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**Contributors**

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METROPOLITAN ASYLUMS BOARD.

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ANNUAL REPORT—1899

(IN TWO VOLUMES).

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**VOL. II.**

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FOURTEENTH REPORT

OF THE

STATISTICAL COMMITTEE.

WITH

APPENDICES.

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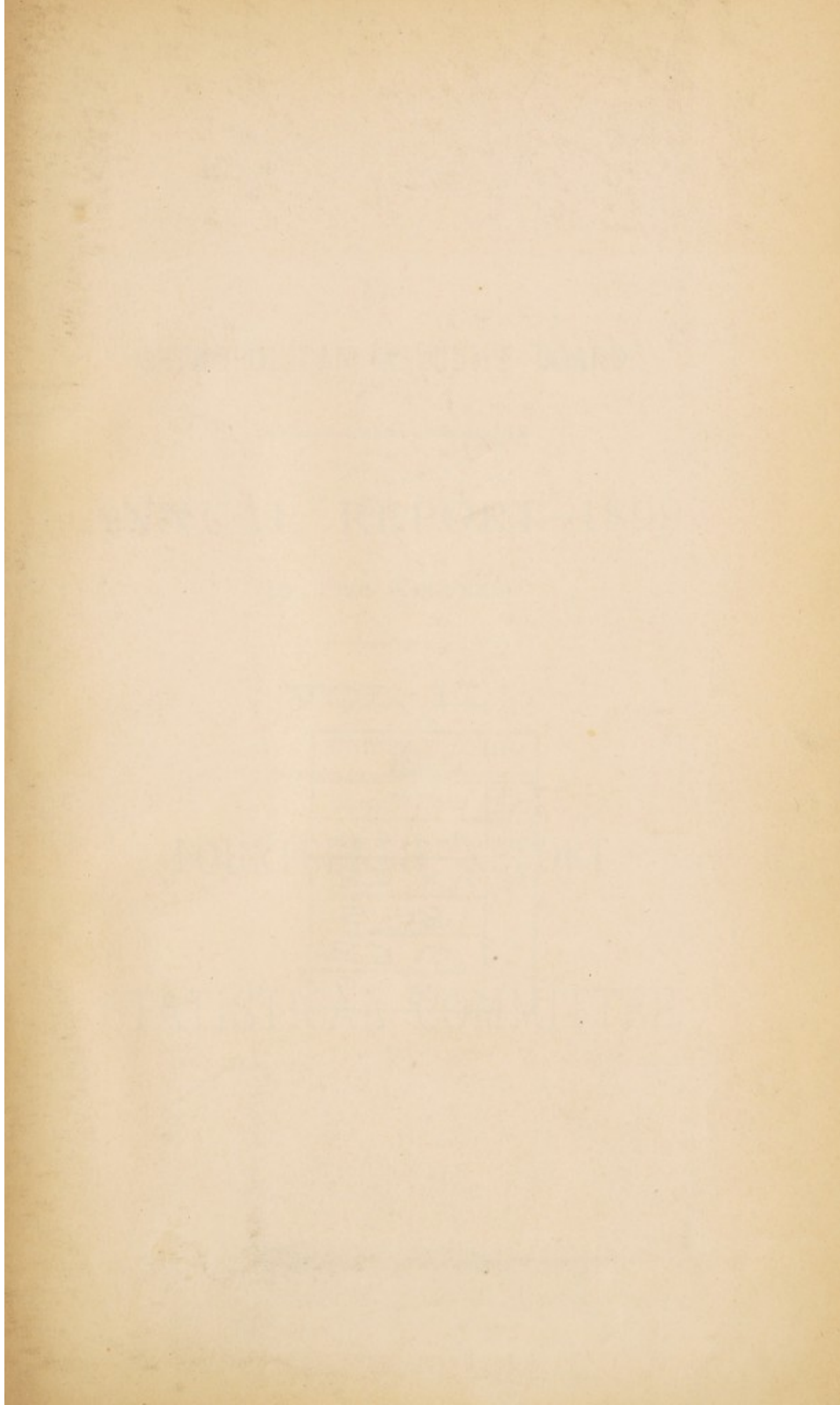
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METROPOLITAN ASYLUMS BOARD.

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ANNUAL REPORT—1899

(IN TWO VOLUMES).

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VOL. II.

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FOURTEENTH REPORT

OF THE

STATISTICAL COMMITTEE.



METROPOLITAN ASYLUM BOARD

ANNUAL REPORT-1899

IN TWO VOLUMES

VOL. II.

FOR THE YEAR

1899

STATISTICAL COMMITTEE

METROPOLITAN ASYLUMS BOARD

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# ANNUAL REPORT—1899

(IN TWO VOLUMES).


VOL. II.

## FOURTEENTH REPORT OF THE STATISTICAL COMMITTEE, WITH APPENDICES.

LONDON :  
MCCORQUODALE & CO., LIMITED, CARDINGTON STREET, N.W.

1900.





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# TABLE OF CONTENTS.

	PAGE
NAMES OF MEMBERS OF THE STATISTICAL COMMITTEE ... ..	9
Report of the Statistical Committee ... ..	11

## *Subjects referred to in the Report :—*

### i. INFECTIOUS DISEASES :

(1.) Notification Statistics and Spotted Maps ... ..	11-19
Table A—Notifications in the several sanitary districts during 1899 ... ..	13-14
Chart of weekly notifications and admissions of Scarlet Fever, and the total number under treatment <i>facing</i>	15
Ditto                      Diphtheria              ditto <i>facing</i>	15
Ditto                      Enteric Fever          ditto <i>facing</i>	15
Table A <sub>1</sub> —Return upon which the charts are based ...	15
Table A <sub>2</sub> —Cases notified during years 1890-1899 ...	16
Table A <sub>3</sub> —Percentage of admissions to notifications, 1890-1899 ... ..	16
Chart of monthly notifications during each year from 1890 to 1899 ... .. <i>facing</i>	17
Tables A <sub>4</sub> , A <sub>5</sub> , and A <sub>6</sub> —Sex and age distribution of Scarlet, Diphtheria, and Enteric cases ... ..	18-19
(2.) Ambulance work ... ..	19
(3.) Hospital accommodation—Fever and Diphtheria ... ..	20
"                      "                      Smallpox ... ..	20
(4.) Hospital Statistics—Fever ... ..	21-35
Table of maximum number of patients under treatment, 1899 ... ..	21
Table I. Admissions, discharges, and deaths, 1899...	21
" II. Monthly admissions, discharges, and deaths, 1899 ... ..	22
Chart of monthly admissions, 1887-1899 ... <i>facing</i>	22
Table III. Admissions from the several Parishes and Unions, and deaths, 1899... ..	23
" IV A. Scarlet Fever, admissions and deaths—Age and sex distribution, 1899 ... ..	24
" IV B. Ditto                      ditto                      1892-1899	25
" V A. Diphtheria, admissions and deaths—Age and sex distribution, 1899 ... ..	26
" V B. Ditto                      ditto                      1888-1894	27
" V B <sub>1</sub> . Ditto                      ditto                      1895-1899	27
" VI A. Enteric Fever, admissions and deaths—Age and sex distribution, 1899 ... ..	28
" VI B. Ditto                      ditto                      1871-1899	29
" VII A. Typhus Fever, admissions and deaths—Age and sex distribution, 1899 ... ..	29
" VII B. Ditto                      ditto                      1871-1899	30
" VIII. Cases of mistaken diagnosis, 1899... ..	34
Tables IX A, IX B, X A, X B, XI, and XII. Duration of residence in hospital of Scarlet Fever, Diphtheria, and Enteric Fever cases, and cases of miscellaneous diseases respectively	31-33



(4.) Hospital Statistics—Fever—*continued.*

	PAGE
Table XIII. Yearly admissions and deaths since establishment of Managers' Hospitals ... ..	36
Tables relating to each Fever Hospital, and summaries	64-94
Smallpox ... ..	34
Cases admitted into Shelters at South Wharf, 1899 ...	95
Non-Smallpox cases sent home and particulars of same, 1899 ... ..	95
Cases treated at the Hospital Ships, 1899 ... ..	96
Table I. Admissions from Parishes and Unions, discharges, and deaths, 1899 ... ..	98-100
Tables IIa., IIb., and IIc. Condition as regards vaccination of patients admitted, died, and discharged, 1899 ... ..	101-112
Table XIV. Admissions and deaths each year, 1870-1899	37
Smallpox mortality in London since 1838 ... ..	38
Cases of mistaken diagnosis ... ..	35
Fever and Smallpox Hospitals—	
Staff illness in Hospitals ... ..	39-42
Staff employed at Hospital Ships ... ..	97
ii. IMBECILITY :	
Accommodation for Imbeciles ... ..	43
Asylum Statistics—Observations on ... ..	43-46
“ “ Tables relating to each Institution, and summaries—	
Asylums ... ..	130-153
Schools ... ..	154-160
iii. TRAINING SHIP “EXMOUTH” :	
(1.) Statistics ... ..	47
iv. GENERAL SUMMARY of the numbers of persons who have been admitted into the Managers' various Institutions ... ..	47
v. MEDICAL SUPPLEMENT ... ..	47

**APPENDIX I.—Infectious Diseases.**

## i. AMBULANCE STATISTICS (TABLES)—

Number of patients removed in Ambulances, 1881-1899	48
Journeys made and mileage run by vehicles and horses, 1886-1899 .. ..	49
Number of persons conveyed in Steamboats, 1884-1899	50
Steamboats—Hours under steam, &c., 1899 ... ..	50

## ii. FEVER HOSPITALS.

## REPORTS OF THE MEDICAL SUPERINTENDENTS—

(1.) Eastern Hospital ... ..	51
(2.) North-Eastern Hospital ... ..	53
(3.) North-Western Hospital ... ..	54
(4.) Western Hospital ... ..	55
(5.) South-Western Hospital ... ..	56
(6.) Fountain Hospital ... ..	57
(7.) Grove Hospital ... ..	58



**APPENDIX I.—Infectious Diseases—continued.**

## ii. FEVER HOSPITALS—continued.

## REPORTS OF THE MEDICAL SUPERINTENDENTS—continued.

	PAGE
(8.) South-Eastern Hospital ... ..	60
(9.) Park Hospital (no report) ... ..	60
(10.) Brook Hospital ... ..	61
(11.) Northern Hospital ... ..	62
(12.) Gore Farm Hospital ... ..	63

## iii. SMALLPOX HOSPITALS.

## REPORTS OF THE MEDICAL OFFICERS—

(1.) River Ambulance Service ... ..	95
(2.) Hospital Ships ... ..	96

**APPENDIX II.—Imbecility.**

## IMBECILE ASYLUMS AND SCHOOLS.

## REPORTS OF THE MEDICAL SUPERINTENDENTS—

Leavesden Asylum ... ..	113
Caterham Asylum ... ..	119
Darenth Asylum and Schools ... ..	122

## LUNACY AND IMBECILITY STATISTICS (TABLES)—

## Admissions, discharges, and deaths during 1899—

Asylums ... ..	130-131
Schools ... ..	154

## Admissions, discharges, and deaths—

Asylums, since 1870 ... ..	130-131
Schools, since 1875 ... ..	154

Admissions, discharges, and deaths, with mean annual mortality  
and proportion of recoveries, 1890-1899—

Asylums ... ..	132-133
Schools ... ..	155

Classification of mental condition of patients admitted  
during 1899—

Asylums ... ..	134
Schools ... ..	156

Classification of mental condition of patients resident at end  
of 1899—

Asylums ... ..	135
Schools ... ..	156

Showing the probable causes of insanity in the patients  
admitted during 1899—

Asylums ... ..	136-137
----------------	---------

## Causes of death and ages of the decedents, 1899—

Asylums ... ..	138-141
Schools ... ..	158

History of the annual admissions, with discharges and deaths  
and numbers remaining of each year's admissions—

Asylums ... ..	142-145
Schools ... ..	157



**APPENDIX II.—Imbecility—continued.****LUNACY AND IMBECILITY STATISTICS (TABLES)—continued.**

	PAGE
Length of residence of patients discharged recovered and of those who died, 1899—	
Asylums ... ..	...146-147
Schools ... ..	... 158
Ages of patients resident at end of each year—	
Asylums, 1890-1899 ... ..	...146-147
Schools, 1893-1899... ..	... 159
Ages of admissions, discharges, and deaths, 1899—	
Asylums ... ..	...148-149
Schools ... ..	... 160
Employments of patients—	
Asylums ... ..	...150-151
Schools ... ..	... 160
Occupations of patients previous to admission, and condition as to marriage, 1899, Asylums ... ..	...152-153

**APPENDIX III.—Medical Supplement.**

Complications and Co-existent Infectious Diseases, 1899 ... ..	163
Post-Scarlatinal Diphtheria, 1899 ... ..	164
Antitoxic Serum Treatment, 1899 ... ..	180
Other papers :—	
On the Outbreak of Enteric Fever and Enteritis which occurred at Leavesden Asylum during the Spring and Summer of 1899, considered from a Clinical Point of View. By W. A. Densham, M.R.C.S. Eng., L.R.C.P. Lond., formerly Assistant Medical Officer, Leavesden Asylum ... ..	181
Observations on the Serum Reaction in certain of the Cases of Fever occurring at the Leavesden Asylum. By E. W. Goodall, M.D. Lond., Medical Superintendent, Eastern Hospital ... ..	186
A Case of Laparotomy and Suture of the Intestine for Perforation in Enteric Fever in a Child: Death. By C. Bolton, B.Sc., M.D., B.S. Lond., Assistant Medical Officer, Eastern Hospital ... ..	189
An Intra-Abdominal Abscess of Doubtful Origin occurring in connection with Enteric Fever: Operation: Recovery. By C. Bolton, B.Sc., M.D., B.S. Lond., Assistant Medical Officer, Eastern Hospital ... ..	191
A Case of Enteric Fever: Perforation of Intestinal Ulcer: Laparotomy: Death. By J. E. Beggs, M.D. Cantab., formerly Assistant Medical Officer, Park Hospital ... ..	192
Two Cases of Relapse or Second Attack in Varicella. By L. Falkener, M.A., M.R.C.S., Assistant Medical Officer, Western Hospital ... ..	196
Concerning the Diagnosis of Morbilli by means of the Specific Spots in the Mouth (Filatow's Spots). By L. Falkener, M.A., M.R.C.S., Assistant Medical Officer, Western Hospital ... ..	198
The Prodromal Rashes of Measles. By A. J. Adkins, M.D. Lond., M.R.C.S., L.R.C.P., D.P.H., Assistant Medical Officer Park Hospital ... ..	206

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1899-1900.

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# METROPOLITAN ASYLUMS BOARD.

## REPORT OF THE STATISTICAL COMMITTEE FOR THE YEAR 1899.

*To the Managers of the  
Metropolitan Asylum District.*

13th June, 1900.

We submit our report for the year 1899 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 42,285 (37,316)\* cases of infectious disease. Of these, 36,338 (31,821) were legally admissible to the Managers' hospitals. The remainder—mainly cases of erysipelas, but including also 326 (247) cases of puerperal fever—were not admissible. Out of the 36,338 admissible cases, 24,732 (20,849)† cases, or 68·08 (65·5) 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	...	33·59 per cent.	1895	...	50·31 per cent.
1891	...	36·69 „	1896	...	52·37 „
1892	..	43·17 „	1897	...	58·50 „
1893	...	36·91 „	1898	...	65·50 „
1894	...	52·23 „	1899	...	68·08 „

Table A, pp. 13-14, shows the number of notifications of, and deaths from, those notifiable diseases which are admissible to the Managers' hospitals, the ratio of such notifications and deaths to the population, the

\* Italic figures in brackets throughout are the corresponding figures for 1898.

† Including 9 cases detained for observation at South Wharf, but excluding Tottenham and other extra-metropolitan cases shown on p. 23.



number of notifications of other notifiable diseases, and the grand total of cases notified during 1899.

The increase in the ratio of diphtheria to scarlet fever, which has been a marked feature for some years past, again shows further progress, particularly in the eastern and south-eastern districts. The number of diphtheria notifications actually exceeded those of scarlet fever in seven different districts, viz., Mile End, St. Saviour's, St. George (Southwark), Newington, Bermondsey, Lambeth, and Camberwell.

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.



TABLE A.—Cases of Infectious Disease Notified, and Deaths therefrom, in London in 1899.

Sanitary Authorities in whose Districts the cases were resident.	Estimated Population, 1899.	Estimated Density of Population per Acre.	NOTIFICATIONS OF, AND DEATHS FROM, THOSE NOTIFIABLE DISEASES WHICH ARE ADMISSIBLE TO THE MANAGERS' HOSPITALS.														NOTIFICATIONS OF OTHER NOTIFIABLE DISEASES.				GRAND TOTAL OF NOTIFICATIONS.					
			NOTIFICATIONS.										DEATHS.													
			Smallpox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Enteric or Typhoid Fever.	Typhus Fever.	Relapsing Fever.	Continued Fever.	TOTAL NOTIFICATIONS.	Annual Rate per 1,000 persons living.	Smallpox.	Scarlet Fever.	Diphtheria (including Membranous Croup).	Enteric or Typhoid Fever.	Typhus Fever.	TOTAL DEATHS.	Annual Rate per 1,000 persons living.	Cholera.		Erysipelas.	Puerperal Fever.	TOTAL.		
WEST DISTRICTS.																										
Paddington ... ..	128,794	103	—	384	204	1	98	1	—	2	690	5·4	—	5	29	9	—	43	0·33	—	148	7	155	845		
Kensington ... ..	172,899	79	—	444	255	3	110	1	1	16	830	4·8	—	10	43	24	—	77	0·45	—	210	11	221	1,051		
Hammersmith ... ..	108,785	48	—	439	184	7	115	1	—	—	746	6·9	—	13	25	23	—	61	0·56	—	109	12	121	867		
Fulham ... ..	130,720	77	1	847	517	11	110	—	—	—	1,488	11·4	—	33	59	25	—	117	0·90	4	179	43	196	1,684		
Chelsea ... ..	96,721	122	—	281	235	3	64	—	—	3	586	6·1	—	8	26	18	—	52	0·54	1	84	9	94	680		
St. George, Hanover Square...	80,876	72	—	199	87	4	46	—	—	—	336	4·2	—	7	12	9	—	28	0·35	—	72	2	74	410		
Westminster ... ..	52,117	63	—	200	100	1	44	—	—	1	346	6·7	—	5	10	9	—	24	0·46	—	56	—	56	402		
St. James, Westminster ...	21,827	134	—	49	37	—	34	—	—	—	120	5·5	—	1	3	3	—	7	0·32	—	22	—	22	142		
NORTH DISTRICTS.																										
Marylebone ... ..	140,139	93	2	400	192	4	118	—	—	1	717	5·1	1	15	36	26	—	78	0·56	—	202	6	208	925		
Hampstead ... ..	80,252	36	—	289	112	4	45	—	—	—	450	5·6	—	6	15	4	—	25	0·31	—	52	5	57	607		
St. Pancras ... ..	244,548	92	—	862	562	16	246	—	—	—	1,686	6·9	—	25	111	42	—	178	0·73	1	311	13	325	2,011		
Islington ... ..	348,085	112	3	1,498	693	17	361	—	—	2	2,574	7·4	—	34	126	48	—	208	0·60	3	355	32	390	2,964		
Stoke Newington ... ..	35,187	55	—	182	30	—	17	—	—	—	229	6·5	—	3	6	5	—	14	0·40	—	82	7	89	268		
Hackney ... ..	222,571	67	2	987	688	20	268	—	—	5	1,970	8·9	—	16	89	35	—	140	0·63	—	301	19	320	2,290		
CENTRAL DISTRICTS.																										
St. Giles ... ..	37,196	152	—	75	29	2	24	—	—	—	130	3·5	—	—	5	4	—	9	0·24	—	55	1	56	186		
St. Martin-in-the-Fields ...	12,142	42	—	31	17	—	7	—	—	—	55	4·5	—	—	1	1	—	2	0·17	—	9	1	10	65		
Strand ... ..	23,016	139	—	55	37	—	12	—	—	—	104	4·5	—	1	7	—	—	8	0·35	—	17	—	17	121		
Holborn ... ..	29,621	148	—	117	61	1	40	—	—	2	221	7·5	—	3	6	7	—	16	0·54	—	45	1	46	267		
Clerkenwell ... ..	66,068	174	—	320	194	3	87	—	—	1	605	9·2	—	13	28	23	—	64	0·97	—	72	6	78	683		
St. Luke ... ..	40,868	172	—	162	98	5	36	—	—	—	301	7·4	—	8	10	6	—	24	0·59	—	64	—	64	365		
City of London ... ..	27,986	42	—	73	57	—	84	—	—	1	215	7·7	—	1	7	12	—	20	0·72	—	21	—	21	236		
EAST DISTRICTS.																										
Shoreditch ... ..	121,071	187	1	364	361	11	168	—	—	6	911	7·5	—	13	65	25	—	103	0·85	1	202	10	212	1,124		
Bethnal Green ... ..	128,938	171	—	430	323	22	202	—	—	—	977	7·6	—	9	59	38	—	106	0·82	1	326	19	345	1,323		
Whitechapel ... ..	81,891	215	3	209	190	12	138	3	—	—	555	6·8	1	2	27	15	—	45	0·55	—	125	4	129	684		
St. George-in-the-East ...	48,560	199	1	100	95	9	72	—	—	—	277	5·7	—	3	12	9	—	24	0·50	—	77	4	81	358		
Limehouse ... ..	58,807	126	2	171	130	2	136	—	—	—	441	7·5	—	1	34	22	—	57	0·97	—	78	3	81	522		
Mile End Old Town ... ..	113,161	167	—	294	361	12	138	—	—	2	807	7·2	—	5	65	26	—	96	0·85	—	149	7	156	963		
Poplar ... ..	170,606	73	2	420	404	20	277	—	—	4	1,127	6·6	—	10	77	38	—	125	0·73	—	230	14	244	1,371		
SOUTH DISTRICTS.																										
St. Saviour, Southwark ...	24,207	119	—	91	121	2	10	—	—	—	224	9·3	—	2	17	1	—	20	0·83	—	33	3	36	260		
St. George, Southwark ...	60,536	213	1	237	441	6	55	1	—	1	742	12·3	—	6	63	8	—	77	1·28	—	76	2	78	820		
Newington ... ..	124,166	197	—	509	706	22	107	—	—	—	1,344	10·9	—	13	104	23	—	140	1·13	—	201	5	206	1,550		
St. Olave, Southwark ...	11,098	89	—	64	32	—	17	—	—	—	113	10·2	—	2	9	2	—	13	1·17	—	3	1	4	117		
Bermondsey ... ..	85,835	137	—	402	536	7	105	3	—	1	1,054	12·3	—	10	88	18	1	117	1·37	—	88	3	91	1,145		
Rotherhithe ... ..	41,050	54	—	256	156	4	57	1	—	—	474	11·6	—	11	32	11	1	55	1·34	—	83	2	85	559		
Lambeth ... ..	308,108	78	1	1,014	1,095	22	214	1	—	10	2,357	7·7	—	25	158	50	—	233	0·76	3	335	26	364	2,721		
Battersea ... ..	174,996	81	—	722	595	13	167	—	—	—	1,497	8·6	—	14	62	38	—	114	0·65	—	208	14	222	1,719		
Wandsworth ... ..	209,655	23	—	911	610	8	121	—	—	1	1,651	7·9	—	9	68	18	—	95	0·45	—	240	13	253	1,904		
Camberwell ... ..	264,817	60	3	1,144	1,219	23	182	1	—	4	2,576	9·8	—	19	160	33	—	212	0·80	—	259	18	277	2,853		
Greenwich ... ..	182,513	53	1	1,205	650	33	162	—	—	2	2,053	11·3	—	17	73	30	—	120	0·66	1	271	14	286	2,339		
Lewisham (excluding Penge)	91,027	16	1	580	478	5	63	—	—	1	1,128	12·4	1	6	68	11	—	86	0·95	—	83	8	91	1,219		
Woolwich ... ..	41,542	37	1	167	129	1	24	—	—	—	332	8·0	—	4	21	5	—	30	0·72	—	28	4	32	354		
Plumstead ... ..	64,031	19	—	708	180	2	30	—	—	1	921	14·4	—	6	16	—	—	22	0·34	—	64	5	69	990		
Lee ... ..	40,219	6	—	195	135	—	21	—	—	—	351	8·8	—	4	14	4	—	22	0·55	—	29	2	31	382		
Port of London ... ..	—	—	4	2	10	—	21	—	—	—	37	—	—	—	—	—	—	—	—	—	2	—	2	39		
Totals ... ..	4,546,752	61	29	18,089	13,346	1338	4,433	13	1	69	36,338	8·0	3	398	1,946	758	2	3,107	0·69	15	5,606	326	5,947	42,285		
Percentage of the above cases admitted to the Managers' Hospitals (un-corrected for mistakes in diagnosis) ...																										
Percentage of deaths in the Managers' Hospitals.																										

\* This does not include 247 cases admitted into general hospitals under arrangements made with those hospitals by the Managers, but if such cases be included the number of admissions will be increased to 2,063, and the percentage to 46·33.

† Only cases of membranous croup which are certified to be of a diphtheritic nature may be admitted into the Board's hospitals.

‡ 28 cases were removed to the South Wharf, but only ten were eventually found to be genuine cases of smallpox.

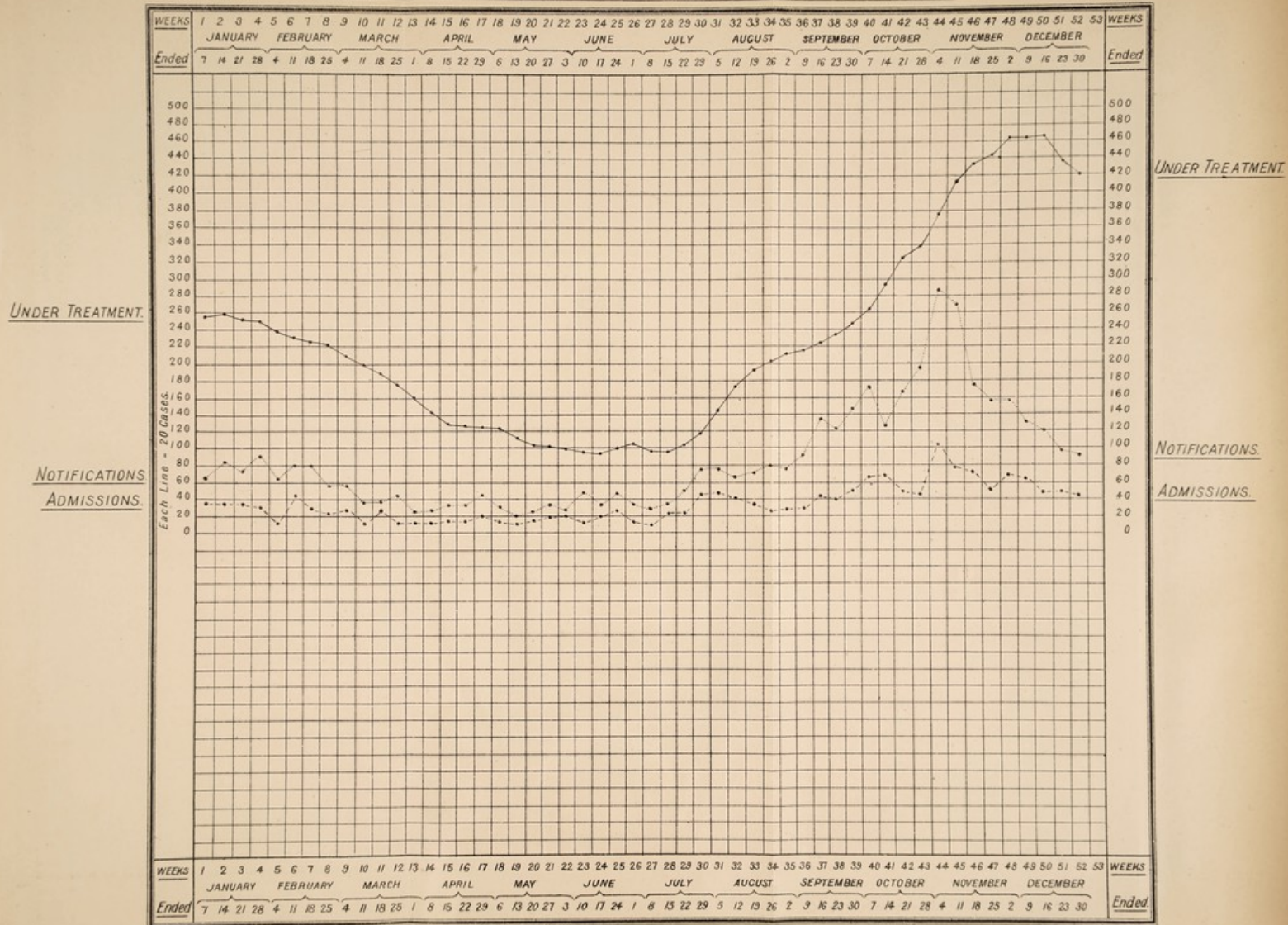
District		Population		Area		Density		Remarks	
Male	Female	Male	Female	Sq. Miles	Sq. Miles	Per Sq. Mile	Per Sq. Mile		
West Division									
1	2	3	4	5	6	7	8	9	10
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	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
North Division									
100	101	102	103	104	105	106	107	108	109
110	111	112	113	114	115	116	117	118	119
120	121	122	123	124	125	126	127	128	129
130	131	132	133	134	135	136	137	138	139
140	141	142	143	144	145	146	147	148	149
150	151	152	153	154	155	156	157	158	159
160	161	162	163	164	165	166	167	168	169
170	171	172	173	174	175	176	177	178	179
180	181	182	183	184	185	186	187	188	189
190	191	192	193	194	195	196	197	198	199
Central Division									
200	201	202	203	204	205	206	207	208	209
210	211	212	213	214	215	216	217	218	219
220	221	222	223	224	225	226	227	228	229
230	231	232	233	234	235	236	237	238	239
240	241	242	243	244	245	246	247	248	249
250	251	252	253	254	255	256	257	258	259
260	261	262	263	264	265	266	267	268	269
270	271	272	273	274	275	276	277	278	279
280	281	282	283	284	285	286	287	288	289
290	291	292	293	294	295	296	297	298	299
East Division									
300	301	302	303	304	305	306	307	308	309
310	311	312	313	314	315	316	317	318	319
320	321	322	323	324	325	326	327	328	329
330	331	332	333	334	335	336	337	338	339
340	341	342	343	344	345	346	347	348	349
350	351	352	353	354	355	356	357	358	359
360	361	362	363	364	365	366	367	368	369
370	371	372	373	374	375	376	377	378	379
380	381	382	383	384	385	386	387	388	389
390	391	392	393	394	395	396	397	398	399
South Division									
400	401	402	403	404	405	406	407	408	409
410	411	412	413	414	415	416	417	418	419
420	421	422	423	424	425	426	427	428	429
430	431	432	433	434	435	436	437	438	439
440	441	442	443	444	445	446	447	448	449
450	451	452	453	454	455	456	457	458	459
460	461	462	463	464	465	466	467	468	469
470	471	472	473	474	475	476	477	478	479
480	481	482	483	484	485	486	487	488	489
490	491	492	493	494	495	496	497	498	499
Total									
500	501	502	503	504	505	506	507	508	509
510	511	512	513	514	515	516	517	518	519
520	521	522	523	524	525	526	527	528	529
530	531	532	533	534	535	536	537	538	539
540	541	542	543	544	545	546	547	548	549
550	551	552	553	554	555	556	557	558	559
560	561	562	563	564	565	566	567	568	569
570	571	572	573	574	575	576	577	578	579
580	581	582	583	584	585	586	587	588	589
590	591	592	593	594	595	596	597	598	599
600	601	602	603	604	605	606	607	608	609
610	611	612	613	614	615	616	617	618	619
620	621	622	623	624	625	626	627	628	629
630	631	632	633	634	635	636	637	638	639
640	641	642	643	644	645	646	647	648	649
650	651	652	653	654	655	656	657	658	659
660	661	662	663	664	665	666	667	668	669
670	671	672	673	674	675	676	677	678	679
680	681	682	683	684	685	686	687	688	689
690	691	692	693	694	695	696	697	698	699
700	701	702	703	704	705	706	707	708	709
710	711	712	713	714	715	716	717	718	719
720	721	722	723	724	725	726	727	728	729
730	731	732	733	734	735	736	737	738	739
740	741	742	743	744	745	746	747	748	749
750	751	752	753	754	755	756	757	758	759
760	761	762	763	764	765	766	767	768	769
770	771	772	773	774	775	776	777	778	779
780	781	782	783	784	785	786	787	788	789
790	791	792	793	794	795	796	797	798	799
800	801	802	803	804	805	806	807	808	809
810	811	812	813	814	815	816	817	818	819
820	821	822	823	824	825	826	827	828	829
830	831	832	833	834	835	836	837	838	839
840	841	842	843	844	845	846	847	848	849
850	851	852	853	854	855	856	857	858	859
860	861	862	863	864	865	866	867	868	869
870	871	872	873	874	875	876	877	878	879
880	881	882	883	884	885	886	887	888	889
890	891	892	893	894	895	896	897	898	899
900	901	902	903	904	905	906	907	908	909
910	911	912	913	914	915	916	917	918	919
920	921	922	923	924	925	926	927	928	929
930	931	932	933	934	935	936	937	938	939
940	941	942	943	944	945	946	947	948	949
950	951	952	953	954	955	956	957	958	959
960	961	962	963	964	965	966	967	968	969
970	971	972	973	974	975	976	977	978	979
980	981	982	983	984	985	986	987	988	989
990	991	992	993	994	995	996	997	998	999
1000	1001	1002	1003	1004	1005	1006	1007	1008	1009
1010	1011	1012	1013	1014	1015	1016	1017	1018	1019
1020	1021	1022	1023	1024	1025	1026	1027	1028	1029
1030	1031	1032	1033	1034	1035	1036	1037	1038	1039
1040	1041	1042	1043	1044	1045	1046	1047	1048	1049
1050	1051	1052	1053	1054	1055	1056	1057	1058	1059
1060	1061	1062	1063	1064	1065	1066	1067	1068	1069
1070	1071	1072	1073	1074	1075	1076	1077	1078	1079
1080	1081	1082	1083	1084	1085	1086	1087	1088	1089
1090	1091	1092	1093	1094	1095	1096	1097	1098	1099
1100	1101	1102	1103	1104	1105	1106	1107	1108	1109
1110	1111	1112	1113	1114	1115	1116	1117	1118	1119
1120	1121	1122	1123	1124	1125	1126	1127	1128	1129
1130	1131	1132	1133	1134	1135	1136	1137	1138	1139
1140	1141	1142	1143	1144	1145	1146	1147	1148	1149
1150	1151	1152	1153	1154	1155	1156	1157	1158	1159
1160	1161	1162	1163	1164	1165	1166	1167	1168	1169
1170	1171	1172	1173	1174	1175	1176	1177	1178	1179
1180	1181	1182	1183	1184	1185	1186	1187	1188	1189
1190	1191	1192	1193	1194	1195	1196	1197	1198	1199
1200	12012								





# METROPOLITAN ASYLUMS BOARD.

CASES OF ENTERIC FEVER notified and admitted during each week of 1899.  
together with the mean number under treatment each week, (uncorrected for mistakes in diagnosis).

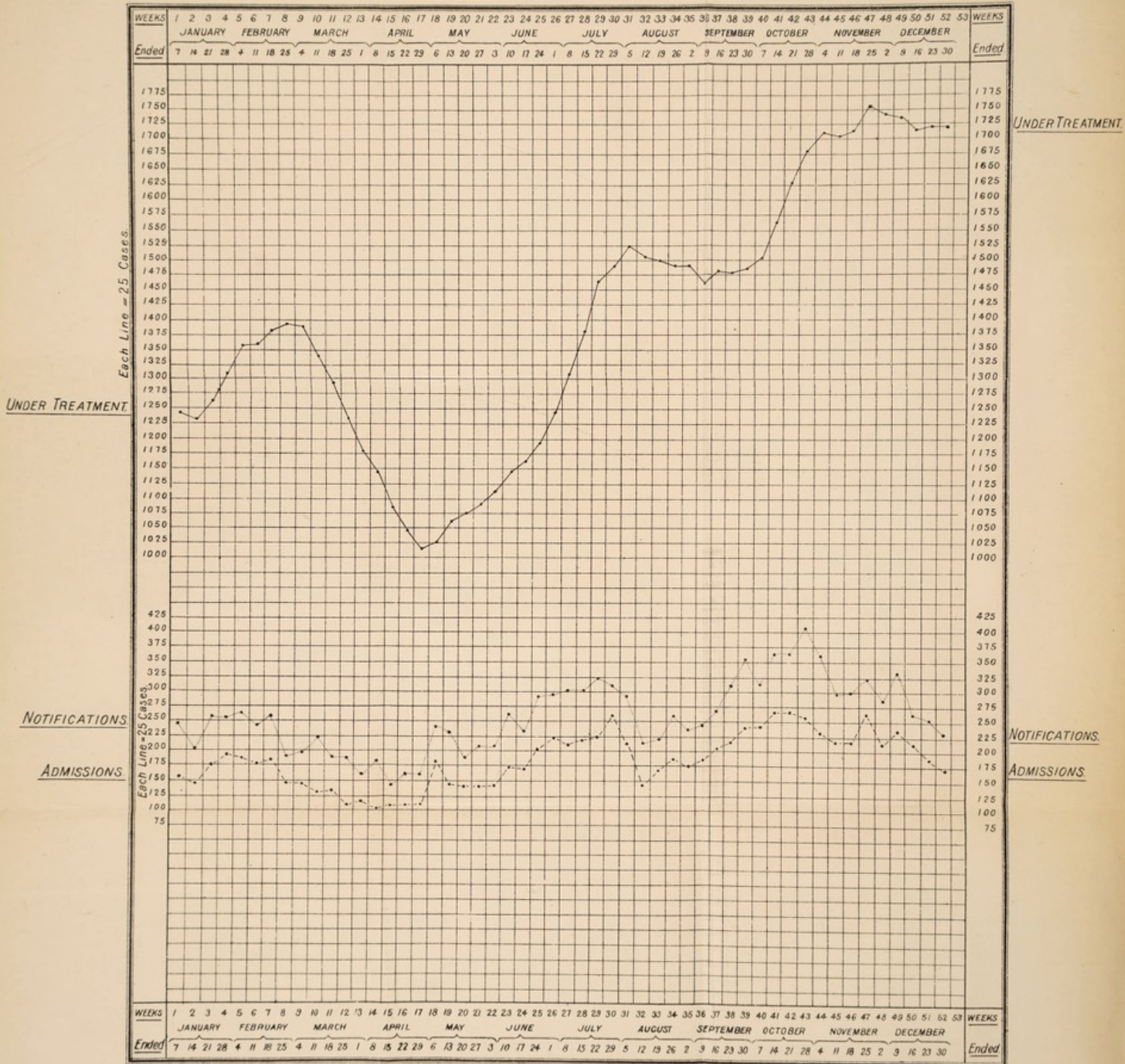


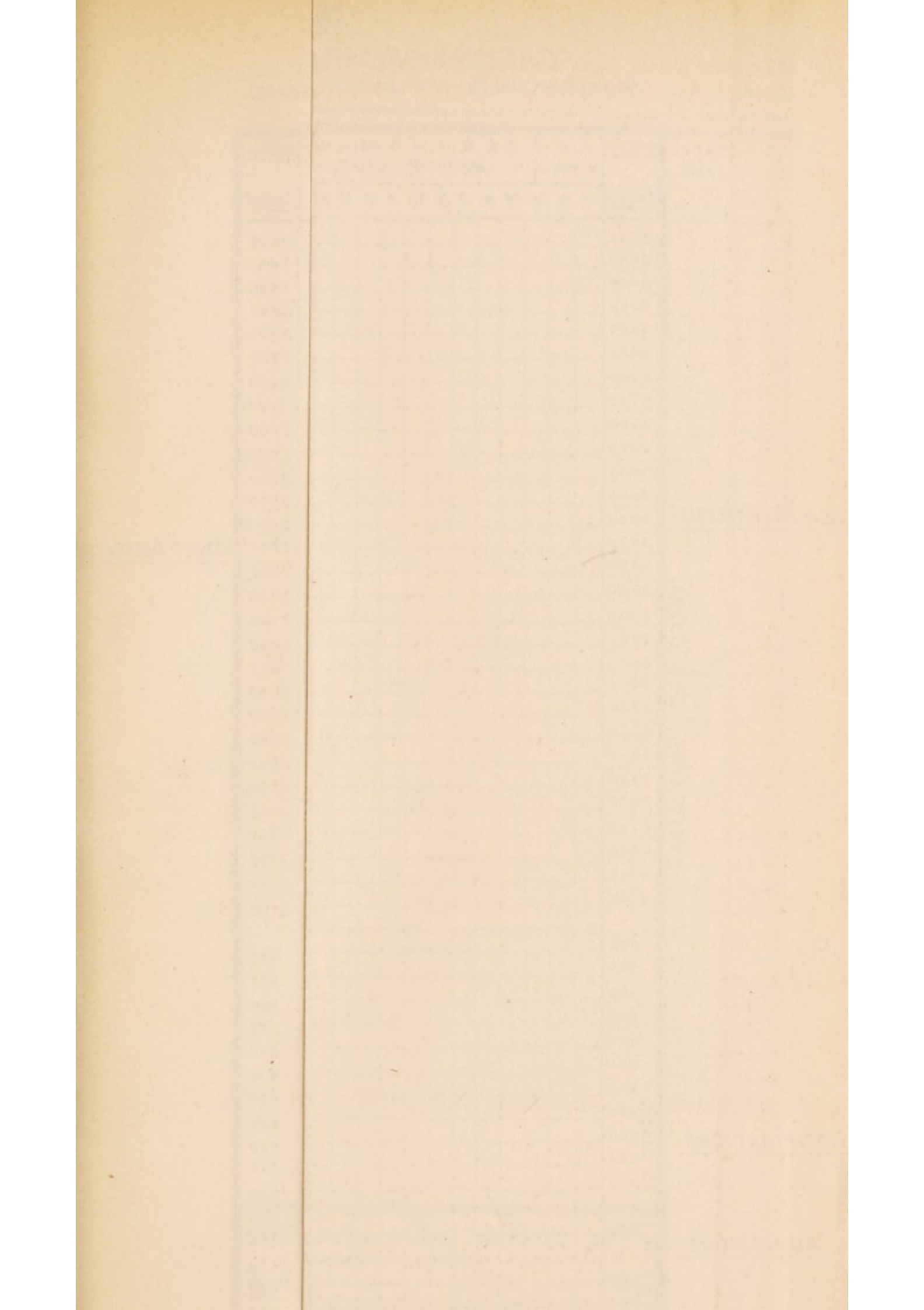




# METROPOLITAN ASYLUMS BOARD.

CASES OF DIPHTHERIA notified and admitted during each week of 1899.  
together with the mean number under treatment each week, (uncorrected for mistakes in diagnosis).

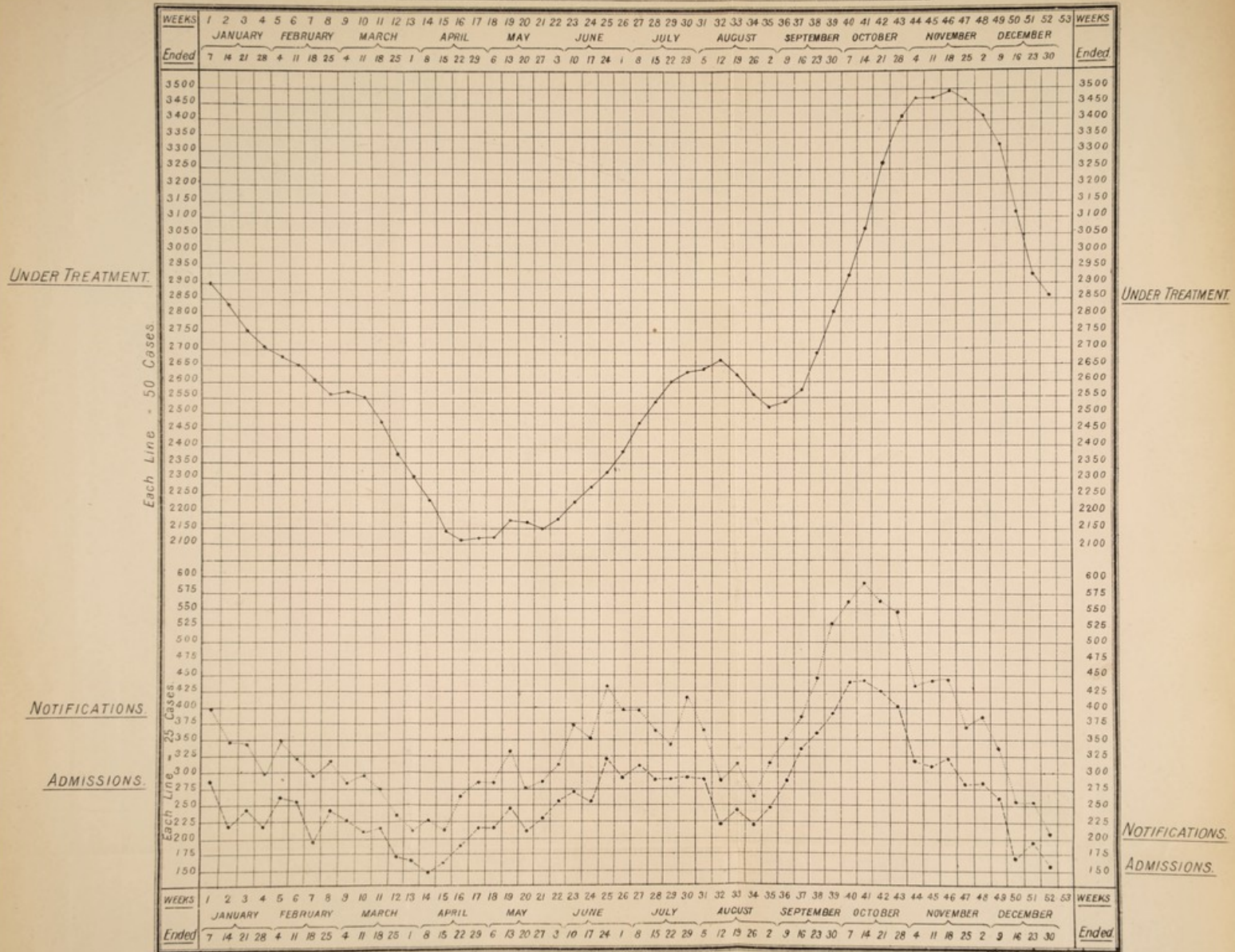






# METROPOLITAN ASYLUMS BOARD.

CASES OF SCARLET FEVER notified and admitted during each week of 1899.  
together with the mean number under treatment each week, (uncorrected for mistakes in diagnosis).





The numbers of notifications and admissions in each chart are based upon the figures in the following table:—

TABLE A1.—Cases of Scarlet Fever, Diphtheria, and Enteric Fever notified, Number admitted, and Percentage of Admissions to Notifications for each week during 1899.

WEEK ENDED		SCARLET FEVER.			DIPHTHERIA.			ENTERIC FEVER.		
		Notifica- tions.	Ad- missions.	Percentage of Admissions.	Notifica- tions.	Ad- missions.	Percentage of Admissions.	Notifica- tions.	Ad- missions.	Percentage of Admissions.
1899.										
1	Jan. 7	391	285	72·89	244	153	62·70	63	36	57·14
2	" 14	341	215	63·05	203	146	71·92	81	35	43·21
3	" 21	338	239	70·71	256	174	67·97	75	35	46·67
4	" 28	299	217	72·58	256	189	73·83	88	29	32·96
5	Feb. 4	346	259	74·86	263	184	69·96	63	13	20·63
6	" 11	322	251	77·95	243	176	72·43	79	42	53·16
7	" 18	296	197	66·55	257	179	69·65	78	30	38·46
8	" 25	318	238	74·84	193	149	77·20	58	23	39·66
9	Mar. 4	280	225	80·36	197	142	72·08	55	27	49·09
10	" 11	294	207	70·41	222	131	59·01	35	14	40·00
11	" 18	275	215	78·18	189	132	69·84	39	26	66·67
12	" 25	231	170	73·59	182	110	60·44	43	15	34·88
13	Apr. 1	206	162	78·64	158	120	75·95	24	13	54·17
14	" 8	226	145	64·16	181	103	56·91	27	13	48·15
15	" 15	212	160	75·47	146	107	73·29	34	16	47·06
16	" 22	262	185	70·61	159	108	67·92	35	16	45·71
17	" 29	280	217	77·50	159	109	68·55	45	21	46·67
18	May 6	281	216	76·87	241	179	74·27	31	15	48·39
19	" 13	329	247	75·08	230	149	64·78	20	11	55·55
20	" 20	276	207	75·00	190	144	75·79	25	16	64·00
21	" 27	284	226	79·58	206	143	69·42	33	19	57·58
22	June 3	311	251	80·71	205	145	70·73	28	21	75·00
23	" 10	372	270	72·58	259	172	66·41	51	17	33·33
24	" 17	350	254	72·57	231	170	73·59	35	20	57·14
25	" 24	432	322	74·54	291	201	69·07	47	26	55·32
26	July 1	398	290	72·86	297	223	75·08	35	17	48·57
27	" 8	399	309	77·44	301	213	70·46	29	11	37·93
28	" 15	363	287	79·06	302	221	73·18	36	22	61·11
29	" 22	342	285	83·33	322	224	69·57	49	23	46·94
30	" 29	416	290	69·71	310	259	83·55	78	46	58·97
31	Aug. 5	360	286	79·44	297	214	72·05	77	50	64·94
32	" 12	287	224	78·05	218	147	67·43	69	42	60·87
33	" 19	311	242	77·81	221	171	77·38	76	38	50·00
34	" 26	264	221	83·71	258	188	72·87	81	28	34·57
35	Sep. 2	318	247	77·67	236	175	74·15	78	29	37·18
36	" 9	350	289	82·57	247	183	74·09	94	29	30·85
37	" 16	381	333	87·40	271	202	74·54	136	42	30·88
38	" 23	445	357	80·22	307	215	70·03	124	41	33·06
39	" 30	525	390	74·29	352	239	67·90	143	52	36·36
40	Oct. 7	556	439	78·96	318	244	76·73	175	68	38·86
41	" 14	583	439	75·17	368	267	72·75	125	70	56·00
42	" 21	558	425	76·16	363	266	73·28	168	49	29·17
43	" 28	548	401	73·18	379	256	67·55	199	45	22·61
44	Nov. 4	432	316	73·15	333	228	68·47	284	103	36·27
45	" 11	442	312	70·59	299	218	72·91	268	79	29·48
46	" 18	446	322	72·20	300	216	72·00	177	73	41·24
47	" 25	373	284	76·14	323	263	81·42	158	54	34·18
48	Dec. 2	386	285	73·83	285	211	74·04	159	69	43·40
49	" 9	332	266	80·12	331	234	70·69	131	65	49·62
50	" 16	255	171	67·06	261	217	83·14	120	50	41·67
51	" 23	255	198	77·65	255	186	72·94	99	49	49·49
52	" 30	212	154	72·64	231	174	75·32	93	43	46·24
		18,089	13,642	*75·41	13,346	9,569	*71·69	4,453	1,836	*41·23

\* These percentages include the extra-metropolitan cases admitted, and hence are higher than those at the bottom of Table A.



This table is also of interest as showing the great variation from week to week in the percentages of cases admitted to hospital. The variations range from 63·05 to 87·40 in the case of scarlet fever; from 56·91 to 83·55 in the case of diphtheria; and from 20·63 to 75·00 in the case of enteric fever.

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 1899:—

TABLE A<sub>2</sub>.—*Number of cases of admissible Diseases\* notified during the years from 1890 to 1899.*

YEARS.	Scarlet.	Diphtheria.	Enteric.	Typhus.	Smallpox.	Relapsing Fever.†	Continued Fever.†	TOTALS.
1890	15,330	5,870	2,877	35	60	7	237	24,416
1891	11,398	5,907	3,372	27	114	39	152	21,009
1892	27,095	7,781	2,465	20	423	7	147	37,938
1893	36,901	13,026	3,663	22	2,813	4	205	56,634
1894	18,440	10,655	3,360	21	1,192	2	162	33,832
1895	19,757	10,772	3,506	14	979	3	105	35,136
1896	25,647	13,362	3,190	6	225	3	103	42,536
1897	22,848	12,803	3,103	4	104	1	67	38,930
1898	16,894	11,543	3,024	16	32	1	55	31,565
1899	18,089	13,346	4,453	13	29	1	69	36,000

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. 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 1899.*

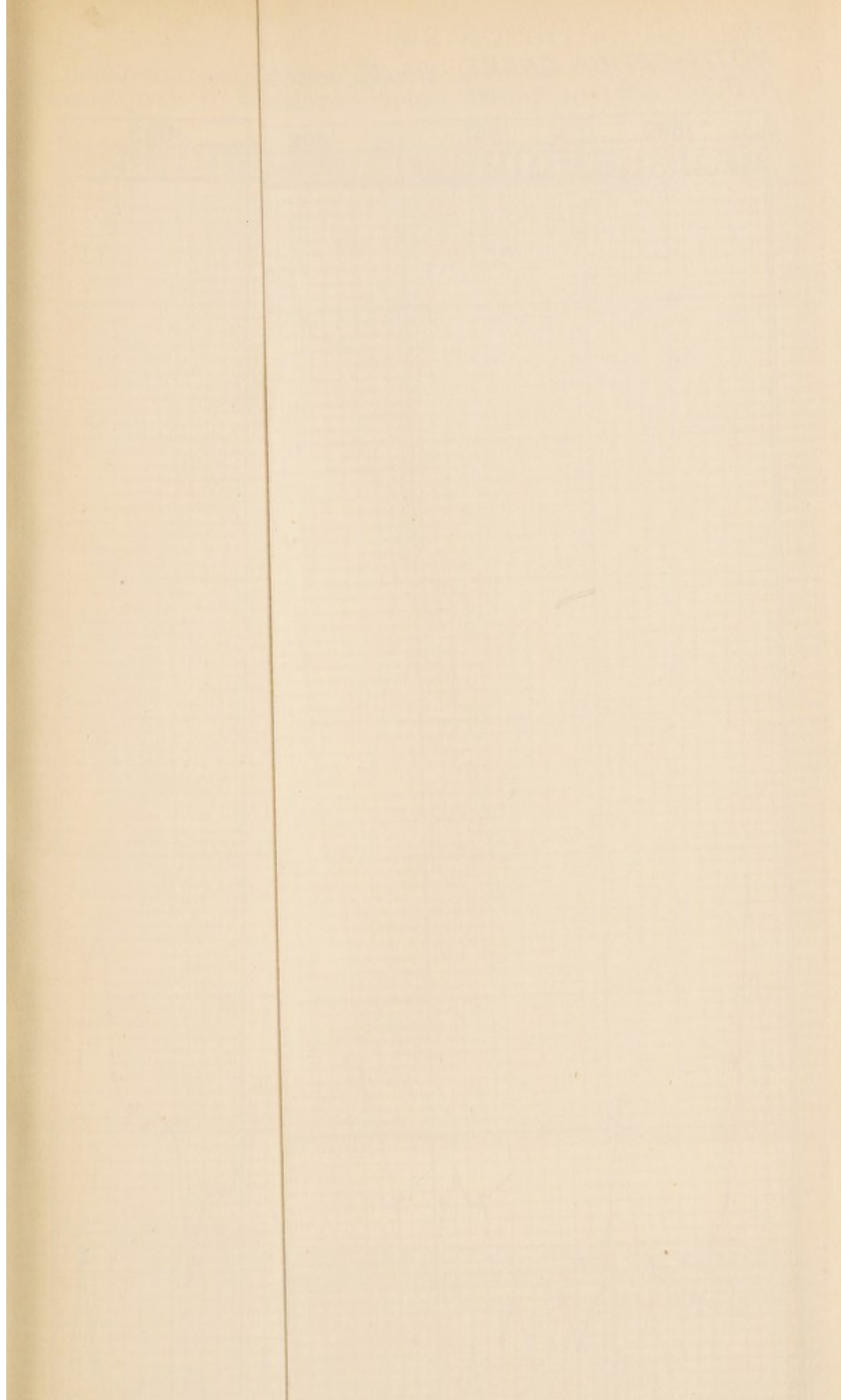
DISEASES.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Scarlet Fever ...	42·82	46·84	48·80	39·68	63·94	58·20	62·65	66·99	73·16	74·34
Diphtheria... ..	17·87	25·07	30·19	24·52	38·89	41·55	39·92	51·64	62·12	69·69
Enteric Fever ...	22·49	27·34	25·27	20·01	20·24	24·13	27·02	30·36	36·64	40·78
Typhus Fever ...	42·86	70·37	60·00	36·36	61·90	42·86	33·33	50·00	87·50	84·62

N.B.—These percentages are exclusive of extra Metropolitan cases, but 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 Fever Statistical Table on p. 21.

