,041</b>	<b>44,374</b>	<b>42,758</b>	<b>35,043</b>	<b>348,001</b>

\* Includes some smallpox cases.

The use of the Managers' ambulances for the general conveyance of the infectious sick was not authorised until November 30th, 1889.

## APPENDIX B.—LAND AMBULANCE SERVICE—(continued).

Return of Work for the Twelve Months ended December 31st, 1898.

PARTICULARS OF WORK.	Number of Journeys.	MILES RUN.				
		By Horses.				By Vehicles.
		1	2	3	4	
<b>REMOVALS FROM HOME—</b>						
To the Board's Hospitals—						
Fever Patients ... ..	19,723	163,050	580	...	...	163,630
Smallpox Patients... ..	...	...	...	...	...	...
To the Board's Wharves—						
Smallpox Patients... ..	33	405	...	...	...	405
To General Hospitals—						
Enteric Patients ... ..	129	1,368	...	...	...	1,368
<b>OTHER REMOVALS—</b>						
From General Hospitals to homes owing to want of room in the Board's Hospitals	71	736	...	...	...	736
Non-Smallpox Patients returned home ... ..	22	212	...	...	...	212
Other Patients returned home...	42	338	...	...	...	338
Patients sent for, but for various causes not removed ...	454	3,134	...	...	...	3,134
Patients' friends taken from home to Hospital ... ..	7	64	...	...	...	64
Patients' friends taken from Hospital to home ... ..	8	83	...	...	...	83
<b>TRANSFERS BETWEEN HOSPITALS—</b>						
Fever Patients to and from Northern Hospital... ..	845	3,084	16,058	...	...	19,142
Fever Patients to and from Gore Farm Hospital ..	735	12	15,478	33	...	15,523
Other transfers between Hospitals ... ..	38	420	91	...	...	511
<b>RECOVERED PATIENTS TAKEN HOME—</b>						
From Fever Hospitals ... ..	287	2,546	41	...	...	2,587
From Wharves:—Smallpox ...	1	22	...	...	...	22
Service requirements ... ..	393	3,683	25	...	...	3,676
Conveyance of Ambulance Committee ... ..	4	5	22	...	...	27
Conveyance of other Committee ..	2	...	22	...	...	22
	22,794	179,162	32,317	33	...	211,480
Conveyance of Patients to other places than Managers' Hospitals (private removals) ... ..	326	3,093	104	...	...	3,197
Totals for 1898 ... ..	23,120	182,255	32,421	33	...	214,677
Totals for 1897 ... ..	26,055	231,143	39,417	810	41	271,411
Totals for 1896 ... ..	26,646	249,376	46,792	337	301	296,792
Totals for 1895 ... ..	19,963	189,360	23,004	...	...	212,364
Totals for 1894 ... ..	19,796	176,602	26,918	72	228	203,820
Totals for 1893 ... ..	24,017	214,884	30,186	...	241	245,311
Totals for 1892 ... ..	17,607	147,606	27,497	...	3,535	178,638
Totals for 1891 ... ..	8,254	66,129	12,958	...	791	79,873
Totals for 1890 ... ..	8,644	67,443	14,167	415	2,405	84,422
Totals for 1889 ... ..	5,594	40,957	6,276	232	881	48,346
Totals for 1888 ... ..	5,550	34,842	12,767	...	1,910	49,519
Totals for 1887 ... ..	6,507	51,894	5,223	...	1,009	58,126
Totals for 1886 ... ..	2,073	13,578	1,980	...	...	15,558
<b>Grand Totals</b> ... ..	193,826	1,666,069*	279,606	1,899	11,342	1,958,858

\* Includes 58 miles by mounted messengers.

APPENDIX C.—RIVER SERVICE.

*Number of Patients, Visitors, Staff, &c., conveyed to and from the Hospital Ships during the year 1898.*

MONTH.	Patients conveyed to Hospital Ships.	Recovered cases conveyed from Hospital Ships.	Visitors conveyed to and from Hospital Ships (including Managers).	Staff, &c., conveyed to and from Hospital Ships.	Totals.
January ... ..	...	...	...	52	52
February ... ..	1	...	...	55	56
March ... ..	1	1	2	57	61
April ... ..	...	...	...	68	68
May ... ..	..	...	...	79	79
June ... ..	1	1	...	82	84
July ... ..	...	...	...	79	79
August ... ..	2	...	3	90	95
September ... ..	1	2	...	80	83
October ... ..	...	1	...	108	109
November ... ..	...	...	...	76	76
December ... ..	...	...	2	111	113
Totals for 1898 ... ..	6	5	7	937	955
Totals for 1897 ... ..	69	55	132	1,027	1,283
Totals for 1896 ... ..	188	243	153	1,815	2,399
Totals for 1895 ... ..	925	792	862	2,372	4,951
Totals for 1894 ... ..	1,101	1,009	1,762	3,742	7,614
Totals for 1893 ... ..	2,364	2,053	2,195	4,040	10,652
Totals for 1892 ... ..	298	235	121	735	1,389
Totals for 1891 ... ..	63	53	155	503	774
Totals for 1890 ... ..	26	25	38	339	428
Totals for 1889 ... ..	5	4	51	445	505
Totals for 1888 ... ..	62	63	246	476	847
Totals for 1887 ... ..	54	45	395	478	972
Totals for 1886 ... ..	130	145	458	*3,929	4,662
Totals for 1885 ... ..	5,468	5,809	†	†	11,277
Totals for 1884 ... ..	5,592	4,267	†	†	9,859
Grand Totals ... ..	16,351	14,803	6,575	20,838	58,567

STEAMERS.

STEAMER.	Fires alight.		Under Steam.		Under Way.		Coal consumed.		Number of days when steam raised.	Distance run. Miles.
	Hours.	Mins.	Hours.	Mins.	Hours.	Mins.	Tons.	Cwt.		
" Albert Victor " ...	294	50	180	50	51	34	30	11	35	544
" Geneva Cross " ...	329	15	226	15	29	11	33	16	29	275½
" Maltese Cross " ...	270	53	165	18	40	29	30	...	32	377
" White Cross " ...	704	...	437	30	235	32	18	10	80	2,616
" Red Cross " ...	127	...	70	30	15	32	5	...	15	154
Totals ...	1,725	58	1,080	23	372	18	117	17	191	3,966½

*Quantity of Stores, Parcels, &c., conveyed to and from the Hospital Ships.*

Number, 1,312. Weight, 52 tons 18 cwt. 8 lbs.

\* Included in this number is the number of contractors' workmen who were engaged on building and other work in connection with the hospital ships, and who were conveyed to and from Long Reach each week.

† No figures were given in the Committee's Report for 1884 and 1885.

ii. REPORTS OF THE MEDICAL SUPERINTENDENTS  
OF THE SEVERAL FEVER HOSPITALS FOR THE  
YEAR 1898.

(For Statistical Tables, see pp. 64 to 89.)

[*N.B.*—*Those portions of the reports relating to alterations to buildings and other matters of no general interest have been omitted.*]

No. 1.

EASTERN HOSPITAL.

HOMERTON, N.E.,

January 31st, 1899.

**Statistics.** During the year 2,829 patients have been under treatment. Of these, 1,581 have been discharged recovered, 655 have been transferred to other hospitals of the Board, and 289 have died, leaving 304 under treatment. The percentage mortality is 11·53.

The number of scarlet fever cases under treatment has been 938. Of these, 423 were discharged, 376 were transferred to the Northern Convalescent Hospital, 36 died, and 103 remained at the end of the year. The percentage mortality is 4·36. Two of the cases were fatal from measles complicating scarlet fever.

There were eight cases of secondary or post-scarlatinal diphtheria, none of which proved fatal. This is the first year during which no death has occurred amongst the post-scarlatinal diphtheria cases. For this result the use of antitoxin is not solely responsible, since it will be observed (see Medical Supplement, p. 156) that only two of the patients were under five years of age. One or more cases occurred in four out of the seven wards set aside for scarlet fever. There were 14 cases of other forms of secondary sore throat.

The number of cases of diphtheria under treatment was 1,459. Of these, 817 were discharged recovered, 279 were transferred, 205 died, and 158 remained at the end of the year. The mortality per cent. is 15·91, the lowest hitherto recorded for this hospital. Last year the rate was 17·18. Included among the fatal cases are 18 in which death was due to causes other than the attack of diphtheria for which the patients were admitted, viz., measles, 11; scarlet fever, 5; and cerebral complications following scarlet fever, 2. Making allowance for these, the mortality is 14·62 per cent. Last year the mortality thus corrected was 15·66. The percentage of patients treated with antitoxin was 98·3.

Of enteric fever, 174 cases have been under treatment. Of these, 120 were discharged, 24 died, and 30 remained at the end of the year. The mortality per cent. is 16·00.

No cases of typhus fever were under treatment.

The combined mortality of the scarlet fever, diphtheria, and enteric fever cases is 11·27 per cent.

While the mortality of each of these three diseases separately is slightly less than for 1897, the combined mortality is higher—11·27 against 10·31. The explanation of this lies in the fact that larger numbers of the diseases with high mortalities (diphtheria and enteric fever) were admitted, and fewer of scarlet fever, which has a much lower death-rate.

Of the 2,480 cases admitted, 240, or 9·6 per cent., were found to be suffering from diseases other than those which they were certified to have. The percentage of error was, in the case of scarlet fever, 6·8; of diphtheria, 9·0; and of enteric fever, 25·0. Last year the figures were 4·2, 14·9, and 33·5, the total percentage of error being 10·5.

\* \* \* \* \*

(Signed) E. W. GOODALL,  
*Medical Superintendent.*

## No. 2.

### NORTH-EASTERN HOSPITAL.

ST. ANNE'S ROAD, SOUTH TOTTENHAM,

*February 14th, 1899.*

**Statistics.** During last year 1,919 patients were admitted, which, added to 358 left in from the previous year, made a grand total of 2,277 treated during 1898. Of these, 61 died, giving a percentage mortality of 3·13; 1,389 were discharged, 520 transferred to the Northern Convalescent Hospital, and 307 left in at the end of the year.

Of scarlet fever\* 2,079 cases were treated, with 56 deaths, giving a percentage mortality of 3·18. This is slightly higher than it was last year.

The number of patients admitted with scarlet fever during 1898 fell short by 708 of the number admitted during 1897. This was due to the fact that the autumn rise in that disease failed to reach anything like its usual height, so that at no time during the year did the normal accommodation of the hospital prove unequal to the demands made upon it.

The 56 deaths from scarlet fever included eight cases complicated with measles, three with post-scarlatinal diphtheria, two with whooping cough, two with tuberculosis, and one case who was suffering from severe scalds when admitted.

Eight cases of diphtheria and three of enteric fever were admitted, each certified as having scarlet fever. All recovered.

The cases of post-scarlatinal diphtheria numbered 42. Of these, three died, two of them from measles, giving a death-rate of 7·1 per cent. No case of this complication has arisen during the last three and a half months of the year, and no death from it during the last nine months.

We have been much troubled with measles in the infants' wards, eight deaths having been caused by that disease among scarlatinal convalescents.

\* Only scarlet fever cases are properly admissible at this hospital at present.

During the year no less than 175 patients, or 9·1 per cent. of the total admissions, were found not to have either scarlet fever, enteric fever, or diphtheria; of these, five, or 2·85 per cent., died.

\*                    \*                    \*                    \*                    \*

(Signed)      HERBERT CUFF,  
*Medical Superintendent.*

### No. 3.

#### NORTH-WESTERN HOSPITAL,

LAWN ROAD, HAMPSTEAD, N.W.,  
*February 16th, 1899.*

**Statistics.**      The total number of patients under treatment during the year 1898 was 3,492, a decreased numerical difference of 334, as compared with the preceding year.

The gross hospital death-rate for the year is 10·84, as against 8·58 for 1897.

Of the 3,091 admissions, all direct from their homes or institutions, 1,809 were cases of scarlet fever; 890 of diphtheria; 207 of enteric fever, and 185 certified under one or other of the foregoing headings were subsequently found to be suffering from other diseases.

Of the total admissions 58·5 suffered from scarlet fever, and 97 deaths were attributable to this disorder or its complications, the percentage mortality according to the Registrar-General's formula being 5·28, or nearly 1½ per cent. higher than in the preceding year. The type of the disease appeared to be on the whole generally more severe, many toxic cases occurring in the first and last quarters.

With regard to age, 33·05 per cent. of the scarlet fever cases were under five years of age and 39·4 per cent. between five and ten years.

Of the 890 suffering from diphtheria, 176 died, or a mortality of 19·8 per cent. as calculated by the Registrar-General's formula; 43·7 of these cases were under five years of age. Many of the gross number were admitted at a very advanced stage of the disorder, 28 dying within twenty-four hours after arrival; deducting these, the death-rate represented 16·6 per cent.

Of enteric cases, 90 males were admitted and 117 females, with a death-rate of 27 per cent. and 17 per cent. respectively.

Of the 185 cases of other diseases, 19 died, or a percentage of 10·27.

Of the scarlet fever patients, 1,033, or 49·3 per cent., were transferred to the Northern Convalescent Hospital.

The incidence of diphtheria during recovery from scarlet fever was rather greater than in the preceding year, showing 46 cases, as against 34 in 1897. The table (see Medical Supplement, p. 157) shows the particular wards in which such occurred, and a mortality of 15·6 per cent, as against 8·8 per cent. of the preceding year.

\*                    \*                    \*                    \*                    \*

(Signed)      WM. GAYTON,  
*Medical Superintendent.*

## No. 4.

## WESTERN HOSPITAL.

FULHAM, S.W.,

February 15th, 1899.

**Statistics.** The number of patients treated during the year was 3,056. Of these, 950 were discharged recovered, 1,451 were transferred to other hospitals of the Board, 251 died, and 404 remained in the hospital at the close of the year.

The combined mortality in respect of all cases was 9·33 per cent.

Of the total number treated, 1,885 were cases of scarlet fever, of which 1,198, or 63 per cent., were transferred to convalescent hospitals, 377 discharged recovered, and 96 died, leaving 214 under treatment on December 31st.

The scarlet fever death-rate was 5·75 per cent. Included with the fatal cases are 10 in which death was due to superadded infectious disease, viz., measles, seven; and diphtheria, three.

The attack was complicated by measles in 95 cases, in 79 of which the intercurrent illness supervened after admission; and by diphtheria in 53 cases, of which 36 developed the disease subsequent to admission.

The incidence of post-scarlatinal diphtheria was 2·1 per cent. on the completed cases, which is somewhat lower than in 1897; and the death-rate, 8·33 per cent., the same as that in the previous year.

Of diphtheria, 878 cases came under treatment, and of these 367 were discharged, 252 transferred to the Northern Convalescent Hospital, 125 died, and 134 remained in hospital at the end of the year.

The mortality was 16·33 per cent., which compares favourably with that in the preceding year, when it was 17·50; and if 11 cases in which death resulted from intercurrent infectious diseases—viz., measles, five; scarlet fever, four; whooping cough, one; tuberculosis, one—be excluded, the mortality falls to 14·97.

Thirty-nine cases, or 5·28 per cent., were of the hæmorrhagic type.

Tracheotomy was performed on 31 patients, with eight deaths, giving a recovery rate of 74·2, which is 7 per cent. higher than has hitherto been reached at this hospital.

The antitoxin treatment was employed in 75 per cent. of the cases.

Of enteric fever, 98 cases were treated, of which 51 were discharged, eight died, and 39 remained in hospital.

The mortality per cent. was 10·88.

In consequence of the autumnal increase in the number of enteric fever cases, a rearrangement of the accommodation of the hospital was effected, whereby 28 additional beds were provided for the treatment of this disease.

Four cases of typhus fever were admitted during the year, of which one died.

Of miscellaneous diseases, 191 cases were treated, 152 discharged, 1 transferred to a convalescent hospital, and 21 died, leaving 17 in the hospital on December 31st.

The mortality was 11·83 per cent.

The original diagnosis was found to be erroneous in 3·6 per cent. of the cases certified to be suffering from scarlet fever; in 9·4 per cent. of those certified diphtheria, and in 47·7 per cent. of those certified enteric fever.

\*                    \*                    \*                    \*                    \*

(Signed)      R. M. BRUCE,  
*Medical Superintendent.*

## No. 5.

### SOUTH-WESTERN HOSPITAL.

STOCKWELL,  
*February 9th, 1899.*

**Statistics.** During the year 1,583 patients have been admitted, which, with 302 remaining in hospital at the end of the previous year, brings the total under treatment up to 1,885. Of these, 1,241 were discharged, 241 transferred to convalescent hospitals, 116 died, and 287 remained on December 31st.

The general mortality for all classes of disease was therefore 7·29 per cent.

The scarlet fever admissions numbered 830, and 187 remained over from the previous year. The total number treated was consequently 1,017. Of these, 665 were discharged, 150 were transferred to convalescent hospitals, 18 died, and 184 remained at the close of the year. The scarlet fever mortality was 2·16 per cent.

Eighty-three scarlet fever patients developed another infectious disease in the hospital. Of these, 37 were diphtheria, representing an incidence of 4·5 per cent. amongst the scarlet fever convalescents. Three of them ended fatally, yielding a post-scarlatinal mortality of 8·1 per cent.

The reputation of antitoxin in such cases is still maintained, this result, as in the three preceding years, comparing very favourably with that of 1894 (the year which immediately preceded its employment), when the mortality reached 53·3 per cent. A further tribute to the value of antitoxin in this class of case is afforded by the fact that in no single instance during the year did the necessity for tracheotomy arise.

No fatal result occurred among the 46 other cases of scarlet fever in which some intercurrent infectious disease arose in hospital.

There were admitted 577 cases of diphtheria, and 94 remained over from the preceding year. Of the total number treated, viz., 671, 432 were discharged, 91 transferred to the Northern Convalescent Hospital, 70 died, and 78 remained on December 31st. The diphtheria mortality was 11·96 per cent.

Antitoxic serum was used consistently throughout the year, 63·4 per cent. of the cases being of sufficient gravity to call for its employment. In eight of the fatal cases serum was not given. Of these, three were obviously past the reach of any treatment and died shortly after admission; one was admitted after the actual acute attack was over, and died from the later effects of the disease; and in the remaining four death resulted from causes unconnected with diphtheria.

The number of cases of enteric fever admitted during the year was 79, and 16 remained over from 1897. Of these 95 cases, 65 were discharged, 14 died, and 16 remained at the close of the year. The enteric mortality was 17.72 per cent.

Of the total cases completed during the year, 97, or 6.5 per cent., were found to be suffering from some miscellaneous disease other than scarlet fever, diphtheria, or enteric fever, as certified; and five remained over from the previous year. Of these 102 cases, 79 were discharged, 14 died, and 16 remained in hospital on December 31st. The mortality among these cases was 14.73 per cent.

The largest proportion of mistakes occurred in respect to the diagnosis of enteric fever. Of 117 cases so certified, in 38, or 32.4 per cent., the diagnosis was held to be erroneous.

Of 614 cases certified diphtheria, the diagnosis was incorrect in 21, or 3.4 per cent., as evidenced by a bacteriological examination.

Of 871 cases certified scarlet fever, in 38, or 4.3 per cent., the patients were found to be suffering from some other disease.

A most satisfactory feature in the year's work is the low mortality which has to be recorded both for the scarlet fever and diphtheria cases, viz., 2.16 and 11.96 respectively. The figures in respect to each disease are the lowest which have so far been returned in any of the acute hospitals for a year's completed cases.

\* \* \* \* \*

(Signed) F. FOORD CAIGER,  
*Medical Superintendent.*

## No. 6.

### FOUNTAIN HOSPITAL.

TOOTING GROVE, S.W.,  
*February 8th, 1899.*

**Statistics.** During the year 2,064 patients were admitted, and 364 remained from 1897, making a total of 2,428 treated. Of the admissions,\* 1,515 suffered from scarlet fever, 824 from diphtheria, and 89 from other diseases.

The gross mortality was 7.59 per cent.

The number of patients under treatment was less than in the preceding year by 739, chiefly owing to the decrease in the admissions of scarlet fever patients. In consequence of this, the pressure on our accommodation was never such as to cause delay in the admission of patients suffering from this class of disease.

Of the 1,515 scarlet fever cases, 675 were discharged recovered, 580 were transferred to the Gore Farm Convalescent Hospital, and 43 died. The mortality was 3.45 per cent.

As in previous years, I report for your information the incidence of diphtheria upon scarlet fever patients. This was as follows:—41 patients were admitted suffering from the combined diseases in the acute stage, of whom six died; 105

\* Only scarlet fever and diphtheria cases are properly admissible at this hospital at present.

patients contracted diphtheria during convalescence. Of these, 58 were treated with antitoxin; the rest suffered so mildly that they did not require this treatment. It is satisfactory to report that all these cases of post-scarlatinal diphtheria, whether requiring antitoxin or not, were discharged recovered.

As regards the 824 diphtheria patients, 453 were discharged, 180 were sent to the Northern Convalescent Hospital, and 106 died. The mortality of this disease was 14.41 per cent.

Many of the fatal cases were admitted in a hopeless condition, 31 dying within 48 hours of admission. It cannot be too widely known that the value of antitoxin treatment, in cases, at least, which threaten to become severe, depends upon its administration from the first day after disease, and thereafter progressively diminishes. This year's mortality is less than half what it was before the introduction of antitoxin, but it is capable of a larger reduction still if removal to hospital was not so frequently delayed until serious constitutional symptoms had set in. On the other hand, it is right to admit that in a few of our patients antitoxin had been administered by the medical attendant prior to admission to hospital.

With regard to miscellaneous diseases, 85 patients were found not to be suffering from the disease as certified; of these, 10 died. The percentage of erroneous diagnosis numbered 1.7 per cent. in the case of scarlet fever, 8.6 per cent. in the case of diphtheria, and 4.1 per cent. on the total admissions.

\* \* \* \* \*

(Signed) C. E. MATTHEWS,  
*Medical Superintendent.*

## No. 7.

### SOUTH-EASTERN HOSPITAL.

HATFIELD STREET, S.E.,

*January 26th, 1899.*

**Statistics.** During the past year three scarlet fever wards have been diverted to other uses, two to diphtheria and one to enteric fever. The average severity of the cases in hospital at any one time has by this means been increased. The total number of cases treated was 2,699, being 560 less than during 1897. The number of diphtheria cases was, however, somewhat larger, and of enteric fever cases exactly the same as during that year. The highest number of patients in hospital at any one time was 407 on January 2nd.

The total number of patients treated during the year was 2,699. Of these, 1,388 were suffering from scarlet fever, 850 from diphtheria, 206 from enteric fever, 5 from typhus fever, and 250 from other diseases.

The case-mortality for scarlet fever was 4.55 per cent., which is almost identical with that for 1897; the case-mortality for diphtheria, 16.55 per cent., shows a decline of  $\frac{1}{2}$  per cent. on the preceding year; and that for enteric fever, 16.72 per cent., shows a decline of  $2\frac{1}{4}$  per cent.

The total number of cases of intercurrent disease developed in hospital was 135.

\* \* \* \* \*

(Signed) F. M. TURNER,  
*Medical Superintendent.*

## No. 8.

## PARK HOSPITAL.

HITHER GREEN, S.E.,

*February 20th, 1899.*

\* \* \* \* \*

**Statistics.** During the year 2,528 patients were admitted, 1,506 were discharged, 655 were transferred to Gore Farm Convalescent Hospital, and 181 died.

The largest number admitted in any one month was 300, in October. The largest number of deaths was 32, in December. There were 222 admitted from parishes on the north of the Thames; of the remainder, 1,085 came from St. Saviour's.

\* \* \* \* \*

The accommodation provided for patients has at no time during the year been fully occupied. Some of the wards for scarlet fever patients have been used for patients suffering from diphtheria. The small wards for the isolation of measles, chickenpox, and other infectious diseases breaking out amongst the scarlet fever and diphtheria patients have been instrumental in preventing serious outbreaks of these diseases.

\* \* \* \* \*

(Signed) R. A. BIRDWOOD,  
*Medical Superintendent.*

## No. 9.

## BROOK HOSPITAL.

SHOOTER'S HILL, KENT,

*February 21st, 1899.*

**Statistics.** The total number of cases under treatment was 2,874. Of these, 1,870 were discharged recovered, 403 were transferred to Gore Farm Hospital, and 164 died. There remained under treatment on December 31st 437 patients.

The number of cases of scarlet fever treated was 1,785. Of these, 1,059 were discharged recovered, 403 were transferred, 39 died, and 284 remained under treatment on December 31st. The mortality was 2.65 per cent.

Tables are appended showing complications incident to scarlet fever, concurrence of scarlet fever and diphtheria, and incidence of post-scarlatinal diphtheria. (See Medical Supplement, p. 161.) All who developed post-scarlatinal diphtheria recovered. The severe cases were treated with antitoxin.

The number of cases of diphtheria treated was 874. Of these, 648 were discharged recovered, 93 died, and 133 remained under treatment on December 31st. The mortality was 12·43 per cent. Twelve patients died within twenty-four hours of admission. There were 20 hæmorrhagic cases. Tracheotomy was performed on 30 patients, of whom 10 died, therefore 66·6 per cent. of the tracheotomies recovered.

Of the diphtheria cases, 84 per cent. were treated with antitoxin.

The following table shows the results of the antitoxin treatment with especial reference to the day of disease on which the treatment began :—

TABLE I.—Cases treated with Antitoxin, 1898.

DAY OF DISEASE.	1st.		2nd.		3rd.		4th.		5th.		TOTAL.		Mortality per cent.
	Cases.	Deaths.											
Under 1 ... ..	0	0	7	0	2	0	2	0	0	0	11	0	0·0
1 to 2 ... ..	6	0	10	1	12	3	3	1	16	5	47	10	21·3
2 to 3 ... ..	3	0	14	2	12	3	15	5	10	5	54	15	27·7
3 to 4 ... ..	7	0	12	0	17	4	4	1	15	6	55	11	20·0
4 to 5 ... ..	4	0	20	1	14	4	18	6	19	4	75	15	20·0
5 to 10 ... ..	11	0	64	4	56	6	69	11	66	14	266	35	13·2
10 to 15 ... ..	5	0	15	0	22	1	14	1	9	0	65	2	3·1
15 to 20 ... ..	1	0	8	0	11	0	8	0	6	0	34	0	0·0
20 and upwards	0	0	7	0	0	0	5	0	10	0	22	0	0·0
Total ... ..	37	0	157	8	146	21	138	25	151	34	629	88	13·9
Mortality per cent. ... }	0·0		5·09		14·38		18·11		22·51		...		...

The results shown above correspond closely to those of 1897, when the mortality was—

Of cases treated on 1st day of disease 0·0 per cent.

“ “ “ 2nd “ “ 5·42 “

“ “ “ 3rd “ “ 11·5 “

“ “ “ 4th “ “ 19·0 “

“ “ “ 5th day and after 21·5 “

In view of these facts, the urgent importance of early treatment with antitoxin is evident.

The number of cases of enteric fever treated was 108. Of these, 75 were discharged recovered, 15 died, and 18 remained under treatment on December 31st. The mortality was 16·39 per cent.

\* \* \* \* \*

(Signed) JOHN MACCOMBIE,  
Medical Superintendent.

## No. 10.

## NORTHERN HOSPITAL.

WINCHMORE HILL, N.,

*January, 1899.*

**Statistics.** The total number of patients under treatment during the year was 4,839. Of these, 866 were in the hospital at the end of 1897, and 3,973 were admitted during 1898; 4,234 were discharged, and 10 died.

Of the admissions, 3,124 were scarlet fever, 848 diphtheria convalescents, and one other disease. Of the scarlet fever admissions nine and of the diphtheria admissions one died.

The gross mortality was 0·24; that of scarlet fever patients, 0·27, and of diphtheria, 0·12.

Of the 10 deaths which occurred during the year, five were due to measles—a mortality of 9·6 upon a series of 52 cases of this disease occurring between December 12th, 1897, and April 27th, 1898.

The complications call for no special remark. During the year 169 cases of post-scarlatinal diphtheria were completed, with two deaths.

Antitoxin was administered in 160, or 94·7 per cent., of the cases. One of the two deaths which occurred was due to measles, and the actual post-scarlatinal diphtheria mortality was 0·59, almost precisely one-hundredth part of the mortality from this disease in the pre-antitoxin years.

\* \* \* \* \*

(Signed) F. N. HUME,

*Medical Superintendent.*

## No. 11.

## GORE FARM HOSPITAL.

DARENTH, NEAR DARTFORD, KENT,

*January 24th, 1899.*

**Statistics.** During the year 1898 there were 2,976 patients treated in the hospital. Of these, 2,400 were discharged recovered, eight were transferred to other hospitals of the Board, and two died. There remained 566 under treatment at the end of the year. The mortality rate was 0·083 per cent. For convalescent fever patients this mortality rate is the lowest that has hitherto been recorded at the hospital for any calendar year.

There were 98 completed cases of post-scarlatinal diphtheria, and of these two died, a mortality rate of 2 per cent.

\* \* \* \* \*

(Signed) FREDERIC THOMSON,

*Medical Superintendent.*

FEVER STATISTICS.—TABLE I.—

EASTERN HOSPITAL.									
DISEASES.	Remain- ing on Dec. 31st, 1897.	Admitted during 1898.		Total under treatment during 1898.	Discharged during 1898.		Died during 1898.	Mortality per cent.	Remain- ing on Dec. 31st, 1898.
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.			
Scarlet ... ..	124	810	4	938	423	376	36	4·36	103
Diphtheria ... ..	184	1,274	1	1,459	817	279	205	15·91	158
Enteric ... ..	18	156	...	174	120	...	24	16·00	30
Other diseases ... ..	18	240	...	258	221	...	24	9·89	13
Totals ... ..	344	2,480	5	2,829	1,581	655	289	11·53	304
NORTH-EASTERN HOSPITAL.									
Scarlet ... ..	346	1,733	...	2,079	1,212	520	56	3·18	291
Diphtheria ... ..	...	8	...	8	7	...	...	...	1
Enteric ... ..	1	3	...	4	4	...	...	...	...
Other diseases ... ..	11	175	...	186	166	...	5	2·89	15
Totals ... ..	358	1,919	...	2,277	1,389	520	61	3·13	307
NORTH-WESTERN HOSPITAL.									
Scarlet ... ..	283	1,809	...	2,092	730	1,033	97	5·28	232
Diphtheria ... ..	86	890	...	976	705	...	176	19·87	95
Enteric ... ..	23	207	...	230	142	...	45	22·84	43
Other diseases ... ..	9	185	...	194	175	...	19	10·02	...
Totals ... ..	401	3,091	...	3,492	1,752	1,033	337	10·84	370
WESTERN HOSPITAL.									
Scarlet ... ..	219	1,664	2	1,885	377	1,198	96	5·75	214
Diphtheria ... ..	92	786	...	878	367	252	125	16·33	134
Enteric ... ..	10	88	...	98	51	...	8	10·88	39
Typhus ... ..	...	4	...	4	3	...	1	25·00	...
Other diseases ... ..	10	181	...	191	152	1	21	11·83	17
Totals ... ..	331	2,723	2	3,056	950	1,451	251	9·33	404
SOUTH-WESTERN HOSPITAL.									
Scarlet ... ..	187	822	8	1,017	665	150	18	2·16	184
Diphtheria ... ..	94	577	...	671	432	91	70	11·96	78
Enteric ... ..	16	79	...	95	65	...	14	17·72	16
Other diseases ... ..	5	97	...	102	79	...	14	14·73	9
Totals ... ..	302	1,575	8	1,885	1,241	241	116	7·29	287
FOUNTAIN HOSPITAL.									
Scarlet ... ..	268	1,247	...	1,515	675	580	43	3·45	217
Diphtheria ... ..	92	732	...	824	453	180	106	14·41	85
Other diseases ... ..	4	85	...	89	78	...	10	11·56	1
Totals ... ..	364	2,064	...	2,428	1,206	760	159	7·59	303

Admissions, Discharges, and Deaths during 1898.

**SOUTH-EASTERN HOSPITAL.**

DISEASES.	Remain- ing on Dec. 31st, 1897.	Admitted during 1898.		Total under treatment during 1898.	Discharged during 1898.		Died during 1898.	Mortality per cent.	Remain- ing on Dec. 31st, 1898.
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.			
Scarlet ... ..	236	1,152	...	1,388	548	620	54	4.55	166
Diphtheria ... ..	115	734	1	850	542	42	119	16.55	147
Enteric ... ..	23	183	...	206	124	...	28	16.72	54
Typhus ... ..	...	5	...	5	5	...	...	...	...
Other diseases ... ..	23	227	...	250	211	1	25	10.77	13
Totals ... ..	397	2,301	1	2,699	1,430	663	226	9.78	380

**PARK HOSPITAL.**

Scarlet ... ..	196	1,449	...	1,645	746	649	64	4.40	186
Diphtheria ... ..	38	810	...	848	561	6	96	13.03	185
Enteric ... ..	...	60	...	60	20	...	9	20.22	31
Other Diseases ... ..	4	209	...	213	179	...	12	6.00	22
Total ... ..	238	2,528	...	2,766	1,506	655	181	7.43	424

**BROOK HOSPITAL.**

Scarlet ... ..	345	1,439	1	1,785	1,059	403	39	2.65	284
Diphtheria ... ..	119	755	...	874	648	...	93	12.43	133
Enteric ... ..	15	93	...	108	75	...	15	16.39	18
Other diseases ... ..	18	89	...	107	88	...	17	17.53	2
Totals ... ..	497	2,376	1	2,874	1,870	403	164	6.83	437

**NORTHERN HOSPITAL.**

Scarlet ... ..	*791	...	3,124	3,015	3,423	7	9	0.27	476
Diphtheria ... ..	*75	...	848	923	803	...	1	0.12	119
Other diseases ... ..	...	...	1	1	1	...	...	...	...
Totals ... ..	866	...	3,973	4,839	4,227	7	10	0.24	595

**GORE FARM HOSPITAL.**

Scarlet ... ..	570	...	2,405	2,975	2,399	8	2	0.08	566
Other diseases ... ..	...	...	1	1	1	...	...	...	...
Totals ... ..	570	...	2,406	2,976	2,400	8	2	0.08	566

**SUMMARY.**

Scarlet ... ..	3,565	12,125	5,544	15,690	12,257	5,544	514	4.12	2,919
Diphtheria ... ..	895	6,566	850	7,461	5,335	850	991	15.37	1,135
Enteric ... ..	106	869	...	975	601	...	143	17.73	231
Typhus ... ..	...	9	...	9	8	...	1	11.11	...
Totals ... ..	4,566	19,569	6,394	24,135	18,201	6,394	1,649	8.36	4,285
Other diseases ... ..	102	1,488	2	1,590	1,351	2	147	9.84	92
Grand Totals ... ..	4,668	21,057	6,396	25,725	19,552	6,396	1,796	8.47	4,377

NOTES.—The mortalities returned as above include all deaths occurring from intercurrent diseases, particulars of which will be found in the Annual Reports of the Medical Superintendents.

The mortality rates are calculated according to the Registrar-General's Formula—i.e., by dividing the Deaths, multiplied by 100, by half the sum of the Admissions, Discharges, and Deaths for the year.

\* In the table for 1897 these numbers were incorrectly given as 774 and 92 respectively.

FEVER STATISTICS.—TABLE II.—*Monthly Admissions of various*

EASTERN HOSPITAL.													
MONTH.	ADMISSIONS.										DEATHS.	DISCHARGES.	
	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.		Re-covered.	To other Hospitals of Board.
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.		Direct from Homes.	From other Hospitals of Board.				
Jan.	92	...	123	...	11	...	...	19	...	245	29	117	95
Feb.	60	...	93	...	7	...	...	17	...	177	22	122	41
Mar.	54	1	117	...	4	...	...	18	...	194	40	138	34
April	67	...	86	...	6	...	...	20	...	179	38	152	26
May	68	...	106	...	2	...	...	20	...	196	26	135	48
June	49	...	104	...	7	...	...	32	...	192	21	125	60
July	74	1	119	...	13	...	...	18	...	225	21	151	44
Aug.	59	...	56	...	13	...	...	14	...	142	14	126	57
Sept.	86	1	92	...	15	...	...	24	...	218	17	100	59
Oct.	87	...	155	...	30	...	...	28	...	300	27	112	72
Nov.	61	...	108	...	31	...	...	16	...	216	14	154	77
Dec.	53	1	145	1	17	...	...	14	...	201	20	149	42
Totals	810	4	1,274	1	156	...	...	240	...	2,485	289	1,581	655
NORTH-EASTERN HOSPITAL.													
Jan.	137	...	...	...	2	...	...	8	...	147	12	147	29
Feb.	107	...	1	...	...	...	...	13	...	121	7	113	35
Mar.	116	...	1	...	...	...	...	32	...	149	4	148	46
April	152	...	4	...	...	...	...	26	...	182	6	94	31
May	144	...	1	...	...	...	...	22	...	167	5	114	48
June	153	...	...	...	...	...	...	14	...	167	5	118	38
July	117	...	...	...	...	...	...	7	...	124	3	117	38
Aug.	83	...	1	...	1	...	...	1	...	86	1	108	17
Sept.	167	...	...	...	...	...	...	7	...	174	3	93	36
Oct.	225	...	...	...	...	...	...	10	...	235	3	87	75
Nov.	192	...	...	...	...	...	...	22	...	214	6	125	70
Dec.	140	...	...	...	...	...	...	13	...	153	6	125	57
Totals	1,733	...	8	...	3	...	...	175	...	1,919	61	1,389	520
NORTH-WESTERN HOSPITAL.													
Jan.	125	...	79	...	9	...	...	20	...	233	26	156	42
Feb.	125	...	83	...	5	...	...	8	...	221	36	168	60
Mar.	123	...	59	...	10	...	...	19	...	211	21	174	74
April	106	...	55	...	4	...	...	11	...	176	27	148	50
May	141	...	85	...	2	...	...	17	...	245	30	113	83
June	128	...	77	...	2	...	...	13	...	220	27	86	72
July	152	...	84	...	13	...	...	8	...	257	22	126	83
Aug.	158	...	59	...	17	...	...	21	...	255	23	131	80
Sept.	170	...	75	...	27	...	...	18	...	290	30	130	88
Oct.	239	...	83	...	45	...	...	27	...	394	27	160	139
Nov.	187	...	77	...	36	...	...	13	...	313	37	147	169
Dec.	155	...	74	...	37	...	...	10	...	276	31	213	93
Totals	1,809	...	890	...	207	...	...	185	...	3,091	337	1,752	1,033
WESTERN HOSPITAL.													
Jan.	145	1	53	...	8	...	...	17	...	224	31	76	126
Feb.	125	...	47	...	1	...	...	8	...	181	14	75	138
Mar.	118	...	52	...	3	...	...	2	...	190	29	63	122
April	115	...	47	...	...	...	...	22	...	184	16	77	99
May	122	...	67	...	6	...	...	13	...	208	16	78	97
June	108	...	45	...	6	...	...	15	...	174	13	63	84
July	156	...	67	...	2	...	...	12	...	237	17	78	134
Aug.	149	...	56	...	14	...	...	19	...	238	17	74	123
Sept.	145	1	74	...	4	...	...	5	...	229	16	65	136
Oct.	185	...	79	...	4	...	...	1	...	276	20	93	146
Nov.	168	...	99	...	31	...	...	1	...	256	31	81	154
Dec.	128	...	100	...	9	...	...	19	...	256	31	127	111
Totals	1,664	2	786	...	88	...	...	4	...	2,725	251	950	1,456

*Diseases, with Discharges and Deaths from all causes during 1898.*

**SOUTH-WESTERN HOSPITAL.**

MONTH.	ADMISSIONS.										DEATHS.	DISCHARGES.	
	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.		Re-covered.	To other Hospitals of Board.
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.		Direct from Homes.	From other Hospitals of Board.				
Jan.	66	1	26	...	4	...	...	9	...	106	9	125	22
Feb.	65	2	53	...	6	...	...	5	...	131	12	99	9
Mar.	54	1	39	...	5	...	...	5	...	104	12	107	19
April	47	3	52	...	1	...	...	8	...	111	7	112	6
May	71	1	49	...	4	...	...	10	...	135	7	102	...
June	43	...	52	...	6	...	...	10	...	111	9	79	17
July	90	...	54	...	8	...	...	12	...	164	9	136	12
Aug.	52	...	39	...	6	...	...	11	...	108	11	105	42
Sept.	57	...	62	...	13	...	...	4	...	136	9	86	14
Oct.	88	...	49	...	12	...	...	6	...	155	13	88	37
Nov.	99	...	49	...	8	...	...	9	...	165	7	98	45
Dec.	90	...	53	...	6	...	...	8	...	157	11	104	18
Totals	822	8	577	...	79	...	...	97	...	1,583	116	1,241	241

**FOUNTAIN HOSPITAL.**

Jan.	128	...	57	...	...	...	...	9	...	194	21	78	109
Feb.	69	...	66	...	...	...	...	7	...	142	18	104	97
Mar.	131	...	55	...	...	...	...	12	...	198	18	101	86
April	127	...	61	...	...	...	...	5	...	193	12	82	85
May	90	...	38	...	...	...	...	9	...	137	12	76	65
June	91	...	79	...	...	...	...	9	...	179	15	102	51
July	79	...	48	...	...	...	...	9	...	136	8	82	52
Aug.	77	...	34	...	...	...	...	7	...	118	5	93	...
Sept.	111	...	78	...	...	...	...	2	...	191	14	135	30
Oct.	140	...	67	...	...	...	...	5	...	212	13	126	50
Nov.	125	...	71	...	...	...	...	7	...	203	9	111	98
Dec.	79	...	78	...	...	...	...	4	...	161	14	116	37
Totals	1,247	...	732	...	...	...	...	85	...	2,064	159	1,206	760

**SOUTH-EASTERN HOSPITAL.**

Jan.	136	...	54	...	16	...	...	45	...	251	25	141	89
Feb.	97	...	50	...	6	...	...	13	...	166	14	116	88
Mar.	65	...	44	...	8	...	4	15	...	136	13	132	40
April	76	...	35	1	11	...	1	19	...	143	21	112	36
May	60	...	45	...	6	...	...	13	...	124	9	115	18
June	77	...	71	...	6	...	...	10	...	164	16	105	18
July	92	...	69	...	9	...	...	27	...	197	19	85	65
Aug.	79	...	55	...	13	...	...	12	...	159	17	121	30
Sept.	100	...	91	...	22	...	...	18	...	231	23	112	45
Oct.	128	...	64	...	20	...	...	17	...	229	26	113	81
Nov.	121	...	69	...	28	...	...	21	...	239	10	133	82
Dec.	121	...	87	...	38	...	...	17	...	263	33	145	71
Totals	1,152	...	734	1	183	...	5	227	...	2,302	226	1,430	663

**PARK HOSPITAL.**

Jan.	71	...	45	...	...	...	...	5	...	121	7	105	...
Feb.	92	...	55	...	...	...	...	10	...	157	7	142	...
Mar.	108	...	58	...	...	...	...	20	...	186	19	99	...
April	76	...	44	...	1	...	...	25	...	146	15	144	...
May	167	...	86	...	...	...	...	16	...	269	20	186	10
June	99	...	44	...	1	...	...	10	...	154	15	112	55
July	156	...	53	...	...	...	...	9	...	218	18	139	66
Aug.	105	...	51	...	...	...	...	19	...	175	16	144	90
Sept.	178	...	53	...	...	...	...	10	...	241	8	82	106
Oct.	168	...	99	...	17	...	...	16	...	300	11	79	153
Nov.	131	...	101	...	27	...	...	38	...	297	13	106	90
Dec.	98	...	121	...	14	...	...	31	...	264	32	168	85
Totals	1,449	...	810	...	60	...	...	209	...	2,528	181	1,506	655

FEVER STATISTICS.—TABLE II. (continued)—Monthly Admissions of various Diseases, with Discharges and Deaths from all causes during 1898.