The proportion of scarlet fever admissions to notifications has risen from 42·82 to 74·34, of diphtheria cases from 17·87 to 69·69, and of enteric cases

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

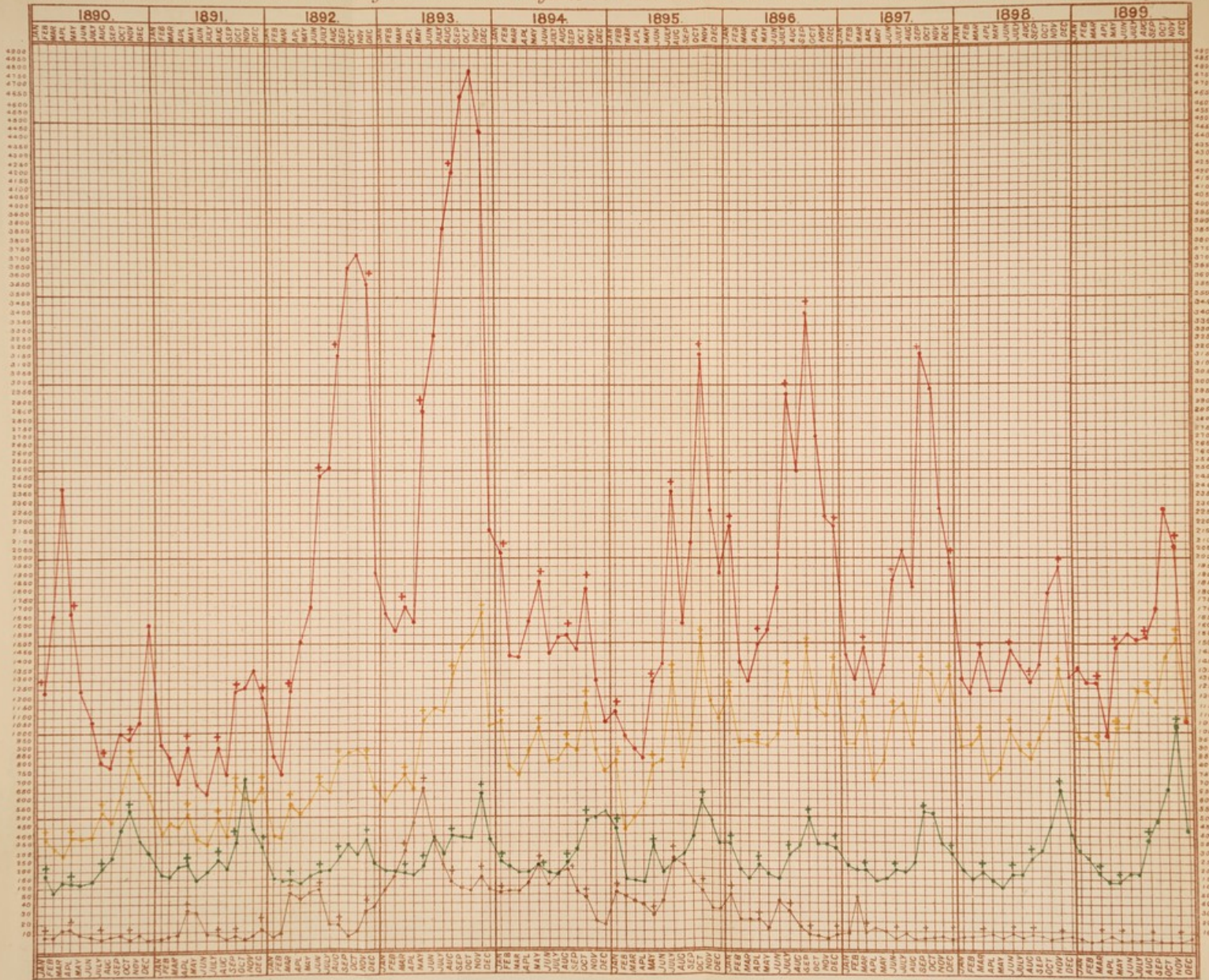
† Although relapsing and continued fevers are admissible to the Managers' hospitals, few cases so certified are sent in.





# 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 22·49 to 40·78. The low figures of 1893 were due to the fact that both diseases were unusually prevalent that year, and the Board's hospital accommodation was quite inadequate.

Enteric fever was more prevalent in 1899 than in any previous year since the introduction of compulsory notification.

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 may still become 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 1899 will be found in the pocket at the end of this volume.

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

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

*Diphtheria* cases are on two maps—one for each half-year.

*Enteric Fever* cases are on one map.

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

AGE AND SEX DISTRIBUTION. Tables A<sub>4</sub>, A<sub>5</sub>, and A<sub>6</sub> exhibit the age and sex of cases notified as scarlet fever, diphtheria, and enteric fever respectively during the year. It will be seen that the two former 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 1899.*

AGES.	Males.	Females.	Total.
Under 1 ... ..	120	91	211
1 to 2 ... ..	293	311	604
2 „ 3 ... ..	608	515	1,123
3 „ 4 ... ..	851	819	1,670
4 „ 5 ... ..	930	931	1,861
Total under 5 ... ..	2,802	2,667	5,469
5 to 10 ... ..	3,265	3,763	7,028
10 „ 15 ... ..	1,371	1,790	3,161
15 „ 20 ... ..	589	552	1,141
20 „ 25 ... ..	234	336	570
25 „ 30 ... ..	121	192	313
30 „ 35 ... ..	65	97	162
35 „ 40 ... ..	30	52	82
40 „ 45 ... ..	19	16	35
45 „ 50 ... ..	9	9	18
50 „ 55 ... ..	2	5	7
55 „ 60 ... ..	4	1	5
Upwards ... ..	4	4	8
Unrecorded ... ..	35	54	89
Sex unrecorded ... ..	1	...	1
Total ... ..	8,551	9,538	18,089

TABLE A5.—*Ages of cases notified as Diphtheria during 1899.*

AGES.	Males.	Females.	Total.
Under 1 ... ..	132	116	248
1 to 2 ... ..	391	389	780
2 „ 3 ... ..	607	508	1,115
3 „ 4 ... ..	667	711	1,378
4 „ 5 ... ..	722	748	1,470
Total under 5 ... ..	2,519	2,472	4,991
5 to 10 ... ..	2,021	2,468	4,489
10 „ 15 ... ..	655	889	1,544
15 „ 20 ... ..	311	451	762
20 „ 25 ... ..	182	313	495
25 „ 30 ... ..	113	273	386
30 „ 35 ... ..	77	187	264
35 „ 40 ... ..	46	90	136
40 „ 45 ... ..	28	48	76
45 „ 50 ... ..	10	44	54
50 „ 55 ... ..	9	26	35
55 „ 60 ... ..	7	12	19
Upwards ... ..	7	13	20
Unrecorded ... ..	33	41	74
Sex unrecorded ... ..	1	...	1
Total ... ..	6,019	7,327	13,346

TABLE A 6.—*Ages of cases notified as Enteric Fever during 1899.*

AGES.	Males.	Females.	Total.
Under 1 ... ..	2	4	6
1 to 2 ... ..	8	7	15
2 „ 3 ... ..	17	16	33
3 „ 4 ... ..	24	31	55
4 „ 5 ... ..	45	30	75
Total under 5 ... ..	96	88	184
5 to 10 ... ..	309	271	580
10 „ 15 ... ..	404	331	735
15 „ 20 ... ..	388	294	682
20 „ 25 ... ..	354	300	654
25 „ 30 ... ..	328	251	579
30 „ 35 ... ..	216	144	360
35 „ 40 ... ..	147	124	271
40 „ 45 ... ..	79	75	154
45 „ 50 ... ..	52	47	99
50 „ 55 ... ..	31	34	65
55 „ 60 ... ..	14	22	36
Upwards ... ..	10	14	24
Unrecorded ... ..	14	16	30
Sex unrecorded ... ..	...	...	...
Total ... ..	2,442	2,011	4,453

**Ambulance Work.** (2.) The statistical tables concerning the work of the ambulance service will be found on pp. 48 to 50.

During the year 24,945 (20,959)\* fever, diphtheria, and smallpox patients were conveyed to the various hospitals of the Managers; 7,973 (6,437) convalescent patients were transferred to the Northern and Gore Farm Hospitals; and 7,904 (6,671) recovered patients were brought back from those hospitals to London. Further, 369 (326) private persons were removed on payment to other places than the Managers' hospitals; 144 (71) were taken from the out-patient departments of general hospitals to their homes, owing to there being no vacant beds in the Managers' hospitals (they were admitted the following day); and 247 (133) enteric patients were removed from their homes to the general hospitals, where arrangements for their reception had been made by the Managers.

Altogether, 42,119 (35,043) removals were effected by the land ambulance service during 1899, and the various vehicles made 28,184 (23,120) journeys, and ran 260,367 (214,677) miles.

The steamboats of the river ambulance service conveyed 1,468 (955) passengers to and from the hospital ships at Long Reach; of that number 11 (6) were patients taken to the hospital ships, 6 (5) were recovered.

\* Italic figures in brackets throughout are the corresponding figures for 1898.



patients brought back to London, and 1,451 (944)\* were visitors, staff, workmen, &c.

**Hospital Accommodation.** (3.) FEVER AND DIPHTHERIA.—The new Grove Hospital, at Tooting, and the new isolation blocks at the Eastern and Northern Hospitals were brought into use during the year.

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

HOSPITAL.	No. of Beds.
Eastern Hospital .. .. .	362
North-Eastern Hospital (temporary buildings) ..	386
North-Western Hospital (including some temporary buildings) .. .. .	460
Western Hospital .. .. .	450
South-Western Hospital .. .. .	366
Fountain Hospital (temporary buildings) .. ..	402
Grove Hospital .. .. .	522
South-Eastern Hospital (including small temporary buildings) .. .. .	435
Park Hospital .. .. .	548
Brook Hospital .. .. .	488
Northern Hospital (including temporary buildings)	764
Total .. .. .	5,183

Further accommodation will be provided at :—

North-Eastern Hospital, additional beds when the permanent buildings now in course of erection shall have been completed .. .. .	128
Southern Convalescent Hospital .. .. .	800
Total .. .. .	928
Grand Total .. .. .	<u>6,111</u>

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.

\* Italic figures in brackets throughout are the corresponding figures for 1898.



(4.) FEVER.—On the last day of 1898 there were 4,377 patients in the fever hospitals then open.

**Hospital  
Statistics.**

By April 29th, 1899, the number under treatment had fallen to the minimum, 3,208 (*May 28th, 1898, 3,120*)\*. After that date, with the exception of a temporary fall during August, the number rose until November 21st, when the maximum, 5,710 (*November 21st, 1898, 4,745*), for the year was attained, and it then declined until the end of the year, when 4,895 (*4,377*) 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 ... ..	86	214	...	51	...	351
North-Eastern Hospital..	417	...	...	2	...	419
North-Western " ...	280	160	...	58	...	438
Western " ...	227	156	...	64	...	447
South-Western " ...	212	102	...	26	...	340
Fountain " ...	206	153	...	...	...	359
Grove " ...	33	178	...	132	...	343
South-Eastern " ...	119	208	...	48	...	375
Park " ...	289	255	...	36	...	580
Brook " ...	296	192	...	28	...	516
Northern " ...	693	95	...	...	...	788
Gore Farm " ...	656	98	...	...	...	754
TOTALS ... ..	3,514	1,751	..	445		5,710†

Tables I. to VIII. and the accompanying chart summarise the several fever hospital tables given on pp. 64 to 94.

TABLE I.—*Admissions, Discharges, and Deaths at Fever Hospitals during 1899.*

DISEASES.	Re- maining on Dec. 31, 1898.	Admitted.	Total under treatment during 1899.	Dis- charged.	Died.	Mortality per cent.	Re- maining on Dec. 31, 1899.
Scarlet ... ..	2,917	13,290	16,207	12,973	353	2·65	2,880
Diphtheria ... ..	1,135	8,673	9,808	7,076	1,182	13·95	1,551
Enteric ... ..	231	1,535	1,766	1,138	240	16·47	388
Typhus ... ..	...	11	11	10	...	...	1
Totals ... ..	4,283	23,509	27,792	21,197	1,775	7·63	4,820
Other diseases ... ..	94	1,583	1,677	1,442	160	10·05	75
Grand Totals... ..	4,377	25,092	29,469	22,639	1,935	7·79	4,895

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 247.

\* Months and figures in italics in brackets throughout are the corresponding months and figures for 1898.

† 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.



The total number of patients treated during the year was the highest on record (due to the increased prevalence of diphtheria and enteric fever), but the death-rate was the lowest yet recorded.

TABLE II.—*Monthly Admissions, Deaths, and Discharges at Fever Hospitals during 1899.*

MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.
	Scarlet.	Diphtheria.	Enteric.	Typhus.	Other Diseases.	Total.	Scarlet.	Diphtheria.	Enteric.	Typhus.	Other Diseases.	Total.	
Jan. ...	1,045	679	115	...	113	1,952	40	79	16	...	11	146	1,881
Feb. ...	875	598	87	4	137	1,701	22	91	17	...	13	143	1,683
March	802	515	59	4	134	1,514	28	87	16	...	18	149	1,940
April	739	409	50	...	82	1,280	25	73	7	...	10	115	1,526
May ...	958	621	47	...	128	1,754	23	66	7	...	13	109	1,475
June ...	1,149	761	49	...	145	2,104	26	76	7	...	20	129	1,638
July ...	1,263	866	98	...	172	2,399	26	96	12	...	14	148	1,675
Aug. ...	1,070	717	138	...	130	2,055	28	89	25	...	16	158	1,990
Sept. ...	1,419	804	150	...	123	2,496	23	90	21	...	13	147	2,013
Oct. ...	1,818	1,006	256	1	177	3,258	30	145	34	...	9	218	2,015
Nov. ...	1,277	866	288	2	158	2,591	39	145	48	...	13	245	2,344
Dec. ...	875	831	198	...	84	1,988	43	145	30	...	10	228	2,459
Totals	13,290	8,673	1,535	11	1,583	25,092	353	1,182	240	...	160	1,935	22,639

The total monthly admissions were lowest in April (*February*),\* 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-eight 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, eight 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, thirteen 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, nine 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, ten times in November, and once in December.

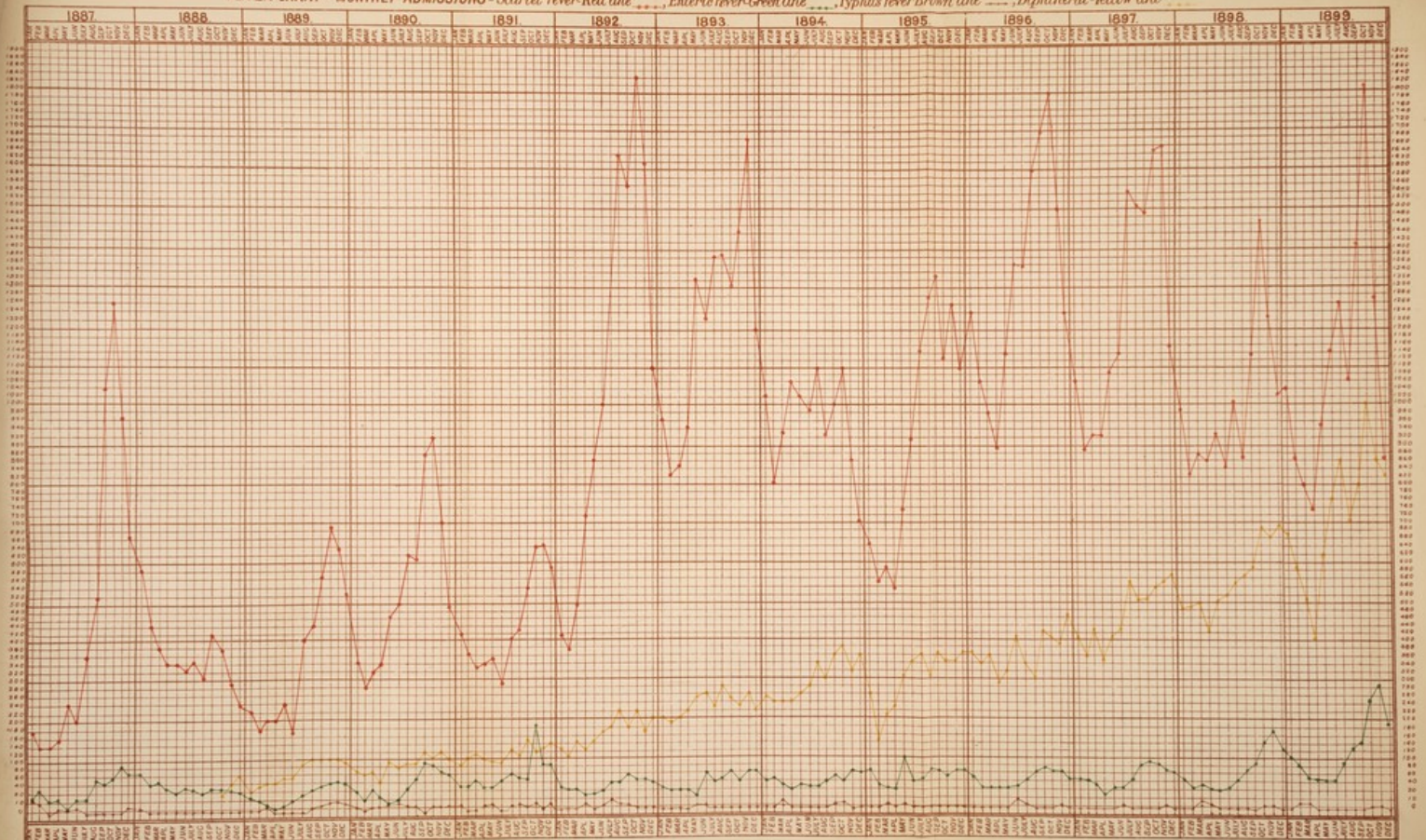
Diphtheria cases were not admitted to the Managers' hospitals until October 23rd, 1888. Since then the minimum admissions have occurred twice in January, four times in February, four times in April, and once in August; while the maximum admissions took place once in July, once

\* Month in italics in brackets are the corresponding months in 1898.



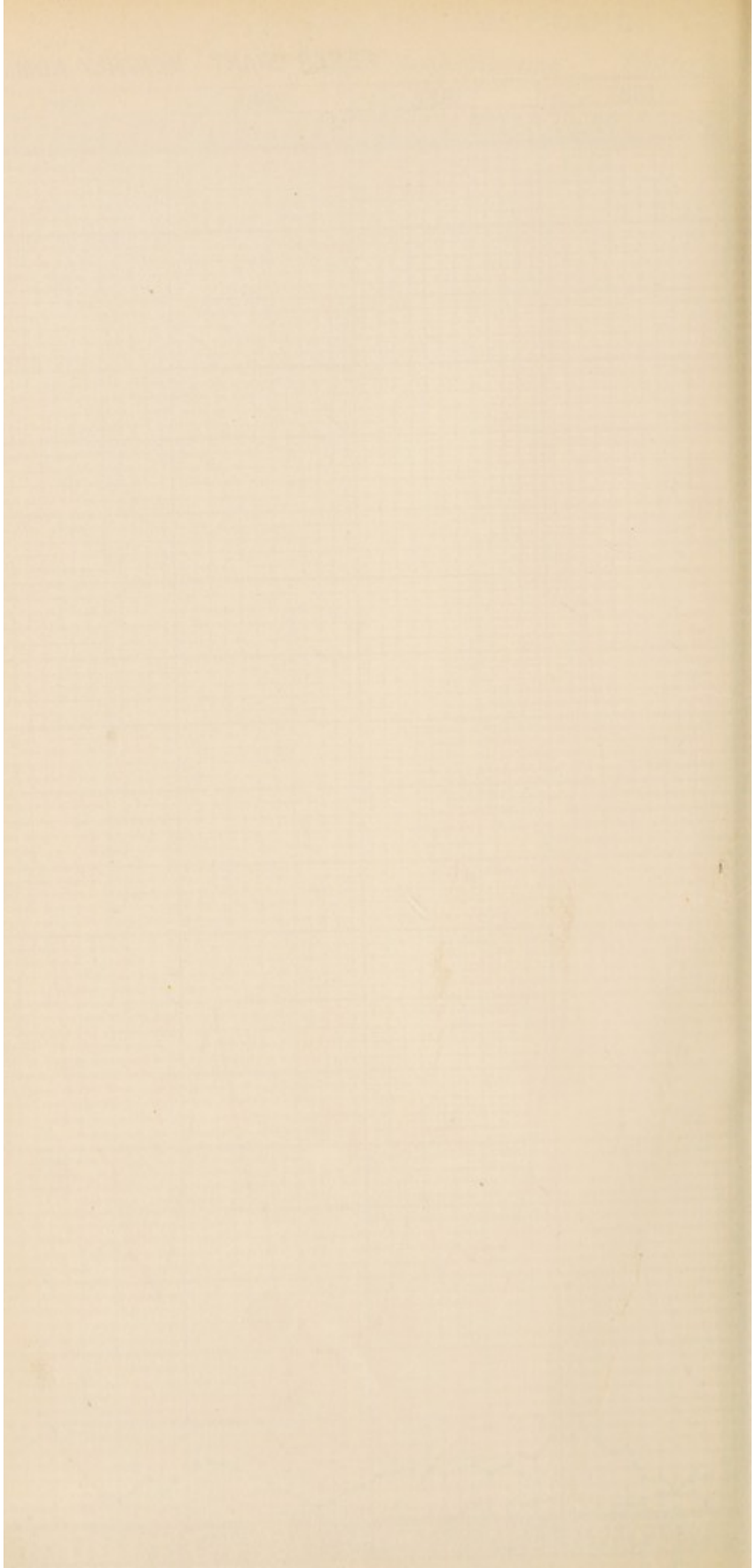
# METROPOLITAN ASYLUMS BOARD.

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.





in August, twice in September, twice 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.

We have for the first time shown separately the monthly deaths from each disease.

TABLE III.—*Admissions and Deaths of Patients at Fever Hospitals during 1899, divided according to Parishes or Unions.*

PARISH OR UNION.	Scarlet.	Diphtheria.	Enteric.	Typhus.	Other Diseases.	Total Admissions.	Total Deaths.
Kensington ... ..	331	166	55	...	33	585	53
Hammersmith ... ..	218	78	10	..	24	330	18
Fulham ... ..	760	404	48	...	53	1,265	93
Paddington ... ..	273	149	31	...	18	471	31
Chelsea ... ..	207	171	21	...	25	424	35
St. George's, Hanover Square ...	329	92	25	...	16	462	25
Westminster... ..	87	50	14	...	13	164	1
St. Marylebone ... ..	328	120	45	...	30	523	48
St. Pancras ... ..	705	347	81	...	66	1,199	108
Hampstead ... ..	178	52	10	...	12	252	14
Islington ... ..	978	386	138	...	131	1,633	128
Hackney ... ..	696	368	69	...	111	1,244	85
St. Giles & St. George, Bloomsbury	50	14	4	...	4	72	8
Strand ... ..	47	16	2	...	3	68	1
Holborn ... ..	537	211	57	...	75	880	54
London, City of ... ..	48	35	7	...	14	104	8
Shoreditch ... ..	283	240	68	...	81	672	68
Bethnal Green ... ..	269	157	67	...	44	537	52
Whitechapel ... ..	159	109	41	3	49	361	23
St. George-in-the-East ... ..	73	50	23	...	17	163	10
Stepney ... ..	113	103	42	...	17	275	34
Mile End Old Town ... ..	161	202	32	...	27	422	44
Poplar ... ..	217	243	74	...	49	583	65
St. Saviour's... ..	707	1,012	78	1	126	1,924	172
St. Olave's ... ..	578	542	75	7	76	1,278	115
Lambeth ... ..	757	690	71	...	70	1,588	142
Wandsworth and Clapham ...	1,118	797	144	...	108	2,167	151
Camberwell ... ..	769	734	70	...	94	1,667	143
Greenwich ... ..	829	421	70	...	66	1,386	77
Woolwich ... ..	810	257	36	...	42	1,145	44
Lewisham ... ..	401	402	12	...	52	867	67
Port and Tower of London ...	2	...	...	...	...	2	...
Tottenham ... ..	216	49	14	...	33	312	15
Beyond Metropolitan Area ...	56	6	1	...	4	67	3
Totals ... ..	13,290	8,673	1,535	11	1,583	25,092	1,935

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, Greenwich, 829 (399)\*; Woolwich, 810 (640); and Lewisham, 401 (167); and as regards diphtheria cases, Shoreditch, 240 (148); Mile End, 202 (100); St. Saviour's, 1,012 (559); St. Olave's, 542 (201); Lambeth, 690 (447); Camberwell, 734 (326); and Lewisham, 402 (213).

SCARLET FEVER.—TABLE IV.A.—*Admissions, Deaths, and Mortality per cent. of Scarlet Fever Patients during 1899, 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 ...	70	9	12.9	44	2	4.5	114	11	9.6
1 to 2 ...	210	16	7.6	211	29	13.7	421	45	10.7
2 „ 3 ...	440	30	6.8	413	27	6.5	853	57	6.7
3 „ 4 ...	670	39	5.8	602	33	5.5	1,272	72	5.7
4 „ 5 ...	744	26	3.5	698	27	3.9	1,442	53	3.7
Totals under } 5 years ... }	2,134	120	5.6	1,968	118	6.0	4,102	238	5.8
5 to 10 ...	2,457	41	1.7	2,766	43	1.6	5,223	84	1.6
10 „ 15 ...	1,020	7	0.7	1,349	10	0.7	2,369	17	0.7
15 „ 20 ...	452	2	0.4	378	1	0.3	830	3	0.4
20 „ 25 ...	174	4	2.1	206	2	0.9	380	6	1.4
25 „ 30 ...	87	2		119	2		206	4	
30 „ 35 ...	36	1		65	...		101	1	
35 „ 40 ...	23	...		30	...		53	...	
40 „ 45 ...	9	...		8	...		17	...	
45 „ 50 ...	3	...		4	...		7	...	
50 „ 55 ...	2	...		...	...		2	...	
55 „ 60 ...	...	...	2.1	...	...	0.9	...	...	1.4
And upwards	...	...		...	...		...	...	
Grand Totals	6,397	177	2.8	6,893	176	2.6	13,290	353	2.7

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 1899 were 13,290 (12,125): the female were 496 (365) in excess of the male admissions. The total mortality, calculated on the admissions, was 2.7 (4.2) 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,

\* Italic figures in brackets throughout are the corresponding figures for 1898.

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 1899, 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... ..	567	134	23·6	470	111	23·6	1,037	245	23·6
1 to 2... ..	1,887	355	18·8	1,769	343	19·4	3,656	698	19·1
2 „ 3... ..	3,470	486	14·0	3,308	447	13·5	6,778	933	13·8
3 „ 4... ..	4,866	497	10·2	4,866	503	10·3	9,732	1,000	10·3
4 „ 5... ..	5,249	371	7·1	5,553	350	6·3	10,802	721	6·7
Totals under } 5 years }	16,039	1,843	11·5	15,966	1,754	11·0	32,005	3,597	11·2
5 to 10... ..	20,612	593	2·8	22,944	619	2·7	43,556	1,212	2·8
10 „ 15... ..	9,343	116	1·2	10,336	105	1·0	19,679	221	1·1
15 „ 20... ..	3,175	40	1·3	3,061	38	1·2	6,236	78	1·3
20 „ 25... ..	1,241	17	1·4	1,515	22	1·5	2,756	39	1·4
25 „ 30... ..	580	10	1·7	856	9	1·1	1,436	19	1·3
30 „ 35... ..	289	8	2·8	465	7	1·5	754	15	2·0
35 „ 40... ..	126	2	1·6	193	4	2·1	319	6	1·9
40 „ 45... ..	62	4	7·2	95	3	2·6	157	7	4·7
45 „ 50... ..	34	3		34	1		68	4	
50 „ 55... ..	21	2		17	...		38	2	
55 „ 60... ..	6	...		5	...		11	...	
And upwards	2	...		3	...		5	...	
Grand Totals...	51,530	2,638	5·1	55,490	2,562	4·6	107,020	5,200	4·9

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 were admitted, but the mortality per cent. amongst the latter was greater than amongst the former by 0·5.



DIPHTHERIA.—TABLE VA.—*Admissions, Deaths, and Mortality per cent. of Diphtheria Patients during 1899, 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 ...	75	26	34·7	72	29	40·3	147	55	37·4
1 to 2 ...	240	65	27·1	229	74	32·3	469	139	29·6
2 „ 3 ...	408	83	20·3	357	80	22·4	765	163	21·3
3 „ 4 ...	501	98	19·6	524	109	20·8	1,025	207	20·2
4 „ 5 ...	524	81	15·5	556	87	15·6	1,080	168	15·6
Total under 5 years }	1,748	353	20·2	1,738	379	21·8	3,486	732	21·0
5 to 10 ...	1,418	159	11·2	1,755	217	12·4	3,173	376	11·8
10 „ 15 ...	476	27	5·7	609	31	5·1	1,085	58	5·3
15 „ 20 ...	169	2	1·2	208	4	1·9	377	6	1·6
20 „ 25 ...	78	...	...	128	2	1·6	206	2	1·0
25 „ 30 ...	37	1	3·7	101	1	1·7	138	2	2·3
30 „ 35 ...	35	2		66	1		101	3	
35 „ 40 ...	12	...		36	...		48	...	
40 „ 45 ...	13	...		16	...		29	...	
45 „ 50 ...	4	...		8	...		12	...	
50 „ 55 ...	3	1		4	1		7	2	
55 „ 60 ...	1	...		4	...		5	...	
And upwards	2	...		4	1		6	1	
Grand Totals	3,996	545	13·6	4,677	637	13·6	8,673	1,182	13·6

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 2,107 cases than in 1898, and the death-rate, 13·6 per cent., was 1·5 below that of the previous year, and was the lowest on record.

We again 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 1895–1899, since that treatment has been adopted.



TABLE VB.—*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	28.0	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 VB<sub>1</sub>.—*Admissions, Deaths, and Mortality per cent. of all Diphtheria Patients in the years 1895 (when antitoxic serum was first generally used) to 1899.*

AGES.	MALES.			FEMALES.			TOTAL.		
	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.	Admitted.	Died.	Mortality per cent.
Under 1 ...	280	101	36.1	230	92	40.0	510	193	37.8
1 to 2 ...	916	318	34.7	803	292	36.4	1,719	610	35.5
2 „ 3 ...	1,297	346	26.7	1,285	338	26.3	2,582	684	26.5
3 „ 4 ...	1,758	403	22.9	1,728	398	23.0	3,486	801	23.0
4 „ 5 ...	1,760	368	20.9	1,906	391	20.5	3,666	759	20.7
Totals under } 5 years }	6,011	1,536	25.6	5,952	1,511	25.4	11,963	3,047	25.5
5 to 10 ...	4,769	695	14.6	5,809	889	15.3	10,578	1,584	15.0
10 „ 15 ...	1,547	92	5.9	1,970	120	6.1	3,517	212	6.0
15 „ 20 ...	482	17	3.5	702	20	2.8	1,184	37	3.1
20 „ 25 ...	247	7	2.8	433	6	1.4	680	13	1.9
25 „ 30 ...	143	4	2.8	331	4	1.2	474	8	1.7
30 „ 35 ...	109	5	4.6	221	9	4.1	330	14	4.2
35 „ 40 ...	48	1	2.1	114	3	2.6	162	4	2.5
40 „ 45 ...	25	...	7.5	57	2	5.2	82	2	6.0
45 „ 50 ...	13	1		25	...		38	1	
50 „ 55 ...	7	1		13	2		20	3	
55 „ 60 ...	3	1		11	...		14	1	
And upwards	5	1		8	2		13	3	
Grand Totals	13,409	2,361	17.6	15,646	2,568	16.4	29,055	4,929	17.0

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 37.8, in the second



year from 63·1 to 35·5, in the third year from 55·1 to 26·5, in the fourth year from 48·3 to 23·0, and in the fifth year from 39·0 to 20·7. Amongst cases from 5 to 10 years of age it has fallen from 28·1 to 15·0. The total mortality has fallen from 30·3 to 17·0. The mortality per cent. of females is in each table less than that of males.

On p. 62 the medical superintendent of the Northern Hospital draws special attention to the value of antitoxin in the treatment of post-scarlatinal diphtheria cases. During the five years immediately preceding the introduction of the serum treatment, the mortality amongst these cases was 61·9 per cent.; and during the succeeding five years, only 1·5 per cent.

ENTERIC FEVER.—TABLE VIA.—*Admissions, Deaths, and Mortality per cent. of Enteric Fever Patients during 1899, 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 ...	25	2	8·0	27	3	11·1	52	5	9·6
5 to 10 ...	111	6	5·4	80	6	7·5	191	12	6·3
10 „ 15 ...	170	15	8·8	136	13	9·6	306	28	9·2
15 „ 20 ...	153	15	9·8	110	12	10·9	263	27	10·3
20 „ 25 ...	120	26	21·7	106	14	13·2	226	40	17·7
25 „ 30 ...	113	27	23·9	86	17	19·8	199	44	22·1
30 „ 35 ...	82	27	32·9	44	8	18·2	126	35	27·8
35 „ 40 ...	43	10	23·3	38	7	18·4	81	17	21·0
40 „ 45 ...	19	8	42·1	24	4	16·7	43	12	27·9
45 „ 50 ...	13	5	43·5	12	4	40·0	25	9	41·7
50 „ 55 ...	5	2		6	2		11	4	
55 „ 60 ...	2	1		5	3		7	4	
And upwards	3	2		2	1		5	3	
Totals ...	859	146	17·0	676	94	13·9	1,535	240	15·6

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 666 or 76·6 per cent. more cases of enteric fever admitted than during 1898, and the total death-rate was 0·8 per cent. lower than in that year.

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



TABLE VIb.—*Admissions, Deaths, and Mortality per cent. of Enteric Fever Patients in the years 1871 to 1899. (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 ...	227	26	11.5	199	24	12.1	426	50	11.7
5 to 10 ...	916	77	8.4	854	71	8.3	1,770	148	8.4
10 „ 15 ...	1,621	161	9.9	1,370	207	15.1	2,991	368	12.3
15 „ 20 ...	1,509	223	14.8	1,320	254	19.2	2,829	477	16.9
20 „ 25 ...	1,057	235	22.2	963	173	18.0	2,020	408	20.2
25 „ 30 ...	846	206	24.3	669	140	20.9	1,515	346	22.8
30 „ 35 ...	489	140	28.7	411	82	20.0	900	222	24.7
35 „ 40 ...	262	71	27.1	275	66	24.0	537	137	25.5
40 „ 45 ...	150	43	28.6	136	33	24.3	286	76	26.6
45 „ 50 ...	70	31	44.3	88	23	26.1	158	54	34.2
50 „ 55 ...	32	13	43.1	38	8	32.3	70	21	37.5
55 „ 60 ...	15	7		14	8		29	15	
And upwards	11	5		10	4		21	9	
Grand Totals	7,205	1,238	17.2	6,347	1,093	17.2	13,552	2,331	17.2

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 XIII., p. 36, 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 very 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 34.2 amongst patients between 45 and 50 years of age and of 37.5 amongst the patients of ages from 50 to 60 and upwards.

The male sex is evidently more liable to attack by this disease. 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.

Eleven (9)\* cases of typhus fever were admitted during the year 1899, and they are entered in the following table:—

TYPHUS FEVER.—TABLE VIIa.—*Admissions and Deaths of Typhus Fever Patients during 1899, divided according to age and sex.*

AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 5 ...	...	...	...	...	...	...
5 to 10 ...	...	...	...	...	...	...
10 „ 15 ...	1	...	3	...	4	...
15 „ 20 ...	3	...	1	...	4	...
20 „ 25 ...	...	...	2	...	2	...
25 „ 30 ...	...	...	...	...	...	...
30 „ 35 ...	...	...	...	...	...	...
35 „ 40 ...	...	...	...	...	...	...
40 „ 45 ...	...	...	...	...	...	...
45 „ 50 ...	...	...	...	...	...	...
50 „ 55 ...	...	...	1	...	1	...
55 „ 60 ...	...	...	...	...	...	...
And upwards	...	...	...	...	...	...
Totals	4	...	7	...	11	...

N.B.—In the above table two cases were treated at the Eastern, seven at the South-Eastern, and two at the Park Hospital.

\* Italic figures in brackets throughout are the corresponding figures for 1898.



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 1899 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	2.0	89	2	2.2
5 to 10 ...	108	1	0.9	139	—	—	247	1	0.4
10 „ 15 ...	173	5	2.9	210	11	5.2	383	16	4.2
15 „ 20 ...	168	10	6.0	200	18	9.0	368	28	7.6
20 „ 25 ...	126	28	22.2	127	22	17.3	253	50	19.8
25 „ 30 ...	77	21	27.3	85	15	17.6	162	36	22.2
30 „ 35 ...	78	26	33.3	86	22	25.6	164	48	29.3
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	39	21	53.8	62	37	59.7
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 ...	999	223	22.3	1,201	217	18.1	2,200	440	20.0

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 XIII., p. 36, for similar reasons to those given in note (2) to Table VIb., on p. 29.

Young children are 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 4.2 than that of males. The mortality in both sexes is greatly influenced by age. Up to the twentieth year the rate does not exceed 7.6 per cent.; but in the quinquennium 20 to 25 it suddenly rises to 19.8 per cent., and thenceforward rapidly increases with advancing age.

Table VIII., pp. 85 to 94, gives details of the cases of miscellaneous diseases admitted during 1899, and is further referred to in the paragraph on p. 34 relating to cases of mistaken diagnosis.

LENGTH OF RESIDENCE OF FEVER PATIENTS IN HOSPITAL. We have had tables prepared to show the length of residence of patients treated in the Managers' hospitals during the year 1899. For scarlet fever and diphtheria there are two tables for each disease, one dealing with cases treated to termination at the Board's London hospitals and the other with cases completing their treatment at the convalescent hospitals.



SCARLET  
FEVER  
PATIENTS.TABLE IXA.—*Length of Residence of Scarlet Fever Patients treated to Recovery or Death in the Board's Town Hospitals during the year 1899.*

HOSPITAL.	Total Number of Cases (including Deaths).	Number of Days' Residence.	Average Residence.	Recovered Cases only.	Number of Days' Residence.	Average Residence.
Eastern ... ..	335	22,652	67.6	309	22,358	72.3
North-Eastern ... ..	1,301	87,620	67.3	1,256	86,959	69.2
North-Western ... ..	740	44,087	59.5	669	42,695	63.8
Western ... ..	648	58,544	76.5	591	48,255	81.6
South-Western ... ..	711	48,065	67.6	683	47,671	69.8
Fountain ... ..	708	46,716	66.0	683	46,212	67.7
Grove ... ..	22	1,085	49.3	20	1,060	53.0
South-Eastern ... ..	423	26,929	63.7	401	26,603	66.3
Park ... ..	765	46,358	60.6	725	45,197	62.3
Brook ... ..	938	73,592	78.5	913	73,116	80.1
Totals ... ..	6,591	455,648	69.1	6,250	440,126	70.4

TABLE IXB.—*Length of Residence of Scarlet Fever Patients who completed their Recovery or Died at the Board's Convalescent Hospitals during the year 1899.*

HOSPITAL.	Total Number of Cases (including Deaths).	Number of Days' Residence.			Average Residence.			Recovered Cases only.	Number of Days' Residence.			Average Residence.		
		Town Hospital.	Convalescent Hospital.	Total.	Town Hospital.	Convalescent Hospital.	Total.		Town Hospital.	Convalescent Hospital.	Total.	Town Hospital.	Convalescent Hospital.	Total.
Northern...	3,565	107,362	164,748	272,110	30.1	46.2	76.3	3,557	107,158	164,510	271,668	30.1	46.2	76.4
Gore Farm	3,171	104,080	144,859	248,939	32.8	45.7	78.5	3,167	104,078	144,859	248,937	32.9	45.7	78.6
Total ...	6,736	211,442	309,607	521,049	31.4	46.0	77.4	6,724	211,236	309,369	520,605	31.4	46.0	77.4

The average duration of residence of scarlet fever cases was at the London hospitals 69.1 days including deaths, and 70.4 days if the fatal cases be excluded. At the convalescent hospitals both averages were 77.4. So that, on the whole, the total residence of cases completing their recovery at the country hospitals was a week longer than that of the corresponding cases at the London hospitals. Probably this extended residence was due to the selection of patients for transfer whose recovery was expected to be most protracted owing to the severity of the disease, its complications, or other causes. The difference between the two convalescent hospitals is 2.2 days for each recovered patient in favour of the Northern Hospital.

As regards the residence of the recovered patients in the London hospitals, there are very considerable variations. Omitting the Grove



Hospital, where the number treated was very small, the shortest residence was 62·3 days at the Park Hospital, or 8·1 below the average, and the longest was 81·6, or 11·2 days above the average, at the Western Hospital. The Brook Hospital, with 80·1 days' residence, was the next highest.

DIPHTHERIA PATIENTS. TABLE XA.—*Length of Residence of Diphtheria Patients treated to Recovery or Death in the Board's Town Hospitals during the year 1899.*

HOSPITAL.	Total Number of Cases (including Deaths).	Number of Days' Residence.	Average Residence.	Recovered Cases only.	Number of Days' Residence.	Average Residence.
Eastern ...	1,014	48,110	47·4	797	45,938	57·6
North-Eastern ...	3	158	52·7	1	148	148·0
North-Western ...	843	36,105	42·8	696	34,348	49·3
Western ...	775	40,100	51·7	658	38,335	58·3
South-Western ...	491	22,658	46·1	413	21,884	53·0
Fountain ...	699	34,261	49·0	606	33,509	55·3
Grove ...	292	10,872	37·2	240	10,535	43·9
South-Eastern ...	865	50,389	58·2	683	47,825	70·0
Park ...	1,173	63,983	54·5	1,010	61,720	61·1
Brook ...	911	55,218	60·6	782	54,056	69·1
Totals ...	7,066	361,854	51·2	5,886	348,298	59·2

TABLE XB.—*Length of Residence of Diphtheria Patients who completed their Recovery or Died at the Board's Convalescent Hospitals during the year 1899.*

HOSPITAL.	Total Number of Cases (including Deaths).	Number of Days' Residence.			Average Residence.			Recovered Cases only.	Number of Days' Residence.			Average Residence.		
		Town Hospital.	Convalescent Hospital.	Total.	Town Hospital.	Convalescent Hospital.	Total.		Town Hospital.	Convalescent Hospital.	Total.	Town Hospital.	Convalescent Hospital.	Total.
Northern...	992	34,702	32,083	66,785	35·0	32·3	67·3	990	34,625	32,023	66,648	35·0	32·3	67·3
Gore Farm	199	7,548	5,055	12,603	37·9	25·4	63·3	199	7,548	5,055	12,603	37·9	25·4	63·3
Total ...	1,191	42,250	37,138	79,388	35·5	31·2	66·7	1,189	42,173	37,078	79,251	35·5	31·2	66·7

The average length of residence of diphtheria patients at the London hospitals was 51·2 days including deaths, and 59·2 if the fatal cases be omitted. At the convalescent hospitals the deaths were too few to affect the average residence, which was 66·7 days. The number treated at the Gore Farm Hospital was very small compared with the number at the Northern Hospital.

Here again the variations in length of residence at different hospitals are very remarkable, ranging from 49·3 days at the North-Western Hospital, 9·9 days below the average, to 70·0 days at the South-Eastern Hospital, or 10·8 days above the average. The diphtheria cases at the North-Eastern Hospital were cases of mistaken diagnosis, having been certified on admission as scarlet fever cases. The Grove Hospital was open during the latter part of the year only.



ENTERIC  
FEVER  
PATIENTS.TABLE XI.—*Length of Residence of Enteric Fever Patients treated to Recovery or Death in the Board's Town Hospitals during the year 1899.*

HOSPITAL.	Total Number of Cases (including Deaths).	Number of Days' Residence.	Average Residence.	Recovered Cases only.	Number of Days' Residence.	Average Residence.
Eastern ... ..	226	11,564	51·2	193	10,964	56·8
North-Eastern . . .	5	385	77·0	5	385	77·0
North-Western ...	285	12,020	42·2	246	11,566	47·0
Western ... ..	175	10,959	62·6	141	10,508	74·5
South-Western ...	103	5,494	53·3	77	5,179	67·3
Grove ... ..	132	5,183	39·3	91	4,648	51·1
South-Eastern ...	254	12,819	50·5	217	12,402	57·1
Park ... ..	92	5,448	59·2	79	5,309	67·2
Brook ... ..	104	5,858	56·3	87	5,588	64·2
Total ... ..	1,376*	69,730	50·7	1,136*	66,549	58·6

The average residence of enteric fever patients was 50·7 days including deaths, and 58·6 days if the fatal cases be excluded. The shortest residence of recovered cases was 47·0 days, or 11·6 days below the average, at the North-Western Hospital, and the longest 74·5 days, or 15·9 days above the average, at the Western Hospital. The enteric fever cases at the North-Eastern Hospital were cases of mistaken diagnosis, having been certified on admission as scarlet fever cases. The Grove Hospital was open only part of the year.

MISCELLA-  
NEOUS  
DISEASES.TABLE XII.—*Length of Residence of Patients suffering from Miscellaneous Diseases treated to Recovery or Death in the Board's Town Hospitals during the year 1899.*

HOSPITAL.	Total Number of Cases (including Deaths).	Number of Days' Residence.	Average Residence.	Recovered Cases only.	Number of Days' Residence.	Average Residence.
Eastern ... ..	276	6,605	23·9	240	6,338	26·4
North-Eastern ...	199	6,826	34·3	189	6,656	35·2
North-Western ...	194	4,027	20·8	176	3,850	21·9
Western ... ..	170	4,614	27·1	147	4,443	30·2
South-Western ...	96	2,641	27·5	81	2,523	31·1
Fountain ... ..	91	1,616	17·8	88	1,593	18·1
Grove ... ..	34	844	24·8	28	809	28·9
South-Eastern ...	187	4,408	23·6	168	4,232	25·2
Park ... ..	259	5,728	22·1	243	5,615	23·1
Brook ... ..	96	3,104	32·3	82	2,977	36·3
Totals ... ..	1,602	40,413	25·2	1,442	39,036	27·1

\* Two cases at the Northern Hospital not included.



Of the cases of miscellaneous diseases (cases of mistaken diagnosis) treated, the average residence of each patient was 25·2 days including deaths, and 27·1 days if the fatal cases be excluded. The shortest residence was at the Fountain Hospital, 18·1 days, or 9·0 days below the average, and the longest at the Brook Hospital, 36·3 days, or 9·2 days above the average.

GENERAL  
REMARKS.

The duration of residence of patients in the Managers' hospitals is of the utmost importance from an economical point of view. Not only would any shortening of the period of residence effect a saving in the cost of maintenance, it would also enable the Managers to treat a larger number of patients without increasing the number of beds, which is of very much greater importance. The subject is a very complex one, and is receiving careful consideration at the present time.

SMALLPOX.

Table I. on pp. 98-100 shows the number of smallpox patients admitted from each parish or union during each month of the year 1899, and the total admissions for the year.

The total number of smallpox cases admitted was 18, of whom 10 came direct from their homes, and 8 were transferred from the Eastern Fever Hospital. 3 died, 8 were discharged recovered, and 7 remained in hospital at the end of the year. But, in addition to these numbers, there were of non-smallpox cases 9 detained at the observation shelters at South Wharf, and 9 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. 96-97, 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. 95.

Tables IIA., IIB., and IIC., on pp. 101-112, supply minute particulars concerning the vaccination of the smallpox patients admitted.

Table IIC. (which is a combination of Tables IIA. and IIB.) shows that vaccination cicatrices were present in 15 cases, of whom 3 died; in 1 case there was "no evidence" of vaccination, and in 2 cases vaccination cicatrices were "absent."

CASES OF  
MISTAKEN  
DIAGNOSIS.

*Fever.*—In the course of the year 1899 no fewer than 1,583 (1,488)\* patients, or a percentage on the total admissions of 6·3 (7·2), 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 (see Table VIII., pp. 85 to 94). The largest number of cases thus admitted to any one hospital was, as in

\* Italic figures in brackets throughout are the corresponding figures for 1898.



previous years, at the Eastern Hospital, where the proportion was 275 (240)\* out of 2,682 (2,480) admissions, or 10·2 (9·2) per cent. of the total. The percentage on the total scarlet fever cases was 3·9 (4·7), diphtheria cases 7·4 (8·3), and enteric fever cases 17·3 (23·3).

Amongst the 542 (603) cases wrongly certified as scarlet fever there were 53 (73) of measles, 120 (129) of tonsillitis, 100 of erythema, and 102 (120) had no obvious disease. Amongst the 693 (600) cases wrongly certified as diphtheria were 38 (34) of measles and 491 (450) of tonsillitis. Amongst the 322 (265) cases wrongly certified as enteric fever were 25 (12) of influenza, 76 (55) of pneumonia, and 15 (6) of bronchitis.

*Smallpox*.—No non-smallpox case was admitted to the Hospital Ships.

In the case of smallpox the original medical certificate is revised 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 18 (30) out of 28 (36), or 64·3 (83·3) per cent.; and these are the figures properly to be compared with those given above in the case of fever.

**Statistics since Establishment of the Managers' Hospitals.** (5.) FEVER.—The return on p. 36 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; 15·38 in 1898; and 13·95 in 1899.

In connection with the mortality of diphtheria cases, we draw special attention to the rate per 1,000 of the estimated population. For some years prior to 1893 it had been steadily advancing, notwithstanding occasional reductions, until in the year mentioned it had attained the very high figure of 0·76. Since 1893, however, the rate has shown a distinct tendency to fall, and this fall has been coincident with the introduction and increasing use of the antitoxic serum treatment of diphtheria. The slight rises in the rates of 1896 and 1899 coincided with the increased prevalence of the disease in those years (see Table A2, p. 16).

\* Italic figures in brackets throughout are the corresponding figures for 1898.



TABLE XIII.—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 25th January, 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.
	(15 months to Dec. 31st, 1872).																			
1871	108	...	134	...	343	864	11	...	30	57	...	168	10.78	...	23.62	21.96	0.58	0.11	0.12	0.27
1872	92	...	401	381	271	1,145	6	...	91	56	58	211	6.55	...	23.15	15.13	0.28	0.08	0.05	0.24
1873	804	...	536	435	359	2,134	89	...	106	63	84	342	12.15	...	19.62	14.87	0.77	0.12	0.09	0.26
1874	1,182	...	65	299	269	1,815	160	...	16	78	54	308	13.69	...	23.35	24.68	1.06	0.17	0.04	0.23
1875	671	...	139	288	294	1,392	90	...	28	59	71	248	12.13	...	19.31	20.34	0.65	0.11	0.04	0.22
1876	479	...	170	372	186	1,207	54	...	36	79	33	202	12.10	...	23.07	22.93	0.44	0.09	0.04	0.25
1877	679	...	168	434	233	1,564	91	...	47	100	40	278	14.34	...	26.25	20.26	0.49	0.15	0.04	0.28
1878	1,469	...	48	385	196	2,098	211	...	11	74	39	335	15.27	...	21.56	19.73	0.72	0.15	0.02	0.23
1879	1,949	...	28	248	239	2,464	242	...	6	43	37	328	12.30	...	20.68	15.63	0.82	0.14	0.02	0.19
1880	1,477	...	219	415	211	2,322	168	...	34	86	46	334	11.10	...	16.95	21.47	0.55	0.17	0.02	0.25
1881	1,850	...	148	515	354	2,867	189	...	27	104	60	380	10.37	...	16.92	20.71	0.52	0.22	0.01	0.25
1882	1,920	...	45	486	269	2,720	234	...	11	74	66	385	12.38	...	21.15	15.64	0.51	0.24	0.01	0.25
1883	1,845	...	29	493	180	2,547	234	...	5	98	55	392	12.27	...	20.00	18.82	0.36	0.24	0.01	0.23
1884	1,353	...	53	420	229	1,855	130	...	7	36	46	219	9.47	...	12.17	15.82	0.18	0.23	0.01	0.15
1885	1,780	...	10	333	74	2,197	151	...	4	47	22	224	9.04	...	42.10	14.85	0.17	0.21	0.00	0.15
1886	5,900	...	35	441	161	6,537	489	...	4	61	59	613	9.54	...	11.59	14.59	0.36	0.23	0.00	0.15
1887	4,408	...	1	450	194	5,152	501	46	...	72	60	679	9.89	59.35	...	14.64	0.30	0.32	0.00	0.17
1888	4,518	722	23	290	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
1889	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
1890	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
1891	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
1892	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
1893	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
1894	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
1895	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
1896	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
1897	12,125	6,566	9	869	1,488	21,057	514	991	1	143	147	1,796	4.12	15.38	14.12	17.73	0.13	0.39	0.00	0.13
1898	13,290	8,676	11	1,535	1,582	25,094	353	1,182	...	240	160	1,935	2.65	13.95	...	16.47	0.09	0.43	0.00	0.18
Totals	151,303	40,656	2,347	13,904	14,342	222,552	9,483	8,445	482	2,420	2,224	23,054	6.26	20.77	20.53	17.40	...	...	...	...

NOTE.—1. From 1st December, 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 23rd October, 1888.

4. The mortality rates of patients in the Managers' hospitals 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.



(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 XIV.—Admissions, Deaths, and Mortality per cent. of Smallpox Patients since 1st December, 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.	Smallpox.	Smallpox.
1st Dec., 1870, to 3rd, } Feb., 1871 }	582	...	582	97	...	97	20·81	...
1871-2 (4th Feb., 1871, } to 31st Jan., 1872) }	13,139	6	13,145	2,460	...	2,460	18·95	2·42
1872-3 (year ended 31st } Jan., 1873) }	2,359	3	2,362	467	1	468	17·84	0·54
1873-4 (year ended 31st } Jan., 1874) }	174	17	191	35	...	35	17·02	0·03
1874 (11 months ended } 31st Dec.) }	112	8	120	10	...	10		0·02
1875 ... ..	89	22	111	22	...	22	21·64	0·01
1876 ... ..	2,134	16	2,150	372	1	373		0·21
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	14·28	0·00
1889 ... ..	5	...	5	...	...	...		...
1890 ... ..	22	5	27	3	...	3	11·29	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
1899 ... ..	18	*18	36	3	...	3	20·69	0·00
Totals ... ..	62,079	1,470	63,549	10,272	59	10,331	16·25	..

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

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:—



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	228
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	18
1896	4,421,955	9	2	18
1897	4,463,169	16	4	17
1898	4,504,766	1	0.2	7.6
1899	4,546,752	3	0.6	3.8

Staff Illness  
in the Fever  
and  
Smallpox  
Hospitals.

(7.) On pp. 39-42 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.

## ANNUAL REPORT, STATISTICAL COMMITTEE, 1899.

59-42

TABLE XV.—*Staff Illness in Infectious Hospitals during the year 1899.*

NATURE OF DISEASE.	OFFICERS.	Eastern Hospital.		North-Eastern Hospital.		North-Western Hospital.		Western Hospital.		South-Western Hospital.		Fountain Hospital.		Geore Hospital.		South-Eastern Hospital.		Park Hospital.		Brook Hospital.		Northern Hospital.		Geore Farm Hospital.		Sewarm (Feet Hospital).		Hospital Ships (Smallpox).		RESULTS.	
		Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.	Number of Officers.	Number of days waited.		
Scarlet Fever	Asst. Medical Officers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	B.H., one remaining waited at end of year.	
	Charge Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	W.H., one remaining waited at end of year.	
	Assistant Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	F.H., two; G.H., one; E.H., one; W.H., three, remaining waited at end of year.	
	Wardmaids	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	S.E.H., one died.	
	Porters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.	
Diphtheria	Medical Superintendent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Asst. Medical Officers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Charge Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Assistant Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Wardmaids	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
Scarlet Fever and Diphtheria	Porters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Medical Superintendent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Asst. Medical Officers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Charge Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Assistant Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
Enteric Fever	Wardmaids	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Porters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Medical Superintendent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Asst. Medical Officers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Charge Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
Other Diseases	Assistant Nurses	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Wardmaids	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Porters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Medical Superintendent	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.
	Asst. Medical Officers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Recovered.

\* Includes 11 temporary Geore Farm Nurses.



REPORT OF THE		COMMISSIONERS OF THE LAND OFFICE	
FOR THE YEAR 1905		AND THE FIRST SIX MONTHS OF 1906	
AMOUNT	PERCENTAGE	AMOUNT	PERCENTAGE
100,000,000	100	100,000,000	100
10,000,000	10	10,000,000	10
20,000,000	20	20,000,000	20
30,000,000	30	30,000,000	30
40,000,000	40	40,000,000	40
50,000,000	50	50,000,000	50
60,000,000	60	60,000,000	60
70,000,000	70	70,000,000	70
80,000,000	80	80,000,000	80
90,000,000	90	90,000,000	90
100,000,000	100	100,000,000	100
110,000,000	110	110,000,000	110
120,000,000	120	120,000,000	120
130,000,000	130	130,000,000	130
140,000,000	140	140,000,000	140
150,000,000	150	150,000,000	150
160,000,000	160	160,000,000	160
170,000,000	170	170,000,000	170
180,000,000	180	180,000,000	180
190,000,000	190	190,000,000	190
200,000,000	200	200,000,000	200
210,000,000	210	210,000,000	210
220,000,000	220	220,000,000	220
230,000,000	230	230,000,000	230
240,000,000	240	240,000,000	240
250,000,000	250	250,000,000	250
260,000,000	260	260,000,000	260
270,000,000	270	270,000,000	270
280,000,000	280	280,000,000	280
290,000,000	290	290,000,000	290
300,000,000	300	300,000,000	300
310,000,000	310	310,000,000	310
320,000,000	320	320,000,000	320
330,000,000	330	330,000,000	330
340,000,000	340	340,000,000	340
350,000,000	350	350,000,000	350
360,000,000	360	360,000,000	360
370,000,000	370	370,000,000	370
380,000,000	380	380,000,000	380
390,000,000	390	390,000,000	390
400,000,000	400	400,000,000	400
410,000,000	410	410,000,000	410
420,000,000	420	420,000,000	420
430,000,000	430	430,000,000	430
440,000,000	440	440,000,000	440
450,000,000	450	450,000,000	450
460,000,000	460	460,000,000	460
470,000,000	470	470,000,000	470
480,000,000	480	480,000,000	480
490,000,000	490	490,000,000	490
500,000,000	500	500,000,000	500
510,000,000	510	510,000,000	510
520,000,000	520	520,000,000	520
530,000,000	530	530,000,000	530
540,000,000	540	540,000,000	540
550,000,000	550	550,000,000	550
560,000,000	560	560,000,000	560
570,000,000	570	570,000,000	570
580,000,000	580	580,000,000	580
590,000,000	590	590,000,000	590
600,000,000	600	600,000,000	600
610,000,000	610	610,000,000	610
620,000,000	620	620,000,000	620
630,000,000	630	630,000,000	630
640,000,000	640	640,000,000	640
650,000,000	650	650,000,000	650
660,000,000	660	660,000,000	660
670,000,000	670	670,000,000	670
680,000,000	680	680,000,000	680
690,000,000	690	690,000,000	690
700,000,000	700	700,000,000	700
710,000,000	710	710,000,000	710
720,000,000	720	720,000,000	720
730,000,000	730	730,000,000	730
740,000,000	740	740,000,000	740
750,000,000	750	750,000,000	750
760,000,000	760	760,000,000	760
770,000,000	770	770,000,000	770
780,000,000	780	780,000,000	780
790,000,000	790	790,000,000	790
800,000,000	800	800,000,000	800
810,000,000	810	810,000,000	810
820,000,000	820	820,000,000	820
830,000,000	830	830,000,000	830
840,000,000	840	840,000,000	840
850,000,000	850	850,000,000	850
860,000,000	860	860,000,000	860
870,000,000	870	870,000,000	870
880,000,000	880	880,000,000	880
890,000,000	890	890,000,000	890
900,000,000	900	900,000,000	900
910,000,000	910	910,000,000	910
920,000,000	920	920,000,000	920
930,000,000	930	930,000,000	930
940,000,000	940	940,000,000	940
950,000,000	950	950,000,000	950
960,000,000	960	960,000,000	960
970,000,000	970	970,000,000	970
980,000,000	980	980,000,000	980
990,000,000	990	990,000,000	990
1,000,000,000	1000	1,000,000,000	1000

There were 4,765 (4,192)\* persons employed at the fever hospitals during the course of the year (including those employed at the Gore Farm Hospital), of whom 243 (212), or 5·1 (5·0) per cent., fell ill with fever or diphtheria, and 3 (3) died; while 1,280 (1,237), or 26·8 (29·5) per cent., suffered from other forms of illness.

The table also shows that 88 (137) persons were employed on the hospital ships during the year, none of whom contracted smallpox, but 19 (10), or 21·6 (7·3) 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.

## ii. IMBECILITY.

### Accommodation for Imbeciles.

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

	Males.	Females.	Total.
Leavesden Asylum ... ..	900	1,100	2,000
Caterham „ ... ..	935	1,100	2,035
Darenth „ (Adult Department) ... ..	450	602	1,052
Darenth Asylum (Schools Department) ... ..	...	...	942
			6,029

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 will be found on pp. 113–129.

\* Italic figures in brackets throughout are the corresponding figures for 1898.



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, 1899, the several Asylums and Schools contained ...	2,262	2,770	5,032	630	329	959	2,892	3,099	5,991
There were admitted during the year from the several Parishes and Unions (including re-admissions)	262	203	465	36	25	61	298	228	526
Transferred ...	26	21	47	..	...	...	26	21	47
The total number under treatment being ...	2,550	2,994	5,544	666	354	1,020	3,216	3,348	6,564
Of that number there were Discharged...	79	45	124	7	4	11	86	49	135
Transferred ...	12	11	23	14	10	24	26	21	47
And there died ..	200	204	404	14	13	27	214	217	431
	291	260	551	35	27	62	326	287	613
Leaving under treatment on December 31st, 1899 ...	2,259	2,734	4,993	631	327	958	2,890	3,061	5,951

The total number remaining under treatment in the asylums and schools at the end of 1899 showed a decrease of 40 (8) as compared with the number at the end of 1898.

*Tables I. to XIII.* are summaries of the separate tables for the three adult asylums given on pp. 130 to 153.

ADULT IMBECILES.—*Table I.* (p. 130) show admissions, re-admissions, discharges, and deaths for the year 1899

Of the admissions, 458 (448)\* were admitted for the first time, 7 (6), were re-admissions, and 24 (44) were patients transferred from the imbecile schools, and 23 from Darenth Asylum to Leavesden Asylum.

Of the patients discharged, 4 (5) were not insane, 20 (36) had recovered, 34 (17) had improved, and 66 (54) had not improved.

The number of patients who died was 404 (376).

The average number resident was 4,983 (5,016); the highest number resident on any one day was 5,055 (5,057); and the lowest number was 4,855 (4,977).

*Table II.* (p. 130) shows admissions, re-admissions, discharges, transfers, and deaths since the opening of the first asylum in September, 1870, up to the end of 1899. The total admissions during this period of over 29 years were 20,323, of whom 18,395 were admitted for the first time, 158 were re-admissions, and 1,770 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

\* Italic figures in brackets throughout are the corresponding figures for 1898.



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, 51 were not insane, 874 had recovered, 1,101 had improved, 1,265 had not improved, and 393 were transfers from one asylum to another. The deaths numbered 11,646.

*Table III.* (p. 132) shows the admissions, discharges, transfers, and deaths, with the mean annual mortality and proportion of recoveries per cent. of the admissions, for the year 1890, and for each subsequent year.

The total percentage of recoveries during the past year was 3·9 (2·9)\*, and the percentage of deaths on the average daily number resident was 8·0 (7·5).

*Table IV.* (p. 134) gives the classification, under the usual denominations of mental disease, of the mental condition of the patients admitted during the year 1899, and *Table V.* that of the patients resident on the last day of that year. Of the total number of 4,993 (5,032) resident, 1,473 (1,440) are classified as suffering from imbecility, 1,356 (1,390) from dementia, 582 (583) from dementia and epilepsy, 395 (415) from imbecility and epilepsy, 301 (292) from chronic mania, 330 (278) from idiocy, 177 (169) from senile dementia, and 131 (130) from melancholia.

*Table VI.* (p. 136) 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. 138) shows the causes of death during the year 1899, together with the ages of the decedents, calculated from the ages stated in the orders of admission.

There were 404 (376) deaths during the year, 20 (26) having been caused by epilepsy, 14 (24) by dementia and exhaustion, 41 (58) by heart disease, 90 (78) by phthisis, 25 (17) by pneumonia, and 83 (70) by senile decay.

*Table VIII.* (p. 142) 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, 1899.

Of the 512 (498) patients admitted during the year 1899, 13 (12) had at the close of the year been discharged as recovered, 8 (7) as improved, and 23 (19) as not improved, and 22 (24) had died.

Of the 4,993 patients remaining under treatment, 2,277 had been resident over ten years.

\* Italic figures in brackets throughout are the corresponding figures for 1898.



*Table IX.* (p. 146) shows the length of residence of those discharged as recovered and of those who have died during the year 1899.

Of the 404 (376)\* deaths, 84 (63) were of patients who had been resident upwards of 20 years.

*Table X.* (p. 146) shows the age of patients resident on December 31st, 1890, and on the same day in each subsequent year, calculated from the ages stated on the orders of admission.

Of the 4,993 (5,032) patients remaining on December 31st, 1899, 2,003 (1,847) were over 50 years of age, 9 (6) being over 90 years.

*Table XI.* (p. 148) shows the ages of the patients admitted, discharged, and dying during the year 1899, calculated from the ages stated on the orders of admission.

Of the 465 (454) patients admitted direct from the parishes and unions, 37 (56) were upwards of 70 years of age.

The total discharges numbered 147 (112).

The total deaths numbered 404 (376), of whom 313 (280) were upwards of 40 years of age, and 119 (95) upwards of 70 years.

*Table XII.* (p. 150) shows the departments where patients were employed on December 31st, 1899. Out of a total of 2,259 (2,262) males, 983 (842), and out of 2,734 (2,770) females, 986 (888) were usefully employed in and about the asylums.

*Table XIII.* (p. 152) shows the occupations previous to admission, and condition as to marriage, of the patients admitted during the year 1899.

Of the 288 (218) males admitted, 53 (30) were described as labourers, 60 (53) had no settled occupation, and of 45 (40) the occupation was unknown; 169 (147) were stated to be single, 68 (38) married, 24 (23) widowers, and as regards 27 (10) the condition as to marriage was unknown.

Of the 224 (280) females, 32 (35) were servants, 13 (16) charwomen, 80 (84) were without settled occupations, and of 42 (78) the occupation was unknown; 141 (163) were stated to be single, 43 (41) to be married, 26 (71) widows, and in 14 (5) 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. 122 to 129.

\* Italic figures in brackets throughout are the corresponding figures for 1898.



## iii. TRAINING SHIP "EXMOUTH."

**Statistics.** The number of boys admitted during the year was 341 (323)\* (including 67 (45) who were admitted from extra-metropolitan parishes and unions), while the number discharged was 372 (306).

Of the latter number, 149 (123) entered the royal navy, 135 (112) the mercantile marine, 58 (32) the army as musicians, and 30 (39) were returned to their respective parishes and unions. There was 1 (1) death.

At the end of the year there remained 531 (563) boys under training, of whom 86 (63) were chargeable to extra-metropolitan districts.

## iv. 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, 1899.
Fever Patients (including 218 cases of relapsing fever treated in 1870) ... }	222,770	4,895
Smallpox Patients .. ...	63,549	7
Imbeciles ... ..	22,584	5,951
Boys on Training Ship "Exmouth" ...	7,192	531
Children at Homes... ..	528	175
Totals ... ..	316,623	11,559

## v. 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. F. M. Turner and Dr. H. E. Cuff), 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 1899, 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.*

\* Italic figures in brackets throughout are the corresponding figures for 1898.



## APPENDIX I.—INFECTIOUS DISEASES.

Statistical tables detached from the Ambulance Committee's Annual Report in Vol I., p. 97.

## 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	1899	TOTALS.
<b>FEVER:—</b>										
From homes to Hospitals	42,848	16,118	18,496	16,573	16,725	22,152	22,795	20,923	24,917	201,547
Convalescents to North- ern and other Hospitals	11,879	7,682	6,813	5,159	5,037	9,998	8,941	6,447	7,973	69,919
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	4,530	49,170
Recovered cases dis- charged from Northern Hospital conveyed from Eastern and Western Hospitals to South- Eastern Hospital ...	...	100	60	221	82	154	111	1	97	826
Ditto from South- Eastern Hospital to Western Hospital ...	...	...	...	...	...	...	...	...	2	2
Recovered cases from Gore Farm Hospital to Town Hospitals for discharge ...	446	2,205	1,536	1,375	...	3,629	3,658	2,445	3,374	18,668
Recovered cases from Gore Farm Hospital conveyed from the South-Eastern, the South-Western, and the Brook Hospitals to other Hospitals ...	..	183	126	112	...	31	181	125	31	789
Other transfers between Hospitals ...	...	...	...	7	61	1	10	2	6	87
From Hospitals to homes	*2,818	220	279	251	256	377	850	317	385	5,253
From General Hospitals to homes, owing to want of room in the Managers' Hospitals...	...	...	468	143	724	1,287	752	71	144	3,589
Enteric Fever cases from homes to General Hos- pitals ...	...	...	170	216	241	109	186	133	247	1,302
<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>41,706</b>	<b>351,152</b>
<b>SMALLPOX:—</b>										
From homes to Hospitals and Wharves ...	14,070	306	2,389	1,186	1,045	265	121	36	28	19,446
From Hospitals to Wharves	4,953	200	331	8	...	...	...	...	8	5,500
Other transfers between Hospitals ...	...	5	1	1	3	...	...	...	7	17
From Hospitals and Wharves to homes ...	10,558	10	44	77	77	59	53	1	1	10,640
<b>Total Smallpox Patients</b>	<b>29,581</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>44</b>	<b>35,603</b>
Conveyance of Patients to other places than the Managers' Hospitals...	256	432	593	269	326	433	361	326	369	3,365
<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>35,048</b>	<b>42,119</b>	<b>390,120</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, 1899.

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 ... ..	23,583	195,297	222	...	...	195,519
Smallpox Patients... ..	...	...	...	...	...	...
To the Board's Wharves—						
Smallpox Patients... ..	28	364	...	...	...	364
To General Hospitals—						
Enteric Patients ... ..	302	2,426	...	...	...	2,426
<b>OTHER REMOVALS—</b>						
From General Hospitals to homes owing to want of room in the Board's Hospitals	140	1,207	...	...	...	1,207
Non-Smallpox Patients returned home ... ..	17	188	...	...	...	188
Other Patients returned home...	13	110	...	...	...	110
Patients sent for, but for various causes not removed ...	605	4,229	...	...	...	4,229
Patients' friends taken from home to Hospital ... ..	31	247	...	...	...	247
Patients' friends taken from Hospital to home ... ..	28	199	...	...	...	199
<b>TRANSFERS BETWEEN HOSPITALS—</b>						
Fever Patients to and from Northern Hospital... ..	958	4,064	17,374	...	...	21,438
Fever Patients to and from Gore Farm Hospital ... ..	1,092	377	19,820	452	...	20,649
Other transfers between Hospi- tals ... ..	64	942	95	...	...	1,037
Board's Hospitals to Wharves...	6	96	...	...	...	96
<b>RECOVERED PATIENTS TAKEN HOME—</b>						
From Fever Hospitals ... ..	348	3,385	39	...	...	3,424
From Wharves:—Smallpox ... ..	1	10	...	...	...	10
Service requirements ... ..	605	5,334	49	...	...	5,315
Conveyance of Ambulance Com- mittee ... ..	3	14	10	...	...	24
Conveyance of other Committee ..	...	...	...	...	...	...
	27,824	218,489	37,609	452	...	256,482
Conveyance of Patients to other places than Managers' Hos- pitals (private removals) }	360	3,639	246	...	...	3,885
Totals for 1899 ... ..	28,184	222,128	37,855	452	...	260,367
Totals for 1898 ... ..	23,120	182,255	32,421	88	...	214,677
Totals for 1897 ... ..	26,055	231,143	39,417	810	41	271,411
Totals for 1896 ... ..	26,646	249,376	46,792	587	801	296,792
Totals for 1895 ... ..	19,968	189,360	25,004	...	...	212,864
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	...	3,585	178,688
Totals for 1891 ... ..	8,254	66,129	12,958	...	791	79,873
Totals for 1890 ... ..	8,644	67,443	14,167	415	2,405	84,423
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> ... ..	222,010	1,888,197*	317,461	2,351	11,342	2,219,225

\* Includes 128 miles by horses only.



## APPENDIX I.—INFECTIOUS DISEASES.

## APPENDIX C.—RIVER SERVICE.

*Number of Patients, Visitors, Staff, &c., conveyed to and from the Hospital Ships during the year 1899.*

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 ... ..	1	1	8	91	101
February ... ..	2	...	4	186	192
March ... ..	...	1	...	227	228
April ... ..	2	...	2	220	224
May ... ..	2	2	...	102	106
June ... ..	2	1	3	67	73
July ... ..	...	...	...	110	110
August ... ..	...	...	...	71	71
September ... ..	...	...	...	86	86
October ... ..	...	...	...	76	76
November ... ..	1	...	...	95	96
December ... ..	1	1	...	103	105
Totals for 1899 ... ..	11	6	17	1,434	1,468
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 ... ..	16,362	14,809	6,592	22,272	60,035

## STEAMERS.

STEAMER.	Fires alight.		Under Steam.		Under Way.		Coal consumed.		Number of days when steam raised.	Distance run.
	Hours.	Mins.	Hours.	Mins.	Hours.	Mins.	Tons.	Cwt.		Miles.
"Albert Victor" ...	325	10	209	10	100	17	38	12	38	831
"Geneva Cross" ...	352	...	188	...	40	53	29	18	37	387
"Maltese Cross" ...	372	30	229	...	130	56	40	10	43	733
"White Cross" ...	481	...	260	36	144	55	22	...	59	1,589
Totals ...	1,530	40	886	46	417	1	131	...	177	3,540

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

Number, 2,543. Weight, 154 tons 10 cwt. 2 qrs. 27 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.



# REPORTS OF THE MEDICAL SUPERINTENDENTS OF THE SEVERAL FEVER HOSPITALS FOR THE YEAR 1899.

(For Statistical Tables, see pp. 64 to 94.)

## No. 1.

### EASTERN HOSPITAL.

HOMERTON, N.E.,

*February 21st, 1900.*

#### Statistics.

During the year, 2,994 patients have been under treatment. Of these, 1,541 have been discharged from the hospital, 799 have been transferred to the Northern Hospital, and 312 have died, leaving 342 under treatment at the end of the year. The percentage mortality is 11·68.

The number of scarlet fever cases under treatment has been 890. Of these, 309 were discharged, 460 were transferred, 26 died, and 95 remained. The percentage mortality is 3·28, the lowest hitherto recorded for this hospital. Included amongst the 26 deaths are 7 cases fatal from disease other than scarlet fever, viz., diphtheria present on admission, 3; post-scarlatinal diphtheria, 1; scalds, 1; measles, 1; and whooping cough, 1. Making allowance for these cases, the mortality is 2·40 per cent.

There have been 24 cases of secondary or post-scarlatinal diphtheria, one of which proved fatal, and in this case the patient was convalescent from measles following scarlet fever when attacked with diphtheria. One or more cases occurred in all the scarlet fever wards except one (Honor). There were 12 cases of other forms of secondary sore throat.

The number of cases of diphtheria under treatment was 1,541. Of these, 797 were discharged recovered, 337 were transferred to the Northern Hospital, 217 died, and 190 remained at the end of the year. The mortality per cent. is 15·86, the lowest hitherto recorded for this hospital, but only a fraction lower than that for the previous year (15·91). Included amongst the fatal cases are 21 in which death was due to diseases other than the attack of diphtheria for which the patients were admitted, viz., measles, 14; scarlet fever, 4; phthisis, 1; whooping-cough, 1; and congenital syphilis, 1. Making allowance for these cases, the mortality is 14·33 per cent. The mortality for 1898 thus corrected was 14·62. The diphtheria mortality therefore still keeps low. This is, in my opinion, chiefly due to the employment of antitoxic serum, which last year was administered in 96·2 per cent. of the completed cases. It is an interesting fact that since the introduction of this special treatment the case-mortality of the patients notified to be suffering from diphtheria admitted to the Managers' hospitals has been lower than that of the notified cases not admitted, having previously been higher. The figures are as follow :—



## DIPHTHERIA.

	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Mortality per cent. of notified cases) admitted to Asylums Board hospitals)	24·8	27·1	25·0	18·3	17·7	14·9	13·4
Mortality per cent. of notified cases not) admitted... ..)	21·5	23·7	24·5	23·3	21·3	20·1	17·1
Percentage of notified cases admitted to) hospitals... ..)	30·1	24·5	38·8	41·5	39·9	51·4	62·4

Some time ago I elsewhere expressed the opinion that this alteration of case-mortality was chiefly due to the extensive use of antitoxin in the hospitals as compared with outside, where there was reason for believing that it was but sparingly employed. Nor do I now see any cause to alter my opinion, which has, indeed, been strengthened by certain observations made by Mr. Shirley Murphy, medical officer of health of the administrative county of London, in his report to the London County Council for 1898. Mr. Murphy compares the behaviour of the two diseases, diphtheria and scarlet fever, during the two periods 1892-94 (non-antitoxin) and 1895-98 (antitoxin). With respect to the former disease, Mr. Murphy's figures (making allowance for the fact that he does not use quite the same set of figures that I do) tell the same tale as mine; but with regard to scarlet fever he clearly shows that the case-mortality of the patients treated in the Managers' hospitals was during both periods higher than that of those treated outside. The following figures, which I have prepared in the same way as those relating to diphtheria given above, illustrate this fact:—

## SCARLET FEVER.

	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Mortality per cent. of notified cases) admitted to Asylums Board hospitals)	6·3	6·1	6·0	5·1	4·1	4·0	4·1
Mortality per cent. of notified cases not) admitted .. ..)	2·3	2·7	3·6	2·8	2·8	2·0	1·5
Percentage of notified cases admitted to) hospitals... ..)	48·8	39·6	63·9	58·2	62·6	66·9	62·4

A comparison of these two sets of figures shows a striking difference in the behaviour of the two diseases in question. There has been, as Mr. Murphy points out, a reduction in the mortality of both with respect not only to cases treated within, but also to those treated without the hospitals; a diminution in the virulence of the disease and a more universal use of notification would tend to reduce the mortality in London as a whole; while an increase in the proportion of cases admitted to hospital would tend to lower the hospital mortality. But these factors do not appear to me to be sufficient to explain why in diphtheria the mortality of the cases admitted to hospital should be brought below that of the cases not admitted, whereas in scarlet fever the mortality of the cases admitted still



remains higher than that of those not admitted. There seems to be yet another factor in the case of diphtheria which is not present in the case of scarlet fever, a factor which came into play somewhat suddenly in 1895, and calling to mind the facts that have been presented to the Managers in previous reports, it is difficult to resist the conclusion that in the antitoxin treatment this factor is to be found.

If the antitoxin treatment influenced the hospital mortality, it would also influence the mortality of London as a whole, provided that a sufficiently large proportion of the notified cases were admitted to hospital.

Of enteric fever, 273 cases have been under treatment. Of these, 193 were discharged, 2 were transferred, 33 died, and 45 remained at the end of the year. The mortality per cent. is 14.01.

Two cases of typhus fever were admitted; both recovered.

The combined mortality of the scarlet fever, diphtheria, and enteric fever cases is 11.52 per cent.

Of the 2,682 cases admitted, 275, or 10.2 per cent., were found to be suffering from diseases other than those they were certified to have.

**Staff.** There has been one change only amongst the staff of superior officers.

Miss Masson resigned her post as matron, and Mrs. Day, who was matron of the Gore Farm Hospital, took her place.

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

## No. 2.

### NORTH-EASTERN HOSPITAL.

ST. ANN'S ROAD, TOTTENHAM, N.,

*January 15th, 1900.*

**Statistics.** During last year 2,248 patients were admitted, which, added to 307 left in from the previous year, brought up the total of those treated during 1899 to 2,555. Of these, 57 died, giving a percentage mortality of 2.55; 1,451 were discharged, 700 transferred, and 347 left in at the end of the year.

The cases of scarlet fever under treatment numbered 2,335, with 45 deaths, or a mortality per cent. of 2.22, against 3.13 last year. The 45 deaths from scarlet fever included two from post-scarlatinal diphtheria, one of these being complicated with measles.

3 cases of diphtheria were admitted, of which 2 died, and 7 cases of enteric, with no deaths.

We had 12 completed cases of post-scarlatinal diphtheria, with 2 deaths, 1 of them from measles. Ten of these 12 cases occurred during the last 3½ months of the year, when the hospital was very crowded.

During the year 209 patients were treated who had neither scarlet fever diphtheria, nor enteric. Of them, 189 were discharged, 10 died (6 from tuberculosis), and 10 remained in at the end of the year.

(Signed) HERBERT CUFF,  
*Medical Superintendent.*



## No. 3.

## NORTH-WESTERN HOSPITAL.

LAWN ROAD, HAMPSTEAD, N.W.,

February 15th, 1900

**Statistics.** The number of patients coming under treatment during the past year was 3,849, an increase of 357, as compared with 1898.

The general mortality for all classes was 7.91 per cent., as against 10.84 per cent. for the preceding year.

Of the total number received 2,131 were cases of scarlet fever, 849 of diphtheria, 300 of enteric fever, and 199 certified under one or other of the foregoing headings were subsequently found to be incorrect as regards the diagnosis. A large proportion of error occurred, as usual, in regard to enteric fever; thus of 357 so certified, in 57 the opinion was not verified after further observation.

Of the total admissions, 61.2 per cent. suffered from scarlet fever, and 71 deaths were attributed to this disorder or its complications, the percentage mortality, according to the Registrar-General's formula, being 3.32, as against 5.22 in the previous 12 months. The contrast in the type of this disorder as compared with 15 or 20 years ago is very marked, as also its fatality, when it was 11 and 13 per cent. respectively. The age-incidence of the scarlet fever cases was 32 per cent. under five years and 39 per cent. between five and ten years, approximating very closely with former statements. No less than 59.4 per cent. of the cases were transferred to the Northern Hospital.

Of diphtheria cases, 849 were directly admitted and 147 died. In 15 instances the patient was practically moribund on arrival, and succumbed within a period of 24 hours. If these were nullified, the mortality per cent. would be 15.5. In five other cases the patient died within 48 hours after coming to the hospital, and again in another six within 72 hours, thus making in all 26 deaths within three days. As early active measures in the treatment of diphtheria are admittedly required and proven by daily experience to be most efficacious, it follows that all these should be subtracted from the total, which, being done, reduces the mortality to 14.4 per cent.

Of the enteric cases, 176 males were received and 124 females, with a death rate of 13.3 per cent., as against 22.8 per cent. last year. Owing to a large demand for accommodation for this class of fever in the autumnal months, an extra ward was allocated, thus providing at a very short notice 21 additional beds.

**Complications and co-existent diseases.** The incidence of post-scarlatinal diphtheria was less in the year just ended than in the preceding year, but its fatality was greatly increased. Measles was seen in 52 cases, and chicken-pox in 78. In the former the mortality was insignificant, one death only occurring, thus serving to emphasise the oft-expressed opinion that very much can be done by treatment in this disease to obviate a fatal termination.

(Signed) WM. GAYTON,  
Medical Superintendent.



## No. 4.

## WESTERN HOSPITAL.

FULHAM, S.W.,

February 14th, 1900.

**Statistics.**

The number of cases treated during the year was 3,232, made up of 2,828 admissions and 404 remaining on December 31st, 1898. Of these, 1,537 were discharged recovered, 1,044 transferred to other hospitals of the Board, 231 died, and 420 were left under treatment at the end of the year. The gross mortality was 8.19 per cent.

The scarlet fever admissions numbered 1,482, which, with 214 cases remaining in at the close of the previous year, bring the total treated to 1,696. Of this number, 828 were transferred to the Northern Hospital, 591 discharged recovered, and 57 died, leaving 220 under treatment.

The scarlet fever mortality was 3.85 per cent., the lowest so far recorded at this hospital. The fatal cases include six in which death was due to intercurrent disease, viz., measles, two; whooping cough, two; diphtheria, one; tuberculosis, one.

Diphtheria was co-existent with scarlet fever at the time of admission of the patient in 32 cases, of which four died, and developed subsequent to admission in 27 cases, all of which recovered with the exception of one, the subject of tuberculosis.

There have been 1,130 cases of diphtheria under treatment. Of these, 658 were discharged, 216 transferred, 117 died, and 139 remained under treatment.

The death rate was 11.77 per cent., as against 16.33 in the preceding year.

The diphtheria mortality is the lowest recorded for this hospital, but the tracheotomy results compare unfavourably with the results obtained in previous years since the introduction of the antitoxin treatment, except 1896, there having been 24 cases, with 15 deaths.

Of enteric fever, 233 cases came under treatment, 141 were discharged recovered, 34 died, and 58 remained on December 31st.

The mortality was 18.42 per cent., as against 10.88 in the previous year. The type of the disease was of greater severity during the latter part of the year.

In consequence of the prevalence of enteric fever in the autumn, the normal accommodation for cases of this disease was supplemented by 16 beds, by the appropriation of four isolation wards.

Of miscellaneous diseases, 173 cases were treated, constituting 5.4 per cent. of the total admissions, 147 were discharged, and 23 died, leaving 3 under treatment.

The mortality per cent. was 14.11.

The original diagnosis was not confirmed in 2.49 per cent. of the cases certified to be suffering from scarlet fever, in 6.4 per cent. of those certified diphtheria, and in 20.1 per cent. of those certified enteric fever.

\* \* \* \* \*

**Works.**

The hospital buildings, ward and administrative, except those recently erected, were painted throughout externally and in part internally.

The only structural addition during the year was the new linen receiving room on the staff side of the laundry, completed in the spring.

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



## No. 5.

## SOUTH-WESTERN HOSPITAL.

STOCKWELL,

*January 31st, 1900.*

Dr. Caiger having been temporarily transferred to the Grove Hospital on July 18th, I acted as medical superintendent until his return on January 14th.

**Statistics.** During the year the number of patients under treatment was 2,229. Of these, 1,254 were discharged, 520 were transferred, and 147 died; leaving in hospital at the end of the year a total of 308 patients.

The scarlet fever admissions numbered 1,102, and 184 remained over from last year, the total number under treatment was therefore 1,286. Of these, 683 were discharged, 382 transferred, and 28 died; leaving in hospital 193 on December 31st. The scarlet fever mortality was 2·55 per cent.

The incidence of diphtheria amongst scarlet fever convalescents was 2·7 per cent., the mortality amongst such cases being only 3·3 per cent., the lowest we have yet reached.

Of diphtheria, 639 cases were admitted, and 78 remained over from the previous year. Out of this number, 413 were discharged, 138 were transferred, and 78 died, 88 remaining in hospital at the end of the year. The diphtheria mortality was 12·30 per cent. Antitoxin was given in 69·3 per cent. of the cases.

As regards enteric fever, 109 cases were admitted, and 16 were brought over from last year. The gross number was consequently 125. Of this number, 77 recovered and 26 died; leaving 22 cases under treatment on December 31st. The enteric fever mortality was 24·53 per cent., which is above the average.

Of miscellaneous diseases, nine cases remained over from 1898 and 92 were admitted during the year. Out of the total 101 cases, 81 were discharged, 15 died, and five cases remained under treatment at the end of the year. The mortality was 15·95 per cent. The greatest number of errors in diagnosis was in respect to enteric fever. In no less than 33 cases out of 109, or 30·2 per cent., the diagnosis was incorrect. In respect to diphtheria, the diagnosis was incorrect in 28 out of 639, or in 4·3 per cent. Whilst the diagnosis of scarlet fever was incorrect in 31 out of 1,102, or in 2·8 per cent. of cases.

**Want of  
isolation  
accom-  
modation.**

Considerable difficulty was experienced during the latter part of the year in respect to isolation of secondary diseases, particularly chicken-pox and measles, in consequence of the small amount of isolation accommodation. Owing to the demolition of four double-bedded isolation rooms to make room for the new pavilion, which has been in use since the beginning of the year, the number of isolation rooms in the upper hospital has been reduced from seven to three. As the general accommodation remains otherwise as it was, the want of more isolation provision is at times much felt.

**Works.**

The reconstruction of the drainage throughout the hospital has been completed, and the various w.c. appliances, the waste pipes, and the connections from the lavatories and bathrooms, as well as the sinks in the ward



kitchens, have been renewed. The whole system is therefore completely up to date, and is quite in accordance with modern sanitary requirements.

The hospital roads have, for the first time, been properly made up, and a large portion, viz., that which takes the bulk of the traffic, has been paved with asphalt. The remaining airing courts have been tar-paved, and new railings have been provided. This has effected an enormous improvement, although in certain details the work is not yet satisfactorily completed.

\*                      \*                      \*                      \*                      \*

(Signed)      W. J. J. STEWART,  
*Acting Medical Superintendent.*

## No. 6.

### FOUNTAIN HOSPITAL.

TOOTING GROVE,  
LOWER TOOTING, S.W.,  
*February 6th, 1900.*

**Statistics.** The number of patients under treatment during the past year has been 2,640; of these, 1,377 were discharged recovered, 852 were transferred to the country, and 121 died. The gross mortality was 5·16 per cent.

The admissions included 1,320 cases of scarlet fever, 923 of diphtheria, and 94 suffering from other diseases. Of the 1,320 cases of scarlet fever, 25 died, showing a mortality of 1·86 per cent. Of the 923 cases of diphtheria, 93 died, showing a mortality of 10·19 per cent.

The rates of mortality both for scarlet fever and diphtheria are the lowest hitherto recorded at this hospital. Several causes have probably contributed to this result, in which the following are, in my opinion, largely concerned. Firstly, the period of disease at which patients have been brought to hospital has been earlier than usual. When one realises that in diphtheria the fate of the patients depends in most cases upon the course of the disease during the first two or three days, and that in antitoxin we possess the most potent means of arresting it, it becomes obvious what an important effect in reducing mortality this cause has. Secondly, I am of opinion that the type of disease, especially as regards scarlet fever, has been milder than usual; and thirdly, it is probable that the increasing percentage of admissions to notifications results in the admission of a larger number of mild cases than was formerly the case.

During the year tracheotomy has been performed on 48 completed cases, with 16 deaths, a mortality of 33·3 per cent.

There were 38 patients admitted with co-existent attacks of scarlet fever and diphtheria, of whom four died; 53 cases of post-scarlatinal diphtheria developed in hospital, with one death, but in this case death was due to an affection contracted long after the patient had recovered from his attack of diphtheria.

As regards cases admitted under errors of diagnosis, the percentage was 2·42 in scarlet fever, 6·71 in diphtheria, and 4·02 on the total admissions.

\*                      \*                      \*                      \*                      \*

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



## No. 7.

## GROVE HOSPITAL.

TOOTING GROVE,

LOWER TOOTING, S.W.,

*January 31st, 1900.***Opening of hospital.**

The first patient was received on August 17th, by which time four wards had been made ready for the treatment of diphtheria, and four others were subsequently added as beds were required.

On September 15th two wards were prepared for the reception of enteric fever, and in consequence of the unusually high prevalence of this disease, eight more wards were afterwards opened for it.

Scarlet fever was first admitted on October 26th, but it was only found necessary to devote three wards to its treatment.

Thus, of the 24 main wards, 19 were brought into use before the close of the year, and of the eight isolation blocks, the four larger ones only were required.

**Statistics.**

The total admissions between August 17th and December 31st numbered 800; of these, 77 were scarlet fever, 437 were diphtheria, 241 were enteric fever, and 45 were cases of miscellaneous disease.

The hospital contained the largest number of patients on December 5th, when there were 381 under treatment. No less than 165 of these were suffering from enteric fever. This large number of enteric fever cases is without precedent in respect to any other of the Board's hospitals, and rendered the work very arduous both for the medical and nursing staffs.

At the close of the year, 320 patients remained under treatment, viz., 55 scarlet fever, 145 diphtheria, 109 enteric fever, and 11 cases of other disease.

This relatively large number of patients who had not completed their convalescence in comparison with the number of admissions renders the mortality rates, calculated by the Board's accepted formula, very misleading, as the figures are higher than the actual death-rate would warrant.

The combined mortality for all diseases comes out at 15.78 per cent.

The scarlet fever mortality was 4.04 per cent. The incidence of secondary diphtheria amongst the scarlet fever convalescents was very slight, only one instance being recorded among the completed cases.

The diphtheria mortality was 14.26 per cent.; 97.2 per cent. of the cases were treated with antitoxin, the beneficial influence of which has been as striking as ever.

The enteric fever mortality was 21.98 per cent. The cases were, in my opinion, of more than average severity, many of them being so ill on admission as to make one feel that their removal was hardly justified.

The cases of miscellaneous disease other than scarlet fever, diphtheria, or enteric fever, showed a mortality of 15.19 per cent.

The largest proportion of cases wrongly certified occurred, as is usual, in respect to enteric fever; they represented rather more than 8 per cent. of the cases so certified. The mistakes in respect to diphtheria certifications were 5 per cent., and in respect to scarlet fever, nil.



**Acting  
medical  
superinten-  
dent's  
opinion on  
suitability  
of buildings.**

After five months' experience of the hospital in working order, I venture to express the following opinions:—

The wards are bright, airy, and comfortable, and, except for certain defects in the warming apparatus, may be regarded as excellently adapted for their purpose.

The staff living rooms and dormitories are well lighted and comfortable. The want of a writing room or "quiet room" in the nurses' home is felt, and the scullery provision in connection with each of the staff dining rooms is quite inadequate. Otherwise, the staff quarters call for little criticism.

The steward's stores, needle room, linen store, and the laundries (excepting in respect to a few points, which, I believe, the Works Committee are attending to), are all excellent, and I believe equal to any to be found in other hospitals of the Board.

The kitchen of the hospital as at present equipped and arranged is not satisfactory. It is capable of considerable improvement.

The general plan of the ward section of the hospital is good. The arrangement of the various administrative departments, though they are far removed from many of the wards, is mutually convenient. The mortuary block and the porter's quarters, however, might with advantage have been placed in a different situation.

**Cost of  
administra-  
tion.**

The cost of administration at the Grove Hospital must always be comparatively high for the following reasons:—

- (a) The female staff dormitories are comprised in seven separate three-storey buildings.
- (b) There is extensive isolation provision.
- (c) There is a large amount of brasswork in the wards.
- (d) The buildings are spread over a large area.

**Works.** The following additions and alterations are much needed:—

- (a) An inquiry room in connection with each receiving room for the accommodation of visitors to the wards.
- (b) A covered way connecting the female staff dormitories with the covered way leading to the wards and staff homes.
- (c) The rearrangement, and in part, a replacement of certain of the culinary apparatus in the hospital kitchen.

\* \* \* \* \*

**Conduct of  
staff.**

I desire to record my appreciation of the manner in which the whole of the staff, almost without exception, performed their individual share in the work of opening the hospital. It was owing to their energy and intelligent co-operation that certain difficulties, notably in the engineering department, were successfully overcome. I cannot speak too highly of the services rendered by the chief subordinate officials, both male and female. With the exception of the engineer, they were all, it is satisfactory to note, recruited either by transfer or promotion from other hospitals of the Board. The advisability of this procedure in opening a new hospital can hardly be over-estimated. This applies with particular force in the case of the matron and steward. In this instance the knowledge and experience possessed by Miss Wachter and Mr. Kellett in the work of their respective departments were of the greatest service.



The capacity for management and thorough knowledge of detail shown by Miss Wachter have been simply invaluable, while the confidence and esteem in which she is universally held by the staff have been most striking. To her and to my medical colleagues I owe a debt of gratitude for their unvarying courtesy and able assistance.

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

### No. 8.

#### SOUTH-EASTERN HOSPITAL.

AVONLEY ROAD,

OLD KENT ROAD, S.E.

**Statistics.** During the year 1899, 2,957 patients were under treatment, an increase of 258 over the corresponding number for the preceding year. The total number admitted was 2,577, out of which 1,117 were suffering from diphtheria, 1,032 from scarlet fever, 233 from enteric fever, 7 from typhus fever, and 188 from other diseases. Compared with the preceding year there is an increase of diphtheria admissions of 383, or more than 50 per cent., and of enteric fever admissions of 50, or nearly 30 per cent. Scarlet fever, on the contrary, shows a small decline, viz., 123.

The case-mortality for all classes of disease together is 10·07 per cent., and is higher than in 1898, owing to the increase of diphtheria admissions. The mortality from the separate diseases is scarlet fever 2·09, diphtheria 16·64, enteric fever 15·19, typhus fever 0, and other diseases 10·13. The scarlet fever mortality is less than half that of 1898 or any preceding year at this hospital. The mortality from the other diseases shows little alteration.

The case-mortality of diphtheria at this hospital is raised above its normal figure by the admission here of a number of patients (33) who were intended for the Brook, Park, or other hospitals, but whose serious condition has led the ambulance nurse to bring them here, as a nearer hospital than the one intended. To what extent these cases are balanced by others who were intended for this hospital, but whose serious condition led to their admission elsewhere, I do not know. But such cases cannot be so common at hospitals situated farther in the country than this is.

The number of cases of infectious disease contracted in hospital was 141. I am glad to say that the incidence of diphtheria amongst scarlatinal cases is diminishing. Only 17 such cases occurred during the year, of whom one died. The number of scarlet fever cases occurring among diphtheria patients is, however, still very high.

**Works.** The new heating apparatus for conveying heat from central boilers to the wards by steam and hot-water pipes was commenced during the summer. Although a great part of the work is completed, the arrangements are such that, with one exception, only those wards are heated which had been heated previously, and the apparatus cannot be fully utilised until after this winter is over.

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

### No. 9.

PARK HOSPITAL.—No report.



## No. 10.

## BROOK HOSPITAL.

March 28th, 1900.

**Statistics.** The total number of cases treated was 3,424. Of these 1,864 were discharged recovered, 906 were transferred to other hospitals of the Board, and 185 died. There remained under treatment on December 31st, 469 patients.

**Scarlet Fever.** The number of cases treated was 2,041. Of these 913 were discharged recovered, 827 were transferred to other hospitals of the Board, and 25 died. The mortality was therefore 1·42 per cent., being, I believe, the lowest mortality hitherto recorded in the Asylums Board's acute hospitals.

The tables appended show the complications that occurred among the scarlet fever patients, the number of cases of concurrent scarlet fever and diphtheria, and the incidence of post-scarlatinal diphtheria. (See Medical Supplement, pp. 163 and 169.)

**Diphtheria.** The number of cases treated was 1,153. Of these 782 were discharged recovered, 79 were transferred to other hospitals of the Board, and 129 died. The mortality was therefore 12·83 per cent. There were 31 hæmorrhagic cases, and 18 patients died within 24 hours of admission. Tracheotomy was performed on 40 patients, of whom 9 died; therefore 77·5 per cent. of the tracheotomies recovered. Of the 990 completed cases, 867 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:—

*Cases treated with Antitoxin.*

AGES.	DAY OF DISEASE.										TOTAL.		Mortality per cent.
	1st.		2nd.		3rd.		4th.		5th. and upwards.				
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Under 1 ... ..	1	0	5	1	3	1	1	0	2	1	12	3	25·0
1 to 2 ... ..	1	0	15	1	7	2	6	1	9	4	38	8	21·0
2 to 3 ... ..	4	0	24	2	9	2	12	5	16	6	65	15	24·6
3 to 4 ... ..	2	0	20	2	22	3	23	10	27	6	94	21	22·3
4 to 5 ... ..	8	0	24	0	25	5	31	8	40	6	128	19	15·6
5 to 10 ... ..	14	0	76	2	82	11	79	13	81	17	332	43	12·6
10 to 15 ... ..	3	0	27	0	27	2	24	2	17	2	98	6	6·1
15 to 20 ... ..	1	0	8	0	20	0	8	0	8	1	45	1	2·2
20 and upwards	2	0	10	0	18	0	10	0	15	1	55	1	1·8
Total ... ..	30	0	209	8	213	26	194	39	215	44	867	117	...
Mortality per cent. ... {	0·0		3·8		12·2		20·0		20·4		...		...

The results shown above correspond closely to those of 1897 and 1898, when the mortalities were as follow:—

	1897.	1898.
Of cases treated on 1st day of disease	0·0	0·0 per cent.
“ “ “ 2nd “ “	5·42	5·09 “
“ “ “ 3rd “ “	11·5	14·38 “
“ “ “ 4th “ “	19·0	18·11 “
“ “ “ 5th day and after	21·0	22·5 “

The above facts show the urgent importance of early treatment with antitoxin.



**Enteric  
Fever.**

The number of cases treated was 131. Of these 87 were discharged recovered and 17 died. The mortality was therefore 15·67 per cent.

\* \* \* \* \*

(Signed) JOHN MACCOMBIE,  
*Medical Superintendent.*

**No. 11.****NORTHERN HOSPITAL.**

WINCHMORE HILL, N.,

*February 2nd, 1900.*

**Statistics.**

The total number of patients under treatment during the year was 5,124. Of these, 595 were in the hospital at the end of 1898, and 4,529 were admitted during 1899; 4,549 were discharged recovered, 15 were transferred to other hospitals, and 10 died.

Of the admissions, 3,570 were scarlet fever, 957 diphtheria cases, and 2 enteric cases. Of the scarlet fever cases 8 and of the diphtheria cases 2 died.

The gross mortality was 0·22; that of scarlet fever, 0·22, and of diphtheria 0·20.

Of the deaths among scarlet fever patients, 3 were due to recurrence of the disease during convalescence.

Of measles, 16 cases occurred—3 among the diphtheria and 13 among the scarlet fever convalescents. Of the latter, 1 died.

**Post-  
Scarlatinal  
Diphtheria.**

Of post-scarlatinal diphtheria, there were 222 cases completed, with 2 deaths—a mortality of 0·9.

Antitoxin was administered in all except 5 of the 222 cases, and was practically the only remedy employed. The opinion based upon the results obtained in 1895 as to the efficacy of the serum treatment is, by the experience of a further period of four years, amply confirmed.

The mortality at this hospital from post-scarlatinal diphtheria during the years 1890–94 inclusive—the five years immediately preceding the introduction of antitoxin—was 61·9 per cent. For the succeeding five years, 1895–99 inclusive, during which the antitoxin treatment has been consistently employed here, the mortality has been 1·5 per cent.

The total number of deaths from post-scarlatinal diphtheria at this hospital for the period 1890–94 was 104; the total number for the succeeding five years, 1895–99, was 16; with a decline from 4 deaths out of 119 cases in 1895 to 2 deaths out of 222 cases in 1899.

No demonstration of the value of a remedy could be more complete, and I again urge the importance of a system by which an adequate supply of properly-tested antitoxin would be available for use by every medical man immediately upon his diagnosis of a case as one of diphtheria.

**Works.**

Three important structural additions to the hospital—an isolation block, a nurses' home, and an electric lighting station—were completed, and the installation of electricity as an illuminant in place of gas throughout the institution was approaching completion at the end of the year.

\* \* \* \* \*

(Signed) F. N. HUME,  
*Medical Superintendent.*



## No. 12.

## GORE FARM HOSPITAL.

DARENTH, NEAR DARTFORD, KENT,

February 20th, 1900.

**Statistics.**

During the year 1899 there were 3,973 patients treated in the hospital. Of these, 3,366 were discharged recovered, 11 were transferred to other hospitals, and 4 died. There remained 592 under treatment at the end of the year. The mortality rate was 0.11 per cent.

The number of scarlet fever patients treated was 3,686. Of these, 3,115 were transferred here from other hospitals of the Board, 566 remained over from last year, and 5 were admitted from Dartford and its surrounding district. Of the number treated 3,167 were discharged recovered, 7 were transferred to other hospitals, 508 remained under treatment at the end of the year, and 4 died. The mortality rate was 0.12 per cent.

The number of diphtheria patients treated was 287. Of these, 286 were transferred here from other hospitals of the Board, 12\* were admitted from the Darenth Asylum, and 1 was admitted from Dartford. Of the number treated 199 were discharged recovered, 4 were transferred to other hospitals, and 84 remained under treatment at the end of the year. The mortality rate was nil.

In March, one of the blocks was prepared for the reception of cases of diphtheria from the Darenth Asylum, a small outbreak having occurred at that asylum, chiefly amongst the imbeciles. Nine patients were admitted in March and three in April. These patients were all discharged recovered to the asylum.

The hospital was first utilised for the reception of convalescent diphtheria patients in September. The blocks chosen for this purpose were R, S, and T. These blocks provide accommodation for 132 patients. I have been impressed by the fact that the diphtheria patients transferred here have not in any way suffered from the journey.

The lower hospital was opened on 25th December for the reception of certain cases of scarlet fever which had contracted smallpox at the Eastern Hospital.† The number admitted was seven, and these are included in the above scarlet fever statistics.

There were 190 completed cases of post-scarlatinal diphtheria, and of these 3 died, a mortality rate of 1.5 per cent. It is of interest to observe how near the incidence of post-scarlatinal diphtheria has been of recent years at the two convalescent hospitals. The following table gives the figures for the years 1896, 1897, and 1898. These figures are taken from the annual statistical returns.

INCIDENCE OF POST-SCARLATINAL DIPHTHERIA FOR THE YEARS 1896, 1897, AND 1898.					
GORE FARM HOSPITAL.			NORTHERN HOSPITAL.		
Discharges, Transfers, and Deaths.	Number of Cases of Post-Scarlatinal Diphtheria.	Percentage Incidence.	Discharges, Transfers, and Deaths.	Number of Cases of Post-Scarlatinal Diphtheria.	Percentage Incidence.
9,598	442	4.60	13,169	656	4.98

(Signed)

FREDERIC THOMSON,

*Medical Superintendent*

\* Not included in the statistical tables, pp. 64 to 94.

† Included in the smallpox tables, pp. 98 to 112.

‡ In this table I have deducted all cases of post-scarlatinal diphtheria which occurred prior to 24th December, 1895, at the Northern Hospital, in order that the figures given may compare more accurately. Gore Farm Hospital was opened for the reception of scarlet fever patients on 24th December, 1895.