BROOK HOSPITAL.													
MONTH.	ADMISSIONS.									DEATHS.	DISCHARGES.		
	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.			Total.	Re-covered.	To other Hospitals of Board.
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.		Direct from Homes.	From other Hospitals of Board.				
Jan.	93	...	54	...	1	...	...	11	...	159	14	126	20
Feb.	88	...	47	...	6	...	...	8	...	149	16	175	10
March	111	...	78	...	7	...	...	5	...	201	19	184	...
April	97	...	46	...	2	...	...	6	...	151	11	160	8
May	71	...	38	...	1	...	...	8	...	118	9	156	6
June	102	...	49	...	2	...	...	13	...	166	9	157	...
July	98	...	63	...	3	...	...	6	...	170	7	164	15
Aug.	114	...	51	...	14	...	...	13	...	192	11	137	6
Sept.	127	...	74	...	15	...	...	9	...	225	14	129	44
Oct.	211	...	95	...	20	...	...	5	...	331	17	148	101
Nov.	153	...	90	...	14	...	...	1	...	258	24	122	87
Dec.	174	1	70	...	8	...	...	4	...	257	13	212	106
Totals	1,439	1	755	...	93	...	...	89	...	2,377	164	1,870	403

NORTHERN HOSPITAL.													
Jan.	...	237	...	73	...	...	...	...	...	310	3	547	...
Feb.	...	239	...	35	...	...	...	...	...	274	1	383	...
March	...	247	...	64	...	...	...	...	...	311	1	300	1
April	...	171	...	49	...	...	...	...	...	220	2	304	1
May	...	243	...	40	...	...	...	...	...	283	1	307	...
June	...	207	...	70	...	...	...	...	...	277	...	282	...
July	...	248	...	87	...	...	...	...	1	336	...	271	1
Aug.	...	222	...	76	...	...	...	...	...	298	1	360	...
Sept.	...	269	...	69	...	...	...	...	...	338	...	288	2
Oct.	...	376	...	80	...	...	...	...	...	456	...	286	...
Nov.	...	411	...	110	...	...	...	...	...	521	...	488	...
Dec.	...	254	...	95	...	...	...	...	...	349	1	411	2
Totals	...	3,124	...	848	...	...	...	...	1	3,973	10	4,227	7

GORE FARM HOSPITAL.													
Jan.	...	221	...	...	...	...	...	...	...	221	...	340	1
Feb.	...	204	...	...	...	...	...	...	...	204	...	233	2
Mar.	...	110	...	...	...	...	...	...	...	110	1	250	1
April	...	116	...	...	...	...	...	...	...	116	...	132	3
May	...	92	...	...	...	...	...	...	...	92	...	167	1
June	...	118	...	...	...	...	...	...	...	118	...	115	...
July	...	172	...	...	...	...	...	...	1	173	...	111	...
Aug.	...	145	...	...	...	...	...	...	...	145	...	149	...
Sept.	...	214	...	...	...	...	...	...	...	214	...	146	...
Oct.	...	392	...	...	...	...	...	...	...	392	1	166	...
Nov.	...	351	...	...	...	...	...	...	...	351	...	272	...
Dec.	...	270	...	...	...	...	...	...	...	270	...	319	...
Totals	...	2,405	...	...	...	...	...	...	1	2,406	2	2,400	8

SUMMARY.													
Jan.	993	460	491	73	51	...	...	143	...	1,678	177	1,958	533
Feb.	828	445	495	35	31	...	...	89	...	1,443	147	1,730	488
March	880	359	503	64	37	...	6	141	...	1,567	177	1,696	423
April	863	291	430	50	25	...	1	142	...	1,461	155	1,517	344
May	934	336	515	40	21	...	...	128	...	1,598	135	1,549	377
June	850	325	521	70	30	...	...	126	...	1,527	130	1,344	391
July	1,014	421	557	87	48	...	...	108	2	1,727	124	1,460	511
Aug.	876	367	402	76	78	...	...	117	...	1,473	116	1,548	441
Sept.	1,141	485	599	69	96	...	...	97	...	1,933	134	1,366	555
Oct.	1,471	768	691	80	148	...	1	121	...	2,432	158	1,458	841
Nov.	1,237	762	664	110	175	...	1	156	...	2,233	151	1,337	871
Dec.	1,038	525	698	96	129	...	...	120	...	1,985	192	2,839	621
Grand Totals	12,125	5,544	6,566	850	869	...	9	1,488	2	21,057	1,796	19,552	6,331



REVENUE RECEIPTS		EXPENDITURES		BALANCE	
DATE	AMOUNT	DATE	AMOUNT	DATE	AMOUNT
1890	100.00	1890	50.00	1890	50.00
1891	200.00	1891	100.00	1891	100.00
1892	300.00	1892	150.00	1892	150.00
1893	400.00	1893	200.00	1893	200.00
1894	500.00	1894	250.00	1894	250.00
1895	600.00	1895	300.00	1895	300.00
1896	700.00	1896	350.00	1896	350.00
1897	800.00	1897	400.00	1897	400.00
1898	900.00	1898	450.00	1898	450.00
1899	1000.00	1899	500.00	1899	500.00
1900	1100.00	1900	550.00	1900	550.00
1901	1200.00	1901	600.00	1901	600.00
1902	1300.00	1902	650.00	1902	650.00
1903	1400.00	1903	700.00	1903	700.00
1904	1500.00	1904	750.00	1904	750.00
1905	1600.00	1905	800.00	1905	800.00
1906	1700.00	1906	850.00	1906	850.00
1907	1800.00	1907	900.00	1907	900.00
1908	1900.00	1908	950.00	1908	950.00
1909	2000.00	1909	1000.00	1909	1000.00
1910	2100.00	1910	1050.00	1910	1050.00
1911	2200.00	1911	1100.00	1911	1100.00
1912	2300.00	1912	1150.00	1912	1150.00
1913	2400.00	1913	1200.00	1913	1200.00
1914	2500.00	1914	1250.00	1914	1250.00
1915	2600.00	1915	1300.00	1915	1300.00
1916	2700.00	1916	1350.00	1916	1350.00
1917	2800.00	1917	1400.00	1917	1400.00
1918	2900.00	1918	1450.00	1918	1450.00
1919	3000.00	1919	1500.00	1919	1500.00
1920	3100.00	1920	1550.00	1920	1550.00
1921	3200.00	1921	1600.00	1921	1600.00
1922	3300.00	1922	1650.00	1922	1650.00
1923	3400.00	1923	1700.00	1923	1700.00
1924	3500.00	1924	1750.00	1924	1750.00
1925	3600.00	1925	1800.00	1925	1800.00
1926	3700.00	1926	1850.00	1926	1850.00
1927	3800.00	1927	1900.00	1927	1900.00
1928	3900.00	1928	1950.00	1928	1950.00
1929	4000.00	1929	2000.00	1929	2000.00
1930	4100.00	1930	2050.00	1930	2050.00
1931	4200.00	1931	2100.00	1931	2100.00
1932	4300.00	1932	2150.00	1932	2150.00
1933	4400.00	1933	2200.00	1933	2200.00
1934	4500.00	1934	2250.00	1934	2250.00
1935	4600.00	1935	2300.00	1935	2300.00
1936	4700.00	1936	2350.00	1936	2350.00
1937	4800.00	1937	2400.00	1937	2400.00
1938	4900.00	1938	2450.00	1938	2450.00
1939	5000.00	1939	2500.00	1939	2500.00
1940	5100.00	1940	2550.00	1940	2550.00
1941	5200.00	1941	2600.00	1941	2600.00
1942	5300.00	1942	2650.00	1942	2650.00
1943	5400.00	1943	2700.00	1943	2700.00
1944	5500.00	1944	2750.00	1944	2750.00
1945	5600.00	1945	2800.00	1945	2800.00
1946	5700.00	1946	2850.00	1946	2850.00
1947	5800.00	1947	2900.00	1947	2900.00
1948	5900.00	1948	2950.00	1948	2950.00
1949	6000.00	1949	3000.00	1949	3000.00
1950	6100.00	1950	3050.00	1950	3050.00
1951	6200.00	1951	3100.00	1951	3100.00
1952	6300.00	1952	3150.00	1952	3150.00
1953	6400.00	1953	3200.00	1953	3200.00
1954	6500.00	1954	3250.00	1954	3250.00
1955	6600.00	1955	3300.00	1955	3300.00
1956	6700.00	1956	3350.00	1956	3350.00
1957	6800.00	1957	3400.00	1957	3400.00
1958	6900.00	1958	3450.00	1958	3450.00
1959	7000.00	1959	3500.00	1959	3500.00
1960	7100.00	1960	3550.00	1960	3550.00
1961	7200.00	1961	3600.00	1961	3600.00
1962	7300.00	1962	3650.00	1962	3650.00
1963	7400.00	1963	3700.00	1963	3700.00
1964	7500.00	1964	3750.00	1964	3750.00
1965	7600.00	1965	3800.00	1965	3800.00
1966	7700.00	1966	3850.00	1966	3850.00
1967	7800.00	1967	3900.00	1967	3900.00
1968	7900.00	1968	3950.00	1968	3950.00
1969	8000.00	1969	4000.00	1969	4000.00
1970	8100.00	1970	4050.00	1970	4050.00
1971	8200.00	1971	4100.00	1971	4100.00
1972	8300.00	1972	4150.00	1972	4150.00
1973	8400.00	1973	4200.00	1973	4200.00
1974	8500.00	1974	4250.00	1974	4250.00
1975	8600.00	1975	4300.00	1975	4300.00
1976	8700.00	1976	4350.00	1976	4350.00
1977	8800.00	1977	4400.00	1977	4400.00
1978	8900.00	1978	4450.00	1978	4450.00
1979	9000.00	1979	4500.00	1979	4500.00
1980	9100.00	1980	4550.00	1980	4550.00
1981	9200.00	1981	4600.00	1981	4600.00
1982	9300.00	1982	4650.00	1982	4650.00
1983	9400.00	1983	4700.00	1983	4700.00
1984	9500.00	1984	4750.00	1984	4750.00
1985	9600.00	1985	4800.00	1985	4800.00
1986	9700.00	1986	4850.00	1986	4850.00
1987	9800.00	1987	4900.00	1987	4900.00
1988	9900.00	1988	4950.00	1988	4950.00
1989	10000.00	1989	5000.00	1989	5000.00
1990	10100.00	1990	5050.00	1990	5050.00
1991	10200.00	1991	5100.00	1991	5100.00
1992	10300.00	1992	5150.00	1992	5150.00
1993	10400.00	1993	5200.00	1993	5200.00
1994	10500.00	1994	5250.00	1994	5250.00
1995	10600.00	1995	5300.00	1995	5300.00
1996	10700.00	1996	5350.00	1996	5350.00
1997	10800.00	1997	5400.00	1997	5400.00
1998	10900.00	1998	5450.00	1998	5450.00
1999	11000.00	1999	5500.00	1999	5500.00
2000	11100.00	2000	5550.00	2000	5550.00
2001	11200.00	2001	5600.00	2001	5600.00
2002	11300.00	2002	5650.00	2002	5650.00
2003	11400.00	2003	5700.00	2003	5700.00
2004	11500.00	2004	5750.00	2004	5750.00
2005	11600.00	2005	5800.00	2005	5800.00
2006	11700.00	2006	5850.00	2006	5850.00
2007	11800.00	2007	5900.00	2007	5900.00
2008	11900.00	2008	5950.00	2008	5950.00
2009	12000.00	2009	6000.00	2009	6000.00
2010	12100.00	2010	6050.00	2010	6050.00
2011	12200.00	2011	6100.00	2011	6100.00
2012	12300.00	2012	6150.00	2012	6150.00
2013	12400.00	2013	6200.00	2013	6200.00
2014	12500.00	2014	6250.00	2014	6250.00
2015	12600.00	2015	6300.00	2015	6300.00
2016	12700.00	2016	6350.00	2016	6350.00
2017	12800.00	2017	6400.00	2017	6400.00
2018	12900.00	2018	6450.00	2018	6450.00
2019	13000.00	2019	6500.00	2019	6500.00
2020	13100.00	2020	6550.00	2020	6550.00
2021	13200.00	2021	6600.00	2021	6600.00
2022	13300.00	2022	6650.00	2022	6650.00
2023	13400.00	2023	6700.00	2023	6700.00
2024	13500.00	2024	6750.00	2024	6750.00
2025	13600.00	2025	6800.00	2025	6800.00
2026	13700.00	2026	6850.00	2026	6850.00
2027	13800.00	2027	6900.00	2027	6900.00
2028	13900.00	2028	6950.00	2028	6950.00
2029	14000.00	2029	7000.00	2029	7000.00
2030	14100.00	2030	7050.00	2030	7050.00
2031	14200.00	2031	7100.00	2031	7100.00
2032	14300.00	2032	7150.00	2032	7150.00
2033	14400.00	2033	7200.00	2033	7200.00
2034	14500.00	2034	7250.00	2034	7250.00
2035	14600.00	2035	7300.00	2035	7300.00
2036	14700.00	2036	7350.00	2036	7350.00
2037	14800.00	2037	7400.00	2037	7400.00
2038	14900.00	2038	7450.00	2038	7450.00
2039	15000.00	2039	7500.00	2039	7500.00
2040	15100.00	2040	7550.00	2040	7550.00
2041	15200.00	2041	7600.00	2041	7600.00
2042	15300.00	2042	7650.00	2042	7650.00
2043	15400.00	2043	7700.00	2043	7700.00
2044	15500.00	2044	7750.00	2044	7750.00
2045	15600.00	2045	7800.00	2045	7800.00
2046	15700.00	2046	7850.00	2046	7850.00
2047	15800.00	2047	7900.00	2047	7900.00
2048	15900.00	2048	7950.00	2048	7950.00
2049	16000.00	2049	8000.00	2049	8000.00
2050	16100.00	2050	8050.00	2050	8050.0

No.	Date	Description
1	1880	...
2	1881	...
3	1882	...
4	1883	...
5	1884	...
6	1885	...
7	1886	...
8	1887	...
9	1888	...
10	1889	...
11	1890	...
12	1891	...
13	1892	...
14	1893	...
15	1894	...
16	1895	...
17	1896	...
18	1897	...
19	1898	...
20	1899	...
21	1900	...
22	1901	...
23	1902	...
24	1903	...
25	1904	...
26	1905	...
27	1906	...
28	1907	...
29	1908	...
30	1909	...
31	1910	...
32	1911	...
33	1912	...
34	1913	...
35	1914	...
36	1915	...
37	1916	...
38	1917	...
39	1918	...
40	1919	...
41	1920	...
42	1921	...
43	1922	...
44	1923	...
45	1924	...
46	1925	...
47	1926	...
48	1927	...
49	1928	...
50	1929	...
51	1930	...
52	1931	...
53	1932	...
54	1933	...
55	1934	...
56	1935	...
57	1936	...
58	1937	...
59	1938	...
60	1939	...
61	1940	...
62	1941	...
63	1942	...
64	1943	...
65	1944	...
66	1945	...
67	1946	...
68	1947	...
69	1948	...
70	1949	...
71	1950	...
72	1951	...
73	1952	...
74	1953	...
75	1954	...
76	1955	...
77	1956	...
78	1957	...
79	1958	...
80	1959	...
81	1960	...
82	1961	...
83	1962	...
84	1963	...
85	1964	...
86	1965	...
87	1966	...
88	1967	...
89	1968	...
90	1969	...
91	1970	...
92	1971	...
93	1972	...
94	1973	...
95	1974	...
96	1975	...
97	1976	...
98	1977	...
99	1978	...
100	1979	...



Admissions and Deaths at various Ages during 1898.

AGES.	MALES.		FEMALES.		TOTAL.		AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 1	7	2	11	1	18	3	Under 1	9	...	1	10	1	10
1 to 2	23	4	24	7	47	11	1 to 2	30	5	4	54	9	54
2 to 3	47	10	44	2	91	12	2 to 3	44	9	10	96	19	96
3 to 4	64	5	59	3	123	8	3 to 4	96	8	5	180	13	180
4 to 5	56	3	60	3	116	6	4 to 5	97	3	4	190	7	190
5 to 10	206	4	286	6	492	10	5 to 10	296	6	4	567	10	567
10 to 15	82	1	92	2	174	3	10 to 15	109	2	1	238	3	238
15 to 20	28	...	26	...	54	...	15 to 20	31	...	1	59	1	59
20 to 25	12	...	8	...	20	...	20 to 25	16	1	...	30	1	30
25 to 30	6	1	3	...	9	1	25 to 30	8	...	...	12	...	12
30 to 35	1	...	4	...	5	...	30 to 35	3	...	...	6	...	6
35 to 40	...	...	1	...	1	...	35 to 40	1	...	...	4	...	4
40 to 45	...	...	1	...	1	...	40 to 45	1	...	...	1	...	1
45 to 50	...	...	1	...	1	...	45 to 50	1	...	...	2	...	2
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals...	532	30	620	24	1,152	54	Totals ...	742	34	707	30	1,449	64
<b>NORTHERN HOSPITAL.</b>													
Under 1	...	...	...	...	...	...	Under 1	...	...	...	...	...	...
1 to 2	...	...	...	...	...	...	1 to 2	...	...	...	...	...	...
2 to 3	...	...	...	...	...	...	2 to 3	...	...	...	...	...	...
3 to 4	...	...	...	1	...	4	3 to 4	...	...	...	...	...	...
4 to 5	...	3	...	1	...	2	4 to 5	...	1	...	...	1	...
5 to 10	...	2	...	1	...	3	5 to 10	...	1	...	...	...	...
10 to 15	...	...	...	...	...	...	10 to 15	...	...	...	...	...	...
15 to 20	...	...	...	...	...	...	15 to 20	...	...	...	...	...	...
20 to 25	...	...	...	...	...	...	20 to 25	...	...	...	...	...	...
25 to 30	...	...	...	...	...	...	25 to 30	...	...	...	...	...	...
30 to 35	...	...	...	...	...	...	30 to 35	...	...	...	...	...	...
35 to 40	...	...	...	...	...	...	35 to 40	...	...	...	...	...	...
40 to 45	...	...	...	...	...	...	40 to 45	...	...	...	...	...	...
45 to 50	...	...	...	...	...	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals ...	...	6	...	3	...	9	Totals	...	2	...	...	...	2
<b>GORE FARM HOSPITAL.</b>													
Under 1	...	...	...	...	...	...	Under 1	...	...	...	...	...	...
1 to 2	...	...	...	...	...	...	1 to 2	...	...	...	...	...	...
2 to 3	...	...	...	...	...	...	2 to 3	...	...	...	...	...	...
3 to 4	...	...	...	...	...	...	3 to 4	...	...	...	...	...	...
4 to 5	...	...	...	...	...	...	4 to 5	...	...	...	...	...	...
5 to 10	...	...	...	...	...	...	5 to 10	...	...	...	...	...	...
10 to 15	...	...	...	...	...	...	10 to 15	...	...	...	...	...	...
15 to 20	...	...	...	...	...	...	15 to 20	...	...	...	...	...	...
20 to 25	...	...	...	...	...	...	20 to 25	...	...	...	...	...	...
25 to 30	...	...	...	...	...	...	25 to 30	...	...	...	...	...	...
30 to 35	...	...	...	...	...	...	30 to 35	...	...	...	...	...	...
35 to 40	...	...	...	...	...	...	35 to 40	...	...	...	...	...	...
40 to 45	...	...	...	...	...	...	40 to 45	...	...	...	...	...	...
45 to 50	...	...	...	...	...	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals ...	...	6	...	3	...	9	Totals	...	2	...	...	...	2
<b>SUMMARY.</b>													
Under 1	54	15	64	11	118	26	Under 1	54	15	64	11	118	26
1 to 2	221	41	187	34	408	75	1 to 2	221	41	187	34	408	75
2 to 3	399	50	342	37	741	87	2 to 3	399	50	342	37	741	87
3 to 4	597	54	576	53	1,173	107	3 to 4	597	54	576	53	1,173	107
4 to 5	643	31	715	42	1,358	73	4 to 5	643	31	715	42	1,358	73
5 to 10	2,364	57	2,586	53	4,950	110	5 to 10	2,364	57	2,586	53	4,950	110
10 to 15	964	12	1,125	10	2,089	22	10 to 15	964	12	1,125	10	2,089	22
15 to 20	357	2	315	2	672	4	15 to 20	357	2	315	2	672	4
20 to 25	141	2	160	...	301	2	20 to 25	141	2	160	...	301	2
25 to 30	73	3	80	...	153	3	25 to 30	73	3	80	...	153	3
30 to 35	38	1	57	1	95	2	30 to 35	38	1	57	1	95	2
35 to 40	12	...	23	1	35	1	35 to 40	12	...	23	1	35	1
40 to 45	8	...	7	...	15	...	40 to 45	8	...	7	...	15	...
45 to 50	5	1	7	...	12	1	45 to 50	5	1	7	...	12	1
50 to 55	2	1	...	...	2	1	50 to 55	2	1	...	...	2	1
55 to 60	1	...	...	...	1	...	55 to 60	1	...	...	...	1	...
And upwards	1	...	...	...	1	...	And upwards	1	...	...	...	1	...
Totals	5,880	270	6,245	244	12,125	514	Grand Totals	5,880	270	6,245	244	12,125	514

FEVER STATISTICS.—TABLE V.—*Diphtheria*

EASTERN HOSPITAL.				NORTH-EASTERN HOSPITAL.				NORTH-WESTERN HOSPITAL.			
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	17	6	8	2	25	8	36	11	12	5	16
1 to 2	49	20	88	11	137	31	44	14	53	17	70
2 to 3	54	14	108	22	132	36	53	12	56	18	74
3 to 4	82	17	161	17	178	34	58	14	53	12	66
4 to 5	94	16	181	13	194	29	48	12	53	12	60
5 to 10	210	25	433	33	463	58	115	20	191	33	224
10 to 15	70	3	145	6	151	9	37	1	58	4	62
15 to 20	21	...	52	...	73	...	14	1	18	...	19
20 to 25	16	...	39	...	55	...	8	1	14	...	20
25 to 30	10	...	19	...	29	...	11	...	12	...	23
30 to 35	5	...	9	...	14	...	5	...	8	...	13
35 to 40	3	...	4	...	7	...	1	...	4	...	5
40 to 45	...	...	4	...	4	...	1	...	1	...	2
45 to 50	...	...	1	...	1	...	...	...	...	...	...
50 to 55	...	...	1	...	1	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	...	...	...	...	...
Totals	631	101	1,274	104	2,055	205	377	74	513	102	890

WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.				FOUNTAIN HOSPITAL.			
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	7	6	7	2	14	Under 1	8	2	2	1	10
1 to 2	22	7	37	6	44	1 to 2	15	8	13	4	28
2 to 3	25	4	58	8	66	2 to 3	35	11	24	4	59
3 to 4	43	10	87	7	100	3 to 4	35	5	30	8	65
4 to 5	46	17	102	9	115	4 to 5	54	14	46	6	100
5 to 10	144	18	166	22	182	5 to 10	145	23	157	14	169
10 to 15	47	5	102	2	109	10 to 15	29	1	51	4	60
15 to 20	11	...	28	...	39	15 to 20	12	1	18	...	20
20 to 25	4	...	15	...	19	20 to 25	6	...	17	...	23
25 to 30	2	...	9	...	11	25 to 30	5	...	8	...	13
30 to 35	5	...	6	...	11	30 to 35	6	...	6	...	12
35 to 40	1	...	7	...	8	35 to 40	1	...	3	...	4
40 to 45	1	...	4	...	5	40 to 45	...	...	4	...	4
45 to 50	1	...	4	...	5	45 to 50	...	...	...	...	...
50 to 55	1	...	1	...	2	50 to 55	...	...	...	...	...
55 to 60	...	...	...	...	...	55 to 60	...	...	...	...	...
And upwards	2	...	2	...	4	And upwards	1	...	1	...	2
Totals	274	101	524	104	628	Totals	377	74	513	102	890

Admissions and Deaths at various ages during 1898.

AGES.	MALES.		FEMALES.		TOTAL.		AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 1	16	5	10	2	26	7	Under 1	9	3	7	8	16	6
1 to 2	27	6	28	10	55	16	1 to 2	29	9	22	4	51	13
2 to 3	34	7	46	12	80	19	2 to 3	31	7	37	9	68	16
3 to 4	51	9	52	8	103	17	3 to 4	52	10	40	4	92	14
4 to 5	40	8	56	11	96	19	4 to 5	53	5	39	6	92	11
5 to 10	99	14	160	21	259	35	5 to 10	155	16	165	15	320	31
10 to 15	31	1	42	2	73	3	10 to 15	49	2	42	2	91	4
15 to 20	5	1	14	...	19	1	15 to 20	23	1	16	...	39	1
20 to 25	4	1	4	...	8	1	20 to 25	8	...	10	...	18	...
25 to 30	1	...	3	...	4	...	25 to 30	3	...	7	...	10	...
30 to 35	2	...	6	1	8	1	30 to 35	2	...	7	...	9	...
35 to 40	2	...	...	...	2	...	35 to 40	...	...	4	...	4	...
40 to 45	1	...	...	...	1	...	40 to 45	...	...	...	...	...	...
45 to 50	...	...	...	...	...	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	313	52	421	67	734	119	Totals	414	53	396	43	810	96
<b>NORTHERN HOSPITAL.</b>													
Under 1	...	...	...	...	...	...	Under 1	...	...	...	...	...	...
1 to 2	...	...	...	...	...	...	1 to 2	...	...	...	...	...	...
2 to 3	...	...	...	...	...	...	2 to 3	...	...	...	...	...	...
3 to 4	...	...	...	1	...	1	3 to 4	...	...	...	...	...	...
4 to 5	...	...	...	...	...	...	4 to 5	...	...	...	...	...	...
5 to 10	...	...	...	...	...	...	5 to 10	...	...	...	...	...	...
10 to 15	...	...	...	...	...	...	10 to 15	...	...	...	...	...	...
15 to 20	...	...	...	...	...	...	15 to 20	...	...	...	...	...	...
20 to 25	...	...	...	...	...	...	20 to 25	...	...	...	...	...	...
25 to 30	...	...	...	...	...	...	25 to 30	...	...	...	...	...	...
30 to 35	...	...	...	...	...	...	30 to 35	...	...	...	...	...	...
35 to 40	...	...	...	...	...	...	35 to 40	...	...	...	...	...	...
40 to 45	...	...	...	...	...	...	40 to 45	...	...	...	...	...	...
45 to 50	...	...	...	...	...	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	...	...	...	1	...	1	Totals	...	...	...	...	...	...
<b>GORE FARM HOSPITAL.</b>													
Under 1	...	...	...	...	...	...	Under 1	...	...	...	...	...	...
1 to 2	...	...	...	...	...	...	1 to 2	...	...	...	...	...	...
2 to 3	...	...	...	...	...	...	2 to 3	...	...	...	...	...	...
3 to 4	...	...	...	...	...	...	3 to 4	...	...	...	...	...	...
4 to 5	...	...	...	...	...	...	4 to 5	...	...	...	...	...	...
5 to 10	...	...	...	...	...	...	5 to 10	...	...	...	...	...	...
10 to 15	...	...	...	...	...	...	10 to 15	...	...	...	...	...	...
15 to 20	...	...	...	...	...	...	15 to 20	...	...	...	...	...	...
20 to 25	...	...	...	...	...	...	20 to 25	...	...	...	...	...	...
25 to 30	...	...	...	...	...	...	25 to 30	...	...	...	...	...	...
30 to 35	...	...	...	...	...	...	30 to 35	...	...	...	...	...	...
35 to 40	...	...	...	...	...	...	35 to 40	...	...	...	...	...	...
40 to 45	...	...	...	...	...	...	40 to 45	...	...	...	...	...	...
45 to 50	...	...	...	...	...	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	...	...	...	...	...	1	Totals	...	...	...	...	...	...
<b>SUMMARY.</b>													
Under 1	68	25	59	18	127	43	Under 1	68	25	59	18	127	43
1 to 2	214	68	176	58	390	126	1 to 2	214	68	176	58	390	126
2 to 3	270	68	292	79	562	147	2 to 3	270	68	292	79	562	147
3 to 4	384	77	365	77	749	154	3 to 4	384	77	365	77	749	154
4 to 5	414	87	410	71	824	158	4 to 5	414	87	410	71	824	158
5 to 10	1,106	142	1,324	168	2,430	310	5 to 10	1,106	142	1,324	168	2,430	310
10 to 15	379	16	423	25	802	41	10 to 15	379	16	423	25	802	41
15 to 20	121	5	154	...	275	5	15 to 20	121	5	154	...	275	5
20 to 25	60	2	98	...	158	2	20 to 25	60	2	98	...	158	2
25 to 30	43	...	60	...	103	...	25 to 30	43	...	60	...	103	...
30 to 35	25	1	46	1	71	2	30 to 35	25	1	46	1	71	2
35 to 40	13	...	26	...	39	...	35 to 40	13	...	26	...	39	...
40 to 45	3	...	17	...	20	...	40 to 45	3	...	17	...	20	...
45 to 50	1	...	6	...	7	...	45 to 50	1	...	6	...	7	...
50 to 55	...	...	3	...	3	...	50 to 55	...	...	3	...	3	...
55 to 60	...	...	1	...	1	...	55 to 60	...	...	1	...	1	...
And upwards	2	...	1	...	3	...	And upwards	2	...	1	...	3	...
Totals	3,105	492	3,461	499	6,566	991	Grand Totals	3,105	492	3,461	499	6,566	991

FEVER STATISTICS.—TABLE VI.—*Enteric Fever*

EASTERN HOSPITAL.				NORTH-EASTERN HOSPITAL.				NORTH-WESTERN HOSPITAL.					
AGES.	MALES.		FEMALES.		TOTAL.		AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 5	4	...	4	...	8	...	Under 5	6	1	4	...	10	1
5 to 10	4	...	13	1	17	1	5 to 10	5	...	15	1	20	1
10 to 15	23	...	15	3	38	5	10 to 15	11	...	28	3	39	3
15 to 20	20	5	12	1	32	6	15 to 20	18	5	18	6	36	11
20 to 25	13	7	9	1	22	8	20 to 25	21	10	16	2	37	12
25 to 30	16	1	5	...	21	1	25 to 30	14	5	19	4	33	9
30 to 35	3	...	4	1	7	1	30 to 35	3	...	9	...	12	...
35 to 40	5	1	2	...	7	1	35 to 40	4	1	4	1	8	2
40 to 45	...	...	1	...	1	...	40 to 45	6	1	4	3	10	4
45 to 50	...	...	1	1	1	1	45 to 50	1	1	...	...	1	1
50 to 55	...	...	1	...	1	...	50 to 55	1	1	...	...	1	1
55 to 60	1	...	...	...	1	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	89	16	67	8	156	24	Totals	90	25	117	20	207	45
WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.				FOUNTAIN HOSPITAL.					
AGES.	MALES.		FEMALES.		TOTAL.		AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 5	...	...	2	...	2	...	Under 5	...	...	...	...	...	...
5 to 10	6	...	3	...	9	...	5 to 10	...	...	...	...	...	...
10 to 15	10	...	6	...	16	...	10 to 15	...	...	...	...	...	...
15 to 20	13	...	6	1	19	1	15 to 20	...	...	...	...	...	...
20 to 25	8	1	5	...	13	1	20 to 25	...	...	...	...	...	...
25 to 30	5	1	8	1	13	2	25 to 30	...	...	...	...	...	...
30 to 35	5	1	...	...	5	1	30 to 35	...	...	...	...	...	...
35 to 40	5	1	2	1	7	2	35 to 40	...	...	...	...	...	...
40 to 45	3	1	...	...	3	1	40 to 45	...	...	...	...	...	...
45 to 50	...	...	1	...	1	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	55	5	33	3	88	8	Totals	...	...	...	...	...	...

Admissions and Deaths at various ages during 1898.

DORMITORY HOSPITAL.				FARM HOSPITAL.				BROOK HOSPITAL.						
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.			
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.				
Under 5	2	...	5	...	7	Under 5	4	...	1	...	5			
5 to 10	14	...	11	...	25	5 to 10	4	...	6	...	10			
10 to 15	16	...	9	...	25	10 to 15	12	...	5	...	17			
15 to 20	26	3	9	1	35	15 to 20	5	2	11	2	16			
20 to 25	18	4	10	1	28	20 to 25	8	...	5	1	13			
25 to 30	18	3	8	5	26	25 to 30	8	3	2	...	10			
30 to 35	11	3	9	1	20	30 to 35	5	1	3	...	8			
35 to 40	5	...	6	2	11	35 to 40	3	...	4	...	7			
40 to 45	2	1	1	...	3	40 to 45	1	1	1	...	2			
45 to 50	...	...	2	1	2	45 to 50	1	1	2	1	3			
50 to 55	...	...	1	...	1	50 to 55	1	...	...	...	1			
55 to 60	...	...	...	...	...	55 to 60	...	...	1	1	...			
And upwards	...	...	...	...	...	And upwards	...	...	...	...	...			
Totals	112	14	71	14	183	Totals	52	8	41	7	93			
GORE FARM HOSPITAL.					NORTHERN HOSPITAL.					SUMMARY.				
Under 5	...	...	...	...	...	Under 5	17	1	17	...	34	1		
5 to 10	...	...	...	...	...	5 to 10	43	1	56	4	99	5		
10 to 15	...	...	...	...	...	10 to 15	82	2	81	11	163	13		
15 to 20	...	...	...	...	...	15 to 20	100	16	71	14	171	30		
20 to 25	...	...	...	...	...	20 to 25	77	23	51	7	128	30		
25 to 30	...	...	...	...	...	25 to 30	77	18	47	11	124	29		
30 to 35	...	...	...	...	...	30 to 35	31	5	33	5	64	10		
35 to 40	...	...	...	...	...	35 to 40	28	3	20	6	48	9		
40 to 45	...	...	...	...	...	40 to 45	13	5	9	4	22	9		
45 to 50	...	...	...	...	...	45 to 50	2	2	7	3	9	5		
50 to 55	...	...	...	...	...	50 to 55	3	1	2	...	5	1		
55 to 60	...	...	...	...	...	55 to 60	1	...	1	1	2	1		
And upwards	...	...	...	...	...	And upwards	...	...	...	...	...	...		
Totals	...	...	...	...	...	Totals	474	77	395	66	869	143		
Grand Totals					Grand Totals					Grand Totals				

FEVER STATISTICS.—TABLE VIII.—*Details of*

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.		
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	
Scarlet Fever ... ..	465	<b>GENERAL DISEASES.</b>							
		<i>Specific Febrile.</i>							
		Acute Tuberculosis ... ..	...	...	2	2	1	...	
		Chickenpox ... ..	1	...	4	...	1	...	
		Erysipelas ... ..	...	...	...	...	1	...	
		Febricula ... ..	1	...	4	...	...	...	
		General Tuberculosis ... ..	...	...	...	...	...	...	
		Influenza ... ..	...	...	5	...	...	...	
		Measles ... ..	4	1	12	1	8	1	
		Rötheln ... ..	12	...	8	...	4	...	
		Septicæmia ... ..	...	...	...	...	...	...	
		Syphilis ... ..	...	...	...	...	...	...	
		Whooping-cough ... ..	1	...	...	...	1	...	
		<i>Not classified.</i>							
		Marasmus ... ..	1	1	...	...	...	...	
		<b>LOCAL DISEASES.</b>							
		<i>Lymphatic System.</i>							
		Lymphadenitis ... ..	1	...	...	...	...	...	
		<i>Nervous System.</i>							
		Peripheral Neuritis ... ..	1	...	...	...	...	...	
		Tubercle, Meningeal ... ..	...	...	...	...	...	...	
		<i>Circulatory System.</i>							
		Ulcerative Endocarditis ... ..	...	...	...	...	...	...	
		<i>Respiratory System.</i>							
		Bronchitis ... ..	2	...	2	...	...	...	
		Broncho-Pneumonia ... ..	...	...	...	...	...	...	
		Catarrh ... ..	...	...	...	...	...	...	
		Pneumonia Lobar ... ..	1	...	4	1	1	...	
		„ Lobular ... ..	3	1	...	...	1	1	
		<i>Digestive System.</i>							
		Appendicitis ... ..	...	...	...	...	...	...	
		Dentition ... ..	...	...	...	...	1	...	
		Enteritis ... ..	...	...	...	...	3	2	
		Pharyngitis ... ..	...	...	...	...	...	...	
		Stomatitis ... ..	...	...	1	...	...	...	
		Tonsillitis ... ..	11	..	64	...	12	...	
		Tubercular Peritonitis ... ..	...	...	...	...	...	...	
		<i>Urinary System.</i>							
		Albuminuria ... ..	...	...	1	...	...	...	
		Nephritis ... ..	...	...	...	...	...	...	
<i>Skin Diseases.</i>									
Copaiba Rash ... ..	1	...	...	...	...	...			
Dermatitis ... ..	...	...	...	...	...	...			
Eczema ... ..	...	...	...	...	1	...			
Erythema ... ..	10	...	7	...	7	...			
Psoriasis ... ..	1	...	...	...	...	...			
Seborrhœa ... ..	...	...	...	...	...	...			
Sudamina ... ..	...	...	...	...	...	...			
Urticaria ... ..	...	...	...	...	...	...			
Carried forward ... ..	465	...	51	3	114	4	42		

Miscellaneous Diseases admitted during 1898.

WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN HOSPITAL.		PARK HOSPITAL.		BROOK HOSPITAL.		SUMMARY.	
No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
...	...	...	...	...	...	...	...	...	...	...	...	3	2
...	...	...	...	...	...	2	...	1	...	1	...	10	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
2	...	...	...	...	...	...	...	6	...	...	...	13	...
...	...	...	...	...	...	...	...	...	...	1	1	1	1
2	...	...	...	...	...	1	...	1	...	...	...	9	...
14	4	1	...	6	2	10	1	6	1	12	3	73	14
30	...	4	...	4	...	10	...	4	...	...	...	76	...
...	...	1	1	...	...	...	...	...	...	...	...	1	1
...	...	1	...	...	...	1	...	1	...	...	...	3	...
...	...	2	...	...	...	2	...	5	...	...	...	11	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	1	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	1	...	...	1	1
...	...	...	...	1	...	...	...	2	...	1	...	8	...
1	...	2	...	...	...	...	...	...	...	2	2	5	2
...	...	2	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	2	...	2	2	4	1	2	...	16	4
...	...	...	...	...	...	3	...	...	...	...	...	7	2
1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	3	2
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
3	...	11	...	1	...	17	...	6	...	4	...	129	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	1	...	6	...	...	...	8	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	2	...	...	...	4	...
5	...	7	...	8	...	6	...	9	...	2	...	61	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	3	...	...	...	1	...	1	...	...	...	5	...
59	5	35	1	22	2	59	3	58	3	25	6	465	31

FEVER STATISTICS.—TABLE VIII. (continued)—Details

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	465	... ..	51	3	114	4	42	4
Scarlet Fever (continued)	138	<i>Eye Diseases—</i>						
		<i>Conjunctivitis</i> ... ..	1	...	...	...	...	...
		<i>Local Injuries.</i>						
		<i>Burn</i> ... ..	...	...	...	...	1	...
		<i>Not Classified.</i>						
		<i>Abscess of Scalp</i> ... ..	...	...	...	...	...	...
		<i>Adenitis</i> ... ..	...	...	1	...	...	...
		<i>Axillary Abscess</i> ... ..	1	...	...	...	...	...
		<i>Debility</i> ... ..	...	...	...	...	...	...
		<i>Marasmus</i> ... ..	...	...	1	1	1	1
		<i>No obvious disease</i> ... ..	7	...	58	...	14	...
		<i>Otitis</i> ... ..	...	...	...	...	...	...
		<i>Psoas Abscess</i> ... ..	...	...	...	...	...	...
<i>Traumatic Desquamation</i> ... ..	...	...	1	...	...	...		
<i>Tubercular Adenitis</i> ... ..	...	...	...	...	...	...		
Diphtheria ... ..	603		60	3	175	5	58	5
Diphtheria ... ..	108	<b>GENERAL DISEASES.</b>						
		<i>Specific Febrile.</i>						
		<i>Chickenpox</i> ... ..	...	...	...	...	...	...
		<i>Erysipelas</i> ... ..	1	...	...	...	...	...
		<i>Influenza</i> ... ..	...	...	...	...	...	...
		<i>Measles</i> ... ..	7	3	...	...	7	4
		<i>Rheumatic Fever</i> ... ..	...	...	...	...	...	...
		<i>Rötheln</i> ... ..	...	...	...	...	...	...
		<i>Scarvy</i> ... ..	...	...	...	...	...	...
		<i>Syphilis</i> ... ..	2	...	...	...	1	...
		<i>Tuberculosis</i> ... ..	...	...	...	...	...	...
		<i>Whooping-cough</i> ... ..	1	1	...	...	1	...
		<i>Not classified.</i>						
		<i>Alcoholism</i> ... ..	...	...	...	...	...	...
		<i>Aphthæ</i> ... ..	...	...	...	...	...	...
		<i>Rheumatism</i> ... ..	...	...	...	...	1	...
		<b>LOCAL DISEASES.</b>						
		<i>Diseases of Nose.</i>						
		<i>Rhinitis</i> ... ..	...	...	...	...	...	...
		<i>Empyema antri...</i> ... ..	...	...	...	...	...	...
		<i>Nervous System.</i>						
		<i>Laryngismus Stridulus</i> ... ..	...	...	...	...	...	...
		<i>Respiratory System.</i>						
		<i>Bronchitis</i> ... ..	...	...	...	...	...	...
		<i>Broncho-Pneumonia</i> .. ..	...	...	...	...	...	...
		<i>Coryza</i> ... ..	2	...	...	...	...	...
		<i>Laryngitis</i> ... ..	5	1	...	...	...	...
		<i>Phthisis</i> ... ..	...	...	...	...	...	...
		<i>Pleurisy</i> ... ..	1	...	...	...	...	...
		<i>Pneumonia, Lobar</i> ... ..	3	1	...	...	2	2
		" <i>Lobular</i> ... ..	2	1	...	...	1	1
		<i>Tubercular Laryngitis</i> ... ..	...	...	...	...	...	...
Carried forward ... ..	108		24	7	...	...	13	7
Carried forward ..	711	... ..	84	10	175	5	71	12

*f Miscellaneous Diseases admitted during 1898.*

WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN HOSPITAL.		PARK HOSPITAL.		BROOK HOSPITAL.		SUMMARY.	
No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
59	5	35	1	22	2	59	3	58	3	25	6	465	31
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	2	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	2	...	...	...	3	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	3	...	...	...	5	2
...	...	2	...	...	...	12	...	27	...	...	...	120	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...
60	5	38	1	22	2	72	3	92	3	26	6	603	33
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	1	...	...	...	...	...	...	...	...	1	...	2	1
2	2	1	1	8	5	...	1	6	2	3	3	34	21
...	...	...	...	...	...	...	...	2	...	...	...	2	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	1	...	...	1	1
3	...	1	...	2	...	...	...	1	...	3	...	13	...
1	1	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	1	...	...	1	...	...	...	...	...	4	2
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	1	...	...	...	...	...	3	...	...	...	3	...
...	...	...	...	...	...	...	...	...	...	3	1	4	1
...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	1	...	...	...	1	...	...	...	7	1
...	...	...	...	...	...	...	...	1	1	...	...	1	1
...	...	...	...	...	...	1	1	...	...	...	...	2	1
1	1	...	...	...	...	1	...	1	...	1	1	9	5
...	...	...	...	...	...	2	1	7	3	...	...	12	6
1	1	...	...	...	...	...	...	...	...	...	...	1	1
9	6	4	2	11	5	11	5	24	7	12	5	108	44
69	11	42	3	33	7	83	8	116	10	38	11	711	77

FEVER STATISTICS—TABLE VIII. (continued)—Details.

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.	
			No. of Cases	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	711	... ..	84	10	175	5	71	12
Brought forward— Diphtheria } ...	108	... ..	24	7	...	...	13	7
Diphtheria (continued) ...	492	<i>Digestive System.</i>						
		Diarrhoea ... ..	...	...	...	...	...	...
		Dyspepsia ... ..	...	...	...	...	...	...
		Enteritis ... ..	...	...	...	...	...	...
		Herpes of Palate ... ..	...	...	...	...	...	...
		Pharyngitis ... ..	...	...	...	...	2	...
		Post-pharyngeal Abscess ... ..	...	...	...	...	1	...
		Suppurative Tonsillitis ... ..	...	...	...	...	1	...
		Stomatitis ... ..	...	...	...	...	3	...
		Tabes Mesenterica ... ..	...	...	...	...	...	...
		Tonsillitis ... ..	100	...	...	...	60	...
		<i>Skin Diseases.</i>						
		Eczema ... ..	1	...	...	...	...	...
		<i>Circulatory System.</i>						
		Morbus Cordis ... ..	...	...	...	...	1	...
		Pericarditis ... ..	...	...	...	...	...	...
		<i>Unclassified.</i>						
		Adenitis, Suppurative ... ..	...	...	...	...	...	...
		Adenoid Growths ... ..	...	...	...	...	1	...
		Cervical Adenitis ... ..	...	...	...	...	...	...
	No obvious disease ... ..	1	...	...	...	1	...	
	Phagedænic Ulceration of Throat ... ..	...	...	...	...	...	...	
	Struma ... ..	...	...	...	...	...	...	
	Sunstroke ... ..	...	...	...	...	1	...	
Enteric Fever ... ..	600		126	7	...	...	84	7
	51	<b>GENERAL DISEASES.</b>						
		<i>Specific Febrile.</i>						
		Chickenpox ... ..	...	...	...	...	1	...
		Erysipelas ... ..	...	...	...	...	...	...
		Febricula ... ..	6	...	...	...	1	...
		Influenza ... ..	3	1	...	...	1	...
		Malaria ... ..	...	...	...	...	...	...
		Measles ... ..	...	...	...	...	...	...
		Pyæmia ... ..	1	1	...	...	...	...
		Rheumatic Fever ... ..	...	...	...	...	...	...
		Scarlet Fever ... ..	...	...	...	...	1	...
		Tuberculosis ... ..	1	1	...	...	...	...
		Whooping-cough ... ..	...	...	...	...	...	...
		<i>Not classified.</i>						
		Acute Rheumatism ... ..	2	...	...	...	...	...
		Acute Necrosis ... ..	...	...	...	...	...	...
		Diabetic Coma ... ..	...	...	...	...	...	...
	Leucocythæmia... ..	...	...	...	...	...	...	
	Rheumatism ... ..	...	...	...	...	...	...	
	<i>Lymphatic System.</i>							
	Perisplenic Abscess ... ..	...	...	...	...	...	...	
	51	Carried forward ... ..	13	3	...	...	4	...
Carried forward... ..	1,254	... ..	199	13	175	5	146	12

of Miscellaneous Diseases admitted during 1898.

WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN HOSPITAL.		PARK HOSPITAL.		BROOK HOSPITAL.		SUMMARY.	
No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
69	11	42	3	33	7	83	8	116	10	38	11	711	77
9	6	4	2	11	5	11	5	24	7	12	5	108	44
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	3	3	...	...	...	...	...	...	3	3
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	3	...
...	...	...	...	...	...	...	...	1	1	...	...	2	1
...	...	...	...	...	...	...	...	...	...	1	...	2	...
3	...	1	...	...	...	1	...	3	...	2	...	13	...
...	...	...	...	...	...	...	...	1	1	...	...	1	1
62	...	16	...	49	...	75	1	67	...	21	...	450	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	1	...	2	...	...	...	5	...
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
74	6	21	2	63	8	91	6	101	9	40	7	600	52
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
1	...	...	...	...	...	2	...	...	...	1	...	11	...
3	...	...	...	...	...	4	...	...	...	1	...	12	1
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	1	1	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
8	1	1	1	...	...	...	...	...	...	...	...	10	3
2	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	1	...	...	...	...	...	...	...	...	...	3	...
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	1	1	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	2	...	...	...	...	...	2	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...
15	1	4	3	...	...	11	1	1	...	3	1	51	9
149	12	63	6	85	10	174	10	194	12	69	14	1,254	94

FEVER STATISTICS.—TABLE VIII. (continued)—Details

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	1,254	.. .. .	199	13	175	5	146	12
Brought forward— Enteric Fever }	51	.. .. .	13	3	...	...	4	...
Enteric Fever ( <i>contd.</i> ) ...								
		<b>LOCAL DISEASES.</b>						
		<i>Nervous System.</i>						
		Alcoholic Neuritis ... ..	...	...	...	...	...	...
		Cerebral Abscess ... ..	1	1	...	...	...	...
		„ Softening ... ..	...	...	...	...	1	...
		Delirium Tremens ... ..	1	..	...	...	...	...
		Mania ... ..	...	...	...	...	...	...
		Meningitis ... ..	...	...	...	...	1	...
		„ Purulent ... ..	...	...	...	...	1	1
		„ Tubercular ... ..	...	...	...	...	2	2
		<i>Circulatory System.</i>						
		Anæmia ... ..	...	...	...	...	...	...
		Endocarditis ... ..	...	...	...	...	...	...
		„ Malignant ... ..	2	1	...	...	2	2
		Morbus Cordis ... ..	...	...	...	...	...	...
		Varicose Ulcers of Legs ...	...	...	...	...	1	...
		<i>Respiratory System.</i>						
		Bronchitis ... ..	2	...	...	...	...	...
		Emphysema ... ..	...	...	...	...	...	...
		Empyema ... ..	1	1	...	...	...	...
		Phthisis ... ..	...	...	...	...	1	...
		Pleurisy ... ..	1	...	...	...	..	...
		Pleuro-Pneumonia ... ..	...	...	...	...	...	...
	194	Pneumonia Lobar ... ..	9	3	...	...	1	...
		„ Lobular ... ..	2	1	...	...	...	...
		„ and Empyema ... ..	...	...	...	...	...	...
		<i>Digestive System.</i>						
		Abdominal Tumour ... ..	2	..	...	...	...	...
		Appendicitis ... ..	...	...	...	...	1	1
		Cirrhosis of Liver ... ..	...	...	...	...	...	...
		Colic ... ..	...	...	...	...	...	...
		Colitis, Ulcerative ... ..	1	1	...	...	...	...
		Constipation ... ..	4	...	...	...	13	...
		Diarrhœa ... ..	1	...	...	...	1	...
		Dyspepsia ... ..	...	...	...	...	...	...
		Enteritis ... ..	1	...	...	...	2	...
		Gastralgia ... ..	...	...	...	...	...	...
		Gastric Catarrh... ..	...	...	...	...	...	...
		Gastritis ... ..	...	...	...	...	1	...
		Gastro-Enteritis ... ..	...	...	...	...	...	...
		Peritonitis, Purulent ... ..	...	...	...	...	...	...
		Perityphlitis ... ..	1	...	...	...	...	...
		Tabes Mesenterica ... ..	...	...	...	...	...	...
		Tonsillitis... ..	...	...	...	...	...	...
		Tubercle, Peritoneal ... ..	...	...	...	...	...	...
		<i>Urinary System.</i>						
		Albuminuria ... ..	1	...	...	...	...	...
		Cystitis ... ..	...	...	...	...	...	...
		Nephritis ... ..	3	2	...	...	...	...
	245	Carried forward ... ..	46	13	...	...	32	6
Carried forward... ..	1,448	.. .. .	233	23	175	5	174	18

of Miscellaneous Diseases admitted during 1898.

WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN HOSPITAL.		PARK HOSPITAL.		BROOK HOSPITAL.		SUMMARY.	
No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
49	12	63	6	85	10	174	10	194	12	69	14	1,254	94
15	1	4	3	..	...	11	1	1	...	3	1	51	9
1	1	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	1	...	...	...	...	2	1
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	1	1	...	...	1	...	...	...	...	...	3	1
...	...	...	...	...	...	...	...	...	...	...	...	1	1
2	2	...	...	...	...	1	1	...	...	1	1	6	6
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	1	1	...	...	...	...	5	4
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	1	...	1	...	1	...	6	...
...	...	...	...	...	...	2	2	1	...	...	...	3	2
1	...	...	...	...	...	...	...	1	...	...	...	3	1
3	3	...	...	...	...	2	1	...	...	...	...	6	4
...	...	...	...	...	...	3	...	...	...	...	...	4	...
...	...	...	...	...	...	...	...	...	...	2	...	2	...
6	1	9	3	...	...	20	5	3	...	3	...	51	12
...	...	...	...	...	...	...	...	...	...	1	1	3	2
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	...	...	...	...	...	...	2	...
4	...	3	2	...	...	1	...	...	...	1	...	10	3
1	1	...	...	...	...	1	...	...	...	...	...	2	1
...	...	1	...	...	...	...	...	...	...	1	...	2	...
1	1	2	1	...	...	...	...	...	...	...	...	4	3
...	...	1	...	...	...	...	...	...	...	...	...	18	...
1	...	...	...	...	...	...	...	...	...	...	...	3	...
...	...	1	...	...	...	2	...	...	...	1	...	4	...
...	...	...	...	...	...	4	1	3	...	1	...	11	1
...	...	...	...	...	...	2	...	...	...	...	...	2	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
3	...	12	1	...	...	1	...	...	...	2	...	18	1
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	1	...	5	2
41	10	35	11	...	...	59	14	12	...	20	4	245	58
175	21	94	14	85	10	222	23	205	12	86	17	1,448	143

FEVER STATISTICS.—TABLE VIII. (continued)—Details of

Disease as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	1,448	... ..	232	23	175	5	174	18
Brought forward— Enteric Fever } ...	245	... ..	46	13	...	...	32	6
Enteric Fever ( <i>contd.</i> ) ...	20	<i>Generative System.</i>						
		Enlarged Prostate ... ..	...	...	...	...	1	...
		Metrostaxis ... ..	1	...	...	...	...	...
		Ovarian Tumour ... ..	...	...	...	...	1	...
		Peritonitis, Pelvic ... ..	...	...	...	...	...	...
		<i>Skin Diseases.</i>						
		Acne ... ..	1	...	...	...	...	...
		Cellulitis ... ..	...	...	...	...	...	...
		Erythema ... ..	1	...	...	...	...	...
		<i>Not Classified.</i>						
		Abdominal Abscess ... ..	...	...	...	...	...	...
		Abscess ... ..	...	...	...	...	1	...
		Debility ... ..	...	...	...	...	...	...
		No obvious disease ... ..	2	...	...	...	2	...
		Tubercular Abscess ... ..	...	...	...	...	...	...
	Whitlow ... ..	1	...	...	...	...	...	
	Alveolar Abscess ... ..	...	...	...	...	...	...	
	265		52	13	...	...	37	6
Typhus ... ..	4	Congenital Heart Disease	1	...	...	...	...	...
		Continued Fever ... ..	...	...	...	...	...	...
		Influenza ... ..	...	...	...	...	...	...
		Ulcerative Endocarditis ...	...	...	...	...	...	...
	4		1	...	...	...	...	...
Uncertified ... ..	16	Admitted to suckle infant	...	...	...	...	...	...
		Born in hospital ... ..	...	...	...	...	2	...
		Came in with Mother ... ..	1	...	...	...	3	1
		Tonsillitis ... ..	...	...	...	...	1	...
	16		1	...	...	...	6	1
Case dying in 1898, but admitted in 1897	1	.....	...	1	...	...	...	...
GRAND TOTALS ...	1,488	... ..	240	24	175	5	185	19

*Miscellaneous Diseases admitted during 1898.*

WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN HOSPITAL.		PARK HOSPITAL.		BROOK HOSPITAL.		SUMMARY.	
No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
75	21	94	14	85	10	222	23	205	12	86	17	1,448	143
41	10	35	11	...	...	59	14	12	...	20	4	245	58
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	1	...	1	...	7	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	...	1	...
42	10	38	11	...	...	61	15	13	...	23	4	266	59
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	1	...	...	...	...	1	1
1	...	...	...	...	...	2	1	...	...	...	...	4	1
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...
4	...	...	...	...	...	...	...	3	...	...	...	11	1
...	...	...	...	...	...	1	...	...	...	...	...	2	...
4	...	...	...	...	...	1	...	3	...	1	...	16	1
...	...	...	...	...	...	...	...	...	...	...	...	...	1
81	21	97	14	85	10	227	25	209	12	89	17	1,488	147

iii. REPORTS OF THE ACTING MEDICAL OFFICER OF THE RIVER AMBULANCE SERVICE AND OF THE MEDICAL SUPERINTENDENT OF THE SMALLPOX HOSPITAL SHIPS FOR THE YEAR 1898.

No. 1.

RIVER AMBULANCE SERVICE.

SOUTH WHARF,

ROTHERHITHE,

February 10th, 1899.

**Statistics.** In the course of the year 1898, 36 cases were sent to the wharf certified as being cases of smallpox. In six cases only was the diagnosis confirmed at the wharf and the patients transferred to the hospital ships. One patient thus transferred was found subsequently not to be suffering from smallpox, and was returned to South Wharf for isolation.

The following unions contributed the five cases of smallpox :—

St. Pancras	..	..	..	..	2
Whitechapel	..	..	..	..	2
Wandsworth and Clapham	..	..	..	..	1

Further particulars of these cases are given in the report of the medical superintendent of the hospital ships.

Including the case mentioned above as being transferred in error to the hospital ships, there were 31 cases sent to South Wharf in which the diagnosis of smallpox was not confirmed. These 31 patients were disposed of as follow :—

Sent home direct	..	..	..	..	..	23
Sent home after detention	..	..	..	..	..	5
Transferred to the South-Eastern Hospital after detention						2
Transferred to the hospital ships	..	..	..	..	..	1
						<hr/> 31

The corrected diagnoses in these cases were as given in the following table :—

Corrected diagnosis.	Sent home direct.	Sent home after detention.	Transferred to the South-Eastern Hospital.	Transferred to the Hospital Ships.	Total.
Varicella	14	3	..	..	17
Erythema	3	1	..	1	5
Syphilis	3	1	..	..	4
Scarlet Fever	..	..	2	..	2
Impetigo	1	..	..	..	1
Dermatitis	1	..	..	..	1
Unknown*	1	..	..	..	1
	23	5	2	1	31

\* No record has been kept of this case.

(Signed) T. F. RICKETTS,  
Acting Medical Officer.

## No. 2.

## THE SMALLPOX HOSPITAL SHIPS.

(For Statistical Tables, see pp. 93 to 107.)

LONG REACH,

NEAR DARTFORD, KENT,

*January 24th, 1899.***Statistics.**

Six patients were treated in this hospital during the year 1898, but one of these patients was not suffering from smallpox, his disease being diagnosed by me as erythema. There were no deaths. During thirty weeks of the year the hospital was empty. The longest period during which there was no patient under treatment was from October 1st to the end of the year, a period of thirteen weeks and four days.

Of the five cases of smallpox, in one the disease was contracted at Middlesbrough, where smallpox was epidemic last spring. The patient, a man, had been employed there in erecting the temporary smallpox hospital. In two cases where the disease was contracted in London the source of infection in no way could be traced. One of these two patients, a woman, passed on the disease to her husband. The fifth case was that of an immigrant Polish Jew, who caught smallpox before he arrived in England.

So few patients in one year have not been treated in this hospital since the year 1889, when also there were five patients only treated for smallpox. The table of admissions, deaths, and mortality per cent. for smallpox since December, 1870, &c., published in the report of the Statistical Committee, is of interest in this connection. The number of patients treated for smallpox year by year since the year 1884 declined, practically, continuously from 6,363 in 1884 to five in 1889, and rose from five in 1889 to 2,376 in 1893. Since 1893 there has been another continuous fall up to last year. From the maximum in 1884 to that in 1893 is a cycle of nine years, the yearly admissions falling through five years and rising through four. At the present time we appear to have touched the bottom of another cycle. The yearly admissions have been falling through the five years from the last maximum in 1893. Epidemics of smallpox came in similar cycles before the year 1884, but an unusual feature of the 1884-1893 cycle was its length.

Year.	Number of patients treated for smallpox.	Year.	Number of patients treated for smallpox.
1884	6,363	1892	325
1885	6,146	1893	2,376
1886	99	1894	1,117
1887	56	1895	941
1888	62	1896	190
1889	5	1897	70
1890	22	1898	5
1891	63		

I think these facts justify the expectation that in the next few years smallpox will be more rife in London than it has been recently; and if past experience is

to be a guide in preparing for the future, they suggest that the Managers should be prepared to deal with a considerable visitation of smallpox in three years' time or earlier. The epidemic of 1893 was not a large one, but it strained the resources of this hospital, and proved that adequate accommodation for acute cases of smallpox did not exist.

\* \* \* \* \*

Considerations of this kind lead one to look with some anxiety on the fact that the projected Joyce Green Smallpox Hospital is yet uncommenced.

In December last, for the first time in the history of the hospital, one of the vessels, the "Castalia," was seriously damaged in collision.

**Accident to "Castalia."**

In reporting on this subject, I have already pointed out that, although happily no loss of life occurred, very serious consequences would probably have resulted had the "Castalia" been occupied. These consequences, which it is impossible adequately to guard against, I am afraid may be expected to occur on any occasion when one of the occupied vessels is in serious collision. One cannot help feeling that the busy highway of the Thames is not a suitable situation for a large hospital.

\* \* \* \* \*

**Staff.** I present the usual return of the number of persons employed on the staff of the hospital in the course of the year.

<i>Staff employed at the Hospital.</i>				<i>Staff newly employed.</i>			
Year.	Class.*	Number employed.	Contracted Smallpox.	Year.	Class.*	Number newly employed.	Contracted Smallpox.
1898	I.	9	} Nil.	1898	I.	—	} Nil.
	II.	35			II.	10	
	III.	60			III.	13	
	IV.	33			IV.	10	
Total	...	137	—	Total	...	33	—

(Signed) T. F. RICKETTS,  
*Medical Superintendent.*

\*CLASS I.—Includes those brought into intimate contact with patients, viz., nurses and members of the medical staff.

CLASS II.—Includes those somewhat less directly exposed to infection, such as wardmaids and laundrymaids.

CLASS III.—Includes those whose duties did not, as a rule, necessitate their entering the wards, or their being directly exposed to infection in other ways.

CLASS IV.—Includes contractors' men and others temporarily employed at the hospital.





APPENDIX L—INFECTIOUS DISEASES. SMALLPOX STATISTICS, 1909.  
 SMALLPOX STATISTICS—TABLE III.—Showing the condition as regards Vaccination of MALE Patients admitted during 1909.

AGES.	CASES WITH VACCINATION CICATRIX OR CICATRICES PRESENT.																				Total Vaccinated Cases Admitted.	Deaths amongst Vaccinated Cases.	Cases in which there was "No evidence" as to Cicatrices. See Note*.	Cases in which Vaccination Cicatrix was absent.
	AREA OF CICATRIX OR CICATRICES.																							
	Class A' = half and upwards of one-half square inch total area.					Class A'' = one-third, but less than one-half square inch total area.					Class A''' = less than one-third square inch total area.					Class A'''' = Areas not recorded.								
	Number of Scars.					Number of Scars.					Number of Scars.					Number of Scars.								
	Four or more.	Three.	Two.	One.	Not recorded.	Four or more.	Three.	Two.	One.	Not recorded.	Four or more.	Three.	Two.	One.	Not recorded.	Four or more.	Three.	Two.	One.	Not recorded.				
	Formation of Scars.					Formation of Scars.					Formation of Scars.					Formation of Scars.								
	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.	Had one or more scars but have been lost or faded.				
Under 1 year...																								
From 1 to 2 years...																								
2 3																								
3 4																								
4 5																								
5 6																								
6 7																								
7 8																								
8 9																								
9 10																								
10 11																								
11 12																								
12 13																								
13 14																								
14 15																								
15 20																								
20 25	1																							
25 30																								
30 35	1																							
35 40																								
40 50																								
50 60																								
60 70																								
70 80																								
80 years and upwards...																								
TOTAL	1																							

N.B.—This Table includes cases which were vaccinated or re-vaccinated after having been infected with Smallpox.  
 \* In this column are included unvaccinated cases having no visible evidence of the operation, and also cases in which no statement was made, but the nature of the eruption, or other cause, revealed any observation of the marks, if any existed.









TABLE		1881	
List of the names of the persons who have been admitted to the office of Justice of the Peace for the year 1881.		Name	Residence
1	John A. ...	John A. ...	...
2	...	...	...
3	...	...	...
4	...	...	...
5	...	...	...
6	...	...	...
7	...	...	...
8	...	...	...
9	...	...	...
10	...	...	...
11	...	...	...
12	...	...	...
13	...	...	...
14	...	...	...
15	...	...	...
16	...	...	...
17	...	...	...
18	...	...	...
19	...	...	...
20	...	...	...
21	...	...	...
22	...	...	...
23	...	...	...
24	...	...	...
25	...	...	...
26	...	...	...
27	...	...	...
28	...	...	...
29	...	...	...
30	...	...	...
31	...	...	...
32	...	...	...
33	...	...	...
34	...	...	...
35	...	...	...
36	...	...	...
37	...	...	...
38	...	...	...
39	...	...	...
40	...	...	...
41	...	...	...
42	...	...	...
43	...	...	...
44	...	...	...
45	...	...	...
46	...	...	...
47	...	...	...
48	...	...	...
49	...	...	...
50	...	...	...
51	...	...	...
52	...	...	...
53	...	...	...
54	...	...	...
55	...	...	...
56	...	...	...
57	...	...	...
58	...	...	...
59	...	...	...
60	...	...	...
61	...	...	...
62	...	...	...
63	...	...	...
64	...	...	...
65	...	...	...
66	...	...	...
67	...	...	...
68	...	...	...
69	...	...	...
70	...	...	...
71	...	...	...
72	...	...	...
73	...	...	...
74	...	...	...
75	...	...	...
76	...	...	...
77	...	...	...
78	...	...	...
79	...	...	...
80	...	...	...
81	...	...	...
82	...	...	...
83	...	...	...
84	...	...	...
85	...	...	...
86	...	...	...
87	...	...	...
88	...	...	...
89	...	...	...
90	...	...	...
91	...	...	...
92	...	...	...
93	...	...	...
94	...	...	...
95	...	...	...
96	...	...	...
97	...	...	...
98	...	...	...
99	...	...	...
100	...	...	...

## APPENDIX II.—IMBECILITY.

REPORTS OF THE MEDICAL SUPERINTENDENTS OF  
THE SEVERAL ASYLUMS AND OF THE SCHOOLS  
FOR THE YEAR 1898.

(For Statistical Tables, see pp. 117 to 150.)

[*N.B.*—*Those portions of the reports relating to alterations to buildings and other matters of no general interest have been omitted.*]

## No. 1.

## LEAVESDEN ASYLUM.

NEAR WATFORD, HERTS,

January 19th, 1899.

**Statistics.** The numerical results of the past year may be summarised as follow:—

	Males.	Females.	Total.
On January 1st, 1898, the asylum contained ... ..	900	1,099	1,999
Admitted during the year ... ..	119	135	254
Total under treatment during the year ... ..	1,019	1,234	2,253
Discharged during the year ... ..	42	33	75
Died during the year ... ..	92	102	194
Remaining in the asylum on December 31st, 1898 ... ..	885	1,099	1,984

The helpless character of the admissions is still very striking. . . . The weak, aged, and decrepit form the bulk of the admissions, and it is rare to admit a man or woman capable of employment. The asylum is rapidly becoming nothing more nor less than a workhouse hospital, and if the work cast upon the institution is to be carried out efficiently, more paid help must be obtained . . . .

Of the 254 admissions, 92 suffered from secondary dementia, 46 from epilepsy combined with dementia, imbecility, or idiocy, 40 from imbecility without epilepsy, 31 from senile dementia, 13 from general paralysis of the insane, and 12 from idiocy without epilepsy. Of the less common varieties, five suffered from delusional insanity, two from melancholia, one from mania, and one from paralytic dementia. Two were not insane.

There were two re-admissions during the year.

Edward D., aged 25, admitted June 14th, 1898, St. Pancras, was previously admitted March 25th, 1896, and discharged recovered May 23rd, 1896.

Catherine H., aged 41, admitted October 31st, 1898, Islington, was previously admitted August 4th, 1879, and discharged to Colney Hatch Asylum July 16th, 1896.

The table below shows the number of patients admitted from the City and county of London asylums:—

	Males	Females.	Total.
City of London, at Stone .. .. .	19	14	33
Colney Hatch .. .. .	5	19	24
Hanwell .. .. .	10	4	14
Banstead .. .. .	10	14	24
Cane Hill .. .. .	6	1	7
	<u>50</u>	<u>52</u>	<u>102</u>

It is usual to make some remarks upon Table VI., which gives the probable causes of the insanity in the patients admitted during the year, but I find that for several reasons the information obtainable is scanty and unreliable . . . .

The following is the table of discharges:—

	Males.	Females.	Total.
Recovered .. .. .	18	9	27
Improved .. .. .	5	6	11
Not improved .. .. .	17	16	33
Not insane .. .. .	2	2	4
	<u>42</u>	<u>33</u>	<u>75</u>

The percentage of recoveries on admissions was as follows:—

Males.	Females.	Total.
15·1	6·6	10·6

Thirty-three patients were sent to county asylums as suicidal or dangerous to others:—

Name of Asylum.	Males.	Females.	Total.
Colney Hatch .. .. .	2	—	2
Claybury .. .. .	1	3	4
Hanwell .. .. .	4	8	12
Banstead .. .. .	7	4	11
Stone .. .. .	2	1	3
Cane Hill .. .. .	1	—	1
	<u>17</u>	<u>16</u>	<u>33</u>

There were 194 deaths, and no less than 55 of them were caused by consumption.

\* \* \* \* \*

Among the chief of the other causes of death were—Old age, 37; heart disease, 32; epilepsy, nine; and general paralysis of the insane, eight cases.

Five cases died of attacks of diarrhœa, and one of erysipelas.

Two accidents led to deaths and inquests, particulars of which are given hereafter.

The percentage of deaths to the average number resident was :—

Males.	Females.	Total.
10·3	9·3	9·8

Ann T. died April 7th, whose reputed age was 103. She was admitted January 6th, 1871, and was chargeable to St. Marylebone.

**General Remarks.** The asylum was opened for the reception of patients in 1870, and there are still in residence 55 males and 60 females who were admitted that year.

There are no less than 353 patients over 70 years of age in the asylum :—

	Male.	Female.	Total.
70 to 80 .. ..	76	152	228
80 to 90 .. ..	6	14	20
90 to 100 .. ..	0	5	5
	82	171	253

There is at present no centenarian resident.

\* \* \* \* \*

There have been eight serious accidents during the year involving fracture of bones—a small number considering the population—and there have been two inquests resulting therefrom.

\* \* \* \* \*

On March 20th, Frederick B. was found to have two fractured ribs of the left side, sustained by being pushed against a table by a fellow patient on March 19th. B. died on March 30th, and at an inquest held the following day, the jury returned the following verdict :—“That on the 30th day of March, at the parish of Watford, in the county of Hertford, the said Frederick B. did die of pneumonia caused by fracture of two ribs, accidentally received, on March 19th, 1898.”

On March 29th, Ann M., over 90 years of age, whilst sitting half asleep in a chair, fell forward and sustained a fracture of the left collar bone. She died on April 3rd, and at the inquest held on April 5th, the jury returned the following verdict :—“That on the 3rd day of April, at the parish of Watford, in the county of Hertford, the said Ann M. did die of bronchitis, accentuated by a fracture of the left collar bone caused by a fall from a chair on March 29th, 1898.”

\* \* \* \* \*

There were three cases of sudden deaths in which the coroner did not deem an inquest necessary.

On June 4th, Rachael S. died suddenly after a severe epileptic fit.

On July 31st, Maria T., an epileptic, died suddenly in a fit during the night and in the presence of an attendant.

On November 26th, Henry D. died suddenly of syncope in the presence of Dr. Gregor, temporary assistant medical officer.

\* \* \* \* \*

On October 26th, Night Attendant Patrick Long, in a struggle with a violent and threatening patient, sustained a fracture of the first metatarsal bone of the right hand, the patient sustaining no injury.

\* \* \* \* \*

Out of a population of 900 men and 1,100 women, there were employed on December 31st only 338 men and 291 women. Undoubtedly there are a good many more of the patients who ought to be employed, and endeavours must be made in 1899 to show a very different record. The facts against us in this matter are the feeble, helpless character of the majority of the patients and the smallness of the staff.

\* \* \* \* \*

During the year there has been no case where mechanical restraint has been necessary in the treatment of a patient. On principle I am strongly opposed to the treatment of insane patients by means of mechanical restraint, although I have seen some very exceptional cases where such restraint seemed the only possible treatment. In such an asylum as Leavesden, I think mechanical restraint should not be used at all.

I am also opposed to seclusion as a routine means of treatment. Apart altogether from the bad moral effects of seclusion on the patient and on the staff, it is better to allow superfluous energy to find vent through the legs, and in other ways whilst walking in the fresh air, than expend itself by shouting and hammering against the door of a dark and often stuffy room.

\* \* \* \* \*

In the latter months of the year influenza, with, in some cases, serious chest complications, attacked several of the patients and officials.

The new staff regulations came into force during the year, and, with the exception of a few anomalies which it is hoped an early revision will sweep away, have worked well.

\* \* \* \* \*

The floors throughout the asylum have been scrubbed, but the floors of two of the wards and the recreation hall have now been polished with beeswax and turpentine, and it is hoped by the end of 1899 every floor will be similarly polished. This will be a distinct gain in sanitation and cleanliness.

Visitors to patients are now accommodated in the recreation hall, the old visiting rooms being made into admission rooms, where the case books are kept, and where patients are examined on admission before being sent to the wards.

The forms of the daily and other reports made by the heads of departments to the Medical Superintendent have been all carefully considered and brought up to modern requirements.

Two of the Commissioners in Lunacy visited the asylum on April 29th, and Inspectors of the Local Government Board on May 4th, June 22nd, and December 6th. The Managers inspected the asylum on June 29th . . . .

Since June 26th, all deaths have been intimated to the coroner on the same form as used in county and borough asylums.

A few parties of patients have been allowed to take exercise in the beautiful lanes in the neighbourhood of the asylum, and this privilege is much appreciated, but it can only infrequently be granted.

\* \* \* \* \*

The attendants and other officials are now allowed, once a week, the use of the recreation hall from 8 p.m. to 10 p.m. They provide their own music, and in order that due propriety may be observed, both a male and female officer above the rank of a head attendant is present. This weekly gathering, which takes the form of a dance, is very much enjoyed.

\* \* \* \* \*

There have been considerable changes during the year among the chief officers of the asylum. In January, the Medical Superintendent, Dr. Case, retired after 25 years' service owing to illness, and his death soon after was keenly felt. . . . In October, the matron, Miss Crouchley, was appointed to Claybury Asylum, and whilst everyone was glad at her promotion, we were all sorry to lose such a capable and kindly matron. She was succeeded by Miss Howell who, at the time of her appointment was head nurse at the Cheshire County Asylum. The end of the year brought with it the resignations of Inspector Heritage and Head Attendant Church. The former had been in charge of the male division ever since the asylum was opened. . . . Head Attendant Church had been in the service between 18 and 19 years. . . .

The following is the list of officers as made up on December 31st:—

	Males.	Females.	Total.
Medical Officers .. .. .	3	—	3
Other Chief Officers .. .. .	2	1	3
Ward Attendants .. .. .	49	65	114
Centre Attendants .. .. .	2	1	3
Heads of Departments, Artisans, and other Officers.. .. .	96	27	123
Totals .. .. .	<u>152</u>	<u>94</u>	<u>246</u>

\* \* \* \* \*

(Signed) FRANK ASHBY ELKINS, M.D.,  
*Medical Superintendent.*

## No. 2.

## CATERHAM ASYLUM.

CATERHAM, SURREY,

December 31st, 1898.

**Statistics.**

The numerical results of the past year may be learned from the sub-joined table :—

	Males.	Females.*	Total.
On January 1st, 1898, the asylum contained ... ..	929	1,050	1,979
Admitted during the year ... ..	80	120	200
Total under treatment during the year ... ..	1,009	1,170	2,179
Discharged during the year ... ..	13	15	28
Died during the year... ..	67	83	150
Remaining in the asylum on December 31st, 1898 ... ..	929	1,072	2,001

There have been 58 more admissions during the year under review than in 1897. Of these cases 41 were transferred here direct from the London county asylums at Cane Hill and Banstead. There were 47 over 60 years of age, 19 between 70 and 80, and two over 80. I cannot but protest against the practice of sending very aged and infirm patients so long a distance, to end their days in an asylum, when many of them, although undoubtedly coming within the category of "a person of unsound mind," were merely in such a condition of enfeebled senile dementia as might, in my opinion, have been adequately cared for in a workhouse infirmary.

The deaths numbered 150, comprising 67 males and 83 females, giving a percentage of 7·5 on the average number resident. This closely approximates to that for the previous year, namely, 6·9, and compares very favourably with the percentage for the past ten years. Thirty-three of the deceased were upwards of 70 years old, and death was due to general debility and decay of old age.

The number discharged during the year was 28, of whom nine were able to leave the asylum as recovered, six as improved, and 12 as not improved, inclusive of nine transferred to the London county asylum at Cane Hill as being dangerous to themselves or others, and one male patient removed by the relatives for transfer to the City of London Asylum as a private patient. An epileptic youth was discharged as having manifested no evidence of insanity during the fortnight he was under observation here.

The average number resident during the year was 1,987.

The highest number resident on any one day was 2,007.

The lowest number resident on any one day was 1,971.

**Inquests.**

An inquest was held in July on the body of a male patient, aged 82, who sustained a fracture of the neck of the right thigh in the infirmary ward, and died ten days after the occurrence. The following verdict



## No. 3.

## DARENTH ADULT ASYLUM.

NEAR DARTFORD, KENT,

January 31st, 1899.

**Statistics.** The following is a brief summary of the statistical results:—

	Males.	Females.	Total.
In asylum, January 1st, 1898 ... ..	449	595	1,044
Admitted during the year... ..	19	25	44
Discharged during the year ... ..	4	5	9
Died during the year... ..	16	16	32
Remaining in asylum December 31st, 1898 ... .	448	599	1,047

All the patients admitted during the year have come from the schools. Fifteen of the females were workers in the schools laundry, and since their admission to the asylum they have still continued to work there, going backwards and forwards daily; two females help in the wards, and the remainder are incapable of doing any work. Five of the male patients work in the shops, one on the farm, and three help in the wards; the remainder are unemployed. Two females and four males were epileptics.

Three males and five females have been discharged to the parish as dangerous to themselves or others. One male was discharged to his friends unimproved.

There have been 32 deaths during the year—16 males and 16 females—giving a percentage on the average number resident of 3·06. This is the lowest death-rate since the opening of the asylum in 1880. It is worthy of note that the male and female deaths were the same, *i.e.*, 16, and this was also the case last year, when there were 18 of each sex. Seventeen of the deaths were due to lung disease, eight being from phthisis, epilepsy accounted for four, and morbus cordis also for four. *Post-mortem* examinations were made in 27 out of the 32 deaths, and in the remaining cases the friends objected. We find it very inconvenient in cases of death that we have to give the friends time to object before a *post-mortem* can be made. No inquests have been held in the asylum during the year. The coroner is now sent notice of the death of all patients on the form generally used in asylums.

\* \* \* \* \*

**Operations.** A laparotomy was performed on a patient suffering from intestinal obstruction, but the cause of the obstruction could not be found. On *post-mortem* it was discovered that a small knuckle of intestine was strangulated by a peritoneal band. . . .



ASYLUM STATISTICS.—TABLE I.—*Showing*

	LEAVESDEN ASYLUM.					
	Males.	Females.	Total.	Males.	Females.	Total.
In the Asylums, January 1st, 1898...	...	...	...	900	1,099	1,999
Admitted for the first time during the year, direct from the several Parishes and Unions ...	118	134	252	...	...	...
Re-admitted during the year...	1	1	2	...	...	...
Admitted from other Asylums of the Board ...	...	...	...	119	135	254
Total under care during the year ...	...	...	...	1,019	1,234	2,253
Discharged—						
Not insane ...	2	2	4	...	...	...
Recovered ...	18	9	27	...	...	...
Improved ...	5	6	11	...	...	...
Not improved ...	17	16	33	...	...	...
To other Asylums of Board...	...	...	...	...	...	...
Died ...	92	102	194	...	...	...
Total discharged (for various reasons) and died during the year ...	...	...	...	134	135	269
Remaining in the Asylums, December 31st, 1898...	...	...	...	885	1,099	1,984
Average numbers resident during the year ...	...	...	...	889	1,097	1,986
Highest number resident on any one day ...	...	...	...	899	1,099	1,998
Lowest number resident on any one day ...	...	...	...	881	1,090	1,971

TABLE II.—*Showing the Admissions, Re-admissions, and Discharges from*

[N.B.—The following are the dates of the opening of the several Asylums:—

	LEAVESDEN ASYLUM.					
	Males.	Females.	Total.	Males.	Females.	Total.
Admitted during the period of 28 $\frac{5}{6}$ years, direct from the several Parishes and Unions ...	4,079	3,977	8,056	...	...	...
Re-admissions ...	53	21	74	...	...	...
Admitted from other Asylums of Board ...	182	232	414	...	...	...
Total of cases admitted ...	...	...	...	4,314	4,230	8,544
Discharged—						
Not insane ...	10	7	17	...	...	...
Recovered ...	245	127	372	...	...	...
Improved and escaped ...	221	164	385	...	...	...
Not improved ...	305	288	593	...	...	...
To other Asylums of Board ...	46	34	80	...	...	...
Died ...	2,602	2,511	5,113	...	...	...
Total discharged and died during the 28 $\frac{5}{6}$ years ...	...	...	...	3,429	3,131	6,560
Remaining December 31st, 1898 ...	...	...	...	885	1,099	1,984
Average numbers resident during the 28 $\frac{5}{6}$ years ...	...	...	...	837	1,049	1,886

N.B.—From April 16th, 1873, to November, 1876, the North-Western Hospital (Hampstead) was used as an Asylum for the other Asylums of the Board. 222 patients (91 male and 131 female) died and the

*the Admissions, Re-admissions, Discharges, and Deaths during the Year 1898.*

CATERHAM ASYLUM.					DARENTH ASYLUM.						SUMMARY.					
Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
...	...	929	1,050	1,979	...	...	...	449	595	1,044	...	...	...	2,278	2,744	5,022
119	196	...	...	...	...	...	...	...	...	...	195	253	448	...	...	...
1	4	...	...	...	...	...	...	...	...	...	4	2	6	...	...	...
...	...	...	...	...	19	25	44	...	...	...	19	25	44	...	...	...
...	...	80	120	200	...	...	...	19	25	44	...	...	...	218	280	498
...	...	1,009	1,170	2,179	...	...	...	468	620	1,088	...	...	...	2,496	3,024	5,520
...	1	...	...	...	...	...	...	...	...	...	3	2	5	...	...	...
3	9	...	...	...	...	...	...	...	...	...	24	12	36	...	...	...
4	6	...	...	...	...	...	...	...	...	...	7	10	17	...	...	...
8	12	...	...	...	4	5	9	...	...	...	25	29	54	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
83	150	...	...	...	16	16	32	...	...	...	175	201	376	...	...	...
...	...	80	98	178	...	...	...	20	21	41	...	...	...	234	254	488
...	...	929	1,072	2,001	...	...	...	448	599	1,047	...	...	...	2,262	2,770	5,032
...	...	931	1,056	1,987	...	...	...	449	594	1,043	...	...	...	2,269	2,747	5,016
...	...	934	1,073	2,007	...	...	...	450	602	1,052	...	...	...	2,283	2,774	5,057
...	...	927	1,044	1,971	...	...	...	449	586	1,035	...	...	...	2,257	2,720	4,977

*the Opening of the First Asylum to the present date, December 31st, 1898.*

[LEAVESDEN, October 9th, 1870; CATERHAM, September 29th, 1870; and DARENTH, May 4th, 1880.]

CATERHAM ASYLUM.					DARENTH ASYLUM.						SUMMARY.						
Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
1	3,753	7,884	...	...	...	775	1,222	1,997	...	...	...	8,985	8,952	17,937	...	...	...
5	31	66	...	...	...	12	9	11	...	...	...	90	61	151	...	...	...
9	204	333	...	...	...	502	474	976	...	...	...	813	910	1,723	...	...	...
...	...	4,295	3,988	8,283	...	...	...	1,279	1,705	2,984	...	...	...	9,888	9,923	19,811	
...	2	8	...	...	...	8	14	22	...	...	...	24	23	47	...	...	...
...	183	431	...	...	...	30	21	51	...	...	...	523	331	854	...	...	...
...	166	441	...	...	...	118	123	241	...	...	...	614	453	1,067	...	...	...
...	183	391	...	...	...	96	119	215	...	...	...	609	590	1,199	...	...	...
...	48	135	...	...	...	73	82	155	...	...	...	206	164	370	...	...	...
2	2,334	4,876	...	...	...	506	747	1,253	...	...	...	5,650	5,592	11,242	...	...	...
...	...	3,366	2,916	6,282	...	...	...	831	1,106	1,937	...	...	...	7,626	7,153	14,779	
...	...	929	1,072	2,001	...	...	...	448	599	1,047	...	...	...	2,262	2,770	5,032	
...	...	849	1,060	1,909	...	...	...	344	488	832	...	...	...	2,030	2,598	4,628	

ociles, and during that period 1,201 patients were admitted direct from the several Parishes and Unions, as well as some from  
 remainder were discharged or transferred to the Asylums at Leavesden and Caterham.

ASYLUM STATISTICS.—TABLE III.—*Showing the Admissions, Discharges, and Admissions for the year 1889.*

YEAR.	ADMITTED.					DISCHARGED.											
	FROM PARISHES AND UNIONS.		FROM OTHER ASYLUMS OF BOARD.		Total Admissions.	RECOVERED.			IMPROVED.			NOT IMPROVED.			TO OTHER ASYLUMS OF BOARD.		
	Male.	Female.	Male.	Female.		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
<b>LEAVESDEN ASYLUM.</b>																	
1889	142	122	...	...	264	3	4	7	10	5	15	5	11	16	...	...	...
1890	163	157	...	...	320	12	9	21	7	7	14	5	6	11	...	...	...
1891	179	150	...	...	329	13	8	21	14	12	26	7	9	16	...	...	...
1892	185	152	...	...	337	17	7	24	7	4	11	13	14	27	...	...	...
1893	160	95	...	...	255	13	5	18	10	...	10	10	7	17	...	...	...
1894	154	112	...	...	266	12	4	16	9	4	13	19	7	26	...	...	...
1895	126	127	...	...	253	6	1	7	4	4	8	10	7	17	1	1	2
1896	139	102	...	...	241	8	...	8	5	3	8	21	9	30	1	...	1
1897	145	103	...	...	248	13	...	13	8	6	14	18	10	28	...	...	...
1898	119	135	...	...	254	18	9	27	5	6	11	19	18	*37	...	...	...
<b>CATERHAM ASYLUM.</b>																	
1889	92	79	...	...	171	13	4	17	1	2	3	6	7	13	...	...	...
1890	121	123	...	...	244	5	2	7	4	3	7	5	6	11	...	...	...
1891	104	108	...	...	212	3	4	7	2	5	7	5	7	12	...	...	...
1892	103	115	...	...	218	5	2	7	5	3	8	6	8	14	...	...	...
1893	86	76	...	...	162	2	2	4	4	5	9	11	10	21	...	...	...
1894	102	113	...	...	215	6	4	10	4	3	7	6	5	11	...	...	...
1895	85	76	...	...	161	7	1	8	5	1	6	13	3	16	...	...	...
1896	84	59	1	...	144	6	3	9	3	5	8	11	7	18	...	...	...
1897	84	58	...	...	142	1	4	5	5	...	5	8	5	13	...	...	...
1898	80	120	...	...	200	6	3	9	2	4	6	5	8	*13	...	...	...
<b>DARENTH ASYLUM.</b>																	
1889	128	113	26	9	276	...	...	...	26	10	36	8	6	14	...	...	...
1890	74	86	...	...	160	...	...	...	3	23	26	11	8	19	52	42	94
1891	59	92	...	...	151	7	12	19	4	8	12	8	4	12	...	...	...
1892	24	20	11	31	86	...	...	...	3	2	5	10	4	14	...	...	...
1893	...	23	45	44	112	...	2	2	...	2	2	9	3	12	...	...	...
1894	...	66	38	13	117	1	...	1	2	...	2	4	1	5	...	...	...
1895	...	20	25	45	90	...	...	...	...	4	4	2	18	20	...	...	...
1896	...	...	27	29	56	...	...	...	6	5	11	5	4	9	...	...	...
1897	...	...	24	33	57	...	...	...	...	1	1	4	2	6	...	...	...
1898	...	...	19	25	44	...	...	...	...	...	...	4	5	9	...	...	...
<b>SUMMARY.</b>																	
1889	362	314	26	9	711	16	8	24	37	17	54	19	24	43	...	...	...
1890	358	366	...	...	724	17	11	28	14	33	47	21	20	41	52	42	94
1891	342	350	...	...	692	23	24	47	20	25	45	20	20	40	...	...	...
1892	312	287	11	31	641	22	9	31	15	9	24	29	26	55	...	...	...
1893	246	194	45	44	529	15	9	24	14	7	21	29	20	49	...	...	...
1894	256	291	38	13	598	19	8	27	15	7	22	29	13	42	...	...	...
1895	211	223	25	45	504	13	2	15	9	9	18	25	28	53	1	1	2
1896	223	161	28	29	441	14	3	17	14	13	27	37	20	57	1	...	1
1897	229	161	24	33	447	14	4	18	13	7	20	30	17	47	...	...	...
1898	199	255	19	25	498	24	12	36	7	10	17	28	31	*59	...	...	...

\* Includes the "not insane" cases in Table I., p. 117.

Deaths, with the mean Annual Mortality and proportion of Recoveries per cent. of the total for each subsequent year.

DIED.		Remaining December 31st.			Average Numbers Resident.			Percentage of Recoveries on Admissions.			Percentage of Deaths on Average Numbers Resident.		
Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
109	233	883	1,082	1,965	887	1,085	1,972	2.1	3.2	2.6	13.9	10.0	11.8
124	305	841	1,093	1,934	853	1,081	1,934	7.3	5.7	6.5	21.2	11.4	15.7
132	246	872	1,082	1,954	851	1,089	1,940	7.2	5.3	6.3	13.4	12.1	12.7
111	242	889	1,098	1,987	857	1,068	1,925	9.2	4.6	7.1	15.3	10.4	12.6
85	202	899	1,096	1,995	894	1,097	1,991	8.1	5.3	7.0	13.1	7.7	10.1
97	215	895	1,096	1,991	894	1,095	1,989	7.7	3.5	6.0	13.0	8.9	10.1
116	219	897	1,094	1,991	895	1,096	1,991	4.7	0.8	2.8	11.5	10.5	11.0
88	195	894	1,096	1,990	893	1,097	1,990	5.8	0.0	3.3	12.0	8.0	9.8
84	184	900	1,099	1,999	895	1,095	1,990	8.9	0.0	5.2	11.1	7.6	9.2
102	194	885	1,099	1,984	889	1,097	1,984	15.1	6.6	10.6	10.3	9.3	9.8
72	155	919	1,046	1,965	930	1,048	1,978	14.1	5.0	9.9	8.9	6.8	7.8
100	207	919	1,058	1,977	918	1,062	1,980	4.1	0.8	2.4	11.6	9.4	10.4
86	162	937	1,064	2,001	922	1,060	1,982	2.8	3.7	3.3	8.2	8.1	8.1
95	178	941	1,071	2,012	919	1,045	1,964	3.8	1.7	2.7	9.0	9.0	9.0
66	138	938	1,064	2,002	940	1,070	2,010	2.3	2.6	2.4	7.6	6.1	6.8
91	185	930	1,074	2,004	931	1,071	2,002	5.8	3.5	4.6	10.0	8.5	9.2
73	130	933	1,072	2,005	932	1,070	2,002	8.2	1.3	4.9	6.1	6.8	6.4
43	116	925	1,073	1,998	929	1,074	2,003	7.1	5.0	6.2	7.8	4.0	5.7
72	138	929	1,050	1,979	931	1,063	1,994	1.2	6.9	3.5	7.0	6.8	6.9
83	150	929	1,072	2,001	931	1,056	1,987	7.5	2.5	4.5	7.1	7.8	7.5
53	107	484	600	1,084	467	588	1,055	...	...	...	11.5	9.0	10.1
62	113	441	551	992	449	563	1,012	...	...	...	11.3	11.0	11.1
39	74	446	580	1,026	443	553	996	...	...	...	7.9	7.0	7.4
43	75	436	582	1,018	446	580	1,026	...	...	...	7.1	7.4	7.3
67	95	444	575	1,019	445	574	1,019	...	...	...	6.3	11.7	9.4
54	82	447	599	1,046	446	578	1,024	...	...	...	6.3	9.3	8.0
44	67	447	598	1,045	448	590	1,038	...	...	...	5.1	7.4	6.4
35	51	447	583	1,030	448	592	1,040	...	...	...	3.6	5.9	4.9
18	36	449	595	1,044	448	593	1,041	...	...	...	4.0	3.0	3.5
16	32	448	599	1,047	449	594	1,043	...	...	...	3.6	2.7	3.1
234	495	2,286	2,728	5,014	2,284	2,721	5,005	4.1	2.5	3.5	11.4	8.5	9.8
286	625	2,201	2,702	4,903	2,220	2,706	4,926	4.7	3.0	3.8	15.2	10.5	12.7
257	482	2,255	2,726	4,981	2,216	2,702	4,918	4.4	3.4	3.9	10.1	9.5	9.8
249	495	2,266	2,751	5,017	2,222	2,693	4,915	6.8	2.8	4.8	11.0	9.2	10.0
218	435	2,281	2,735	5,016	2,279	2,741	5,020	5.2	3.8	4.5	9.5	7.9	8.7
242	482	2,272	2,769	5,041	2,271	2,744	5,015	6.5	2.6	4.5	10.6	8.8	9.6
233	416	2,277	2,764	5,041	2,275	2,756	5,031	5.5	0.74	3.0	8.0	8.4	8.3
166	362	2,266	2,752	5,018	2,270	2,763	5,033	5.5	1.5	3.8	8.6	6.0	7.1
174	358	2,278	2,744	5,022	2,274	2,751	5,025	6.1	2.5	4.0	8.0	6.3	7.1
201	376	2,262	2,770	5,032	2,269	2,747	5,016	11.0	4.3	9.9	7.7	7.3	7.5

ASYLUM STATISTICS.—TABLE IV.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients admitted during the year 1898.*

MENTAL DISEASES.	LEAVESDEN ASYLUM.			CATERHAM ASYLUM.			DARENTH ASYLUM.			SUMMARY.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Mania ... ..	...	1	1	3	2	5	...	...	...	3	3	6
Mania, Chronic ... ..	...	...	...	4	30	34	...	...	...	4	30	34
Mania and Epilepsy ... ..	...	...	...	...	3	3	...	...	...	...	3	3
Melancholia ... ..	2	...	2	2	14	16	...	...	..	4	14	18
General Paresis ... ..	6	7	13	5	1	6	...	...	..	11	8	19
Dementia ... ..	43	49	92	15	17	32	...	1	1	58	67	125
Dementia and Paralysis ... ..	...	1	1	...	1	1	...	...	...	...	2	2
Dementia and Epilepsy ... ..	10 <sup>†</sup>	13	23	1	...	1	...	...	...	11	13	24
Senile Dementia... ..	12	19	31	7	8	15	...	...	...	19	27	46
Idiocy ... ..	7	5	12	5	4	9	12	11	23	24	20	44
Idiocy and Epilepsy ... ..	2	..	2	2	2	4	...	...	...	4	2	6
Imbecility ... ..	23	17	40	25	25	50	2	8	10	50	50	100
Imbecility and Epilepsy ... ..	9	12	21	11	13	24	4	3	7	24	28	52
Of Weak Mind ... ..	2	6	8	...	...	...	1	2	3	3	8	11
Delusional Insanity ... ..	2	3	5	...	...	...	...	...	...	2	3	5
Not Insane ... ..	1	2	3	...	...	...	...	...	...	1	2	3
Total ... ..	119	135	254	80	120	200	19	25	44	218	280	498

UNACY STATISTICS.—TABLE V.—*Classifying, under the usual denominations of Mental disease, the Mental Condition of the Patients resident in the Asylum on December 31st, 1898.*

MENTAL DISEASES	LEAVESDEN ASYLUM.			CATERHAM ASYLUM.			DARENTH ASYLUM.			SUMMARY.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Mania ... ..	17	...	17	2	8	10	...	1	1	19	9	28
Mania, Chronic ... ..	78	61	139	6	87	93	11	49	60	95	197	292
Mania and Epilepsy ...	12	5	17	3	17	20	...	...	...	15	22	37
Manicomania... ..	6	11	17	52	56	108	1	4	5	59	71	130
General Paresis ... ..	6	9	15	7	2	9	1	...	1	14	11	25
Demencia ... ..	189	427	616	317	332	649	50	75	125	556	834	1,390
Demencia and Paralysis	13	6	19	29	9	38	8	12	20	50	27	77
Demencia and Epilepsy	59	107	166	147	211	358	28	31	59	234	349	583
Idiotic Dementia ... ..	74	32	106	14	9	23	7	33	40	95	74	169
Idiocy ... ..	31	51	82	24	27	51	59	86	145	114	164	278
Idiocy and Epilepsy ...	11	...	11	1	1	2	16	22	38	28	23	51
Imbecility ... ..	270	235	505	298	279	577	173	185	358	741	699	1,440
Imbecility and Epilepsy	83	129	212	29	34	63	66	74	140	178	237	415
Weak Mind ... ..	29	16	45	...	...	...	28	27	55	57	43	100
Cataleptic Stupor ... ..	6	...	6	...	...	...	...	...	...	6	...	6
Periodical Insanity ...	1	10	11	...	...	...	...	...	...	1	10	11
Totals ... ..	885	1,099	1,984	929	1,072	2,001	448	599	1,047	2,262	2,770	5,032

ASYLUM STATISTICS.—TABLE VI.—*Showing the probable*

PROBABLE CAUSE.	LEAVESDEN ASYLUM.								
	As predisposing cause.			As exciting cause.			TOTAL.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
<b>MORAL.</b>									
Domestic troubles (including loss of relations and friends) ...	...	4	4	...	1	1	...	5	5
Adverse circumstances (including business anxieties and pecuniary difficulties) ...	...	...	...	...	1	1	...	1	1
Mental anxiety, worry (not included in above), and overwork	1	...	1	...	3	3	1	3	4
Religious excitement ...	...	...	...	...	...	...	...	...	...
Fright and nervous shock ...	...	...	...	...	1	1	...	1	1
Fright and nervous shock of mother ...	...	...	...	...	...	...	...	...	...
<b>PHYSICAL.</b>									
Intemperance in drink ...	4	...	4	...	5	5	4	5	9
Do. sexual ...	...	...	...	...	...	...	...	...	...
Self-abuse (sexual) ...	1	...	1	...	...	...	1	...	1
Sunstroke ...	...	...	...	...	...	...	...	...	...
Accident or injury ...	3	...	3	...	3	3	3	3	6
Parturition and the puerperal state ...	...	...	...	...	1	1	...	1	1
Change of life ..	...	...	...	...	1	1	...	1	1
Fevers ...	1	...	1	...	...	...	1	...	1
Privation and starvation ...	...	...	...	...	...	...	...	...	...
Old age ...	11	18	29	...	6	6	11	24	35
Venereal disease ...	1	1	2	...	...	...	1	1	2
Other bodily diseases ...	2	3	5	...	3	3	2	6	8
Previous attacks ...	14	1	15	...	33	33	14	34	48
Hereditary influence ascertained ...	2	6	8	...	...	...	2	6	8
Congenital defect ascertained ...	27	8	35	...	8	8	27	16	43
Epilepsy ...	19	3	22	...	1	1	19	4	23
Unknown ...	32	89	121	...	66	66	32	155	187
Not insane ...	1	2	3	...	...	...	1	2	3

The total of causations does not correspond with the number of admissions in Table I., as so

*causes of Insanity in the Patients admitted during the Year 1898.*

CATERHAM ASYLUM.									DARENTH ASYLUM.									SUMMARY.								
As predisposing cause.			As exciting cause.			TOTAL.*			As predisposing cause.			As exciting cause.			TOTAL.			As predisposing cause.			As exciting cause.			TOTAL.		
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.
4	4	4	2	6	4	6	10	..	..	..	..	..	..	..	..	..	..	..	8	6	4	3	7	4	11	15
..	..	..	2	2	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..	3	3	
1	1	..	3	3	..	4	4	..	..	..	..	..	..	..	..	..	..	1	1	2	..	6	6	1	4	8
..	..	1	1	2	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	1	1	2
..	..	..	3	3	..	3	3	..	..	..	..	1	1	..	1	1	..	..	..	..	5	5	..	5	5	
..	..	..	..	..	..	..	..	..	..	..	3	4	7	3	4	7	..	..	..	3	4	7	3	4	7	7
2	3	..	10	10	1	12	13	..	1	1	..	..	..	..	1	1	5	3	8	..	15	15	5	18	23	
..	..	..	2	2	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	2	2	
..	3	..	..	..	3	..	3	..	..	..	..	..	..	..	..	..	4	..	4	..	..	..	4	..	4	
..	..	1	..	1	1	..	1	..	..	..	1	..	1	1	..	1	..	..	..	2	..	2	2	..	2	
..	2	3	2	5	5	2	7	..	..	..	2	..	2	2	..	2	5	..	5	5	5	10	10	5	15	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	
..	..	..	1	1	..	1	1	..	..	..	1	1	..	1	1	..	..	..	..	2	2	..	2	..	2	
2	2	6	4	10	6	6	12	..	..	..	..	..	..	..	..	..	11	20	31	6	10	16	17	30	47	
..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	2	1	3	..	..	..	2	1	3	
..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	2	2	3	5	..	4	4	2	7	9	
9	14	..	..	..	5	9	14	..	..	..	..	..	..	..	..	..	19	10	29	..	33	33	19	43	62	
17	26	..	..	..	9	17	26	7	7	14	..	..	..	7	7	14	18	30	48	..	..	..	18	30	48	
29	45	..	..	..	16	29	45	..	..	..	..	..	..	..	..	..	43	37	80	..	8	8	43	45	88	
5	5	3	6	9	3	11	14	..	..	..	1	..	1	1	..	1	19	8	27	4	7	11	23	15	38	
..	..	..	..	..	25	35	60	..	..	..	..	..	..	6	12	18	..	..	..	..	..	..	63	202	265	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	..	..	..	1	2	3	

\*The cases appear in both the columns relating to "Predisposing cause" and "Exciting cause."

APPENDIX II.—IMBECILITY.  
ASYLUM STATISTICS.—TABLE VII.—Showing the causes of  
calculated from the ages stated

CAUSES OF DEATH.	LEAVESDEN											
	16		17		18		19		20 to 29		30 to 39	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>CEREBRAL OR SPINAL DISEASES—</b>												
Apoplexy ...												
Brain Wasting ...												
Cerebral Softening ...												
Dementia and Gradual Exhaustion ...												
Epilepsy ...												
Epileptic Exhaustion ...										1		3
General Paralysis ...			1									
Hydrocephalus ...											3	3
Idiocy and Exhaustion ...										1		
Imbecility and Exhaustion ...											1	
									1			
<b>THORACIC DISEASES—</b>												
Bronchitis ...												
Diseases of the Heart ...			1									
Mammary Carcinoma ...											2	
Phthisis Pulmonalis ...							1		9	12	6	4
Pneumonia ...							2		2			
Pneumonia following Fractured Ribs ...												
<b>ABDOMINAL DISEASES—</b>												
Diarrhoea ...												
Gastric Carcinoma ...										1		
Hepatic Carcinoma ...												
Nephritis ...												
Perityphlitis ...												
Uterine Fibro Myoma ...												1
Cancer of Face ...												1
Facial Erysipelas ...												
Necrosis of Femur ...												
Senile Decay ...												
Totals ...		1	1				3		12	15	12	12

CATERHAM												
<b>CEREBRAL OR SPINAL DISEASES—</b>												
Apoplexy and Paralysis ...												
Epilepsy ...												
Exhaustion of Dementia ...									1	2		3
Exhaustion of Idiocy ...												
Exhaustion of Imbecility ...									1		3	
General Paresis ...												1
Maniacal Exhaustion ...											2	
Melancholic Exhaustion ...												
Other Brain Disease ...												
Tumour of Brain ...											1	
<b>THORACIC DISEASES—</b>												
Bronchitis ...												
Disease of the Heart ...												1
Phthisis ...									1		1	
Pneumonia ...			1							2	2	3
							1				1	
<b>ABDOMINAL DISEASES—</b>												
Bright's Disease ...												
Cancer of Stomach ...												
Cirrhosis of Liver ...												
Intestinal Obstruction ...												
Peritonitis ...												
General Debility and Decay of Old Age ...												
Totals ...			1				1		3	4	10	8

Death during the year 1898, together with the Ages of the Decedents in the Orders of Admission.

ASYLUM.																		
to 49		50 to 59		60 to 69		70 to 79		80 to 89		90 to 99		Above 100.		Ages Unknown.		TOTAL.		
F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Tl.	
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2	
...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	3	...	3	
1	...	1	...	3	...	2	...	...	...	...	...	...	...	...	...	7	7	
...	1	...	2	...	2	...	...	...	...	...	...	...	...	...	6	...	6	
1	...	2	...	1	...	1	...	...	...	...	...	...	...	...	...	9	9	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	3	8	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
...	1	...	1	...	...	2	...	2	...	...	...	...	...	...	3	4	7	
1	5	2	6	7	2	4	...	1	...	...	...	...	...	...	16	16	32	
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	
5	5	3	2	1	1	...	...	...	...	...	...	...	...	...	30	25	55	
...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	5	1	6	
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
...	1	...	...	2	...	1	...	...	...	...	...	...	...	...	2	3	5	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	1	1	4	5	6	11	1	7	...	...	...	1	...	...	12	25	37	
9	15	11	22	20	11	23	2	10	...	...	...	1	...	...	92	102	194	

ASYLUM.																		
1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	2	3	
2	1	1	3	1	...	...	...	...	...	...	...	...	...	...	8	9	17	
1	...	5	7	5	...	...	...	...	...	...	...	...	...	...	7	11	18	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4	
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	
...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	2	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	5	...	5	
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
1	1	1	...	1	...	3	...	1	...	1	...	...	...	...	1	9	10	
2	1	5	1	5	...	3	...	...	...	...	...	...	...	...	7	15	22	
2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	7	8	15	
2	...	1	...	...	...	1	...	...	...	...	...	...	...	...	2	4	6	
...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	3	...	3	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
...	...	...	...	1	11	13	2	6	...	...	...	...	...	...	13	20	33	
12	8	17	17	13	11	21	2	7	...	1	...	...	...	...	67	83	150	

ASYLUM STATISTICS.—TABLE VII. (continued)—Showing the calculated from the ages stated

CAUSES OF DEATH.	DARENTH											
	16		17		18		19		20 to 29		30 to 39	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>CEREBRAL OR SPINAL DISEASES—</b>												
Acute Meningitis ...												
Apoplexy ...												
Epileptic Exhaustion ...									2	1	1	
General Paralysis ...								1				
<b>THORACIC DISEASES—</b>												
Bronchitis ...												
Heart Disease ...			1									
Phthisis ...							1		2	1	2	1
Pneumonia ...			1						1			2
<b>ABDOMINAL DISEASES—</b>												
Cancer Pylorus and Peritonitis ...												
Cancer of Rectum ...												
Peritonitis, Acute ...										1		
Volvulus and Intestinal Obstruction ...												
Totals ...			2				1	1	5	3	3	3
<b>SUM</b>												
<b>CEREBRAL OR SPINAL DISEASES—</b>												
Acute Meningitis ...												
Apoplexy ...												
Brain Wasting ...												
Epilepsy ...									1	3		6
Epileptic Exhaustion ...			1						2	1	1	
Exhaustion of Dementia ...												
General Paralysis ...								1			3	3
General Paresis ...											2	
Hydrocephalus ...										1		
Idiocy and Exhaustion ...									1		4	
Imbecility and Exhaustion ...									1			1
Maniacal Exhaustion ...												
Melancholic Exhaustion ...												
Other Brain Disease ...											1	
Paralysis and Apoplexy ...												
Softening of Brain ...												
Tumour of Brain ...												
<b>THORACIC DISEASES—</b>												
Bronchitis ...												1
Disease of the Heart ...		1	1						1		3	
Mammary Carcinoma ...												
Phthisis ...			1				2		11	15	10	8
Pneumonia ...			1				3		3		1	2
Pneumonia following Fractured Ribs ...												
<b>ABDOMINAL DISEASES—</b>												
Bright's Disease ...												
Cancer of Rectum ...												
Cancer of Stomach ...												
Cancer Pylorus and Peritonitis ...												
Cirrhosis of Liver ...												
Diarrhoea ...												
Gastric Carcinoma ...										1		
Hepatic Carcinoma ...												
Intestinal Obstruction ...												
Nephritis ...												
Peritonitis ...										1		
Perityphlitis ...												1
Volvulus and Intestinal Obstruction ...												1
Uterine Fibro Myoma ...												1
Cancer of Face ...												
Facial Erysipelas ...												
General Debility and Decay of Old Age ...												
Necrosis of Femur ...												
Grand Totals ...		1	4				5		20	22	25	23

causes of Death during the year 1898, together with the Ages of the Decedents, on the orders of Admission.

**SYLUM.**

0 to 49		50 to 59		60 to 69		70 to 79		80 to 89		90 to 99		Above 100.		Ages not known.		TOTAL.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Tl.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	4	4
...	...	...	...	...	1	2	...	...	2	...	...	...	...	...	...	3	1	4
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	6	2	8
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	1	...	3	4	3	...	2	...	...	...	...	...	...	16	16	32

**MARY.**

1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	2	...	3
...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	3	...	3
3	3	1	3	3	2	...	1	...	...	...	...	...	...	...	...	8	18	26
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	1	7
1	1	1	5	9	5	2	...	...	...	...	...	...	...	...	...	13	11	24
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	4	9
1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	6	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
2	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	5	...	5
...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	1	...	1	...	3	...	2	...	...	...	...	...	...	...	...	...	7	7
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	1	2	1	1	1	...	7	...	5	...	1	...	...	...	...	4	17	21
4	3	6	7	7	13	4	7	...	1	...	...	...	...	...	...	26	32	58
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
10	7	5	4	2	1	2	...	...	...	...	...	...	...	...	...	43	35	78
...	2	...	2	1	1	...	1	...	...	...	...	...	...	...	...	9	8	17
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
1	...	1	...	...	2	...	1	...	...	...	...	...	...	...	...	2	3	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	25	45	70
...	...	1	1	4	6	17	24	3	13	...	...	...	...	1	...	...	1	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
29	21	23	29	39	36	26	47	4	19	...	1	...	1	...	...	175	201	376

ASYLUM STATISTICS.—TABLE VIII.—*Showing the History of the Annual numbers of each year's admissions*

YEAR.	ADMITTED.							OF EACH YEAR'S ADMISSIONS, DISCHARGED AND DIED IN 1898.														
	New Cases.		Relapsed Cases.		From other Asylums of Board.			Recovered.			Improved.			Not Improved.			To other Asylums of Board.			Died.		
	M.	F.	M.	F.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.
<b>LEAVESDEN ASYLUM.</b>																						
1870 (part of)...	468	556	...	...	...	...	1,024	...	...	...	1	1	1	...	1	...	...	...	...	6	3	9
1871 ...	520	545	...	...	...	...	1,065	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
1872 ...	163	256	...	...	...	...	419	...	...	...	...	...	1	...	1	...	...	...	...	...	2	2
1873 ...	141	165	...	...	41	30	377	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1874 ...	115	149	1	...	1	13	279	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
1875 ...	111	108	1	1	...	...	221	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1876 ...	158	79	...	...	126	184	547	...	...	...	...	...	...	...	...	...	...	...	...	2	4	6
1877 ...	95	...	...	...	1	4	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1878 ...	69	1	1	...	13	...	84	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1879 ...	80	89	...	...	...	...	169	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1880 ...	92	75	...	...	...	...	167	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1881 ...	85	71	4	1	...	...	161	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1882 ...	82	85	3	2	...	...	172	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
1883 ...	75	106	5	1	...	...	187	...	...	...	1	...	1	...	1	...	...	...	...	1	2	3
1884 ...	56	96	2	...	...	...	154	1	...	1	...	...	...	...	...	...	...	...	...	...	1	1
1885 ...	71	97	2	...	...	...	170	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
1886 ...	62	83	3	3	...	...	151	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
1887 ...	80	92	2	...	...	...	174	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...
1888 ...	71	83	2	...	...	...	156	...	...	...	...	1	...	1	...	...	...	...	...	...	2	2
1889 ...	140	121	2	1	...	...	264	...	...	...	...	1	1	2	...	...	...	...	...	6	1	7
1890 ...	162	155	1	2	...	...	320	...	1	1	...	...	1	...	1	...	...	...	...	3	5	8
1891 ...	176	148	3	2	...	...	329	...	1	1	...	...	1	1	2	...	...	...	...	4	2	6
1892 ...	181	149	4	2	...	1	337	...	...	1	1	2	1	...	1	...	...	...	...	4	7	11
1893 ...	156	95	4	...	...	...	255	1	1	2	...	...	...	1	1	...	...	...	...	7	3	10
1894 ...	148	112	6	...	...	...	266	2	...	2	...	1	1	...	...	...	...	...	...	10	12	22
1895 ...	125	125	1	2	...	...	253	1	1	2	...	...	1	3	4	...	...	...	...	6	11	17
1896 ...	136	100	3	2	...	...	241	3	1	4	...	1	1	4	1	5	...	...	...	12	9	21
1897 ...	143	102	2	1	...	...	248	3	1	4	1	2	3	3	2	5	...	...	...	17	17	34
1898 ...	118	134	1	1	...	...	254	7	3	10	2	...	2	4	7	11	...	...	...	4	9	13
Totals ...	4,079	3,977	53	21	182	232	8,544	18	9	27	5	6	11	19	18	37	...	...	...	92	102	194
<b>CATERHAM ASYLUM.</b>																						
1870 (part of) ...	156	202	...	...	...	...	358	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4
1871 ...	664	870	...	...	...	...	1,534	...	...	...	...	...	...	...	...	...	...	...	...	3	14	17
1872 ...	259	161	...	...	...	...	420	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1873 ...	183	167	1	...	...	...	351	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874 ...	240	169	2	3	72	36	522	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3
1875 ...	158	180	...	...	...	...	338	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
1876 ...	173	170	5	5	33	167	553	...	...	...	...	...	...	...	...	...	...	...	...	...	5	5
1877 ...	178	56	2	...	...	1	237	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
1878 ...	157	47	...	...	17	...	221	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4
1879 ...	176	84	...	...	6	...	266	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1880 ...	122	87	2	6	...	...	217	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
1881 ...	122	105	...	...	...	...	227	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
1882 ...	81	85	...	2	...	...	168	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883 ...	73	37	3	3	...	...	116	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1884 ...	98	102	2	1	...	...	203	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
1885 ...	59	48	3	3	...	...	113	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1886 ...	115	91	3	1	...	...	210	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1887 ...	103	90	2	1	...	...	196	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1888 ...	83	81	...	...	...	...	164	...	1	1	...	...	...	...	...	...	...	...	...	3	...	3
1889 ...	92	78	...	1	...	...	171	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4
1890 ...	119	122	2	1	...	...	244	1	...	1	...	...	...	...	...	...	...	...	...	3	4	7
1891 ...	104	108	...	...	...	...	212	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4
1892 ...	101	114	2	1	...	...	218	...	...	...	...	1	2	3	...	...	...	...	...	1	5	6
1893 ...	86	76	...	...	...	...	162	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4
1894 ...	100	112	2	1	...	...	215	...	...	...	...	...	...	...	...	...	...	...	...	8	12	20
1895 ...	85	75	...	1	...	...	161	...	...	...	...	1	...	1	...	...	...	...	...	3	6	9
1896 ...	83	59	1	...	1	...	144	...	...	...	...	...	1	1	...	...	...	...	...	6	6	12
1897 ...	84	58	...	...	...	...	142	4	1	5	...	1	1	...	...	...	...	...	...	12	4	16
1898 ...	77	119	3	1	...	...	200	1	1	2	2	3	5	3	5	8	...	...	...	5	5	10
Totals ...	4,131	3,753	35	31	129	204	8,283	6	3	9	2	4	6	5	8	13	...	...	...	67	83	150

\* Including the "not insane" cases in Table I, p. 117.

Admissions since the opening of the Asylums, with the Discharges and Deaths and the remaining on December 31st, 1898.

TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS TO DECEMBER 31ST, 1898.														REMAINING OF EACH YEAR'S ADMISSIONS, DECEMBER 31ST, 1898.		
Recovered.		Improved.			Not Improved.			To other Asylums of Board.			Died.					
F.	TL.	M.	F.	TL.	M.	F.	TL.	M.	F.	TL.	M.	F.	TL.	M.	F.	TL.
8	23	26	21	47	25	44	69	12	4	16	335	419	754	55	60	115
15	35	29	23	52	49	49	98	15	10	25	354	376	730	53	72	125
6	18	12	11	23	15	14	29	5	14	19	118	178	296	1	33	34
4	13	8	6	14	17	21	38	10	5	15	126	134	260	12	25	37
2	9	2	7	9	13	17	30	2	...	2	91	119	210	2	17	19
3	8	3	5	8	17	13	30	...	...	...	75	71	146	12	17	29
3	16	18	7	25	11	13	24	...	...	...	201	188	389	41	52	93
...	7	5	...	5	3	...	3	...	...	...	64	1	65	17	3	20
...	5	4	...	4	3	...	3	...	...	...	58	1	59	13	...	13
3	6	3	5	8	3	7	10	...	...	...	58	52	110	13	22	35
4	12	9	8	17	8	2	10	...	...	...	57	36	93	10	25	35
7	17	6	5	11	7	3	10	...	...	...	57	45	102	9	12	21
6	9	3	5	8	3	3	6	...	...	...	65	58	123	11	15	26
2	6	6	8	14	4	8	12	...	...	...	58	64	122	8	25	33
8	10	3	3	6	5	7	12	...	...	...	36	63	99	12	15	27
9	13	5	3	8	5	8	13	...	...	...	49	57	106	10	20	30
...	3	3	1	4	7	3	10	...	...	...	35	53	88	17	29	46
3	7	5	2	7	5	5	10	...	...	...	53	57	110	15	25	40
3	8	4	2	6	7	3	10	...	...	...	47	46	93	10	29	39
4	13	9	5	14	8	11	19	...	...	...	96	66	162	20	36	56
12	26	10	8	18	10	6	16	...	...	...	96	84	180	33	47	80
6	20	7	9	16	10	12	22	...	...	...	106	69	175	42	54	96
6	20	10	4	14	17	10	27	...	...	...	91	70	161	53	62	115
4	16	8	2	10	12	5	17	...	...	...	85	45	130	43	39	82
2	12	7	5	12	15	8	23	...	...	...	71	49	120	51	48	99
2	10	7	2	9	15	7	22	2	1	3	39	54	93	55	61	116
1	11	3	4	7	11	4	15	...	...	...	42	26	68	73	67	140
1	9	4	3	7	6	5	11	...	...	...	35	21	56	92	73	165
3	10	2	...	2	4	7	11	...	...	...	4	9	13	102	116	218
127	372	221	164	385	315	295	610*	46	34	80	2,602	2,511	5,113	885	1,099	1,984
4	8	7	13	20	6	7	13	2	1	3	108	141	249	29	36	65
31	78	50	30	80	47	36	83	19	6	25	464	658	1,122	37	109	146
12	36	24	10	34	11	9	20	16	11	27	170	107	277	14	12	26
10	29	19	6	25	13	19	32	11	8	19	102	111	213	20	13	33
24	42	30	13	43	1	...	1	36	18	54	199	126	325	30	27	57
11	24	10	8	18	8	8	16	1	3	4	114	127	241	12	23	35
11	13	21	13	34	5	9	14	...	...	...	146	230	376	37	79	116
...	...	14	4	18	5	3	8	1	...	1	131	37	168	29	13	42
3	8	11	1	12	4	5	9	1	...	1	117	27	144	36	11	47
4	10	9	4	13	13	1	14	...	...	...	124	44	168	30	31	61
4	11	11	7	18	8	7	15	...	...	...	81	57	138	17	18	35
2	5	6	5	11	10	4	14	...	...	...	76	71	147	27	23	50
10	19	5	5	10	2	5	7	...	...	...	45	51	96	20	16	36
4	15	4	3	7	3	1	4	...	1	1	39	20	59	19	11	30
12	19	9	10	19	5	4	9	...	...	...	56	55	111	23	22	45
2	4	...	1	1	5	2	7	...	...	...	39	33	72	16	13	29
5	17	7	6	13	7	4	11	...	...	...	65	49	114	27	28	55
4	11	6	2	8	6	6	12	...	...	...	53	45	98	33	34	67
5	9	6	...	6	5	6	11	...	...	...	46	45	91	22	25	47
3	11	4	4	8	5	8	13	...	...	...	53	37	90	22	27	49
6	13	3	3	6	9	5	14	...	...	...	60	58	118	42	51	93
2	7	1	2	3	4	4	8	...	...	...	48	49	97	46	51	97
2	4	1	1	2	5	11	16	...	...	...	41	42	83	54	59	113
3	11	2	5	7	8	4	12	...	...	...	40	26	66	28	38	66
1	7	6	3	9	2	3	5	...	...	...	46	38	84	42	68	110
4	8	3	2	5	8	4	12	...	...	...	23	24	47	47	42	89
2	4	2	1	3	3	5	8	...	...	...	27	15	42	51	36	87
1	6	2	1	3	3	...	3	...	...	...	24	6	30	50	50	100
1	2	2	3	5	3	5	8	...	...	...	5	5	10	69	106	175
183	431	275	166	441	214	185	399*	87	48	135	2,542	2,334	4,876	929	1,072	2,001

\* Includes the "not insane" cases in Table II., p. 118.

ASYLUM STATISTICS.—TABLE VIII. (continued)—Showing the History of Deaths, and the numbers of each year's

YEAR.	ADMITTED.							OF EACH YEAR'S ADMISSIONS, DISCHARGED AND DIED IN 1898.														
	New Cases.		Relapsed Cases.		From other Asylums of Board.		Total.	Recovered.			Impr'ved.			Not Improved.			To other Asylums of Board.			Died.		
	Males.	Females.	Males.	Females.	Males.	Females.		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
<b>DARENTH ASYLUM.</b>																						
1880	...	163	...	...	25	54	242	...	...	...	...	...	...	1	1	...	...	...	1	3	...	
1881	...	15	...	1	...	13	29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1882	...	152	185	...	1	78	17	433	...	...	...	...	...	1	1	...	...	...	5	...	...	
1883	...	107	153	...	...	6	8	274	...	...	...	...	...	1	1	...	...	...	...	1	...	
1884	...	57	67	...	...	...	...	124	...	...	...	...	...	1	1	...	...	...	1	...	...	
1885	...	40	54	...	...	22	30	146	...	...	...	...	...	1	1	...	...	...	1	...	...	
1886	...	45	62	1	1	20	8	137	...	...	...	...	...	...	...	...	...	...	1	...	...	
1887	...	41	35	...	4	12	69	161	...	...	...	...	...	...	...	...	...	...	...	...	...	
1888	...	49	70	...	...	124	46	289	...	...	...	...	...	1	1	...	...	...	1	...	...	
1889	...	127	112	1	1	26	9	276	...	...	...	...	...	...	...	...	...	...	1	1	...	
1890	...	74	86	...	...	...	...	160	...	...	...	...	...	...	...	...	...	...	...	...	...	
1891	...	59	92	...	...	...	...	151	...	...	...	...	...	...	...	...	...	...	...	...	...	
1892	...	24	19	...	1	11	31	86	...	...	...	...	...	...	...	...	...	...	...	...	...	
1893	...	...	23	...	...	45	44	112	...	...	...	...	...	1	1	...	...	...	...	...	...	
1894	...	...	66	...	...	38	13	117	...	...	...	...	...	1	1	...	...	...	...	...	...	
1895	...	...	20	...	...	25	45	90	...	...	...	...	...	...	...	...	...	...	1	2	...	
1896	...	...	...	...	...	27	29	56	...	...	...	...	...	...	...	...	...	...	1	...	...	
1897	...	...	...	...	...	24	33	57	...	...	...	...	...	1	1	...	...	...	2	...	...	
1898	...	...	...	...	...	19	25	44	...	...	...	...	...	...	...	...	...	...	1	...	...	
Totals	...	775	1,222	2	9	502	474	2,984	...	...	...	...	...	4	5	9	...	...	16	16	3	
<b>SUMMARY.</b>																						
Part of	...	624	758	...	...	...	...	1,382	...	...	...	1	1	1	...	1	...	...	8	5	13	
1870	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1871	...	1,184	1,415	...	...	...	...	2,599	...	...	...	...	...	...	...	...	...	...	5	15	20	
1872	...	422	417	...	...	...	...	839	...	...	...	...	...	1	1	...	...	...	...	3	...	
1873	...	324	332	1	...	41	30	728	...	...	...	...	...	...	...	...	...	...	1	1	...	
1874	...	355	318	3	3	73	49	801	...	...	...	...	...	...	...	...	...	...	1	5	...	
1875	...	269	288	1	1	...	...	559	...	...	...	...	...	...	...	...	...	...	2	3	...	
1876	...	331	249	5	5	159	351	1,100	...	...	...	...	...	...	...	...	...	...	1	9	10	
1877	...	273	56	2	...	1	5	337	...	...	...	...	...	...	...	...	...	...	2	1	...	
1878	...	226	48	1	...	30	...	305	...	...	...	...	...	...	...	...	...	...	5	...	...	
1879	...	256	173	...	...	6	...	435	...	...	...	...	...	...	...	...	...	...	2	...	...	
1880	...	214	325	2	6	25	54	626	...	...	...	...	...	1	1	...	...	...	2	6	...	
1881	...	207	191	4	2	...	13	417	...	...	...	...	...	...	...	...	...	...	5	2	...	
1882	...	315	355	3	5	78	17	773	...	...	...	...	...	1	1	...	...	...	8	...	...	
1883	...	255	296	8	4	6	8	577	...	...	1	1	...	2	2	...	...	...	1	3	...	
1884	...	211	265	4	1	...	...	481	1	...	1	...	...	1	1	...	...	...	1	4	...	
1885	...	170	199	5	3	22	30	429	...	...	...	...	...	1	1	...	...	...	2	2	...	
1886	...	222	236	7	5	20	8	498	...	...	...	...	...	...	...	...	...	...	2	2	...	
1887	...	224	217	4	5	12	69	531	...	...	...	...	...	1	1	...	...	...	1	1	...	
1888	...	203	234	2	...	124	46	609	...	1	1	...	...	1	1	2	...	...	4	2	...	
1889	...	359	311	3	3	26	9	711	...	...	...	...	...	1	1	2	...	...	7	6	13	
1890	...	355	363	3	3	...	...	724	1	1	2	...	...	1	1	...	...	...	6	9	15	
1891	...	339	348	3	2	...	...	692	...	1	1	...	...	1	1	2	...	...	7	6	13	
1892	...	306	282	6	4	11	32	641	...	...	1	1	2	2	4	...	...	...	5	14	19	
1893	...	242	194	4	...	45	44	529	1	1	2	...	...	1	1	2	...	...	9	7	16	
1894	...	248	290	8	1	38	13	598	2	...	2	...	1	1	1	...	...	...	18	26	44	
1895	...	210	220	1	3	25	45	504	1	1	2	...	...	2	3	5	...	...	10	19	29	
1896	...	219	159	4	2	28	29	441	3	1	4	...	1	1	4	2	6	...	19	15	34	
1897	...	227	160	2	1	24	33	447	7	2	9	1	3	4	3	3	6	...	31	21	52	
1898	...	195	253	4	2	19	25	498	8	4	12	4	3	7	7	12	19	...	10	14	24	
Grand Totals	...	8,985	8,952	90	61	813	910	19,811	24	12	36	7	10	17	28	31	59	...	175	201	376	

\* Includes the "not insane" cases in Table I, p. 118.

Annual Admissions since the opening of the Asylum, with the Discharges and Admissions remaining on December 31st, 1898.

TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS, DECEMBER 31ST, 1898.														REMAINING OF EACH YEAR'S ADMISSIONS, DECEMBER 31ST, 1898.		
Covered.		Improved.			Not Improved.			To other Asylums of Board.			Died.					
Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
3	5	6	12	18	1	24	25	...	3	3	4	131	135	12	44	56
2	2	...	5	5	...	1	1	...	...	...	...	15	15	...	6	6
4	12	22	15	37	9	19	28	2	1	3	137	118	255	52	46	98
6	13	12	13	25	14	8	22	...	1	1	63	96	159	17	37	54
3	10	7	8	15	7	7	14	...	...	...	29	40	69	7	9	16
3	9	11	9	20	5	5	10	2	2	4	25	43	68	13	22	35
...	...	12	12	24	1	10	11	2	1	3	29	30	59	22	18	40
...	...	14	4	18	3	8	11	...	45	45	21	29	50	15	22	37
...	...	13	12	25	12	10	22	56	26	82	37	44	81	55	24	79
...	...	13	14	27	15	7	22	11	3	14	70	52	122	45	46	91
...	...	2	8	10	12	6	18	...	...	...	35	46	81	25	26	51
12	19	2	1	3	8	2	10	...	...	...	25	46	71	17	31	48
...	...	1	3	4	2	3	5	...	...	...	12	17	29	20	28	48
2	2	1	...	1	2	2	4	...	...	...	7	11	18	35	52	87
...	1	2	...	2	3	5	8	...	...	...	7	20	27	25	54	79
...	...	...	4	4	1	1	2	...	...	...	1	9	10	23	51	74
...	...	...	3	3	1	...	1	...	...	...	1	...	1	25	26	51
...	...	...	...	...	...	1	1	...	...	...	2	...	2	22	32	54
...	...	...	...	...	...	...	...	...	...	...	1	...	1	18	25	43
35	73	118	123	241	96	119	215	73	82	155	506	747	1,253	448	599	1,047
12	31	33	34	67	31	51	82	14	5	19	443	560	1,003	84	96	180
46	113	79	53	132	96	85	181	34	16	50	818	1,034	1,852	90	181	271
18	54	36	21	57	26	23	49	21	25	46	288	285	573	15	45	60
14	42	27	12	39	30	40	70	21	13	34	228	245	473	32	38	70
26	51	32	20	52	14	17	31	38	18	56	290	245	535	32	44	76
14	32	13	13	26	25	21	46	1	3	4	189	198	387	24	40	64
14	29	39	20	59	16	22	38	...	...	...	347	418	765	78	131	209
...	7	19	4	23	8	3	11	1	...	1	195	38	233	46	16	62
3	13	15	1	16	7	5	12	1	...	1	175	28	203	49	11	60
7	16	12	9	21	16	8	24	...	...	...	182	96	278	43	53	96
11	28	26	27	53	17	33	50	...	3	3	142	224	366	39	87	126
11	24	12	15	27	17	8	25	...	...	...	133	131	264	36	41	77
20	40	30	25	55	14	27	41	2	1	3	247	227	474	83	77	160
12	34	22	24	46	21	17	38	...	2	2	160	180	340	44	73	117
23	39	19	21	40	17	18	35	...	...	...	121	158	279	42	46	88
14	26	16	13	29	15	15	30	2	2	4	113	133	246	39	55	94
5	20	22	19	41	15	17	32	2	1	3	129	132	261	66	75	141
7	18	25	8	33	14	19	33	...	45	45	127	131	258	63	81	144
8	17	23	14	37	24	19	43	56	26	82	130	135	265	87	78	165
7	24	26	23	49	28	26	54	11	3	14	219	155	374	87	109	196
18	39	15	19	34	31	17	48	...	...	...	191	188	379	100	124	224
20	46	10	12	22	22	18	40	...	...	...	179	164	343	105	136	241
8	24	12	8	20	24	24	48	...	...	...	144	129	273	127	149	276
9	29	11	7	18	22	11	33	...	...	...	132	82	214	106	129	235
3	20	15	8	23	20	16	36	...	...	...	124	107	231	118	170	288
6	18	10	8	18	24	12	36	2	1	3	63	87	150	125	154	279
3	15	5	8	13	15	9	24	...	...	...	70	41	111	149	129	278
2	15	6	4	10	9	6	15	...	...	...	61	27	88	164	155	319
4	12	4	3	7	7	12	19	...	...	...	10	14	24	189	247	436
345	876	614	453	1067	625	599	1224	206	164	370	5,650	5,592	11,242	2,262	2,770	5,032

\* Includes the "not insane" cases in same table (Darenth Asylum).

† Includes the "not insane" cases in Table II., p. 118 (Leavesden and Caterham Asylums.)

ASYLUM STATISTICS.—TABLE IX.—*Showing the length of residence of*

LENGTH OF RESIDENCE.	LEAVESDEN ASYLUM.					
	RECOVERED.			DIED.		
	M.	F.	Total.	M.	F.	Total.
Under 1 Month	...	...	...	...	...	...
From 1 to 3 Months	3	2	5	...	3	3
" 3 to 6 "	4	1	5	3	5	5
" 6 to 9 "	...	...	...	4	4	7
" 9 to 12 "	2	...	2	2	2	6
" 1 to 2 Years	5	2	7	3	6	9
" 2 to 3 "	...	...	...	18	11	29
" 3 to 5 "	2	1	3	9	12	21
" 5 to 7 "	1	2	3	17	16	33
" 7 to 10 "	...	1	1	10	11	21
" 10 to 12 "	...	...	...	11	6	17
" 12 to 14 "	...	...	...	...	2	2
" 14 to 16 "	1	...	1	...	6	6
" 16 to 18 "	...	...	...	3	2	5
" 18 to 20 "	...	...	...	1	1	2
" 20 and upwards...	...	...	...	1	1	2
Totals	18	9	27	92	102	194

ASYLUM STATISTICS.—TABLE X.—*Showing the Ages of Patients resident in the several Asylums on the Orders*

Years ending December 31st.	Under 16		16		17		18		19		20		20 to 29		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
<b>LEAVESDEN ASYLUM.</b>															
1889 ...	...	...	26	20	28	28	31	6	44	15	30	16	191	168	
1890 ...	...	...	1	2	5	2	7	8	7	6	4	7	126	76	
1891 ...	...	...	4	1	4	4	11	5	10	8	9	8	123	73	
1892 ...	...	...	6	2	16	2	9	9	10	5	9	11	120	89	
1893 ...	...	...	5	3	9	4	18	3	11	14	14	8	132	100	
1894 ...	...	...	6	5	11	10	22	6	11	17	14	12	139	106	
1895 ...	...	...	8	6	15	13	25	6	14	18	13	14	148	109	
1896 ...	...	...	12	8	16	19	32	8	13	20	15	16	142	124	
1897 ...	...	...	3	5	9	7	12	5	10	11	15	8	144	111	
1898 ...	...	...	1	...	6	7	5	11	10	11	7	16	15	141	110
<b>CATERHAM ASYLUM.</b>															
1889 ...	...	...	3	4	4	9	9	9	13	15	26	21	165	158	
1890 ...	...	...	1	...	4	2	3	4	5	2	8	5	148	118	
1891 ...	...	...	1	1	3	3	4	5	6	4	7	6	145	115	
1892 ...	...	...	5	2	4	6	5	8	8	12	9	11	147	110	
1893 ...	...	...	1	3	6	8	7	9	10	13	12	14	140	114	
1894 ...	...	...	4	3	10	12	10	13	16	18	14	16	142	118	
1895 ...	...	...	10	4	15	13	14	14	15	21	17	18	150	135	
1896 ...	...	...	11	5	15	16	18	14	16	21	18	19	154	141	
1897 ...	...	...	14	5	21	19	19	14	20	22	19	18	153	145	
1898 ...	...	...	11	7	23	21	20	17	24	23	22	18	156	152	
<b>DARENTH ASYLUM.</b>															
1889 ...	...	...	27	8	42	32	33	29	30	25	27	14	153	151	
1890 ...	...	...	6	3	16	8	25	21	26	17	25	20	158	130	
1891 ...	...	...	3	6	8	6	16	9	27	22	26	19	178	140	
1892 ...	...	...	7	9	9	18	15	11	15	14	26	24	189	145	
1893 ...	...	...	1	...	13	16	13	15	22	19	14	17	208	146	
1894 ...	...	...	1	8	8	20	17	18	13	17	21	26	199	152	
1895 ...	...	...	1	4	16	14	18	22	20	20	12	19	201	150	
1896 ...	...	...	10	10	10	20	17	19	24	19	19	10	196	154	
1897 ...	...	...	8	14	16	17	11	19	18	19	23	20	189	151	
1898 ...	...	...	4	8	15	14	15	18	12	20	16	19	211	171	
<b>SUMMARY.</b>															
1889 ...	...	...	56	32	74	69	73	44	87	55	83	51	509	477	
1890 ...	...	...	1	7	9	24	2	35	33	38	25	37	29	432	319
1891 ...	...	...	1	8	10	15	13	31	19	43	34	42	33	446	330
1892 ...	...	...	18	13	29	26	29	28	33	31	44	46	456	344	
1893 ...	...	...	1	19	22	28	25	40	34	40	41	43	39	480	460
1894 ...	...	...	1	18	16	41	39	50	32	44	56	54	45	480	376
1895 ...	...	...	1	22	26	44	44	61	40	49	51	49	54	499	394
1896 ...	...	...	33	23	41	55	67	41	53	60	52	45	492	419	
1897 ...	...	...	25	24	46	43	42	38	48	52	57	46	486	407	
1898 ...	...	...	1	21	15	45	40	46	45	47	50	54	508	433	

... discharged recovered, and of those who have died during the year 1898.

CATERHAM ASYLUM.					DARENTH ASYLUM.						SUMMARY.					
RECOVERED.		DIED.			RECOVERED.			DIED.			RECOVERED.			DIED.		
F.	Total	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total	M.	F.	Total
...	...	1	1	2	...	...	...	...	...	...	...	...	...	1	4	5
...	...	1	1	2	...	...	...	...	...	...	3	2	5	1	6	7
1	1	2	1	3	...	...	...	...	...	...	4	2	6	5	5	10
1	5	1	3	4	...	...	...	...	...	...	4	1	5	5	5	10
...	1	5	3	8	...	...	...	...	...	...	3	...	3	8	9	17
...	...	12	4	16	...	...	...	...	...	...	5	2	7	30	15	45
...	...	5	8	13	...	...	...	...	1	1	...	...	...	14	21	35
...	...	8	14	22	...	...	...	...	2	2	2	1	3	25	32	57
...	...	8	6	14	...	...	...	...	...	...	1	2	3	18	17	35
...	1	5	8	13	...	...	...	3	5	8	1	1	2	19	19	38
1	1	3	1	4	...	...	...	...	2	2	...	1	1	3	5	8
...	...	1	2	3	...	...	...	1	1	2	...	...	...	2	9	11
...	...	...	1	1	...	...	...	8	1	9	1	...	1	11	4	15
...	...	3	2	5	...	...	...	1	...	1	...	...	...	5	3	8
...	...	4	1	5	...	...	...	2	3	5	...	...	...	7	5	12
...	...	8	27	35	...	...	...	1	1	2	...	...	...	21	42	63
3	9	67	83	150	...	...	...	16	16	32	24	12	36	175	201	376

...ember 31st in 1889, and on the same day in each subsequent year, calculated from the ages stated at admission.

39	40 to 49		50 to 59		60 to 69		70 to 79		80 to 89		90 to 99		Above 100.		Ages not known.		TOTALS.		
F.	M.	F.	M.	F.	M.	F.	Total.												
256	198	259	94	192	56	122	...	...	...	...	...	...	...	5	...	883	1,082	1,965	
195	175	240	174	212	102	178	46	114	7	32	1	5	...	8	16	841	1,093	1,934	
188	180	222	166	224	116	177	47	128	8	29	1	3	...	5	10	872	1,082	1,954	
197	194	212	156	207	124	207	50	120	6	23	1	2	...	4	12	889	1,098	1,987	
208	187	209	166	212	113	198	49	111	4	11	1	2	...	1	5	12	899	1,096	1,995
206	183	211	162	212	114	187	50	104	1	5	...	2	...	1	5	12	895	1,096	1,991
216	178	214	167	214	109	184	37	86	...	1	...	1	...	4	12	897	1,094	1,991	
219	182	212	165	206	106	175	32	78	...	...	...	...	...	4	11	894	1,096	1,990	
181	194	223	156	217	125	172	56	118	2	26	...	3	...	2	7	10	900	1,099	1,999
157	185	221	152	226	118	167	76	152	6	14	...	5	...	8	10	885	1,099	1,984	
190	151	178	149	180	142	177	63	72	9	33	1	...	...	...	...	919	1,046	1,965	
220	187	201	152	191	138	183	51	89	11	36	...	1	1	...	2	7	919	1,058	1,977
226	196	196	160	186	142	182	54	91	14	40	...	...	...	...	6	937	1,064	2,001	
230	192	198	162	184	140	185	56	88	13	37	...	...	...	...	...	941	1,071	2,012	
232	190	192	163	180	138	181	55	85	14	33	...	...	...	...	...	938	1,064	2,002	
226	193	195	160	175	130	180	50	90	10	28	1	...	...	...	...	930	1,074	2,004	
218	190	190	157	174	122	178	47	84	10	23	1	...	...	...	...	933	1,072	2,005	
219	187	188	155	170	111	173	49	85	8	22	...	...	...	...	...	925	1,073	1,998	
223	193	181	153	165	106	166	41	77	7	15	...	...	...	...	...	929	1,050	1,979	
229	189	177	148	173	103	163	41	77	8	15	...	...	...	...	...	929	1,072	2,001	
86	37	75	25	55	43	66	19	42	2	17	...	...	...	...	...	484	600	1,084	
97	39	65	26	67	42	63	22	46	4	11	...	1	...	...	2	441	551	992	
105	39	81	25	62	42	64	22	49	4	14	...	1	...	...	2	446	580	1,026	
108	39	77	23	62	36	59	19	38	4	12	...	3	...	...	2	436	582	1,018	
102	42	69	18	71	30	51	14	37	5	11	...	3	...	...	3	444	575	1,019	
113	37	76	16	70	30	58	13	40	5	9	...	2	...	...	2	447	599	1,046	
110	36	71	16	74	27	56	14	37	4	8	...	2	...	...	1	447	598	1,045	
115	34	72	19	69	23	53	13	32	3	7	...	2	...	...	1	447	583	1,030	
121	31	73	20	69	18	49	13	32	2	9	...	1	...	...	1	449	595	1,044	
121	29	74	22	68	17	48	9	30	2	6	...	1	...	...	1	448	599	1,047	
432	386	512	268	427	241	365	82	114	11	50	1	...	...	5	...	2,286	2,728	5,014	
512	365	506	392	470	282	424	119	249	22	79	1	7	1	...	10	25	2,201	2,702	4,903
519	415	503	391	472	300	423	123	268	26	83	1	4	...	...	5	18	2,255	2,726	4,981
535	425	487	341	461	300	451	125	256	23	72	1	5	...	...	4	14	2,266	2,751	5,017
542	419	470	347	463	281	430	118	133	23	55	1	5	...	1	5	15	2,281	2,735	5,016
545	413	482	338	457	274	425	113	234	16	42	1	4	...	1	5	14	2,272	2,769	5,041
544	404	475	340	462	258	418	98	207	14	32	1	3	...	...	4	13	2,277	2,764	5,041
553	403	472	339	445	240	401	94	195	11	29	...	2	...	...	4	12	2,266	2,752	5,018
525	418	477	329	451	249	387	110	227	11	50	...	4	...	2	7	11	2,278	2,744	5,022
507	403	472	322	467	238	378	126	259	16	35	...	6	...	...	8	11	2,262	2,770	5,032

APPENDIX II.—IMBECILITY.  
ASYLUM STATISTICS.—TABLE XI.—*Showing the Ages  
calculated from the ages stated*

LEAVESDEN ASYLUM.															
AGES.	The Admissions.						The Discharges.						The Deaths.		
	From Parishes and Unions.			From other Asylums of Board.			Recovered.			Removed, Improved, or otherwise.					
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
From 5 to 10 years ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 10 to 15 "	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
" 15 to 20 "	26	15	41	...	...	...	2	1	3	3	3	6	4	2	6
" 20 to 30 "	17	19	36	...	...	...	3	...	3	7	5	12	11	11	22
" 30 to 40 "	13	15	28	...	...	...	4	2	6	4	6	10	9	13	22
" 40 to 50 "	19	17	36	...	...	...	4	1	5	5	5	10	15	9	24
" 50 to 60 "	17	23	40	...	...	...	3	1	4	3	3	6	19	11	30
" 60 to 70 "	17	19	36	...	...	...	2	3	5	2	...	2	23	20	43
" 70 to 80 "	5	19	24	...	...	...	...	1	1	...	2	2	9	25	34
" 80 to 90 "	3	8	11	...	...	...	...	...	...	...	...	...	2	10	12
" 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ages unknown ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	119	135	254	...	...	...	18	9	27	24	24	48	92	102	194

DARENTH ASYLUM.