FEVER STATISTICS.—TABLE I.—

EASTERN HOSPITAL.										
DISEASES.	Remain- ing on Dec. 31st, 1898.	Admitted during 1899.		Total under treatment during 1899.	Discharged during 1899.		Died during 1899.	Mortality per cent.	Remain- ing on Dec. 31st, 1899.	
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.				
Scarlet ... ..	103	782	5	890	309	460	26	3.28	95	
Diphtheria ... ..	158	1,380	3	1,541	797	337	217	15.86	190	
Enteric ... ..	30	243	...	273	193	2	33	14.01	45	
Typhus ... ..	...	2	...	2	2	...	...	...	...	
Other diseases ... ..	13	275	...	288	240	...	36	13.06	12	
Totals ... ..	304	2,682	8	2,994	1,541	799	312	11.68	342	
NORTH-EASTERN HOSPITAL.										
Scarlet ... ..	*289	2,046	...	2,335	1,256	700	45	2.22	334	
Diphtheria ... ..	1	3	...	4	1	...	2	66.66	1	
Enteric ... ..	...	7	...	7	5	...	...	...	2	
Other diseases ... ..	*17	192	...	209	189	...	10	5.11	10	
Totals ... ..	307	2,248	...	2,555	1,451	700	57	2.55	347	
* In the table for 1898 these numbers were incorrectly given as 291 and 15 respectively.										
NORTH-WESTERN HOSPITAL.										
Scarlet ... ..	232	2,131	...	2,363	669	1,404	71	3.32	219	
Diphtheria ... ..	95	849	...	944	696	...	147	17.37	101	
Enteric ... ..	43	300	...	343	246	...	39	13.33	58	
Other diseases ... ..	...	199	...	199	176	...	18	9.13	5	
Totals ... ..	370	3,479	...	3,849	1,787	1,404	275	7.91	383	
WESTERN HOSPITAL.										
Scarlet ... ..	214	1,479	3	1,696	591	828	57	3.85	220	
Diphtheria ... ..	134	993	3	1,130	658	216	117	11.77	139	
Enteric ... ..	39	194	...	233	141	...	34	18.42	58	
Other diseases ... ..	17	156	...	173	147	...	23	14.11	3	
Totals ... ..	404	2,822	6	3,232	1,537	1,044	231	8.19	420	
SOUTH-WESTERN HOSPITAL.										
Scarlet ... ..	184	1,097	5	1,286	683	382	28	2.55	193	
Diphtheria ... ..	78	637	2	717	413	138	78	12.30	88	
Enteric ... ..	16	109	...	125	77	...	26	24.53	22	
Other diseases ... ..	9	92	...	101	81	...	15	15.95	5	
Totals ... ..	287	1,935	7	2,229	1,254	520	147	7.61	308	
FOUNTAIN HOSPITAL.										
Scarlet ... ..	217	1,320	...	1,537	683	649	25	1.86	180	
Diphtheria ... ..	85	923	...	1,008	606	203	93	10.19	106	
Other diseases ... ..	1	94	...	95	88	...	3	3.24	4	
Totals ... ..	303	2,337	...	2,640	1,377	852	121	5.16	290	
GROVE HOSPITAL.										
Scarlet ... ..	...	77	...	77	20	...	2	4.04	55	
Diphtheria ... ..	...	437	...	437	240	...	52	14.26	145	
Enteric ... ..	...	241	...	241	91	...	41	21.98	109	
Other diseases ... ..	...	45	...	45	28	...	6	15.19	11	
Totals ... ..	...	800	...	800	379	...	101	15.78	320	



*Admissions, Discharges, and Deaths during 1899.*

**SOUTH-EASTERN HOSPITAL.**

DISEASES.	Remain- ing on Dec. 31st, 1898.	Admitted during 1899.		Total under treatment during 1899.	Discharged during 1899.		Died during 1899.	Mortality per cent.	Remain- ing on Dec. 31st, 1899.
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.			
Scarlet ... ..	166	1,030	2	1,198	401	446	22	2·09	129
Diphtheria ... ..	147	1,115	2	1,264	683	205	182	16·64	194
Enteric ... ..	54	233	...	287	217	...	37	15·19	33
Typhus ... ..	...	7	...	7	6	...	...	...	1
Other diseases ... ..	13	188	...	201	168	...	19	10·13	14
Totals ... ..	380	2,573	4	2,957	1,475	851	260	10·07	371

**PARK HOSPITAL.**

Scarlet ... ..	186	1,566	...	1,752	725	788	40	2·56	199
Diphtheria ... ..	185	1,315	1	1,501	1,010	66	163	12·75	262
Enteric ... ..	31	100	...	131	79	5	13	13·19	34
Typhus ... ..	...	2	...	2	2	...	...	...	...
Other Diseases ... ..	22	245	...	267	243	...	16	6·34	8
Total ... ..	424	3,228	1	3,653	2,059	859	232	7·27	503

**BROOK HOSPITAL.**

Scarlet ... ..	284	1,756	1	2,041	913	827	25	1·42	276
Diphtheria ... ..	133	1,020	...	1,153	782	79	129	12·83	163
Enteric ... ..	18	108	5	131	87	...	17	15·67	27
Other diseases ... ..	2	97	...	99	82	...	14	14·51	3
Totals ... ..	437	2,981	6	3,424	1,864	906	185	6·23	469

**NORTHERN HOSPITAL.**

Scarlet ... ..	476	1	3,569	4,046	3,557	9	8	0·22	472
Diphtheria ... ..	119	...	957	1,076	990	6	2	0·20	78
Enteric ... ..	...	...	2	2	2	...	...	...	...
Other diseases ... ..	...	...	...	...	...	...	...	...	...
Totals ... ..	595	1	4,528	5,124	4,549	15	10	0·22	550

**GORE FARM HOSPITAL.**

Scarlet ... ..	566	5	3,115	3,686	3,167	7	4	0·12	508
Diphtheria ... ..	...	1	286	287	199	4	...	...	84
Other diseases ... ..	...	...	...	...	...	...	...	...	...
Totals ... ..	566	6	3,401	3,973	3,366	11	4	0·11	592

**SUMMARY.**

Scarlet ... ..	2,917	13,290	6,700	16,207	12,974	6,700	353	2·65	2,880
Diphtheria ... ..	1,135	8,673	1,254	9,808	7,075	1,254	1,182	13·95	1,551
Enteric ... ..	231	1,535	7	1,766	1,138	7	240	16·47	388
Typhus ... ..	...	11	...	11	10	...	...	...	1
Totals ... ..	4,283	23,509	7,961	27,792	21,197	7,961	1,775	7·63	4,820
Other diseases ... ..	94	1,583	...	1,677	1,442	...	160	10·05	75
Grand Totals ... ..	4,377	25,092	7,961	29,469	22,639	7,961	1,935	7·79	4,895

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.





APPENDIX I.—INFECTIOUS DISEASES. FEVER STATISTICS, 1899.  
 FEVER STATISTICS.—TABLE II.—Monthly Admissions and Deaths of various Diseases and total Discharges during 1899.

EASTERN HOSPITAL.																	SOUTH-WESTERN HOSPITAL.																				
MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.					MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.						
	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Typhus.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.	Scarlet.		From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Typhus.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.				
January	56	...	174	...	16	...	...	28	...	224	8	14	1	...	2	20	143	65	January	77	...	53	1	12	...	6	...	189	4	6	...	1	11	106	40		
February	50	...	88	...	19	...	...	23	...	180	2	21	4	...	2	29	104	44	February	95	...	56	...	5	...	10	...	166	5	11	...	2	21	95	43		
March	41	1	86	...	15	...	...	23	...	166	2	19	5	...	7	33	135	52	March	50	...	47	...	4	...	6	...	107	1	7	...	3	12	117	51		
April	59	...	62	...	11	...	...	24	...	146	3	11	...	...	1	15	112	31	April	61	...	45	...	2	...	6	...	112	1	9	...	...	10	90	41		
May	38	...	124	...	9	...	...	27	...	218	2	12	3	...	5	22	106	69	May	66	...	47	...	8	...	9	...	130	1	9	...	1	7	90	41		
June	73	...	137	...	17	...	...	34	...	261	1	18	1	...	5	25	125	79	June	97	...	62	...	8	...	7	...	174	3	6	...	...	12	90	41		
July	88	...	135	...	20	...	...	27	...	270	...	15	4	...	4	23	125	90	July	110	1	56	...	3	...	12	...	125	1	9	...	...	13	91	44		
August	66	...	132	...	22	...	...	77	...	238	8	22	4	...	3	32	129	78	August	70	...	44	...	17	...	10	...	141	1	6	...	...	14	118	37		
September	83	1	129	1	20	...	...	16	...	250	2	22	1	...	5	30	129	82	September	136	...	49	...	17	...	8	...	210	4	4	...	...	1	14	118	37	
October	99	1	122	...	23	...	...	1	17	...	243	3	18	3	...	1	25	144	83	October	150	4	75	...	10	...	5	...	244	1	4	...	...	...	7	84	101
November	64	2	130	...	30	...	...	1	23	...	259	1	23	6	...	1	30	159	92	November	116	...	35	...	19	...	8	...	189	4	5	...	...	1	13	135	32
December	45	...	111	1	32	...	...	16	...	205	4	22	2	...	...	28	130	56	December	69	...	50	1	15	...	5	...	138	3	5	...	...	1	12	148	11	
Totals	742	5	1,380	3	243	...	...	2	275	...	2,630	36	217	53	...	56	312	1,541	799	Totals	1,097	5	637	2	109	...	92	...	1,942	28	78	26	...	15	147	1,234	520

NORTH-EASTERN HOSPITAL.																	FOUNTAIN HOSPITAL.																	
MONTH.	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.	MONTH.	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.					
January	117	...	...	...	1	...	10	...	128	5	...	...	5	132	10	January	112	...	85	...	...	9	...	206	4	3	...	1	8	142	51			
February	137	...	...	...	1	...	20	...	158	8	...	...	2	164	22	February	85	...	64	...	...	15	...	164	3	4	...	...	...	7	108	69		
March	134	...	...	...	1	...	39	...	174	5	1	...	1	185	55	March	104	...	61	...	...	13	...	178	4	9	...	...	...	5	126	83		
April	79	...	...	...	1	...	7	...	87	...	...	...	1	102	18	April	82	...	24	...	...	3	...	119	2	3	...	...	...	4	124	37		
May	136	...	...	...	...	...	19	...	155	2	...	...	2	7	115	28	May	103	...	79	...	...	2	...	184	1	3	...	...	...	10	84	79	
June	135	...	...	...	...	...	5	...	140	5	...	...	...	2	7	115	28	June	101	...	83	...	...	9	...	185	1	9	...	...	...	13	133	91
July	204	...	...	...	1	...	7	...	212	2	...	...	2	119	69	July	124	...	127	...	...	15	...	264	2	11	...	...	...	8	84	53		
August	184	...	...	...	2	...	11	...	197	3	...	...	1	4	104	August	88	...	59	...	...	4	...	131	1	7	...	...	...	1	7	146	59	
September	255	...	...	...	...	...	11	...	267	8	...	...	3	111	162	September	117	...	74	...	...	5	...	196	...	6	...	...	...	...	23	75	122	
October	335	...	...	...	1	...	31	...	367	6	...	...	1	6	128	October	202	...	119	...	...	10	...	331	1	22	...	...	...	1	9	90	128	
November	216	...	...	...	1	...	29	...	246	6	...	...	7	146	142	November	120	...	86	...	...	7	...	213	2	6	...	...	...	...	...	14	140	70
December	114	...	...	...	...	...	3	...	117	9	...	...	2	11	114	December	82	...	70	...	...	4	...	156	4	10	...	...	...	...	...	...	...	...
Totals	2,046	...	3	...	7	...	192	...	2,348	45	2	...	10	57	1,451	700	Totals	1,320	...	923	...	...	94	...	2,337	25	98	...	...	...	8	121	1,377	852

NORTH-WESTERN HOSPITAL.																	GROVE HOSPITAL.																		
MONTH.	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.	MONTH.	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.						
January	155	...	64	...	34	...	6	...	259	8	15	6	...	26	141	43	January	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
February	172	...	80	...	14	...	6	...	271	1	7	3	...	3	13	133	84	February	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March	119	...	67	...	16	...	15	...	217	6	11	2	...	2	21	157	125	March	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April	142	...	26	...	13	...	14	...	205	6	6	3	...	3	17	133	72	April	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May	161	...	79	...	15	...	15	...	270	8	12	2	...	3	25	119	142	May	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	210	...	78	...	9	...	26	...	323	6	13	...	...	3	22	134	113	June	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July	206	...	57	...	31	...	34	...	328	6	7	2	...	1	16	132	108	July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	172	...	79	...	22	...	14	...	267	6	9	3	...	2	14	145	130	August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September	213	...	77	...	25	...	20	...	335	2	7	1	...	1	11	108	119	September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	250	...	77	...	40	...	22	...	399	10	22	4	...	1	37	126	149	October	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November	202	...	67	...	37	...	19	...	325	8	17	6	...	1	32	146	159	November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	129	...	88	...	44	...	9	...	270	7	21	7	...	...	35	177	165	December	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	2,181	...	849	...	300	...	199	...	3,479	71	147	39	...	18	275	1,787	1,404	Totals	77	...	437	...	241	...	45	...	800	2	52	41	...	6	101	379	...

WESTERN HOSPITAL.																	SOUTH-EASTERN HOSPITAL.																			
MONTH.	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.	MONTH.	Scarlet.	From other Hospitals of Board.	Diphtheria.	From other Hospitals of Board.	Etiotic.	From other Hospitals of Board.	Total.	Scarlet.	Diphtheria.	Etiotic.	From other Hospitals of Board.	Total.	Re-covered.	To other Hospitals of Board.							
January	129	...	98	1	10	...	6	...	244	7	10	2	...	2	21	110	101	January	81	...	76	...	25	...	15	...	197	3	7	...	3	17	113	82		
February	93	...	87	...	14	...	8	...	202	3	14	2	...	...	19	108	92	February	...	...	55	...	30	...	3	...	141	1	7	...	1	11	120	25		
March	104	...	65	1	7	...	13	...	190	3	4	...	...	3	10	126	69	March	...	...	50	...	69	...	11	...	135	1	17	...	...	...	23	137	27	
April	62	...	65	...	1	...	10	...	139	6	15	...	...	...	21	113	23	April	...	...	42	...	74	...	11	...	128	1	14	...	...	...	3	117	18	
May	106	...	62	...	1	...	17	...	186	2	5	...	...	1	8	151	39	May	...	...	72	...	86	...	6	...	139	...	16	...	...	1	14	105	86	
June	156	1	73	...	5	...	23	...	276	6	5	1	...	2	14	172	72	June	...	...	95	...	79	...	6	...	194	...	16	...	...	5	23	98	51	
July	144	1	118	...	29	...	23	...	315	7	11	3	...	3	23	142	96	July	...	...	108	...	140	...	11	...	217	...	27	...	...	...	16	100	96	
August	150	...	78	...	24	...	17	...	269	3	7	...	...	2	12	93	123	August	...	...	125	...	145	...	29	...	219	...	28	...	...	...	16	123	70	
September	143	...	87	1	11	...	14	...	226	4	11	4	...	2	21	159	147	September	...	...	122	...	110	1	31	...	17	...	253	2	27	4	...	33	114	146
October	190	...	31	...	31	...	7	...	233	7	30	10	...	1	36	141	166	October	...	...	113	...	100	1	26	...	1	...	263	1	20	4	...	1	26	155
November	100	...	85	...	41	...	...	...	191	6	9	4	...	2	21	134	65	November</																		



NORTH-EASTERN DISTRICT									
1900					1901				
Area	Population	Area	Population	Area	Area	Population	Area	Population	Area
1	100	1	100	1	1	100	1	100	1
2	200	2	200	2	2	200	2	200	2
3	300	3	300	3	3	300	3	300	3
4	400	4	400	4	4	400	4	400	4
5	500	5	500	5	5	500	5	500	5
6	600	6	600	6	6	600	6	600	6
7	700	7	700	7	7	700	7	700	7
8	800	8	800	8	8	800	8	800	8
9	900	9	900	9	9	900	9	900	9
10	1000	10	1000	10	10	1000	10	1000	10
11	1100	11	1100	11	11	1100	11	1100	11
12	1200	12	1200	12	12	1200	12	1200	12
13	1300	13	1300	13	13	1300	13	1300	13
14	1400	14	1400	14	14	1400	14	1400	14
15	1500	15	1500	15	15	1500	15	1500	15
16	1600	16	1600	16	16	1600	16	1600	16
17	1700	17	1700	17	17	1700	17	1700	17
18	1800	18	1800	18	18	1800	18	1800	18
19	1900	19	1900	19	19	1900	19	1900	19
20	2000	20	2000	20	20	2000	20	2000	20
21	2100	21	2100	21	21	2100	21	2100	21
22	2200	22	2200	22	22	2200	22	2200	22
23	2300	23	2300	23	23	2300	23	2300	23
24	2400	24	2400	24	24	2400	24	2400	24
25	2500	25	2500	25	25	2500	25	2500	25
26	2600	26	2600	26	26	2600	26	2600	26
27	2700	27	2700	27	27	2700	27	2700	27
28	2800	28	2800	28	28	2800	28	2800	28
29	2900	29	2900	29	29	2900	29	2900	29
30	3000	30	3000	30	30	3000	30	3000	30
31	3100	31	3100	31	31	3100	31	3100	31
32	3200	32	3200	32	32	3200	32	3200	32
33	3300	33	3300	33	33	3300	33	3300	33
34	3400	34	3400	34	34	3400	34	3400	34
35	3500	35	3500	35	35	3500	35	3500	35
36	3600	36	3600	36	36	3600	36	3600	36
37	3700	37	3700	37	37	3700	37	3700	37
38	3800	38	3800	38	38	3800	38	3800	38
39	3900	39	3900	39	39	3900	39	3900	39
40	4000	40	4000	40	40	4000	40	4000	40
41	4100	41	4100	41	41	4100	41	4100	41
42	4200	42	4200	42	42	4200	42	4200	42
43	4300	43	4300	43	43	4300	43	4300	43
44	4400	44	4400	44	44	4400	44	4400	44
45	4500	45	4500	45	45	4500	45	4500	45
46	4600	46	4600	46	46	4600	46	4600	46
47	4700	47	4700	47	47	4700	47	4700	47
48	4800	48	4800	48	48	4800	48	4800	48
49	4900	49	4900	49	49	4900	49	4900	49
50	5000	50	5000	50	50	5000	50	5000	50
51	5100	51	5100	51	51	5100	51	5100	51
52	5200	52	5200	52	52	5200	52	5200	52
53	5300	53	5300	53	53	5300	53	5300	53
54	5400	54	5400	54	54	5400	54	5400	54
55	5500	55	5500	55	55	5500	55	5500	55
56	5600	56	5600	56	56	5600	56	5600	56
57	5700	57	5700	57	57	5700	57	5700	57
58	5800	58	5800	58	58	5800	58	5800	58
59	5900	59	5900	59	59	5900	59	5900	59
60	6000	60	6000	60	60	6000	60	6000	60
61	6100	61	6100	61	61	6100	61	6100	61
62	6200	62	6200	62	62	6200	62	6200	62
63	6300	63	6300	63	63	6300	63	6300	63
64	6400	64	6400	64	64	6400	64	6400	64
65	6500	65	6500	65	65	6500	65	6500	65
66	6600	66	6600	66	66	6600	66	6600	66
67	6700	67	6700	67	67	6700	67	6700	67
68	6800	68	6800	68	68	6800	68	6800	68
69	6900	69	6900	69	69	6900	69	6900	69
70	7000	70	7000	70	70	7000	70	7000	70
71	7100	71	7100	71	71	7100	71	7100	71
72	7200	72	7200	72	72	7200	72	7200	72
73	7300	73	7300	73	73	7300	73	7300	73
74	7400	74	7400	74	74	7400	74	7400	74
75	7500	75	7500	75	75	7500	75	7500	75
76	7600	76	7600	76	76	7600	76	7600	76
77	7700	77	7700	77	77	7700	77	7700	77
78	7800	78	7800	78	78	7800	78	7800	78
79	7900	79	7900	79	79	7900	79	7900	79
80	8000	80	8000	80	80	8000	80	8000	80
81	8100	81	8100	81	81	8100	81	8100	81
82	8200	82	8200	82	82	8200	82	8200	82
83	8300	83	8300	83	83	8300	83	8300	83
84	8400	84	8400	84	84	8400	84	8400	84
85	8500	85	8500	85	85	8500	85	8500	85
86	8600	86	8600	86	86	8600	86	8600	86
87	8700	87	8700	87	87	8700	87	8700	87
88	8800	88	8800	88	88	8800	88	8800	88
89	8900	89	8900	89	89	8900	89	8900	89
90	9000	90	9000	90	90	9000	90	9000	90
91	9100	91	9100	91	91	9100	91	9100	91
92	9200	92	9200	92	92	9200	92	9200	92
93	9300	93	9300	93	93	9300	93	9300	93
94	9400	94	9400	94	94	9400	94	9400	94
95	9500	95	9500	95	95	9500	95	9500	95
96	9600	96	9600	96	96	9600	96	9600	96
97	9700	97	9700	97	97	9700	97	9700	97
98	9800	98	9800	98	98	9800	98	9800	98
99	9900	99	9900	99	99	9900	99	9900	99
100	10000	100	10000	100	100	10000	100	10000	100
101	10100	101	10100	101	101	10100	101	10100	101
102	10200	102	10200	102	102	10200	102	10200	102
103	10300	103	10300	103	103	10300	103	10300	103
104	10400	104	10400	104	104	10400	104	10400	104
105	10500	105	10500	105	105	10500	105	10500	105
106	10600	106	10600	106	106	10600	106	10600	106
107	10700	107	10700	107	107	10700	107	10700	107
108	10800	108	10800	108	108	10800	108	10800	108
109	10900	109	10900	109	109	10900	109	10900	109
110	11000	110	11000	110	110	11000	110	11000	110
111	11100	111	11100	111	111	11100	111	11100	111
112	11200	112	11200	112	112	11200	112	11200	112
113	11300	113	11300	113	113	11300	113	11300	113
114	11400	114	11400	114	114	11400	114	11400	114
115	11500	115	11500	115	115	11500	115	11500	115
116	11600	116	11600	116	116	11600	116	11600	116
117	11700	117	11700	117	117	11700	117	11700	117
118	11800	118	11800	118	118	11800	118	11800	118
119	11900	119	11900	119	119	11900	119	11900	119
120	12000	120	12000	120	120	12000	120	12000	120
121	12100	121	12100	121	121	12100	121	12100	121
122	12200	122	12200	122	122	12200	122	12200	122
123	12300	123	12300	123	123	12300	123	12300	123
124	12400	124	12400	124	124	12400	124	12400	124
125	12500	125	12500	125	125	12500	125	12500	125
126	12600	126	12600	126	126	12600	126	12600	126
127	12700	127	12700	127	127	12700	127	12700	127
128	12800	128	12800	128	128	12800	128	12800	128
129	12900	129	12900	129	129	12900	129	12900	129
130	13000	130	13000	130	130	13000	130	13000	130
131	13100	131	13100	131	131	13100	131	13100	131
132	13200	132	13200	132	132	13200	132	13200	132
133	13300	133	13300	133	133	13300	133	13300	133
134	13400	134	13400	134	134	13400	134	13400	134
135	13500	135	13500	135	135	13500	135	13500	135
136	13600	136	13600	136	136	13600	136	13600	136
137	13700	137	13700	137	137	13700	137	13700	137
138	13800	138	13800	138	138	13800	138	13800	138
139	13900	139	13900	139	139	13900	139	13900	139
140	14000	140	14000	140	140	14000	140	14000	140

FEVER STATISTICS.—TABLE II. (continued)—*Monthly Admissions and Deaths of various Diseases and total Discharges during 1899.*

PARK HOSPITAL.																	GORE FARM HOSPITAL.																				
MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.					MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.						
	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.	
	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.		Direct from House.	From other Hospitals of Board.				Total.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.			Direct from House.	From other Hospitals of Board.				Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.		Direct from House.	From other Hospitals of Board.				Direct from House.
January	134	...	71	...	9	...	...	19	...	253	2	10	2	...	14	161	76	January	...	288	...	...	...	...	...	288	...	...	...	...	...	...	...	375	...		
February	144	...	113	...	5	...	...	1	56	...	171	2	21	1	...	18	179	...	February	...	...	...	...	...	...	...	1	...	...	...	...	1	281	...			
March	91	...	67	...	3	...	...	1	14	...	174	10	17	...	12	223	...	March	...	129	...	...	...	...	...	129	...	...	...	...	...	1	187	...			
April	82	...	48	...	4	...	...	...	15	...	169	4	10	1	...	3	176	79	April	...	126	...	...	...	...	...	128	...	...	...	...	...	108	...			
May	140	...	78	...	...	...	...	19	...	238	2	8	...	...	14	112	57	May	...	247	...	...	...	...	...	201	...	...	...	...	...	126	...				
June	148	...	113	...	...	...	...	20	...	281	2	9	...	...	4	132	83	June	...	...	...	...	...	...	...	301	...	...	...	...	...	14	...				
July	115	...	147	1	1	...	...	29	...	296	...	13	...	...	2	15	112	78	July	...	...	...	...	...	...	...	326	...	...	...	...	...	194	2			
August	113	...	115	...	...	...	...	20	...	249	3	14	...	...	5	20	247	80	August	...	345	...	...	...	...	...	287	...	...	...	...	1	331	...			
September	161	...	111	...	...	...	...	17	...	289	...	9	...	...	12	161	103	September	...	...	...	...	...	...	...	351	...	...	...	...	...	1	280	...			
October	196	...	158	...	37	...	...	32	...	433	4	15	7	...	1	27	125	84	October	...	540	...	...	...	...	...	687	...	...	...	...	...	3	...	...		
November	146	...	159	...	13	...	...	18	...	336	6	26	1	...	1	54	277	62	November	...	552	1	91	...	...	...	411	...	...	...	...	...	439	2	...		
December	96	...	135	...	20	...	...	8	...	259	5	26	...	...	1	29	198	118	December	...	5	272	...	...	...	...	376	1	...	...	...	...	486	1	...		
Totals	1,566	...	1,815	1	100	...	2	245	...	5,229	40	163	13	...	16	232	2,059	859	Totals	...	5	3,115	1	286	...	...	...	...	...	...	4	3,366	11	...			

BROOK HOSPITAL.																	SUMMARY.																					
MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.					MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.							
	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.		
	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.		Direct from House.	From other Hospitals of Board.				Total.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.			Direct from House.	From other Hospitals of Board.				Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.		Direct from House.	From other Hospitals of Board.				Direct from House.	From other Hospitals of Board.
January	184	...	108	...	5	...	...	14	...	314	5	14	1	...	2	22	99	168	January	...	1,045	426	679	149	115	...	...	113	...	1,502	40	79	16	...	11	146	1,881	575
February	49	...	45	...	9	...	...	5	...	108	...	6	2	...	...	8	133	...	February	...	875	307	568	83	87	...	4	137	...	1,701	22	82	17	...	12	143	1,638	390
March	109	...	52	...	1	...	...	10	...	172	1	8	1	...	2	12	200	26	March	...	802	447	515	45	59	...	4	134	...	1,514	28	87	16	...	18	149	1,940	492
April	120	...	47	...	2	...	...	...	...	186	...	5	2	...	...	9	148	8	April	...	739	362	409	15	50	...	...	82	...	1,280	25	73	7	...	10	115	1,526	277
May	116	...	66	...	...	...	...	...	...	188	1	9	1	...	1	12	185	36	May	...	958	436	621	63	47	...	...	128	...	1,704	23	66	7	...	19	109	1,475	491
June	148	...	114	...	...	...	...	8	...	261	2	8	...	...	2	12	188	16	June	...	1,149	509	761	52	49	2	...	145	...	2,104	26	76	7	...	20	129	1,636	563
July	164	...	86	...	...	...	...	10	...	252	3	13	1	...	1	19	170	79	July	...	1,263	619	866	161	98	3	...	172	...	2,099	26	96	12	...	14	148	1,675	783
August	142	...	85	...	16	...	...	6	...	237	2	13	...	...	3	137	79	148	August	...	1,070	650	717	104	138	...	...	130	...	2,053	28	49	25	...	16	154	1,906	754
September	184	...	77	...	16	...	...	9	...	286	3	10	5	...	1	19	173	93	September	...	1,419	736	804	96	150	...	...	125	...	2,496	23	90	21	...	13	147	2,013	832
October	236	...	125	...	14	...	...	16	...	389	...	13	2	...	2	19	173	103	October	...	1,818	1,041	1,096	153	256	...	1	177	...	3,538	30	145	34	...	9	218	2,015	1,194
November	157	...	1	92	...	21	6	...	307	1	12	2	...	...	2	19	156	183	November	...	1,277	792	866	194	288	...	2	158	...	2,591	39	145	48	...	13	245	2,344	986
December	121	...	122	...	9	...	...	7	...	359	1	23	...	...	...	24	160	96	December	...	875	465	831	137	198	...	2	84	...	1,988	43	145	30	...	10	228	2,430	624
Totals	1,756	1	1,020	...	108	5	...	97	...	5,987	25	129	17	...	14	185	1,864	996	Grand Totals	13,290	6,700	8,678	1,754	1,535	7	11	1,583	...	25,092	353	1,182	240	...	160	1,935	22,039	7,901	

NORTHERN HOSPITAL.																																			
MONTH.	ADMISSIONS.						DEATHS.						DISCHARGES.																						
	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.	Scarlet.		Diphtheria.		Enteric.		Typhus.	Other Diseases.		Total.	Re-conv.	To other Hospitals of Board.											
	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.		Direct from House.	From other Hospitals of Board.				Total.	Direct from House.	From other Hospitals of Board.	Direct from House.	From other Hospitals of Board.	Direct from House.		From other Hospitals of Board.	Direct from House.				From other Hospitals of Board.										
January	...	138	...	147	...	...	...	...	285	2	...	...	...	2	359	1	January	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February	...	307	...	83	...	...	...	...	390	1	...	...	...	1	298	1	February	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
March	...	316	...	44	...	...	...	...	360	2	1	...	...	3	280	2	March	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
April	...	133	...	15	...	...	...	...	148	...	...	...	...	...	298	1	April	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
May	...	225	...	63	...	...	...	...	290	1	...	...	...	1	294	...	May	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
June	...	361	...	52	...	...	...	...	413	...	...	...	...	...	317	1	June	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
July	...	290	...	160	...	...	...	...	450	...	...	...	...	...	394	1	July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
August	...	363	...	103	...	...	...	...	466	...	...	...	...	...	419	1	August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
September	...	390	...	69	...	...	...	...	459	1	1	...	...	...	411	1	September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
October	...	41	...	81	...	...	...	...	574	...	...	...	...	...	508	2	October	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
November	...	437	...	102	...	...	...	...	539	...	...	...	...	...	468	1	November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
December	...	213	...	86	...	2	...	...	251	1	...	...	...	...	1	468	1	December	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Totals	1	3,949	...	957	...	2	...	...	4,329	8	2	...	...	...	10	4,549	15	Totals	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	



PARK HOSPITAL

Month	Admissions							
	Fever		Typhoid		Typhoid		Other Diseases	
	From Hospital	From Outside	From Hospital	From Outside	From Hospital	From Outside	From Hospital	From Outside
January	104	...	71	...	9	...	10	...
February	144	...	113	...	5	...	28	...
March	71	...	67	...	5	...	14	...
April	62	...	48	...	4	...	10	...
May	140	...	75	...	...	...	10	...
June	118	...	118	...	1	...	10	...
July	145	...	147	...	1	...	20	...
August	118	...	113	...	1	...	20	...
September	101	...	111	...	...	...	17	...
October	100	...	108	...	27	...	20	...
November	145	...	100	...	18	...	18	...
December	60	...	135	...	20	...	8	...
Total	1,500	...	1,815	1	100	...	242	...

BROOK HOSPITAL

January	104	...	108	...	8	...	14	...
February	40	...	30	...	3	...	2	...
March	100	...	50	...	1	...	10	...
April	100	...	67	...	7	...	2	...
May	110	...	100	...	2	...	4	...
June	101	...	114	...	2	...	5	...
July	104	...	50	...	2	...	10	...
August	140	...	68	...	10	...	0	...
September	101	...	77	...	10	...	0	...
October	100	...	100	...	14	...	10	...
November	107	1	02	...	21	...	0	...
December	101	...	102	...	9	...	7	...
Total	1,700	1	1,000	...	100	5	97	...

NORTHERN HOSPITAL

January	104	...	108	...	...	...	...	...
February	107	...	...	...	...	...	...	...
March	110	...	...	...	...	...	...	...
April	100	...	...	...	...	...	...	...
May	100	...	...	...	...	...	...	...
June	101	...	...	...	...	...	...	...
July	100	...	...	...	...	...	...	...
August	100	...	...	...	...	...	...	...
September	100	...	...	...	...	...	...	...
October	100	1	...	...	...	...	...	...
November	107	...	...	...	...	...	...	...
December	110	...	...	...	...	2	...	...
Total	1,000	1	...	...	...	...	...	...





STATION AND BRANCH		STATION HOSPITAL		STATION AND BRANCH	
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9
10	10	10	10	10	10
11	11	11	11	11	11
12	12	12	12	12	12
13	13	13	13	13	13
14	14	14	14	14	14
15	15	15	15	15	15
16	16	16	16	16	16
17	17	17	17	17	17
18	18	18	18	18	18
19	19	19	19	19	19
20	20	20	20	20	20
21	21	21	21	21	21
22	22	22	22	22	22
23	23	23	23	23	23
24	24	24	24	24	24
25	25	25	25	25	25
26	26	26	26	26	26
27	27	27	27	27	27
28	28	28	28	28	28
29	29	29	29	29	29
30	30	30	30	30	30
31	31	31	31	31	31
32	32	32	32	32	32
33	33	33	33	33	33
34	34	34	34	34	34
35	35	35	35	35	35
36	36	36	36	36	36
37	37	37	37	37	37
38	38	38	38	38	38
39	39	39	39	39	39
40	40	40	40	40	40
41	41	41	41	41	41
42	42	42	42	42	42
43	43	43	43	43	43
44	44	44	44	44	44
45	45	45	45	45	45
46	46	46	46	46	46
47	47	47	47	47	47
48	48	48	48	48	48
49	49	49	49	49	49
50	50	50	50	50	50
51	51	51	51	51	51
52	52	52	52	52	52
53	53	53	53	53	53
54	54	54	54	54	54
55	55	55	55	55	55
56	56	56	56	56	56
57	57	57	57	57	57
58	58	58	58	58	58
59	59	59	59	59	59
60	60	60	60	60	60
61	61	61	61	61	61
62	62	62	62	62	62
63	63	63	63	63	63
64	64	64	64	64	64
65	65	65	65	65	65
66	66	66	66	66	66
67	67	67	67	67	67
68	68	68	68	68	68
69	69	69	69	69	69
70	70	70	70	70	70
71	71	71	71	71	71
72	72	72	72	72	72
73	73	73	73	73	73
74	74	74	74	74	74
75	75	75	75	75	75
76	76	76	76	76	76
77	77	77	77	77	77
78	78	78	78	78	78
79	79	79	79	79	79
80	80	80	80	80	80
81	81	81	81	81	81
82	82	82	82	82	82
83	83	83	83	83	83
84	84	84	84	84	84
85	85	85	85	85	85
86	86	86	86	86	86
87	87	87	87	87	87
88	88	88	88	88	88
89	89	89	89	89	89
90	90	90	90	90	90
91	91	91	91	91	91
92	92	92	92	92	92
93	93	93	93	93	93
94	94	94	94	94	94
95	95	95	95	95	95
96	96	96	96	96	96
97	97	97	97	97	97
98	98	98	98	98	98
99	99	99	99	99	99
100	100	100	100	100	100









Admissions and Deaths at various Ages during 1899.

AGES	MALES.		FEMALES.		TOTAL.		MALES.		FEMALES.		TOTAL.		MALES.		FEMALES.		TOTAL.		MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Under 1 ...	11	2	3	...	14	2	9	2	7	...	16	2	...	...	...	...	...	...	...	...	...	...	...	...
1 to 2 ...	16	2	24	2	40	4	42	1	23	1	65	2	...	...	...	...	...	...	...	...	...	...	...	...
2 to 3 ...	48	6	28	3	76	9	54	2	57	1	111	3	...	...	...	...	...	...	...	...	...	...	...	...
3 to 4 ...	80	3	72	2	152	5	93	4	73	4	166	8	...	...	...	...	...	...	...	...	...	...	...	...
4 to 5 ...	90	1	80	4	170	5	86	...	92	2	178	2	...	...	...	...	...	...	...	...	...	...	...	...
5 to 10 ...	325	5	344	5	669	10	350	1	383	6	733	7	...	...	...	...	...	...	...	...	...	...	...	...
10 to 15 ...	128	2	160	1	288	3	103	...	200	...	303	...	...	...	...	...	...	...	...	...	...	...	...	...
15 to 20 ...	44	1	37	...	81	1	54	...	38	...	92	...	...	...	...	...	...	...	...	...	...	...	...	...
20 to 25 ...	10	1	18	...	28	1	37	...	21	...	58	...	...	...	...	...	...	...	...	...	...	...	...	...
25 to 30 ...	9	...	14	...	23	...	7	1	8	...	15	1	...	...	...	...	...	...	...	...	...	...	...	...
30 to 35 ...	7	...	6	...	13	...	7	...	5	...	12	...	...	...	...	...	...	...	...	...	...	...	...	...
35 to 40 ...	2	...	5	...	7	...	1	...	2	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
40 to 45 ...	2	...	1	...	3	...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
45 to 50 ...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50 to 55 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55 to 60 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
And upwards ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	773	23	793	17	1,566	40	846	11	910	14	1,756	25	...	2	1	6	...	...	...	...	...	...	...	...

SUMMARY.												Grand Totals
Under 1 ...	1 to 2 ...	2 to 3 ...	3 to 4 ...	4 to 5 ...	5 to 10 ...	10 to 15 ...	15 to 20 ...	20 to 25 ...	25 to 30 ...	30 to 35 ...	35 to 40 ...	
70	210	440	670	744	2,457	1,020	452	174	87	26	23	6,397
9	16	30	39	26	41	7	2	4	2	1	...	177
44	211	413	602	698	2,766	1,349	378	206	119	65	30	6,893
2	29	27	33	27	43	10	1	2	2	...	...	176
114	421	853	1,272	1,442	5,223	2,369	830	380	206	101	53	13,290
45	57	72	53	84	17	3	6	4	1	...	...	353



FEVER STATISTICS.—TABLE V.—*Diphtheria*

AGES.	EASTERN HOSPITAL.					NORTH-EASTERN HOSPITAL.					NORTH-WESTERN HOSPITAL.					WESTERN HOSPITAL.				
	MALES.		FEMALES.		TOTAL.	MALES.		FEMALES.		TOTAL.	MALES.		FEMALES.		TOTAL.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.	
Under 1 ...	13	6	7	6	20	...	...	...	...	...	9	2	19	6	28	7	2	5	2	4
1 to 2 ...	39	10	41	15	80	...	...	...	...	...	20	8	23	6	43	28	7	17	3	12
2 to 3 ...	66	23	72	11	138	...	...	...	...	...	39	10	29	11	68	30	5	40	6	45
3 to 4 ...	83	15	72	21	155	...	...	...	...	...	53	10	58	18	111	52	10	58	13	70
4 to 5 ...	79	13	95	15	174	...	...	...	...	...	43	9	47	10	90	63	12	64	11	110
5 to 10 ...	219	33	286	33	505	...	...	...	...	...	143	18	177	33	320	170	12	199	28	127
10 to 15 ...	73	4	110	8	183	...	...	...	...	...	39	1	37	3	76	57	1	53	3	369
15 to 20 ...	19	...	37	2	56	...	...	...	...	...	26	1	20	...	46	28	...	29	...	110
20 to 25 ...	6	...	17	...	23	...	...	...	...	...	19	...	10	1	29	15	...	23	...	4
25 to 30 ...	7	1	13	...	20	...	...	...	...	...	7	...	10	...	17	3	...	15	...	...
30 to 35 ...	2	...	10	...	12	...	...	...	...	...	6	...	5	...	11	5	...	19	...	...
35 to 40 ...	1	...	3	...	4	...	...	...	...	...	2	...	4	...	6	2	...	4	...	...
40 to 45 ...	2	...	2	...	4	...	...	...	...	...	...	...	2	...	2	...	...	3	...	...
45 to 50 ...	1	...	3	...	4	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
50 to 55 ...	1	...	2	...	3	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...
55 to 60 ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
And upwards	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	612	106	768	111	1,380	1	1	2	1	3	406	59	443	88	849	461	49	532	68	993
					217										147					117
AGES.	SOUTH-WESTERN HOSPITAL.					FOUNTAIN HOSPITAL.					GROVE HOSPITAL.					SOUTH-EASTERN HOSPITAL.				
	MALES.		FEMALES.		TOTAL.	MALES.		FEMALES.		TOTAL.	MALES.		FEMALES.		TOTAL.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.		Admitted.	Died.	Admitted.	Died.	
Under 1 ...	4	3	4	3	8	4	1	4	2	3	4	1	1	1	5	14	6	11	2	25
1 to 2 ...	11	3	13	5	24	21	7	30	5	51	7	1	8	3	15	39	12	36	16	8
2 to 3 ...	19	2	22	7	41	41	4	29	7	70	23	4	10	2	33	59	13	53	15	28
3 to 4 ...	34	6	46	5	80	50	12	53	6	103	30	3	24	5	54	68	12	89	19	31
4 to 5 ...	38	5	47	5	85	60	7	69	14	129	33	4	24	5	47	87	13	73	10	23
5 to 10 ...	117	6	112	17	229	132	10	240	12	372	92	9	80	10	172	164	21	219	33	160
10 to 15 ...	50	4	46	3	96	23	3	77	3	100	26	1	42	3	68	87	4	75	4	54
15 to 20 ...	8	...	18	1	26	11	...	20	...	31	7	...	11	...	18	16	...	17	1	8
20 to 25 ...	3	...	13	...	16	1	...	19	...	20	6	...	4	...	10	8	...	16	1	1
25 to 30 ...	3	...	11	1	14	4	...	11	...	15	2	...	1	...	3	2	...	14	...	...
30 to 35 ...	5	1	3	...	8	3	...	6	...	9	...	...	3	...	6	5	...	2	...	...
35 to 40 ...	2	...	2	...	4	2	...	6	...	8	...	...	3	...	3	...	...	5	...	...
40 to 45 ...	2	...	2	...	4	3	...	...	...	3	...	...	2	...	3	...	...	1	...	...
45 to 50 ...	1	...	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
50 to 55 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55 to 60 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	907	30	940	48	987	355	44	568	49	923	223	23	214	29	437	502	81	613	101	1,115
					78					93					52					182







## APPENDIX I.—INFECTIOUS DISEASES.

FEVER STATISTICS—TABLE VI.—*Enteric Fever*

[illegible]







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

Disease as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Scarlet Fever ...	422	GENERAL DISEASES.								
		Acute Rheumatism ...	...	...	1	...	...	...	...	...
		Acute Tuberculosis ...	...	...	4	4	...	...	...	...
		Alcoholism ...	1	...	...	...	...	...	...	...
		Chickenpox ...	1	...	2	...	1	...	1	...
		Cowpox ...	...	...	1	...	...	...	...	...
		Erysipelas ...	...	...	1	...	...	...	...	...
		Febricula ...	1	...	1	...	...	...	1	...
		Influenza ...	...	...	1	1	...	...	1	...
		Measles ...	4	1	3	1	10	1	6	...
		Parotitis ...	...	...	...	...	...	...	1	...
		Rickets ...	...	...	...	...	...	...	...	...
		Rötheln ...	4	...	4	...	...	...	2	...
		Smallpox ...	1	...	...	...	...	...	...	...
		Syphilis ...	...	...	1	...	...	...	...	...
		Whooping-cough ...	2	...	2	1	1	...	1	...
		LOCAL DISEASES.								
		Generative System.								
		Orchitis ...	...	...	...	...	...	...	...	...
		Nervous System.								
		Chronic Hydrocephalus ...	...	...	...	...	...	...	...	...
		Meningitis ...	...	...	...	...	1	1	...	...
		Tubercle, Meningeal ...	...	...	2	2	1	1	...	...
		Circulatory System.								
		Endocarditis ...	...	...	...	...	...	...	...	...
		Respiratory System.								
		Bronchitis ...	2	...	...	...	...	...	...	...
		Broncho-Pneumonia ...	...	...	...	...	...	...	...	...
		Coryza ...	5	...	...	...	...	...	...	...
		Epistaxis ...	1	...	...	...	...	...	...	...
		Phthisis ...	...	...	...	...	...	...	...	...
		Pneumonia, Lobar ...	3	...	3	...	...	...	1	...
		„ Lobular ...	...	...	...	...	...	...	1	...
		Digestive System.								
		Appendicitis ...	...	...	1	...	...	...	...	...
		Colitis ...	...	...	1	1	...	...	...	...
		Dentition ...	...	...	...	...	...	...	...	...
		Enteritis ...	...	...	...	...	...	...	1	...
		Gastric Catarrh ...	...	...	...	...	...	...	...	...
		Gastro Enteritis ...	...	...	...	...	...	...	...	...
		Glossitis ...	...	...	...	...	...	...	...	...
		Pharyngitis ...	...	...	6	...	...	...	...	...
		Stomatitis ...	...	...	3	...	...	...	1	...
		Tonsillitis ...	9	...	47	...	1	...	14	...
		Urinary System.								
		Albuminuria ...	...	...	...	...	...	...	...	...
		Nephritis ...	1	...	...	...	...	...	...	...
		Skin Diseases.								
		Copaiba Rash ...	1	...	1	...	...	...	...	...
		Dermatitis ...	...	...	...	...	...	...	...	...
		Enema Rash ...	...	...	...	...	...	...	1	...
		Eczema ...	1	...	...	...	...	...	...	...
		Erythema ...	3	...	54	...	6	...	...	...
		Herpes ...	1	...	...	...	...	...	...	...
		Lichen ...	...	...	...	...	...	...	...	...
		Traumatic Desquamation ...	...	...	1	...	...	...	...	...
		Urticaria ...	...	...	1	...	...	...	3	...
		Xerodermia ...	...	...	...	...	...	...	...	...
Carried forward	422	...	41	1	141	10	21	3	35	...



Miscellaneous Diseases admitted during 1899.

SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		GROVE 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.
...	...	...	...	...	...	1	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	1	1	5	5
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	3	...	1	...	9	...
...	...	...	...	...	...	...	...	1	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	1	...	2	...
...	...	...	...	...	...	...	...	2	...	...	...	5	...
1	...	...	...	...	...	...	...	1	...	...	...	4	1
7	...	3	1	...	...	2	...	9	2	9	1	53	7
...	...	...	...	...	...	...	...	1	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
1	...	10	...	...	...	1	...	3	...	...	...	25	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	2	...	...	...	...	...	1	...	...	...	4	...
...	...	...	...	...	...	1	1	3	...	...	...	10	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	5	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	2	...
...	...	1	...	...	...	...	...	...	...	...	...	2	...
2	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	1	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	2	...	...	...	8	...
...	...	1	...	...	...	...	...	...	...	...	...	5	...
18	...	...	...	...	...	15	...	12	...	4	...	120	...
...	...	...	...	...	...	...	...	2	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	4	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	1	...	1	...	1	1	5	1
2	...	9	...	...	...	5	...	21	...	...	...	100	...
...	...	...	...	...	...	...	...	1	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	2	...	...	...	7	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
31	...	30	1	...	...	29	1	74	2	20	4	422	22



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

Disease as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward	422	... ..	41	1	141	10	21	3	35	...
Scarlet Fever (continued)	120	<i>Local Injuries.</i>								
		Burn ... ..	1	1	...	...	1	...	...	...
		Concussion... ..	...	...	...	...	...	...	...	...
		<i>Not Classified.</i>								
		Axillary Abscess ... ..	...	...	...	...	1	...	...	...
		Caries of Spine... ..	...	...	...	...	...	...	...	...
		Osteomyelitis ... ..	...	...	...	...	...	...	...	...
		Otitis ... ..	2	...	1	...	...	...	...	...
		Radical Cure of Hernia ... ..	...	...	...	...	...	...	...	...
		Strumous Dactylitis... ..	...	...	...	...	1	...	...	...
		Tubercular Disease of Elbow ... ..	...	...	...	...	...	...	...	...
		No obvious disease ... ..	11	...	49	...	18	...	2	...
Diphtheria ...	542		55	2	191	10	42	3	37	...
	140	<b>GENERAL DISEASES.</b>								
		Acute Rheumatism ... ..	...	...	...	...	...	...	...	...
		Chickenpox ... ..	...	...	...	...	...	...	...	...
		Erysipelas... ..	1	...	...	...	...	...	...	...
		Febricula ... ..	...	...	...	...	...	...	...	...
		Influenza ... ..	...	...	...	...	...	...	...	...
		Measles ... ..	8	2	...	...	5	...	3	3
		Pyæmia ... ..	...	...	...	...	...	...	...	...
		Ricketts ... ..	...	...	...	...	...	...	...	...
		Septicæmia ... ..	...	...	...	...	...	...	1	1
		Syphilis ... ..	1	...	...	...	3	...	4	...
		Tuberculosis ... ..	...	...	...	...	...	...	...	...
		Whooping-cough ... ..	1	1	...	...	...	...	...	...
		<b>LOCAL DISEASES.</b>								
		<i>Urinary System.</i>								
		Nephritis ... ..	2	1	...	...	...	...	...	...
		<i>Nervous System.</i>								
		Cerebral Tumour ... ..	...	...	...	...	...	...	...	...
		Chorea ... ..	...	...	...	...	...	...	1	...
		Neuralgia ... ..	...	...	...	...	1	...	...	...
		Puerperal Mania ... ..	...	...	...	...	1	...	...	...
		Suppurative Meningitis ... ..	...	...	...	...	...	...	1	1
		Tetanus ... ..	1	1	...	...	...	...	...	...
		<i>Respiratory System.</i>								
		Bronchitis ... ..	2	1	...	...	...	...	...	...
		Broncho-Pneumonia ... ..	...	...	...	...	2	2	...	...
		Catarrh ... ..	...	...	...	...	...	...	...	...
		Coryza ... ..	5	...	...	...	...	...	...	...
		Empyema ... ..	...	...	...	...	...	...	...	...
		Laryngitis ... ..	15	1	...	...	...	...	2	1
		Phthisis ... ..	1	...	...	...	...	...	...	...
		Pneumonia, Lobar ... ..	8	4	...	...	1	1	2	1
		„ Lobular... ..	2	2	...	...	...	...	3	3
	140	Carried forward ... ..	47	13	...	...	13	3	17	10
Carried forward	682	... ..	102	15	191	10	55	6	54	10

of Miscellaneous Diseases admitted during 1899.

SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		GROVE 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.
31	...	30	1	...	...	29	1	74	2	20	4	422	22
...	...	...	...	...	...	...	...	4	...	...	...	6	1
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	1	1	...	...	1	1
...	...	...	...	...	...	...	...	2	...	...	...	5	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	2	...	...	...	6	...	14	...	...	...	102	...
31	...	32	1	...	...	36	1	98	3	20	4	542	24
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	2	...	1	...	...	...	3	...
...	...	...	...	...	...	1	1	...	...	...	...	2	1
...	...	...	...	...	...	...	...	2	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
2	1	3	2	4	1	5	...	5	1	3	...	38	10
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	1	1	...	...	...	...	2	2
...	...	1	...	1	...	2	...	2	...	...	...	14	...
1	1	...	...	...	...	1	1	...	...	1	1	3	3
...	...	...	...	...	...	...	...	3	1	2	...	6	2
...	...	...	...	...	...	1	...	...	...	...	...	3	1
...	...	...	...	1	1	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	1
2	2	...	...	...	...	...	...	...	...	1	1	3	2
1	...	...	...	...	...	...	...	...	...	...	...	4	4
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	5	...
...	...	...	...	...	...	...	...	1	1	...	...	1	1
...	...	...	...	3	...	...	...	2	...	...	...	22	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	...	...	...	...	3	3	15	9
...	...	...	...	...	...	...	...	...	...	...	...	5	5
7	4	4	2	9	2	13	3	17	3	13	6	140	46
38	4	36	3	9	2	49	4	115	6	33	10	682	70



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

Disease as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward	682	...	102	15	191	10	55	6	54	10
Brought forward —Diphtheria	140	...	47	13	...	...	13	3	17	10
Diphtheria (continued)	553	<i>Digestive System.</i>								
		Cancrum Oris ...	...	...	...	...	...	...	...	...
		Dentition ...	...	...	...	...	...	...	1	...
		Enthelioma Palati ...	...	...	...	...	...	...	...	...
		Glossitis ...	...	...	...	...	...	...	1	...
		Pharyngitis ...	...	...	...	...	...	...	...	...
		Post-pharyngeal Abscess ...	1	...	...	...	...	...	...	...
		Quinsy ...	3	...	...	...	...	...	...	...
		Suppurative Tonsillitis ...	...	...	...	...	...	...	...	...
		Stomatitis ...	4	...	...	...	...	...	4	...
		Tabes Mesenterica ...	...	...	...	...	...	...	1	1
		Tonsillitis ...	82	1	...	...	77	...	46	...
		<i>Skin Diseases.</i>								
		Erythema ...	...	...	...	...	1	...	...	...
		Herpes ...	...	...	...	...	...	...	...	...
		Impetigo ...	...	...	...	...	...	...	...	...
		Psoriasis ...	1	...	...	...	...	...	...	...
		Xerodermia ...	...	...	...	...	...	...	...	...
		<i>Circulatory System.</i>								
		Arthritis ...	...	...	...	...	...	...	1	...
		Endocarditis ...	1	...	...	...	1	1	...	...
		„ Malignant	1	1	...	...	...	...	...	...
		<i>Unclassified.</i>								
		Alveolar Abscess ...	1	...	...	...	...	...	...	...
		Cellulitis ...	...	...	...	...	...	...	1	...
		Extra Peritoneal Abscess ...	...	...	...	...	...	...	...	...
		Morbus Cordis ...	...	...	...	...	...	...	...	...
		Otitis ...	1	...	...	...	...	...	...	...
		Periostitis ...	...	...	...	...	1	...	...	...
		No obvious disease ...	...	...	...	...	4	...	1	...
Enteric Fever ...	693	...	142	15	...	...	97	4	73	11
	77	<i>GENERAL DISEASES.</i>								
		Alcoholism ...	2	...	...	...	2	...	...	...
		Erysipelas ...	...	...	...	...	...	...	...	...
		Febricula ...	11	...	...	...	3	...	3	...
		Gout ...	...	...	...	...	...	...	...	...
		Influenza ...	3	...	...	...	10	...	1	...
		Leucocythæmia ...	...	...	...	...	...	...	...	...
		Measles ...	2	2	...	...	...	...	...	...
		Purpura Rheumatica ...	...	...	...	...	...	...	...	...
		Pyæmia ...	1	1	...	...	...	...	...	...
		Rheumatism ...	...	...	...	...	...	...	...	...
		Syphilis ...	...	...	...	...	1	...	...	...
	77	Tuberculosis ...	...	...	...	...	2	2	2	2
		Whooping-cough ...	...	...	...	...	...	...	...	...
	77	<i>Disease of Eye.</i>								
		Panophthalmitis ...	...	...	...	...	...	...	...	...
	77	Carried forward ...	19	3	...	...	18	2	6	2
Carried forward	1,312	...	216	20	191	10	157	9	116	13



of Miscellaneous Diseases admitted during 1899.

SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		GROVE 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.
38	4	36	3	9	2	49	4	115	6	33	10	682	70
7	4	4	2	9	2	13	3	17	3	13	6	140	46
...	...	...	...	...	...	...	...	1	1	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	1	...	1	...	...	...	2	...
...	...	1	...	...	...	...	...	1	...	...	...	3	...
...	...	...	...	...	...	...	...	...	...	...	...	3	...
...	...	1	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	1	...	1	...	1	...	2	...	13	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1
21	...	53	...	7	...	77	...	93	1	35	...	491	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	1	...	...	3	2
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	2	...
...	...	...	...	...	...	1	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	1	1	1	1
...	...	...	...	...	...	...	...	1	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	6	...	...	...	3	...	...	...	15	...
28	4	62	2	23	2	94	3	122	6	52	7	693	54
...	...	...	...	...	...	...	...	...	...	...	...	4	...
...	...	...	...	...	...	1	...	1	1	1	...	3	1
...	...	...	...	...	...	1	...	2	...	1	...	21	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
8	1	...	...	1	...	1	...	1	...	...	...	25	1
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	1	...	...	...	...	...	...	...	1	...
1	1	...	...	...	...	...	...	...	...	...	...	2	2
1	...	...	...	...	...	1	...	...	...	2	1	4	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
3	3	...	...	1	1	2	1	...	...	...	...	10	9
1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
14	5	...	...	3	1	9	2	4	1	4	1	77	17
73	9	94	3	26	3	139	6	224	10	76	12	1,312	95



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

Disease as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward	1,312	... ..	216	20	191	10	157	9	116	13
Brought forward —Enteric Fever	77	... ..	19	3	...	...	18	2	6	2
Enteric Fever ( <i>continued</i> )		LOCAL DISEASES.								
		<i>Nervous System.</i>								
		Chorea ... ..	...	...	...	...	...	...	...	...
		Cerebral Hæmorrhage ...	1	1	...	...	...	...	...	...
		Delirium Tremens ...	...	...	...	...	...	...	...	...
		Headache ... ..	...	...	...	...	...	...	...	...
		Meningitis ... ..	1	1	...	...	8	6	3	3
		„ Tubercular ...	1	1	...	...	...	...	...	...
		<i>Circulatory System.</i>								
		Anæmia ... ..	...	...	...	...	...	...	...	...
		Endocarditis ... ..	...	...	...	...	...	...	1	...
		„ Malignant ...	2	2	...	...	...	...	...	...
		Morbus Cordis ... ..	...	...	...	...	1	...	...	...
		<i>Respiratory System.</i>								
		Bronchitis ... ..	5	1	...	...	2	...	3	1
		Broncho-Pneumonia ...	...	...	...	...	...	...	...	...
		Empyema ... ..	...	...	...	...	1	1	...	...
		Phthisis ... ..	2	...	...	...	...	...	...	...
		Pleurisy ... ..	1	1	...	...	...	...	1	...
		Pneumonia, Lobar ...	22	5	...	...	8	2	9	...
		„ Lobular ...	...	...	...	...	...	...	2	...
		<i>Digestive System.</i>								
		Abdominal Tumour ...	1	...	...	...	...	...	...	...
		Appendicitis ... ..	...	...	...	...	1	...	...	...
		Colic ... ..	1	...	...	...	...	...	...	...
		Colitis, Ulcerative ...	1	1	...	...	...	...	1	...
		Constipation ... ..	4	...	...	...	5	...	1	...
		Diarrhœa ... ..	2	...	...	...	...	...	...	...
		Dyspepsia ... ..	...	...	...	...	...	...	...	...
		Enteritis ... ..	...	...	...	...	...	...	8	4
		Gastric Catarrh ...	...	...	...	...	...	...	...	...
		Gastritis ... ..	...	...	...	...	...	...	...	...
		Gastro-Enteritis ...	...	...	...	...	10	...	...	...
		Hepatic Disease ...	...	...	...	...	2	...	...	...
		Intestinal Cancer ...	...	...	...	...	...	...	...	...
		Perforating Ulcer of Duodenum ... ..	...	...	...	...	...	...	...	...
		Peritonitis ... ..	...	...	...	...	1	...	1	1
		Perityphlitis ... ..	1	...	...	...	...	...	...	...
		Septic Inflammation of Throat ... ..	...	...	...	...	...	...	...	...
		Tubercle, Peritoneal ...	3	1	...	...	...	...	3	...
		<i>Urinary System.</i>								
		Nephritis ... ..	1	...	...	...	...	...	...	...
		Pyonephrosis ... ..	1	...	...	...	...	...	...	...
		Renal Calculus ...	...	...	...	...	...	...	...	...
		<i>Generative System.</i>								
		Menorrhagia ... ..	...	...	...	...	...	...	...	...
		Parametritis ... ..	...	...	...	...	...	...	...	...
		Prostatic Tumour ...	...	...	...	...	...	...	...	...
		<i>Skin Diseases.</i>								
		Erythema ... ..	2	...	...	...	...	...	...	...
		Ichthyosis ... ..	1	...	...	...	...	...	...	...
	309	Carried forward ..	72	17	...	...	57	11	39	11
Carried forward	1,544	... ..	269	34	191	10	196	18	149	22



of Miscellaneous Diseases admitted during 1899.

SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		GROVE 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.
73	9	94	3	26	3	139	6	224	10	76	12	1,312	95
14	5	..	...	3	1	9	2	4	1	4	1	77	17
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	2	...	...	...	...	...	2	...
...	...	...	...	1	1	...	...	...	...	...	...	13	11
...	...	...	...	...	...	2	2	2	2	...	...	5	5
...	...	...	...	1	...	...	...	...	...	1	1	2	1
1	1	...	...	...	...	2	2	...	...	...	...	4	3
...	...	...	...	...	...	...	...	1	1	...	...	3	3
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	1	...	...	...	3	...	15	2
...	...	...	...	...	...	1	...	1	...	...	...	2	...
...	...	...	...	...	...	...	...	1	...	...	...	2	1
2	1	...	...	...	...	...	...	...	...	3	1	7	2
...	...	...	...	...	...	...	...	...	...	...	...	2	1
5	2	...	...	6	1	17	4	2	1	5	...	74	15
...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
2	...	...	...	1	...	1	1	...	...	1	...	6	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	1	...	...	2	...	1	1	...	...	...	...	6	3
...	...	...	...	...	...	1	...	...	...	...	...	11	...
2	...	...	...	...	...	...	...	...	...	...	...	4	...
...	...	...	...	...	...	2	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	4	...	...	...	12	4
1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	...	...	3	...	3	...	1	...	3	...	20	...
...	...	...	...	...	...	1	...	...	...	...	...	3	...
1	1	...	...	...	...	...	...	1	...	...	...	2	1
...	...	...	...	...	...	1	1	...	...	...	...	1	1
...	...	...	...	1	1	...	...	...	...	...	...	3	2
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	1	...	...	...	1	1	...	...	1	1
...	...	...	...	1	...	1	1	...	...	...	...	8	2
...	...	...	...	...	...	1	...	...	...	1	...	3	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
32	11	...	...	20	4	47	14	19	6	23	3	309	77
91	15	94	3	43	6	177	18	239	15	95	14	1,544	155



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.		WESTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward	1,544	... ..	269	34	191	10	196	18	*149	22
Brought forward Enteric Fever	309	... ..	72	17	...	...	57	11	39	11
Enteric Fever (continued)	13	Not Classified.	...	...	...	...	...	...	...	...
		Lympho-Sarcoma ...	...	...	...	...	...	...	...	...
		Otitis Media ...	...	...	...	...	...	...	...	...
		Ptomaine Poisoning...	1	...	...	...	...	...	...	...
		No obvious disease ...	...	...	...	...	...	...	...	...
	322		73	17	...	...	57	11	39	11
Typhus ...	4	Pleurisy ...	...	...	...	...	...	...	...	...
		Pneumonia ...	...	...	...	...	...	...	...	...
		No obvious disease ...	...	...	...	...	...	...	...	...
	4		...	...	...	...	...	...	...	...
Puerperal Fever	1	Parametritis ...	...	...	...	...	1	...	...	...
	1		...	...	...	...	1	...	...	...
Uncertified ...	21	Admitted to suckle infant ...	...	...	...	...	1	...	...	...
		Born in hospital ...	1	1	...	...	...	...	...	...
		Came in with Mother	4	...	1	...	1	...	5	1
		Tonsillitis ...	...	...	...	...	...	...	1	...
		Whooping Cough ...	...	...	...	...	...	...	1	...
	21		5	1	1	...	2	...	7	1
Case dying in 1899, but admitted in 1898	1	...	...	1	...	...	...	...	...	...
GRAND TOTALS	1,583	... ..	275	36	192	10	199	18	156	23

Miscellaneous Diseases admitted during 1899.

SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		GROVE 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.
91	15	94	3	43	6	177	18	239	15	95	14	1,544	155
32	11	...	..	20	4	47	14	19	6	23	3	309	77
...	...	...	...	...	...	1	1	...	...	...	...	1	1
1	...	...	...	...	...	1	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	2	...	5	...	...	...	2	...	9	...
33	11	...	...	22	4	54	15	19	6	25	3	322	78
..	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	2	...	...	...	...	...	2	...
...	...	...	...	...	...	1	...	...	...	...	...	1	...
...	...	...	...	...	...	4	...	...	...	...	...	4	.
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	2	1	...	...	3	2
...	...	...	...	...	...	...	...	4	...	...	...	15	1
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	6	1	...	...	21	3
...	...	...	...	...	...	...	...	...	...	...	...	...	1
92	15	94	3	45	6	188	19	245	16	97	14	1,583	160



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 1899.

No. 1.

RIVER AMBULANCE SERVICE.

SOUTH WHARF,

ROTHERHITHE, S.E.,

3rd February, 1900.

**Statistics.** In the course of the year 1899, 36 patients were sent to the wharf certified to be suffering from smallpox. This diagnosis was confirmed in 18 cases, the patients being disposed of as follows:—

Transferred to the Hospital Ships .. ..	11*
Transferred to the Gore Farm Hospital .. ..	7
Total .. ..	18

The patients transferred to Gore Farm Hospital were suffering also from scarlet fever. They were admitted from the Eastern Hospital. Most of the seven patients being too ill when admitted to bear the long journey by road to Darent, they were detained in the shelters for various periods, the longest period of detention being 10 days.

There were 18 cases in which it appeared that an error of diagnosis had been made. These patients were all returned home, 16 on the same day as or on the day following their removal, and two after a period of detention of three and five days respectively.

The corrected diagnoses in these cases were as follows:—

Varicella .. ..	13
Measles .. ..	2
Erythema .. ..	2
Dermatitis .. ..	1
Total .. ..	18

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

\* Includes one case from the Eastern Hospital



## No. 2.

## HOSPITAL SHIPS.

(For Statistical Tables, see pp. 98 to 112.)

LONG REACH,

NEAR DARTFORD, KENT,

*February 6th, 1900.***Statistics.**

Eleven patients were treated in this hospital during the year 1899. Seven patients suffering from scarlet fever as well as from smallpox were treated at the Gore Farm Hospital, and were not admitted to this hospital. Three patients died, all at this hospital.

Most of the patients admitted to this hospital appeared to have caught smallpox abroad or in the provinces. Thus, one patient got smallpox in Antwerp, another at New York, a third on his voyage home from South Africa, and a fourth in Paris. One patient was infected at a port in the north of England; and two more by a man residing in the outskirts of London (Buckhurst Hill, in Essex), who had himself contracted smallpox in Egypt.

The other four patients resided in London, where they contracted the disease. No source of infection could be ascertained in any of these four cases. The patients lived in widely different parts of London, and their attacks occurred at different times. It is therefore certain that 18 does not represent all the cases of smallpox that occurred in London last year. In fact, more cases of smallpox occurred on the outskirts of London than were known to have occurred in the metropolitan area itself. Thus there was an outbreak of some proportions at Finchley. It may be regarded, therefore, as a fortunate circumstance that the metropolitan area escaped so lightly.

In November a patient was sent here from the Eastern Hospital, where he had been admitted on a certificate erroneously stating that he was suffering from scarlet fever. During his brief period of detention there seven other inmates of the hospital unfortunately caught smallpox from him. These patients developed the disease in due course and were removed to South Wharf. The patients were suffering also from scarlet fever. There being no isolation accommodation at this hospital, the Managers decided that, although the hospital was at that time empty, it would not be wise to receive these patients into a general ward of this hospital, and they therefore directed their removal to the Gore Farm Hospital. The wisdom of this decision was demonstrated shortly afterwards. The patients were removed to the Gore Farm Hospital in the last week of December. In the first week of the current year smallpox broke out in Hackney, and within a short time 18 patients were under treatment at the Hospital Ships. Several of these patients were young children. Had patients suffering from scarlet fever been admitted to the hospital that disease would almost inevitably have attacked some of the other patients.



## APPENDIX I.—INFECTIOUS DISEASES.

**Staff employed.** 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.
1899	I.	7	} Nil.	1899	I.	1	} Nil.
	II.	33			II.	12	
	III.	48			III.	7	
	IV.	71			IV.	45	
Total ... ..		159	—	Total ... ..		65	—

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

**APPENDIX I.—INFECTIOUS DISEASES. SMALLPOX STATISTICS, 1899.**  
**SMALLPOX STATISTICS.—TABLE I.—Return showing the Numbers of Smallpox Patients Admitted from each Parish or Union during each Month of the Year 1899; the Total Admissions, Discharges, and Deaths during the Year, and the condition of the Patients as to Vaccination.**

PARISH OR UNION.	REMAINDER IN HOSPITAL ON 1ST JANUARY.	VACCINATION CICATRIX OR CICATRICES.																																				TOTAL ADMISSIONS.	DEATHS.	DISCHARGES.	REMAINDER IN HOSPITAL ON 31ST DECEMBER.
		JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.			JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.						
		Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.	Present.	No Evidence.	Absent.							
W. DISTRICT.	Kensington	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...				
	Fulham	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Paddington	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Chelsea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	St. George's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Westminster	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
N. DISTRICT.	St. Marylebone	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	St. Pancras	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Hampstead	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Islington	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Hackney	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
CENT. DIST.	St. Giles & St. George's, Bloomsbury	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Strand	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Holborn	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	London, City of	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
E. DISTRICT.	Shoreditch	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Bethnal Green	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Whitechapel	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	St. George-in-the-East	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Stepney	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Mile End Old Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Poplar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
S. DISTRICT.	St. Saviour's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	St. Olave's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Lambeth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Wandsworth & Clapham	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Camberwell	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...				

N.B.—Admissions, &c., from "other diseases" during the year are not included in this Return.

NOTE 1.—The columns headed "no evidence" contain the particulars of cases stated to have been vaccinated, but bearing no visible evidence of the operation and also of those in which no statement was made, but the nature of the eruption or other cause prevented any observation of the marks, if any existed.



Name of the person		Address		Occupation		Date of birth		Date of death		Cause of death		Burial place		Remarks	
John Doe		123 Main St		Farmer		1850		1920		Old age		Cemetery			
Jane Doe		123 Main St		Homemaker		1855		1925		Old age		Cemetery			
Robert Doe		123 Main St		Teacher		1860		1930		Old age		Cemetery			
Mary Doe		123 Main St		Teacher		1865		1935		Old age		Cemetery			
William Doe		123 Main St		Farmer		1870		1940		Old age		Cemetery			
Elizabeth Doe		123 Main St		Homemaker		1875		1945		Old age		Cemetery			
James Doe		123 Main St		Farmer		1880		1950		Old age		Cemetery			
Sarah Doe		123 Main St		Homemaker		1885		1955		Old age		Cemetery			
Charles Doe		123 Main St		Farmer		1890		1960		Old age		Cemetery			
Anna Doe		123 Main St		Homemaker		1895		1965		Old age		Cemetery			
Thomas Doe		123 Main St		Farmer		1900		1970		Old age		Cemetery			
Margaret Doe		123 Main St		Homemaker		1905		1975		Old age		Cemetery			
George Doe		123 Main St		Farmer		1910		1980		Old age		Cemetery			
Mary Ann Doe		123 Main St		Homemaker		1915		1985		Old age		Cemetery			
John Henry Doe		123 Main St		Farmer		1920		1990		Old age		Cemetery			
Elizabeth Ann Doe		123 Main St		Homemaker		1925		1995		Old age		Cemetery			
William Henry Doe		123 Main St		Farmer		1930		2000		Old age		Cemetery			
Sarah Ann Doe		123 Main St		Homemaker		1935		2005		Old age		Cemetery			
Charles Henry Doe		123 Main St		Farmer		1940		2010		Old age		Cemetery			
Anna Mary Doe		123 Main St		Homemaker		1945		2015		Old age		Cemetery			
Thomas Henry Doe		123 Main St		Farmer		1950		2020		Old age		Cemetery			
Margaret Ann Doe		123 Main St		Homemaker		1955		2025		Old age		Cemetery			
George Henry Doe		123 Main St		Farmer		1960		2030		Old age		Cemetery			
Mary Ann Doe		123 Main St		Homemaker		1965		2035		Old age		Cemetery			
John Henry Doe		123 Main St		Farmer		1970		2040		Old age		Cemetery			
Elizabeth Ann Doe		123 Main St		Homemaker		1975		2045		Old age		Cemetery			
William Henry Doe		123 Main St		Farmer		1980		2050		Old age		Cemetery			
Sarah Ann Doe		123 Main St		Homemaker		1985		2055		Old age		Cemetery			
Charles Henry Doe		123 Main St		Farmer		1990		2060		Old age		Cemetery			
Anna Mary Doe		123 Main St		Homemaker		1995		2065		Old age		Cemetery			
Thomas Henry Doe		123 Main St		Farmer		2000		2070		Old age		Cemetery			
Margaret Ann Doe		123 Main St		Homemaker		2005		2075		Old age		Cemetery			
George Henry Doe		123 Main St		Farmer		2010		2080		Old age		Cemetery			
Mary Ann Doe		123 Main St		Homemaker		2015		2085		Old age		Cemetery			
John Henry Doe		123 Main St		Farmer		2020		2090		Old age		Cemetery			
Elizabeth Ann Doe		123 Main St		Homemaker		2025		2095		Old age		Cemetery			
William Henry Doe		123 Main St		Farmer		2030		2100		Old age		Cemetery			
Sarah Ann Doe		123 Main St		Homemaker		2035		2105		Old age		Cemetery			
Charles Henry Doe		123 Main St		Farmer		2040		2110		Old age		Cemetery			
Anna Mary Doe		123 Main St		Homemaker		2045		2115		Old age		Cemetery			
Thomas Henry Doe		123 Main St		Farmer		2050		2120		Old age		Cemetery			
Margaret Ann Doe		123 Main St		Homemaker		2055		2125		Old age		Cemetery			
George Henry Doe		123 Main St		Farmer		2060		2130		Old age		Cemetery			
Mary Ann Doe		123 Main St		Homemaker		2065		2135		Old age		Cemetery			
John Henry Doe		123 Main St		Farmer		2070		2140		Old age		Cemetery			
Elizabeth Ann Doe		123 Main St		Homemaker		2075		2145		Old age		Cemetery			
William Henry Doe		123 Main St		Farmer		2080		2150		Old age		Cemetery			
Sarah Ann Doe		123 Main St		Homemaker		2085		2155		Old age		Cemetery			
Charles Henry Doe		123 Main St		Farmer		2090		2160		Old age		Cemetery			
Anna Mary Doe		123 Main St		Homemaker		2095		2165		Old age		Cemetery			
Thomas Henry Doe		123 Main St		Farmer		2100		2170		Old age		Cemetery			
Margaret Ann Doe		123 Main St		Homemaker		2105		2175		Old age		Cemetery			
George Henry Doe		123 Main St		Farmer		2110		2180		Old age		Cemetery			
Mary Ann Doe		123 Main St		Homemaker		2115		2185		Old age		Cemetery			
John Henry Doe		123 Main St		Farmer		2120		2190		Old age		Cemetery			
Elizabeth Ann Doe		123 Main St		Homemaker		2125		2195		Old age		Cemetery			
William Henry Doe		123 Main St		Farmer		2130		2200		Old age		Cemetery			
Sarah Ann Doe		123 Main St		Homemaker		2135		2205		Old age		Cemetery			

APPENDIX I.—INFECTIOUS DISEASES. SMALLPOX STATISTICS, 1899.  
SMALLPOX STATISTICS—TABLE IIa.—Showing the condition as regards Vaccination of MALE Patients admitted during 1899.

101-104

SMALLPOX STATISTICS.—TABLE III.—Showing the condition as regards Vaccination of MALE Patients admitted during 1897.

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 A.	Cases in which Vaccination Cicatrix was "absent."																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	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.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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	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.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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N. B.—( ) The small figures indicate the number of deaths in each sub-division of the classes. This Table includes cases which were vaccinated or re-vaccinated after having been infected with Smallpox.  
\* In this column are included cases stated to have been vaccinated, but bearing no visible evidence of the operation, and also cases in which no statement was made, but the nature of the eruption, or other cause, prevented any observation of the marks, if any existed.





APPENDIX I.—INFECTIOUS DISEASES. SMALLPOX STATISTICS, 1899.

105-108

SMALLPOX STATISTICS—TABLE IIa. (continued)—Showing the condition as regards Vaccination of the FEMALE Patients admitted during 1899.

CASES WITH VACCINATION CICATRIX OR CICATRICES PRESENT.

AREA OF CICATRIX OR CICATRICES.

AGES.	Class A' $\geq$ half and upwards of one-half square inch total area.																			
	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.				
	Half and upwards of one-half square inch total area.	Less than half recorded.	Plasma scars.	Not recorded.	Not recorded.	Half and upwards of one-half square inch total area.	Less than half recorded.	Plasma scars.	Not recorded.	Not recorded.	Half and upwards of one-half square inch total area.	Less than half recorded.	Plasma scars.	Not recorded.	Not recorded.	Half and upwards of one-half square inch total area.	Less than half recorded.	Plasma scars.	Not recorded.	Not recorded.
Under 1 year ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
From 1 to 2 years ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...

This table includes cases which were vaccinated or re-vaccinated after having been infected with Smallpox.

\* In this column are included cases stated to have been vaccinated, but bearing no visible evidence of the operation, and also cases in which no statement was made, but the nature of the eruption, or other cause, prevented any observation of the marks, if any existed.





SMALLPOX STATISTICS—TABLE IIc. (continued)—Showing the condition as regards Vaccination of Patients admitted during 1899 (MALES AND FEMALES COMBINED).

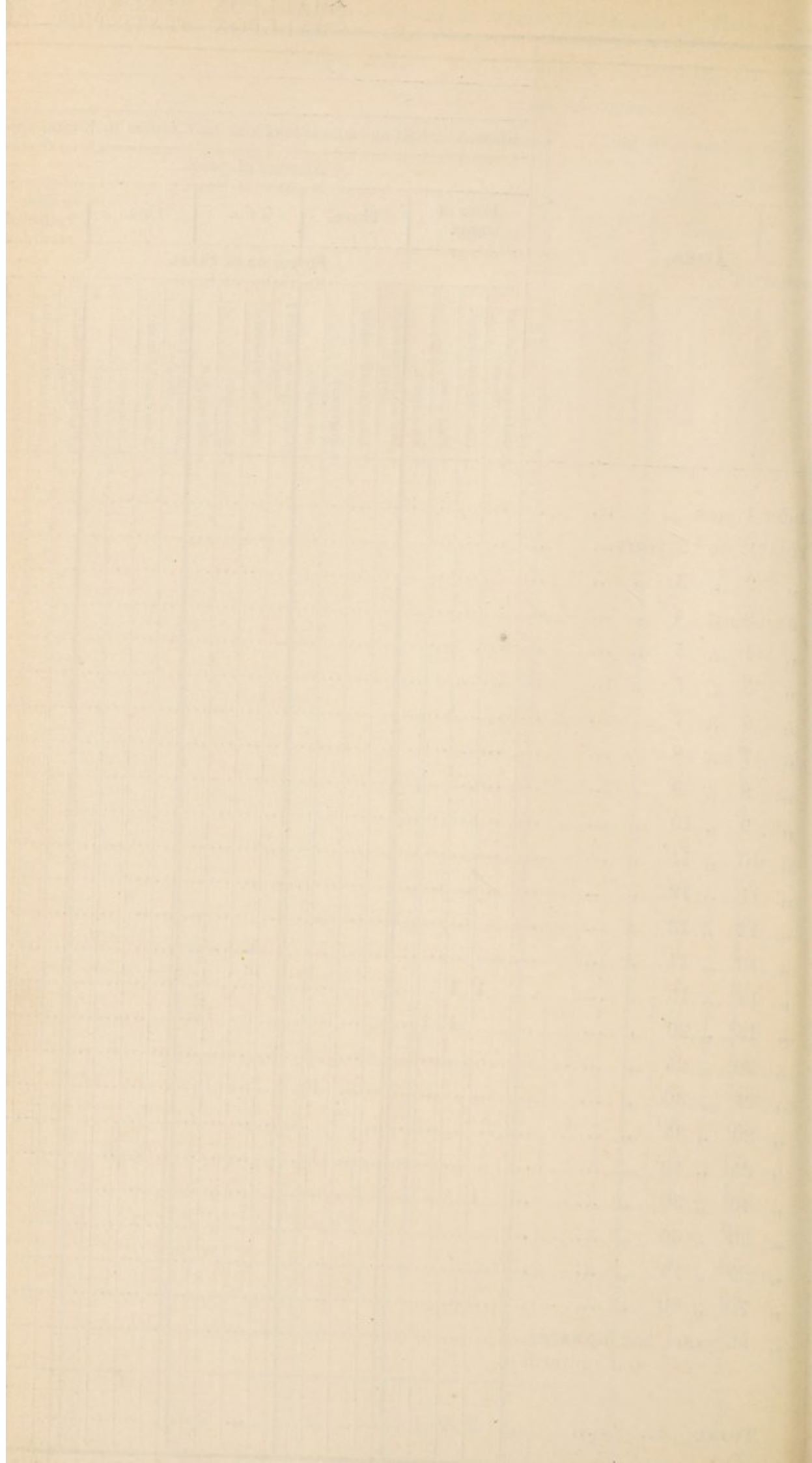
SMALLPOX STATISTICS—TABLE IIc. (continued).—Showing the condition as regards Vaccination of Patients admitted during 1899 (MALES AND FEMALES COMBINED).

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."																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	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' = Area not recorded.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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N.B.—(+) The small figures indicate the number of deaths in each sub-division of the classes. This Table includes cases which were vaccinated or re-vaccinated after having been infected with Smallpox.

\* In this column are included cases stated to have been vaccinated but bearing no visible evidence of the operation, and also cases in which no statement was made, but the nature of the eruption, or other cause, prevented any observation of the marks, if any existed.





## APPENDIX II.—IMBECILITY.

REPORTS OF THE MEDICAL SUPERINTENDENTS OF  
THE SEVERAL ASYLUMS FOR THE YEAR 1899.

(For Statistical Tables, see pp. 130 to 160.)

## No. 1.

## LEAVESDEN ASYLUM.

NEAR WATFORD, HERTS,  
*January, 1900.*

## Statistics.

	Males.	Females.	Total.
On 1st January, 1899, the asylum contained ... ..	885	1,099	1,984
Admitted during the year ... ..	196	146	342
Total under treatment during the year ... ..	1,081	1,245	2,326
Discharged during the year ... ..	63	28	91
Died during the year ... ..	121	129	250
Remaining in the asylum on 31st December, 1899 ... ..	897	1,088	1,985

**Admissions.** In last year's annual report attention was drawn to the weak, aged, and decrepit people sent for care and treatment to the asylum. These helpless cases were as numerous as ever during 1899, and besides there came, more especially towards the end of the year, a proportion of cases of such a character as could only be managed in a county asylum. At the end of the year it was decided to transfer cases from Darenth Asylum, so that Darenth could for awhile admit new cases from the outside. The first 23 cases were admitted from Darenth Asylum on December 13th, 1899. The majority of admissions to this asylum during recent years have been lunatics, and not imbeciles. The transfers from Darenth Asylum will add to the ranks of the mentally deficient and of those requiring constant attention on account of their faulty habits.

There were 3 re-admissions during the year:—

Catherine H., aged 58, City of London, admitted September 23rd, 1899, was previously admitted September 2nd, 1875, and discharged on July 8th, 1876.

William D., aged 40, Poplar, admitted September 26th, 1899, was previously admitted January 21st, 1895, and discharged, recovered, July 8th, 1895.

Joseph C., aged 44, City of London, admitted May 15th, 1899, was previously admitted February 3rd, 1898, and discharged, recovered, July 12th, 1898.



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

Name of Asylum.	Males.	Females.	Total
City of London, at Stone .. .. .	29	20	49
Colney Hatch .. .. .	8	16	24
Hanwell .. .. .	5	7	12
Banstead .. .. .	9	9	18
Cane Hill .. .. .	22	5	27
Claybury .. .. .	15	8	23
Bexley .. .. .	24	12	36
Manor .. .. .	6	—	6
	<u>118</u>	<u>77</u>	<u>195</u>

The table giving the supposed causes of the insanity of the patients admitted is unreliable, because of the scanty information supplied on the admission orders; but it is now one of the duties of the third assistant medical officer to make as full inquiries as possible so as to get more reliable information.

**Discharges.** The following is the table of the discharges:—

	Males.	Females.	Total.
Recovered .. .. .	9	4	13
Improved .. .. .	25	5	30
Not improved .. .. .	26	17	43
Under age regulation .. .. .	—	1	1
Not insane .. .. .	3	1	4
	<u>63</u>	<u>28</u>	<u>91</u>

The percentage of recoveries on admissions was as follows:—

	Males.	Females.	Total
	4·6	2·7	3·8

34 patients were sent to other asylums as suicidal or dangerous to others:—

Name of Asylum.	Males.	Females.	Total.
Banstead .. .. .	1	—	1
Claybury .. .. .	4	2	6
Colney Hatch .. .. .	5	3	8
Hanwell .. .. .	7	9	16
Stone .. .. .	1	2	3
	<u>18</u>	<u>16</u>	<u>34</u>

Suicidal and dangerous patients are a source of great anxiety in an institution like Leavesden, where neither the building is adapted nor the staff sufficient for the treatment of such cases. Often, too, there is some delay before the cases can be admitted to a London asylum. Of the suicidal cases, 2 men cut their throats, 1 man attempted to hang himself, 4 men and 3 women attempted to strangle themselves, 1 man cut both his wrists, 1 woman scratched herself severely with pins, and 1 man and 2 women threatened suicide.



3 patients were transferred to other asylums as private patients:—

Name of Asylum.	Males.	Females	Total.
Holloway Sanatorium .. .. .	1	—	1
Claybury Hall .. .. .	1	—	1
Peckham House .. .. .	—	1	1
	<u>2</u>	<u>1</u>	<u>3</u>

**Deaths.** The deaths numbered 250—121 males and 129 females—no less than 70 being due to pulmonary tuberculosis, mostly occurring among middle-aged and elderly people. Senile decay accounted for 38 deaths. That the health of the institution has not been all that could be desired is proved by the deaths from pulmonary tuberculosis (70), enteric fever (5), enteritis (22), pneumonia (19), tubercular enteritis (1), ulcerative colitis (2), and general tuberculosis (2).

Among the chief causes of death, exclusive of those mentioned above, were valvular disease of the heart (19), general paralysis of the insane (13), cerebral softening (10), and fatty degeneration of the heart (10).

There were 147 *post-mortem* examinations. Bedsores were found on 22 male and 25 female bodies after death, and, although this is a bad record, it is an enormous improvement on 1898. The amount of tubercular disease at this asylum calls for most serious attention. It cannot be denied that there is overcrowding nearly everywhere in the asylum, and overcrowding is well known to be a potent agent in disseminating the disease. The floors too should all be dry rubbed and polished\* as soon as possible, as scrubbed floors are certainly unfavourable where there are phthisical cases.

During the summer there was a serious epidemic of enteric fever, enteritis, and pneumonia among the patients and staff, but as very full reports were given by Drs. Shadwell, Goodall, and Cartwright Wood and by myself during and subsequent to the epidemic, it need only be stated that the illnesses were traced to the water which was pumped from a deep chalk well. Unfortunately the source of pollution of the well has not yet been discovered, and, to add to the puzzle, analyses of the water at the end of the year showed that it was then very pure. The percentage of deaths on the average number resident was high owing partly to the epidemic, but more especially to the large number of deaths from pulmonary tuberculosis:—

Males.	Females.	Total.
13·9	11·9	12·8

**Accidents, inquests, and sudden deaths.** There have been 10 serious accidents during the year involving fractures of bone, but as every accident was reported fully to the sub-committee at the time, details are unnecessary here.

The coroner held 3 inquests during 1899. On March 18th, and subsequently on April 10th, an inquiry was held into the cause of the death of Caroline Ansell, and the jury returned the following verdict:—"That the said

\* On June 1st, 1900, the medical superintendent reported that this work "is rapidly proceeding."



Caroline Ansell died at Leavesden Asylum, in the parish of Watford aforesaid, on the 14th March, 1899, and her death was caused by eating a piece of cake on the 10th March, 1899, containing phosphorus poison, such cake having been received by her through the post on the 9th March, 1899, and having been sent to her by her sister, Mary Ann Ansell, for the purpose of obtaining the insurance money payable under the life insurance policy on the life of Caroline Ansell; and so the jurors aforesaid do further say that the said Mary Ann Ansell, of 42, Great Coram Street, London, on the 14th day of March, 1899, did feloniously, wilfully, and of malice aforethought, murder the said Caroline Ansell." Mary Ann Ansell was subsequently hanged for the murder.

On July 20th, Mary Ann Cox, aged 45, died, and was certified to have died of cerebral softening. On July 21st the mother and daughter of the deceased visited the asylum for the purpose of seeing the remains. The patient had been a very stout woman, and had lain unconscious, with a very flushed face, for some hours before death. In consequence of the exceptionally hot weather and of the mode of death, decomposition rapidly made its appearance in the face, as well as elsewhere, and the relatives, seeing this, expressed their opinion that the deceased had not met a natural death. The coroner was communicated with, and Dr. Rudyard, of Watford, who was directed to make a *post-mortem* examination, found that the cause of death was cerebral softening. At the inquest on July 22nd, the jury returned the following verdict:—"That the said Mary Ann Cox died at Leavesden Asylum, on Thursday, the 20th day of July, 1899, and her death resulted from softening of the brain."

On December 22nd an inquest was held upon the body of Ann St. Leger, a very old and feeble woman, who fell when being helped along the ward by two fellow-patients. The jury returned the following verdict:—"That the said Ann St. Leger died at the Leavesden Asylum on the 21st December, 1899, from the result of a fracture at the hip, sustained by an accidental fall on the 7th December, 1899, in ward 1 A of the female infirmary, and no blame is attached to any person."

There were 6 cases of unexpected death in which the coroner did not deem an inquest necessary. Full particulars of these were presented at the time to the sub-committee.

**Asylum  
improvements and  
additions.**

The following improvements and additions have been made:—The repainting of blocks II. and XII., the kitchen, the tailors' shop, the shoemakers' shop, the bakehouse, the assistant medical officers' quarters, the billiard room, the male and female messrooms, and the messroom sculleries; the polishing of the floors of blocks II. and XII., the nurses' sitting-room, and the needle-room; the renewal of the floor of the vegetable kitchen; the provision of safes for food in each ward throughout the asylum; the renewal and increase of the internal sanitary fittings throughout the asylum (in progress); the rearrangement of the stock of all the wards; hot water and light carried to the assistant medical officers' bathroom; the provision of American roll-top desks in each assistant medical officers' sitting-room; a 36-gallon Aymard's milk steriliser and two new ovens placed in the kitchen.



Several other improvements and additions are about to be undertaken, the most urgent of which is the provision of more accommodation for male sick patients by the conversion of block IV. into 3 infirmary wards.

**Staff.** The number of the staff employed on 31st December, 1899, was as follows :—

	Males.	Females.	Total.
Medical officers .. .. .	4	—	4
Other chief officers .. .. .	2	1	3
Attendants .. .. .	52	68	120
Heads of departments, artisans, and other officials .. .. .	109	29	138
Totals .. .. .	167	98	265

The same medical and principal officers are still on the staff. During the earlier part of the year Dr. F. J. Stuart was temporary assistant medical officer, but left when appointed assistant medical officer to the Northampton County Asylum. The excellent services rendered during the epidemic by Dr. Densham, who was temporarily lent from Gore Farm Fever Hospital, must be specially recorded. Dr. F. H. Fawcett joined the staff in August as a much-needed third assistant medical officer, and has proved an agreeable and helpful colleague.

\* \* \* \* \*

The way in which the staff of attendants is continually changing is detrimental to the best interests of the patients and the asylum, and the matter is receiving the attention of the committee.

The wages, emoluments, quarters, leave, and rations of attendants should be at least equal to those which are given in the London county asylums, as the work in the metropolitan asylums is far more discouraging, irksome, and trying, the duties often being most unpleasant and disgusting, as well as detrimental to both mind and body.

It would be an advantage, too, if attendants holding approved nursing certificates could receive some addition to their wages, in order to encourage persons to remain in the service who have taken the trouble to train themselves. This has frequently been done in other asylums.

The Medico-Psychological Association still refuses to recognise the experience obtainable at the metropolitan asylums as a sufficient training for those who wish to be candidates for the nursing certificate, but it is confidently hoped that this prohibition will soon be removed. The association, after some correspondence, agreed to admit to the examination 6 Leavesden officials, all of whom had had at least 2 years' experience in other asylums, but who had received the training lectures at this asylum. All these 6 officials passed the examination, which was creditable both to them and to Dr. Blair, who coached them. The sequel proves the value of the certificate, for 2 of the attendants at once obtained more responsible posts in another asylum; and a charge attendant—Miss Eynthoven—is now a head attendant in a Dublin asylum. Old officials say they cannot recall



the name of another female attendant who has been promoted to the post of head attendant.

Promotions from an institution are always a healthy sign; and there will, it is hoped, soon be a time when the valuable nursing training obtainable in the metropolitan asylums will enable the nurses and attendants to look forward to promotion in other asylums.

\* \* \* \* \*

The number of patients working on December 30th was as follows—

Males.	Females.	Total.
475	379	854

These figures are an improvement on last year. One of the duties of the third assistant medical officer is to encourage as many patients as possible to be at work, but it is difficult to push this very far owing to the weak, helpless character of so many of the patients and the smallness of the staff to look after them.

Diphtheria and measles occurred among the children of some of the officials, but precautions were taken and I am glad to say that the diseases did not attack the patients.

Several male patients became affected with ringworm in the autumn.

During the last few days of 1899 a severe epidemic of influenza began to affect the patients and staff, but this history belongs to 1900.

There was no necessity during 1899 to use seclusion, mechanical restraint, or strong dresses in the treatment of the patients. The practice of placing all wet, dirty, noisy, excited, sleepless, and recently-admitted cases under supervision in dormitories at night and reserving the single-bedded rooms for quiet, well-behaved patients is now fully carried out in this large asylum, with the best possible results. The wet and dirty habits are largely conquered by efficient nursing, the noisy and excited are soothed and cared for, the sleepless and recently-admitted are specially watched and tended, and the destruction of bedding and clothing largely prevented. The practical results are shown in the following tables. The numbers apply only to the month of December:—

	Males.	Females.	Total.
Average number of faulty patients } per night during December	21.45	29.35	50.8
Average number of dirty articles } per night during December	70.7	101.03	171.73

It may be stated that the above figures are most creditable to the night attendants, who have taken the keenest interest in the working details of the new system.

The large insufficiently supervised dormitories are still a source of much anxiety to those responsible.

5 major surgical operations were performed by Dr. Blair during the year—excision of the breasts of 3 women for cancer, amputation of a man's arm for bone disease, and the removal of an innocent tumor from the breast of a woman.

A qualified veterinary surgeon has been appointed to attend to the farm stock, and the application of the tuberculin test proved that the majority of the dairy



cows suffered from tuberculosis. The tubercular cows have been gradually disposed of and new cows only admitted to the dairy that had passed the tuberculin test, with the result that the herd of dairy cows can now be described as non-tubercular.

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

## No. 2.

### CATERHAM ASYLUM.

CATERHAM, SURREY,  
*January, 1900.*

**Statistics.** The statistical results of the year may be thus summarised:—

	Males.	Females.	Total.
On 1st January, 1899, the asylum contained ... ..	929	1,072	2,001
Admitted during the year ... ..	76	68	144
Total number under treatment during the year ... ..	1,005	1,140	2,145
Discharged during the year ... ..	16	13	29
Died during the year... ..	58	53	111
Remaining in the asylum on 31st December, 1899 ... ..	931	1,074	2,005

**Admissions.** The mental condition of nearly all admitted was of a hopeless nature, and their bodily health in many cases much impaired, nearly a third of the number, owing to their enfeebled state, requiring to be at once sent to the infirmary wards. It is to be hoped that when the asylum infirmary now being erected at Tooting is opened, such cases as I refer to will find a more suitable home there, and the vacancies thus occasioned be filled up by patients of the comparatively able-bodied class of the insane, for whom these asylums were originally intended and designed. It is now very rare that any patients capable of assisting in the industrial work of the asylum are received, and if the present class of cases continues to be admitted, it will probably become necessary to materially increase the staff of paid workers. The character of the admissions has been more of the county asylum type, 30 having been transferred here from the London County Asylum, Cane Hill, during the year.

It will be gathered from table V. that the large majority of the patients under treatment here are chronic lunatics and not cases of imbecility and idiocy, and therefore the term "imbecile" asylum is a misnomer and somewhat misleading.

**Deaths.** The total number of deaths during the year was 111—58 men and 53 women—and the percentage on the average number resident 5·5. This is the lowest percentage since the opening of the asylum in 1870. 34 were between 70 and 80 years of age, and 5 between 80 and 90. There were only



8 of the deaths due to phthisis, as compared with 15 of the year 1898. The number of autopsies was 69.

**Discharges.** 7 patients were discharged as recovered, 4 as improved, and 18 as not improved. The latter number embraced 1 male and 1 female who were removed to Camberwell House Asylum and the London County Asylum at Horton respectively as private patients, by order of the Court of Chancery, and 16 who, being either suicidal or dangerous to others, were transferred to the London County Asylum, Cane Hill. The comparatively small number of recoveries is due to the chronic and hopeless mental character of the patients under care here.

The highest number resident on any one day was 2,008, the lowest, 1,987, and the average number resident during the year, 2,002.

**Inquest.** An inquest was held on January 5th, in the case of a female patient (Annie M.) who died from the effects of burns, caused by her clothes becoming accidentally ignited whilst she was assisting in the domestic work of the charge nurse's room. The jury returned a verdict of "accidental death," and exonerated the nurse from all blame.

**Entertainments.** Recreations and amusements of a varied character, including theatrical performances, concerts, &c., which have such a beneficial influence in rendering the patients cheerful and contented, have been provided, the weekly dances during the winter months and the cricket matches in the summer being especially appreciated.

**Works.** The new residential block for the female nursing staff was opened in May last. It provides accommodation for 30 attendants, in addition to quarters for the assistant matron, superintendent nurse, messroom maid, and a housemaid. The night attendants' rooms are effectually isolated, in order to prevent them being disturbed during their hours of rest. There are also commodious sitting, dining, and writing rooms, comfortably and tastefully furnished, and I have every reason to believe that, in addition to meeting an urgent want by relieving the overcrowded state of the hitherto existing accommodation, the home thus provided has rendered them more settled and pleased with their positions.

Plans have recently been submitted by the Engineer to the Board for important structural improvements and additions to the laundry. The scheme provides for an effectual separation of the sexes, an increased plant of machinery, and the improved hot-air system of drying clothes. The existing laundry accommodation has for some time past undoubtedly proved to be quite inadequate to the present requirements of the asylum.

A new thatched rustic shelter, capable of accommodating 140 patients, has been erected in male B airing court, and has proved a source of great comfort and a most efficient protection from the sun and sudden showers of rain, in addition to providing resting accommodation for the more feeble.

During the year a large quantity of tar-paving has been carried out in the male and female airing courts, and drinking fountains of a suitable design for the patients' use have been fixed in several of the male airing courts.



**Staff.** The average daily number of staff employed during the year was :—

A. Medical staff	..	{ Medical superintendent. Two assistant medical officers. }	3
B. Nursing staff	..	{ This includes matron, assistant matron, head attendants, and superintendent nurse. }	126
C. Other staff	.. .. .		103

The general health of the patients and staff has been exceptionally good, and it is gratifying to be able to record an entire immunity from any epidemic disease.

**Consumption.** I desire especially to draw the attention of the committee to the very low death rate from phthisis pulmonalis, which figures in the "cause of death" table as 8. I gather from the reports for the preceding year that the deaths due to this disease were as follow :—

			Average number resident.	Deaths from phthisis.	Rate per cent.
Leavesden Asylum	.. ..		1,986	55	2·77
Caterham Asylum	.. ..		1,987	15	0·75
Darenth Adult Asylum	.. ..		1,043	8	0·76

The causation of death is certified at this asylum, and doubtless also at Leavesden, in the majority of cases, after verification by *post-mortem* examination, and this renders the cause given exceptionally trustworthy. I think it most probable that the comparative immunity from phthisis amongst our population is due to the salubrity of the site, the dry bracing air, situated as we are 610 feet above sea level, and the chalk soil. The same remark will apply to Darenth, which is also situated on comparatively high ground and on chalk. The subject of the contagious and infectious nature of pulmonary consumption has been closely engaging the attention of the medical profession for several years past, and the conclusion universally arrived at by the highest scientific authorities is, that phthisis must be regarded as a highly infectious and contagious disease, and therefore demanding isolation, as far as possible, in its treatment. There is also a general concurrence of medical opinion that it is curable, in many cases, if arrested in its early stages, and the patient placed under the "open-air treatment" and other special hygienic conditions. The point to which I especially desire to invite the attention of the committee is, quoting from a paper on the subject by Dr. F. G. Crookshank, "that the official death-rate from phthisis in asylums in England and Wales is 4·5 times as great as that of the age-group of the general population most liable to phthisis—males between the ages of 35 to 45." This is probably in a great measure due to (1) the conditions of asylum life favouring the development of phthisis, (2) the insane being peculiarly liable to this disease, (3) the asylum daily routine of life, necessitating the spending of long hours in crowded day rooms and dormitories, and the, in many cases, morbid and dirty habits of the patients. I cannot but think, with these ascertained facts before us, the question of providing isolation treatment for insane patients suffering from consumption must be earnestly considered, and I would throw out as a suggestion for the consideration of the Asylums Committee the advisability of erecting a



detached block of the sanatorium type, isolated from the main building, at one of the asylums, for the treatment of such cases. The situation of Leavesden, owing to it being apparently favourable to the development of this disease, and the asylum infirmary now being built at Tooting, being on clay soil and in proximity to a town-crowded population, hardly appear to be suitable, but the sites both of Caterham and Darenth should be free from these objections, and the cases of consumption as they arise in the other asylums could be transferred to the selected institution. There can be but little doubt that the plans of no new asylum to be erected will be approved by the commissioners in lunacy unless such special provision as I have indicated be included.

**General  
remarks.**

There has been no occasion to have recourse to mechanical restraint in the treatment of the patients during the year; indeed, it has only been necessary in one case during the past 10 years, and this was for surgical purposes, to prevent the patient, who was suffering from maniacal excitement, tearing open a wound.

The usual course of lectures to the female attendants on elementary anatomy, physiology, and the nursing and management of the insane, have been given by Dr. Campbell, the senior assistant medical officer, and these have been followed by lectures on practical nursing by the matron.

The day and night attendants have been periodically drilled in fire practice, and copies of the new fire regulations have been issued to all the members of the staff. I am of opinion that a steam fire engine is much needed, as at present the force of water is inadequate in the event of the occurrence of a serious outbreak of fire.

Swine fever again made its appearance in November at the farm, which was declared by the Board of Agriculture to be an infected place, and all the pigs located in the far pig shed, which is situated at a considerable distance from the farm main building, were ordered to be slaughtered, compensation being paid to the estimated amount of their value.

I desire to record that Dr. Campbell continues to render me most able and energetic help in the general administrative and medical work of the asylum.

(Signed) G. STANLEY ELLIOT,  
*Medical Superintendent.*

### No. 3.

#### DARENTH ASYLUMS.

NEAR DARTFORD, KENT,  
*January, 1900.*

I have the honour to submit to you the annual report for these asylums for the year ended 31st December, 1899, together with the statistical tables, which, owing to amalgamation not being complete till the end of the year, have been prepared separately for the adult and children's departments.



## Statistics.

The following table gives a brief summary of the statistical results for the whole institution :—

	Males.	Females.	Total.
On January 1st, 1899, the asylums contained ... ..	1,073	928	2,006
Admitted during the year... ..	38	25	63
Total under treatment during the year ... ..	1,116	953	2,069
Discharged during the year ... ..	19	19	38
Died during the year... ..	35	35	70
Remaining in the asylums on December 31st, 1899 ... ..	1,062	899	1,961

**Admissions.** Of the total number admitted, 61 have been children and 2 adults. The number is considerably less than last year. This is explained by the fact that, since last May, one block on the male and one on the female side of the adult asylum have been in the hands of the contractors—as far as possible the patients from these blocks being accommodated in other wards, necessitating a temporary loss of 25 male and 25 female beds—and also partly by the fact that the sub-committee in July last decided to deduct the 20 beds in the admission block from the total accommodation, which previously had been kept full.

The adult asylum was opened for outside admissions on 29th November, but no fresh cases could be received for some time after that date until some of the patients from these asylums had been transferred to Leavesden. Of the 63 cases admitted, 38 have been males and 25 females. 2 of the males have been admitted to the adult asylum, all the remainder and the 25 females to the children's department. Of the 38 males, 14 were epileptic and 3 doubtful; and of the 25 females, 11 were epileptic and 2 doubtful.

With regard to the male children, the prognosis as to improvement is good in 4, fair in 8, doubtful in 6, and bad in 18. In the females, it is good in 2, fair in 11, doubtful in 4, and bad in 8.

11 males and 3 females cannot talk at all, and about one-half of the boys and one-third of the girls are of defective habits.

In all cases in which it was possible an ophthalmoscopic examination was made; this was done in 30 males and 19 females. Some abnormality was found in 13 males and 6 females. 6 males and 5 females had choroido-retinal changes.

**Discharges.** During the year 38 patients were discharged, *i.e.*, 27 adults and 11 children. Of the 27 adults, 23—*i.e.*, 12 males and 11 females—were transferred to Leavesden Asylum, and 4 were sent to the county asylum as dangerous to themselves or others.

5 children were discharged improved and 6 not improved. 24 patients from the children's department were transferred to the adult.

**Deaths.** There have been 70 deaths in the institution during the year. Of these 70, 43 were in the adult and 27 in the children's department.

These figures give the very low death rate of 3·5 per cent. on the average number resident in the whole institution. Amongst the adults it was 4·1 per cent.



and amongst the children 2·8 per cent. Considering the helpless, feeble cases we have, this death rate is very satisfactory.

*Post-mortem* examinations were made in 42 out of the 43 adults, or 97 per cent. of the deaths, and in 21 out of the 27 children, or 77 per cent.

Epilepsy was the cause of death in 6 adults and 7 children. 9 adults died from senile decay.

Phthisis again figured as the largest cause of death. 10 adults and 4 children died of this disease; this gives 20 per cent. of all deaths.

I have been over some of the statistics of former years, and, although the death rate from phthisis in the outside world is steadily falling—thanks to sanitary and hygienic measures—it seems to keep fairly steady in the adult asylum, and accounts for from 20 per cent. to 25 per cent. of all the deaths. It is now, I believe, generally accepted that of all tubercular affections phthisis is most likely to be caused by ærial infection. It rarely, if ever, happens that our infirmary wards are free from this disease, and, owing to the walls being distempered, they cannot be washed down.

The sub-committee have recently erected a milk steriliser, and this is undoubtedly a step in the right direction, but our deaths from abdominal tubercular disease—the form most likely to be caused by milk infection—have never been high, and in my opinion what we most require is a building where we can isolate all cases of phthisis. It must be remembered that many of our patients are day and night in the infirmary wards, and owing to their low vitality are very vulnerable to infection.

The fact that 6 of the deaths were due to juvenile general paralysis is deserving of special comment. Up to recent years this disease has been considered to be almost peculiar to adults, and certainly has not been much recognised amongst children. 3 of the cases were males and 3 females. With regard to the cause of this disease, our experience here confirms that of Dr. Mott, that in a large proportion of the cases there is a history of congenital syphilis. In 4 of our cases, *i.e.*, 2 males and 2 females, there was a probable history of this disease in the parents, and in 2 cases no history was forthcoming. The earliest age at which the symptoms manifested themselves would seem to be 5 years, and the latest 14. The duration of the disease after recognition varied from 11 months up to 9 years. The mental condition in all appears to have been one of gradually progressive dementia, but 2 were preceded by maniacal symptoms. In all these cases the diagnosis was verified by *post-mortem* examination. The other causes of death call for no special remark.

**Inquest.** 1 inquest was held during the year on a patient, who, on *post-mortem* examination, was found to have a small potato lodged in a dilatation of the œsophagus. It had nothing to do with the cause of death, which was from bronchitis.

**Accidents.** A few cases of fracture of the limbs have occurred during the year, but apart from this there have been no serious casualties.

**Restraint.** Restraint—*i.e.*, canvas gloves—was used for surgical reasons in one boy for 180 hours on 9 occasions during the year.



**Causation.** We have obtained a history more or less reliable in 55 of the 63 cases admitted. The reasons given for the mental defect by the friends are very varied, and include falls, worry of the mother, fright, fits, vaccination, &c.

I have very carefully gone into all these histories, and find that in 23 cases, *i.e.*, 13 males and 10 females, there is an acknowledged history of heredity, that is, 38 per cent. of all the admissions. Taking into consideration how very reluctant friends are to acknowledge any mental defect, and the further fact that many of them scarcely know their family history, this is a very large proportion, and I am more than ever convinced that heredity is by far the most important factor in the causation of imbecility. Epilepsy was probably the cause in 11 cases, *i.e.*, 5 males and 6 females, or in 17 per cent. of the admissions. The prognosis in these cases is always bad, dementia invariably supervening sooner or later, unless, as is frequently the case, they succumb to a severe outburst of epileptic fits or die of phthisis, to which disease they would appear to be peculiarly vulnerable.

In 2 cases there was a history of drink in the parents, and 1 case admitted had undoubted evidence of congenital syphilis.

In 23 cases, or 37 per cent., the cause was doubtful, and no reliable reason could be assigned.

There was a history of phthisis in the parents in only 2 cases.

**Epidemics.** At the end of last year we were unfortunately suffering from an outbreak of diphtheria. Up to the 31st December, 1898, there had been 5 cases. These continued to occur up to May, 1899, and in all we had 23 cases. During the first part of the time the patients were isolated in the admission block, but were afterwards sent to Gore Farm Hospital. In spite of the fact that many of the patients were in feeble health, there was only 1 death. All cases were immediately treated with antitoxin, and the result of the injections was most satisfactory. The outbreak was almost entirely limited to the male side of the schools, 3 cases only occurring on the female side. The diagnosis in all cases was verified by bacteriological examination.

In March and April there was a small outbreak of scurvy-rickets amongst some of the patients on mince diet in the pavilions, but none of the cases was serious. To obviate this for the future, the patients on mince diet now have cabbage twice a week. Ringworm and ophthalmia continue to occur, but the number of cases now under treatment is less than at any time since I have had charge of the asylums. All cases are strictly isolated.

**Educational department.** During the past year the work in this department has been actively carried on by Miss Hoatson and her assistants, and in spite of the fact that they are seriously handicapped by want of room, very good work has been done.

Increased attention has been paid to the development of industrial occupations, and in order to still further develop this branch the sub-committee have recently appointed 2 industrial trainers.

During the year, 53 fresh patients were sent to school, 28 were removed, and 7 were discharged to their friends.



The head schoolmistress sends me the following report on the school work for the year :—

“ Number of names on registers, 31st December, 412.

**Statistics.**

		boys, 247 ; girls, 165.			
Number of children attending school all day . .	..	..	236		
“ “ “ “ 2½ hours ..	..	..	30		
“ “ “ “ half-day ..	..	..	146		
Total ..			412		

**History.**

During the first 3 months school work was carried on under great difficulties. Owing to an outbreak of diphtheria, boys were absent for some time. Teachers were sent to the different blocks, but as children from all classes are in each block, it was not easy or profitable work to either children or teachers.

**Progress.**

During the past year steady progress has been made by the children, principally in hand and eye-work, viz., kinder-garten and advanced occupations.

**Occupations.—**

**Knitting.** 254 articles have been made and sold during the year, the proceeds of sales purchasing materials for new work. Average number in class, 18. Lessons, 2 hours in length of time.

**Sewing—** 242 articles of clothing have been made. 62 articles of fancy plain, fancy. needlework have been made and sold. Lessons, 2 hours. Average number in class, 30.

**Basket-work.**

Baskets, &c., to the number of 176, of various kinds, have been made and sold. Lessons, 1 hour. Average number in class, 12.

**Cane-seating.**

41 chairs of various kinds, open and solid seats, have been resealed during the year for the asylums here. Lessons, 1 hour per day. Average number in class at one time, 4. Scarcity of work handicaps this industry.

**Rug-work.**

There are at present 10 children in this class. Number at work at one time, 5. 4 mats have been made, 3 sold. Occupation commenced in January, 1899. 2 full-sized hearthrugs and 3 smaller mats are in hand at the present time.