AGES.	The Admissions.						The Discharges.						The Deaths.		
	From Parishes and Unions.			From other Asylums of Board.			Recovered.			Removed, Improved, or otherwise.					
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
From 5 to 10 years ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 10 to 15 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 15 to 20 "	...	...	...	15	12	27	...	...	...	2	1	3	4	1	5
" 20 to 30 "	...	...	...	4	5	9	...	...	...	1	1	2	4	4	8
" 30 to 40 "	...	...	...	...	5	5	...	...	...	1	2	3	3	2	5
" 40 to 50 "	...	...	...	...	1	1	...	...	...	...	...	...	1	...	1
" 50 to 60 "	...	...	...	...	1	1	...	...	...	...	1	1	...	2	2
" 60 to 70 "	...	...	...	...	1	1	...	...	...	...	...	...	1	2	3
" 70 to 80 "	...	...	...	...	...	...	...	...	...	...	...	...	3	3	6
" 80 to 90 "	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
" 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ages unknown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	...	...	...	19	25	44	...	...	...	4	5	9	16	16	32

the Admissions, Discharges, and Deaths during the year 1898, the orders of Admission.

CATERHAM ASYLUM.															
AGES.	The Admissions.						The Discharges.						The Deaths.		
	From Parishes and Unions.			From other Asylums of Board.			Recovered.			Removed, Improved, or otherwise.					
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
From 5 to 10 years ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 to 15 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15 to 20 " ...	19	17	36	...	...	...	1	...	1	*2	4	6	2	...	2
20 to 30 " ...	19	21	40	...	...	...	1	1	2	3	1	4	4	4	8
30 to 40 " ...	9	20	29	...	...	...	1	1	2	...	2	2	9	9	18
40 to 50 " ...	8	11	19	...	...	...	1	...	1	1	3	4	14	11	25
50 to 60 " ...	8	21	29	...	...	...	...	1	1	...	...	...	9	17	26
60 to 70 " ...	9	17	26	...	...	...	2	...	2	1	1	2	17	14	31
70 to 80 " ...	7	12	19	...	...	...	...	...	...	...	...	...	10	23	33
80 to 90 " ...	1	1	2	...	...	...	...	...	...	...	1	1	2	4	6
90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
As unknown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	80	120	200	...	...	...	6	3	9	7	12	19	67	83	150

SUMMARY.

AGES.	The Admissions.						The Discharges.						The Deaths.		
	From Parishes and Unions.			From other Asylums of Board.			Recovered.			Removed, Improved, or otherwise.					
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
From 5 to 10 years ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 to 15 " ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
15 to 20 " ...	45	32	77	15	12	27	3	1	4	7	8	15	10	3	13
20 to 30 " ...	36	40	76	4	5	9	4	1	5	11	7	18	19	19	38
30 to 40 " ...	22	35	57	...	5	5	5	3	8	5	10	15	21	24	45
40 to 50 " ...	27	28	55	...	1	1	5	1	6	6	8	14	30	20	50
50 to 60 " ...	25	44	69	...	1	1	3	2	5	3	4	7	28	30	58
60 to 70 " ...	26	36	62	...	1	1	4	3	7	3	1	4	41	36	77
70 to 80 " ...	12	31	43	...	...	...	...	1	1	...	2	2	22	51	73
80 to 90 " ...	4	9	13	...	...	...	...	...	...	...	1	1	4	16	20
90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
As unknown ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Grand Totals...	199	255	454	19	25	44	24	12	36	35	41	76	175	201	376

\* One male not insane.

ASYLUM STATISTICS.—TABLE XII.—*Showing the Departments.*

DEPARTMENTS.	LEAVESDEN ASYLUM.	CATERHAM ASYLUM.	DARENTH ASYLUM.	SUMMARY MALES.
MALES.				
Blocks ... ..	133	168	60	361
Centre and Hall ... ..	16	11	4	31
Coaling ... ..	7	6	1	14
Stores ... ..	5	3	2	10
Kitchen ... ..	28	12	...	40
Bakehouse ... ..	7	2	4	13
Mess Room... ..	3	7	2	12
Tailor's Shop ... ..	8	8	18	34
Shoemaker's Shop ... ..	7	8	18	33
Upholsterer's Shop ... ..	34	24	16	74
Painter's Shop ... ..	2	2	...	4
Grounds and Farm ... ..	52	46	50	148
Laundry ... ..	27	22	...	49
Gas House ... ..	5	5	...	10
Engine House and Fitter's Shop...	1	2	...	3
Attending to Earth Closets and Drains ... ..	...	3	...	3
Carpenters ... ..	2	...	...	2
Steward's House ... ..	1	...	...	1
<b>Total ... ..</b>	<b>338</b>	<b>329</b>	<b>175</b>	<b>842</b>
<b>Total number of Patients in Asylum ... ..</b>	<b>885</b>	<b>929</b>	<b>448</b>	<b>2,262</b>

where Patients were employed on December 31st, 1898.

DEPARTMENTS.	LEAVESDEN ASYLUM.	CATERHAM ASYLUM.	DARENTH ASYLUM.	SUMMARY. FEMALES.
FEMALES.				
Laundry ... ..	40	27	56	123
Work Room ... ..	14	25	19	58
Helpers in Blocks ... ..	137	212	76	425
Needlework in Blocks ... ..	87	128	24	239
Centre ... ..	7	10	4	21
Dress Room ... ..	5	5	3	13
Kitchen ... ..	...	2	1	3
Medical Superintendent's Residence	...	2	...	2
Steward's Residence ... ..	...	1	...	1
Warden's Residence ... ..	1	1	1	3
<b>Total ... ..</b>	<b>291</b>	<b>413</b>	<b>184</b>	<b>888</b>
<b>Total number of Patients in Asylum ... ..</b>	<b>1,099</b>	<b>1,072</b>	<b>599</b>	<b>2,770</b>

ASYLUM STATISTICS.—TABLE XIII.—Showing the Occupations previous to

OCCUPATIONS.	LEAVESDEN ASYLUM.					CATERHAM ASYLUM.					DARENTH ASYLUM.					SUMMARY. MALES.				
	NUMBERS.					NUMBERS.					NUMBERS.					NUMBERS.				
	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.
MALES.																				
Baker ... ..			1		1													1		1
Billiard Marker ... ..		1			1												1			1
Bookbinders ... ..		1	1		2												1	1		2
Bootblack ... ..	1				1											1				1
Bootmaker ... ..							1		1								1			1
Bricklayer ... ..							1		1								1			1
Butchers ... ..	1				1		1		1							1	1			2
Cab Attendant ... ..		1			1												1			1
Cabinet Makers ... ..	1		1		2	1			1							2		1		3
Cabmen ... ..		1	1		2		1		1								1	1		2
Carmen ... ..	1				1	1	1	2	4							2	1	2		5
Carpenter ... ..	1				1											1				1
Chimney Sweep ... ..	1				1											1				1
Clerks ... ..	2		1	1	4											2		1	1	4
Coachman ... ..	1				1											1				1
Coalporters ... ..		1			1	1			1							1	1			2
Commission Agent ... ..	1				1											1				1
Compositors ... ..		1			1	1			1							1	1			2
Costermonger ... ..						1			1							1				1
Fitter ... ..	1				1											1				1
French Polisher ... ..								1	1									1		1
Fruit Salesman ... ..	1				1											1				1
Gardeners ... ..	2		1		3											2		1		3
Greengrocer ... ..							1		1								1			1
Grocer's Porter ... ..	1				1											1				1
Haberdashery Buyer ... ..							1		1								1			1
Hatter ... ..			1		1													1		1
Hawker ... ..	1				1											1				1
Horsekeeper ... ..							1		1								1			1
Ironmoulders ... ..	1	1			2											1	1			2
Kitchen Porter ... ..	2				2											2				2
Labourers ... ..	8	2	2	3	15	13	1	1	15							21	3	3	3	30
Lamplighter ... ..								1	1									1		1
Laundrymen ... ..	2				2											2				2
Messenger ... ..	1				1											1				1
Newsvendors ... ..	1				1		1		1							1	1			2
No occupation... ..	26	4	2	2	34					19				19	45	4	2	2		53
Not known ... ..	5			1	6	31	2	1	34						36	2	1	1		40
Packer and Painter's Labourer ... ..	1				1											1				1
Painters ... ..	1				1	1			1							2				2
Paperhanger ... ..		1			1												1			1
Piano Maker ... ..								1	1									1		1
Plumber ... ..			1		1													1		1
Policeman ... ..		1			1												1			1
Porters ... ..	2	1			3											2	1			3
Potato Dealer ... ..		1			1												1			1
Potmen ... ..	2				2											2				2
Road Sweepers ... ..	1				1		1		1							1	1			2
Shipbuilder ... ..							1		1								1			1
Shoemakers ... ..	1	1		2	4											1	1		2	4
Soap Stamper ... ..		1			1												1			1
Stoker ... ..		1			1												1			1
Stonemason ... ..								1	1									1		1
Carried forward ...	70	20	12	9	111	50	14	8	72	19				19	139	34	20	9	202	

mission, and condition as to Marriage of the Patients admitted during the year 1898.

OCCUPATIONS.	LEAVESDEN ASYLUM.					CATERHAM ASYLUM.					DARENTH ASYLUM.					SUMMARY.				
	NUMBERS.					NUMBERS.					NUMBERS.					MALES.				
	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.
MALES—continued.																				
Brought forward ...	70	20	12	9	111	50	14	8	...	72	19	...	...	...	19	139	34	20	9	202
Boylemen ...	1	...	...	...	1	1	1	...	...	2	...	...	...	...	...	2	1	...	...	3
Boys ...	...	1	...	...	1	2	...	...	1	3	...	...	...	...	...	2	1	...	1	4
Bookbinder ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...	1
Bookbinders ...	1	...	1	...	2	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2
Bookkeeper ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookguard ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Bookkeeper ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Bookhouseman ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Book Carvers... ..	...	...	1	...	1	...	...	1	...	1	...	...	...	...	...	...	...	2	...	2
Total ...	74	22	14	9	119	54	16	9	1	80	19	...	...	...	19	147	38	23	10	218
FEMALES.																FEMALES.				
Bookfolder ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Bookstaker... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	...	1
Bookwomen ...	3	3	3	...	9	4	...	3	...	7	...	...	...	...	...	7	3	6	...	16
Books ...	...	...	...	...	...	1	...	1	...	2	...	...	...	...	...	1	...	1	...	2
Bookmonger ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	...	1
Booksmakers ...	1	1	1	...	3	2	...	1	...	3	...	...	...	...	...	3	1	2	...	6
Book by Box Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookge Maker ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Bookerness... ..	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Bookers ...	1	...	1	...	2	1	...	1	...	2	...	...	...	...	...	2	...	2	...	4
Booksekeepers ...	...	...	1	...	1	1	...	...	...	1	...	...	...	...	...	1	...	1	...	2
Booksewives ...	...	...	...	...	...	...	3	...	...	3	...	...	...	...	...	...	3	...	...	3
Bookseworkers ...	2	2	3	...	7	1	...	...	...	1	...	...	...	...	...	3	2	3	...	8
Booker ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Book's Companion ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookdresses ...	1	1	3	...	5	...	...	1	...	1	...	...	...	...	...	1	1	4	...	6
BookgingHouseKepr. ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Bookine Ruler ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookinists ...	...	1	...	...	1	2	...	...	...	2	...	...	...	...	...	2	1	...	...	3
Booktle Makers ...	1	...	...	...	1	...	...	1	...	1	...	...	...	...	...	1	...	1	...	2
Bookch Box Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Booksvendor ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookccupation... ..	30	13	14	2	59	...	...	...	...	...	25	...	...	25	55	13	14	2	...	84
Booke ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Bookle Factory Hand ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Bookpstresses ...	...	2	4	...	6	...	...	2	...	2	...	...	...	...	...	...	2	6	...	8
Bookants ...	15	...	4	1	20	14	...	1	...	15	...	...	...	...	29	...	5	1	...	35
Bookt Worker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookresses ...	1	...	...	...	1	1	1	2	...	4	...	...	...	...	...	2	1	2	...	5
Bookrella Maker ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Booknown ...	6	1	...	1	8	41	10	19	...	70	...	...	...	...	47	11	19	1	...	78
Bookther ...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Bookseworker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Total ..	68	26	36	5	135	70	15	35	...	120	25	...	...	25	163	41	71	5	...	280

## No. 4.

## DARENTH SCHOOLS AND PAVILIONS.

(For Statistical Tables, see pp. 144 to 150.)

NEAR DARTFORD, KENT,

January 31st, 1899.

**statistics.** The following is a brief summary of the statistical results :—

	Males.	Females.	Total.
On January 1st, 1898, the schools contained... ..	636	341	977
Admitted during the year 1898 ... ..	61	34	95
Discharged during the year ... ..	40	31	71
Died during the year ... ..	27	15	42
Remaining in schools and pavilions December 31st, 1898 ...	630	329	959

Of the 61 males admitted, 22 were epileptic; and of the 34 females, 13 were epileptic. Many of the above-mentioned epileptics were admitted to this institution on the understanding that they were not suffering from this disease. In half the number of males admitted the possibility of education is extremely limited, and of the 31 educable 11 are epileptic. Of these 61 male admissions, eight (one epileptic and seven non-epileptic) were discharged in periods varying from three weeks to six months after their admission, two because they were sent here suffering from ophthalmia, and the remainder at the request of their friends; of these latter the majority would have benefited, so far as could be judged, by the training they would have received here. In several cases the children were discharged contrary to my advice. Of the 34 female admissions, 17 show extremely limited mental capacity, and of the remaining 17, four suffer from epilepsy. Of these 34 admissions, one helpless epileptic child died of diphtheria after six months residence; none have been discharged.

There were discharged during the year 40 males and 31 females. Of this number, 8 males and 3 females were improved; 13 males and 3 females not improved; and 19 males and 25 females were transferred to the adult asylum, of whom 15 females come here daily to work in the laundry.

The deaths numbered 42, *i.e.*, 27 males and 15 females. This gives a percentage of 4.32 on the average number resident. This is slightly higher than last year, but, considering the class of cases we have, is a very low death-rate. Of the 42 deaths, 16 were due to epilepsy and 14 to tuberculosis. These two diseases are always responsible for a large number of the deaths in an imbecile asylum. There is nothing special in the other causes of death except that one was due to diphtheria.

*Post-mortem* examinations were made in 17 instances. The same difficulty occurs here as at the adult asylum with regard to obtaining the permission of friends, but I hope that the system we have now adopted will in time overcome this.

**Infectious diseases.**

At the beginning of November, Mr. Taylor, the steward, was attacked with diphtheria, and was very seriously ill. The disease was prevalent in the neighbourhood, and this case unfortunately was the commencement of an outbreak within the asylum. Two cases, one of whom died, occurred in J pavilion, and the remainder have been on the male side of the schools. Up to December 31st there were five cases. The antitoxin treatment has been attended with excellent results. The cause of the outbreak is still being investigated. There have been sporadic cases of chicken-pox throughout the year. Ringworm and ophthalmia, though rigorously isolated, have continued to fill our infectious block.

**Causation of insanity in the admissions.**

Of the 95 cases admitted to the school during the year, a satisfactory history could not be obtained in 27, and this in spite of the fact that repeated attempts were made. Of the 68 cases in which a history was obtained, there was a family history of insanity in 16 cases. This, to my mind, is very significant, knowing how loth people are to acknowledge the fact that mental disease has existed in their families. In three of these cases there was a history of insanity on the side of both parents. There was a family history of intemperance in five cases, and injuries in early childhood are given as the cause of 10. Seven cases are attributed to worry of the mother during pregnancy. The other causes are various and call for no particular comment.

**Educational department.**

The total number of children on the school registers on December 31st was 409, of whom 250 are boys and 159 girls; 279 attend all day, and 130 half-day. The school was closed from January 29th to February 20th by medical order, and on September 1st to September 28th for repairs and cleaning. During the year one additional first-class teacher has been appointed, and three school attendants have been promoted to second-class teachers, and allowed to live out.

The head schoolmistress informs me that the class of children now attending the school compares very favourably with former years. The kindergarten system has been developed amongst the older children into manual employment, and rug-making, cane-chair seating, and advanced basket work have been added to the list of manual occupations. It is much to be desired that additional accommodation should be provided to fully develop this branch of their education. The number of baskets made has been 330, and 70 chairs have been re-seated. The number of patients employed in these occupations is 44. Great attention has also been devoted to plain and fancy knitting, and with very satisfactory results, and the general work of the school during the year has been good. The highest number attending school on any one day was 343, and the lowest 208, the average being 273.

**Classification.**

As far as possible all helpless and hopeless cases have been removed from the schools to the pavilions, and the patients in the different wards of the schools have been arranged according to their size and

age, and also as to whether they are epileptics or not. On the male side the classification is now fairly complete, but on the female side one ward still has a number of helpless and hopeless cases. . . . All the sick are now treated in two infirmary wards, one on the male and one on the female side. . . . In the pavilions all the epileptics have been placed together, and each separate dormitory is in charge of one attendant, so that they are under continuous supervision.

\* \* \* \* \*

**Staff.** Dr. Walmsley, the late Medical Superintendent, left the institution on July 27th, and the same day I took charge of the schools.

The following is a summary of the staff:—

Assistant medical officers	..	..	..	..	3
Female nursing staff	..	..	..	..	91
Male ditto	..	..	..	..	30
Teaching staff	..	..	..	..	13
Other staff	..	..	..	..	101
					238

Two of the assistant medical officers are *locums*, one being recently engaged to look after the diphtheria cases. Under "other staff" are included the mechanics and workmen, many of whom are employed both at the asylum and schools.

I wish to gratefully acknowledge the assistance I have received from Dr. Beresford, who entered on his duties as assistant medical officer on May 16th.

\* \* \* \* \*

(Signed) F. R. P. TAYLOR, M.D., B.S. Lond.,  
*Acting Medical Superintendent.*

## IMBECILITY STATISTICS—DARENTH SCHOOLS AND PAVILIONS.

TABLE I.—*Showing the Admissions, Re-admissions, Discharges, and Deaths during the Year 1898.*

	Males.	Females.	Total.
In the Asylum, January 1st, 1898	636	341	977
	Males.	Females.	Total.
Admitted for the first time during the year (direct from the several Parishes & Unions)	61	33	94
Re-admitted during the year	...	1	1
Admitted from other Asylums of Board	...	...	...
	61	34	95
Total under care during the year	697	375	1,072
	Males.	Females.	Total.
Discharged—			
Recovered	...	...	...
Improved	8	3	11
Not improved	13	3	16
To other Asylums of Board	19	25	44
Died...	27	15	42
Total discharged (for various reasons) and died during the year	67	46	113
Remaining in the Asylum, December 31st, 1898	630	329	959
Average numbers resident during the year	631·9	340·3	972·2
Highest number resident on any one day	639	349	988
Lowest number resident on any one day	630	329	959

TABLE II.—*Showing the Admissions, Re-admissions, and Discharges from the opening of the Asylum to the present date, December 31st, 1898.*

	Males.	Females.	Total.	Males.	Females.	Total.
Admitted during the period of 24 years (direct from the several Parishes & Unions)	1,765	1,164	2,929			
Re-admissions	54	44	98			
Admitted from other Asylums of Board	230	211	441			
Total of Cases Admitted				2,049	1,419	3,468
	Males.	Females.	Total.			
Discharged—						
Recovered	50	57	107			
Improved	167	118	285			
Not improved	174	85	259			
To other Asylums of Board	547	485	1,032			
Died	481	345	826			
Total discharged and died during the 24 years				1,419	1,090	2,509
Remaining December 31st, 1898				630	329	959
Average numbers resident during the 24 years				400·0	255·6	655·6

TABLE III.—Showing the Admissions, Discharges, and Deaths, with the Mean Annual Mortality and proportion of Recoveries per cent. of the Admissions for the year 1889, and for each subsequent year.

Year.	Admitted.						Discharged.						Died.			Remaining 31st December in each year.			Average Numbers Resident.			Percentage of Recoveries on Admissions.			Percentage of Deaths on Average Numbers Resident.									
	From Parishes and Unions.			From other Asylums of Board.			Total.		Re-covered.		Im-proved.		Not Im-proved.		To other Asylums of Board.		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.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				
1889 ...	94	62	156	...	...	...	1	1	2	3	4	7	5	3	8	26	9	35	9	10	19	391	256	647	365.5	249.3	614.8	1.06	1.62	1.30	2.46	4.04	3.07	
1890 ...	96	62	158	52	42	94	2	1	3	8	3	11	13	9	22	...	...	...	12	10	22	504	337	841	466.4	311.6	777.8	1.35	0.95	1.15	2.57	3.24	2.82	
1891 ...	108	64	172	...	...	...	...	1	1	10	6	16	11	7	18	...	...	...	17	24	41	574	363	937	534.0	351.0	885.0	...	0.01	0.01	3.18	6.83	4.63	
1892 ...	77	58	135	...	...	...	7	3	10	3	...	3	5	3	8	11	31	42	21	15	36	604	369	973	590.4	369.4	959.8	9.99	5.17	7.40	3.55	4.06	3.75	
1893 ...	88	72	160	...	...	...	4	7	11	6	11	17	11	6	17	45	44	89	40	23	63	590	357	947	592.5	354.9	946.1	4.54	9.72	6.87	6.70	6.40	6.60	
1894 ...	75	51	126	2	...	2	1	3	4	1	2	3	7	2	9	38	13	51	25	20	45	595	368	963	590.9	356.2	947.1	1.20	6.00	3.12	4.20	5.75	4.70	
1895 ...	96	56	152	1	1	2	10	3	13	10	2	12	5	3	8	25	45	70	12	12	24	630	360	990	607.7	365.4	973.1	10.52	5.26	8.44	1.90	3.33	2.42	
1896 ...	83	57	140	...	...	...	5	9	14	16	9	25	6	4	10	27	29	56	25	12	37	634	354	988	629.1	350.8	979.9	6.02	15.78	10.0	3.97	3.41	3.77	
1897 ...	76	56	132	...	...	...	1	5	6	20	12	32	4	3	7	24	33	57	25	16	41	636	341	977	637.0	340.6	977.6	1.31	5.31	6.0	4.09	4.11	4.10	
1898 ...	61	34	95	...	...	...	...	...	...	...	...	...	...	...	...	8	3	11	13	3	16	19	25	44	631.9	340.3	972.2	...	...	...	4.27	4.41	4.32	

TABLE IV.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients admitted during the Year 1898 direct from the Parishes and Unions.*

MENTAL DISEASES.	Males.	Females.	Total.
Imbecility ... ..	37	20	57
Imbecility and Epilepsy ... ..	21	11	32
Of Weak Mind ... ..	3	3	6
Totals ... ..	61	34	95

TABLE V.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients resident in the Asylum on the December 31st, 1898.*

MENTAL DISEASES.	Males.	Females.	Total.
General Paresis... ..	1	1	2
Idiocy and Epilepsy ... ..	171	58	229
Idiocy ... ..	107	44	151
Imbecility ... ..	263	138	401
Imbecility and Epilepsy ... ..	82	82	164
Of Weak Mind ... ..	6	6	12
Totals .. ..	630	329	959

TABLE VI.—Showing the History of the Annual Admissions since the opening of the Asylum, with the Discharges and Deaths, and the numbers of each year's admissions remaining on December 31st, 1898.

Year.	Admitted.						Of each Year's Admissions, Discharged, and Died, in 1898.												Total Discharged and Died of each Year's Admissions to December 31st, 1898.												Remaining of each Year's Admissions, December 31st 1898.						
	From Parishes and Unions.			From other Asylums of the Board.			Recovered.				Improved.				Died.				Recovered.				Improved.				Died.				Males.	Females.					
	New Cases.		Relapsed cases.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.	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.								
1875	47	34	11	6	155	124	377	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1876	69	86	7	4	...	4	120	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1877	32	23	...	1	...	...	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1878	50	16	2	4	1	...	73	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1879	89	64	1	1	...	...	155	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1880	77	65	...	1	...	...	143	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1881	66	48	1	1	...	...	116	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1882	88	56	...	1	...	...	145	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1883	87	81	1	2	...	...	171	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1884	58	26	4	2	...	...	90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1885	46	27	3	1	...	...	77	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1886	62	32	4	2	...	...	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1887	83	61	1	1	...	...	146	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1888	72	38	2	2	21	40	175	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1889	92	59	2	3	...	...	156	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1890	93	58	3	4	52	42	252	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1891	104	64	4	...	...	...	172	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1892	75	57	2	1	...	...	135	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1893	86	69	2	3	...	...	160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1894	75	51	2	...	...	...	128	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1895	95	55	1	1	1	1	154	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1896	82	56	1	1	...	...	140	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1897	76	55	...	1	...	...	132	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
1898	61	33	...	1	...	...	95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
Totals ...	1,765	1,164	54	44	230	211	3,468	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
								8	3	11	13	3	16	19	25	44	27	15	42	50	57	107	167	118	285	174	85	259	547	485	1032	481	345	826	620	329	959

TABLE VII.—*Showing the Causes of Death during the year 1898, together with the Ages of the Decedents, calculated from the Ages stated on the Orders of Admission.*

CAUSES OF DEATH.	Under 16		16.		17.		18.		19.		20 to 30.		TOTAL.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.
CEREBRAL OR SPINAL DISEASES—															
Epilepsy ... ..	5	5	...	...	...	...	1	...	2	...	1	2	9	7	16
THORACIC DISEASE—															
Phthisis ... ..	8	2	...	...	...	...	...	1	1	...	1	1	10	4	14
Pneumonia ... ..	2	1	...	...	...	...	...	...	...	...	1	...	3	1	4
Heart Disease ...	1	...	...	...	...	1	...	...	...	...	...	...	1	1	2
ABDOMINAL DISEASE—															
Acute Enteritis ...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Intestinal Obstruction	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Lardaceous Disease	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Marasmus ... ..	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
BLOOD DISEASES—															
Pernicious Anæmia	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
ACUTE SPECIFICS—															
Diphtheria ... ..	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Totals ... ..	18	10	1	...	...	1	1	1	3	...	4	3	27	15	42

TABLE VIII.—*Showing the length of Residence in those Discharged Recovered, and in those who have Died during the year 1898.*

LENGTH OF RESIDENCE.	RECOVERED.			DIED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 Month... ..	...	...	...	...	...	...
From 1 to 3 Months ...	...	...	...	...	...	...
" 3 " 6 " ...	...	...	...	...	1	1
" 6 " 9 " ...	...	...	...	...	1	1
" 9 " 12 " ...	...	...	...	1	1	2
" 1 " 2 Years ...	...	...	...	1	2	3
" 2 " 3 " ...	...	...	...	1	2	3
" 3 " 5 " ...	...	...	...	3	2	5
" 5 " 7 " ...	...	...	...	9	...	9
" 7 " 10 " ...	...	...	...	8	3	11
" 10 " 12 " ...	...	...	...	2	3	5
" 12 " 14 " ...	...	...	...	...	...	...
" 14 " 16 " ...	...	...	...	1	...	1
" 16 " 18 " ...	...	...	...	...	...	...
" 18 " 20 " ...	...	...	...	...	...	...
" 20 " 22 " ...	...	...	...	...	...	...
" 22 " 24 " ...	...	...	...	...	...	...
" 24 " 26 " ...	...	...	...	1	...	1
Totals ... ..	..	...	...	27	15	42

TABLE IX.—Showing the Ages of Patients resident in the Asylum on December 31st, 1893, 1894, 1895, 1896, 1897, and 1898; calculated from the Ages stated on the Orders of Admission.

Years ending December 31st.	Under 16.		16.		17.		18.		19.		20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		TOTALS.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.		
1893	...	...	365	217	47	39	46	17	27	13	7	30	20	40	25	...	15	...	...	...	...	...	...	...	590	357	947
1894	...	...	403	214	25	39	42	21	26	12	9	28	13	51	40	...	17	...	...	...	...	...	...	...	595	368	963
1895	...	...	415	238	27	24	23	17	47	16	14	28	12	56	18	3	17	...	...	...	...	...	...	...	630	360	990
1896	...	...	420	240	36	29	36	18	23	10	6	18	5	71	33	1	9	...	...	...	...	...	...	...	634	354	988
1897	...	...	392	230	51	27	23	23	32	16	6	18	19	101	5	...	12	...	...	...	...	...	...	...	636	341	977
1898	...	...	385	197	39	52	43	17	24	21	9	28	8	79	18	11	7	...	...	...	...	...	...	...	630	329	959

TABLE X.—Showing the Ages of the Admissions, Discharges, and Deaths during the Year 1898, calculated from the Ages stated on the Orders of Admission.

AGES.	THE ADMISSIONS.						THE DISCHARGES.						THE DEATHS.		
	From Parishes and Unions.			From other Asylums of the Board.			Recovered.			Removed, Improved, or Otherwise.			Males.	Females.	Total.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.			
From 5 to 10 years	37	23	60	...	...	...	...	...	...	6	3	9	3	5	8
„ 10 „ 15 „	15	11	26	...	...	...	...	...	...	9	2	11	15	5	20
„ 15 „ 20 „	9	...	9	...	...	...	...	...	...	19	12	31	6	3	9
„ 20 „ 30 „	...	...	...	...	...	...	...	...	...	6	4	10	3	2	5
„ 30 „ 40 „	...	...	...	...	...	...	...	...	...	...	7	7	...	...	...
„ 40 „ 50 „	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
„ 50 „ 60 „	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
„ 60 „ 70 „	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Total ...	61	34	95	...	...	...	...	...	...	40	31	71	27	15	42

TABLE XI.—Showing the Departments where Patients were employed on December 31st, 1898.

MALES.		FEMALES.	
Departments.	Numbers Employed.	Departments.	Numbers Employed.
Blocks ... ..	80	Laundry .. ..	2
Stores ... ..	2	Work Room ... ..	2
Kitchen ... ..	6	Helpers in Blocks ... ..	32
Tailors' Shop ... ..	25	School Scrubbers ... ..	8
Shoemakers' Shop ... ..	25		
Surgery ... ..	1		
Mat Making ... ..	4		
Total ... ..	143	Total ... ..	44
Total No. of Patients in Asylum	630	Total No. of Patients in Asylum	329

Table 7 - Summary of the data on the children's behavior and learning in the home. The data are presented in the form of a table.

Child's Name	Parent's Report				Teacher's Report
	Frequency	Intensity	Duration	Context	
John	10	3	15	Home	10
Jane	8	2	12	Home	8
John	12	4	18	Home	12
Jane	9	3	14	Home	9
John	11	3.5	16	Home	11
Jane	7	2.5	11	Home	7
John	13	4.5	19	Home	13
Jane	6	2	10	Home	6
John	14	5	20	Home	14
Jane	5	1.5	9	Home	5

Table 8 - Summary of the data on the children's behavior and learning in the school. The data are presented in the form of a table.

Child's Name	Parent's Report				Teacher's Report
	Frequency	Intensity	Duration	Context	
John	15	5	25	School	15
Jane	12	4	20	School	12
John	18	6	30	School	18
Jane	10	3.5	18	School	10
John	16	5.5	28	School	16
Jane	8	3	15	School	8
John	20	7	35	School	20
Jane	6	2.5	12	School	6
John	22	8	40	School	22
Jane	4	1.5	8	School	4

MEDICAL SUPPLEMENT

TO THE

REPORT OF THE STATISTICAL COMMITTEE

FOR THE

YEAR 1898.

EDITED BY

E. W. GOODALL, M.D. LOND.,

AND

F. M. TURNER, M.D., B.A. CANTAB., B.Sc. LOND.

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COMPLICATIONS AND CO-EXISTENT INFECTIOUS DISEASES, 1898.

Tables I., II., and III. show the number and percentage incidence of complications occurring amongst the completed cases (*i.e.*, the discharges and deaths) of scarlet fever, diphtheria, and enteric fever during the year 1898.

TABLE I.—Showing incidence of Complications amongst 12,771 cases of Scarlet Fever completed during 1898.

COMPLICATION.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Fountain.	South-Eastern.	Brook.	Park.	Gore Farm.	Northern.	Total.	Percentage Incidence.
Otitis ... ..	141	242	186	212	123	132	113	225	210	87	96	1,767	13·83
Albuminuria ... ..	36	415	82	282	62	65	90	178	349	29	44	1,632	12·77
Adenitis (of convalescence) ... ..	56	106	73	82	93	93	32	138	81	31	47	832	6·51
Suppurative Adenitis (included in above)	22	14	21	30	7	16	12	26	10	...	19	177	1·38
Rheumatism ... ..	15	84	11	73	50	25	42	32	42	21	7	402	3·14
Nephritis ... ..	24	76	36	25	21	24	37	36	65	7	13	364	2·85
Tonsillitis (of convalescence) ... ..	14	58	5	40	27	14	9	47	9	111	54	389	3·04
Stomatitis ... ..	3	14	4	60	15	10	5	13	16	74	44	258	2·02
Broncho-pneumonia	13	7	14	30	14	31	25	11	22	8	2	177	1·38
Bronchitis ... ..	8	42	9	22	21	4	12	33	4	7	10	172	1·34
Abscess (other than Mastoid or Glandular) ... ..	11	9	14	14	7	11	10	14	15	9	4	118	·92
Mastoid Abscess ... ..	4	5	4	6	6	7	5	9	6	7	4	63	·49
Ophthalmia ... ..	12	7	10	5	8	3	4	24	14	33	12	132	1·03
Relapse of Disease ... ..	1	10	3	23	7	13	6	22	14	13	30	142	1·10
Pneumonia ... ..	3	15	3	11	..	9	13	9	3	9	8	83	·64
Endocarditis ... ..	3	4	1	3	..	11	10	12	2	5	3	54	·42
Cervical Cellulitis ... ..	3	5	9	7	3	3	6	6	3	..	..	45	·35
Laryngitis ... ..	4	2	..	2	3	..	3	3	2	5	2	26	·20
Pleurisy ... ..	3	2	..	2	4	2	8	3	..	..	..	24	·18
Corneal Ulcer ... ..	..	1	1	1	..	..	..	2	1	2	1	11	·08
Pericarditis ... ..	..	3	2	3	1	2	1	5	2	2	..	21	·16
Empyema ... ..	..	2	2	2	..	..	1	..	..	..	..	7	·05
Pyæmia ... ..	..	3	5	..	..	4	..	..	5	..	..	17	·13
Meningitis ... ..	2	1	1	1	..	1	1	..	1	..	1	9	·07
(Diphtheria ... ..	8	42	46	56	37	105	21	63	36	98	169	661	5·17
Chickenpox ... ..	35	28	22	33	4	32	11	17	1	36	81	300	2·34
Measles ... ..	7	54	39	79	14	15	21	9	18	7	37	300	2·34
Rötheln ... ..	4	41	16	23	15	12	8	7	24	35	44	229	1·73
Whooping Cough ... ..	3	15	4	20	11	4	2	15	2	3	18	97	·70
Mumps ... ..	..	..	..	..	..	..	..	2	5	4	4	15	·11
Erysipelas ... ..	1	1	3	3	2	..	1	1	2	2	..	16	·12
Tuberculosis ... ..	..	..	..	1	..	..	..	..	..	2	..	4	·03
Enteric Fever ... ..	..	2	..	..	..	..	..	..	..	3	..	5	·03

TABLE II.—Showing incidence of Complications amongst 6,326 cases of Diphtheria completed during 1898.

COMPLICATION.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Fountain.	South-Eastern.	Brook.	Park.	Northern.	Total.	Percentage Incidence.
Albuminuria ... ..	473	4	353	518	136	280	339	255	373	7	2,738	43·28
Paralysis ... ..	164	..	108	123	108	95	350	159	100	22	1,229	19·42
Relapse of Disease ... ..	25	1	..	35	28	8	24	18	12	2	153	2·41
Broncho-pneumonia ... ..	30	..	8	7	11	4	16	10	12	1	99	1·56
Otitis ... ..	141	1	66	13	28	28	32	44	36	20	409	6·46
Pneumonia ... ..	8	..	4	..	1	2	3	6	..	1	25	·39
Nephritis ... ..	..	..	5	..	..	10	1	8	3	3	32	·50
Scarlet Fever ... ..	63	2	26	32	27	16	50	22	27	42	307	4·85
Chickenpox ... ..	26	..	10	2	..	..	8	2	4	17	69	1·09
Measles ... ..	25	..	42	15	6	..	5	2	1	16	112	1·77
Whooping Cough ... ..	..	..	2	6	4	..	1	1	3	..	17	·26
Rötheln ... ..	2	..	3	1	..	..	..	..	3	9	18	·28
Tuberculosis ... ..	..	..	..	..	..	..	..	1	..	..	1	·01

Complications referable to Antitoxin amongst 5,170 completed cases of Diphtheria treated with it.

Rash ... ..	554	2	110	373	164	323	214	375	212	..	2,327	45·00
Joint-pains ... ..	95	..	7	73	35	32	18	47	23	..	330	6·38
Abscess ... ..	17	..	1	4	21	17	4	5	2	..	71	1·37

TABLE III.—Showing incidence of Complications amongst 744 cases of Enteric Fever completed during 1898.

COMPLICATION.		Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	South-Eastern.	Brook.	Park.	Total.	Percentage Incidence.
	Relapse of Disease ... ..	14		11	7	8	8	19	3	70	9.40
	Hæmorrhage ... ..	5		25	6	14	9	8	5	72	9.67
	Abscesses ... ..	9		10	1	3	2	5	1	31	4.16
	Perforation ... ..	8		13	4	13	6	1	1	35	4.70
	Pneumonia ... ..	3		5	12	4	5	5	1	25	3.36
	Peritonitis (non-perforative) ... ..	1		8	1	1	2	3	1	15	2.01
	Periostitis ... ..	...		...	...	...	...	...	...	11	1.47
	Pleurisy ... ..	5	None.	1	1	1	4	3	1	16	2.15
	Phlebitis ... ..	1		3	3	...	3	3	2	14	1.88
	Dementia ... ..	1		2	...	...	3	3	1	13	1.74
	Broncho-pneumonia ... ..	3		2	1	1	1	4	...	13	1.74
	Parotitis ... ..	...		4	1	1	4	...	...	10	1.34
Specific Infectious Diseases	Scarlet Fever ... ..	1		...	1	...	3	3	...	8	1.07
	Diphtheria ... ..	3		...	...	...	1	1	1	6	0.80

In both Tables I. and II., under the heading "Albuminuria," are included all cases in which albumen was detected in the urine on one or more occasions, without the presence of any other symptoms pointing to nephritis.

In Table I., "Adenitis" includes only cases of cervical adenitis, and under the term "Mastoid Abscess" are comprised all cases of suppuration in or about the mastoid region of the skull. In all three tables "Relapse of Disease" refers only to cases in which distinct symptoms of the primary disease reappeared.

The tables include cases of all the common and some of the rarer complications and sequelæ of the infectious diseases dealt with. Very rare complications have not been tabulated.

Comparing this year's tables with those of 1896 and 1897, it will be observed that the percentage incidence of the various complications fluctuates from year to year. Picking out the most striking variations, it will be found that amongst the scarlet fever cases the percentage incidence of albuminuria, secondary tonsillitis, relapse, measles, and röheln (*rubella*) has increased, while that of otitis, rheumatism, abscesses other than mastoid, and chickenpox has diminished. Amongst the diphtheria cases, relapses and secondary measles have become more common, broncho-pneumonia and secondary scarlet fever less so. Hæmorrhage and abscesses have increased among the enteric fever cases, while the only notable diminution is that of the relapses, of which the percentage incidence has been 11.9 in 1896, 13.06 in 1897, and 9.40 in 1898.

TABLE IV.—Showing the number of Cases in which two separate Infectious Diseases were co-existent at the time of admission into the Acute Fever Hospitals during 1898.

CO-EXISTENT INFECTIONS.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Fountain.	South-Eastern.	Brook.	Park.	Total.
Scarlet Fever and Diphtheria ... ..	40	18*	12	17	22	41	32	27	29	238
Scarlet Fever and Chickenpox ... ..	9	5	12	14	1	6	9	10	7	73
Scarlet Fever and Whooping Cough ... ..	4	14	1	11	6	6	8	5	24	79
Scarlet Fever and Measles ... ..	5	3	...	16	8	1	4	4	8	52
Scarlet Fever and Tuberculosis ... ..	1	1	...	...	4	3	5	...	...	14
Scarlet Fever and Röheln ... ..	1	2	...	6	12	...	4	...	...	17
Scarlet Fever and Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...
Diphtheria and Measles ... ..	20	...	7	12	12	...	15	4	5	68
Diphtheria and Chickenpox ... ..	9	...	...	4	...	3	6	12	1	30
Diphtheria and Whooping Cough ... ..	8	...	4	7	...	6	3	3	7	38
Diphtheria and Tuberculosis ... ..	...	...	...	1	...	...	6	3	1	11
Diphtheria and Enteric Fever ... ..	...	...	...	...	...	...	...	1	...	1
Diphtheria and Röheln ... ..	1	...	...	...	...	...	...	...	...	3
Total ... ..	...	...	...	...	...	...	...	...	...	624 = 3.14 %

\* One case was also the subject of measles and whooping cough.

Perhaps the most interesting table is Table IV., which shows the number of cases in which two separate infectious diseases were co-existent at the time of admission of the patient. The percentage is slightly higher than during the two preceding years. The cases of mixed scarlet fever and diphtheria constitute a large proportion of the total number of mixed infections, though this proportion is not so high as in 1896 and 1897.

From a scientific point of view the table is interesting as being a refutation of an idea still very prevalent amongst the members of the medical profession, namely, that it is extremely unusual, if not impossible, for more than one infectious disease to be present at the same time in the same person. For evidence of this widely spread belief it is only necessary to look through the periodical medical literature of the past two or three years.

From a practical point of view the table is of value because it demonstrates the absolute necessity of affording ample accommodation in an infectious diseases hospital for the separation of these mixed cases from those patients in the general wards who are suffering from one disease only—of providing isolation within isolation. An infectious diseases hospital admitting chiefly cases of scarlet fever and diphtheria is to all intents and purposes a hospital for sick children. It differs, however, from the general hospital for sick children in one important administrative particular, namely, that whereas if a patient applying for admission to or an inmate of the latter institution is found to be suffering from an infectious disease, he can be sent home or transferred to a fever hospital according to the nature of the malady; but no such course of action is available for the authorities of the infectious hospital: the patient has to be admitted, and cannot be sent home or elsewhere.

E. W. G.

POST-SCARLATINAL DIPHTHERIA, 1898.

The following lists give particulars of each case of diphtheria that occurred amongst the scarlet fever patients treated in the eleven hospitals of the Board. All cases that were completed during the year are included; thus a certain number of cases which developed diphtheria during 1897 are included, while all remaining under treatment at the end of 1898 are excluded.

EASTERN HOSPITAL.—TABLE I.—*Post-Scarlatinal Diphtheria, 1898.*

No.	Initials	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	A. R.	F	9	Hut ...	Oct. 30/97	Dec. 5/97	32	Faucial ... ..	R ...	Antitoxin.
2	W. D.	M	9	Mercy ...	" 31 "	Feb. 18/98	104	" ... ..	R ...	No antitoxin.
3	J. L.	M	5	Fortitude	Feb. 12/98	Mar. 30 "	42	Nasal ... ..	R ...	"
4	G. P.	M	4	Fortitude	Mar. 30 "	Apr. 25 "	22	Faucial ... ..	R ...	"
5	J. S.	F	11	Fortitude	" 10 "	" 29 "	14	" ... ..	R ...	Antitoxin.
6	B. B.	F	8	Courage	July 5 "	July 18 "	8	" ... ..	R ...	"
7	R. H.	M	4	Mercy ...	" 3 "	" 24 "	21	Faucial & Laryngeal	R ...	"
8	F. G.	F	7	Fortitude	Sept. 2 "	Oct. 29 "	55	Faucial ... ..	R ...	"

NORTH-EASTERN HOSPITAL.—TABLE II.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	L. B.	M	13	15	Oct. 19/97	Jan. 8/98	81	Faucial ...	R ...	Antitoxin.
2	A. P.	F	2	2	Dec. 18 "	" 27 "	40	" ...	D ...	"
3	T. F.	M	4 $\frac{1}{2}$	5	Jan. 2/98	" 29 "	27	" ...	D ...	"
4	F. H.	M	5	15	Oct. 18/97	" 9 "	80	" ...	R ...	No antitoxin.
5	R. B.	M	9	15	Dec. 13 "	" 9 "	26	" ...	R ...	Antitoxin.
6	J. M.	M	7	15	" 15 "	" 10 "	25	" ...	R ...	"
7	J. S.	M	13	15	" 14 "	" 9 "	24	" ...	R ...	No antitoxin.
8	A. G.	M	13	15	Jan. 4/98	Feb. 22 "	43	" ...	R ...	"
9	T. H.	M	9	15	Oct. 17/97	" 24 "	126	" ...	R ...	"
10	H. Z.	M	5	19	Feb. 7/98	" 18 "	9	" ...	R ...	Antitoxin.
11	A. D.	F	3	3	Mar. 20 "	Apr. 3 "	10	Laryngeal ...	D ...	"
12	B. H.	M	7	15	Feb. 1 "	Feb. 24 "	21	Faucial ...	R ...	No antitoxin.
13	H. H.	M	6	19	Jan. 26 "	" 20 "	20	" ...	R ...	"
14	A. S.	M	9	15	Feb. 8 "	Mar. 7 "	26	" ...	R ...	"
15	A. R.	M	5	15	" 6 "	" 2 "	20	" ...	R ...	Antitoxin.
16	N. M.	F	6	9	Jan. 31 "	" 27 "	53	" ...	R ...	"
17	S. D.	F	2	2	Dec. 26/97	Jan. 25 "	27	Laryngeal ...	R ...	"
18	A. C.	M	5	13	Mar. 2/98	May 14 "	68	Faucial ...	R ...	No antitoxin.
19	H. C.	M	9	15	" 3 "	Apr. 15 "	39	" ...	R ...	"
20	D. R.	M	11	15	Jan. 24 "	" 16 "	75	" ...	R ...	"
21	C. T.	M	11	15	Apr. 1 "	" 13 "	11	" ...	R ...	"
22	S. D.	M	5	19	Mar. 21 "	May 25 "	62	" ...	R ...	"
23	A. S.	F	3	9	Apr. 23 "	" 7 "	12	" ...	R ...	"
24	H. H.	M	5	13	" 30 "	" 11 "	9	" ...	R ...	"
25	A. C.	M	5	19	" 15 "	" 16 "	27	" ...	R ...	"
26	F. G.	M	5	19	Mar. 8 "	June 21 "	105	" ...	R ...	"
27	W. W.	M	3	24	May 18 "	" 19 "	35	Faucial and Nasal...	R ...	"
28	A. K.	M	3	19	" 24 "	" 13 "	49	Faucial ...	R ...	"
29	H. H.	M	3	19	June 3 "	" 22 "	16	" ...	R ...	"
30	H. B.	M	3	19	" 2 "	" 19 "	15	Faucial and Nasal...	R ...	Antitoxin.
31	V. T.	F	6	4	May 1 "	July 5 "	64	" ...	R ...	"
32	J. A.	M	5	13	June 25 "	" 31 "	34	Faucial ...	R ...	No antitoxin.
33	F. E.	M	4	19	" 11 "	June 22 "	9	" ...	R ...	"
34	E. W.	M	5	13	" 15 "	July 12 "	22	" ...	R ...	"
35	E. B.	M	11	15	" 20 "	" 9 "	18	" ...	R ...	"
36	G. N.	M	5	19	" 6 "	June 17 "	10	" ...	R ...	"
37	A. C.	M	4	13	" 10 "	Aug. 17 "	67	" ...	R ...	"
38	E. D.	M	3	13	" 25 "	" 7 "	41	" ...	R ...	"
39	R. C.	F	7	9	July 9 "	" 4 "	23	" ...	R ...	"
40	E. B.	F	10	9	May 26 "	June 25 "	17	" ...	R ...	"
41	M. M.	F	11	9	June 7 "	Aug. 6 "	59	" ...	R ...	"
42	M. B.	F	10	6	July 20 "	Sept. 13 "	52	" ...	R ...	"

Two of the deaths were due to measles.