**Macramé knotting.**

27 articles have been made and sold. Work commenced in 1899. Lessons, 1 hour 3 times per week. Average number in class, 12.

**Osier-work.**

Industry commenced May, 1899. Time allotted to work averages 13 hours per week. Up to the present time 22 store baskets have been made and sent in to the steward. 9 small model laundry baskets and 6 larger ones have also been made. Average number of boys at work at one time, 4.

All these occupations are the result of patient, steady work on the part of the school staff during the past 2 years.”



**Amalgamation of the adult and children's departments.**

The scheme for the amalgamation of the 2 divisions of the institution has been generally approved by the Board. It entails a considerable amount of structural alteration. The laundry at the adult asylum will be enlarged and reorganised, and it is intended to do the washing for the whole institution in this laundry. Additional ovens and cooking appliances will be erected in the adult kitchen, and the cooking for all the patients and the staff of the pavilions and adult asylum will be done here. A small kitchen, capable of cooking for the officers and staff of the children's department, will be maintained at the schools. A tram line will run from the adult kitchen to the schools and pavilions to convey the food and laundry.

The messroom sculleries at the adult asylum are to be enlarged, and the staff of the adult asylum and pavilions will have their meals here. This will set free a mess-room at the schools, which will be used as a needle-room for the whole institution.

The stores at the schools will be used for dry goods and those at the asylum for food, &c.

The above are the main features in the amalgamation scheme, and the plans for the structural alteration involved will shortly be submitted to the Local Government Board.

As a preliminary to this amalgamation, the patients have been consecutively renumbered throughout the institution and one uniform diet scale has been adopted. The renumbering of the patients has involved a very large amount of clerical work both for the assistant medical officers and also for the clerks.

Two great obstacles stand in the way of the complete amalgamation: (i.) the continued presence of the "educable" children and (ii.) the fact that we still have two sets of female officers, independent of each other and each exercising jurisdiction over a part of the institution. The latter is the outcome of the previous dual administration, and must necessarily take time to rectify. This duplication of female officers serves no useful purpose and doubles my administrative work, which under the most favourable circumstances in a large scattered institution of this sort must always be sufficiently onerous.

With regard to the continued presence of the "educable" children, it is much to be desired both in the interests of the institution and also of the children that the Board may soon find some place suitable for their accommodation. It is most difficult to administer a place which is used as a school, and where everything must be subservient to education, on asylum rules.

With regard to the male staff, the amalgamation has been carried out and works very smoothly.

**Instruction for attendants.**

During the year lectures on first aid and sick nursing, in connection with the St. John Ambulance Association, have been given to the attendants by the medical staff. An examination for first aid was held in April last, and 20 male and 28 female attendants obtained the certificate.

At the present time about 50 members of the male and female nursing staff are attending lectures on first aid and sick nursing.

Instruction in massage has been given to a number of the charge nurses in the children's department by Miss Skelton, one of the superintendent nurses, and this treatment has been of great value to the patients. Miss Keene, the other superintendent nurse, has given the female attendants instruction in bandaging, &c.



**Amusements.** During the past year the amusements of the patients have been well looked after. In the winter weekly entertainments, consisting of concerts, theatricals, and dances, were held, and during the summer the band gave outdoor performances. The advantages of a good band for an institution of this sort cannot be over-estimated. The cricket season was a most successful one, a match being played each week.

\* \* \* \* \*

**Building and alterations.** A large amount of new work, repairs, and alterations has been carried out in the institution during the past year.

The following work has been completed:—

- (a) Brick piers to support the laundry floor.
- (b) A new pitch-pine floor for the nurses' sitting-room.
- (c) New air ducts under the recreation hall floor.
- (d) Outside coal, foul linen, and dust stores for blocks 1, 4, and 10.
- (e) Hot-air propulsion fans for the laundry drying closets.
- (f) Racks for storing patients' clothing in blocks 1, 2, 3, and 4.
- (g) A new poultry shed at the farm.
- (h) New retort beds and governor house for the gasworks.

The following work is now in progress and will shortly be completed:—

- (a) The remodelling of the sanitary arrangements throughout the adult asylum and the erection of pedestal closets, with automatic flush tanks; also the laying of asphalte floors in all the w.c.'s.
- (b) The redecoration of the adult asylum throughout and the relaying of most of the floors in pitch pine.
- (c) The plastering of the outside of the south, west, and part of the east sides of the front blocks and corridors of the adult asylum.

Much of this work was urgently necessary. The brick piers for the support of the laundry floor were required on account of the vibration of the hydros.

The new air ducts under the recreation hall floor were necessary, as the joists in some parts were found to be affected with dry rot.

Previous to the erection of the outside coal, foul linen, and dust stores for blocks 1, 4, and 10, there was no proper storage accommodation for the coal, the foul linen was kept in the w.c., and the dust under the stairs. The lunacy commissioners in their last report commented very favourably on these stores, and recommended that they should be provided for all blocks. The sub-committee have had plans and an estimate prepared.

The laundry drying closets were unable to cope with the large amount of clothes sent daily to the laundry, and on this account were fitted with the hot-air propulsion fans.

The female attendants in the adult part of the institution had until recently no sitting-room. A room formerly used as a visiting-room for female patients was taken for the purpose. A new floor was laid in pitch pine and the room redecorated. It now makes a very good sitting-room.

The new sanitary arrangements, when finished, will be a great boon. Previously, the building was fitted with the old trough closet. Many of the w.c. floors were of wood, and were most insanitary.



The redecoration of the asylum was badly required, and the floors especially needed renewing; many of them had been down since the asylum was first built. The substitution of polished floors for scrubbed ones will much improve the sanitary condition of the wards. The turpentine used for the polishing will act as an excellent antiseptic, and we shall not be troubled, as formerly, with damp boards.

The outside cementing of the walls of the front blocks was most urgently required on account of the very exposed site on which the asylum is built. With the violent gales we experience here, the rain often appeared to be driven completely through the walls.

In addition to the above work, the sub-committee have had plans prepared for laying out the airing courts of the adult asylum with grass and asphalte paths. In my last annual report I called attention to the condition of these airing courts. At present, with one exception, they are covered with loose gravel. In summer they are very dusty and hard to walk upon, and in winter they are so muddy that, if the weather is at all damp, the patients cannot go out. The steep slopes of the front ones are very dangerous for the old and feeble patients. The courts as they are at present are most unattractive.

**Staff.** There has been a great number of changes in the subordinate staff during the past year, especially amongst the male attendants. This, no doubt, is largely accounted for by the fact that a number of reserve men have been recalled to the colours; but, allowing for this, 55 male attendants out of a total staff of 69, exclusive of married couples, have left the asylum in the past 12 months. There have not been so many resignations amongst the female attendants, but still the number is high.

\* \* \* \* \*

It must necessarily follow that so many changes are very detrimental both to the patients and institution.

The Asylums Committee are now considering this matter, and I hope will take steps to place their attendants in as good a position as regards accommodation, leave, and remuneration as they can obtain in the county asylums.

\* \* \* \* \*

The staff of scrubbing women in the children's department has been still further reduced by employing patients to do the household work. We now have only 5 paid women, the services of 4 having been dispensed with during the year.

The following tabulated form shows the number of staff:—

Medical superintendent	..	..	1
Assistant medical officers	..	..	4
Female nursing staff	..	..	139
Male do.	..	..	69
*Other staff	..	..	173

\* \* \* \* \*

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

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\* This includes household staff and all persons employed on the estate.



ASYLUM STATISTICS.—TABLE I.—*Showing*

	LEAVESDEN ASYLUM.					
	Males.	Females.	Total.	Males.	Females.	Total.
In the Asylums, January 1st, 1899...	...	...	...	885	1,099	1,984
Admitted for the first time during the year, direct from the several Parishes and Unions ...	182	134	316	...	...	...
Re-admitted during the year...	2	1	3	...	...	...
Admitted from other Asylums of the Board ...	12	11	23	...	...	...
				196	146	342
Total under care during the year ...	...	...	...	1,081	1,245	2,326
Discharged—						
Not insane ...	3	1	4	...	...	...
Recovered ...	9	4	13	...	...	...
Improved ...	25	5	30	...	...	...
Not improved ...	26	18	44	...	...	...
To other Asylums of Board...	...	...	...	...	...	...
Died ...	121	129	250	...	...	...
Total discharged (for various reasons) and died during the year ...	...	...	...	184	157	341
Remaining in the Asylums, December 31st, 1899...	...	...	...	897	1,088	1,985
Average numbers resident during the year ...	...	...	...	869	1,083	1,952
Highest number resident on any one day ...	...	...	...	901	1,099	2,000
Lowest number resident on any one day ...	...	...	...	817	1,051	1,868

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 29 $\frac{8}{10}$ years, direct from the several Parishes and Unions ...	4,261	4,111	8,372	...	...	...
Re-admissions ...	55	22	77	...	...	...
Admitted from other Asylums of Board ...	194	243	437	...	...	...
Total of cases admitted ...	...	...	...	4,510	4,376	8,886
Discharged—						
Not insane ...	13	8	21	...	...	...
Recovered ...	254	131	385	...	...	...
Improved and escaped ...	246	169	415	...	...	...
Not improved ...	331	306	637	...	...	...
To other Asylums of Board ...	46	34	80	...	...	...
Died ...	2,723	2,640	5,363	...	...	...
Total discharged and died during the 29 $\frac{8}{10}$ years ...	...	...	...	3,613	3,288	6,901
Remaining December 31st, 1899 ...	...	...	...	897	1,088	1,985
Average numbers resident during the 29 $\frac{8}{10}$ years ...	...	...	...	838	1,050	1,888

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 to



*the Admissions, Re-admissions, Discharges, and Deaths during the Year 1899.*

CATERHAM ASYLUM.						DARENT ASYLUM.						SUMMARY.					
Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
...	...	...	929	1,072	2,001	...	...	...	448	599	1,047	...	...	...	2,262	2,770	5,032
73	67	140	...	...	...	2	...	2	...	...	...	257	201	458	...	...	...
3	1	4	...	...	...	...	...	...	...	...	...	5	2	7	...	...	...
...	...	...	...	...	...	14	10	24	...	...	...	26	21	47	...	...	...
...	...	...	76	68	144	...	...	...	16	10	26	...	...	...	288	224	512
...	...	...	1,005	1,140	2,145	...	...	...	464	609	1,073	...	...	...	2,550	2,994	5,544
...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	...	...	...
3	4	7	...	...	...	...	...	...	...	...	...	12	8	20	...	...	...
3	1	4	...	...	...	...	...	...	...	...	...	28	6	34	...	...	...
10	8	18	...	...	...	...	4	4	...	...	...	36	30	66	...	...	...
...	...	...	...	...	...	12	11	23	...	...	...	12	11	23	...	...	...
58	53	111	...	...	...	21	22	43	...	...	...	200	204	404	...	...	...
...	...	...	74	66	140	...	...	...	33	37	70	...	...	...	291	260	551
...	...	...	931	1,074	2,005	...	...	...	431	572	1,003	...	...	...	2,259	2,734	4,993
...	...	...	932	1,070	2,002	...	...	...	442	587	1,029	...	...	...	2,243	2,740	4,983
...	...	...	933	1,075	2,008	...	...	...	448	599	1,047	...	...	...	2,282	2,773	5,055
...	...	...	925	1,062	1,987	...	...	...	429	571	1,000	...	...	...	2,171	2,684	4,855

*the Opening of the First Asylum to the present date, December 31st, 1899.*

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

CATERHAM ASYLUM.						DARENT ASYLUM.						SUMMARY.					
Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
4,204	3,820	8,024	...	...	...	777	1,222	1,999	...	...	...	9,242	9,153	18,395	...	...	...
38	32	70	...	...	...	2	9	11	...	...	...	95	63	158	...	...	...
129	204	333	...	...	...	516	484	1,000	...	...	...	839	931	1,770	...	...	...
...	...	...	4,371	4,056	8,427	...	...	...	1,295	1,715	3,010	...	...	...	10,176	10,147	20,323
6	2	8	...	...	...	8	14	22	...	...	...	27	24	51	...	...	...
251	187	438	...	...	...	30	21	51	...	...	...	535	339	874	...	...	...
278	167	445	...	...	...	118	123	241	...	...	...	642	459	1,101	...	...	...
218	191	409	...	...	...	96	123	219	...	...	...	645	620	1,265	...	...	...
87	48	135	...	...	...	85	93	178	...	...	...	218	175	393	...	...	...
2,600	2,387	4,987	...	...	...	527	769	1,296	...	...	...	5,850	5,796	11,646	...	...	...
...	...	...	3,440	2,982	6,422	...	...	...	864	1,143	2,007	...	...	...	7,917	7,413	15,330
...	...	...	931	1,074	2,005	...	...	...	431	572	1,003	...	...	...	2,259	2,734	4,993
...	...	...	851	1,060	1,911	...	...	...	349	493	842	...	...	...	2,038	2,603	4,641

Imbeciles, 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 1890,*

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.
LEAVESDEN ASYLUM.																	
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	151	...	1	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	...	...	...
1899	184	135	12	11	342	9	4	13	25	5	30	29	19	48*	...	...	...
CATERHAM ASYLUM.																	
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	...	...	...
1899	76	68	...	...	144	3	4	7	3	1	4	10	8	18	...	...	...
DARENTH ASYLUM.																	
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	...	...	...
1899	2	...	14	10	26	...	...	...	...	...	...	...	4	4	12	11	23
SUMMARY.																	
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	286	11	32	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	...	...	...
1899	262	203	26	21	512	12	8	20	28	6	34	39	31	70*	12	11	23

\* Includes the "not insane" cases in Table I., p. 130.



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

DIED.			Remaining December 31st.			Average Numbers Resident.			Percentage of Recoveries on Admissions.			Percentage of Deaths on Average Numbers Resident.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
181	124	305	841	1,093	1,934	853	1,081	1,934	7.3	5.7	6.5	21.2	11.4	15.7
114	132	246	872	1,082	1,954	851	1,089	1,940	7.2	5.3	6.3	13.4	12.1	12.7
131	111	242	889	1,098	1,987	857	1,068	1,925	9.2	4.6	7.1	15.3	10.4	12.6
117	85	202	899	1,096	1,995	894	1,097	1,991	8.1	5.3	7.0	13.1	7.7	10.1
118	97	215	895	1,096	1,991	894	1,095	1,989	7.7	3.5	6.0	13.0	8.9	10.1
103	116	219	897	1,094	1,991	895	1,096	1,991	4.7	0.8	2.8	11.5	10.5	11.0
107	88	195	894	1,096	1,990	893	1,097	1,990	5.8	0.0	3.3	12.0	8.0	9.8
100	84	184	900	1,099	1,999	895	1,095	1,990	8.9	0.0	5.2	11.1	7.6	9.2
92	102	194	885	1,099	1,984	889	1,097	1,984	15.1	6.6	10.6	10.3	9.3	9.8
121	129	250	897	1,088	1,985	869	1,083	1,952	4.6	2.7	3.8	13.9	11.9	12.8
107	100	207	919	1,058	1,977	918	1,062	1,980	4.1	0.8	2.4	11.6	9.4	10.4
76	86	162	937	1,064	2,001	922	1,060	1,982	2.8	3.7	3.3	8.2	8.1	8.1
83	95	178	941	1,071	2,012	919	1,045	1,964	3.8	1.7	2.7	9.0	9.0	9.0
72	66	138	938	1,064	2,002	940	1,070	2,010	2.3	2.6	2.4	7.6	6.1	6.8
94	91	185	930	1,074	2,004	931	1,071	2,002	5.8	3.5	4.6	10.0	8.5	9.2
57	73	130	933	1,072	2,005	932	1,070	2,002	8.2	1.3	4.9	6.1	6.8	6.4
73	43	116	925	1,073	1,998	929	1,074	2,003	7.1	5.0	6.2	7.8	4.0	5.7
66	72	138	929	1,050	1,979	931	1,063	1,994	1.2	6.9	3.5	7.0	6.8	6.9
67	83	150	929	1,072	2,001	931	1,056	1,987	7.5	2.5	4.5	7.1	7.8	7.5
58	53	111	931	1,074	2,005	932	1,070	2,002	3.9	5.8	4.8	6.2	4.9	5.5
51	62	113	441	551	992	449	563	1,012	...	...	...	11.3	11.0	11.1
35	39	74	446	580	1,026	443	553	996	...	...	...	7.9	7.0	7.4
32	43	75	436	582	1,018	446	580	1,026	...	...	...	7.1	7.4	7.3
28	67	95	444	575	1,019	445	574	1,019	...	...	...	6.3	11.7	9.4
28	54	82	447	599	1,046	446	578	1,024	...	...	...	6.3	9.3	8.0
23	44	67	447	598	1,045	448	590	1,038	...	...	...	5.1	7.4	6.4
16	35	51	447	583	1,030	448	592	1,040	...	...	...	3.6	5.9	4.9
18	18	36	449	595	1,044	448	593	1,041	...	...	...	4.0	3.0	3.5
16	16	32	448	599	1,047	449	594	1,043	...	...	...	3.6	2.7	3.1
21	22	43	431	572	1,003	442	587	1,029	...	...	...	4.7	3.7	4.2
339	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
225	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
246	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
217	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
240	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
183	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
196	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
184	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
175	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
200	204	404	2,259	2,734	4,993	2,243	2,740	4,983	4.1	3.5	3.9	8.9	7.4	8.0



ASYLUM STATISTICS.—TABLE IV.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients admitted during the year 1899.*

MENTAL DISEASES.	LEAVESDEN ASYLUM.			CATERHAM ASYLUM.			DARENTH ASYLUM.			SUMMARY.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Mania ... ..	12	4	16	1	2	3	...	...	...	13	6	19
Mania, Chronic ... ..	3	9	12	1	16	17	...	...	...	4	25	29
Mania and Epilepsy ... ..	...	1	1	...	1	1	...	...	...	...	2	2
Melancholia ... ..	4	7	11	5	5	10	...	...	...	9	12	21
General Paresis ... ..	7	6	13	9	1	10	...	...	...	16	7	23
Dementia ... ..	80	65	145	26	7	33	...	...	...	106	72	178
Dementia and Paralysis ... ..	...	2	2	...	...	...	...	...	...	...	2	2
Dementia and Epilepsy ... ..	13	7	20	6	3	9	...	...	...	19	10	29
Senile Dementia ... ..	15	9	24	4	6	10	...	...	...	19	15	34
Idiocy ... ..	7	8	15	2	7	9	...	...	...	9	15	24
Idiocy and Epilepsy ... ..	...	...	...	2	...	2	...	...	...	2	...	2
Imbecility ... ..	42	19	61	12	18	30	1	...	1	55	37	92
Imbecility and Epilepsy ... ..	13	9	22	8	2	10	1	...	1	22	11	33
Total ... ..	196	146	342	76	68	144	2	...	2	274	214	*488

\* Excluding 14 males, 10 females, admitted from the schools department at Darenth.

LUNACY STATISTICS.—TABLE V.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients resident in the Asylum on December 31st, 1899.*

MENTAL DISEASES.	LEAVESDEN ASYLUM.			CATERHAM ASYLUM.			DARENTH ASYLUM.			SUMMARY.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Mania ... ..	18	3	21	3	8	11	1	2	3	22	13	35
Mania, Chronic ... ..	70	94	164	...	93	93	4	40	44	74	227	301
Mania and Epilepsy ..	17	11	28	2	17	19	...	...	...	19	28	47
Melancholia... ..	12	11	23	55	49	104	...	4	4	67	64	131
General Paresis ... ..	7	9	16	12	2	14	2	...	2	21	11	32
Dementia ... ..	212	407	619	301	315	616	50	71	121	563	793	1,356
Dementia and Paralysis	14	7	21	24	7	31	8	12	20	46	26	72
Dementia and Epilepsy	70	103	173	146	206	352	27	30	57	243	339	582
Senile Dementia ..	58	32	90	29	28	57	2	28	30	89	88	177
Idiocy ... ..	42	52	94	24	30	54	74	108	182	140	190	330
Idiocy and Epilepsy ...	10	...	10	3	1	4	...	...	...	13	1	14
Imbecility ... ..	283	249	532	301	286	587	171	183	354	755	718	1,473
Imbecility and Epilepsy	84	110	194	31	32	63	67	71	138	182	213	395
Of Weak Mind ... ..	...	...	...	...	...	...	25	23	48	25	23	48
Totals ... ..	897	1,088	1,985	931	1,074	2,005	431	572	1,003	2,259	2,734	4,993



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) ...	...	1	1	...	...	...	...	1	1
Adverse circumstances (including business anxieties and pecuniary difficulties) ...	2	1	3	...	1	1	2	2	4
Mental anxiety, worry (not included in above), and overwork	1	...	1	...	2	2	1	2	3
Religious excitement ...	...	...	...	...	1	1	...	1	1
Fright and nervous shock ...	1	...	1	...	2	2	1	2	3
<b>PHYSICAL.</b>									
Intemperance in drink ...	...	...	...	4	5	9	4	5	9
Do. sexual ...	...	...	...	...	...	...	...	...	...
Self-abuse (sexual) ...	...	...	...	2	...	2	2	...	2
Sunstroke ...	...	...	...	1	...	1	1	...	1
Accident or injury ...	...	...	...	6	1	7	6	1	7
Parturition and the puerperal state ...	...	...	...	...	...	...	...	...	...
Change of life ...	...	...	...	...	1	1	...	1	1
Fevers ...	...	...	...	1	1	2	1	1	2
Privation and starvation ...	...	...	...	...	2	2	...	2	2
Old age ...	15	11	26	...	...	...	15	11	26
Venereal disease ...	...	...	...	...	...	...	...	...	...
Other bodily diseases ...	6	1	7	...	1	1	6	2	8
Previous attacks ...	78	27	105	...	...	...	78	27	105
Hereditary influence ascertained ...	6	10	16	...	...	...	6	10	16
Congenital defect ascertained ...	62	36	98	...	...	...	62	36	98
Epilepsy ...	...	...	...	13	8	21	13	8	21
Unknown ...	42	89	131	...	...	...	42	89	131

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



causes of Insanity in the Patients admitted during the Year 1899.

CATERHAM ASYLUM.									DAREMTH ASYLUM.									SUMMARY.								
As predisposing cause.			As exciting cause.			TOTAL.			As predisposing cause.			As exciting cause.			TOTAL.			As predisposing cause.			As exciting cause.			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.
1	2	3	1	2	3	2	4	6	..	...	...	...	...	...	1	3	4	1	2	3	2	5	7			
1	3	4	..	3	3	1	6	7	...	...	..	...	...	...	3	4	7	...	4	4	3	8	11			
...	...	...	...	1	1	..	1	1	...	...	...	...	...	...	1	...	1	...	3	3	1	3	4			
..	...	...	...	1	1	...	1	1	...	...	...	..	...	...	...	...	...	2	2	..	2	2				
2	...	2	1	3	4	3	3	6	...	...	...	...	1	1	...	1	1	3	..	3	1	6	7	4	6	10
7	...	7	6	3	9	13	3	16	...	...	...	...	...	...	7	...	7	10	8	18	17	8	25			
...	...	...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	1	...	1	1	...	1				
...	...	...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	3	...	3	3	...	3				
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	1	...	1				
3	...	3	3	...	3	6	...	6	1	...	1	...	...	...	1	...	1	4	...	4	9	1	10	13	1	14
...	...	...	...	1	1	..	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1			
...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1			
...	..	...	1	1	2	1	1	2	...	...	...	...	...	...	...	...	...	...	...	2	2	4	2	2		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	2			
6	...	6	...	5	5	6	5	11	...	...	...	...	...	...	21	11	32	...	5	5	21	16	37			
...	...	...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	1	...	1	1	..	1				
...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	6	1	7	1	1	2	7	2	9
6	9	15	...	...	...	6	9	15	...	...	...	...	...	...	84	36	120	...	...	...	84	36	120			
9	7	16	...	...	...	9	7	16	3	..	3	...	...	...	3	...	3	18	17	35	...	...	...	18	17	35
11	18	29	...	...	...	11	18	29	...	...	...	...	...	...	73	54	127	...	...	..	73	54	127			
2	3	5	1	4	5	3	7	10	...	...	...	2	1	3	2	1	3	2	3	5	16	13	29	18	16	34
20	14	34	...	...	..	20	14	34	9	8	17	...	...	...	9	8	17	71	111	182	...	...	...	71	111	182

of 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*

												LEAVESDEN											
CAUSES OF DEATH.												16		17		18		19		20 to 29		30 to 39	
												M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
CEREBRAL OR SPINAL DISEASES—																							
Cerebral Hæmorrhage	...	...	...	...	...	...	...	...	...	...	...	...	...										
Cerebral Softening	...	...	...	...	...	...	...	...	...	...	...	...	1										
General Paralysis	...	...	...	...	...	...	...	...	...	...	1	...	2										
Locomotor Ataxy	...	...	...	...	...	...	...	...	...	...	...	...	3										
Status Epilepticus	...	...	...	...	...	...	...	...	...	...	...	2	...										
THORACIC DISEASES—																							
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	1										
Diseases of the Heart	...	...	...	...	...	...	...	...	...	...	1	1	1										
Pleurisy	...	...	...	...	...	...	...	...	...	...	...	...	...										
Pneumonia	...	...	...	...	...	...	...	...	...	...	1	...	1										
Pulmonary Tuberculosis	...	...	...	...	...	...	1	1	1	7	4	7	5										
ABDOMINAL DISEASES—																							
Acute Peritonitis	...	...	...	...	...	...	...	...	...	...	...	...	...										
Chronic Nephritis	...	...	...	...	...	...	...	...	...	...	...	...	...										
Enteritis	...	...	...	...	...	...	...	...	...	...	...	3	...										
Strangulated Hernia	...	...	...	...	...	...	...	...	...	...	...	...	...										
Tubercular Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...										
Ulcerative Colitis	...	...	...	...	...	...	...	...	...	1	...	...	...										
Carbuncle	...	...	...	...	...	...	...	...	...	...	...	...	...										
Carcinoma	...	...	...	...	...	...	...	...	...	...	...	...	1										
Enteric Fever	...	...	...	...	...	1	...	...	...	3	1	...	...										
Fracture of Femur	...	...	...	...	...	...	...	...	...	...	...	...	...										
General Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	2	...										
Phosphorus Poisoning (Murder)	...	...	...	...	...	...	...	...	...	...	1	...	...										
Senile Decay	...	...	...	...	...	...	...	...	...	...	...	...	...										
Totals												...	...	1	...	...	1	1	1	14	9	14	13

												CATERHAM										
CEREBRAL OR SPINAL DISEASES—																						
Apoplexy and Paralysis	...	...	...	...	...	...	...	...	...	...	...	...	...									
Epilepsy	...	...	...	...	...	...	...	...	...	...	2	...	2									
Exhaustion of Dementia	...	...	...	...	...	...	...	...	...	...	...	...	1									
Exhaustion of Idiocy	...	...	...	...	...	...	...	...	...	...	2	...	1									
General Paresis	...	...	...	...	...	...	...	...	...	...	1	...	2									
Other Brain Disease	...	...	...	...	...	...	...	...	...	...	...	...	1									
THORACIC DISEASES—																						
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...									
Disease of the Heart	...	...	...	...	...	...	...	...	...	...	...	...	...									
Phthisis	...	...	...	...	...	1	...	...	...	...	1	...	3									
Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...									
ABDOMINAL DISEASES—																						
Bright's Disease	...	...	...	...	...	...	...	...	...	...	...	...	...									
Hepatic Disease	...	...	...	...	...	...	...	...	...	...	...	...	...									
Intestinal Obstruction	...	...	...	...	...	...	...	...	...	...	...	...	1									
Peritonitis	...	...	...	...	...	...	...	...	...	...	...	...	...									
Suppurative Perityphlitis	...	...	...	...	...	...	...	...	...	...	...	...	...									
Accidental Death	...	...	...	...	...	...	...	...	...	...	...	...	1									
Cellulitis of Arm	...	...	...	...	...	...	...	...	...	...	...	...	...									
General Debility and Decay of Old Age	...	...	...	...	...	...	...	...	...	...	...	...	...									
Necrosis of Jaw	...	...	...	...	...	...	...	...	...	...	...	...	...									
Scirrhus of Breast and Liver	...	...	...	...	...	...	...	...	...	...	...	...	...									
Tubercular Abscess of Neck	...	...	...	...	...	...	...	...	...	...	...	...	...									
Totals												...	...	...	1	...	...	...	6	...	5	8



Death during the year 1899, together with the Ages of the Decedents on the Orders of Admission.

## ASYLUM.

40 to 49		50 to 59		60 to 69		70 to 79		80 to 89		90 to 99		Above 100.		Ages Unknown.		TOTAL.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	Tl.
...	...	...	1	...	2	...	1	...	...	...	...	...	...	...	...	...	4	4
...	1	...	...	...	2	...	1	...	4	...	1	...	...	...	...	1	9	10
...	3	3	1	...	...	...	...	...	...	...	...	...	...	...	...	6	7	13
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	2	...	1	...	1	...	...	...	...	...	...	...	...	...	6	6
...	...	...	...	1	...	1	3	...	...	...	...	...	...	...	...	2	4	6
...	...	2	3	4	12	2	2	1	1	...	...	...	...	...	...	10	20	30
...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	2
4	3	2	3	2	...	1	2	...	...	...	...	...	...	...	...	10	9	19
12	7	10	8	1	1	2	3	...	...	...	...	...	...	...	...	40	30	70
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	2	...	1	2	...	...	...	...	...	...	...	...	3	2	5
5	...	3	3	3	2	...	3	...	...	...	...	...	...	...	...	14	8	22
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2
1	...	1	1	3	...	...	...	...	...	...	...	...	...	...	...	5	2	7
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	2	1	7	14	6	6	...	2	...	...	...	...	15	23	38
24	15	23	23	20	21	17	36	7	8	...	2	...	...	...	...	121	129	250

## ASYLUM.

...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
1	3	1	2	1	1	...	...	...	...	...	...	...	...	...	...	7	7	14
1	2	2	1	1	3	...	...	...	...	...	...	...	...	...	...	4	7	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...	3	3
1	...	2	...	2	2	...	1	...	...	...	...	...	...	...	...	5	3	8
1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	8
...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	1	3	4
...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	2	2	4
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	1	...	20	10	...	5	...	...	...	...	...	...	21	15	36
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
6	5	12	8	9	12	20	14	...	5	...	...	...	...	...	...	58	53	111



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>												
Cerebral Tumour...	...	...	...	...	...	...	...	...	...	...	1	...
Epileptic Exhaustion ...	...	...	...	...	...	...	1	2	1	1	...	...
Mania ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>THORACIC DISEASES—</b>												
Cancer of Breast ...	...	...	...	...	...	...	...	...	...	...	...	...
Disease of the Heart ...	...	...	...	...	...	...	...	...	1	...	...	1
Phthisis ...	...	...	...	...	...	...	2	2	...	1	2	...
Pneumonia ...	...	...	...	...	...	...	...	...	...	...	1	...
<b>ABDOMINAL DISEASES—</b>												
Cancer of Intestine ...	...	...	...	...	...	...	...	...	...	...	...	1
Cancer of Stomach ...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer of Uterus ...	...	...	...	...	...	...	...	...	...	...	...	...
Intestinal Obstruction ...	...	...	...	...	...	...	...	...	...	...	...	...
Splenic Anæmia ...	...	...	...	...	...	...	...	1	...	...	...	...
Cancer of Neck ...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...	...
Exhaustion after operation ...	...	...	...	...	...	...	...	...	...	...	...	...
Senile Decay ...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	...	...	...	...	...	...	3	6	1	4	4	...
<b>SUM</b>												
<b>CEREBRAL OR SPINAL DISEASES—</b>												
Apoplexy and Paralysis ...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebral Hæmorrhage ...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebral Softening ...	...	...	...	...	...	...	...	...	...	...	...	1
Cerebral Tumour ...	...	...	...	...	...	...	...	...	...	...	1	...
Epilepsy ...	...	...	...	...	...	...	...	...	2	2	2	1
Epileptic Exhaustion ...	...	...	...	...	...	...	1	2	1	1	...	...
Exhaustion of Dementia ...	...	...	...	...	...	...	...	2	...	1	1	...
General Paralysis ...	...	...	...	...	...	...	...	2	...	4	4	...
Locomotor Ataxy ...	...	...	...	...	...	...	...	...	...	...	...	...
Mania ...	...	...	...	...	...	...	...	...	...	...	...	...
Other Brain Disease ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>THORACIC DISEASES—</b>												
Bronchitis ...	...	...	...	...	...	...	...	...	...	...	...	1
Cancer of Breast ...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of the Heart ...	...	...	...	...	...	...	...	2	1	...	2	...
Phthisis ...	...	...	...	1	...	1	1	3	10	4	10	10
Pleurisy ...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia ...	...	...	...	...	...	...	...	1	...	1	1	...
<b>ABDOMINAL DISEASES—</b>												
Bright's Disease ...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer of Intestine ...	...	...	...	...	...	...	...	...	...	...	...	1
Cancer of Stomach ...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer of Uterus ...	...	...	...	...	...	...	...	...	...	...	...	...
Chronic Nephritis ...	...	...	...	...	...	...	...	...	...	...	...	...
Enteritis ...	...	...	...	...	...	...	...	...	...	...	3	...
Hepatic Disease ...	...	...	...	...	...	...	...	...	...	...	...	...
Intestinal Obstruction ...	...	...	...	...	...	...	...	...	...	...	...	1
Peritonitis ...	...	...	...	...	...	...	...	...	...	...	...	...
Splenic Anæmia ...	...	...	...	...	...	...	...	1	...	...	...	...
Strangulated Hernia ...	...	...	...	...	...	...	...	...	...	...	...	...
Suppurative Perityphlitis ...	...	...	...	...	...	...	...	...	...	...	...	...
Ulcerative Colitis ...	...	...	...	...	...	...	...	1	...	...	...	...
Accidental Death ...	...	...	...	...	...	...	...	...	...	...	...	1
Cancer of Neck ...	...	...	...	...	...	...	...	...	...	...	...	...
Carbuncle ...	...	...	...	...	...	...	...	...	...	...	...	...
Carcinoma ...	...	...	...	...	...	...	...	...	...	...	...	1
Cellulitis of Arm ...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	...	...	1	...	...	...	...	3	1	...	...	...
Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...	...
Exhaustion after Operation ...	...	...	...	...	...	...	...	...	...	...	...	...
Fracture of Femur ...	...	...	...	...	...	...	...	...	...	...	...	...
Necrosis of Jaw ...	...	...	...	...	...	...	...	...	...	...	...	...
Phosphorus Poisoning (Murder) ...	...	...	...	...	...	...	...	...	1	...	...	...
Scirrhus of Breast and Liver ...	...	...	...	...	...	...	...	...	...	...	...	...
Senile Decay ...	...	...	...	...	...	...	...	...	...	...	...	...
Tubercular Abscess of Neck ...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Totals ...	...	...	1	1	...	1	1	4	26	10	23	25



*causes of Death during the year 1899, together with the Ages of the Decedents,  
on the orders of Admission.*

**ASYLUM.**

40 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	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	6
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	2	3
1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	4	6	10
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	1	2	2	...	2	1	...	...	...	...	...	4	5	9
3	2	...	3	2	3	5	3	...	3	1	...	...	...	...	...	21	22	43

**MARY.**

...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	1	...	2	...	1	...	...	...	...	...	...	...	...	...	4	4
...	1	...	...	...	2	1	4	...	1	...	...	...	...	...	...	1	9	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	3	1	4	1	2	...	1	...	...	...	...	...	...	...	...	7	13	20
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	6
1	2	2	1	1	3	...	...	...	...	...	...	...	...	...	...	7	7	14
1	3	3	1	...	...	...	...	...	...	...	...	...	...	...	...	10	8	18
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	3
...	...	...	...	1	2	1	4	...	...	...	...	...	...	...	...	2	7	9
...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
1	...	4	3	6	15	2	3	1	1	...	...	...	...	...	...	16	25	41
14	8	12	9	1	1	2	3	...	...	...	...	...	...	...	...	50	40	90
...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	2
4	3	2	5	3	2	1	2	...	...	...	...	...	...	...	...	12	13	25
...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	3	2	5
5	...	3	4	3	2	...	3	...	...	...	...	...	...	...	...	14	9	23
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	2	...	...	...	1	1	...	...	...	...	...	...	...	...	3	2	5
...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	1	...	1	3	...	...	...	...	...	...	...	...	...	...	...	2	...	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	4	2	29	26	6	13	1	2	...	...	...	40	43	83
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
33	22	35	34	31	36	42	53	7	16	1	2	...	...	...	...	200	204	404



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 1899.														
	New Cases.		Relapsed Cases.		From other Asylums of Board.		Tl.	Recovered.			Improved.			Not Improved.			To other Asylums of Board.			Died.		
	M.	F.	M.	F.	M.	F.		M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.
LEAVESDEN ASYLUM.																						
1870 (part of)...	468	556	...	...	...	...	1,024	...	...	...	...	...	...	...	...	...	...	...	...	4	6	1
1871 ...	520	545	...	...	...	...	1,065	...	...	...	1	...	1	1	...	1	...	...	...	3	3	...
1872 ...	163	256	...	...	...	...	419	...	...	...	...	...	...	...	...	...	...	...	...	1	5	...
1873 ...	141	165	...	...	41	30	377	...	...	...	1	...	1	...	...	...	...	...	...	3	4	...
1874 ...	115	149	1	...	1	13	279	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
1875 ...	111	108	1	1	...	...	221	...	...	...	...	...	...	...	...	...	...	...	...	1	5	...
1876 ...	158	79	...	...	126	184	547	...	...	...	...	...	...	...	...	...	...	...	...	4	4	...
1877 ...	95	...	...	...	1	4	100	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...
1878 ...	69	1	1	...	13	...	84	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1879 ...	80	89	...	...	...	...	169	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
1880 ...	92	75	...	...	...	...	167	...	...	...	1	...	1	...	...	...	...	...	...	1	...	...
1881 ...	85	71	4	1	...	...	161	1	...	1	1	...	1	...	...	...	...	...	...	2	2	...
1882 ...	82	85	3	2	...	...	172	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883 ...	75	106	5	1	...	...	187	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
1884 ...	56	96	2	...	...	...	154	...	...	...	...	...	...	...	...	...	...	...	...	2	5	...
1885 ...	71	97	2	...	...	...	170	...	...	...	...	1	1	...	...	...	...	...	...	4	1	...
1886 ...	62	83	3	3	...	...	151	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...
1887 ...	80	92	2	...	...	...	174	...	...	...	...	1	1	...	...	...	...	...	...	5	1	...
1888 ...	71	83	2	...	...	...	156	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...
1889 ...	140	121	2	1	...	...	264	...	...	...	1	...	1	...	1	1	...	...	...	...	3	...
1890 ...	162	155	1	2	...	...	320	...	...	...	2	...	2	2	...	2	...	...	...	5	3	...
1891 ...	176	148	3	2	...	...	329	...	...	...	...	...	2	...	2	2	...	...	...	8	3	1
1892 ...	181	149	4	2	...	1	337	...	...	...	1	...	1	2	...	2	...	...	...	4	6	1
1893 ...	156	95	4	...	...	...	255	...	...	...	...	...	1	1	2	...	...	...	...	2	8	1
1894 ...	148	112	6	...	...	...	266	...	...	...	2	...	2	...	...	...	...	...	...	3	2	...
1895 ...	125	125	1	2	...	...	253	...	...	...	2	1	3	2	1	3	...	...	...	7	11	1
1896 ...	136	100	3	2	...	...	241	...	...	...	1	...	1	...	3	3	...	...	...	8	6	...
1897 ...	143	102	2	1	...	...	248	...	...	...	4	1	5	3	4	7	...	...	...	13	10	2
1898 ...	118	134	1	1	...	...	254	2	2	4	2	...	2	3	2	5	...	...	...	25	24	4
1899 ...	182	134	2	1	12	11	342	6	2	8	5	1	6	13	7	20	...	...	...	11	5	1
Totals	4,261	4,111	55	22	194	243	8,886	9	4	13	25	5	30	29	19	48	...	...	...	121	129	25
CATERHAM ASYLUM.																						
1870 (part of)...	156	202	...	...	...	...	358	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
1871 ...	664	870	...	...	...	...	1,534	...	...	...	...	...	...	...	...	...	...	...	...	6	4	1
1872 ...	259	161	...	...	...	...	420	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
1873 ...	183	167	1	...	...	...	351	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
1874 ...	240	169	2	3	72	36	522	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
1875 ...	158	180	...	...	...	...	338	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...
1876 ...	173	170	5	5	33	167	553	...	...	...	...	...	...	...	...	...	...	...	...	1	7	...
1877 ...	178	56	2	...	...	1	237	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
1878 ...	157	47	...	...	17	...	221	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
1879 ...	176	84	...	...	6	...	266	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...
1880 ...	122	87	2	6	...	...	217	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
1881 ...	122	105	...	...	...	...	227	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
1882 ...	81	85	...	2	...	...	168	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1883 ...	73	37	3	3	...	...	116	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
1884 ...	98	102	2	1	...	...	203	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1885 ...	59	48	3	3	...	...	113	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1886 ...	115	91	3	1	...	...	210	...	...	...	...	...	3	...	3	...	...	...	...	...	...	...
1887 ...	103	90	2	1	...	...	196	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
1888 ...	83	81	...	...	...	...	164	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1889 ...	92	78	...	1	...	...	171	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
1890 ...	119	122	2	1	...	...	244	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
1891 ...	104	108	...	...	...	...	212	...	...	...	...	...	...	1	1	...	...	...	...	1	3	...
1892 ...	101	114	2	1	...	...	218	...	...	...	...	...	...	1	...	1	...	...	...	4	5	...
1893 ...	86	76	...	...	...	...	162	...	...	...	...	...	...	...	1	1	...	...	...	2	2	...
1894 ...	100	112	2	1	...	...	215	...	...	...	...	...	...	...	...	...	...	...	...	1	5	...
1895 ...	85	75	...	1	...	...	161	...	...	...	...	...	...	...	1	1	...	...	...	5	2	...
1896 ...	83	59	1	...	1	...	144	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...
1897 ...	84	58	...	...	...	...	142	...	1	1	...	...	3	1	4	...	...	...	...	4	3	...
1898 ...	77	119	3	1	...	...	200	...	1	1	2	...	2	2	2	4	...	...	...	10	5	...
1899 ...	73	67	3	1	...	...	144	3	2	5	1	1	2	1	2	3	...	...	...	5	1	...
Totals	4,204	3,820	38	32	129	204	8,427	3	4	7	3	1	4	1	8	18	...	...	...	58	53	...

\* Including the "not insane" cases in Table I., p. 130.



*Admissions since the opening of the Asylums, with the Discharges and Deaths and the remaining on December 31st, 1899.*

TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS TO DECEMBER 31ST, 1899.															REMAINING OF EACH YEAR'S ADMISSIONS, DECEMBER 31ST, 1899.		
Recovered.			Improved.			Not Improved.			To other Asylums of Board.			Died.					
M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.	M.	F.	Tl.
15	8	23	26	21	47	25	44	69	12	4	16	339	425	764	51	54	105
20	15	35	30	23	53	50	49	99	15	10	25	357	379	736	48	69	117
12	6	18	12	11	23	15	14	29	5	14	19	119	183	302	...	28	28
9	4	13	9	6	15	17	21	38	10	5	15	129	138	267	8	21	29
7	2	9	2	7	9	13	17	30	2	...	2	93	120	213	...	16	16
5	3	8	3	5	8	17	13	30	...	...	...	76	76	152	11	12	23
13	3	16	18	7	25	11	13	24	...	...	...	205	192	397	37	48	85
7	...	7	5	...	5	3	...	3	...	...	...	65	4	69	16	...	16
5	...	5	4	...	4	3	...	3	...	...	...	59	1	60	12	...	12
3	3	6	3	5	8	3	7	10	...	...	...	58	54	112	13	20	33
8	4	12	10	8	18	8	2	10	...	...	...	58	36	94	8	25	33
11	7	18	7	5	12	7	3	10	...	...	...	59	47	106	5	10	15
3	6	9	3	5	8	3	3	6	...	...	...	65	58	123	11	15	26
4	2	6	7	8	15	4	8	12	...	...	...	58	64	122	7	25	32
2	8	10	3	3	6	5	7	12	...	...	...	38	68	106	10	10	20
4	9	13	5	4	9	5	8	13	...	...	...	53	58	111	6	18	24
3	...	3	3	1	4	7	3	10	...	...	...	36	55	91	16	27	43
4	3	7	5	3	8	5	5	10	...	...	...	58	58	116	10	23	33
5	3	8	4	2	6	7	3	10	...	...	...	47	50	97	10	25	35
9	4	13	10	5	15	8	12	20	...	...	...	96	69	165	19	32	51
14	12	26	12	8	20	12	6	18	...	...	...	101	87	188	24	44	68
14	6	20	7	9	16	12	12	24	...	...	...	114	72	186	32	51	83
14	6	20	11	4	15	19	10	29	...	...	...	95	76	171	46	56	102
12	4	16	8	2	10	13	6	19	...	...	...	87	53	140	40	30	70
10	2	12	9	5	14	15	8	23	...	...	...	74	51	125	46	46	92
8	2	10	9	3	12	17	8	25	2	1	3	46	65	111	44	48	92
10	1	11	4	4	8	11	7	18	...	...	...	50	32	82	64	58	122
8	1	9	8	4	12	9	9	18	...	...	...	48	31	79	72	58	130
9	5	14	4	...	4	7	9	16	...	...	...	29	33	62	70	88	158
6	2	8	5	1	6	13	7	20	...	...	...	11	5	16	161	131	292
254	131	385	246	169	415	344	314	658*	46	34	80	2,723	2,640	5,363	897	1,088	1,985
4	4	8	7	13	20	6	7	13	2	1	3	109	142	251	28	35	63
47	31	78	50	30	80	47	36	83	19	6	25	470	662	1,132	31	105	136
24	12	36	24	10	34	11	9	20	16	11	27	171	108	279	13	11	24
19	10	29	19	6	25	13	19	32	11	8	19	104	112	216	18	12	30
18	24	42	30	13	43	1	...	1	36	18	54	199	127	326	30	26	56
13	11	24	10	8	18	8	8	16	1	3	4	115	129	244	11	21	32
2	11	13	21	13	34	5	9	14	...	...	...	147	237	384	36	72	108
...	...	...	14	4	18	5	3	8	...	...	...	131	38	169	29	12	41
5	3	8	11	1	12	4	5	9	1	...	1	117	28	145	36	10	46
6	4	10	9	4	13	13	1	14	...	...	...	125	46	171	29	29	58
7	4	11	11	7	18	8	7	15	...	...	...	81	59	140	17	16	33
3	2	5	6	5	11	10	4	14	...	...	...	77	72	149	26	22	48
9	10	19	5	5	10	2	5	7	...	...	...	45	51	96	20	16	36
11	4	15	4	3	7	3	1	4	...	1	1	41	20	61	17	11	28
7	12	19	9	10	19	5	4	9	...	...	...	56	55	111	23	22	45
2	2	4	...	1	1	5	2	7	...	...	...	39	33	72	16	13	29
12	5	17	7	6	13	10	4	14	...	...	...	65	49	114	24	28	52
7	4	11	6	2	8	6	6	12	...	...	...	55	46	101	31	33	64
4	5	9	6	...	6	5	6	11	...	...	...	47	45	92	21	25	46
8	3	11	4	4	8	5	8	13	...	...	...	54	38	92	21	26	47
7	6	13	3	3	6	9	5	14	...	...	...	63	58	121	39	51	90
5	2	7	1	2	3	4	5	9	...	...	...	49	52	101	45	47	92
2	2	4	1	1	2	6	11	17	...	...	...	45	47	92	49	54	103
8	3	11	2	5	7	8	5	13	...	...	...	42	28	70	26	35	61
6	1	7	6	3	9	2	3	5	...	...	...	47	43	90	41	63	104
4	4	8	3	2	5	8	5	13	...	...	...	28	26	54	42	39	81
2	2	4	2	1	3	3	5	8	...	...	...	30	16	46	48	35	83
5	2	7	2	1	3	6	1	7	...	...	...	28	9	37	43	45	88
1	2	3	4	3	7	5	7	12	...	...	...	15	10	25	55	98	153
3	2	5	1	1	2	1	2	3	...	...	...	5	1	6	66	62	128
251	187	438	278	167	445	224	193	417	87	48	135	2,600	2,387	4,987	931	1,074	2,005

\* Includes the "not insane" cases in Table II., p. 130.



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 1899.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
			New Cases.		Relapsed Cases.		From other Asylums of Board.		Total.	Recovered.			Improved.			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.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
DARENTH ASYLUM.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

\* Includes the "not insane" cases in Table I., p. 130.



*the Annual Admissions since the opening of the Asylum, with the Discharges and admissions remaining on December 31st, 1899.*

TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS, DECEMBER 31st, 1899.															REMAINING OF EACH YEAR'S ADMISSIONS, DECEMBER 31st, 1899		
Recovered.			Improved.			Not Improved.			To other Asylums of Board.			Died.			Males.	Females.	Total.
Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.			
2	3	5	6	12	18	1	24	25	1	4	5	5	134	139	10	40	50
...	2	2	...	5	5	...	1	1	...	...	...	...	15	15	...	6	6
8	4	12	22	15	37	9	19	28	4	1	5	139	121	260	48	43	91
7	6	13	12	13	25	14	8	22	...	1	1	64	98	162	16	35	51
7	3	10	7	8	15	7	7	14	...	...	...	30	40	70	6	9	15
6	3	9	11	9	20	5	5	10	2	3	5	25	44	69	13	20	33
...	...	...	12	12	24	1	11	12	2	1	3	31	30	61	20	17	37
...	...	...	14	4	18	3	8	11	1	46	47	21	29	50	14	21	35
...	...	...	13	12	25	12	10	22	57	26	83	39	46	85	52	22	74
...	...	...	13	14	27	15	7	22	11	4	15	72	53	125	43	44	87
...	...	...	2	8	10	12	6	18	1	1	2	38	46	84	21	25	46
7	12	19	2	1	3	8	2	10	...	...	...	27	46	73	15	31	46
...	...	...	1	3	4	2	3	5	1	...	1	13	19	32	18	26	44
...	2	2	1	...	1	2	2	4	...	1	1	9	13	22	33	49	82
1	...	1	2	...	2	3	6	9	1	3	4	8	23	31	23	47	70
...	...	...	...	4	4	1	2	3	1	1	2	1	10	11	22	48	70
...	...	...	...	3	3	1	...	1	...	...	...	2	1	3	24	25	49
...	...	...	...	...	...	...	2	2	...	1	1	2	1	3	22	29	51
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	18	25	43
...	...	...	...	...	...	...	...	...	3	...	3	...	...	...	13	10	23
38	35	73	118	123	241	96	123	219	85	93	178	527	769	1,296	431	572	1,003
19	12	31	33	34	67	31	51	82	14	5	19	448	567	1,015	79	89	168
67	46	113	80	53	133	97	85	182	34	16	50	827	1,041	1,868	79	174	253
36	18	54	36	21	57	26	23	49	21	25	46	290	291	581	13	39	52
28	14	42	28	12	40	30	40	70	21	13	34	233	250	483	26	33	59
25	26	51	32	20	52	14	17	31	38	18	56	292	247	539	30	42	72
18	14	32	13	13	26	25	21	46	1	3	4	191	205	396	22	33	55
15	14	29	39	20	59	16	22	38	...	...	...	352	429	781	73	120	193
7	...	7	19	4	23	8	3	11	1	...	1	196	42	238	45	12	57
10	3	13	15	1	16	7	5	12	1	...	1	176	29	205	48	10	58
9	7	16	12	9	21	16	8	24	...	...	...	183	100	283	42	49	91
17	11	28	27	27	54	17	33	50	1	4	5	144	229	373	35	81	116
14	11	25	13	15	28	17	8	25	...	...	...	136	134	270	31	38	69
20	20	40	30	25	55	14	27	41	4	1	5	249	230	479	79	74	153
22	12	34	23	24	47	21	17	38	...	2	2	163	182	345	40	71	111
16	23	39	19	21	40	17	18	35	...	...	...	124	163	287	39	41	80
12	14	26	16	14	30	15	15	30	2	3	5	117	135	252	35	51	86
15	5	20	22	19	41	18	18	36	2	1	3	132	134	266	60	72	132
11	7	18	25	9	34	14	19	33	1	46	47	134	133	267	55	77	132
9	8	17	23	14	37	24	19	43	57	26	83	133	141	274	83	72	155
17	7	24	27	23	50	28	27	55	11	4	15	222	160	382	83	102	185
21	18	39	17	19	36	33	17	50	1	1	2	202	191	393	84	120	204
26	20	46	10	12	22	24	19	43	...	...	...	190	170	360	92	129	221
16	8	24	13	8	21	27	24	51	1	...	1	153	142	295	113	136	249
20	9	29	11	7	18	23	13	36	...	1	1	138	94	232	99	114	213
17	3	20	17	8	25	20	17	37	1	3	4	129	117	246	110	156	266
12	6	18	12	9	21	26	15	41	3	2	5	75	101	176	108	135	243
12	3	15	6	8	14	15	12	27	...	...	...	82	49	131	136	118	254
13	3	16	10	5	15	15	12	27	...	1	1	78	41	119	137	132	269
10	7	17	8	3	11	12	16	28	...	...	...	45	43	88	143	211	354
9	4	13	6	2	8	14	9	23	3	...	3	16	6	22	240	203	443
543	353	896	642	459	1,101	664	630	1,294	218	175	393	5,850	5,796	11,646	2,259	2,734	4,993

\* Includes the "not insane" cases in Table II., p. 139. (Darent Asylum).

† Includes the "not insane" cases in Table II., p. 139. (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	...	...	...	...	...	...	...	...	...	1	...	1
From 1 to 3 Months	...	...	...	...	...	...	5	2	7	4	2	6
" 3 to 6 "	...	...	...	...	...	...	1	...	1	6	4	10
" 6 to 9 "	...	...	...	...	...	...	...	...	...	2	3	5
" 9 to 12 "	...	...	...	...	...	...	1	1	2	6	9	15
" 1 to 2 Years	...	...	...	...	...	...	1	1	2	19	14	33
" 2 to 3 "	...	...	...	...	...	...	...	...	...	12	8	20
" 3 to 5 "	...	...	...	...	...	...	...	...	...	14	17	31
" 5 to 7 "	...	...	...	...	...	...	...	...	...	8	11	19
" 7 to 10 "	...	...	...	...	...	...	...	...	...	16	11	27
" 10 to 12 "	...	...	...	...	...	...	...	...	...	...	6	6
" 12 to 14 "	...	...	...	...	...	...	...	...	...	7	4	11
" 14 to 16 "	...	...	...	...	...	...	...	...	...	5	6	11
" 16 to 18 "	...	...	...	...	...	...	1	...	1	...	...	...
" 18 to 20 "	...	...	...	...	...	...	...	...	...	2	2	4
" 20 and upwards...	...	...	...	...	...	...	...	...	...	19	32	51
Totals	...	...	...	...	...	...	9	4	13	121	129	250

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>																				
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	75
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
1899 ...	...	...	...	...	...	...	...	...	3	3	9	4	10	11	11	13	11	10	168	116
<b>CATERHAM ASYLUM.</b>																				
1890 ...	...	...	...	...	...	...	1	...	...	4	2	2	3	4	5	2	8	5	148	113
1891 ...	...	...	...	...	...	...	...	1	1	3	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
1899 ...	...	...	...	...	...	...	...	...	3	3	6	7	9	2	12	14	9	5	128	110
<b>DARENTH ASYLUM.</b>																				
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	13	15	22	19	14	17	17	208	146
1894 ...	...	...	...	...	...	...	...	1	8	8	20	17	18	13	17	21	26	17	199	152
1895 ...	...	...	...	...	...	...	...	1	4	16	14	18	22	20	20	12	19	22	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
1899 ...	...	...	...	...	...	...	...	...	7	5	7	11	12	15	19	14	10	19	189	166
<b>SUMMARY.</b>																				
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	52	508	433
1899 ...	...	...	...	...	...	...	...	...	13	11	22	22	31	28	42	41	30	34	485	392



those discharged recovered, and of those who have died during the year 1899.

CATERHAM ASYLUM.						DARENTH ASYLUM.						SUMMARY.					
RECOVERED.			DIED.			RECOVERED.			DIED.			RECOVERED.			DIED.		
M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	3	...	3
1	...	1	1	...	1	...	...	...	...	...	...	6	2	8	5	2	7
2	2	4	1	...	1	...	...	...	...	...	...	3	2	5	7	4	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5
...	...	...	1	1	2	...	...	...	...	...	...	1	1	2	7	10	17
...	2	2	10	5	15	...	...	...	...	...	...	1	3	4	29	19	48
...	...	...	7	4	11	...	...	...	...	...	...	...	...	...	19	12	31
...	...	...	6	7	13	...	...	...	...	2	2	...	...	...	20	26	46
...	...	...	6	7	13	...	...	...	...	1	2	3	...	...	15	20	35
...	...	...	5	4	9	...	...	...	...	6	6	12	...	...	27	21	48
...	...	...	3	1	4	...	...	...	...	2	3	5	...	...	5	10	15
...	...	...	...	...	...	...	...	...	...	2	1	3	...	...	9	5	14
...	...	...	2	...	2	...	...	...	...	1	1	2	...	...	8	7	15
...	...	...	1	1	2	...	...	...	...	6	4	10	1	...	7	5	12
...	...	...	1	4	5	...	...	...	...	2	2	4	...	...	5	8	13
...	...	...	12	19	31	...	...	...	...	1	1	2	...	...	32	52	84
3	4	7	58	53	111	...	...	...	21	22	43	12	8	20	200	204	404

December 31st in 1890, and on the same day in each subsequent year, calculated from the ages stated of Admission.

30 to 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.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
178	195	175	240	174	212	102	178	46	114	7	32	1	5	...	...	8	16	841	1,093	1,934
188	188	180	222	166	224	116	177	47	128	8	29	1	3	...	...	5	10	872	1,082	1,954
184	197	194	212	156	207	124	207	50	120	6	23	1	2	...	...	4	12	889	1,098	1,987
185	208	187	209	166	212	113	198	49	111	4	11	1	2	...	1	5	12	899	1,096	1,995
177	206	183	211	162	212	114	187	50	104	1	5	...	2	...	1	5	12	895	1,096	1,991
179	216	178	214	167	214	109	184	37	86	...	1	...	1	...	...	4	12	897	1,094	1,991
175	219	182	212	165	206	106	175	32	78	...	...	...	...	...	...	4	11	894	1,096	1,990
167	181	194	223	156	217	125	172	56	118	2	26	...	3	...	2	7	10	900	1,099	1,999
147	157	185	221	152	226	118	167	76	152	6	14	...	5	...	...	8	10	885	1,099	1,984
166	170	181	226	154	228	120	170	64	124	...	10	...	3	...	...	...	...	897	1,088	1,985
210	220	187	201	152	191	138	183	51	89	11	36	...	1	1	...	2	7	919	1,058	1,977
205	226	196	196	160	186	142	182	54	91	14	40	...	...	...	...	...	6	937	1,064	2,001
200	230	192	198	162	184	140	185	56	88	13	37	...	...	...	...	...	...	941	1,071	2,012
202	232	190	192	163	180	138	181	55	85	14	33	...	...	...	...	...	...	938	1,064	2,002
190	226	193	195	160	175	130	180	50	90	10	28	1	...	...	...	...	...	930	1,074	2,004
185	218	190	190	157	174	122	178	47	84	10	23	1	...	...	...	...	...	933	1,072	2,005
183	219	187	188	155	170	111	173	49	85	8	22	...	...	...	...	...	...	925	1,073	1,998
183	223	193	181	153	165	106	166	41	77	7	15	...	...	...	...	...	...	929	1,050	1,979
184	229	189	177	148	173	103	163	41	77	8	15	...	...	...	...	...	...	929	1,072	2,001
178	160	200	221	183	211	127	189	64	124	10	21	1	5	...	...	1	2	931	1,074	2,005
52	97	39	65	26	67	42	63	22	46	4	11	...	1	...	...	2	...	441	551	992
56	105	39	81	25	62	42	64	22	49	4	14	...	1	...	...	2	...	446	580	1,026
54	108	39	77	23	62	36	59	19	38	4	12	...	3	...	...	2	...	436	582	1,018
49	102	42	69	18	71	30	51	14	37	5	11	...	3	...	...	3	...	444	575	1,019
58	113	37	76	16	70	30	58	13	40	5	9	...	2	...	...	2	...	447	599	1,046
70	110	36	71	16	74	27	56	14	37	4	8	...	2	...	...	1	...	447	598	1,045
79	115	34	72	19	69	23	53	13	32	3	7	...	2	...	...	1	...	447	583	1,030
100	121	31	73	20	69	18	49	13	32	2	9	...	1	...	...	1	...	449	595	1,044
96	121	29	74	22	68	17	48	9	30	2	6	...	1	...	...	1	...	448	599	1,047
114	125	32	66	18	71	14	43	7	28	2	8	...	...	...	...	1	...	431	572	1,003
440	512	365	506	392	470	282	424	119	249	22	79	1	7	1	...	10	25	2,201	2,702	4,903
449	519	415	503	391	472	300	423	123	268	26	83	1	4	...	...	5	18	2,255	2,726	4,981
438	535	425	487	341	461	300	451	125	256	23	72	1	5	...	...	4	14	2,266	2,751	5,017
436	542	419	470	347	463	281	430	118	133	23	55	1	5	...	1	5	15	2,281	2,735	5,016
425	545	413	482	338	457	274	425	113	234	16	42	1	4	...	1	5	14	2,272	2,769	5,041
434	544	404	475	340	462	258	418	98	207	14	32	1	3	...	...	4	13	2,277	2,764	5,041
437	553	403	472	339	445	240	401	94	195	11	29	...	2	...	...	4	12	2,266	2,752	5,018
450	525	418	477	329	451	249	387	110	227	11	50	...	4	...	2	7	11	2,278	2,744	5,022
427	507	403	472	322	467	238	378	126	259	16	35	...	6	...	...	8	11	2,262	2,770	5,032
458	455	413	513	355	510	261	402	135	276	12	39	1	8	...	...	1	3	2,259	2,734	4,993



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 „ ...	14	15	29	2	2	5	...	1	1	5	4	9	2	2	4
„ 20 to 30 „ ...	30	15	45	4	...	4	1	1	2	11	4	15	14	9	23
„ 30 to 40 „ ...	39	22	61	4	5	9	2	...	2	9	2	11	14	13	27
„ 40 to 50 „ ...	30	18	48	1	3	4	3	1	4	8	4	12	24	15	39
„ 50 to 60 „ ...	26	25	51	...	1	1	1	...	1	7	6	13	23	23	46
„ 60 to 70 „ ...	32	26	58	...	...	...	2	1	3	8	1	9	20	21	41
„ 70 to 80 „ ...	12	9	21	...	...	...	...	...	...	6	1	7	17	36	53
„ 80 to 90 „ ...	1	5	6	...	...	...	...	...	...	...	1	1	7	8	15
„ 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Ages unknown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	184	135	319	12	11	23	9	4	13	54	24	78	121	129	250

## 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 „ ..	2	...	2	11	10	21	...	...	...	2	2	4	...	3	3
„ 20 to 30 „ ..	...	...	...	3	...	3	...	...	...	4	2	6	6	2	8
„ 30 to 40 „ ..	...	...	...	...	...	...	...	...	...	5	5	10	4	3	7
„ 40 to 50 „ ..	...	...	...	...	...	...	...	...	...	1	3	4	3	2	5
„ 50 to 60 „ ..	...	...	...	...	...	...	...	...	...	...	3	3	...	3	3
„ 60 to 70 „ ..	...	...	...	...	...	...	...	...	...	...	...	...	3	3	6
„ 70 to 80 „ ..	...	...	...	...	...	...	...	...	...	...	...	...	4	3	7
„ 80 to 90 „ ..	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
„ 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ages unknown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Totals ... ..	2	...	2	14	10	24	...	...	...	12	15	27	21	22	43



*of the Admissions, Discharges, and Deaths during the year 1899,  
on 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 „ ...	13	12	25	...	...	...	1	...	1	1	1	2	...	1	1
„ 20 to 30 „ ...	16	14	30	...	...	...	...	1	1	3	1	4	6	...	6
„ 30 to 40 „ ...	11	5	16	...	...	...	1	...	1	5	1	6	5	7	12
„ 40 to 50 „ ...	5	8	13	...	...	...	1	1	2	1	2	3	5	6	11
„ 50 to 60 „ ...	15	14	29	...	...	...	...	2	2	2	2	4	14	8	22
„ 60 to 70 „ ...	12	9	21	...	...	...	...	...	...	1	2	3	9	12	21
„ 70 to 80 „ ...	3	6	9	...	...	...	...	...	...	...	...	...	17	14	31
„ 80 to 90 „ ...	1	...	1	...	...	...	...	...	...	...	...	...	2	5	7
„ 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ages unknown ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	76	68	144	...	...	...	3	4	7	13	9	22	58	53	111

## 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 „ ...	29	27	56	14	12	26	1	1	2	8	7	15	2	6	8
„ 20 to 30 „ ...	46	29	75	7	...	7	1	2	3	18	7	25	26	11	37
„ 30 to 40 „ ...	50	27	77	4	5	9	3	...	3	19	8	27	23	23	46
„ 40 to 50 „ ...	35	26	61	1	3	4	4	2	6	10	9	19	32	23	55
„ 50 to 60 „ ...	41	39	80	...	1	1	1	2	3	9	11	20	37	34	71
„ 60 to 70 „ ...	44	35	79	...	...	...	2	1	3	9	3	12	32	36	68
„ 70 to 80 „ ...	15	15	30	..	...	...	...	...	...	6	1	7	38	53	91
„ 80 to 90 „ ...	2	5	7	...	...	...	...	...	...	...	1	1	10	15	25
„ 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
Ages unknown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Totals...	262	203	465	26	21	47	12	8	20	79	48	127	200	204	404



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

DEPARTMENTS.	LEAVESDEN ASYLUM.	CATERHAM ASYLUM.	DARENTH ASYLUM.	SUMMARY. MALES.
MALES.				
Blocks ... ..	212	180	60	452
Centre and Hall ... ..	13	11	8	32
Coaling ... ..	8	6	...	14
Stores ... ..	5	3	3	11
Kitchen ... ..	27	12	...	39
Bakehouse ... ..	8	2	5	15
Mess Room ... ..	6	7	1	14
Tailor's Shop ... ..	10	8	15	33
Shoemaker's Shop ... ..	7	8	15	30
Upholsterer's Shop ... ..	48	24	15	87
Painter's Shop ... ..	...	2	...	2
Grounds and Farm ... ..	87	46	45	178
Laundry ... ..	25	22	...	47
Gas House ... ..	9	5	...	14
Engine House and Fitter's Shop...	3	2	...	5
Attending to Earth Closets and Drains ... ..	...	3	...	3
Carpenters ... ..	4	...	...	4
Steward's House ... ..	1	...	...	1
The Lodge ... ..	1	...	...	1
Fireman ... ..	1	...	...	1
Total ... ..	475	341	167	983
Total number of Patients in Asylum ... ..	897	931	431	2,259



where Patients were employed on December 31st, 1899.

DEPARTMENTS.	LEAVESDEN ASYLUM.	CATERHAM ASYLUM.	DARENTH ASYLUM.	SUMMARY. FEMALES.
FEMALES.				
Laundry ... ..	37	26	50	113
Work Room ... ..	14	26	20	60
Helpers in Blocks ... ..	202	219	106	527
Needlework in Blocks ... ..	113	135	...	248
Centre ... ..	13	9	1	23
Mess Room ... ..	...	7	2	9
Kitchen ... ..	...	2	...	2
Medical Superintendent's Residence	...	2	...	2
Steward's Residence ... ..	...	1	...	1
Matron's Residence ... ..	...	1	...	1
Total ... ..	379	428	179	986
Total number of Patients in Asylum ... ..	1,088	1,074	572	2,734



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.																				
Bakers ... ..	1	...	...	...	1	...	1	...	...	1	...	...	...	...	...	1	1	...	...	2
Basket Maker ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Billposter ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Blacksmith ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Blindmaker ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Bookbinders ... ..	1	...	...	...	1	...	...	1	...	1	...	...	...	...	...	1	...	1	...	2
Bootmakers ... ..	1	1	1	...	3	2	1	...	...	3	...	...	...	...	...	3	2	1	...	6
Boot Sewer ... ..	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Bottle Stopper Grind'r ... ..	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Bottle Washer ... ..	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Brass Finisher ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Brass Moulder ... ..	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Bricklayers ... ..	1	1	...	...	2	...	...	1	...	1	...	...	...	...	...	1	1	1	...	3
Cabinet Makers ... ..	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2
Cap Makers ... ..	1	1	...	...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	...	2
Carmen ... ..	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
Carpenters ... ..	2	...	...	...	2	...	1	...	...	1	...	...	...	...	...	2	1	...	...	3
Channel Pilot ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Chimney Sweep ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Clay Pipe Maker ... ..	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Clerks ... ..	3	1	1	...	5	3	...	...	...	3	...	...	...	...	...	6	1	1	...	8
Coalporter ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Commercial Travell'r ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Compositors ... ..	1	1	...	...	2	1	...	...	...	1	...	...	...	...	...	2	1	...	...	3
Costermonger ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Cricket Bat Maker ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Dock Labourer ... ..	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Engine Driver ... ..	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Engravers ... ..	1	...	...	1	2	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
Fitter ... ..	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
French Polisher ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Furrier ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Gas Meter Inspector ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
General Dealer ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Glass Leveller ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Greengrocer ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Grocer's Assistant ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Gut Dresser ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Hammerman ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Harness Maker ... ..	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Hawkers ... ..	1	2	...	...	3	...	...	...	...	...	...	...	...	...	...	1	2	...	...	3
Hotel Keeper ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Jeweller ... ..	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Journalist ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Labourers ... ..	19	14	2	5	40	6	3	3	1	13	...	...	...	...	...	25	17	5	6	53
Leather Gilder ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Leather Seller ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Marble Polishers ... ..	1	1	...	...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	...	2
Match Seller ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Mattress Maker ... ..	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Messenger ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Miners ... ..	1	1	...	...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	...	2
Mineral Water Maker ... ..	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Minister ... ..	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Musician ... ..	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
No occupation ... ..	38	3	...	3	44	...	...	...	...	...	16	...	...	...	16	54	3	...	3	60
Packing Case Maker ... ..	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Painters ... ..	2	2	...	1	5	1	...	1	...	2	...	...	...	...	...	3	2	1	1	7
Piano Tuner ... ..	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Plasterers ... ..	...	...	1	...	1	...	...	1	...	1	...	...	...	...	...	...	...	2	...	2
Carried forward ... ..	88	39	9	11	147	18	14	10	1	43	16	...	...	...	16	122	53	19	12	206



admission, and condition as to Marriage of the Patients admitted during the year 1899.

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.
<b>MALES—continued.</b>																				
Brought forward ...	88	39	9	11	147	18	14	10	1	43	16	...	...	...	16	122	53	19	12	206
Plumber ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Porters ...	4	2	...	1	7	...	1	...	...	1	...	...	...	...	...	4	3	...	1	8
Postman ...	1	...	...	1	2	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Potmen ...	...	1	...	1	2	...	...	...	...	...	...	...	...	...	...	1	1	...	1	3
Presser ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Publican ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Seamen ...	2	...	...	1	3	...	...	...	...	...	...	...	...	...	...	2	...	...	1	3
Scavengers ...	...	1	...	...	1	1	...	...	...	1	...	...	...	...	...	1	1	...	...	2
Scholar ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Schoolmaster ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Shipwright ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Shoeblocks ...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2
Silk Weaver ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Slipper Maker ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Soldiers ...	1	...	...	...	1	1	...	...	...	1	...	...	...	...	...	2	...	...	...	2
Stick Maker ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Umbrella Maker ...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Undertaker ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Unknown ...	7	1	3	11	22	22	...	1	...	23	...	...	...	...	...	29	1	4	11	45
Waiter ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Wardrobe Maker ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Watchman ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Woodcutters ...	...	...	1	...	1	...	1	...	...	1	...	...	...	...	...	...	1	1	...	2
Total ..	108	49	13	26	196	45	19	11	1	76	16	...	...	...	16	169	68	24	27	288
<b>FEMALES.</b>																				
Artificial Flower Maker ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Ballet Dancer ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Bookfolder ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Braid Worker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Cap Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Charwomen ...	6	1	3	...	10	1	...	2	...	3	...	...	...	...	...	7	1	5	...	13
Dressmakers ...	5	1	1	2	9	...	...	...	...	...	...	...	...	...	...	5	1	1	2	9
Envelope Folder ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Fancy Box Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Fancy Leather Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Governesses ...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2
Hotel Manageress ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Housekeepers ...	1	1	...	...	2	2	...	...	...	2	...	...	...	...	...	3	1	...	...	4
Housewives ...	...	7	...	...	7	...	3	...	...	3	...	...	...	...	...	...	10	...	...	10
Ironer ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Laundresses ...	1	1	...	...	2	...	1	...	...	1	...	...	...	...	...	1	2	...	...	3
Machinists ...	1	...	...	1	2	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
Mantle Maker ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Milk Carrier ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Musician ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Needlewomen ...	...	...	...	...	...	1	1	...	...	2	...	...	...	...	...	1	1	...	...	2
No occupation ...	40	13	9	8	70	...	...	...	...	...	10	...	...	...	10	50	13	9	8	80
Nurses ...	1	...	...	1	2	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
Pew Opener ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Pianoforte Teacher ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Sempstress ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Servants ...	16	2	2	...	20	12	...	...	...	12	...	...	...	...	...	28	2	2	...	32
Shopkeeper ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Tailoresses ...	...	...	...	...	...	1	1	...	...	2	...	...	...	...	...	1	1	...	...	2
Tobacco Workers ...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2
Trotter Cleaner ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Unknown ...	1	2	1	2	6	23	6	7	...	36	...	...	...	...	...	24	8	8	2	42
Washerwoman ...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Total ..	86	30	16	14	146	45	13	10	...	68	10	...	...	...	10	141	43	26	14	224



## IMBECILITY STATISTICS—DARENTH SCHOOLS AND PAVILIONS.

TABLE I.—*Showing the Admissions, Re-admissions, Discharges, and Deaths during the Year 1899.*

	Males.	Females.	Total.
In the Asylum, January 1st, 1899 ... ..	630	329	959
Admitted for the first time during the year (direct from the several Parishes & Unions)	34	25	59
Re-admitted during the year ... ..	2	...	2
Admitted from other Asylums of Board ...	...	...	...
	36	25	61
Total under care during the year ... ..	666	354	1,020
Discharged—			
Recovered ... ..	...	...	...
Improved ... ..	3	2	5
Not improved ... ..	4	2	6
To other Asylums of Board ... ..	14	10	24
Died... ..	14	13	27
Total discharged (for various reasons) and died during the year ...	35	27	62
Remaining in the Asylum, December 31st, 1899 ... ..	631	327	958
Average numbers resident during the year ... ..	630.79	329.18	959.97
Highest number resident on any one day ... ..	637	333	970
Lowest number resident on any one day ... ..	615	322	937

TABLE II.—*Showing the Admissions, Re-admissions, and Discharges from the opening of the Schools to the present date, December 31st, 1899.*

	Males.	Females.	Total.	Males.	Females.	Total.
Admitted during the period of 25 years (direct from the several Parishes & Unions)	1,799	1,189	2,988			
Re-admissions ... ..	56	44	100			
Admitted from other Asylums of Board ..	230	211	441			
Total of Cases Admitted ... ..				2,085	1,444	3,529
Discharged—						
Recovered ... ..	50	57	107			
Improved ... ..	170	120	290			
Not improved ... ..	178	87	265			
To other Asylums of Board ... ..	561	495	1,056			
Died ... ..	495	358	853			
Total discharged and died during the 25 years ... ..				1,454	1,117	2,571
Remaining December 31st, 1899 ... ..				631	327	958
Average numbers resident during the 25 years ... ..				409.23	258.40	667.63



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 1890, and for each subsequent year.*

Year.	Admitted.						Discharged.												Died.			Remaining December 31st 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.		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.						
1890 ...	96	62	158	52	42	94	148	104	252	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	...	...	...	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	...	...	...	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	...	...	...	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	77	51	128	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	97	57	154	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	3.83	2.42
1896 ...	83	57	140	...	...	...	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	...	...	...	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	...	...	...	61	34	95	...	...	...	8	3	11	13	3	16	19	25	44	27	15	42	630	329	959	631.9	340.3	972.2	...	...	...	4.27	4.41	4.32
1899 ...	36	25	61	...	...	...	36	25	61	...	...	...	3	2	5	4	2	6	14	10	24	14	13	27	631	327	958	630.8	329.18	959.97	...	...	...	2.20	3.90	2.80



TABLE IV.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients admitted during the Year 1899 direct from the Parishes and Unions.*

MENTAL DISEASES.	Males.	Females.	Total.
Mania and Epilepsy ... ..	1	...	1
Imbecility ... ..	22	14	36
Imbecility and Epilepsy ... ..	10	10	20
Idiocy and Epilepsy ... ..	3	1	4
Totals ... ..	36	25	61

TABLE V.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients resident in the Asylum on December 31st, 1899.*

MENTAL DISEASES.	Males.	Females.	Total.
General Paresis... ..	1	1	2
Idiocy ... ..	108	59	167
Imbecility ... ..	270	119	389
Imbecility and Epilepsy ... ..	83	82	165
Of Weak Mind ... ..	4	6	10
Idiocy and Epilepsy ... ..	165	60	225
Totals .. ..	631	327	958



TABLE VI.—Showing the History of the Annual Admissions since the opening of the Schools, with the Discharges and Deaths, and the numbers of each year's admissions remaining on December 31st, 1899.

Admitted.				Of each Year's Admissions, Discharged, and Died, in 1899.										Total Discharged and Died of each Year's Admissions to December 31st, 1899.										Remaining of each Year's Admissions, December 31st, 1899.					
Year.	From Parishes and Unions. New Cases.				From other Asylums of the Board.		Recovered.		Improved.		Not Improved.		To other Asylums of Board.		Died.		Recovered.		Improved.		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.	Males.	Females.	Total.	Males.	Females.	Total.	Males.			Females.
1875	47	34	11	6	155	377	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1876	69	36	7	4	120	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1877	32	23	..	1	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1878	50	16	2	4	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	175	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1889	92	59	2	3	156	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1890	93	58	3	4	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	154	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1896	82	56	1	1	140	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1897	76	55	...	1	132	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1898	61	33	...	1	95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1899	34	25	2	...	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Totals...	1,799	1,189	56	44	230	3,529	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
							50	57	107	170	120	290	178	87	265	561	495	1,056	495	358	853	631	327	958					



TABLE VII.—*Showing the Causes of Death during the year 1899, 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 ... ..	3	3	...	...	...	...	...	...	...	1	...	...	3	4	7
General Paralysis	2	2	...	...	1	1	...	...	...	...	...	...	3	3	6
THORACIC DISEASE—															
Morbus Cordis ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Phthisis ... ..	2	...	...	...	...	...	1	...	...	...	1	...	4	...	4
Pneumonia ... ..	...	2	...	...	...	...	...	...	...	...	...	...	...	2	2
Bronchitis ... ..	...	...	...	...	...	...	...	...	1	...	...	1	1	1	2
ABDOMINAL DISEASE—															
Gastric Ulcer ... ..	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
Marasmus ... ..	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
OTHER DISEASES—															
Acute Rheumatism ... ..	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Congenital Syphilis ... ..	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Asthenia ... ..	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Totals ... ..	7	9	2	1	1	1	1	...	2	1	1	1	14	13	27

TABLE VIII.—*Showing the length of Residence in those Discharged Recovered, and in those who have Died during the year 1899.*

LENGTH OF RESIDENCE.	RECOVERED.			DIED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 Month... ..	...	...	...	...	...	...
From 1 to 3 Months ... ..	...	...	...	...	...	...
" 3 " 6 " ..	...	...	...	...	...	...
" 6 " 9 " ..	...	...	...	...	...	...
" 9 " 12 " ..	...	...	...	...	...	...
" 1 " 2 Years ... ..	...	...	...	1	2	3
" 2 " 3 " ..	...	...	...	1	3	4
" 3 " 5 " ..	...	...	...	4	3	7
" 5 " 7 " ..	...	...	...	3	1	4
" 7 " 10 " ..	...	...	...	4	2	6
" 10 " 12 " ..	...	...	...	1	1	2
" 12 " 14 " ..	...	...	...	...	...	...
" 14 " 16 " ..	...	...	...	...	1	1
" 16 " 18 " ..	...	...	...	...	...	...
" 18 " 20 " ..	...	...	...	...	...	...
" 20 " 22 " ..	...	...	...	...	...	...
" 22 " 24 " ..	...	...	...	...	...	...
" 24 " 26 " ..	...	...	...	...	...	...
" 26 " 28 " ..	...	...	...	...	...	...
Totals ..	...	...	...	14	13	27



TABLE IX.—Showing the Ages of Patients resident in the Asylum on December 31st, 1893, 1894, 1895, 1896, 1897, 1898, and 1899; 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	35	7	30	20	40	25	...	15	...	2	...	1	...	...	...	590	357	947
1894	...	...	...	403	214	25	39	42	21	26	12	9	28	13	51	40	...	17	...	1	...	1	...	...	...	595	368	963
1895	...	...	...	...	415	238	27	24	23	17	47	16	31	14	28	18	3	17	...	2	...	...	...	...	...	630	358	988
1896	...	...	...	...	420	240	36	29	36	18	23	10	29	6	18	5	1	9	...	2	...	1	...	...	...	634	354	988
1897	...	...	...	...	392	230	51	27	23	23	32	16	19	6	18	19	...	12	...	2	...	1	...	...	...	636	343	979
1898	...	...	...	...	385	197	89	52	43	17	24	21	22	9	28	8	10	7	...	...	...	...	...	...	...	630	329	959
1899	...	...	...	...	355	208	52	27	33	23	40	20	23	14	20	13	12	...	...	...	...	...	...	...	...	631	327	958



TABLE X.—*Showing the Ages of the Admissions, Discharges, and Deaths during the Year 1899, 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.			Recov red.			Removed, Improved, or Otherwise.					
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
From 5 to 10 years	14	8	22	...	...	...	...	...	...	1	1	2	2	2	4
„ 10 „ 15 „	19	15	34	...	...	...	...	...	...	3	...	3	3	5	8
„ 15 „ 20 „	3	2	5	...	...	...	...	...	...	15	13	28	8	5	13
„ 20 „ 30 „	...	...	...	...	...	...	...	...	...	1	...	1	1	1	2
„ 30 „ 40 „	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
„ 40 „ 50 „	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 50 „ 60 „	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 60 „ 70 „	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	36	25	61	...	...	...	...	...	...	21	14	35	14	13	27

TABLE XI.—*Showing the Departments where Patients were employed on December 31st, 1899.*

MALES.		FEMALES.	
Departments.	Numbers Employed.	Departments.	Numbers Employed.
Blocks ... ..	49	Laundry .. ...	4
Stores ... ..	3	Work Room ... ..	4
Kitchen ... ..	5	Helpers in Blocks ... ..	28
Tailors' Shop ... ..	33		
Shoemakers' Shop ... ..	28		
Upholsterers' Shop ... ..	1		
Mat Making ... ..	3		
Surgery ... ..	1		
Total ... ..	123	Total ... ..	36
Total No. of Patients in Asylum	631	Total No. of Patients in Asylum	327



MEDICAL SUPPLEMENT

TO THE

REPORT OF THE STATISTICAL COMMITTEE

FOR THE

YEAR 1899.

EDITED BY

F. M. TURNER, M.D.,

AND

H. E. CUFF, M.D., F.R.C.S.



## CONTENTS.

	PAGE
Complications and Co-existent Infectious Diseases, 1899 ..	163
Post-Scarlatinal Diphtheria, 1899 .. .. .	164
Summary of Antitoxin Treatment of Diphtheria, 1899 ..	180
On the Outbreak of Enteric Fever and Enteritis which occurred at Leavesden Asylum during the Spring and Summer of 1899, con- sidered from a Clinical Point of View. By W. A. Densham, M.R.C.S. Eng., L.R.C.P. Lond., formerly Assistant Medical Officer, Leavesden Asylum .. .. .	181
Observations on the Serum Reaction in certain of the Cases of Fever occurring at the Leavesden Asylum. By E. W. Goodall, M.D. Lond., Medical Superintendent, Eastern Hospital ..	186
A Case of Laparotomy and Suture of the Intestine for Perforation in Enteric Fever in a Child: Death. By C. Bolton, B.Sc., M.D., B.S. Lond., Assistant Medical Officer, Eastern Hospital	189
An Intra-Abdominal Abscess of Doubtful Origin occurring in connection with Enteric Fever: Operation: Recovery. By C. Bolton, B.Sc., M.D., B.S. Lond., Assistant Medical Officer, Eastern Hospital .. .. .	191
A Case of Enteric Fever: Perforation of Intestinal Ulcer: Laparotomy: Death. By J. E. Beggs, M.D. Cantab., formerly Assistant Medical Officer, Park Hospital .. .. .	192
Two Cases of Relapse or Second Attack in Varicella. By L. Falkener, M.A., M.R.C.S., Assistant Medical Officer, Western Hospital .. .. .	196
Concerning the Diagnosis of Morbilli by means of the Specific Spots in the Mouth (Filatow's Spots). By L. Falkener, M.A., M.R.C.S., Assistant Medical Officer, Western Hospital .. .. .	198
The Prodromal Rashes of Measles. By A. J. Adkins, M.D. Lond., M.R.C.S., L.R.C.P., D.P.H., Assistant Medical Officer, Park Hospital .. .. .	206



## COMPLICATIONS AND CO-EXISTENT INFECTIOUS DISEASES, 1899.

TABLE I.—Showing incidence of Complications amongst 13,274 cases of Scarlet Fever completed during 1899.

COMPLICATION.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Fountain.	Grove.	South-Eastern.	Park.	Brook.	Northern.	Gore Farm.	Total.	Percentage Incidence.
Total Cases ... ..	795	2,001	2,144	1,476	1,093	1,357	22	1,069	1,553	1,765	3,561	3,178	13,274	...
Otitis ... ..	105	171	233	208	123	131	2	143	215	199	101	99	1,730	13.03
Albuminuria ... ..	30	216	101	126	64	78	1	75	281	85	38	23	1,218	9.13
Adenitis (of convalescence) ... ..	37	91	82	59	109	71	...	49	99	122	56	30	905	6.06
Suppurative Adenitis (included in above) ...	23	33	17	22	16	9	...	13	16	48	18	2	217	1.64
Rheumatism ... ..	12	120	23	31	60	39	...	16	61	41	14	16	433	3.26
Nephritis ... ..	19	48	29	42	20	15	...	17	42	31	23	4	290	2.19
Tonsillitis (of convalescence) ... ..	12	102	11	10	41	10	...	8	10	50	48	138	440	3.32
Stomatitis ... ..	1	10	4	30	11	11	...	...	2	17	43	7	136	1.03
Broncho-pneumonia ...	3	10	7	14	7	6	1	4	5	4	4	1	66	.50
Bronchitis ... ..	1	12	7	5	11	5	...	8	20	28	5	9	111	.83
Abscess (other than Mastoid or Glandular) ... ..	9	9	13	2	6	3	...	8	10	18	6	6	90	.69
Mastoid Abscess ... ..	6	5	10	6	7	5	...	8	11	6	...	3	67	.50
Ophthalmia ... ..	9	14	1	2	5	...	...	...	6	16	10	17	80	.60
Relapse of Disease ...	5	16	8	15	23	10	...	4	10	22	29	16	158	1.18
Pneumonia ... ..	5	8	8	5	2	3	...	5	1	11	8	3	59	.44
Endocarditis ... ..	2	15	...	2	3	9	...	7	6	7	5	5	61	.46
Cervical Cellulitis ...	20	...	4	2	1	1	...	7	...	6	...	2	43	.32
Laryngitis ... ..	...	1	...	...	1	...	...	...	...	6	1	6	15	.11
Pleurisy ... ..	4	6	2	2	2	1	...	2	1	2	1	3	26	.19
Corneal Ulcer ... ..	...	3	1	1	1	...	...	...	...	1	...	2	9	.07
Pericarditis ... ..	2	3	...	8	1	2	...	1	4	...	3	...	26	.19
Empyema ... ..	2	3	1	1	1	...	...	...	1	1	...	...	10	.08
Pyæmia ... ..	1	5	1	...	1	1	...	3	2	1	...	...	15	.11
Meningitis ... ..	2	1	1	1	...	...	...	...	2	...	...	...	7	.05
Diphtheria ... ..	24	12	26	27	30	53	1	17	41	49	222	190	692	5.21
Chickenpox ... ..	4	29	78	89	13	29	...	22	5	8	146	59	482	3.64
Measles ... ..	27	28	37	7	8	7	...	20	44	26	11	6	221	1.67
Rötheln ... ..	1	16	2	4	...	11	...	...	...	...	16	...	50	.38
Whooping Cough ...	4	14	11	19	6	3	...	3	3	2	21	12	98	.76
Mumps ... ..	1	...	...	...	...	3	...	...	10	...	19	1	34	.26
Erysipelas ... ..	2	4	...	...	...	...	...	...	...	1	1	1	9	.07
Tuberculosis ... ..	2	...	4	4	...	...	...	...	...	...	...	2	12	.09
Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ... ..	7	...	...	...	...	...	...	...	...	...	...	...	7	.05

TABLE II.—Showing incidence of Complications amongst 8,310 cases of Diphtheria completed during 1899.

COMPLICATION.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Fountain.	Grove.	South-Eastern.	Park.	Brook.	Northern.	Gore Farm.	Total.	Percentage Incidence.
Total cases ... ..	1,351	3	843	991	629	902	292	1,070	1,239	990	...	...	8,310	...
Albuminuria ... ..	678	...	230	313	206	368	12	364	623	270	11	...	3,075	37.00
Paralysis ... ..	199	1	115	132	98	172	21	450	295	191	23	4	1,701	20.50
Relapse of Disease ...	25	...	5	15	23	14	1	25	35	19	...	1	163	2.00
Broncho-pneumonia ...	18	...	9	9	7	10	3	19	10	10	1	3	99	1.20
Otitis ... ..	170	...	65	50	31	27	6	19	46	53	18	2	487	5.90
Pneumonia ... ..	6	...	1	...	...	2	...	2	3	3	...	...	17	.20
Nephritis ... ..	9	1	9	2	1	18	...	5	...	3	2	...	50	.60
Scarlet Fever ... ..	39	1	26	44	19	37	2	66	20	33	65	4	356	4.30
Chickenpox ... ..	22	1	7	13	2	6	4	9	1	1	21	...	87	1.00
Measles ... ..	15	...	2	...	21	3	2	1	20	4	3	...	71	.87
Whooping Cough ...	8	...	10	4	3	6	...	5	3	4	...	...	43	.52
Rötheln ... ..	...	1	1	...	...	1	...	...	...	...	...	...	3	.04
Tuberculosis ... ..	...	...	1	...	...	...	...	...	...	...	...	...	1	.01
Enteric Fever ... ..	1	...	...	...	...	...	...	...	...	...	...	...	1	.01
Erysipelas ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1	.01
Parotitis ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1	.01

Complications referable to Antitoxic Serum amongst 7,147 cases of Diphtheria treated with it.

Total cases ... ..	1,320	3	493	970	513	841	280	991	1,098	867	...	...	7,376	...
Rash ... ..	559	1	74	421	187	241	125	168	357	412	...	...	2,545	34.50
Joint-pains ... ..	71	...	4	69	31	41	29	28	49	74	...	...	396	5.40
Abscess ... ..	11	...	9	3	4	5	...	9	2	11	...	...	54	.73



TABLE III.—*Showing incidence of Complications amongst 1,383 cases of Enteric Fever completed during 1899.*

COMPLICATION.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Grove.	South-Eastern.	Park.	Brook.	Total.	Percentage Incidence.
Total Cases ... ..	228	5	285	175	103	132	254	97	104	1,383	...
Relapse of Disease ... ..	29	...	15	14	21	9	16	19	8	131	9.4
Hæmorrhage ... ..	8	...	30	11	17	10	11	5	7	99	7.2
Abscesses ... ..	9	...	1	1	3	6	9	6	6	41	3.0
Perforation ... ..	11	...	8	4	6	6	9	5	1	50	3.6
Pneumonia ... ..	6	...	10	2	6	6	6	6	4	46	3.3
Peritonitis (non-perforative) ... ..	2	...	...	2	1	...	...	1	1	7	.5
Periostitis ... ..	2	...	2	4	4	2	4	3	5	26	1.9
Pleuritis ... ..	4	...	...	2	1	2	3	...	...	12	.9
Phlebitis ... ..	7	...	3	2	1	...	5	4	3	25	1.8
Dementia ... ..	1	...	1	...	1	...	3	5	1	12	.9
Broncho-pneumonia ... ..	2	...	10	2	1	5	2	...	1	24	1.7
Parotitis ... ..	1	...	1	1	3	...	2	...	3	11	.8
Scarlet Fever } Specific Infectious {	1	...	...	...	...	...	2	...	...	3	.2
Diphtheria ... } Diseases {	7	...	...	1	1	1	...	1	...	11	.8

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 1899.*

CO-EXISTENT INFECTIONS.	Eastern.	North-Eastern.	North-Western.	Western.	South-Western.	Fountain.	Grove.	South-Eastern.	Park.	Brook.	Totals.
Scarlet Fever and Diphtheria ...	39	4	7	32	22	38	...	21	18	38	219
Scarlet Fever and Chickenpox ...	4	13	3	14	7	9	...	11	10	29	91
Scarlet Fever and Whooping Cough ...	3	11	5	11	3	3	...	6	9	2	53
Scarlet Fever and Measles ...	8	2	1	2	1	1	...	3	13	8	39
Scarlet Fever and Tuberculosis ...	...	...	...	...	1	...	...	...	4	4	9
Scarlet Fever and Rôtheln ...	...	...	...	1	1	1	...	...	...	...	3
Scarlet Fever and Enteric Fever ...	...	...	3	...	1	...	...	2	...	...	6
Scarlet Fever and Mumps ...	...	...	...	...	...	...	...	...	1	...	1
Diphtheria and Measles ...	23	...	1	2	7	...	...	9	5	1	48
Diphtheria and Chickenpox ...	15	...	...	...	2	1	1	4	3	4	30
Diphtheria and Whooping Cough ...	7	...	2	3	1	...	...	5	18	5	41
Diphtheria and Tuberculosis ...	1	...	...	...	...	...	...	...	...	1	2
Diphtheria and Enteric Fever ...	1	...	...	...	...	...	...	...	...	1	2
Diphtheria and Rôtheln ...	...	...	...	...	...	...	...	2	...	1	3
Diphtheria and Mumps ...	1	...	...	...	...	...	...	...	4	...	5
Total ... ..	...	...	...	...	...	...	...	...	...	...	552
Total number of Scarlet Fever, Diphtheria, and Enteric Fever cases admitted }	...	...	...	...	...	...	...	...	...	...	23,498
Percentage ... ..	...	...	...	...	...	...	...	...	...	...	2.3

## POST-SCARLATINAL DIPHTHERIA, 1899.

The following lists give particulars of each case of diphtheria that occurred amongst the scarlet fever patients treated in the twelve hospitals of the Board. All cases that were completed during the year are included; thus a certain number of cases which developed diphtheria during 1898 are included, while all remaining under treatment at the end of 1899 are excluded.



EASTERN HOSPITAL.—TABLE I.—*Post-Scarlatinal Diphtheria*, 1899

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	H. W.	M	5	Mercy ...	Nov. 21/98	Dec. 7/98	14	Faucial and Nasal	R ...	Antitoxin.
2	G. M.	F	3	Mercy DR	" 20 "	Jan. 18/99	57	" " "	" D	"
3	F. M.	F	4	Fortitude	Dec. 23 "	Feb. 5 "	39	" " "	R ...	"
4	A. B.	F	7	Fortitude	Jan. 19/99	" 9 "	21	Faucial ...	R ...	"
5	M. L.	F	3	Fortitude	" 17 "	" 10 "	22	" " "	R ...	"
6	M. R.	F	7	Courage	Nov. 12/98	" 12 "	92	" " "	R ...	"
7	S. C.	F	5	Fortitude	Jan. 31/99	" 12 "	10	Faucial and Nasal	R ...	"
8	M. R.	F	13	Truth ...	Feb. 14 "	" 24 "	9	Faucial ...	R ...	"
9	F. W.	M	4	Mercy ...	" 2 "	Mar. 3 "	25	Faucial & Laryngeal	R ...	"
10	E. C.	M	5	Mercy ...	Mar. 2 "	" 23 "	19	Faucial ...	R ...	"
11	H. L.	M	2	Fortitude	Dec. 25/98	" 24 "	87	Faucial and Nasal	R ...	"
12	A. H.	M	5	Gladness	Apr. 2/99	Apr. 23 "	18	Faucial, Nasal, and Laryngeal	R ...	"
13	E. R.	F	3	Courage	Feb. 21 "	" 30 "	67	Nasal ...	R ...	"
14	G. B.	F	3	Courage	Apr. 2 "	May 12 "	39	Faucial and Nasal	R ...	"
15	E. B.	F	10	Courage	Mar. 31 "	" 13 "	42	Faucial ...	R ...	"
16	E. M.	F	3	Courage	" 19 "	" 16 "	55	Faucial and Nasal...	R ...	"
17	H. C.	M	9	Courage	May 3 "	" 20 "	16	Faucial ...	R ...	"
18	M. M.	F	9	Truth ...	Apr. 12 "	June 12 "	60	" " "	R ...	"
19	E. W.	F	6	Fortitude	June 5 "	" 16 "	7	Faucial and Nasal	R ...	"
20	L. W.	F	7	Fortitude	May 20 "	" 17 "	27	Faucial ...	R ...	"
21	L. G.	M	4	Truth ...	" 25 "	Apr. 25 "	56	" " "	R ...	"
22	S. S.	F	5	Truth ...	July 3 "	July 16 "	11	" " "	R ...	"
23	E. P.	F	2	Courage	" 28 "	Sept. 20 "	52	" " "	R ...	"
24	E. H.	F	31	Courage	" 29 "	" 24 "	54	" " "	R ...	"

NORTH-EASTERN HOSPITAL.—TABLE II.—*Post-Scarlatinal Diphtheria*, 1899.

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. J.	M	4	13	Nov. 3/98	Feb. 1/99	69	Laryngeal & Faucial	R ...	Antitoxin.
2	J. L.	M	2	24	Apr. 18/99	June 2 "	41	" " "	" D*	"
3	M.A.W.	F	3	12	May 12 "	Sept. 11 "	122	Faucial ...	R ...	"
4	L. W.	F	2	12	Aug. 25 "	" 15 "	17	" " "	R ...	"
5	K. S.	F	2½	12	July 20 "	" 19 "	47	" " "	R ...	"
6	E. L.	M	2½	12	Aug. 4 "	Oct. 4 "	60	Laryngeal & Faucial	R ...	"
7	M. D.	F	2	12	" 31 "	" 12 "	38	Faucial ...	R ...	"
8	F. G.	M	19	18	Sept. 26 "	Nov. 8 "	42	" " "	R ...	"
9	W.W.	M	13	18	" 22 "	" 9 "	44	" " "	R ...	"
10	G. N.	F	2	12	Oct. 15 "	" 17 "	33	" " "	R ...	"
11	A. P.	M	12	18	" 2 "	" 27 "	41	" " "	R ...	No antitoxin.
12	E. B.	M	2½	13	Nov. 24 "	Dec. 18 "	23	Laryngeal & Faucial	" D†	Antitoxin.

NORTH-WESTERN HOSPITAL.—TABLE III.—*Post-Scarlatinal Diphtheria*, 1899.

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	N. W.	F	5	C	Jan. 5/99	Jan. 10/99	4	Nasal ...	R ...	Antitoxin.
2	W. T.	F	6	D	" 12 "	Feb. 10 "	35	" " "	R ...	"
3	E. H.	F	5	6	" 5 "	" 22 "	33	Faucial and Nasal...	R ...	No antitoxin.
4	H. J.	M	5	F	Dec. 21/98	" 17 "	27	" " "	R ...	Antitoxin.
5	A. D.	F	8	4	Jan. 24/99	Apr. 12 "	46	Faucial ...	R ...	"
6	E. T.	F	5	F	" 31 "	Mar. 4 "	32	" " "	R ...	"
7	A. B.	F	7	F	Feb. 6 "	Feb. 19 "	12	Nasal ...	R ...	"
8	E. D.	M	4	F	" 6 "	Mar. 15 "	35	Faucial ...	R ...	No antitoxin.
9	D. P.	F	3	2	" 23 "	" 22 "	23	Faucial and Nasal	R ...	Antitoxin.
10	C. H.	F	1½	2	" 27 "	Apr. 28 "	59	Faucial ...	R ...	No antitoxin.
11	H. O.	M	3	A	Mar. 15 "	Mar. 30 "	13	Nasal ...	R ...	Antitoxin.
12	M. G.	F	4	A	" 15 "	May 17 "	67	Faucial ...	R ...	"
13	W. H.	M	3	A	" 18 "	June 9 "	83	" " "	R ...	No antitoxin.
14	M. G.	F	8	C	May 5 "	May 13 "	7	Faucial and Nasal	" D	Antitoxin.
15	W. N.	M	5	4	June 1 "	June 23 "	18	Faucial ...	R ...	"
16	R. B.	M	4	4	May 28 "	July 7 "	32	Faucial and Nasal	R ...	"
17	J. C.	M	1	1	June 12 "	June 23 "	11	Nasal ...	" D	"
18	E. T.	F	2	4	July 24 "	Sept. 17 "	53	Laryngeal ...	R ...	"
19	M. R.	F	6	D	" 29 "	Aug. 25 "	24	Faucial ...	R ...	"
20	V. P.	F	10	D	Aug. 9 "	" 31 "	22	" " "	R ...	"
21	L. D.	F	3	4	" 6 "	" 16 "	6	Faucial and Nasal	" D	"
22	E. B.	F	4	4	" 16 "	Sept. 11 "	26	Nasal ...	R ...	"
23	F. A.	F	8	D	" 27 "	" 18 "	52	Faucial and Nasal	" D	"
24	K. S.	F	1	4	Oct. 27 "	Nov. 22 "	23	Faucial ...	R ...	"
25	G. J.	M	3	D	Nov. 4 "	" 20 "	14	Faucial and Nasal	" D	"
26	K. E.	F	6	D	" 4 "	" 27 "	21	Faucial ...	R ...	"

\* Complicated by measles and erysipelas.

† Tracheotomy.



WESTERN HOSPITAL.—TABLE IV.—*Post-Scarlatinal Diphtheria*,  
1899.

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	K. W.	F	2½	13	Oct. 8/98	Dec. 9/98	28	Laryngeal ...	R ...	Antitoxin.
2	D. B.	F	9	12	Sept. 9 "	" 22 "	41	Faucial ...	R ...	"
3	E. T.	M	3	3	Nov. 13 "	Feb. 22/99	99	" ...	R ...	"
4	W. B.	M	2	12	" 15 "	" 5 "	81	" ...	R ...	"
5	M. H.	F	2	12	" 14 "	" 13 "	87	" ...	R ...	"
6	C. G.	M	3	13	" 7 "	Dec. 7/98	15	" ...	R ...	"
7	D. M.	F	5	11	Dec. 17 "	Feb. 20/99	64	Laryngeal ...	R ...	"
8	F. C.	F	9	12	" 28 "	Jan. 23 "	24	Faucial ...	R ...	"
9	A. N.	M	2	12	Jan. 7/99	May 12 "	132	" ...	R ...	"
10	A. M.	M	8	10	" 14 "	Feb. 8 "	23	" ...	R ...	"
11	D. C.	F	5	14	" 17 "	" 6 "	20	" ...	R ...	"
12	E. H.	F	3	8	" 16 "	Apr. 28 "	101	" ...	R ...	"
13	E. L.	F	26	8	Feb. 15 "	Mar. 10 "	25	" ...	R ...	"
14	F. McD.	M	2½	4	" 23 "	Apr. 28 "	62	" ...	R ...	"
15	M. O.	F	5	13	" 24 "	Mar. 17 "	20	Laryngeal ...	R ...	"
16	S. W.	M	7	10	Mar. 6 "	Apr. 26 "	50	Faucial ...	R ...	"
17	G. C.	F	6	3	" 8 "	" 21 "	42	Laryngeal ...	R ...	"
18	D. W.	F	14	14	" 16 "	Mar. 31 "	12	Faucial ...	R ...	"
19	J. W.	F	6	3	" 23 "	June 7 "	34	" ...	R ...	"
20	E. K.	F	3	13	" 26 "	May 21 "	54	" ...	R ...	"
21	C. J.	F	5	8	" 15 "	" 2 "	63	Laryngeal ...	R ...	"
22	F. S.	M	5	3	Apr. 14 "	June 9 "	55	Faucial ...	R ...	"
23	E. H.	F	3	12	May 30 "	" 22 "	19	" ...	R ...	"
24	C. E.	F	2½	5A	July 10 "	July 28 "	11	Laryngeal ...	R ...	"
25	R. T.	F	8	3	Sept. 15 "	Sept. 28 "	9	Nasal ...	R ...	"
26	J. N.	F	13	13	" 20 "	Oct. 16 "	25	Faucial ...	R ...	"
27	H. H.	M	4	11	Dec. 2 "	Dec. 21 "	15	Laryngeal ...	D*	"

SOUTH-WESTERN HOSPITAL.—TABLE V.—*Post-Scarlatinal Diphtheria*,  
1899.

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. E.	M	4	H 2	Oct. 26/98	Dec. 3/98	35	Faucial & Laryngeal	R ...	Antitoxin.
2	J. C.	M	1	G 1	" 15 "	" 7 "	49	Faucial and Nasal...	R ...	"
3	K. S.	F	5	F 2	Sept. 20 "	" 8 "	78	Faucial ...	R ...	No antitoxin.
4	G. F.	M	2	H 2	Oct. 19 "	" 18 "	61	Faucial and Nasal...	R ...	"
5	R. B.	F	4	D 2	Nov. 26 "	" 20 "	18	Nasal ...	R ...	Antitoxin.
6	G. C.	M	3	G 2	Oct. 25 "	" 24 "	58	" ...	R ...	"
7	A. P.	F	5	G 2	Nov. 10 "	" 25 "	43	" ...	R ...	No antitoxin.
8	F. L.	F	5	G 2	" 6 "	" 25 "	48	" ...	R ...	"
9	R. G.	F	4	D 2	Dec. 9 "	Jan. 10/99	31	" ...	R ...	Antitoxin.
10	B. C.	F	5	D 2	" 8 "	" 24 "	45	" ...	R ...	"
11	F. C.	F	2	D 2	Jan. 25/99	" 30 "	3	" ...	R ...	"
12	L. P.	F	2	G 1	Dec. 30/98	Feb. 3 "	28	" ...	R ...	"
13	N. P.	M	2	H 2	" 3 "	Mar. 4 "	89	Faucial & Laryngeal	R ...	No antitoxin.
14	O. F.	F	4½	F 2	Mar. 5/99	" 14 "	7	Faucial ...	R ...	Antitoxin.
15	E. S.	M	5	S	Dec. 14/98	Apr. 1 "	103	" ...	R ...	No antitoxin.
16	F. B.	F	11	D 1	Mar. 21/99	" 13 "	21	" ...	R ...	Antitoxin.
17	W. P.	F	3	D 2	May 30 "	June 20 "	19	Faucial & Laryngeal	R ...	"
18	H. S.	F	1½	F 2	Aug. 3 "	Aug. 21 "	17	Laryngeal ...	D	"
19	R. W.	F	9	E 2	June 25 "	" 30 "	16	Faucial ...	R ...	No antitoxin.
20	H. B.	M	4	H 2	July 21 "	" 30 "	49	Faucial and Nasal...	R ...	Antitoxin.
21	A. T.	M	4	S	Aug. 13 "	Sept. 18 "	29	Faucial ...	R ...	"
22	W. B.	M	2	G 1	June 27 "	" 22 "	82	Nasal ...	R ...	No antitoxin.
23	W. P.	M	8	S	Aug. 6 "	" 22 "	40	Faucial ...	R ...	"
24	M. F.	M	3½	H 2	" 16 "	" 25 "	38	Faucial & Laryngeal	R ...	Antitoxin.
25	A. N.	M	4	C 1	Sept. 4 "	" 27 "	21	Faucial ...	R ...	No antitoxin.
26	F. S.	F	4	F 2	June 27 "	Oct. 6 "	98	Laryngeal ...	R ...	Antitoxin.
27	L. W.	F	3½	F 2	Sept. 12 "	" 7 "	23	Faucial and Nasal...	R ...	"
28	D. A.	F	4	F 2	" 10 "	" 8 "	27	Nasal ...	R ...	No antitoxin.
29	A. R.	F	6	D 1	" 22 "	Nov. 5 "	19	" ...	R ...	"
30	L. R.	F	5	D 1	" 1 "	" 7 "	21	" ...	R ...	"

\* Tracheotomy complicated with general tuberculosis



FOUNTAIN HOSPITAL.—TABLE VI.—*Post-Scarlatinal Diphtheria*,  
1899.