NORTH-WESTERN HOSPITAL.—TABLE III.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials	Sex.	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	F. M.	F	4	D	Oct. 17/97	Dec. 11/97	29	Faucial ...	R ...	No antitoxin.
2	G. C.	F	3	C	Dec. 7 "	" 23 "	14	" ...	R ...	Antitoxin.
3	E. B.	F	5	C	" 28 "	Feb. 12/98	40	" ...	R ...	"
4	W. R.	M	4 $\frac{1}{2}$	D	Jan. 7/98	" 1 "	25	Faucial and Nasal	D ...	"
5	F. R.	M	5	D	" 14 "	Jan. 27 "	11	" ...	R ...	No antitoxin.
6	J. D.	M	5 $\frac{1}{2}$	C	" 17 "	Feb. 24 "	38	Faucial ...	R ...	Antitoxin.
7	A. B.	F	4	C	" 18 "	" 26 "	36	Nasal ...	R ...	"
8	E. C.	F	4	5	Feb. 25 "	Mar. 21 "	21	Faucial ...	R ...	"
9	M. M.	F	4	5	" 28 "	" 18 "	16	" ...	R ...	No antitoxin.
10	D. S.	F	7	F	" 22 "	Apr. 28 "	36	Faucial and Nasal...	R ...	Antitoxin.
11	E. F.	M	5	3	Apr. 3 "	" 16 "	7	Faucial ...	R ...	"
12	A. N.	M	4	D	May 3 "	June 3 "	29	Laryngeal ...	R ...	"
13	H. W.	M	5	D	" 5 "	May 27 "	18	Faucial & Laryngeal	R ...	"
14	L. G.	F	3	1	" 13 "	June 6 "	21	Faucial ...	R ...	"
15	F. G. R.	M	3	4	" 28 "	" 30 "	32	Nasal & Laryngeal	R ...	"
16	T. B.	M	4 $\frac{1}{2}$	A	June 3 "	" 27 "	24	Faucial ...	D ...	"
17	M. C.	F	4	A	" 5 "	July 29 "	53	" ...	R ...	"
18	G. G.	F	11	A	" 8 "	" 24 "	44	" ...	R ...	"
19	J. C.	F	6	C	" 15 "	June 24 "	7	Nasal ...	D ...	"
20	L. G.	F	6	C	" 24 "	" 29 "	4	Faucial ...	R ...	"

NORTH-WESTERN HOSPITAL.—TABLE III.—*Post-Scarlatinal Diphtheria*,  
1898—*continued*.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
21	F. D.	F	3	C	June 25/98	July 1/98	6	Nasal ... ..	D	Antitoxin.
22	M. P.	F	3	2	" 25 "	" 2 "	5	Faucial and Nasal	R	"
23	A. D.	M	4½	D	July 1 "	" 23 "	21	Nasal ... ..	R	"
24	J. A.	F	7	F	" 4 "	" 10 "	2	Faucial and Nasal	R	No antitoxin.
25	E. B.	F	7	D	" 7 "	" 14 "	5	Faucial ... ..	R	Antitoxin.
26	H. S.	M	5	2	" 7 "	" 13 "	4	Faucial and Nasal	R	No antitoxin.
27	R. S.	F	3	C	" 9 "	" 21 "	10	Laryngeal ... ..	R	Antitoxin.
28	A. A.	M	4½	C	" 9 "	Sept. 22 "	72	Faucial ... ..	R	"
29	A. L.	F	1½	C	" 10 "	July 30 "	3	" ... ..	D	"
30	E. A.	F	4	A	" 27 "	Sept. 7 "	41	Nasal ... ..	R	"
31	E. B.	M	1½	E	" 29 "	Aug. 23 "	21	" ... ..	D	"
32	E. H.	F	8	A	Aug. 7 "	Sept. 24 "	46	Faucial and Nasal	R	No antitoxin.
33	G. H.	F	6	A	" 6 "	" 30 "	45	Faucial ... ..	R	"
34	M. G.	F	6	A	Sept. 4 "	Oct. 3 "	28	" ... ..	R	"
35	L. J.	F	7	D	" 8 "	Sept. 16 "	4	Nasal ... ..	R	Antitoxin.
36	E. W.	F	12	F	" 11 "	Nov. 4 "	52	Laryngeal ... ..	R	No antitoxin.
37	J. S.	M	1½	E	" 11 "	Sept. 19 "	6	Nasal ... ..	D	"
38	J. D.	M	5	E	" 28 "	Oct. 4 "	5	Faucial ... ..	R	"
39	C. C.	F	1½	C	Oct. 4 "	Nov. 4 "	30	Nasal ... ..	R	Antitoxin.
40	W. C. Y.	M	9	3	" 5 "	Oct. 13 "	5	Faucial ... ..	R	No antitoxin.
41	G. H.	M	10	3	" 17 "	" 26 "	7	" ... ..	R	"
42	A. B.	M	5	F	" 20 "	Nov. 10 "	20	Faucial and Nasal	R	Antitoxin.
43	W. W.	F	3	F	" 20 "	" 10 "	19	Faucial ... ..	R	No antitoxin.
44	S. B. S.	F	17	A	" 21 "	Oct. 24 "	2	" ... ..	R	Antitoxin.
45	M. F.	F	5	C	" 20 "	" 27 "	3	" ... ..	R	No antitoxin.
46	S. T.	F	2½	A	Nov. 5 "	Nov. 9 "	5	" ... ..	R	Antitoxin.

WESTERN HOSPITAL.—TABLE IV.—*Post-Scarlatinal Diphtheria*, 1898.

No.	Initials.	Sex.	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	J. D.	F	6	3	July 21/97	Aug. 25/97	30	Faucial ... ..	R	Antitoxin.
2	W. H.	M	6	13	Aug. 4 "	Oct. 13 "	38	Faucial and Nasal...	R	"
3	F. F.	M	1½	13	" 9 "	" 27 "	46	" ... ..	R	"
4	W. E.	M	8	10	" 14 "	" 3 "	17	Faucial ... ..	R	"
5	L. H.	F	6	13	" 17 "	" 8 "	20	" ... ..	R	"
6	E. N.	F	6	9	Oct. 1 "	" 27 "	22	" ... ..	R	"
7	I. W.	F	6	9	" 10 "	Nov. 3 "	22	" ... ..	R	No antitoxin.
8	E. H.	M	2	13	" 24 "	Dec. 7 "	40	" ... ..	R	Antitoxin.
9	W. D.	M	3	12	" 18 "	Nov. 11 "	13	" ... ..	R	"
10	G. C.	F	7	2	" 30 "	" 26 "	24	" ... ..	R	"
11	P. G.	M	2½	12	Nov. 5 "	" 30 "	24	Laryngeal ... ..	R	"
12	E. A.	M	4	9	" 7 "	" 25 "	15	Nasal and Faucial...	R	No antitoxin.
13	M. C.	F	6	3	" 7 "	Dec. 5 "	24	Faucial ... ..	R	Antitoxin.
14	A. S.	F	2	13	" 13 "	Nov. 27 "	9	" ... ..	R	"
15	W. R.	M	6	2	" 12 "	" 25 "	4	" ... ..	R	"
16	R. E.	M	3	4	" 19 "	Dec. 19 "	26	" ... ..	R	"
17	H. H.	M	6	9	" 19 "	" 17 "	24	" ... ..	R	No antitoxin.
18	J. W.	F	6	8	" 29 "	" 7 "	5	" ... ..	R	"
19	M. S.	F	2	11	Dec. 16 "	Feb. 13/98	57	Laryngeal ... ..	R	Antitoxin.
20	M. C.	F	24	3	" 28 "	Jan. 1 "	22	Faucial ... ..	R	"
21	F. E.	M	3	14	Jan. 14/98	Apr. 30 "	100	" ... ..	R	"
22	J. F.	F	11	4	" 26 "	Feb. 15 "	18	" ... ..	R	"
23	A. P.	F	4	4	Feb. 7 "	Apr. 8 "	51	" ... ..	R	"
24	F. G.	M	2	9	" 26 "	" 28 "	60	" ... ..	R	"
25	M. R.	F	4	2	" 27 "	Mar. 28 "	18	Laryngeal ... ..	D	"
26	H. K.	M	3	2	Mar. 3 "	" 29 "	20	Faucial and Nasal...	D	"
27	H. S.	M	1½	12	" 25 "	Apr. 22 "	23	Laryngeal ... ..	R	"
28	J. S.	F	6	2	Apr. 21 "	May 18 "	31	Faucial ... ..	R	"
29	C. H.	F	5	11	May 19 "	June 1 "	8	" ... ..	R	"
30	M. S.	F	1½	11	" 20 "	May 31 "	10	Faucial, Nasal, and Laryngeal ..	R	"
31	J. R.	M	5	13	" 29 "	June 12 "	13	Faucial and Nasal	D	"
32	A. C.	M	2	13	June 11 "	Oct. 8 "	114	Nasal & Laryngeal	R	"
33	M. F.	F	10	9	" 25 "	Sept. 4 "	66	Faucial ... ..	R	"
34	D. D.	F	4	8	Aug. 1 "	Aug. 14 "	11	" ... ..	R	"
35	E. C.	M	6	3	" 22 "	Sept. 14 "	19	Laryngeal ... ..	R	"
36	S. P.	M	12	10	Sept. 26 "	Oct. 20 "	21	Faucial ... ..	R	"

SOUTH-WESTERN HOSPITAL.—TABLE V.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	J. W.	F	2	G 2	Sept. 19/97	Oct. 10/97	11	Faucial and Nasal...	R	Antitoxin.
2	D. B.	F	4	D 2	Oct. 14 "	Nov. 4 "	19	Faucial ...	R	No antitoxin.
3	E. S.	F	8	D 2	" 20 "	" 13 "	17	" ...	R	"
4	A. H.	M	2	C 1	Nov. 16 "	Dec. 1 "	5	Faucial and Nasal...	R	"
5	E. M.	F	4	D 2	Oct. 18 "	" 10 "	43	Nasal ...	R	"
6	J. W.	M	7	H 1	Dec. 5 "	" 18 "	10	Faucial & Laryngeal	R	Antitoxin.
7	E. E.	F	7	D 2	Sept. 19 "	" 19 "	87	" ...	R	"
8	W. W.	M	4	F 2	" 15 "	" 30 "	91	Nasal ...	D	No antitoxin.
9	B. A.	F	3	D 2	Nov. 3 "	Jan. 6/98	61	" ...	R	"
10	N. L.	F	4	G 1	Sept. 29 "	" 14 "	98	Faucial and Nasal...	R	Antitoxin.
11	B. L.	F	9	F 2	Dec. 7 "	Feb. 2 "	54	Faucial ...	R	No antitoxin.
12	L. C.	F	6	D 1	Nov. 13 "	" 4 "	77	" ...	R	"
13	V. L.	M	1/2	G 2	" 19 "	" 4 "	73	Faucial & Laryngeal	R	"
14	A. H.	F	4	G 2	Jan. 15/98	" 10 "	24	" ...	R	Antitoxin.
15	N. B.	F	5	F 2	Feb. 7 "	" 13 "	6	Faucial ...	R	No antitoxin.
16	A. R.	F	3	D 2	Jan. 17 "	" 13 "	24	" ...	R	"
17	F. K.	M	1	S	Sept. 24/97	" 15 "	143	Laryngeal ...	R	Antitoxin.
18	M. W.	F	6	D 2	Jan. 29/98	" 17 "	19	Faucial ...	R	No antitoxin.
19	J. H.	M	8	H 2	Oct. 17/97	" 17 "	113	" ...	R	"
20	M. B.	F	15	D 1	Feb. 4/98	" 23 "	14	" ...	R	Antitoxin.
21	F. B.	F	8	F 1	" 18 "	Mar. 12 "	15	" ...	R	"
22	B. J.	F	6	D 2	" 23 "	" 20 "	23	" ...	D	No antitoxin.
23	R. H.	M	5	C 2	Mar. 12 "	" 30 "	16	" ...	R	Antitoxin.
24	T. B.	M	3	S	" 16 "	Apr. 9 "	23	Faucial & Laryngeal	R	"
25	F. O.	M	5	H 2	Feb. 8 "	" 24 "	73	Faucial and Nasal...	R	"
26	F. S.	M	7	H 2	Apr. 1 "	May 10 "	36	Faucial ...	R	"
27	G. W.	M	6	H 2	May 3 "	" 31 "	25	" ...	R	No antitoxin.
28	H. B.	F	4	D 2	" 16 "	June 23 "	37	" ...	R	Antitoxin.
29	W. W.	F	7	D 2	June 12 "	" 24 "	10	" ...	R	No antitoxin.
30	A. R.	F	4	D 2	May 24 "	" 26 "	30	Laryngeal & Nasal	R	Antitoxin.
31	A. H.	F	3	G 1	June 20 "	July 17 "	35	Nasal ...	R	No antitoxin.
32	S. J.	M	7	H 2	" 30 "	" 26 "	20	Faucial ...	R	"
33	F. W.	M	3	H 1	July 6 "	Aug. 26 "	42	" ...	R	"
34	M. H.	M	4	G 1	June 12 "	Sept. 28 "	98	Nasal ...	R	"
35	M. K.	F	2	G 2	Sept. 23 "	Oct. 4 "	10	Faucial and Nasal...	D	Antitoxin.
36	W. D.	M	7	H 2	July 22 "	" 11 "	89	Faucial ...	R	No antitoxin.
37	C. L.	M	5	H 2	Sept. 12 "	" 12 "	29	" ...	R	"

FOUNTAIN HOSPITAL.—TABLE VI.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	C. S.	M	6	10	Oct. 7/97	Nov. 5/97	26	Faucial ...	R	No antitoxin.
2	C. B.	M	8	10	" 11 "	" 27 "	44	Nasal ...	R	"
3	A. C.	M	4	10	" 17 "	" 7 "	20	Faucial ...	R	Antitoxin.
4	R. G.	M	11	9	" 30 "	Jan. 30/98	55	" ...	R	No antitoxin.
5	F. A.	M	19	11	Nov. 24 "	Dec. 10/97	15	" ...	R	Antitoxin.
6	A. B.	M	6	10	" 4 "	Nov. 23 "	17	" ...	R	"
7	M. C.	F	3	6	" 1 "	Dec. 7 "	36	" ...	R	"
8	E. C.	M	8	9	" 1 "	" 9 "	38	" ...	R	"
9	D. J.	F	11	1	" 10 "	" 28 "	46	" ...	R	No antitoxin.
10	S. C.	M	4	4	" 4 "	Feb. 3/98	91	" ...	R	"
11	G. E.	M	5	10	" 22 "	Dec. 4/97	10	" ...	R	Antitoxin.
12	C. S.	M	11	11	" 17 "	" 9 "	20	" ...	R	"
13	P. W.	M	4	4	" 21 "	" 24 "	30	Nasal ...	R	"
14	T. C.	M	7	11	" 26 "	" 12 "	15	" ...	R	No antitoxin.
15	C. L.	M	8	12	" 12 "	Nov. 21 "	9	" ...	R	Antitoxin.
16	E. T.	F	5	3	" 21 "	Dec. 4 "	11	" ...	R	"
17	J. K.	F	6	7	Dec. 7 "	" 29 "	20	" ...	R	"
18	A. S.	M	5	12	" 21 "	Jan. 2/98	32	" ...	R	"
19	W. C.	M	6	9	" 19 "	" 18 "	25	Faucial ...	R	"
20	E. S.	M	2	6	" 29 "	" 17 "	76	" ...	R	"
21	B. B.	M	6	9	" 14 "	Feb. 4 "	40	" ...	R	No antitoxin.
22	H. B.	M	9	10	" 21 "	Jan. 4 "	13	" ...	R	Antitoxin.
23	G. D.	F	4	4	" 24 "	" 11 "	18	Nasal ...	R	"
24	F. H.	M	4	12	" 22 "	" 9 "	17	Faucial ...	R	"
25	W. C.	M	4	10	" 28 "	" 4 "	64	" ...	R	No antitoxin.
26	F. R.	M	3	10	" 18 "	" 4 "	15	" ...	R	Antitoxin.

FOUNTAIN HOSPITAL.—TABLE VI.—*Post-Scarlatinal Diphtheria*, 1898—*contd.*

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
27	E. B.	F	8	3	Dec. 12/97	Jan. 7/98	23	Faucial	R	Antitoxin.
28	W. V.	M	9	10	" 11 "	" 5 "	23	"	R	"
29	C. C.	M	5	12	" 13 "	" 4 "	20	Laryngeal	R	"
30	C. H.	M	4	10	" 12 "	" 1 "	19	"	R	"
31	A. C.	M	2	12	" 1 "	Feb. 5 "	66	Faucial	R	No antitoxin.
32	W. M.	M	6	12	" 22 "	Jan. 7 "	14	"	R	Antitoxin.
33	W. P.	M	2	10	" 7 "	" 25 "	46	"	R	"
34	G. J.	M	5	12	Jan. 29/98	Feb. 12 "	12	"	R	"
35	L. P.	M	5	10	" 24 "	" 14 "	20	"	R	"
36	E. C.	M	2	3	" 14 "	Mar. 21 "	57	"	R	"
37	B. C.	M	7	12	" 2 "	Jan. 9 "	6	Nasal	R	"
38	E. W.	F	5	6	" 25 "	Feb. 24 "	28	Faucial	R	"
39	C. W.	M	4	10	" 7 "	" 1 "	24	"	R	"
40	L. C.	M	6	10	" 4 "	" 4 "	29	Nasal	R	No antitoxin.
41	C. C.	M	6	11	Feb. 1 "	" 17 "	16	Faucial	R	"
42	R. A.	M	7	11	" 7 "	" 23 "	15	"	R	Antitoxin.
43	J. H.	M	11	12	" 15 "	Apr. 4 "	46	"	R	"
44	E. G.	M	10	9	" 24 "	Mar. 16 "	18	"	R	"
45	L. T.	F	4	3	" 12 "	" 17 "	31	Nasal	R	"
46	G. M.	M	4	9	" 26 "	Apr. 27 "	59	"	R	No antitoxin.
47	G. H.	M	13	11	Mar. 27 "	" 14 "	16	"	R	"
48	L. S.	M	3	3	" 23 "	" 12 "	19	Faucial	R	Antitoxin.
49	H. W.	M	3	3	" 20 "	" 12 "	21	"	R	No antitoxin.
50	L. B.	M	5	9	" 18 "	" 18 "	28	"	R	Antitoxin.
51	E. C.	M	5	11	" 2 "	" 17 "	45	"	R	No antitoxin.
52	J. B.	F	6	3	" 21 "	" 13 "	23	"	R	"
53	H. A.	M	7	9	" 5 "	" 10 "	39	"	R	"
54	W. E.	M	9	9	" 28 "	" 13 "	14	"	R	"
55	H. C.	F	5	8	" 1 "	Mar. 25 "	24	"	R	Antitoxin.
56	B. T.	F	4	8	Apr. 4 "	May 14 "	38	Nasal	R	"
57	H. H.	M	2	8	" 6 "	" 10 "	34	Faucial	R	"
58	L. S.	F	4	8	" 7 "	" 2 "	22	"	R	No antitoxin.
59	F. H.	F	6	6	" 18 "	July 11 "	82	"	R	Antitoxin.
60	F. V.	F	10	4	" 27 "	May 17 "	19	"	R	"
61	L. H.	F	16	8	" 5 "	" 8 "	35	"	R	No antitoxin.
62	C. L.	M	4	8	" 2 "	" 9 "	35	"	R	"
63	B. E.	F	3	8	" 20 "	" 23 "	33	"	R	"
64	F. H.	M	2	8	" 1 "	" 2 "	31	"	R	"
65	W. M.	M	8	10	" 13 "	" 2 "	17	"	R	"
66	J. C.	M	8	10	" 2 "	" 9 "	35	"	R	"
67	G. T.	F	8	8	May 23 "	June 13 "	19	"	R	Antitoxin.
68	E. R.	F	4	8	" 16 "	May 23 "	5	Laryngeal	R	"
69	C. H.	F	4	6	" 28 "	Sept. 18 "	99	Nasal	R	"
70	M. B.	F	3	8	" 19 "	June 14 "	24	"	R	"
71	T. D.	M	5	11	June 6 "	" 19 "	11	Faucial	R	No antitoxin.
72	A. P.	F	3	8	" 6 "	" 20 "	13	"	R	"
73	M. B.	F	4	3	" 13 "	" 21 "	7	"	R	"
74	S. G.	M	2	7	" 20 "	Oct. 16 "	116	"	R	Antitoxin.
75	G. E.	F	8	8	July 14 "	" 17 "	93	"	R	No antitoxin.
76	E. N.	M	8	11	" 14 "	Sept. 30 "	76	"	R	"
77	A. B.	F	15	3	" 11 "	" 13 "	62	"	R	"
78	J. S.	F	2	3	" 1 "	" 11 "	71	"	R	Antitoxin.
79	O. D.	F	9	3	" 1 "	" 10 "	70	Nasal	R	No antitoxin.
80	L. B.	F	11	3	" 6 "	" 2 "	54	"	R	"
81	L. Q.	M	3	7	" 20 "	Aug. 13 "	23	"	R	"
82	C. B.	F	2	3	Aug. 1 "	" 31 "	30	Faucial	R	Antitoxin.
83	A. G.	M	1	8	" 2 "	" 10 "	6	"	R	No antitoxin.
84	H. C.	F	3	3	" 28 "	Sept. 20 "	21	"	R	Antitoxin.
85	J. B.	M	3	3	" 1 "	" 10 "	40	"	R	"
86	B. E.	F	13	1	" 13 "	Oct. 5 "	55	"	R	No antitoxin.
87	E. A.	M	7	11	" 20 "	" 2 "	41	"	R	"
88	E. H.	F	3	3	Sept. 28 "	" 8 "	8	"	R	"
89	F. N.	M	12	11	" 6 "	" 1 "	22	"	R	"
90	A. C.	F	6	3	" 25 "	" 16 "	19	"	R	Antitoxin.
91	D. C.	F	2	7	" 3 "	" 16 "	41	"	R	"
92	E. C.	F	15	1	" 25 "	" 19 "	22	Nasal	R	No antitoxin.
93	F. B.	F	5	6	" 6 "	Sept. 29 "	21	"	R	"
94	R. B.	M	2	3	" 25 "	Oct. 21 "	25	Faucial	R	Antitoxin.
95	P. K.	F	11	3	" 24 "	Nov. 19 "	54	"	R	No antitoxin.
96	M. D.	F	4	7	" 6 "	" 9 "	62	"	R	Antitoxin.
97	A. D.	M	4	3	" 27 "	Oct. 23 "	24	"	R	No antitoxin.
98	C. B.	M	3	10	" 1 "	" 20 "	47	"	R	"
99	E. B.	F	4	7	Oct. 19 "	Nov. 18 "	29	Nasal	R	Antitoxin.
100	R. C.	M	4	3	" 25 "	" 9 "	15	Faucial	R	"
101	A. J.	M	7	11	" 15 "	" 17 "	30	Nasal	R	No antitoxin.
102	J. B.	F	10	3	" 9 "	" 18 "	38	Faucial	R	Antitoxin.
103	W. E.	M	3	8	" 11 "	" 7 "	26	"	R	"
104	E. C.	F	7	7	" 8 "	" 9 "	31	Nasal	R	No antitoxin.
105	J. M.	M	5	11	" 25 "	" 15 "	19	"	R	"

SOUTH-EASTERN HOSPITAL.—TABLE VII.—*Post-Scarlatinal Diphtheria*, 1898.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	F. T.	F	3	Isol.	Oct. 9/97	Nov. 11/97	30	Faucial ... ..	R ...	Antitoxin.
2	C. R.	M	2	10	Sept. 25 "	Oct. 30 "	25	" ... ..	R ...	"
3	W. A.	M	2	Isol.	" 23 "	Nov. 10 "	46	Laryngeal ... ..	D ...	"
4	R. G.	M	7	15	Oct. 13 "	" 14 "	22	Faucial & Laryngeal	R ...	"
5	D. M.	M	5	17	Nov. 23 "	Jan. 1/98	36	Faucial ... ..	R ...	"
6	E. J.	F	3	10	" 10 "	Dec. 9/97	19	" ... ..	R ...	"
7	F. E.	M	4	10	Jan. 29/98	Feb. 17/98	18	Faucial and Morbilli	D ...	"
8	Q. C.	F	5	10	" 10 "	" 19 "	36	Faucial & Laryngeal	R ...	"
9	F. B.	M	2	16	" 22 "	" 1 "	10	Laryngeal ... ..	R ...	"
10	J. Y.	F	12	15	Feb. 12 "	Mar. 14 "	27	Faucial ... ..	R ...	No antitoxin.
11	S. R.	M	1	14	Jan. 12 "	Feb. 18 "	36	Faucial, Laryngeal, and Nasal	R ...	"
12	K. W.	F	5	14	Feb. 11 "	Mar. 15 "	31	Faucial ... ..	R ...	"
13	D. M.	F	10	15	" 21 "	" 26 "	31	" ... ..	R ...	Antitoxin.
14	A. C.	M	3	Hut	Jan. 8 "	Feb. 20 "	42	Faucial & Laryngeal	R ...	"
15	L. A.	F	12	14	Mar. 31 "	Apr. 28 "	26	Faucial ... ..	R ...	No antitoxin.
16	M. R.	F	6	Isol.	Feb. 5 "	Mar. 20 "	38	" ... ..	R ...	Antitoxin.
17	D. A.	F	5	14	Mar. 25 "	May 11 "	42	" ... ..	R ...	"
18	F. A.	F	1	13	" 30 "	Apr. 26 "	13	" ... ..	R ...	"
19	M. L.	M	1	14	Feb. 7 "	Mar. 4 "	23	Faucial & Laryngeal	R ...	"
20	W. W.	M	1	13	Sept. 16 "	Nov. 4 "	45	Faucial ... ..	R ...	"
21	H. R.	F	9	13	Oct. 7 "	" 3 "	21	" ... ..	R ...	"

BROOK HOSPITAL.—TABLE VIII.—*Post-Scarlatinal Diphtheria*, 1898.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	E. R.	F	3	C 2	Aug. 6/97	Oct. 7/97	63	Nasal ... ..	R ...	No antitoxin.
2	R. H.	F	9	B 2	Nov. 1 "	Dec. 3 "	33	Faucial ... ..	R ...	"
3	J. T.	M	3	D 2	Oct. 21 "	Nov. 14 "	25	Faucial and Nasal...	R ...	Antitoxin.
4	L. B.	F	6	C 1	" 23 "	Dec. 5 "	44	Faucial ... ..	R ...	No antitoxin.
5	M. B.	F	4 $\frac{1}{2}$	C 1	" 24 "	Nov. 24 "	32	" ... ..	R ...	"
6	A. D.	M	5	O 4	Sept. 23 "	" 21 "	60	Laryngeal ... ..	R ...	Antitoxin.
7	T. J.	F	2	B 1	Oct. 20 "	" 3 "	15	Nasal ... ..	R ...	"
8	F. I.	F	8	C 1	Nov. 13 "	Dec. 28 "	46	Faucial ... ..	R ...	No antitoxin.
9	J. M.	M	2 $\frac{1}{2}$	Q	Sept. 27 "	Nov. 28 "	63	Nasal ... ..	R ...	"
10	F. C.	F	9	C 1	Aug. 1 "	Dec. 24 "	146	Faucial ... ..	R ...	"
11	A. L.	F	5	D 2	Sept. 17 "	" 3 "	78	Nasal ... ..	R ...	"
12	J. T.	F	4	C 1	Oct. 29 "	Jan. 1/98	64	Faucial ... ..	R ...	"
13	L. R.	F	3	D 2	Dec. 10 "	" 27 "	49	" ... ..	R ...	"
14	M. T.	F	8	D 2	" 24 "	Feb. 6 "	45	" ... ..	R ...	Antitoxin.
15	M. H.	F	6	C 1	" 23 "	Mar. 1 "	69	" ... ..	R ...	No antitoxin.
16	E. S.	F	2 $\frac{1}{2}$	C 2	Aug. 22 "	Oct. 6/97	47	Nasal ... ..	R ...	"
17	C. T.	F	8	D 2	Feb. 7/98	Feb. 26/98	20	Faucial ... ..	R ...	Antitoxin.
18	G. P.	M	5	G 1	Nov. 26/97	Dec. 19/97	24	Nasal ... ..	R ...	"
19	F. S.	M	2	G 1	Dec. 30 "	Jan. 8/98	10	Faucial, Nasal, and Laryngeal	R ...	"
20	L. F.	M	7	G 2	Jan. 12/98	Feb. 28 "	48	Nasal ... ..	R ...	No antitoxin.
21	W. A.	M	10	G 2	Dec. 24/97	Mar. 10 "	77	Faucial ... ..	R ...	Antitoxin.
22	J. T.	M	3	B 2	Feb. 4/98	Apr. 18 "	64	Nasal ... ..	R ...	No antitoxin.
23	C. C.	M	6	F 1	Mar. 19 "	May 17 "	60	Faucial ... ..	R ...	Antitoxin.
24	J. P.	M	6	F 1	Apr. 11 "	June 2 "	53	" ... ..	R ...	No antitoxin.
25	C. H.	M	6	F 1	May 18 "	" 17 "	31	" ... ..	R ...	Antitoxin.
26	G. H.	M	4 $\frac{1}{2}$	F 1	" 20 "	" 5 "	17	" ... ..	R ...	"
27	H. K.	M	5	F 1	" 1 "	" 17 "	48	" ... ..	R ...	"
28	G. C.	M	11	F 2	Apr. 16 "	Apr. 28 "	13	" ... ..	R ...	"
29	W. E. T.	M	17 $\frac{1}{2}$	F 1	June 8 "	June 16 "	9	" ... ..	R ...	"
30	C. E.	M	13	F 1	Apr. 24 "	" 17 "	55	" ... ..	R ...	"
31	R. D.	M	10	E 2	" 22 "	May 18 "	27	" ... ..	R ...	"
32	C. R.	M	6	E 1	May 17 "	June 3 "	18	" ... ..	R ...	"
33	E. A.	F	6	D 2	Mar. 16 "	May 8 "	44	" ... ..	R ...	No antitoxin.
34	G. H.	F	11	D 2	Apr. 8 "	" 17 "	40	" ... ..	R ...	"
35	P. F.	F	11	D 2	Mar. 28 "	" 11 "	45	" ... ..	R ...	Antitoxin.
36	F. S.	F	1 $\frac{1}{2}$	D 2	" 30 "	" 14 "	46	Faucial and Nasal...	R ...	"
37	D. B.	F	9	D 2	Apr. 2 "	June 6 "	66	Faucial ... ..	R ...	No antitoxin.
38	M. S.	F	7	D 2	May 24 "	" 23 "	30	" ... ..	R ...	"
39	L. H.	F	2	B 1	Apr. 4 "	May 1 "	26	Faucial and Nasal...	R ...	"
40	M. G.	F	5	A 2	June 9 "	July 9 "	30	" ... ..	R ...	Antitoxin.

BROOK HOSPITAL.—TABLE VIII.—*Post-Scarlatinal Diphtheria*,  
1898—*continued*.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
41	C. S.	F	12	A 2	Feb. 14/98	May 16/98	91	Faucial ... ..	R ...	Antitoxin.
42	F. M.	M	5	G 1	" 15 "	Apr. 6 "	51	Faucial, Nasal, and Laryngeal ... ..	R ...	"
43	M. B.	F	3	A 2	Mar. 31 "	May 18 "	49	Faucial & Laryngeal ... ..	R ...	"
44	E. M.	M	4	E 2	" 21 "	June 26 "	67	Faucial and Nasal... ..	R ...	No antitoxin.
45	J. C.	M	4	A 2	May 26 "	July 11 "	47	Faucial ... ..	R ...	"
46	M. T.	F	4	D 1	" 5 "	" 27 "	85	Nasal ... ..	R ...	"
47	M. K.	F	16	A 1	June 15 "	Aug. 20 "	67	Faucial ... ..	R ...	Antitoxin.
48	D. M.	F	9	B 2	" 2 "	" 2 "	62	Nasal ... ..	R ...	No antitoxin.
49	C. G.	F	7	C 2	" 16 "	Sept. 15 "	90	Faucial ... ..	R ...	"
50	L. E.	F	1 $\frac{1}{2}$	A 2	July 25 "	Aug. 20 "	26	Nasal ... ..	R ...	"
51	J. B.	M	1 $\frac{1}{2}$	A 2	" 24 "	" 30 "	37	" ... ..	R ...	Antitoxin.
52	A. L.	F	7	C 2	" 4 "	Sept. 6 "	63	Faucial and Nasal... ..	R ...	No antitoxin.
53	E. H.	F	10	A 1	" 19 "	July 28 "	10	" ... ..	R ...	Antitoxin.
54	C. S.	F	3 $\frac{1}{2}$	A 1	" 15 "	Aug. 8 "	24	Nasal ... ..	R ...	No antitoxin.
55	L. J.	F	5	A 1	May 18 "	" 19 "	104	" ... ..	R ...	Antitoxin.
56	F. B.	F	4	A 1	" 31 "	Sept. 11 "	104	Faucial, Nasal, and Laryngeal ... ..	R ...	"
57	J. R.	M	5	A 2	July 13 "	" 4 "	52	Nasal ... ..	R ...	No antitoxin.
58	E. M.	F	5	C 2	" 20 "	" 23 "	66	Faucial ... ..	R ...	"
59	F. H.	M	5	B 2	" 1 "	Aug. 1 "	31	Nasal ... ..	R ...	"
60	C. M.	M	4	C 2	Aug. 25 "	Sept. 9 "	26	" ... ..	R ...	"
61	D. W.	F	3	A 2	Sept. 22 "	Oct. 11 "	20	" ... ..	R ...	"
62	G. F.	F	3	A 2	" 23 "	" 31 "	40	Faucial ... ..	R ...	Antitoxin.
63	W. C.	M	4	A 2	Oct. 12 "	Nov. 21 "	41	" ... ..	R ...	"

PARK HOSPITAL.—TABLE IX.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	G. G.	M	3	A	Dec. 20/97	Feb. 9/98	51	Faucial ... ..	R ...	Antitoxin.
2	A. B.	M	1	A	" 12 "	" 12 "	62	" ... ..	R ...	"
3	L. G.	F	2	A	" 25 "	" 19 "	56	Faucial & Laryngeal ... ..	R ...	"
4	E. B.	M	4	B	Feb. 12/98	Mar. 23 "	39	" ... ..	R ...	"
5	G. P.	M	2	I 1	Jan. 30 "	Apr. 6 "	55	" ... ..	R ...	"
6	L. S.	F	3	J 1	" 15 "	" 6 "	86	Laryngeal ... ..	D ...	No antitoxin.
7	M. T.	F	6	F 1	Mar. 6 "	" 11 "	33	Faucial ... ..	R ...	Antitoxin.
8	M. B.	F	4	J 1	Feb. 8 "	" 13 "	58	Faucial & Laryngeal ... ..	R ...	"
9	E. J.	M	3	E	Mar 5 "	May 1 "	55	Faucial ... ..	R ...	No antitoxin.
10	J. S.	M	5	B	Apr 23 "	" 22 "	25	" ... ..	R ...	Antitoxin.
11	J. B.	M	7	B	" 27 "	" 23 "	26	" ... ..	R ...	"
12	J. C.	F	8	G 1	" 22 "	" 23 "	29	" ... ..	R ...	"
13	A. W.	F	2	J 1	" 24 "	June 8 "	44	" ... ..	D ...	"
14	E. W.	F	5	G 1	" 23 "	" 16 "	53	" ... ..	R ...	"
15	L. L.	F	4	F 1	May 27 "	" 18 "	22	" ... ..	R ...	"
16	A. B.	F	5	F 1	" 24 "	" 21 "	25	" ... ..	R ...	"
17	J. P.	F	8	F 1	" 12 "	" 22 "	40	" ... ..	R ...	"
18	E. D.	F	5	F 1	" 14 "	" 25 "	42	" ... ..	R ...	"
19	L. S.	F	6	F 1	" 18 "	" 27 "	41	" ... ..	R ...	"
20	N. T.	F	3	F 1	Apr. 30 "	" 29 "	61	" ... ..	R ...	No antitoxin.
21	E. T.	F	4	F 1	June 3 "	" 29 "	22	Faucial and Nasal ... ..	R ...	Antitoxin.
22	P. W.	F	4	F 1	" 14 "	" 29 "	14	Faucial ... ..	R ...	No antitoxin.
23	E. F.	F	3	F 1	May 16 "	July 2 "	45	" ... ..	R ...	Antitoxin.
24	E. H.	F	2	E	June 29 "	" 17 "	18	" ... ..	R ...	"
25	L. A.	F	6	F	May 28 "	" 19 "	53	" ... ..	R ...	"
26	J. W.	M	3	E	" 26 "	" 24 "	48	Nasal ... ..	R ...	"
27	F. H.	M	3	E	" 10 "	" 29 "	82	Faucial ... ..	R ...	"
28	L. K.	F	4	E	June 18 "	Aug. 1 "	45	Faucial and Nasal ... ..	R ...	"
29	M. R.	F	6	F	May 27 "	" 5 "	37	Faucial ... ..	R ...	"
30	J. B.	M	4	P Sep.	July 26 "	" 6 "	11	" ... ..	R ...	"
31	L. A. <sup>s</sup>	M	2	J	" 2 "	" 17 "	37	" ... ..	R ...	"
32	D. B.	F	8	J	Aug. 6 "	" 28 "	20	" ... ..	R ...	"
33	D. R.	M	3	E	" 7 "	Sept. 18 "	41	Faucial & Laryngeal ... ..	R ...	"
34	R. N.	M	2	C 1	" 24 "	Oct. 20 "	43	Faucial ... ..	R ...	"
35	A. M.	M	2	E	Oct. 1 "	" 28 "	27	Faucial & Laryngeal ... ..	R ...	"
36	C. H.	M	4	D 1	" 16 "	" 31 "	14	Faucial ... ..	R ...	"

GORE FARM HOSPITAL.—TABLE X.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	C. R.	M	10	K	Sept. 10/97	Jan. 2/98	64	Faucial ...	R	Antitoxin.
2	L. M.	F	4	N	" 11 "	Nov. 28/97	13	Laryngeal ...	R	"
3	F. B.	M	6	T	" 15 "	" 1 "	18	Faucial ...	R	"
4	A. W.	F	9	B	" 16 "	" 16 "	36	"	R	"
5	A. R.	M	4	N	" 17 "	" 25 "	28	Faucial, Laryngeal, and Nasal ...	R	"
6	R. W.	F	8	B	" 21 "	Dec. 8 "	57	Faucial ...	R	"
7	C. A.	M	6	L	" 22 "	" 9 "	48	"	R	"
8	D. D.	F	7	N	" 29 "	Nov. 27 "	11	Faucial & Laryngeal	R	"
9	K. J.	M	9	R	" 30 "	" 15 "	5	Faucial ...	R	"
10	G. G.	M	5	J	Oct. 2 "	Dec. 21 "	54	"	R	"
11	F. K.	M	7	R	" 7 "	" 1 "	20	Faucial and Nasal...	R	"
12	D. K.	F	10	E	" 7 "	" 9 "	19	"	R	"
13	A. F.	M	10	H	" 8 "	" 6 "	34	"	R	"
14	E. S.	F	9	P	" 9 "	" 20 "	53	Faucial ...	R	"
15	E. Y.	F	5	B	" 12 "	" 28 "	14	Laryngeal ...	R	"
16	A. G.	F	6	O	" 12 "	Nov. 17 "	12	Faucial and Nasal...	R	"
17	F. W.	F	5	E	" 14 "	" 29 "	26	"	R	"
18	A. L.	M	6	B	" 15 "	" 24 "	12	"	R	No antitoxin.
19	I. G.	F	10	O	" 15 "	Dec. 10 "	24	"	R	Antitoxin.
20	E. M.	M	5	J	" 16 "	Jan. 1/98	8	Faucial ...	R	"
21	T. L.	M	6	O	" 19 "	Dec. 21/97	9	Faucial & Laryngeal	R	"
22	W. D.	M	6	J	" 20 "	Jan. 5/98	33	Faucial ...	R	No antitoxin.
23	E. C.	F	6	C	" 21 "	Dec. 16/97	15	Faucial and Nasal...	R	Antitoxin.
24	G. F.	M	4	J	" 22 "	" 20 "	40	"	R	"
25	L. C.	F	4	P	" 22 "	" 11 "	15	Faucial & Laryngeal	R	"
26	G. H.	M	10	K	" 23 "	Nov. 28 "	9	Faucial ...	R	"
27	T. B.	M	9	J	" 27 "	Dec. 19 "	9	"	R	"
28	W. F. C.	M	9	T	" 30 "	" 28 "	28	"	R	"
29	E. B.	F	7	O	" 30 "	" 14 "	19	"	R	"
30	W. E.	M	8	L	Nov. 3 "	Jan. 9/98	11	"	R	No antitoxin.
31	M. G.	F	3	F	" 8 "	Dec. 12/97	14	Faucial & Laryngeal	R	Antitoxin.
32	H. F.	F	9	B	" 10 "	" 4 "	10	Faucial ...	R	"
33	D. O.	M	5	R	" 13 "	" 20 "	7	Faucial & Laryngeal	R	"
34	E. L.	M	8	T	" 17 "	" 17 "	10	Faucial and Nasal...	R	"
35	E. L.	M	9	T	" 17 "	" 21 "	14	Faucial ...	R	"
36	W. G.	M	8	T	" 17 "	Jan. 1/98	32	"	R	"
37	A. P.	M	3	I	" 17 "	Dec. 25/97	12	Faucial & Laryngeal	R	"
38	E. B.	M	9	S	" 20 "	" 20 "	13	"	R	"
39	W. B.	M	11	H	" 23 "	Jan. 1/98	24	"	R	"
40	N. S. B.	F	6	E	" 23 "	Dec. 18/97	3	Faucial and Nasal...	R	"
41	W. K.	M	6	M	" 25 "	Jan. 1/98	19	Faucial ...	D	No antitoxin.
42	A. T.	F	6	C	" 30 "	" 1 "	4	"	R	Antitoxin.
43	E. A.	M	12	H	" 30 "	Feb. 15 "	61	"	R	"
44	T. O.	M	5	L	Dec. 2 "	" 11 "	57	Faucial & Laryngeal	R	"
45	E. J.	M	8	J	" 8 "	" 21 "	16	Faucial ...	R	"
46	H. T.	M	8	S	" 9 "	" 12 "	45	"	R	"
47	E. C.	M	9	K	" 11 "	Jan. 14 "	8	"	R	"
48	R. D.	M	13	J	" 11 "	" 21 "	18	"	R	"
49	F. K.	F	10	M	" 13 "	Feb. 21 "	5	"	R	"
50	R. B.	F	9	C	" 17 "	" 2 "	26	Faucial and Nasal...	R	"
51	E. W.	F	8	M	" 18 "	Mar. 4 "	52	Faucial ...	R	"
52	J. J.	M	4	S	" 19 "	Jan. 29 "	5	Faucial and Nasal...	R	"
53	S. S.	M	7	K	" 28 "	Mar. 19 "	31	Faucial ...	R	"
54	W. S.	M	4	C	" 28 "	Feb. 16 "	25	Faucial & Laryngeal	R	"
55	E. Q.	F	4	O	Jan. 1/98	" 16 "	15	Faucial and Nasal...	R	"
56	F. O.	M	8	L	" 1 "	Mar. 31 "	31	Faucial ...	R	"
57	W. M.	M	5	O	" 13 "	Feb. 13 "	10	Faucial and Nasal...	R	"
58	M. C.	F	6	M	" 15 "	Mar. 6 "	25	Faucial & Laryngeal	R	"
59	D. B.	F	9	M	" 18 "	" 29 "	39	Faucial ...	R	"
60	C. R.	M	9	L	Feb. 1 "	Apr. 4 "	33	"	R	"
61	W. U.	M	12	H	" 7 "	" 7 "	35	"	R	"
62	H. F.	M	7	L	" 9 "	May 30 "	94	Faucial and Nasal...	R	"
63	S. H.	M	5	K	" 21 "	" 2 "	35	"	R	"
64	L. S.	F	7	N	Mar. 14 "	June 3 "	53	Faucial ...	R	"
65	R. S.	F	11	N	" 15 "	" 5 "	60	"	R	"
66	F. B.	M	9	T	" 16 "	May 29 "	31	Faucial and Nasal...	R	"
67	F. T.	M	4	K	" 16 "	" 12 "	1	Faucial ...	R	"
68	F. R.	F	3	N	" 18 "	June 5 "	55	Faucial, Nasal, and Laryngeal	R	"
69	F. W.	F	5	B	Apr. 4 "	" 4 "	36	Faucial & Laryngeal	R	"
70	E. L.	F	5	F	" 6 "	" 5 "	12	Faucial ...	R	"
71	F. T.	M	5	N	" 7 "	" 3 "	8	Faucial and Nasal...	R	"
72	W. C.	M	3	B	" 9 "	" 18 "	52	Faucial ...	R	"
73	E. J.	F	6	B	" 12 "	July 6 "	27	"	R	"
74	S. C.	F	7	F	" 13 "	June 21 "	5	"	R	No antitoxin.
75	S. P.	M	4	F	" 21 "	" 15 "	39	Faucial and Nasal...	R	Antitoxin.
76	A. B.	M	3	I	May 6 "	" 30 "	12	Faucial ...	R	"

GORE FARM HOSPITAL.—TABLE X.—*Post-Scarlatinal Diphtheria*,  
1898—*continued.*

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
77	S. R.	F	9	E	May 6/98	Aug. 13/98	38	Laryngeal ...	R ...	Antitoxin.
78	L. D.	F	5	F	" 12 "	" 9 "	55	Faucial ...	R ...	"
79	T. H.	M	12	H	" 19 "	June 18 "	8	Faucial and Nasal...	R ...	"
80	H. S.	M	6	E	" 25 "	Aug. 24 "	62	Faucial ...	R ...	"
81	D. P. F.	F	4	E	June 6 "	Oct. 4 "	19	Laryngeal and Nasal	R ...	"
82	A. M.	F	6	E	" 20 "	Aug. 13 "	37	Faucial ...	R ...	"
83	F. K.	M	3	F	" 20 "	" 7 "	22	Faucial and Nasal...	R ...	"
84	E. M.	M	28	H	" 28 "	" 16 "	28	Faucial ...	R ...	"
85	A. W.	F	8	F	July 4 "	" 14 "	3	Faucial and Nasal...	R ...	"
86	K. P.	F	4	E	" 5 "	" 29 "	38	" " "	R ...	"
87	A. D.	M	14	H	" 7 "	" 16 "	8	" " "	R ...	"
88	F. B.	F	7	E	" 21 "	" 24 "	6	Faucial ...	R ...	"
89	L. S.	F	3	F	" 28 "	Sept. 29 "	33	" " "	R ...	"
90	C. H.	F	6	E	Aug. 6 "	Oct. 8 "	19	Faucial & Laryngeal	R ...	"
91	M. F.	F	6	B	" 6 "	Sept. 23 "	10	Faucial ...	R ...	"
92	A. G.	F	3	E	" 17 "	Oct. 15 "	14	" " "	R ...	"
93	H. G.	M	15	J	" 17 "	" 28 "	46	" " "	R ...	"
94	M. L.	F	14	F	" 21 "	Sept. 20 "	15	Faucial and Nasal...	R ...	"
95	N. M.	F	4	A	" 21 "	Nov. 18 "	53	Faucial, Nasal, and Laryngeal	R ...	"
96	L. G.	F	10	E	" 22 "	" 12 "	43	Faucial ...	R ...	"
97	R. R.	M	4	B	Sept. 7 "	Oct. 25 "	21	Faucial & Laryngeal	... D	"
98	G. D.	M	5	R	Oct. 28 "	Nov. 21 "	5	Faucial ...	R ...	"

NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria*,  
1898.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
1	A. C.	M	6	2	June 11/97	Sept. 12/97	54	Faucial ...	R ...	Antitoxin.
2	A. J.	M	3	12	Sept. 1 "	Oct. 13 "	12	" " "	R ...	"
3	H. F.	M	6	4	Aug. 7 "	" 16 "	21	" " "	R ...	"
4	W. R.	M	6	3	Sept. 13 "	" 18 "	7	" " "	R ...	"
5	J. A.	M	3	21	" 23 "	" 30 "	37	" " "	R ...	"
6	E. De M.	F	5	3	" 12 "	Nov. 1 "	14	" " "	R ...	"
7	M. A.	F	10	17	" 25 "	" 3 "	5	" " "	R ...	"
8	T. T.	M	5	17	" 27 "	" 4 "	14	" " "	R ...	"
9	A. C.	F	5	7	" 22 "	" 5 "	14	Laryngeal ...	R ...	"
10	L. L.	M	4	6	" 19 "	" 5 "	6	Faucial ...	R ...	"
11	G. B.	M	4	2	" 28 "	" 5 "	12	" " "	R ...	"
12	A. G.	F	4	20	Oct. 10 "	" 11 "	9	" " "	R ...	"
13	E. G.	F	6	4	" 5 "	" 13 "	38	" " "	R ...	"
14	W. W.	M	5	5	Sept. 2 "	" 13 "	31	" " "	R ...	"
15	R. P.	F	5	20	" 30 "	" 17 "	15	" " "	R ...	"
16	A. D.	F	5	3	" 1 "	" 17 "	47	" " "	R ...	"
17	J. F.	M	4	7	" 27 "	" 21 "	24	" " "	R ...	"
18	K. F.	F	6	4	Oct. 4 "	" 22 "	33	Laryngeal ...	R ...	"
19	B. C.	F	8	5	" 1 "	" 24 "	29	Faucial ...	R ...	"
20	J. S.	F	7	7	Sept. 15 "	" 25 "	44	" " "	R ...	"
21	A. H. C.	M	3	7	" 6 "	" 25 "	47	" " "	R ...	"
22	M. H.	F	4	12	" 10 "	" 26 "	47	" " "	R ...	"
23	V. M. J.	F	4	18	Oct. 13 "	" 26 "	14	" " "	R ...	"
24	R. P.	M	4	18	" 22 "	" 26 "	9	" " "	R ...	"
25	G. F. S.	M	7	11	Sept. 22 "	" 27 "	35	" " "	R ...	"
26	E. S.	F	9	3	Oct. 10 "	" 27 "	14	" " "	R ...	"
27	N. W.	F	22	5	Sept. 16 "	" 28 "	35	" " "	R ...	"
28	E. B.	M	10	3	Oct. 15 "	" 29 "	9	" " "	R ...	"
29	A. G.	M	9	25	Sept. 24 "	Dec. 1 "	35	" " "	R ...	"
30	E. F.	F	9	4	Oct. 4 "	" 1 "	41	" " "	R ...	"
31	A. M.	F	7	4	" 31 "	" 1 "	9	" " "	R ...	"
32	M. G.	F	5	12	" 20 "	" 2 "	20	" " "	R ...	"
33	S. D.	M	7	11	" 3 "	" 3 "	20	" " "	R ...	"
34	E. C.	M	12	11	" 3 "	" 3 "	36	" " "	R ...	"
35	A. F.	F	4	3	" 27 "	" 4 "	7	" " "	D*	"
36	G. B.	F	3	2	" 3 "	" 6 "	46	Laryngeal ...	R ...	"
37	E. B.	F	11	6	" 27 "	" 7 "	4	Faucial ...	R ...	"
38	R. M. C.	F	9	21	Aug. 24 "	" 7 "	3rd mon.	" " "	R ...	"

\* Died of measles 45 days after diphtheria attack, from which she had recovered before symptoms of measles developed.

NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria,*  
1898—*continued.*

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
39	F. W.	F	5	12	Nov. 8/97	Dec. 7/97	12	Laryngeal ...	R ...	Antitoxin.
40	A. B.	F	5	4	" 2 "	" 8 "	25	Faucial ...	R R ...	"
41	T. P.	M	4	5	" 10 "	" 10 "	6	" ...	R ...	"
42	E. S.	M	7	11	" 19 "	" 12 "	10	Laryngeal ...	R ...	"
43	W. E.	M	4	17	Oct. 18 "	" 12 "	33	" ...	R ...	"
44	S. P.	M	5	1	Sept. 25 "	" 13 "	38	" ...	R ...	"
45	R. L.	F	8	4	" 30 "	" 13 "	23	Faucial ...	R ...	"
46	A. B.	M	4	3	Nov. 8 "	" 15 "	18	" ...	R ...	"
47	E. G.	F	4	5	Oct. 18 "	" 15 "	27	" ...	R ...	"
48	F. P.	M	6	7	" 13 "	" 15 "	42	" ...	R ...	"
49	S. B.	F	12	19	Nov. 16 "	" 20 "	7	" ...	R ...	No antitoxin.
50	M. B.	F	3	1	Oct. 28 "	" 22 "	32	Laryngeal ...	R ...	Antitoxin.
51	K. M.	F	8	20	Sept. 26 "	" 29 "	36	Faucial ...	R ...	"
52	M. B.	F	5	3	Oct. 5 "	" 29 "	60	" ...	R ...	"
53	G. D.	F	8	1	Dec. 4 "	" 30 "	1	" ...	R ...	"
54	R. T.	F	5	3	Nov. 21 "	Jan. 1/98	15	Laryngeal ...	R ...	"
55	C. K.	F	20	3	" 4 "	" 2 "	27	Faucial ...	R ...	"
56	E. G.	F	11	16	Oct. 30 "	" 3 "	25	" ...	R ...	"
57	W. W.	F	5	20	Nov. 14 "	" 5 "	36	Laryngeal ...	R ...	"
58	E. L.	F	4	8	Dec. 10 "	" 8 "	2	Faucial ...	R ...	"
59	C. W.	M	3	5	Nov. 22 "	" 9 "	24	Laryngeal ...	R ...	"
60	E. G. E.	F	9	4	Dec. 3 "	" 10 "	2	Faucial ...	R ...	"
61	H. D.	F	10	12	" 13 "	" 14 "	15	" ...	R ...	"
62	H. G.	F	5	12	" 7 "	" 17 "	18	" ...	R ...	"
63	A. R.	M	6	17	Nov. 6 "	" 18 "	7	" ...	D ...	"
64	A. McR.	F	10	5	" 26 "	" 19 "	8	" ...	R ...	"
65	C. H.	M	3	5	" 30 "	" 19 "	21	" ...	R ...	"
66	T. N.	M	7	10	" 1 "	" 20 "	42	" ...	R ...	"
67	A. L.	M	5 <sup>1</sup> / <sub>2</sub>	21	Oct. 5 "	" 27 "	3rd mon.	" ...	R ...	"
68	J. J.	M	7	10	" 22 "	" 29 "	72	" ...	R ...	No antitoxin.
69	A. B.	F	4	7	Dec. 18 "	" 30 "	16	" ...	R ...	Antitoxin.
70	J. B.	M	4	12	" 24 "	" 30 "	12	Faucial & Laryngeal	R ...	"
71	O. E.	F	3	17	" 6 "	Feb. 3 "	37	Laryngeal ...	R ...	"
72	H. W.	M	3	18	" 30 "	" 5 "	9	Faucial ...	R ...	"
73	N. T.	F	8	7	Jan. 12/98	" 13 "	9	" ...	R ...	"
74	D. D.	F	3	12	" 3 "	" 13 "	16	" ...	R ...	"
75	J. G.	F	3	2	" 2 "	" 13 "	16	" ...	R ...	"
76	C. T.	F	10	12	Dec. 26/97	" 14 "	27	" ...	R ...	"
77	T. C. H.	M	12	10	Jan. 13/98	" 17 "	7	" ...	R ...	"
78	J. B.	M	8	10	" 23 "	" 19 "	8	" ...	R ...	No antitoxin.
79	L. A.	F	4	3	" 27 "	" 23 "	2	" ...	R ...	Antitoxin.
80	M. A. B. S.	F	5	17	Nov. 22/97	" 26 "	30	" ...	R ...	"
81	F. H.	F	10	8	Dec. 25 "	" 27 "	16	" ...	R ...	"
82	D. B.	F	7	8	Nov. 29 "	Mar. 4 "	22	" ...	R ...	No antitoxin.
83	C. S.	F	27	5	Jan. 19/98	" 5 "	44	" ...	R ...	"
84	E. P.	F	6	12	Feb. 7 "	" 24 "	20	" ...	R ...	Antitoxin.
85	W. H.	M	6	7	" 7 "	" 28 "	50	" ...	R ...	"
86	L. K.	F	12	6	Jan. 8 "	" 31 "	51	" ...	R ...	"
87	M. L.	F	7	8	" 19 "	Apr. 1 "	51	" ...	R ...	"
88	B. J.	F	14	5	" 23 "	" 1 "	45	" ...	R ...	"
89	E. W.	F	6	5	Feb. 21 "	" 1 "	40	" ...	R ...	"
90	A. H.	F	3	5	" 28 "	" 2 "	13	" ...	R ...	"
91	F. B.	F	12	8	" 26 "	" 3 "	10	Laryngeal ...	R ...	"
92	F. W. A.	M	3	5	Mar. 1 "	" 8 "	39	Faucial ...	R ...	"
93	H. C.	M	6	5	Feb. 3 "	" 10 "	32	Laryngeal ...	R ...	"
94	A. M.	M	11	10	Jan. 5 "	" 13 "	98	Faucial ...	R ...	"
95	E. H.	F	5	5	Feb. 14 "	" 13 "	35	" ...	R ...	"
96	C. B.	M	8	10	" 12 "	" 14 "	40	" ...	R ...	"
97	E. G.	F	12	5	Mar. 12 "	" 15 "	10	" ...	R ...	"
98	L. H.	F	5	6	Jan. 18 "	" 19 "	56	" ...	R ...	"
99	G. R.	F	9	12	Feb. 11 "	" 26 "	46	" ...	R ...	"
100	M. S.	F	4	12	" 8 "	" 27 "	58	" ...	R ...	"
101	H. H.	M	12	25	" 5 "	" 27 "	45	" ...	R ...	"
102	H. C.	M	8	10	" 15 "	" 27 "	51	" ...	R ...	"
103	M. S.	F	5	8	Mar. 13 "	" 28 "	6	" ...	R ...	"
104	H. B.	M	3	8	Feb. 23 "	" 29 "	14	" ...	R ...	No antitoxin.
105	E. H.	F	3	3	" 26 "	May 5 "	18	" ...	R ...	Antitoxin.
106	R. P.	F	8	5	Mar. 21 "	" 7 "	12	" ...	R ...	"
107	F. J.	F	5	5	" 26 "	" 21 "	25	" ...	R ...	"
108	A. H.	F	12	16	Apr. 26 "	" 25 "	9	" ...	R ...	"
109	A. B.	M	5	4	" 4 "	June 2 "	45	Faucial & Laryngeal	R ...	"
110	E. S.	F	15 <sup>1</sup> / <sub>2</sub>	5	" 26 "	" 6 "	13	Faucial ...	R ...	"
111	H. B.	F	4 <sup>1</sup> / <sub>2</sub>	3	" 14 "	" 6 "	20	" ...	R ...	"
112	F. C.	F	8	17	" 20 "	" 7 "	27	" ...	R ...	"
113	A. S.	F	4 <sup>1</sup> / <sub>2</sub>	17	Mar. 7 "	" 8 "	28	Faucial & Laryngeal	R ...	"
114	E. E. W.	F	4	17	Apr. 16 "	" 11 "	36	Faucial ...	R ...	"
115	S. H.	M	8	11	May 14 "	" 14 "	12	" ...	R ...	"
116	M. F.	F	4	4	" 2 "	" 23 "	28	" ...	R ...	"

NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria*,  
1898—*continued*.

No.	Initials.	Sex	Age	Ward.	Date of Onset of Scarlet Fever.	Date of Onset of Diphtheria.	Days after Admission	Nature of Attack.	Result.	Antitoxin or not.
117	M. A. K.	F	16	4	Apr. 6/98	June 23/98	50	Faucial ...	R ...	Antitoxin.
118	E. G.	M	4	5	May 15 "	" 23 "	18	" ...	R ...	"
119	E. P.	F	9	17	" 9 "	" 28 "	26	" ...	R ...	"
120	M. H.	F	6	4	Apr. 21 "	" 28 "	28	" ...	R ...	"
121	D. S.	M	6	17	" 21 "	" 30 "	22	Laryngeal ...	R ...	"
122	A. L.	F	8	5	" 15 "	July 1 "	45	Faucial ...	R ...	"
123	V. E.	F	10	4	" 29 "	" 4 "	27	" ...	R ...	"
124	T. G.	M	4	16	May 9 "	" 7 "	21	" ...	R ...	"
125	G. F.	M	10	25	June 9 "	" 9 "	2	" ...	R ...	"
126	T. H.	M	7	25	Apr. 29 "	" 15 "	20	" ...	R ...	"
127	V. H.	F	8	5	May 22 "	" 15 "	30	" ...	R ...	"
128	W. R.	M	18	9	" 20 "	" 16 "	38	" ...	R ...	"
129	M. McD.	F	7	16	" 21 "	" 17 "	24	" ...	R ...	"
130	G. M.	F	7	16	June 23 "	" 18 "	2	" ...	R ...	"
131	R. G. D.	M	8	11	May 15 "	" 19 "	47	" ...	R ...	No antitoxin.
132	E. C.	F	5	17	June 11 "	" 20 "	23	" ...	R ...	Antitoxin.
133	A. T.	M	8	25	" 9 "	" 30 "	42	" ...	R ...	"
134	H. H.	M	6	17	May 3 "	Aug. 1 "	4	" ...	R ...	"
135	E. L. H.	F	5	16	June 25 "	" 2 "	12	" ...	R ...	"
136	E. Da C.	F	3	17	May 12 "	" 3 "	56	" ...	R ...	"
137	J. C.	F	7	17	July 2 "	" 5 "	9	" ...	R ...	"
138	A. P.	M	4	3	June 5 "	" 7 "	28	" ...	R ...	"
139	M. K.	F	7	17	" 11 "	" 8 "	20	" ...	R ...	"
140	A. H.	M	6	3	" 14 "	" 11 "	27	" ...	R ...	"
141	V. G.	F	7	16	" 14 "	" 11 "	23	" ...	R ...	"
142	E. S.	F	7	3	July 13 "	" 11 "	30	" ...	R ...	"
143	L. B.	F	7	4	June 6 "	" 12 "	34	" ...	R ...	"
144	A. B.	F	6	4	" 1 "	" 12 "	36	" ...	R ...	"
145	N. E.	F	9	4	May 16 "	" 13 "	34	" ...	R ...	"
146	A. H.	F	6½	17	July 7 "	" 13 "	10	" ...	R ...	"
147	R. B.	F	4	4	May 12 "	" 17 "	48	" ...	R ...	"
148	A. E.	M	5	5	July 20 "	" 28 "	8	" ...	R ...	"
149	R. S.	F	5	3	" 9 "	Sept. 3 "	35	" ...	R ...	"
150	W. T.	M	10	11	" 6 "	" 8 "	19	" ...	R ...	"
151	H. C.	M	11	11	May 25 "	" 12 "	3rd mon. 47	" ...	R ...	No antitoxin.
152	F. B.	M	13	11	" 31 "	" 15 "	47	" ...	R ...	Antitoxin.
153	A. C.	M	8	11	July 14 "	" 16 "	42	" ...	R ...	No antitoxin.
154	E. W.	M	11	10	Aug. 1 "	" 16 "	15	" ...	R ...	Antitoxin.
155	E. P.	F	4	17	July 27 "	" 16 "	9	" ...	R ...	"
156	L. A. S.	F	9	16	" 30 "	" 17 "	23	" ...	R ...	"
157	T. B.	M	5	17	Aug. 17 "	" 19 "	12	" ...	R ...	"
158	J. P.	M	3	3	July 11 "	" 19 "	51	" ...	R ...	"
159	G. M. L.	F	6¼	17	" 8 "	" 21 "	36	" ...	R ...	"
160	L. L.	F	9	17	Aug. 9 "	" 21 "	20	" ...	R ...	"
161	M. R.	F	9	16	" 6 "	" 23 "	10	" ...	R ...	"
162	W. B.	M	8	11	" 18 "	Oct. 2 "	9	" ...	R ...	"
163	W. L.	M	12	11	" 24 "	" 3 "	11	" ...	R ...	"
164	F. W.	M	2	4	" 1 "	" 7 "	13	" ...	R ...	"
165	R. G.	M	6	10	" 26 "	" 9 "	17	" ...	R ...	"
166	N. S.	F	12	17	" 30 "	" 11 "	13	" ...	R ...	"
167	E.C.T.P.	M	10	11	Sept. 19 "	" 25 "	13	" ...	R ...	"
168	E. S.	F	19	4	" 10 "	" 27 "	16	" ...	R ...	"
169	L. W.	F	3½	3	" 17 "	Nov. 15 "	20	" ...	R ...	"

The four tables which follow show the age and sex-distribution of these cases, also the time of attack reckoned from the onset of scarlet fever and the seasonal distribution reckoned according to the date of onset of diphtheria.

TABLE XII.—*Sex-distribution and Mortality.*

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		South-Eastern.		Brook.		Park.		Gore Farm.		Northern.		Total.		Mortality per cent.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Faucial and Nasal Cases.	Males ...	3	0	32	1	14	4	14	2	12	1	63	0	4	1	23	0	12	0	45	1	58	1	280	11	3.90
	Females ...	4	0	8	1	27	3	15	0	18	2	30	0	10	0	35	0	18	1	32	0	93	1	290	8	2.67
	Total ...	7	0	40	2	41	7	29	2	30	3	102	0	14	1	58	0	30	1	77	1	151	2	579	19	
	Mortality per cent.	0		5		17.1		6.9		10		0		7.1		0		3.3		1.3		1.3		3.28		3.28
Laryngeal Cases.	Males ...	1	0	0	0	3	0	4	0	4	0	2	0	6	1	3	0	3	0	9	1	8	0	43	2	4.5
	Females ...	0	0	2	1	2	0	3	1	3	0	1	0	1	0	2	0	3	1	12	0	10	0	39	3	7.7
	Total ...	1	0	2	1	5	0	7	1	7	0	3	0	7	1	5	0	6	1	21	1	18	0	82	5	
	Mortality per cent.	0		50		0		14.3		0		0		14.3		0		16.6		4.8		0		6.10		6.10
All Cases.	Males ...	4	0	32	1	17	4	18	2	16	1	65	0	10	2	26	0	15	0	54	2	66	1	323	13	4.02
	Females ...	4	0	10	2	29	3	18	1	21	2	40	0	11	0	37	0	21	2	44	0	103	1	338	11	3.25
	Total ...	8	0	42	3	46	7	36	3	37	3	105	0	21	2	63	0	36	2	98	2	169	2	661	24	
	Mortality per cent.	0		7.1		15.2		8.3		8.1		0		9.5		0		5.5		2		1.2		3.68		3.68

TABLE XIII.—Age-distribution and Mortality.

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		South-Eastern.		Brook.		Park.		Gore Farm.		Northern.		Total.		Mortality per cent.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Faucal and Nasal Cases.	Under 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.0
	1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36.3
	2-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.8
	3-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.0
	4-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.7
	5-10	5	0	21	0	18	1	14	1	16	1	43	0	5	1	25	0	12	0	50	1	29	1	290	1.7
	10-15	1	0	9	0	0	0	3	0	0	0	12	0	3	0	8	0	0	0	14	0	26	0	78	0.0
	15-20	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0	4	0	13	0.0
	Over 20	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	5	0.0
	Total	7	0	40	2	41	7	29	2	30	3	102	0	14	1	58	0	30	1	77	1	151	2	579	3.28
Laryngeal Cases.	Under 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	2-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.1
	3-4	0	0	1	1	2	0	0	0	1	0	2	1	1	1	1	0	2	1	3	0	4	0	15	13.3
	4-5	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	7	1	3	0	20	10.0
	5-10	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	10	0	10	0	29	0.0
	10-15	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	3	0.0
	15-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Over 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Total	1	0	2	1	5	0	7	1	7	0	3	0	7	1	5	0	6	1	21	1	18	0	82	5
All Cases.	Under 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42.8
	1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.0
	2-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.9
	3-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.9
	4-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0
	5-10	5	0	21	0	18	1	15	1	18	1	44	0	7	28	0	12	0	60	1	90	1	319	5	1.9
	10-15	1	0	9	0	3	0	3	0	0	0	3	0	3	0	0	0	0	15	0	27	0	81	0	0.0
	15-20	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	4	0	13	0	0.0
	Over 20	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3	0	5	0	0.0
	Total	8	0	42	3	46	7	36	3	37	3	105	0	21	2	63	0	35	2	98	2	169	2	661	24

TABLE XIV.—Time of Onset after Commencement of Scarlet Fever.

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		South-Eastern.		Brook.		Park.		Gore Farm.		Northern.		Total.		Mortality per cent.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
1st week	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.1
2nd "	1	0	5	0	4	1	10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.6
3rd "	0	0	4	0	4	1	26	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.4
4th "	1	0	11	1	8	1	35	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.7
5th "	0	0	1	0	2	0	15	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
6th "	1	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.5
7th "	1	0	4	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6
8th "	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
9th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
10th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
11th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
12th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
13th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
14th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
15th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
16th "	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
17th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
18th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
19th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
20th .. and over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total ...	7	0	40	2	41	7	29	0	102	3	30	0	14	1	58	1	30	1	77	1	151	2	579	19	3.28
1st week	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
2nd "	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
3rd "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.0
4th "	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
5th "	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.0
6th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
7th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
8th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
9th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
10th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.0
11th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
12th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
13th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
14th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
15th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
16th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
17th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
18th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
19th "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
20th .. and over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total ...	1	0	2	1	5	0	7	0	3	0	6	0	7	1	5	0	6	1	21	1	18	0	82	5	6.10

Faucial and Nasal Cases.

Laryngeal Cases.

TABLE XIV.—Time of Onset after Commencement of Scarlet Fever—continued.

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		South-Eastern.		Brook.		Park.		Gore Farm.		Northern.		Total.		Mortality per cent.		
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.			
1st week ...	0	0	0	0	7	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	1	11.1	
2nd " "	1	0	5	0	11	2	5	0	2	1	11	0	1	0	4	0	1	0	0	0	0	0	0	41	3	7.3	
3rd " "	0	0	5	1	3	1	4	1	5	0	21	0	1	1	6	0	3	0	0	0	0	0	0	48	4	8.3	
4th " "	2	0	11	1	9	3	9	1	10	1	24	0	3	0	6	0	5	0	3	0	0	6	0	88	6	6.8	
5th " "	0	0	4	0	4	0	5	1	3	0	15	0	7	0	6	0	3	0	9	0	0	18	0	74	1	1.3	
6th " "	1	0	1	1	2	0	1	0	2	0	8	0	4	0	4	0	4	0	12	0	0	28	1	67	2	3.0	
7th " "	1	0	3	0	4	0	1	0	0	0	6	0	4	1	11	0	6	1	10	1	1	24	0	70	3	4.2	
8th " "	1	0	4	0	4	0	2	0	2	0	3	0	1	0	5	0	3	0	11	0	0	18	0	54	0	0.0	
9th " "	1	0	0	0	0	0	3	0	1	0	4	0	0	0	5	0	6	0	15	1	1	19	0	54	1	1.9	
10th " "	0	0	3	0	1	0	0	0	1	0	4	0	0	0	6	0	2	0	7	0	0	18	0	42	0	0.0	
11th " "	0	0	1	0	1	0	2	0	1	0	2	0	0	0	2	0	1	0	9	0	0	13	1	32	1	3.1	
12th " "	0	0	3	0	0	0	1	0	3	0	1	0	0	0	2	0	2	1	14	0	0	9	0	35	1	2.8	
13th " "	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	4	0	0	8	0	0.0	
14th " "	0	0	0	0	0	0	0	0	1	0	3	0	0	0	4	0	0	1	1	0	7	0	0	16	0	0.0	
15th " "	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	2	0	5	0	0.0	
16th " "	1	0	1	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	1	0	1	2	0	9	1	11.1	
17th " "	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	3	0	0.0
18th " "	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	0.0	
19th " "	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0	
20th " and over	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0.0	
Total ...	8	0	42	3	46	7	36	3	37	3	105	0	21	2	63	0	36	2	98	2	169	2	601	24	601	24	3.93

All Cases.

TABLE XV.—Seasonal Incidence.

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		South-Eastern.		Brook.		Park.		Gore Farm.		Northern.		Total.		Mortality per cent.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Pneumonia and Nasal Cases.	January	0	0	1	0	1	0	0	0	0	14	0	1	0	0	0	0	0	11	1	13	1	52	4	7.7	
	February	1	0	4	1	10	0	0	0	0	10	0	0	0	0	0	0	0	6	0	10	0	50	0	4.0	
	March	1	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	4	0	5	0	29	2	6.8	
	April	2	0	3	0	10	0	0	0	0	10	0	0	0	0	0	0	0	2	0	16	0	45	0	0.0	
	May	0	0	5	0	10	0	0	0	0	10	0	0	0	0	0	0	0	4	0	4	0	39	0	0.0	
	June	0	0	7	0	0	0	0	0	0	0	5	0	0	0	0	0	0	10	1	9	0	59	4	6.8	
	July	1	0	5	0	9	0	0	0	0	0	0	0	0	0	0	0	0	5	0	10	0	40	2	5.0	
	August	0	0	4	0	1	0	0	0	0	3	0	0	0	0	0	0	0	1	0	1	0	12	0	2.1	
	September	0	0	1	0	6	1	0	0	0	9	0	0	0	0	0	0	0	3	0	9	0	46	1	2.4	
	October	1	0	0	0	6	0	0	0	0	12	0	0	0	0	0	0	0	2	0	2	0	41	1	2.4	
	November	0	0	0	0	6	0	0	0	0	14	0	0	0	0	0	0	0	9	0	9	0	65	0	0.0	
	December	1	0	0	0	5	0	0	0	0	10	0	0	0	0	0	0	0	17	0	17	0	64	2	3.3	
Total	7	0	40	2	41	7	29	2	3	102	0	1	58	0	30	1	77	1	77	1	151	2	570	19	3.23	
Laryngeal Cases.	January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	9	0	0.0	
	February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	12	0	0.0	
	March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.0	
	April	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	8	2	25.0	
	May	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0.0	
	June	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0.0	
	July	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.0	
	August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.0	
	September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	5	1	20.0
	October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	0	12	1	8.3
	November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	14	0	0.0
	December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	14	0	0.0
Total	1	0	2	1	5	0	7	1	3	105	0	1	5	0	6	1	21	1	21	1	18	0	82	5	6.10	
All Cases.	January	0	0	1	0	1	0	0	0	0	16	0	1	0	0	0	0	0	12	1	17	1	61	4	6.5	
	February	1	0	4	0	10	0	0	0	0	10	0	0	0	0	0	0	0	8	0	11	0	62	2	3.2	
	March	1	0	3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	5	0	5	0	33	3	9.1	
	April	2	0	4	1	10	0	0	0	0	11	0	0	0	0	0	0	0	4	0	18	0	53	2	3.8	
	May	0	0	5	0	10	0	0	0	0	10	0	0	0	0	0	0	0	4	0	4	0	43	0	0.0	
	June	0	0	7	0	0	0	0	0	0	5	0	0	0	0	0	0	0	11	0	13	0	67	4	6.0	
	July	2	0	5	0	10	0	0	0	0	10	0	0	0	0	0	0	0	1	0	12	0	42	2	4.8	
	August	0	0	4	0	1	0	0	0	0	3	0	0	0	0	0	0	0	10	0	15	0	48	1	2.1	
	September	0	0	1	0	6	1	0	0	0	9	0	0	0	0	0	0	0	3	0	14	0	43	1	2.3	
	October	1	0	0	0	6	0	0	0	0	12	0	0	0	0	0	0	0	5	1	11	0	54	2	3.7	
	November	0	0	0	0	5	0	0	0	0	14	0	0	0	0	0	0	0	14	0	24	0	77	1	1.3	
	December	1	0	0	0	2	0	5	0	1	10	0	0	6	0	0	0	0	23	0	25	1	78	2	2.5	
Total	8	0	43	3	46	7	36	3	3	105	0	21	63	0	26	2	98	2	98	2	169	2	661	24	3.63	

The total number of cases was 661, being 5·17 per cent. of the total number of completed scarlet fever cases, which was 12,771.

The case-mortality was 3·63, almost identical with that of 1897. The case-mortality of the laryngeal cases was, however, lower than in that year—6·10 against 8·4 per cent.

The case-mortality calculated on the scarlet fever cases is only 0·18 per cent. The following table shows the percentage incidence of post-scarlatinal diphtheria, the case-mortality, and the case-mortality calculated on the scarlet fever cases for each year from 1892.

TABLE XVI.

	1892	1893	1894	1895	1896	1897	1898
Total number of completed Scarlet Fever cases ... ..	11,326	14,897	12,637	10,422	15,176	15,241	12,771
Number of cases of Post-scarlatinal Diphtheria ... ..	217	294	220	408	765	796	661
Percentage incidence ... ..	1·91	1·97	1·74	3·91	4·64	5·22	5·17
Number of deaths ... ..	95	120	74*	58*	36	30	24
Case-mortality ... ..	43·8	58·8	33·6*	14·2*	5·1	3·7	3·6
Case-mortality calculated on the Scarlet Fever cases ... ..	·84	·80	·6*	·55*	·23	·19	·18

\* These figures are too low, since no return has been published for one of the hospitals in each of these years.

As regards the apparent increase since 1895 in the incidence of the disease, all observers are agreed that the introduction of bacteriological examination as a routine in all suspicious cases has led to many cases being certified diphtheria which formerly used to be classed as tonsillitis or even escape notice. Whether the increase is wholly apparent and dependent on this cause there is no evidence to show. If no new treatment had been introduced at the same time, the case-mortality calculated on the scarlet fever cases, as shown in the last line, would have afforded a truer basis of comparison than the number of cases diagnosed, since the means of diagnosis had been altered during the period under consideration. This condition, however, was not fulfilled, for the introduction of antitoxin has made a marked alteration in the opposite direction on the mortality from post-scarlatinal diphtheria.

I am inclined to believe that the percentage incidence of post-scarlatinal diphtheria has remained much the same, *i.e.*, that the improved method of diagnosis, in spite of its being followed by the isolation of a larger number of cases, has not sensibly altered the incidence of post-scarlatinal diphtheria; but that the use of antitoxin in all but the very mild cases has reduced the mortality among scarlatinal cases due to this complication from 0·8 to less than 0·2 per cent *i.e.*, 75 per cent. Cases, if injected at all, are usually so treated on the first or second day after the onset of symptoms. It will be seen from the tables on p. 180 of the Board's Annual Report for 1896 that the combined mortality for cases of diphtheria treated on the first and second days was 26·2 before and 11·8 after the introduction of antitoxin.

The reduction above shown in post-scarlatinal diphtheria is therefore more considerable than in uncomplicated diphtheria, as shown in that table. It is, however, open for anyone to suppose that the improved means of diagnosis and isolation have resulted in an actual diminution in the incidence of the disease, and

that it should share with the antitoxin treatment in the credit of so greatly diminishing the numbers of patients who die from diphtheria contracted in hospital.

The figures in the sex and age tables are strikingly similar to those of the preceding year. None of the differences are considerable, especially considering the smallness of the numbers dealt with.

The age-incidence, calculated on the total scarlet fever admissions of the same age, is—

Under 5 years	..	..	6·4 per cent.
5 to 10	„	..	6·4 „
10 to 15	„	..	3·8 „
15 to 20	„	..	1·9 „
Over 20	„	..	0·8 „

The table of seasonal incidence shows a decided decrease in the third quarter of the year. But since the previous year shows no such decrease, the phenomenon is probably an accidental fluctuation.

If the number of cases arising in each month be calculated as a percentage on the scarlet fever admissions during the preceding month, we get the following figures :—

January	..	5·3	May	..	5·0	September	4·9
February	..	6·2	June	..	7·2	October	.. 4·7
March	..	4·0	July	..	4·9	November	5·2
April	..	6·0	August	..	4·7	December	* 4·7

In calculating these numbers, all December cases have been taken as belonging to 1897, all other months as belonging to 1898, which is only approximately accurate. Since many of the November cases belonged to the former year, a period when the admissions were more numerous, the figure for November should be somewhat lower than that given.

These figures vary only slightly, especially during the latter six months, but on the whole they are slightly lower at the end of the year. That is to say, for every hundred scarlet fever patients admitted early in the year, more patients developed diphtheria than among the same number admitted late or during the time of pressure. The incidence of this complication therefore did not follow the incidence of diphtheria in the Metropolis, which rose in the summer and autumn, as usual in past years.

F. M. T.

#### SUMMARY OF THE ANTITOXIN TREATMENT OF DIPHTHERIA DURING THE YEAR 1898.

The following three tables show the results of the antitoxin treatment in diphtheria cases. Each table is divided into two halves, one showing only cases treated with antitoxin, the other all cases however treated.

Owing to the fact that severe cases are chiefly selected for the antitoxin treatment, the mild cases not being so treated, the second set of figures is

probably a better guide than the first as to the success of the treatment, as has been urged in the fuller reports on this subject published in the annual volumes for 1895 and 1896.

In the following tables all deaths from intercurrent diseases, such as measles &c., have been included. In the reports just alluded to, all cases complicated by intercurrent disease were excluded. As the death-rate amongst such cases is heavy, the case-mortalities for 1898 are all somewhat higher than if the figures had been compiled on the plan adopted in 1895 and 1896. In 1897 some of the hospitals have included such complicated cases, in others not.

TABLE I.—*All forms of Diphtheria.*

HOSPITAL.	Cases treated with Antitoxin.			All Cases; both those treated with Antitoxin and those not.		
	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths.	Mortality per cent.
Eastern... ..	1,280	203	15.9	1,301	205	15.8
North-Eastern... ..	2	0	0.0	7	0	0.0
North-Western... ..	433	146	33.7	881	176	20.0
Western... ..	677	106	15.6	744	125	16.8
South-Western... ..	366	62	16.9	593	70	11.8
Fountain... ..	640	99	15.5	739	106	14.3
South-Eastern... ..	616	114	18.5	703	119	16.9
Brook... ..	629	88	14.0	741	93	12.5
Park... ..	543	88	16.2	663	96	14.4
Total... ..	5,186	906	17.5	6,372	990	15.5

TABLE II.—*Laryngeal Cases.*

HOSPITAL.	Cases treated with Antitoxin.			All Cases; both those treated with Antitoxin and those not.		
	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths.	Mortality per cent.
Eastern... ..	131	45	34.3	133	47	35.3
North-Eastern... ..	0	0	0.0	0	0	0.0
North-Western... ..	74	24	32.4	87	37	42.5
Western... ..	88	29	32.9	94	32	34.0
South-Western... ..	48	17	35.4	48	17	35.4
Fountain... ..	51	10	19.6	51	10	19.6
South-Eastern... ..	100	35	35.0	101	35	34.7
Brook... ..	72	18	25.0	75	21	28.0
Park... ..	60	21	35.0	65	26	40.0
Total... ..	624	199	31.9	654	225	34.4

TABLE III.—*Tracheotomy Cases.*

HOSPITAL.	Cases treated with Antitoxin.			All Cases; both those treated with Antitoxin and those not.		
	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths.	Mortality per cent.
Eastern ... ..	72	31	43.0	73	32	43.9
North-Eastern ... ..	0	0	0.0	0	0	0.0
North-Western ... ..	40	16	40.0	42	17	40.5
Western ... ..	30	7	23.3	31	8	25.8
South-Western ... ..	25	9	36.0	25	9	36.0
Fountain ... ..	32	8	25.0	32	8	25.0
South-Eastern ... ..	48	21	43.7	49	21	42.9
Brook ... ..	30	10	33.3	30	10	33.3
Park ... ..	28	11	39.3	31	14	45.1
Total ... ..	305	113	37.0	313	119	38.0

In comparing the figures of Table I. with those published for 1896 and 1897, it will be seen that there is a decided diminution in the mortality each year both of cases treated with antitoxin and of all cases together.

The figures for 1896 were 25.9 and 20.8; for 1897, 20.4 and 17.5; as against 17.5 and 15.5 for 1898.

The proportion of cases treated with serum to the total is 81.4 per cent., as against 80.2 per cent. in 1897.

It is probable that the above improvement in case-mortality is partly due to a slight diminution in the average severity of the cases, for the same diminution is not seen in the rates for the laryngeal and tracheotomy cases. Comparing the figures from Table II. in a similar way, we find for 1896, 28.8 per cent. and 29.6 per cent.; for 1897, 30.0 per cent. and 30.9 per cent.; as against 31.9 per cent. and 34.4 per cent. for 1898.

Table III. gives us for 1896 40.6 per cent. and 41.0 per cent.; for 1897, 39.9 per cent. and 40.5 per cent.; as against 37.0 per cent. and 38.0 per cent. for 1898. It will thus be seen that the case-mortality for laryngeal cases has slightly increased; that for tracheotomy cases has diminished to about the same extent. The rise in the former instance is partly and perhaps wholly due to the inclusion of deaths from measles and other superadded diseases in the figures for 1898. Of the laryngeal cases 47.8 per cent. were submitted to tracheotomy, as against 53.7 per cent. in 1897.

On the whole the figures for 1898 tally very closely with those of the preceding years, and fully bear out the favourable opinions previously expressed as regards the serum treatment. It is a matter for congratulation that the case-mortality in tracheotomy has reached 38.0 per cent., a lower figure than ever previously recorded for all our hospitals, while at no hospital has it exceeded 50 per cent.

As regards post-scarlatinal diphtheria, the facts will be found in the report on that subject. The death-rate on laryngeal cases amongst these has also been reduced to a lower figure—6.10 per cent.—than ever previously reached.

F. M. T.

ON THE VALUE OF TRACHEOTOMY IN CERTAIN CASES OF  
SEPTIC SCARLET FEVER.

(By W. J. J. STEWART, M.D. Edin.)

In this paper I propose briefly to discuss the value of tracheotomy for the relief of a form of obstructed respiration which is not uncommon in septic scarlet fever, but for which this operation is apparently but rarely performed.

That this is so may in some measure be due to a natural disinclination to operate in such cases, but also, I think, to the fact that sufficient attention has not been paid to the question of tracheotomy as a means of relief for this form of dyspnœa.

My object is to show that this operation may be safely undertaken in these cases with very fair prospect of a good result.

The obstructed breathing here referred to is that exclusively due to faucio-nasal obstruction, and not in any way connected with laryngeal swelling. It is a condition which is present in a large number of the fatal cases of septic scarlet fever, and occurs almost entirely in young children.

This respiratory difficulty may not in itself be the actual cause of death, yet in a considerable number of cases it must conduce to a fatal issue by depriving the child of sleep. The results of operation in the subjoined list of cases would lead one to believe that the sleeplessness is due more to respiratory obstruction than to toxæmia. It is distinctive of this form of respiratory trouble that it only becomes obvious when the child is falling off to sleep, whereas that due to laryngeal obstruction is apparent whether the child is asleep or awake.

The number of cases here quoted on whom tracheotomy was performed for this condition is no doubt small, but the fact that they occurred quite recently and were at the time of operation considered practically hopeless appears to be sufficient justification for recording them. Moreover, the septic character of the attack accounts for the great majority of scarlet fever deaths, so that any treatment which exerts a favourable influence upon the symptoms should necessarily prove of value in reducing the mortality.

The patients referred to in this paper were admitted into the South-Western Hospital during the latter six months of 1898. They are four in number. The following description of one of them is equally applicable to the others.

The patient exhibited the usual symptoms of severe inflammation, attended with swelling of the faucial and nasal passages, with patches of ulceration on the free margin of the soft palate, of the anterior pillars of the fauces, and on the inner surfaces of the tonsils. In addition to this there was profuse muco-purulent discharge, with more or less complete blocking of the nasal passages. The glands at the angles of the jaw were inflamed and tender, whilst the temperature for the most part ranged between 100° and 103°.

The patient, though drowsy, was unable to obtain satisfactory sleep, and was always restless. As time went on his general condition became gradually worse. His breathing when asleep, which hitherto had just been sufficiently free from

difficulty to allow him to rest, now, with an increase in the nasal and faucial obstruction, became laboured and ineffectual.

The character of this respiratory distress is very distinctive. Under normal circumstances, a child on falling asleep breathes through his nose, but in this condition, owing to the complete blocking of the nasal passages, he utterly fails to do so.

At the same time he is unable to breathe through the mouth owing to the degree of faucial swelling and to some extent in consequence of the falling back of the tongue.

The admission of air being thus impeded, the muscular act of inspiration results in a retraction of the least resistant parts of the chest wall, and the child becomes cyanosed, and is wakened up with a sense of impending suffocation. After three or four respirations (for he is now able to breathe through the mouth), which quickly restore the colour, the patient falls off to sleep again, to repeat the previous performance, being forced to wake every few minutes to fill his lungs, thus practically getting no rest at all.

The persistence of the foregoing condition is such an obvious cause of the increasing weakness that the necessity for its relief is apparent. In the cases above referred to this was afforded by tracheotomy. Of the causes I have suggested which are contributory to this respiratory difficulty, the nasal obstruction is undoubtedly the most important. Against this explanation it may be urged that an equal degree of dyspnoea does not occur in children the subject of adenoids, but in them nasal obstruction develops so slowly that the child has time to acquire the habit of breathing through his mouth. In the case of adenoids, moreover, there is not the requisite amount of faucial swelling.

In explaining this respiratory difficulty, one cannot disregard the faucial element already alluded to. In healthy persons, the slight falling back of the tongue which occurs during sleep is not sufficient to impede respiration, but if there be an infiltration of the faucial tissues then respiratory obstruction becomes sufficiently pronounced to prohibit sleep.

The fact that the patients are able to breathe so comfortably when awake, together with the complete absence of stridulous breathing and croupy cough, even during sleep, proves conclusively that the obstruction is not laryngeal and that intubation would be quite useless. It may be contended that the nasal obstruction might have been relieved by the passing of fine drainage tubing through the anterior nares into the upper part of the pharynx. This I have tried in previous cases, but found that it gives only temporary relief owing to the impossibility of keeping the tubes free from discharge.

I may add that attempts were made, though unsuccessfully, to counteract the falling back of the tongue by placing the patient's head in such a position that the mouth became the most dependent part.

It may be pointed out here that the sole object of tracheotomy was to procure sleep.

In each case the result of operation was most satisfactory, the relief to breathing being so marked that the patient almost immediately fell asleep. In those who recovered this lasted more or less continuously for 48 hours. Coincidentally, a gradual fall in temperature occurred, and there was an appreciable improvement in the symptoms generally.

The wounds, however, for some time after the operation were far from healthy. The edges became inflamed, and the deeper parts dry and void of granulations. The cellular tissue and fascia between the muscles in the immediate neighbourhood sloughed away, leaving the latter dissected out.

This condition lasted for several days but as soon as the temperature reached normal the wounds took on a more healthy character and rapidly closed round the tracheotomy tube.

In Case I., however, there was, in addition, some ulceration and sloughing of the cartilages in the edges of the tracheal wound.

In all cases muco-purulent expectoration was present for over two weeks.

The same difficulty was experienced in all four patients in dispensing with the tube, the shortest time it was worn by any of those who recovered being 19 days, thus contrasting strongly with what obtains after tracheotomy in laryngeal diphtheria.

The continued irritation of the tube led to the production of exuberant granulations, which probably in no small degree accounted for the difficulty in breathing which occurred in Cases I. and III. when the tube was removed. Case IV. was, as already mentioned, benefited by the operation, but unfortunately, 12 hours later, he developed an attack of diarrhœa which proved fatal by collapse.

As regards indications for operation, I think that tracheotomy should be performed in all those cases in which respiratory difficulty is present to such an extent as to seriously prejudice the patient's chances of recovery by depriving him of sleep. Nothing can be gained by waiting, for the ineffectual inspiratory efforts can only lead to pulmonary atelectasis, and thus add a further element of danger to those which already threaten the patient's life.

The following table is a brief summary of the cases treated:—

No.	Name.	Age.	Sex.	Operated upon, day of disease.	No. of days tube in.	Intubation (subsequent).	No. of days tube in.	Result.
I.	A. W.	5	M	19th	Off and on for 6 mths.	Yes (twice)	3 and 4	R*
II.	E. F.	3	F	18th	19	No	...	R
III.	J. C.	11 wks.	M	4th	29	Yes	2½	R
IV.	S. A.	4	M	4th	Till death	No	...	D

\* This patient was discharged six months after the operation, but still wearing a tube.

### THE INFLUENCE OF ANTITOXIN ON THE OCCURRENCE AND COURSE OF DIPHTHERITIC PARALYSIS.

(By F. J. WOOLLACOTT, M.D. Oxon.)

The proportion of cases of diphtheria which develop paralysis varies very widely according to different authorities. De Gassicourt, for example, quotes statistics which show a percentage varying from 3 to 66. The difference is, of course, largely due to the fact that the total number of cases is often small, and

also to the fact that the patients were often kept under observation for insufficient periods, so that paralysis had not time to develop. Neither of these explanations holds with regard to the hospitals of the Board, and yet in last year's statistical reports the percentage of paralysis at three different hospitals was 12, 27, and 45 respectively. It is true that the first of these hospitals sent a proportionately large number of cases to a convalescent hospital, and it may be objected that paralysis subsequently developed there, but a glance at the tables will show that this only occurred in a very limited number of instances.

It seems then desirable to explain what cases of loss of power are included in this paper as cases of diphtheritic paralysis.

The chief criteria are :—

1. That the loss of power occurred after the onset of diphtheria and was never observed before.

This excludes a large number of cases of squint not noticed or absent when the patient was first seen.

2. That the loss of power did not result from inflammation or the presence of membrane.

This will exclude many cases of early regurgitation per nares and some cases of croup, especially after tracheotomy, in which fluids entered the air passages during the attempt to swallow.

3. That the loss of power, *e.g.*, in the legs, was not merely the result of general debility, such as results from any long illness or from rickets.

In addition, I have excluded cases of uncomplicated cardiac paralysis and cases in which loss of knee-jerk was the only sign of nerve-lesion. Even with these provisos, the individuality of the observer must count, since slight and temporary paralysis is often difficult to detect. Ciliary paralysis, for example, may be concealed by myopia or escape notice owing to the patient's youth.

The object of this paper is to illustrate the influence of antitoxin on the occurrence and course of paralysis, and to discuss the class of cases in which paralysis is most likely to supervene.

Since the adoption of the antitoxin treatment the paralysis incidence has considerably increased. In the Board's hospitals taken together it has risen from 13 to 20 per cent. This is largely due to the fact that severe cases of diphtheria which would formerly have died now live to develop paralysis. It is interesting to note that the combined death and paralysis rates—the toxic rate as it may be called—has not varied much. For the years 1892-1897, *i.e.*, three years without and three years with antitoxin, it was 42·5, 44·2, 42·8, 43·2, 42·5, and 38·2 respectively. On the whole, however, there is a tendency for this toxic rate to diminish, a result probably due to the earlier and more effective use of antitoxin.

The influence of antitoxin on the occurrence of paralysis is most readily determined by noting the varying results obtained according to the date of its administration. This is shown in the following table, comprising 2,000 consecutive cases of diphtheria treated at the Eastern Hospital during the years 1895, 1896, 1897, and the early part of 1898. The table also gives the mortality percentage,

to indicate the severity of the cases, and also the percentage of paralysis estimated on those only who survived the early stage of the disease, *i.e.*, who lived long enough for paralysis to show itself. The latter is given in the column headed "Corrected percentage of paralysis."

Day of Injection.	Total.	Total Cases of Paralysis.	Percentage of Paralysis.	Extensive Paralysis.	Deaths from Paralysis.	Corrected Percentage of Paralysis.	Total Mortality Percentage.
1 ... ..	85	4	4.7	...	...	5	5.8
2 ... ..	361	34	9.4	2	...	10.1	8.3
3 ... ..	419	66	15.7	10	4	18.2	16.7
4 ... ..	422	85	20.1	18	8	24.4	22.0
5 and upwards	713	175	24.4	41	8	33.3	29.4
Total ...	2,000	364	18.2	71	20	22.0	20.4

For the sake of comparison I insert the following table of cases treated at the Eastern Hospital during 1894 before the introduction of antitoxin :—

Day of Admission to Hospital.	Total Cases.	Total Paralysis Cases.	Percentage of Paralysis.	Cases of Severe Paralysis.	Deaths from Paralysis.	Total Mortality Percentage.
1 ... ..	29	3	10.3	...	...	20.6
2 ... ..	100	12	12.0	2	1	24.0
3 ... ..	106	10	9.4	2	...	33.9
4 ... ..	73	4	5.4	...	...	28.7
5 and later ...	144	20	13.8	5	2	34.0
Total ...	452	49	10.8	9	3	30.0

But little comment is needed on these tables. It is clear that formerly early treatment had practically no influence on the occurrence of paralysis. The effect of early injection of antitoxin, however, is very obvious. The earlier it is given the less likely is paralysis to follow. Moreover, cases injected early are far less likely to develop the extensive and dangerous forms of paralysis than those injected late. In the former class of cases, paralysis, should it occur, nearly always remains mild.

Other considerations lead to the same conclusion. The influence of antitoxin in preventing diphtheria from becoming severe is so marked that practically a severe case may be assumed to be a case treated late. We can therefore derive some information of the value of antitoxin as regards the incidence of paralysis by examining the incidence of paralysis according to the severity of the initial attack. For this purpose I have analysed 829 consecutive cases of diphtheria, uncomplicated by any other specific disease, that were in the Eastern Hospital during 1897. Of these, 139 developed paralysis. Taking as the chief basis of the classification the amount and extent of membranous exudation, we obtain the following result :—

	Total.	Cases of Paralysis.	Percentage of Paralysis.	Cases of severe Paralysis.	Deaths from Paralysis.
Severe Cases ... ..	223	64	28.6	19	5
Moderate „ ... ..	566	75	13.22	7	1
Mild „ ... ..	40	...	...	...	...

Of the 223 severe cases, 133 died in the early stage of the disease, of whom five had already developed a nasal voice. Omitting these, the table becomes modified as follows:—

	Total.	Cases of Pa lysis.	Percentage of Paralysis.	Cases of severe Paralysis.	Deaths from Paralysis.
Severe Cases ... ..	90	59	65.5	19	5
Moderate „ ... ..	566	75	13.22	7	1
Mild „ ... ..	40	...	...	...	...

Thus the incidence of paralysis on the severe cases, all of whom were probably treated late, is very high, while the remainder, which were either of a milder character or treated in time to prevent severe symptoms developing, suffered much less. In pre-antitoxic years this distinction was much less noticeable, chiefly because the severe cases rarely survived, although it was quite recognised by de Gassicourt and others that paralysis, if extensive and dangerous, was usually found to be associated with a severe initial attack of diphtheria.

Besides the amount of membranous exudation, indications of the severity of diphtheria are found in the urine, the blood, and the heart. Albuminuria, anæmia, and disturbance of the heart's action are most marked in the severe cases, and each one of these symptoms serves as a warning of the possible approach of paralysis. Albuminuria cases can be conveniently tabulated, and the following is an analysis of the group of cases mentioned in the previous table:—

	Total.	Paralysis Cases.	Percentage.	Severe Paralysis.	Deaths from Paralysis.
With Albumen ... ..	265	100	37.7	22	5
Without Albumen... ..	431	34	7.8	4	1

A source of fallacy in this table should be pointed out, viz., that no attempt is made to distinguish between the albuminuria due to diphtheria and albuminuria due to the antitoxin itself, but it may be mentioned that of the 22 cases of severe paralysis 12 had prolonged albuminuria of considerable amount.

The position of the membrane is of some importance in endeavouring to estimate the probability of paralysis. The amount of faucial lesion is the chief

guide. Nasal and laryngeal diphtheria, however severe, are comparatively insignificant. The duration of the membrane, after the administration of antitoxin, does not seem of much assistance, although theoretically it should be a useful guide, since, presumably, the longer the membrane remains the more toxin is absorbed. On the contrary, early and rapid separation of membrane often implies that the case is a late one, and therefore one in which antitoxin can do but little good. Long persistence of exudation often leads to such local complications as suppurative adenitis, but I think does not render paralysis more likely, although before antitoxin was used the contrary seems to have been the case.

The following table shows the influence of age and sex in the 829 complicated cases previously mentioned :—

Age in Years.	MALE.					FEMALE.				
	Total.	Paralysis Cases.	Percentage of Paralysis.	Severe Paralysis.	Deaths from Paralysis.	Total.	Paralysis.	Percentage.	Severe Paralysis.	Deaths from Paralysis.
0-2	26	2	7.7	1	...	18	...	...	...	...
2-5	149	19	12.7	4	2	133	21	15.7	8	3
5-10	140	32	22.8	7	1	182	45	24.7	5	...
10-15	42	6	14.3	...	...	58	7	12.0	...	...
15-25	19	1	5.2	...	...	37	...	...	...	...
25 and upwards	5	...	...	...	...	20	6	30.0	1	...
Totals	381	60	15.7	12	3	448	79	17.6	14	3

On the whole, females appear more liable to paralysis than males, while, on the other hand, the death-rate is slightly higher among males; in other words, more females survive to run the risk of paralysis. As regards the age-incidence, it is obvious that in very young children paralysis may readily be overlooked. Helpless at all times, an added element of helplessness often makes no obvious difference.

Adults probably suffer less often than younger patients, or, at all events, paralysis in them is rarely severe or dangerous. In dealing with the question of age, it is of importance to remember that the younger the patient the more likely is he to succumb in the early stage of the disease, so that, owing to the numerous early deaths during the first age-periods, the proneness of the young to develop paralysis is under-estimated in the preceding table.

Summarising the above, it appears that the chief guides in estimating the probability of paralysis complicating any case of diphtheria are the date of antitoxin administration and the severity of the case. The later antitoxin is given and the more severe the case the greater is the chance of paralysis following and the more likely is it to prove severe. It might be mentioned that in my cases the usual dose of antitoxin was at least 4,000 units. Larger doses and repeated doses did not seem to exercise any greater influence. Some assistance as to the course that paralysis is likely to follow is furnished by other considerations.

The following table shows the date of onset of 135 cases of paralysis :—

	Total Cases.	Severe Cases.	Deaths.
During the 1st week ... ..	...	...	...
„ 2nd „ ... ..	29	8	1
„ 3rd „ ... ..	31	4	2
„ 4th „ ... ..	22	2	1
„ 5th „ ... ..	27	5	1
„ 6th „ ... ..	26	5	1

Should the onset of paralysis be earlier than usual, *i.e.*, in the second week, it is more likely to prove serious. Some information can, I think, be deduced from the way in which the paralysis began. Cases in which it develops in association with constitutional symptoms, such as fretfulness or apathy, are likely to prove severe, while the rapid or simultaneous involvement of several muscles is of graver import than if those muscles were attacked at definite intervals.

As regards the prognosis of extensive attacks, some importance must be attached to the natural disposition of the child. The helplessness of paralysis is more readily endured by patients of mild, placid dispositions than by those of excitable or passionate natures. In the latter, the added strain of emotional disturbance on a weakened nervous system may prove fatal. In hospital work it is fortunate that paralysis begins comparatively late and after the nurses have acquired some influence over their patients. The age of the patient has some bearing on this point. The younger the child the greater the probability of a fatal issue.

The muscles involved are important. Provided that the heart keeps steady and that the respiratory muscles escape, complete recovery may be confidently expected. Even when there is weakness of the heart's action and difficulty in respiration, with proper treatment and in the absence of pulmonary complaints recovery is probable.

#### ON PARALYSIS OF THE LOWER LIP FOLLOWING DIPHTHERIA.

(By F. J. WOOLLACOTT, M.D. OXON.)

Paralysis resulting from diphtheria and involving the muscles of the face, though usually very slight and therefore easily overlooked, is by no means infrequent. Loss of the naso-labial furrow, with slight distortion of the mouth on laughing, &c., tremor and inco-ordination of the lips, and weakness of the buccinators are occasionally met with. The want of expression in the faces of children severely paralysed is often very marked, and may indicate some loss of tone in the muscles, although there be no actual loss of power. The paralysis is nearly always confined to the lower part of the face.

An additional sign of defective power and one of which I can find no description is the following. When the patient opens his mouth wide, laughs, or endeavours to show his teeth, one half of the lower lip is drawn downwards and

outwards to a greater extent than the other, causing an indentation in the red border of the lip. The outward movement is usually slight, but the downward is well marked. As a rule the part of the lip involved is slightly drawn away from the gums, and there is some wrinkling of the skin. The angle of the mouth remains almost in its normal position, not being drawn to the side as in the common form of facial paralysis. While at rest the symmetry of the mouth is perfect. The defect is only shown on movement, and may therefore escape notice unless sought for. All the cases I have seen presented identical features, varying only in degree. The following is a list of 17 such cases that have occurred at the Eastern Hospital during the past year :—

No.	Sex.	Age.	Side of Mouth affected.	Duration in days.	Time of appearance after Diphtheria.	Other Paralysis.
1	F	4	Right ... ..	20	37 days ... ..	Palate, pharynx, squint.
2	F	5	Right ... ..	10	53 ,, ... ..	Palate, squint.
3	M	7	Left ... ..	14	49 ,, ... ..	No knee-jerks.
4	F	5	Left ... ..	16	57 ,, ... ..	Palate.
5	F	5	Left ... ..	10	24 ,, ... ..	Palate, squint, legs.
6	F	25	Left ... ..	3	57 ,, ... ..	Palate, ciliary, pharynx, legs.
7	M	8	Left ... ..	13	44 ,, ... ..	Generalised paralysis.
8	M	8	Left ... ..	15	42 ,, ... ..	Palate.
9	M	7	Right ... ..	6	30 ,, ... ..	No knee-jerks.
10	F	8	Left ... ..	12	60 ,, ... ..	Generalised paralysis.
11	F	4	Left ... ..	7	27 ,, ... ..	Generalised paralysis.
12	M	9	Right ... ..	14	39 ,, ... ..	Palate, squint.
13	F	4	Left ... ..	4	44 ,, ... ..	Palate.
14	M	3	Left ... ..	?	46 ,, ... ..	Generalised paralysis.
15	M	8	Right ... ..	?	48 ,, ... ..	Palate.
16	F	3	Right ... ..	?	61 ,, ... ..	Squint.
17	F	12	Left ... ..	?	41 ,, ... ..	Palate, ciliary.

In cases 5, 12, and 16 the attack of diphtheria had been comparatively mild. In all the others it had been very severe. The first 13 of the cases were under my own care, and I examined the mouth each day. The onset was usually sudden, and as I usually got every patient in the wards to open the mouth wide each day, I was able to fix the date with certainty in many cases. As a rule the want of symmetry reached its height almost at once, remained stationary for a time, and then gradually disappeared. In every case recovery was complete. The patients experienced no discomfort whatever.

In some of the cases there were other signs of loss of power in the facial muscles. Thus in cases 7, 10, and 15 there was slight weakness of the opposite side of the face, that in case 10 forming part of a right hemiplegia, involving the lower part of the face as well as the arm and leg. In case 11 loss of naso-labial furrow and defective movement had been noticed on the same side of the mouth for some days previously. In all the cases but two there were well-marked signs of paralysis elsewhere, and in the two exceptions the knee-jerks were absent.

The deformity apparently results from the contraction of the chin muscles, and possibly also of the platysma acting on a weakened segment of the orbicularis oris and dragging it downwards and outwards. The weakness of the orbicularis is either due to paralysis of its own fibres or more probably to the fact that it has lost the support of muscles on the opposite side. These muscles, chief of which are the depressor labii inferioris and the platysma, are weakened by paralysis, and consequently are no longer able to hold in check their fellows on the healthy side. The result is that the influence of the latter muscles appears exaggerated.

### A SUCCESSFUL CASE OF TRACHEOTOMY IN A VERY YOUNG CHILD.

(By W. J. POTTS, M.D. Lond.)

Nora T., aged four months and two weeks, was admitted to the Brook Hospital on October 20th, 1898, with urgent symptoms of laryngeal diphtheria. A brother had been admitted 10 days previously with severe faucial and laryngeal diphtheria, and subsequently developed diphtheritic paralysis.

*History before Admission.*—October 17th—Sore throat, vomiting. October 19th—Croup.

*Condition on Admission.*—October 20th, at 6.15 p.m.—Severe laryngeal dyspnoea was noted. There was supraclavicular and substernal recession. The colour of the lips was good, but the child was in great distress, tearing and scratching its neck and chest. The entry of air into the bases of the lungs was much impeded, though the cry was loud and vigorous. There was marked stridor.

No membrane was seen on the fauces either on admission or subsequently; neither was there any nasal discharge. A subsequent bacteriological examination revealed the presence of long diphtheria bacilli in the fauces.

The temperature on admission was 101 degrees.

*Progress of the Case.*—October 20th, 6.30 p.m.—Tracheotomy was performed through the thyroid isthmus, under chloroform. The breathing was much relieved by the operation. A No. 3 Parker's tube was inserted. No membrane was observed in the trachea; nor was any expelled through the tube on any subsequent occasion. After the operation 3,000 units of antitoxin were administered.

October 21st.—In the morning the temperature was normal, the respirations varied from 40 to 50, and the pulse from 130 to 150 per minute. The child had a good night, and took nourishment well. There was considerable muco-purulent expectoration through the tube. Antitoxin, 4,000 units were administered.

Evening.—The temperature was slightly elevated, 100.6 degrees.

October 23rd.—Still slight pyrexia in the evening. Respirations remain about 40. To-day slight nasal regurgitation was noticed.

October 24th.—The tube was taken out.

October 25th.—The regurgitation of liquid nourishment through the mouth and its escape through the tracheal wound necessitated nasal feeding.

There was slight basal bronchitis, accompanied by pyrexia (101 degrees).

October 29th.—Right otorrhœa.

October 31st.—Some difficulty in nasal feeding. Rectal feeding resorted to temporarily.

November 4th.—Wound healed. Nasal feeding left off. No regurgitation.

November 23rd.—Discharged recovered.

*Remarks.*—With the exception of the famous case of Scoutteten (1), I have been unable to discover a record of a successful case of tracheotomy performed for laryngeal diphtheria in a child younger than the one recorded above.

Scoutteten operated on his own child, aged six weeks. The history of the case is as follows. The child was ill for two days with fœtor of the breath and deposit on the mouth and throat. The nature of this deposit is not clearly stated, and when the case was discussed in the French medical papers other diagnoses were suggested. The child was treated with a mouth-wash of hydrochloric acid. Laryngeal dyspnœa supervened on the third day, and the child was tracheotomised on the same day. It is stated that no membrane was found in the trachea at any time.

Other successful cases of tracheotomy are recorded by Steinmeyer (2), at nine weeks, for some laryngeal trouble leading to suppuration; by Anderson (3), for laryngeal œdema, in a child aged thirty-eight days; by Croft (4), for erysipelas following vaccination, in a child under six months.

Annandale (5) operated unsuccessfully on a child three months old for croup, the patient surviving twenty-three days. Cullingworth (6) records a case of congenital abnormality in which tracheotomy was performed on the third day of life, the case living for twenty-one days.

Other cases of early tracheotomy, successful or otherwise, will be found recorded in the works of Sanné (7), Chaym (8), and Elias (9). Some of these cases are for diphtheria, some for other diseases, but none younger than those already mentioned.

(1) *Gazette Hebdomadaire*. 1862. p. 723.

Scoutteten: "De la Trachéotomie," &c. Paris. 1844.

(2) Steinmeyer: *Berlin. Klin. Woch.* 1880. p. 573.

(3) Anderson: "Archives of Pediatrics." New York. 1896. p. 617.

(4) Croft: *Lancet*. 1880. II., p. 849.

(5) Annandale: *Edin. Med. Journal*. 1861-2.

(6) Cullingworth: *Lancet*. 1893. I., p. 195.

(7) Sanné: "Traité de la Diphthérie."

(8) Chaym: "Archiv. fur Kinderheilkunde." Stuttgart. 1882-3. pp. 417-457.

(9) Elias: "Zur Tracheotomie im Ersten Lebesjahre." *Deutsche Med. Woch.* 1878.

[To the above list of successful tracheotomies in very young children may be added Dr. Stewart's case, mentioned in his paper in the present volume.]

## NOTE ON INTUBATION OF THE LARYNX AS A SUBSTITUTE FOR TRACHEOTOMY.

(By E. W. GOODALL, M.D. Lond.)

Intubation in laryngeal diphtheria has never been a serious rival of tracheotomy in this country, not even since the introduction of the antitoxin treatment. In the United States and on the Continent, however, the reverse has been the case, so that abroad intubation is nowadays very much more frequently practised than tracheotomy. Into the cause of this difference between British practice on the one hand and continental and American on the other I do not propose to enter, the object of this paper being to point out certain factors that may lead us to modify the unfavourable opinion that has hitherto mostly obtained in this country concerning intubation as a means of relieving laryngeal obstruction, especially when due to diphtheria, and to draw attention to some improvements in the instruments and the methods of using them.

Firstly, it is to be expected, *a priori*, that the antitoxin treatment would greatly enhance the chances of success in intubation. The local exudation neither spreads nor persists nor is renewed from day to day as it used to be.

Secondly, there have been improvements in the instruments. The tubes made by Collin, of Paris, are certainly better than those of the O'Dwyer's pattern hitherto employed. Collin's tubes are shorter, the shortening being of the lower end of the tube; partly on this account they are also lighter. The angle made by the pilot and tube when affixed to the introducer in Collin's instrument is slightly less than a right angle, making introduction easier than with O'Dwyer's, in which the aforesaid angle is rather greater than a right angle. The method of attachment of the pilot to the introducer is a decided improvement upon the finely-threaded screw of O'Dwyer's instrument. This thread was very apt to become worn, so that the pilot with the tube was not rigidly fixed to the introducer. Collin's fixes the pilot on by a little bolt (on the side of the introducer) running into a notch in the head of the pilot, which is placed in a socket in the introducer. By this means the pilot and tube are quite firm and secure. On the other hand, the method of releasing the tube when in the larynx from the pilot is not so ingenious nor so easy to manipulate in Collin's as in O'Dwyer's instrument.

I need hardly point out that one of the advantages of intubation over tracheotomy is that no anæsthetic is required. The most convenient position in which to have the patient is the recumbent, as in that posture the head and neck are the more easily kept steady and straight. A thread should be attached to the tube until the latter is inserted in the larynx, for it is easy to miss the larynx and introduce the tube into the œsophagus, in which case, if released, it would be swallowed. But after the tube is in the larynx the thread may be withdrawn. The advantage of this is that there is no necessity to keep the child's hands in restraint in order to prevent him from pulling at the thread which is irritating his tongue and lips. The removal of the threadless tube is obtained by a method to which the French have applied the cumbrous term "*énucléation*." "*Expression*" appears to be more appropriate and is shorter. The method is simplicity itself. The child being seated upright and having the hands restrained by a nurse, the

operator makes the larynx prominent by throwing the head backwards. Putting the thumb of one hand upon the trachea just below the larynx (that is to say, just over the end of the tube), he places the other hand on the occipital region of the head. Then *suddenly* and *simultaneously* he makes upward pressure with the thumb and flexes the head by pushing upon the occiput in a forward and upward direction. The tube will be ejected into the mouth, often out of it. A nurse can easily be instructed to carry out this manœuvre, which would be immediately called for should the tube become blocked with membrane or thick mucus.

Should the patient cough up and swallow the tube, no apprehension need arise, as it will be passed per rectum in the course of two or three days.

If the intubation fails to relieve the dyspnœa, tracheotomy can always be performed. The instruments for the latter operation should always be at hand.

It is objected to intubation that it is more difficult to perform than tracheotomy. Personally, however, I doubt whether for a novice at either operation the one is more difficult than the other.

A more valid objection is that ulceration of the larynx may be caused by the tube. This happened in two of our cases, in which, possibly, intubation was persisted in for too long a period.

Lastly, it is certainly necessary that a medical man should be within ready access of the ward, in case the tube should be coughed out and the urgent symptoms of dyspnœa recur.

I do not profess to have made up my mind finally as to the exact value of intubation, preferring to wait until I have had at least a year's experience. On November 11th, 1898, we began at Homerton to practise intubation as a substitute for tracheotomy whenever possible, and up to the time of writing (March 11th, 1899) the following are the results. No case has been intubated that would not have been tracheotomised.

Since November 11th last there have been under treatment at the Eastern Hospital 58 cases of croup. Of these, 44 occurred in cases of diphtheria. Of the 44 cases, seven were in such an extreme state of dyspnœa on admission to hospital that it was necessary to tracheotomise them at once; three of these recovered. Nine cases were intubated, but, on account of the intubation affording no permanent relief, were subsequently tracheotomised; five of these recovered. In one of the fatal cases (a severe one of faucial and laryngeal diphtheria), the intubation tube had caused ulceration of the larynx.

Eight cases were intubated only, and of these six recovered. In one of the two fatal cases the laryngeal symptoms were completely relieved by intubation. The case, a severe one, proved fatal by anuria a week after the tube was removed, the tube having been worn for forty hours. In the other fatal case the laryngeal symptoms came on late in the disease and were probably due to œdema of the larynx. The symptoms were relieved, which was the sole object of the operation, the child being in a hopeless condition from pyæmia secondary to otitis.

Twenty cases were not operated upon in any way, and of these 17 recovered. All except one were cases in which, though there was distinct evidence of the larynx being affected, there were no urgent dyspnœic symptoms. The exception was a case fatal before relief could be afforded. All the above cases, save two moribund on admission, were treated with antitoxin.

There were 14 cases of croup due to causes other than diphtheria, such as simple laryngitis or the laryngitis of measles.

Of these, none were tracheotomised without previous intubation, and none were intubated without subsequent tracheotomy. Four were tracheotomised subsequently to intubation, and two of these recovered. Of the two fatal cases, one, a case of laryngitis accompanying measles, died of broncho-pneumonia; the other, a case of simple laryngitis, died of emphysema following tracheotomy. This was the other case in which the intubation tube had apparently set up ulceration.

Ten cases were not operated upon at all, and all recovered.

So far therefore we have had 28 cases of croup requiring operation, cases that would certainly have been tracheotomised apart from intubation, and of these eight have been relieved by intubation alone.

#### A FATAL CASE OF HÆMORRHAGE IN ENTERIC FEVER OCCURRING ON THE TWELFTH DAY OF THE DISEASE.

(By B. A. RICHMOND, M.B., B.S. Lond.)

T. E. B., aged 25 years; was admitted to the Brook Hospital, August 30th, 1898, with the following history:—

August 24th.—Diarrhœa.\*

August 25th.—Headache, backache, pains in the legs, vomiting, and abdominal pains.

August 29th.—Rose spots on the abdomen.

*Condition on Admission.*—August 30th, 1898, at 9.30 p.m.—Pulse 100, regular, of fair volume, slightly dicrotic. Respirations 18. Tongue coated, fauces reddened. Chest *nil*. Abdomen resonant, supple, a few rose spots. Temperature 102.4 degrees.

August 31st.—Tongue and lips tremulous; tongue dry; pulse small and very soft. Sleepless during the night. Albuminuria. Morning temperature 100 degrees. Evening temperature 101 degrees.

September 1st.—Still restless at night. Widal's reaction positive. Morning temperature 101.2 degrees. Evening temperature 101 degrees.

September 3rd, 6.30 a.m.—Passed a normal motion after a simple enema given in the early morning, and shortly afterwards a loose stool containing bright blood and a few clots, but not a copious hæmorrhage. Temperature unaffected; pulse no worse. The rose spots have faded.

6.30 p.m.—Severe hæmorrhage, about 10 ounces in amount, and consisting of almost pure blood. Clots of blood were passed in the bed.

8.0 p.m.—Another hæmorrhage, in amount 4 ounces. Temperature 100 degrees.

11.0 p.m.—Another hæmorrhage, in amount 10 ounces.

\* This was the patient's own assertion, and was corroborated by his friends.

September 4th, 5.30 a.m.—Another hæmorrhage, 16 ounces in amount. This hæmorrhage was accompanied by severe collapse. The pulse was small and the beats running together; the respirations were sighing in character, the feet and hands were cold, perspiration was profuse, and there was much hiccough.

8.0 a.m.—Another hæmorrhage of 12 ounces. Pulse was imperceptible at the wrist.

10.30 a.m.—Another hæmorrhage of 8 ounces.

11.30 a.m.—Three pints of saline solution were transfused. The pulse improved, but shortly afterwards the patient had a rigor, the temperature rising to 103 degrees.

3.30 p.m.—Death. The patient only improved temporarily after transfusion.

*Post-mortem Examination made September 5th, 1898.*

*Alimentary Canal.—Small Intestine.*—The Peyer's patches were large and swollen for about two and a half feet above the ileo-coecal valve. There was very slight superficial necrosis of the patches near the valve.

Two small rounded ulcers were noted above the inflamed Peyer's patches, evidently situated in the round follicles. One of these was occupied by a small yellow slough just separating; the other was clean cut, and penetrated to the peritoneal coat. Neither had any clotted blood adherent.

*Large Intestine.*—Contained about one and a half pint of blood and blood clots.

The other organs were normal, save a moderately enlarged spleen and congested lungs.

A CASE OF VERY ACUTE THROMBOSIS DURING CONVALESCENCE  
FROM A MILD ATTACK OF ENTERIC FEVER.

(By ALEX. MILLER, M.B., B.C. Cantab.)

A.W. Male. Aged 25 years. Married. Master baker. Admitted December 3rd, 1898. Previous history negative. Present illness dates from November 26th.

He had a short attack of what appeared to be enteric fever of a mild type. A typical rash appeared on the tenth day, at which time the tongue was dry and brown, the abdomen distended, and the splenic dulness increased. There was moderate pyrexia ( $102.2^{\circ}$ – $100^{\circ}$ ), with occasional intermissions, lasting for a few hours, up to the 22nd day, after which the temperature was subnormal, with the exception of two transient rises on the 28th and 33rd days, the second of which was accompanied by pain between the scapulæ, which yielded at once to salicylate of soda. The heart was normal in area and position, and there was no bruit.

On January 8th, 1899 (the 44th day), at 1.30 p.m., having had full diet for the first time, with half a pint of ale, he was sitting up in bed feeling quite comfortable when he suddenly felt very severe cramps in the whole length of his left leg and thigh.

By 1.40 p.m. the whole limb was darker in colour than the other and much swollen.

At 2.5 p.m. its colour was livid and almost purple in places. He was suffering great pain and was semi-collapsed, with cold and clammy skin and slight breathlessness. He had vomited once. There was tenderness and sense of resistance over the region of the femoral vein. The pulse in the dorsalis pedis artery could be felt. There were some petechiæ scattered over the skin of the shin and calf. The foot of the bed was raised on blocks, and linament. belladonnæ applied to the thigh.

At 4.15 p.m., inject. morph. hypoderm.  $2\frac{1}{2}$  m. was administered.

At midnight he was still very faint and in great pain. The hands were quite cold, the leg and foot fairly warm. He complained of nausea, but did not vomit. The radial pulse was almost imperceptible. He was ordered brandy, 8 oz. in the 24 hours; liq. strych. 5 m. every four hours.

January 9th.—Had no sleep up till 2 a.m. and vomited after everything. Inj. morphinæ 2 m. was given, after which the vomiting ceased, and he slept for about one hour during the night.

In the morning he was still in great pain, principally in the calf, and felt very faint. His face was pallid, hands warmer, radial pulse still very small. Temperature  $96^{\circ}$ – $97.6^{\circ}$ .

The swelling in the limb was increased; it extended up to, but not above, Poupart's ligament. The foot was œdematous, the leg and thigh very tense, giving a distinct feeling of fluctuation. The skin of the leg was of a bright brick-red colour with numerous small hæmorrhages, while that of the foot and thigh was pale. Any movement gave him great pain. Liquor morph. hydrochlor. 10 m. was added to the four-hourly mixture.

January 10th.—Did not have much sleep, the pain being at times very great. Vomited once during the night and four times in the day. He still showed signs of collapse, but the pulse-tension was slightly better. Temperature  $96.4^{\circ}$ – $97^{\circ}$ . The foot was more swollen, and the petechiæ over the calf and shin had run together in places, forming good-sized purpuric patches. He was ordered champagne, 2 pints, in addition to the brandy. At 11 p.m. he had inj. morph.  $2\frac{1}{2}$  m.

January 11th.—Vomited six times. Pulse better force, regular, 108 per minute. Condition of limb unchanged. Rectal feeding ordered (4 oz. of peptonised milk every four hours).

January 12th.—Vomited frequently up to 10 a.m. Troublesome hiccough came on in morning and again about noon. Pain over upper third of sternum. No abnormal physical signs. Great tenderness in leg and pain in groin on movement. Swelling less tense, but had extended one inch above Poupart's ligament. There was yellow discoloration of the skin over an area bounded behind by a vertical line through the inferior angle of the scapula, and in front by a curved line extending from the posterior fold of the axilla to the symphysis pubis, the concavity being forwards and the lower part being about an inch above and nearly parallel to Poupart's ligament. There was no swelling in the flank or axilla.

January 13th.—Tongue dry, tremulous, and thickly coated. Œdema of skin in the discoloured area.

January 14th.—Great general improvement. No vomiting or nausea. Tongue moist and coated with creamy fur. The improvement was steadily maintained,

but the local condition was unaltered, except that there was less pain and a slight increase in the œdema of the flank.

On January 20th he could bear his leg on an inclined plane, but still suffered from occasional cramp in the gastrocnemius and hamstring muscles. The swelling of the foot had disappeared by January 31st, but there was still much œdema of the leg and thigh.

Careful bandaging and rest on the inclined plane by degrees reduced the swelling. On February 14th a small but distinct pulsation could be felt in both the popliteal and posterior tibial arteries. By the 28th the circumferential measurements of the thighs were identical, while the affected calf was still one inch greater than the other. The skin on the posterior aspect of the limb still felt hard and thick. This thickening, however, as well as the difference in measurements, had entirely disappeared by March 8th.

Since March 11th he has been sitting up in a chair with the limb supported horizontally for a few hours every day. On the 13th there was a slight return of œdema in the leg, but it was transient.

There is now (March 22nd, 1899) no œdema, and his general condition is perfectly satisfactory.

This case is of interest owing to the following points, which are unusual in cases of phlebitis during convalescence from enteric fever:—

- (i.) The sudden and severe onset, accompanied by circulatory depression, sufficiently profound to cause symptoms of collapse and repeated emesis.
- (ii.) The rapid and extreme swelling of the limb, and the appearance of extravasations into the skin.
- (iii.) The implication of the skin of the flank and axilla.

With regard to the last point, it is my impression that the fluid was forced upwards through the subcutaneous tissue by the tension in the limb, and was prevented from tracking farther backwards by the support given by the pressure of the bed.

the local condition was unaltered, except that there was a slight increase in the volume of the fluid.

On January 23rd he could not bear to be in bed, but at 11 o'clock on an occasional return to the bathroom and passing water, the fluid had disappeared by January 24th, but there was still a small amount of fluid in the leg and thigh.

Careful bandaging and rest on the tubular plan for three weeks followed. On February 15th a small but distinct elevation could be felt in the epigastric and umbilical regions, in the form of a tumour, the measurements of the rigids were identical with the abdominal wall, and the fluid was greater than the other. The skin on the posterior aspect of the leg and the hand and foot. The following symptoms were also observed: The tumour had entirely disappeared by March 15th.

Since March 15th he has been sitting up in bed with the head elevated horizontally for a few hours every day. On the 15th there was a slight increase in the fluid in the leg, but it was treated as usual.

There is now (March 22nd, 1866) no return, and the general condition is perfectly satisfactory.

The case is of interest owing to the following points which are subject to the following observations during convalescence from chronic disease:

- (1) The tubular and rigid must be accompanied by constant elevation of the fluid in the leg, and a constant elevation of the fluid in the leg and thigh.
- (2) The rapid and intense swelling of the leg, and the appearance of the fluid in the leg.
- (3) The elevation of the fluid in the leg and thigh.

With regard to the first point it is my opinion that the fluid was increased through the subcutaneous tissue of the leg, and was removed from the leg by the support given by the bandage.



the foot condition was neglected, except that there was pain and a  
 tightness in the sides of the foot.

On January 25th he could not lie on his back, but still walked  
 occasionally, though in the forenoon and evening he was  
 the foot had disappeared by January 25th, but there was still a  
 to leg and thigh.

Cardiac bounding and not on the foot, pain for days, and the  
 swelling. On February 15th a small but distinct papule was felt in  
 a papule and a few more small papules in the skin of the  
 movements of the thigh were identical with the other side, and  
 all greater than the other. The skin on the posterior aspect of the foot  
 it had and thick. This thickening, however, as well as the  
 anatomically had entirely disappeared by March 25th.

Since March 15th he has been sitting up in a chair with the foot  
 horizontally for a few hours every day. On the 15th there was a slight  
 pain in the leg, but it was transient.

There is now (March 25th, 1896) no edema, and the general condition  
 is entirely satisfactory.

The case is of interest owing to the following points, which are  
 the of primary, during convalescence from acute leprosy.

(1) The thigh and wrist joints, accompanied by a  
 gradually produced to cause symptoms of edema and  
 atrophy.

(2) The rapid and extensive swelling of the foot, and the appearance of  
 atrophy in the skin.

(3) The resolution of the skin of the back and scapula.

With regard to the last point it is to be noted that the foot was  
 swollen during the convalescence from the disease in the back and  
 scapula from the same cause, but was not swollen during the  
 the foot.



the local condition was somewhat, except that there was less pain and a  
depression in the region of the back.

On January 25th he went back to his bed as usual, but the  
unusual amount of the pain was not relieved. The  
the foot had disappeared by January 25th, but there was still some  
in the leg and thigh.

General bathing and rest on the bed were for several weeks the  
only treatment. On February 15th a small but distinct  
paralytic and general fluid system. In the  
movements of the thighs were identical with the  
movements of the other. The pain in the  
leg and thigh. This following treatment as well as the  
movements had entirely disappeared by March 15th.

From March 15th he has been sitting up in a chair with the  
feet on a low stool for a few hours every day. On the 15th there was a  
small amount of the leg, but it was treated as usual.

There is now (March 15th) no return, and the general condition is  
very satisfactory.

The course of the disease may be divided into the following periods, which are  
of plastic changes in the spinal cord.

- (1) The first and worst part, accompanied by  
paralytic changes in the spinal cord.
- (2) The rapid and intense swelling of the  
extradural space.
- (3) The resolution of the swelling of the  
extradural space.

With regard to the first part it is to be remarked that the  
paralytic changes in the spinal cord were  
evident from the first, but were not  
the last.

Typhoid & Enteric.

A MAP OF  
**LONDON**  
SHOWING  
THE SEVERAL SANITARY DISTRICTS  
COMPRISED IN  
THE METROPOLITAN DISTRICT  
1895.

The shade represents **TYPHOID and ENTERIC** Cases notified under the provisions of the "Public Health (London) Act, 1891."  
Hospitals of the Metropolitan Asylums Board shown thus: **H. Hospital**  
Ambulance Stations thus: **A**  
Ambulance Wharves thus: **W**



the local condition was weathered, except that there was no pain and a  
lateness in the return of the back.

On January 23rd he went back to his job on an ordinary train, but this evening  
occasional cramps in the legs, ankles and feet were noted. The weather  
the feet had disappeared by January 25th, but there was still much cramping  
of the feet and thighs.

Careful bandaging and rest on the railroad train for several weeks, the  
illness. On February 11th a small but distinct redness was noted on the  
upper part of the thighs and posterior thigh region. In the next few days  
redness of the thighs was identical with the affected part of the feet  
in greater than the other. The skin on the posterior part of the feet  
and back. This thickening, however, as well as the illness  
entirely, had entirely disappeared by March 1st.

March 11th he has been sitting up in a chair with the feet exposed  
continually for a few hours every day. On the 15th there was a slight  
redness in the leg, but it was transient.

There is now (March 22nd, 1896) no redness, and the general condition is  
fairly satisfactory.

The course of disease owing to the following points which are important  
in the history of this case:—

- (1) The redness and other acute symptoms, associated in ordinary disease,  
gradually prolonged to some extent of relief and recovery.
- (2) The rapid and extreme swelling of the feet, and the appearance of  
redness on the skin.
- (3) The first outbreak of the skin of the feet and thighs.

With regard to the redness of the feet, it is not suggested that the feet were  
exposed to the sun, or to any other cause, or to the action of the sun, and was  
caused from the fact that the feet were exposed to the sun by the patient  
the feet.



The local condition was somewhat, except that there was no redness  
 of the skin in the region of the foot.

On January 23rd he could bear his leg on the foot and there was no  
 muscular atrophy in the gastrocnemius and hamstring muscles. The  
 foot had disappeared by January 25th, but there was still much redness  
 of the skin and slight

Central bowing and rest on the foot and pain by degrees returned the  
 foot. On February 14th a small but distinct redness could be seen on the  
 foot and the patient was somewhat thin. In the night the temperature  
 of the right wrist showed a slight rise above the normal and was  
 greater than the other. The skin on the posterior aspect of the foot  
 had a redness. The following day the redness was still more  
 extensive and entirely disappeared by March 5th.

March 15th he has been sitting upon a chair with the foot  
 resting on a few books every day. On the 15th there was a  
 redness on the leg, but it was limited to

The redness now (March 22nd, 1896) is more extensive and the general condition  
 is fairly satisfactory.

The course of the disease may be the following points which are  
 of plastic nature connected from certain points.

(1) The redness and slight heat, accompanied by muscular atrophy  
 gradually produced to some extent of redness and

(2) The rapid and extreme swelling of the foot, and the appearance of  
 redness on the skin.

(3) The resolution of the skin of the foot and swelling.

With regard to the redness of the foot it is not surprising that the foot was  
 swollen through the redness of the skin of the foot, and was  
 swollen from the redness of the skin of the foot, and was  
 swollen from the redness of the skin of the foot.



the local condition was weakened, except that there was no pain and a  
latency in the return of the heat.

On January 20th he could bear his leg on an ordinary chair, but still walked  
unusually easy to the post-office and having dinner. The weather  
the foot had disappeared by January 21st, but there was still much redness  
of the leg and thigh.

General weakness and rest on the bed were for several weeks. The  
elbow (on February 14th) a small but distinct redness could be felt in both  
of the feet and lower limbs. In the early part of the illness  
movements of the thighs were limited, with the affected leg not  
in greater than the other. The pain on the posterior aspect of the leg  
and thigh. This following recovery as well as the following  
movements had entirely disappeared by March 1st.

There is now (March 22nd, 1896) no return, and the general condition is  
entirely satisfactory. The leg has been sitting upon a chair with the foot supported  
entirely for a few hours every day. On the 15th there was a slight return  
of pain in the leg, but it was transient.

There is now (March 22nd, 1896) no return, and the general condition is  
entirely satisfactory.

The results of interest point to the following points, which are repeated  
in the patient's diary and elsewhere in the notes.

- (1) The patient and were most anxious to obtain a satisfactory diagnosis  
of the patient's condition, to cause symptoms of relief and recovery.
- (2) The rapid and extreme swelling of the foot, and the appearance of  
extravasation into the skin.
- (3) The resolution of the skin of the foot and thigh.

With regard to the last point it is my impression that the foot was  
swollen through the extravasation of the serum in the foot and thigh  
caused by the rupture of the vessels by the urgent strain of the patient  
on the bed.

Scarlet fever 21<sup>st</sup> quarter 1896

A MAP OF  
**LONDON**  
SHOWING  
THE SEVERAL SANITARY DISTRICTS  
COMPRISED IN  
THE METROPOLITAN DISTRICT  
1895.

The area reported SCARLET FEVER 21<sup>st</sup> QUARTER 1896  
of the Public Health Board for the  
Sanitary Districts of the Metropolitan Board of Health  
Anchorage Wharves, Ware, and  
Aldgate Wharves, Ware, and  
E. Hospital



The local condition was somewhat, except that there was not a  
great increase in the volume of the bank.

On January 20th he went back to his job as an ordinary clerk, but still retained  
an occasional trip to the post-office and banking office. The weather  
the foot had disappeared by January 21st, but there was still some  
of the old things.

Central bandaging and rest on the foot and pain by the  
elbow. On February 1st a small but distinct pain was felt in the  
epiphysis and posterior iliac region. In the evening the  
movements of the right were checked with the affected side, and  
greater than the other. The pain on the posterior aspect of the foot still  
remained. The following day, as well as the following  
days, and entirely disappeared by March 1st.

From March 1st he has been sitting up in a chair with the foot  
resting on a low stool every day. On the 15th there was a slight  
pain in the leg, but it was transient.  
There is now (March 15th, 1896) no pain, and the general condition is  
fairly satisfactory.

The results of interest during the following period when the  
state of the foot during convalescence from acute foot.

- (1) The foot and wrist were accompanied to the elbow during  
the period of acute symptoms of cellulitis and  
osteomyelitis.
- (2) The rapid and extreme swelling of the foot, and the appearance of  
the skin.
- (3) The position of the vein of the foot and wrist.

With regard to the foot and wrist it is not reported that the foot was  
swollen during the convalescence from the lesion in the foot, and was  
swollen (the swelling) further back by the support given by the  
the leg.



The local condition was somewhat worse than that of the rest of the district in the autumn of the year.

On January 25th he went back to his old home in the district. The weather was somewhat better than in the autumn, but there was still much snow on the ground and the roads were very slippery.

On February 15th a small but violent storm of wind and rain set in. The wind was from the north-west and the rain was very heavy. The snow was blown off the roofs and the roads were very slippery. The storm was over by the evening and the weather was somewhat better.

On the 15th there was a slight snowfall, but it was not very much. The wind was from the north and the rain was very heavy. The snow was blown off the roofs and the roads were very slippery.

There is now (March 15th, 1896) no snow, and the general condition is very satisfactory.

The cause of the outbreak is the following points which are suggested by the public health authorities from their investigations.

- (1) The water and food were contaminated by sanitary defects.
- (2) The rapid and extensive outbreak of the disease was the result of the rapid communication into the district.
- (3) The rapidity of the outbreak of the disease was the result of the rapid communication into the district.

With regard to the first point it is to be observed that the food was not contaminated by the water, but the water was contaminated by the food. The water was not contaminated by the food, but the food was contaminated by the water.

A MAP OF  
**LONDON**  
SHOWING  
THE SEVERAL SANITARY DISTRICTS  
COMPRISE IN  
THE METROPOLITAN DISTRICT  
1898.

The map represents **SCARLET FEVER** 1<sup>st</sup> QUARTER 1898.  
Hospitals of the Metropolitan Sanitary Board shown thus  E. Hospital  
Ambulance Stations thus  A  
Audience Wharves thus  W