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	B. P.	F	2	2	Jan. 17/99	Mar. 5/99	45	Faucial ...	R ...	Antitoxin.
2	W. H.	F	7	7	Dec. 27/98	Jan. 14 "	17	" ...	R ...	No antitoxin.
3	W. P.	M	4	4	Nov. 26 "	Feb. 9 "	76	Faucial and Nasal	R ...	Antitoxin.
4	E. M. G.	F	2	2	" 9 "	Jan. 4 "	56	Faucial ...	R ...	"
5	A. H.	F	2	2	Oct. 27 "	" 15 "	68	" ...	R ...	No antitoxin.
6	L. C.	M	6	6	Nov. 27 "	" 1 "	34	Nasal ...	R ...	Antitoxin.
7	H. C.	M	6	6	" 25 "	Dec. 15/98	17	" ...	R ...	"
8	A. G.	F	7	7	Oct. 31 "	Nov. 28 "	26	Faucial ...	*D ...	No antitoxin.
9	A. M.	F	3	3	Nov. 5 "	" 30 "	24	Nasal ...	R ...	Antitoxin.
10	L. C.	F	2	2	" 8 "	Dec. 28 "	49	" ...	R ...	"
11	H. D.	M	11	11	" 21 "	" 10 "	19	Faucial ...	R ...	"
12	A. L.	M	2	2	" 21 "	" 18 "	26	Laryngeal ...	R ...	"
13	R. G.	M	11	11	Oct. 31 "	Nov. 26 "	25	Faucial ...	R ...	No antitoxin.
14	R. S.	F	7	7	" 16 "	" 6 "	20	" ...	R ...	Antitoxin.
15	F. W.	F	3	3	" 30 "	" 20 "	16	Nasal and Faucial	R ...	"
16	L. F.	M	7	7	" 14 "	" 2 "	16	Nasal ...	R ...	"
17	R. C.	F	3	3	Nov. 5 "	" 29 "	24	Faucial and Nasal	R ...	"
18	E. T.	F	1	1	" 4 "	Dec. 1 "	25	Faucial ...	R ...	No antitoxin.
19	R. S.	M	3	3	" 9 "	" 5 "	24	Nasal ...	R ...	Antitoxin.
20	M. R.	F	3	3	Sept. 4 "	Sept. 19 "	15	Faucial ...	R ...	No antitoxin.
21	W. P.	F	3	3	Oct. 7 "	Nov. 19 "	41	Nasal ...	R ...	"
22	A. T.	M	12	12	Nov. 6 "	Dec. 13 "	36	Faucial ...	R ...	Antitoxin.
23	S. C.	M	2	2	" 14 "	" 12 "	29	Faucial and Nasal	R ...	"
24	A. H.	F	4	4	" 23 "	Apr. 20/99	28	Faucial ...	R ...	"
25	F. B.	F	3	3	Mar. 21/99	" 24 "	33	" ...	R ...	No antitoxin.
26	E. W.	F	2	2	Jan. 7 "	" 5 "	84	" ...	R ...	Antitoxin.
27	M. W.	F	3	3	Feb. 15 "	Mar. 2 "	14	Nasal ...	R ...	"
28	E. Q.	F	11	2	Jan. 8 "	May 23 "	132	Faucial ...	R ...	"
29	E. N.	M	5	4	Feb. 28 "	Apr. 2 "	32	Faucial and Nasal	R ...	"
30	D. T.	M	4	8	" 7 "	Mar. 6 "	27	Nasal ...	R ...	No antitoxin.
31	S. W.	M	5	12	Jan. 29 "	" 4 "	34	" ...	R ...	Antitoxin.
32	R. C.	F	12	2	" 8 "	" 7 "	58	Faucial ...	R ...	No antitoxin.
33	E. O.	M	5	12	Dec. 23/98	Feb. 18 "	45	" ...	R ...	"
34	E. N.	F	10	7	Oct. 3 "	Nov. 8 "	35	" ...	R ...	Antitoxin.
35	G. B.	F	8	7	" 7 "	" 3 "	14	" ...	R ...	No antitoxin.
36	H. B.	M	5	9	" 7 "	" 20 "	42	Nasal ...	R ...	Antitoxin.
37	L. R.	F	5	6	May 19/99	June 21 "	33	Faucial ...	R ...	"
38	I. S.	F	12	1	" 17 "	" 3 "	15	" ...	R ...	"
39	A. C.	M	4	8	Feb. 27 "	Mar. 20 "	20	" ...	R ...	No antitoxin.
40	E. W.	F	4	6	Jan. 15 "	May 5 "	110	" ...	R ...	Antitoxin.
41	K. P.	F	6	7	Apr. 22 "	June 25 "	62	" ...	R ...	"
42	J. S.	M	4	7	May 30 "	" 25 "	16	" ...	R ...	"
43	M. S.	F	2	6	Feb. 7 "	May 3 "	82	Nasal ...	R ...	"
44	A. F.	F	4	6	May 29 "	July 21 "	54	Faucial ...	R ...	"
45	G. A.	F	4	7	June 19 "	" 18 "	29	" ...	R ...	"
46	S. R.	M	3	6	Aug. 30 "	Sept. 10 "	12	" ...	R ...	"
47	F. S.	F	3	6	July 1 "	Aug. 11 "	40	Nasal ...	R ...	"
48	S. G.	M	6	7	Oct. 2 "	Nov. 8 "	33	Faucial ...	R ...	"
49	M. G.	F	2	6	July 30 "	Sept. 10 "	41	Laryngeal ...	R ...	"
50	A. J.	M	4	6	" 22 "	" 12 "	49	Faucial ...	R ...	"
51	E. C.	F	4	6	" 31 "	Aug. 9 "	10	Nasal ...	R ...	"
52	H. J.	M	4	7	Sept. 11 "	Oct. 12 "	29	Faucial ...	R ...	"
53	L. C.	M	6	9	Oct. 9 "	Nov. 10 "	30	Nasal ...	R ...	"

GROVE HOSPITAL.—TABLE VII.—*Post-Scarlatinal Diphtheria*,  
1899.

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	W. M.	M	5	9 A	Nov. 25/99	Dec. 4/99	9	Laryngeal ...	D	Antitoxin.

\* Died on February 5th, 1899, after the attack of diphtheria, from pericarditis and endocarditis. No evidence of diphtheritic paralysis.



SOUTH-EASTERN HOSPITAL.—TABLE VIII.—*Post-Scarlatinal Diphtheria*, 1899.

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	K. W.	M	5	13	Oct. 23/98	Nov. 6/98	14	Faucial and Nasal...	R	Antitoxin.
2	F. R.	F	3	13	" 12 "	" 5 "	24	Faucial ...	R	"
3	M. G.	M	2	Isol.	Jan. 14/99	Jan. 20/99	6	Faucial and Nasal...	R	"
4	H. G.	M	14	17	Mar. 1 "	Mar. 23 "	22	Faucial ...	R	"
5	B. M.	F	6	9	Feb. 3 "	" 27 "	52	" ...	R	"
6	A. G.	F	3	12	Dec. 7/98	Feb. 24 "	79	Faucial and Nasal...	R	"
7	V. G.	F	7	13	May 13/99	June 13 "	31	Faucial ...	R	"
8	B. H.	F	16	13	" 18 "	" 29 "	42	" ...	R	No antitoxin.
9	N. G.	F	13	13	" 16 "	" 8 "	23	" ...	R	Antitoxin.
10	E. P.	F	9	13	" 19 "	" 6 "	18	" ...	R	"
11	R. D.	F	4	Isol.	Mar. 21 "	Apr. 3 "	13	" ...	R	"
12	E. S.	F	12	12	Aug. 1 "	Aug. 13 "	12	Laryngeal ...	D	"
13	J. G.	F	3	12	June 18 "	" 11 "	54	Faucial ...	R	"
14	J. L.	F	5	12	July 2 "	" 23 "	52	" ...	R	"
15	A. L.	F	13	13	" 1 "	July 27 "	26	Laryngeal ...	R	"
16	J. P.	M	4	16	Aug. 23 "	Sept. 30 "	38	Faucial ...	R	"
17	J. N.	F	4	11	" 23 "	" 9 "	17	" ...	R	"

PARK HOSPITAL.—TABLE IX.—*Post-Scarlatinal Diphtheria*, 1899.

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	S. B.	M	2	E	Sept. 23/98	Nov. 2/98	40	Faucial and Nasal	R	Antitoxin.
2	C. S.	M	4	C 1	Nov. 2 "	" 18 "	14	Faucial ...	R	No antitoxin.
3	P. P.	M	3	C 1	" 7 "	" 20 "	9	" ...	R	"
4	S. F.	M	3	E	Oct. 26 "	" 22 "	8	Faucial and Nasal	R	Antitoxin.
5	L. F.	F	5	H 1	" 23 "	Dec. 12 "	51	Faucial ...	R	No antitoxin.
6	L. L. M.	M	5	C 1	Dec. 8 "	" 26 "	15	" ...	R	Antitoxin.
7	C. H.	M	3	D 1	" 24 "	Jan. 8/99	15	" ...	R	No antitoxin.
8	A. B.	F	23	H	" 8 "	" 10 "	57	" ...	R	Antitoxin.
9	W. B.	M	3	C 1	" 17 "	" 12 "	24	" ...	R	"
10	M. R.	F	2	G 1	" 17 "	" 23 "	34	" ...	D	No antitoxin.
11	M. G.	F	5	G	Jan. 7/99	Feb. 3 "	26	" ...	R	Antitoxin.
12	W. K.	M	7	C 1	" 1 "	" 5 "	35	" ...	R	"
13	F. P.	F	3	G 1	" 7 "	" 23 "	47	Faucial and Nasal	R	"
14	H. W.	M	18	D 1	" 3 "	Mar. 1 "	57	Faucial ...	R	"
15	E. W.	F	6	G 1	Dec. 14/98	" 7 "	82	" ...	D	"
16	R. W.	M	6	C 1	Jan. 28/99	" 14 "	45	Faucial and Nasal	R	"
17	J. B.	M	12	A	" 24 "	" 19 "	51	" ...	D	"
18	L. B.	F	3	A	Feb. 17 "	" 22 "	30	Faucial ...	R	"
19	G. S.	F	3	E	" 6 "	" 27 "	49	Faucial and Nasal	R	"
20	S. T.	M	1	A	Jan. 27 "	Apr. 4 "	65	Faucial & Laryngeal	D	"
21	W. H. B.	M	11	D 1	Feb. 6 "	" 5 "	55	Faucial ...	R	"
22	D. A.	F	10	H 1	Mar. 16 "	" 6 "	21	" ...	R	No antitoxin.
23	F. M. H.	F	4	A	Feb. 12 "	" 6 "	45	Faucial and Nasal	R	Antitoxin.
24	P. E.	M	6	C 1	Mar. 21 "	" 6 "	13	Faucial & Laryngeal	R	"
25	H. J.	M	3	A	Feb. 15 "	" 7 "	51	Faucial ...	R	"
26	R. A.	M	4	E	" 24 "	" 14 "	49	" ...	R	"
27	A. M.	M	9	D 1	" 25 "	" 18 "	48	" ...	R	"
28	H. P.	M	7	C 1	Mar. 21 "	" 18 "	27	" ...	R	"
29	C. G.	M	5	C 1	" 25 "	May 1 "	33	" ...	R	"
30	W. J. S.	M	2	E	" 27 "	" 11 "	44	Faucial & Laryngeal	D	"
31	W. A. B.	M	2	E	May 16 "	June 20 "	35	Faucial ...	R	"
32	W. G.	M	4	C 1	June 11 "	July 2 "	20	" ...	R	No antitoxin.
33	E. B.	F	3	E	" 2 "	" 6 "	34	Faucial & Laryngeal	R	Antitoxin.
34	F. E.	F	4	E	" 21 "	Aug. 6 "	42	Faucial ...	R	"
35	G. A. E.	M	8	D 1	July 5 "	" 13 "	32	" ...	R	"
36	J. E. B.	M	11	D 1	" 14 "	" 14 "	25	" ...	R	No antitoxin.
37	A. B.	M	18	D 1	Sept. 14 "	Oct. 24 "	37	" ...	R	"
38	A. F.	M	2	D 1	" 16 "	" 25 "	36	Faucial, Nasal, and Laryngeal	R	Antitoxin.
39	P. L.	M	7	D 1	" 4 "	" 25 "	51	Faucial ...	R	No antitoxin.
40	A. P.	M	3	E	Aug. 7 "	" 28 "	79	Faucial and Nasal	D	Antitoxin.
41	F. G. H.	M	11	D 1	Oct. 30 "	Nov. 13 "	8	Faucial ...	R	No antitoxin.



BROOK HOSPITAL.—TABLE X.—*Post-Scarlatinal Diphtheria*,  
1899.

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. C.	F	22	C 2	Sept. 21/98	Nov. 22/98	57	Faucial ... ..	R ...	Antitoxin.
2	H. G.	M	7	F 2	" 24 "	Jan. 10/99	106	" ... ..	R ...	"
3	R. T.	F	2½	A 2	Oct. 2 "	Nov. 12/98	37	" ... ..	R ...	"
4	M. W.	F	4	D 1	" 3 "	Dec. 7 "	65	Nasal ... ..	R ...	No antitoxin.
5	W. B.	M	4½	D 1	Nov. 1 "	Jan. 11/99	65	" ... ..	R ...	"
6	M. B.	F	5½	A 2	Dec. 17 "	Mar. 13 "	84	Faucial and Nasal...	R ...	Antitoxin.
7	W. P.	F	4	A 1	" 19 "	Jan. 19 "	29	" ... ..	R ...	"
8	E. H.	M	2	F 2	" 30 "	Feb. 16 "	45	Faucial, Nasal, and Laryngeal	R ...	"
9	R. P.	M	6	B 2	Jan. 7/99	" 27 "	37	Faucial & Laryngeal	R ...	"
10	O. B.	F	2	D 2	" 9 "	Mar. 30 "	78	Laryngeal ... ..	R ...	"
11	D. R.	F	9	A 2	" 16 "	Apr. 12 "	85	Faucial ... ..	R ...	"
12	E. H.	F	7	A 2	" 23 "	Mar. 2 "	35	Faucial and Nasal...	R ...	"
13	M. B.	F	4	A 2	" 26 "	" 4 "	35	Faucial ... ..	R ...	No antitoxin.
14	H. S.	M	4	F 2	Feb. 4 "	May 2 "	85	" ... ..	R ...	Antitoxin.
15	H. M.	M	3½	D 2	Mar. 1 "	" 2 "	60	Faucial and Nasal...	R ...	No antitoxin.
16	J. H.	M	5	A 2	" 2 "	Apr. 17 "	42	Faucial, Nasal, and Laryngeal	R ...	Antitoxin.
17	C. T.	M	5	E 1	" 10 "	May 27 "	77	Faucial ... ..	R ...	"
18	B. D.	F	8	C 2	" 14 "	" 8 "	54	" ... ..	R ...	"
19	A. C.	M	6	C 2	" 25 "	" 24 "	58	Faucial and Nasal...	R ...	"
20	W. C.	M	3	A 2	Apr. 18 "	June 12 "	52	Nasal ... ..	R ...	No antitoxin.
21	D. A.	F	8½	A 2	" 20 "	" 21 "	61	Faucial and Nasal...	R ...	"
22	F. T.	M	6	F 1	" 22 "	July 1 "	68	Faucial ... ..	R ...	"
23	O. T.	F	5	B 2	" 26 "	" 1 "	64	" ... ..	R ...	Antitoxin.
24	G. S.	M	3	C 1	" 29 "	May 24 "	24	" ... ..	R ...	"
25	E. H.	M	3	B 1	May 6 "	July 29 "	81	" ... ..	R ...	"
26	G. A.	F	4	B 2	" 12 "	" 15 "	64	Faucial and Vulval	*D ...	"
27	E. L.	F	7	B 1	" 29 "	Aug. 4 "	62	Faucial ... ..	R ...	No antitoxin.
28	A. H.	F	5	B 2	June 5 "	Sept. 7 "	92	" ... ..	R ...	Antitoxin.
29	A. E.	F	4	C 2	" 18 "	July 25 "	31	Faucial and Nasal...	R ...	"
30	J. S.	M	1½	C 1	" 19 "	Aug. 7 "	48	Laryngeal ... ..	R ...	"
31	A. N.	F	8	B 2	" 28 "	July 27 "	26	Faucial and Nasal...	R ...	"
32	D. H.	F	7	B 1	" 29 "	Aug. 23 "	53	Faucial ... ..	R ...	"
33	D. W.	F	4½	A 2	" 30 "	July 22 "	20	" ... ..	R ...	"
34	A. G.	F	4	C 1	July 2 "	Aug. 15 "	43	" ... ..	R ...	"
35	H. W.	M	20	E 2	" 6 "	" 30 "	54	" ... ..	R ...	"
36	R. S.	F	3	A 1	" 6 "	Sept. 16 "	70	Nasal ... ..	R ...	No antitoxin.
37	A. H.	M	2½	A 1	" 16 "	" 2 "	46	Faucial and Nasal...	R ...	Antitoxin.
38	A. W.	M	6	A 2	" 21 "	" 28 "	67	Faucial ... ..	R ...	No antitoxin.
39	E. W.	F	4	B 1	" 22 "	" 12 "	49	" ... ..	R ...	Antitoxin.
40	M. R.	F	5	B 1	" 25 "	" 1 "	37	" ... ..	R ...	"
41	E. L.	F	11	B 2	" 26 "	Aug. 17 "	21	" ... ..	R ...	No antitoxin.
42	E. L.	F	6½	D 1	Aug. 8 "	" 15 "	6	" ... ..	R ...	Antitoxin.
43	N. H.	F	3½	B 1	" 10 "	Sept. 6 "	25	Faucial and Nasal...	R ...	"
44	G. S.	M	4	B 2	" 13 "	" 5 "	18	" ... ..	R ...	"
45	H. A.	M	4	B 1	" 15 "	" 21 "	33	Faucial ... ..	R ...	"
46	C. B.	M	3	N 2	" 15 "	" 15 "	35	Nasal ... ..	R ...	No antitoxin.
47	A. D.	F	5	B 1	" 21 "	" 7 "	16	Faucial ... ..	R ...	Antitoxin.
48	L. S.	F	1½	A 1	" 28 "	Oct. 4 "	36	Nasal ... ..	R ...	"
49	D. T.	F	4	C 2	Sept. 27 "	" 15 "	15	" ... ..	R ...	No antitoxin.

NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria*,  
1899.

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	H. O.	M	3	17	July 16/98	Sept. 15/98	13	Laryngeal ... ..	R ...	Antitoxin.
2	M. L. C.	F	10	17	Aug. 6 "	Oct. 9 "	32	Faucial ... ..	R ...	"
3	S. C.	M	5	16	Sept. 26 "	" 27 "	On admis'n	" ... ..	R ...	"
4	O. H.	M	9	11	Oct. 3 "	Nov. 11 "	8	" ... ..	R ...	"
5	M. G. M.	F	4½	12	Sept. 18 "	" 13 "	23	" ... ..	R ...	"
6	L. S.	F	6½	4	Oct. 3 "	" 13 "	16	" ... ..	R ...	"
7	C. B.	M	6	3	Aug. 31 "	" 15 "	29	" ... ..	R ...	"
8	J. H.	F	6	12	Sept. 11 "	" 18 "	22	" ... ..	R ...	"
9	M. E.	F	15	3	" 6 "	" 18 "	11	" ... ..	R ...	"
10	A. W. T.	M	6	8	Oct. 1 "	" 23 "	15	" ... ..	R ...	"
11	E. J. F.	F	28	19	" 19 "	" 25 "	10	" ... ..	R ...	"
12	J. A.	M	5½	19	" 29 "	" 26 "	11	" ... ..	R ...	"

\* This case was complicated by varicella gangrenosa.



NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria*,  
1899—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.
13	C. B.	M	3½	5	Oct. 20/98	Dec. 11/98	25	Faucial	R	Antitoxin.
14	E. B.	M	6	4	Sept. 25 "	" 13 "	50	"	R	"
15	W. L.	M	5	18	Oct. 17 "	" 14 "	35	"	R	"
16	J. T.	F	11	7	" 21 "	" 15 "	30	"	R	"
17	E. L.	F	5	2	" 13 "	" 15 "	47	"	R	"
18	C. L. A. B.	F	5	4	" 30 "	" 16 "	24	"	R	"
19	L. W.	F	8	17	" 30 "	" 17 "	18	"	R	"
20	E. H.	F	7	7	" 20 "	" 18 "	12	"	R	"
21	A. L. W.	F	10	7	" 18 "	" 19 "	13	"	R	"
22	P. C.	M	5	5	Nov. 17 "	" 20 "	5	"	R	"
23	A. B.	F	3	17	Oct. 30 "	" 22 "	22	"	R	"
24	H. S.	M	6	17	Nov. 1 "	" 28 "	27	Laryngeal	R	"
25	M. L.	F	3	17	" 18 "	Jan. 1/99	25	" (severe)	R	"
26	E. McN.	F	9	17	" 7 "	" 1 "	25	Faucial	R	"
27	E. W.	F	13	3	" 30 "	" 1 "	2	"	R	"
28	L. I.	F	8	5	" 16 "	" 6 "	11	"	R	"
29	A. H.	F	3	17	Oct. 19 "	" 6 "	51	"	R	"
30	H. H.	M	5	5	Nov. 1 "	" 8 "	40	"	R	"
31	R. B.	F	7	4	" 10 "	" 11 "	22	"	R	"
32	E. S.	F	15	5	" 19 "	" 14 "	46	"	R	"
33	E. M.	M	11	10	Dec. 2 "	" 15 "	17	"	R	"
34	J. L.	F	4	17	" 5 "	" 16 "	5	"	R	"
35	C. T.	F	18	17	Nov. 16 "	" 17 "	27	"	R	"
36	A. E. W.	M	7	10	Dec. 16 "	" 18 "	12	"	R	"
37	A. L.	F	28	8	Nov. 27 "	" 21 "	22	"	R	"
38	W. D.	M	14	10	Dec. 4 "	" 24 "	10	"	R	"
39	G. D.	F	6½	17	" 23 "	" 26 "	8	"	R	"
40	A. J.	F	7	3	Nov. 30 "	" 31 "	31	"	R	"
41	A. C.	F	5	3	Dec. 17 "	Feb. 2 "	8	"	R	"
42	E. S.	F	5	17	Nov. 5 "	" 7 "	62	"	R	"
43	E. V. E.	F	7	3	Dec. 30 "	" 8 "	4	"	R	"
44	C. C.	F	8	1	Nov. 10 "	" 9 "	41	"	R	"
45	A. E.	M	6	3	Jan. 6/99	" 10 "	6	"	R	"
46	W. C.	M	6	17	Nov. 27/98	" 11 "	51	"	R	"
47	A. C. B.	F	6	3	Dec. 8 "	" 12 "	9	"	R	"
48	F. F.	M	5	2	Nov. 17 "	" 13 "	44	"	R	"
49	M. R.	F	4	4	Jan. 17/99	" 16 "	6	"	R	"
50	F. W.	F	6	2	Dec. 27/98	On admis'n	...	"	R	"
51	C. P.	M	5	2	" 30 "	" 18/99	...	"	R	"
52	A. C.	M	7	25	" 30 "	Feb. 18/99	14	"	R	"
53	E. H.	F	6	7	Jan. 22/99	" 20 "	3	"	R	"
54	T. W.	M	6	17	" 28 "	" 21 "	1	"	R	"
55	C. I.	F	14	4	Dec. 22 "	" 21 "	11	"	R	"
56	M. D.	F	14	4	" 14 "	" 21 "	42	"	R	"
57	E. S.	F	9	17	Jan. 13/99	" 21 "	6	"	R	"
58	F. F.	M	28	9	" 16 "	" 21 "	5	"	R	"
59	W. N.	M	3½	4	" 11 "	" 22 "	14	"	R	"
60	A. S.	M	7	18	" 20 "	" 23 "	6	"	R	"
61	A. W.	M	3	17	Dec. 5/98	" 23 "	28	"	R	"
62	M. F.	F	6	4	Jan. 21/99	" 23 "	13	"	R	"
63	A. B.	F	8	17	" 14 "	" 25 "	12	Laryngeal (severe)	R	D
64	W. J.	M	11	10	" 15 "	Mar. 1 "	42	Faucial	R	"
65	R. S.	M	5½	4	" 29 "	" 5 "	5	Laryngeal	R	"
66	A. G.	F	12	1	Dec. 27/98	" 7 "	31	Faucial	R	"
67	A. W.	F	16	17	Jan. 14/99	" 9 "	20	"	R	"
68	A. A.	F	7	17	Feb. 5 "	" 11 "	14	"	R	"
69	A. B.	F	7	3	" 7 "	" 12 "	8	"	R	"
70	A. W. K.	M	6	5	Jan. 20 "	" 14 "	27	"	R	"
71	J. H.	M	5	5	" 7 "	" 14 "	31	"	R	"
72	M. W.	F	6	4	Feb. 6 "	" 15 "	6	"	R	"
73	F. E.	F	6	7	Dec. 29/98	" 15 "	25	"	R	"
74	N. G. W.	F	4	17	Feb. 12/99	" 16 "	8	"	R	"
75	P. R.	M	5	12	Jan. 2 "	" 16 "	48	"	R	"
76	H. C.	M	4	5	" 2 "	" 20 "	19	Laryngeal (mild)	R	"
77	A. W. H.	M	12	10	Feb. 5 "	" 22 "	22	Faucial	R	"
78	D. A. A. J.	F	5	8	" 21 "	" 23 "	2	"	R	"
79	B. H.	F	4	1	Dec. 28/98	" 23 "	9	"	R	"
80	E. C.	F	12	12	Jan. 13/99	" 24 "	46	"	R	"
81	A. M.	F	3	1	" 2 "	" 24 "	30	"	R	"
82	F. H.	F	6	1	" 21 "	" 24 "	20	"	R	"
83	L. B.	M	6	4	Feb. 10 "	" 28 "	5	"	R	"
84	J. D.	F	4	1	Jan. 25 "	" 30 "	26	"	R	"
85	S. M.	F	7	17	Feb. 8 "	Apr. 3 "	19	"	R	"
86	E. S.	F	5	5	Mar. 9 "	" 5 "	6	"	R	"
87	E. M.	F	5	17	Dec. 19/98	" 5 "	84	"	R	"
88	G. R.	M	10	11	Feb. 17/99	" 6 "	19	"	R	"
89	M. G.	F	9	5	" 12 "	" 7 "	8	Laryngeal	R	"
90	S. G.	M	5	1	" 26 "	" 8 "	9	Faucial	R	"



NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria*,  
1899—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.
91	L.	F	4	5	Feb. 9/99	Apr. 10/99	19	Faucial	R	Antitoxin.
92	F. N.	F	11	7	" 13 "	" 15 "	36	"	R	"
93	A. B.	M	6	17	" 18 "	" 20 "	29	"	R	"
94	L. M.	F	18	7	" 17 "	" 21 "	34	"	R	"
95	C. L.	F	12	7	Jan. 25 "	" 1 "	63	"	R	"
96	L. M. C.	F	5	17	Feb. 4 "	" 22 "	52	"	R	"
97	F. H.	F	9	7	" 7 "	May 2 "	55	"	R	"
98	L. G.	F	10	3	Mar. 18 "	" 6 "	18	"	R	"
99	D. J.	F	8	17	Feb. 11 "	" 7 "	12	"	R	"
100	W. W.	M	5½	11	" 7 "	" 7 "	64	"	R	"
101	S. H.	M	6	11	Mar. 20 "	" 18 "	28	"	R	"
102	E. T.	M	13	10	" 24 "	" 26 "	36	"	R	"
103	A. P.	F	4	4	Apr. 14 "	" 29 "	5	"	R	"
104	F. F.	M	3	7	" 18 "	" 31 "	5	"	R	"
105	A. K.	F	6	17	Mar. 24 "	June 2 "	23	"	R	"
106	M. H.	M	7	11	" 20 "	" 4 "	41	"	R	"
107	L. B.	F	4	7	Apr. 1 "	" 9 "	13	"	R	"
108	A. H.	F	4	8	" 8 "	" 11 "	23	Laryngeal & Faucial	R	"
109	C. J.	F	9	4	" 30 "	" 12 "	17	Laryngeal	R	"
110	C. L.	M	9	11	May 7 "	" 12 "	12	Faucial	R	"
111	K. L. M.	F	9	4	Apr. 6 "	" 12 "	30	"	R	"
112	E. B.	F	5	8	Mar. 2 "	" 16 "	45	"	R	"
113	L. O.	F	4	1	Apr. 24 "	" 18 "	12	"	R	"
114	G. P.	F	6	8	" 7 "	" 19 "	38	"	R	"
115	B. F.	F	10	8	Mar. 13 "	" 20 "	48	"	R	"
116	J. C.	M	3	8	" 28 "	" 21 "	26	"	R	"
117	G. B.	M	5	8	May 15 "	" 22 "	6	"	R	"
118	K. R.	M	4	5	" 6 "	" 22 "	13	"	R	"
119	M. M.	F	13	12	" 8 "	" 23 "	10	"	R	"
120	J. E. S.	F	7	17	" 24 "	" 23 "	7	"	R	"
121	H. B.	M	3	8	" 16 "	" 25 "	9	"	R	"
122	M. G.	F	4	1	" 5 "	" 27 "	21	"	R	"
123	M. M.	F	3½	12	Apr. 17 "	" 29 "	23	"	R	"
124	A. W.	F	9	17	May 30 "	" 30 "	9	"	R	"
125	C. B.	F	8	12	" 8 "	July 2 "	16	"	R	"
126	E. F. B.	F	3	12	" 13 "	" 2 "	17	"	R	"
127	A. H.	F	6	17	" 10 "	" 2 "	24	"	R	"
128	E. W.	F	6	1	" 14 "	" 3 "	27	"	R	"
129	A. E.	M	24	9	" 19 "	" 6 "	7	"	R	No antitoxin.
130	S. T.	M	6	12	June 7 "	" 11 "	7	"	R	Antitoxin.
131	M. M.	F	7	12	May 12 "	" 11 "	25	"	R	"
132	J. H.	F	3	12	Apr. 17 "	" 11 "	7	"	R	"
133	S. G. B.	M	3	12	May 28 "	" 12 "	8	Faucial & Laryngeal	R	"
134	J. L.	F	8	12	Mar. 7 "	" 14 "	55	Faucial	R	No antitoxin.
135	I. P.	F	5	2	June 10 "	" 21 "	17	"	R	Antitoxin.
136	J. L.	M	12	12	May 27 "	" 22 "	25	"	R	"
137	L. M.	M	9	12	" 31 "	" 23 "	32	"	R	"
138	A. M.	M	7	18	June 15 "	" 23 "	5	"	R	"
139	G. H.	F	8	2	" 17 "	" 26 "	12	"	R	"
140	B. L.	M	4	2	" 11 "	" 29 "	22	"	R	"
141	T. H.	M	8	12	" 2 "	Aug. 3 "	27	"	R	"
142	L. M.	F	6	1	" 13 "	" 4 "	29	Faucial & Laryngeal	R	"
143	C. T.	F	6	1	" 19 "	" 4 "	21	Faucial	R	"
144	E. L.	F	6	2	" 25 "	" 6 "	9	"	R	"
145	C. W. E. K.	M	6	18	" 21 "	" 9 "	6	"	R	"
146	F. W.	F	7	1	May 16 "	" 12 "	63	"	R	"
147	J. J.	F	6	17	June 22 "	" 12 "	17	"	R	"
148	T. G.	M	11	18	" 21 "	" 16 "	33	"	R	"
149	C. D.	M	7	18	July 10 "	" 20 "	17	"	R	"
150	C. D. A.	M	7	18	" 16 "	" 20 "	3	"	R	No antitoxin.
151	H. W.	M	10	18	June 20 "	" 22 "	38	"	R	Antitoxin.
152	A. H.	M	9	10	" 28 "	" 29 "	39	"	R	"
153	F. B.	M	7	11	" 24 "	" 29 "	33	"	R	"
154	F. C.	M	4	2	July 4 "	" 30 "	29	"	R	"
155	D. B.	F	5	17	" 19 "	" 31 "	14	"	R	"
156	A. H.	F	5	17	June 9 "	Sept. 1 "	58	"	R	"
157	M. W.	F	6	17	July 14 "	" 3 "	18	"	R	"
158	W. S.	M	6	17	" 7 "	" 4 "	46	"	R	"
159	T. S.	M	6	17	Aug. 11 "	" 6 "	8	"	R	"
160	W. A. B.	M	5	10	" 3 "	" 7 "	1	"	R	"
161	J. A.	M	5	12	July 17 "	" 8 "	28	"	R	"
162	D. M.	F	4	12	" 19 "	" 8 "	30	"	R	"
163	F. N.	M	4	12	" 11 "	" 8 "	8	"	R	"
164	M. K.	F	3	12	" 27 "	" 9 "	8	"	R	"
165	M. B.	F	3	12	Aug. 2 "	" 9 "	7	"	R	"
166	H. C.	M	10	11	June 23 "	" 9 "	37	"	R	"
167	A. R.	M	7	11	" 21 "	" 9 "	44	"	R	"
168	A. A.	M	4	1	July 19 "	" 10 "	25	"	R	"



NORTHERN HOSPITAL.—TABLE XI.—*Post-Scarlatinal Diphtheria*,  
1899—*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.
169	R. B.	F	5	2	July 4/99	Sept. 12/99	43	Faucial ...	R ...	Antitoxin.
170	K. A.	F	4	8	" 29 "	" 13 "	14	" ...	R ...	"
171	D. L. L.	F	5	8	Aug. 3 "	" 14 "	15	" ...	R ...	"
172	E. W.	F	14	17	July 28 "	" 14 "	15	" ...	D ...	"
173	D. C.	F	3	2	" 25 "	" 14 "	12	Laryngeal ...	R ...	"
174	G. R.	M	4	1	Aug. 10 "	" 15 "	14	Faucial ...	R ...	"
175	W. G.	M	6	18	" 28 "	" 16 "	7	" ...	R ...	"
176	E. K.	M	5	17	" 17 "	" 16 "	10	Laryngeal ...	R ...	"
177	M. E. M.	F	12	17	" 11 "	" 18 "	9	Faucial ...	R ...	"
178	J. D.	M	10	11	" 25 "	" 20 "	9	" ...	R ...	"
179	E. B.	F	4	17	" 4 "	" 21 "	15	" ...	R ...	"
180	C. L.	M	10	11	" 16 "	" 25 "	12	" ...	R ...	"
181	A. T.	M	12	11	" 9 "	" 25 "	18	" ...	R ...	"
182	B. H.	F	5	12	" 20 "	" 20 "	12	" ...	R ...	"
183	C. E.	M	5	8	" 2 "	" 29 "	30	" ...	R ...	"
184	E. R.	M	3	2	July 16 "	" 30 "	52	" ...	R ...	"
185	A. M.	F	4	12	Sept. 1 "	Oct. 1 "	5	" ...	R ...	"
186	E. M.	F	6	12	" 1 "	" 1 "	8	" ...	R ...	"
187	E. C.	F	4	8	Aug. 6 "	" 1 "	8	" ...	R ...	"
188	C. G.	M	13	11	June 6 "	" 1 "	94	" ...	R ...	"
189	J. W.	M	12	11	July 31 "	" 2 "	25	" ...	R ...	"
190	E. H. W.	M	10	11	Aug. 9 "	" 2 "	11	" ...	R ...	"
191	E. S.	F	7	17	Sept. 1 "	" 6 "	15	" ...	R ...	"
192	R. E. D.	F	7	17	Oct. 7 "	" 7 "	17	" ...	R ...	"
193	A. R.	F	15	12	Sept. 11 "	" 8 "	4	" ...	R ...	"
194	E. H.	F	12	8	Aug. 25 "	" 11 "	18	" ...	R ...	"
195	N. M.	F	6	17	" 16 "	" 11 "	7	" ...	R ...	"
196	R. H.	F	5	7	July 13 "	" 18 "	56	" ...	R ...	"
197	W. I.	M	5	7	Sept. 6 "	" 19 "	21	" ...	R ...	"
198	H. S.	M	14	11	" 23 "	" 20 "	8	" ...	R ...	"
199	L. F.	F	3	8	Aug. 20 "	" 20 "	27	" ...	R ...	"
200	F. E. A.	F	4	1	Sept. 12 "	" 21 "	7	" ...	R ...	No antitoxin.
201	S. H.	M	11	11	Aug. 31 "	" 22 "	8	" ...	R ...	Antitoxin.
202	E. F.	M	3	12	Sept. 20 "	" 22 "	14	" ...	R ...	"
203	M. M.	F	10	1	Aug. 25 "	" 22 "	10	" ...	R ...	"
204	C. K.	M	4	6	Oct. 1 "	" 23 "	3	Faucial and Nasal...	R ...	"
205	I. P.	F	3	12	Sept. 23 "	" 24 "	17	Faucial ...	R ...	"
206	H. D.	M	8	25	Aug. 8 "	" 25 "	53	" ...	R ...	"
207	A. G.	F	19	8	Sept. 12 "	" 27 "	8	" ...	R ...	"
208	D. N.	F	6	3	Aug. 29 "	" 28 "	32	" ...	R ...	"
209	L. H.	F	9	6	Sept. 26 "	" 30 "	11	" ...	R ...	"
210	K. S.	F	12	12	" 15 "	" 31 "	17	" ...	R ...	"
211	K. M.	F	17	17	" 3 "	Nov. 1 "	27	" ...	R ...	"
212	L. S.	F	5	1	" 28 "	" 1 "	6	" ...	R ...	"
213	T. C.	M	4	6	" 20 "	" 1 "	3	" ...	R ...	"
214	F. G. H.	M	4	8	" 26 "	" 3 "	9	" ...	R ...	"
215	A. L.	M	11	18	" 10 "	" 3 "	21	" ...	R ...	"
216	E. M. P.	F	12	6	" 29 "	" 5 "	16	" ...	R ...	"
217	E. D.	F	10	7	Oct. 13 "	" 5 "	6	" ...	R ...	"
218	R. M.	F	16	7	Sept. 10 "	" 5 "	23	" ...	R ...	"
219	V. H.	F	5	6	Oct. 3 "	" 8 "	7	" ...	R ...	"
220	A. B.	F	3	17	Sept. 29 "	" 8 "	6	" ...	R ...	"
221	S. B.	M	3	12	" 25 "	" 9 "	23	Laryngeal ...	R ...	"
222	M. H.	F	3	6	Oct. 10 "	" 12 "	5	Faucial ...	R ...	"

GORE FARM HOSPITAL.—TABLE XII.—*Post-Scarlatinal Diphtheria*,  
1899.

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	M. S.	F	16	M	Oct. 3/98	Nov. 27/98	54	Faucial ...	R ...	Antitoxin.
2	H. C.	M	6	B	Sept. 30 "	" 20 "	49	Faucial and Nasal...	R ...	"
3	C. T.	F	5	P	Aug. 31 "	Oct. 21 "	50	Faucial ...	R ...	"
4	R. P.	F	14	F	Sept. 28 "	" 29 "	28	" ...	R ...	"
5	C. T.	F	10	P	" 18 "	" 21 "	32	" ...	R ...	"
6	W. B.	M	5	S	Oct. 14 "	Nov. 20 "	35	Laryngeal & Nasal	R ...	"
7	D. S.	M	10	J	" 16 "	" 26 "	37	Faucial and Nasal...	R ...	"
8	L. S.	F	7	F	Sept. 30 "	" 30 "	60	Faucial ...	R ...	"



GORE FARM HOSPITAL—TABLE XII.—*Post-Scarlatinal Diphtheria*,  
1899—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.
9	F. H.	F	11	F	Sept. 10/98	Nov. 30/98	79	Faucial ...	R	Antitoxin.
10	H. R.	F	5½	N	Oct. 5 "	Dec. 5 "	61	Laryngeal, Faucial, and Nasal	R	"
11	M. S.	F	6	B	May 4 "	July 11 "	66	Faucial ...	R	"
12	S. W.	M	9	J	Oct. 17 "	Dec. 4 "	46	"	R	"
13	F. B.	M	5	I	July 10 "	Nov. 19 "	130	"	R	"
14	R. F.	M	4½	J	Sept. 8 "	" 24 "	73	Faucial and Nasal	R	"
15	A. T.	M	5	J	Oct. 13 "	" 29 "	45	Faucial ...	R	"
16	E. P.	M	8	J	" 8 "	" 26 "	47	"	R	"
17	J. W.	M	8	J	Sept. 28 "	Dec. 2 "	62	Faucial and Nasal	R	"
18	L. T.	M	7	K	" 21 "	" 7 "	75	"	R	"
19	J. M.	M	6	I	Oct. 22 "	" 8 "	44	Laryngeal & Nasal	R	"
20	F. K.	M	7	J	" 8 "	" 16 "	66	Faucial and Nasal	R	"
21	W. N.	M	7	J	" 7 "	" 3 "	54	Faucial ...	R	"
22	C. E.	M	8	J	Sept. 23 "	" 4 "	71	"	R	"
23	F. J. H.	M	9	K	Aug. 4 "	Nov. 18 "	105	Laryngeal ...	R	"
24	C. L. L.	F	4	A	Sept. 19 "	Oct. 19 "	25	Faucial ...	R	"
25	G. P.	M	5	I	Oct. 22 "	Dec. 9 "	45	Laryngeal ...	R	"
26	T. A.	M	5	J	Sept. 30 "	Nov. 24 "	54	Faucial ...	R	"
27	S. S. W.	F	5	B	Oct. 24 "	" 28 "	34	"	R	"
28	A. P.	F	11	F	" 3 "	Nov. 30 "	55	"	R	"
29	E. B.	F	8	B	" 21 "	Dec. 1 "	34	Laryngeal ...	R	"
30	K. S.	F	5	B	Nov. 3 "	" 15 "	38	Faucial ...	R	"
31	I. D.	F	5	C	Oct. 1 "	" 9 "	66	"	R	"
32	E. A. D.	F	13	F	Sept. 18 "	" 1 "	73	"	R	"
33	F. C.	F	5	B	" 28 "	" 2 "	63	"	R	"
34	A. B.	F	3	B	Oct. 11 "	" 27 "	76	Laryngeal ...	R	"
35	J. D.	M	5	I	" 10 "	Nov. 27 "	48	"	R	"
36	R. A.	M	5	J	" 30 "	Dec. 11 "	39	"	R	"
37	M. I.	F	6	B	" 13 "	" 9 "	56	Faucial ...	R	"
38	E. G.	M	4	L	Jan. 2/99	Jan. 31/99	29	Laryngeal ...	D	"
39	A. F.	M	7	K	Oct. 16/98	Dec. 27/98	71	Faucial ...	R	"
40	R. S.	M	5	J	Nov. 3 "	" 24 "	49	"	R	"
41	A. W.	M	11	J	Oct. 22 "	" 25 "	63	"	R	No antitoxin.
42	H. W.	M	10	K	Nov. 2 "	" 31 "	59	"	R	Antitoxin.
43	J. A.	M	4	J	Sept. 23 "	" 24 "	89	Laryngeal ...	R	"
44	G. T.	M	5	J	Oct. 29 "	" 3 "	35	"	R	"
45	R. H.	F	4	B	" 24 "	" 15 "	49	"	R	"
46	W. H.	M	5	I	" 10 "	" 23 "	74	Faucial ...	R	"
47	J. M.	M	8	J	" 25 "	" 14 "	50	Laryngeal ...	R	"
48	S. T.	M	7	S	" 21 "	" 31 "	68	Faucial and Nasal	R	"
49	J. S.	M	7	K	" 30 "	Jan. 1/99	62	Laryngeal ...	R	"
50	W. S.	M	7	J	Nov. 16 "	Dec. 29/98	40	Faucial and Nasal	R	"
51	P. S.	M	3	E	Sept. 19 "	Nov. 4 "	46	Faucial ...	R	"
52	R. B.	F	7	E	Oct. 3 "	" 11 "	37	"	R	"
53	F. H. S.	M	9	H	Nov. 19 "	Jan. 2/99	30	"	R	"
54	S. G.	M	12	R	" 28 "	Dec. 31/98	33	"	R	"
55	L. H.	F	8	F	Sept. 9 "	" 2 "	81	"	R	"
56	L. G.	F	3	F	Oct. 20 "	" 11 "	50	"	R	"
57	D. T.	F	7	A	Nov. 12 "	" 21 "	36	"	R	"
58	W. S.	M	8	R	Oct. 25 "	Jan. 5/99	71	"	R	"
59	H. B.	F	7	M	Nov. 18 "	" 1 "	43	"	R	"
60	W. W.	M	9½	L	" 21 "	" 2 "	42	Laryngeal ...	R	"
61	C. W.	M	5	P	Dec. 2 "	" 6 "	35	"	R	"
62	M. G.	F	3	C	" 16 "	" 10 "	24	Faucial ...	R	"
63	K. S.	F	4	B	Nov. 3 "	" 7 "	65	"	R	"
64	A. A.	F	8	M	Dec. 4 "	" 18 "	45	"	R	"
65	M. G.	F	9	C	" 13 "	" 9 "	21	"	R	"
66	J. W.	M	6	L	Sept. 6 "	Dec. 9/98	84	"	R	"
67	A. A.	M	7	J	Oct. 14 "	" 17 "	60	"	R	"
68	H. P.	M	9	R	Dec. 8 "	Jan. 17/99	40	"	R	"
69	S. H.	M	14	S	Nov. 2 "	Dec. 31/98	59	"	R	"
70	L. O.	F	4	F	Oct. 27 "	" 22 "	68	Laryngeal ...	R	"
71	G. R.	F	4	M	Nov. 22 "	Jan. 18/99	50	"	R	"
72	S. B.	M	4	I	Oct. 18 "	Dec. 10/98	53	Faucial and Nasal	R	"
73	L. F. L.	M	6½	R	Nov. 6 "	Jan. 16/99	71	Faucial ...	R	"
74	S. C.	M	11	H	Dec. 24 "	Feb. 1 "	32	"	R	"
75	L. H.	F	3	M	Oct. 2 "	Jan. 19 "	105	"	R	"
76	J. T.	M	13	H	Dec. 3 "	Feb. 1 "	58	"	R	"
77	G. J.	M	7	L	" 18 "	Jan. 25 "	37	"	R	"
78	A. C.	M	3	E	Oct. 18 "	" 27 "	100	Laryngeal ...	R	"
79	F. G. N.	M	8½	R	Dec. 12 "	" 3 "	20	Faucial ...	R	"
80	M. U.	F	10	F	Nov. 12 "	" 4 "	51	"	R	"
81	S. B.	F	9	M	" 28 "	" 27 "	59	"	R	"
82	G. P.	F	6	A	" 19 "	" 27 "	69	"	R	"
83	A. K. B.	F	6½	B	Dec. 17 "	" 25 "	36	"	R	"
84	H. J.	M	5	S	Nov. 12 "	Dec. 29/98	47	"	R	"
85	J. J.	F	7	B	" 28 "	Jan. 14/99	46	"	R	"



GORE FARM HOSPITAL.—TABLE XII.—*Post-Scarlatinal Diphtheria*,  
1899—*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.
86	H. H.	F	7	B	Dec. 29/98	Feb. 14/99	47	Faucial and Nasal...	R	Antitoxin.
87	S. F.	F	4	A	" 2 "	" 14 "	74	Faucial ...	R	"
88	L. H.	F	7	B	" 24 "	Jan. 29 "	25	" ...	R	"
89	G. W.	M	8	R	" 14 "	Feb. 6 "	54	" ...	R	"
90	A. J.	F	6	B	Oct. 28 "	" 15 "	96	" ...	R	"
91	T. N.	M	4	F	" 18 "	Jan. 25 "	95	" ...	R	"
92	E. B.	F	5	B	Dec. 9 "	Feb. 6 "	60	" ...	R	"
93	W. S.	M	3	M	Oct. 18 "	Jan. 31 "	105	" ...	R	"
94	J. D.	F	4	F	Dec. 20 "	Feb. 24 "	64	Laryngeal ...	R	"
95	A. B.	F	5	W	" 27 "	" 27 "	58	Faucial ...	R	"
96	F. C.	F	5	C	" 3 "	" 26 "	87	" ...	R	"
97	A. K.	M	6½	I	" 31 "	" 13 "	41	" ...	R	"
98	M. C.	F	9	B	" 29 "	Mar. 9 "	70	Laryngeal ...	R	"
99	L. L.	F	6	F	" 3 "	" 6 "	90	Faucial ...	R	"
100	H. G.	M	9	I	Jan. 2/99	Feb. 14 "	43	" ...	R	"
101	D. F.	F	4	B	Nov. 7/98	Jan. 16 "	70	" ...	R	"
102	T. H.	M	6	I	Dec. 10 "	" 23 "	44	" ...	R	"
103	F. H.	M	7	H	Nov. 4 "	Feb. 22 "	110	" ...	R	"
104	G. H.	M	3	R	" 27 "	Jan. 26 "	59	Faucial and Nasal...	R	"
105	F. A.	M	10	L	Mar. 15/99	Apr. 16 "	31	Faucial ...	R	"
106	N. T.	F	8½	F	Feb. 16 "	" 18 "	61	" ...	R	"
107	C. S. C.	M	4	B	Jan. 25 "	" 8 "	73	Laryngeal ...	R	"
108	F. W.	F	3	B	Feb. 22 "	Mar. 25 "	31	Faucial ...	R	"
109	C. C.	M	6	B	Apr. 2 "	May 9 "	37	" ...	R	"
110	A. D.	M	5	L	Mar. 4 "	Apr. 25 "	52	" ...	R	"
111	G. K.	F	8	B	" 6 "	May 8 "	63	" ...	R	"
112	M. W.	F	4	B	" 16 "	" 9 "	54	" ...	R	"
113	H. P.	F	4	B	" 6 "	" 8 "	63	" ...	R	"
114	S. W. C.	M	5	B	Feb. 15 "	Apr. 17 "	54	" ...	R	"



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

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		Grove.		South-Eastern.		Park.		Brook.		Northern.		Gore Farm.		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.	Cases.	Deaths.																											
Faucial and Nasal Cases.	Males	...	5	0	3	0	2	8	0	9	0	21	0	0	0	4	0	25	2	16	0	84	0	75	1	258	5	1.9																									
	Females	...	17	1	5	0	17	3	12	0	15	0	30	1	0	11	0	11	2	28	1	124	1	80	1	350	10	2.8																									
	Total	...	22	1	8	0	25	5	20	0	24	0	51	1	0	15	0	36	4	44	1	208	1	155	2	608	15																										
Mortality per cent.																												4.5	0		20		0		0		1.9		0		0		11.1		2.2		0.4		1.2				2.4
Laryngeal Cases.	Males	...	2	0	4	2	0	2	1	3	0	1	0	1	1	0	0	4	2	4	0	7	0	24	1	52	7	13.4																									
	Females	...	0	0	0	0	1	0	5	0	3	1	1	0	0	2	1	1	0	1	0	7	1	11	0	32	3	9.3																									
	Total	...	2	0	4	2	1	0	7	1	6	1	2	0	1	2	1	5	2	5	0	14	1	35	1	84	10																										
Mortality per cent.																												0	50.0		0		14.2		16.6		0		100.0		50.0		40.0		0		7.1		2.8				11.9
All Cases.	Males	...	7	0	7	2	8	10	1	12	0	22	0	1	1	4	0	29	4	20	0	91	0	99	2	310	12	3.8																									
	Females	...	17	1	5	0	18	3	17	0	18	1	31	1	0	13	1	12	2	29	1	131	2	91	1	382	13	3.4																									
	Total	...	24	1	12	2	26	5	27	1	30	1	53	1	1	17	1	41	6	49	1	222	2	190	3	692	25																										
Mortality per cent.																												4.1	16.6		19.2		3.7		3.3		1.8		100.0		5.8		14.6		2.0		0.9		1.5				3.6







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

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		Grove.		South-Eastern.		Park.		Brook.		Northern.		Gore Farm.		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.	Cases.	Deaths.	
1st week	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0.0
2nd "	4	0	0	0	4	0	0	0	1	0	0	0	0	0	2	0	0	4	0	0	0	0	0	0	1	3	16.6
3rd "	4	0	0	0	5	0	0	0	5	0	0	0	0	0	4	0	0	4	0	0	0	0	0	2	0	1	35.5
4th "	3	0	0	0	2	0	0	0	2	0	0	0	0	0	4	0	0	0	2	0	0	0	0	5	0	0	0.0
5th "	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	2.6
6th "	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	0.0
7th "	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	0.0
8th "	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	1.2
9th "	4	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	3.8
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	2.9
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	2.7
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	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	9.5
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	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	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	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	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	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	0.0
20th ", and over	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total ...	25	1	8	0	25	5	20	0	24	0	51	1	0	0	15	0	36	4	44	1	208	1	155	2	608	15	2.4
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	0.0
2nd "	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	66.6
3rd "	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	28.5
4th "	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	16.6
5th "	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	12.5
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	8.3
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	14.2
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	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	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	5.0
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	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	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	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	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	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	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	0.0
18th "	0	0	0	0	0	0	0	0	0	0	0	0	0														



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

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		Grove.		South-Eastern.		Park.		Brook.		Northern.		Gore Farm.		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.	Cases.	Deaths.	
1st week ...	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0.0
2nd " ...	4	0	0	0	4	3	0	0	1	0	2	0	1	1	3	1	5	0	1	0	0	0	0	0	21	5	23.8
3rd " ...	5	0	1	0	2	1	6	1	2	1	7	0	0	0	2	0	4	0	2	0	1	0	3	0	35	3	8.5
4th " ...	3	0	1	1	7	0	5	0	5	0	12	0	0	0	4	0	4	0	5	0	18	0	6	0	70	1	1.4
5th " ...	2	0	1	0	2	0	3	0	2	0	10	1	0	0	1	0	7	1	2	0	34	0	26	1	84	3	3.5
6th " ...	1	0	1	0	3	0	0	0	4	0	5	0	0	0	2	0	4	0	3	0	30	1	25	0	83	1	1.2
7th " ...	1	0	3	1	0	0	3	0	5	0	4	0	0	0	3	0	6	1	4	0	39	1	25	0	91	3	3.2
8th " ...	2	0	1	0	2	1	3	0	2	0	3	0	0	0	0	0	6	1	6	0	36	0	30	1	91	3	3.2
9th " ...	4	1	2	0	2	0	0	0	3	0	3	0	0	0	0	0	2	0	5	0	21	0	32	1	74	2	2.7
10th " ...	0	0	0	0	1	0	2	0	2	0	1	0	0	0	0	0	1	1	5	1	14	0	12	0	38	2	5.2
11th " ...	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0	14	0	20	0	39	0	0.0
12th " ...	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	2	2	2	0	8	0	7	0	52	2	9.0
13th " ...	2	0	1	0	0	0	2	0	1	0	2	0	0	0	0	0	0	0	4	0	3	0	3	0	18	0	0.0
14th " ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	4	0	0.0
15th " ...	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	6	0	0.0
16th " ...	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	5	0	8	0	0.0
17th " ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0.0
18th " ...	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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	1	0	1	0	0.0
20th " and over	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0
Total ...	24	1	12	2	26	5	27	1	30	1	53	1	1	1	17	1	41	6	49	1	222	2	190	3	692	25	3.6

All Cases.



TABLE XVI.—Cases and Incidence.

	Eastern.		North-Eastern.		North-Western.		Western.		South-Western.		Fountain.		Grove.		South-Eastern.		Park.		Brook.		Northern.		Gore Farm.		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.	Cases.	Deaths.	
Faucial and Nasal Cases.	1	0	0	0	0	0	1	0	0	0	4	0	0	0	1	0	4	1	3	0	15	0	23	0	56	1	1.7
	6	1	0	0	0	0	5	0	1	0	0	0	0	0	1	0	3	0	0	0	22	0	12	0	56	1	1.7
	2	0	0	0	0	0	2	0	1	0	6	0	0	0	2	0	6	2	0	0	19	0	2	0	47	2	4.2
	1	0	0	0	0	0	3	0	0	0	4	0	0	0	1	0	7	0	1	0	11	0	4	0	36	0	0.0
	4	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	6	0	8	0	6	0	32	1	3.1
	4	0	0	0	0	0	3	0	0	0	4	0	0	0	4	0	1	0	2	0	18	0	8	0	47	1	2.1
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	1	13	0	9	1	36	2	5.5
	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	3	0	6	0	14	0	16	0	48	1	2.0
	2	0	0	0	0	0	1	0	4	0	3	0	0	0	2	0	0	0	11	0	27	1	15	0	66	1	1.5
	0	0	3	0	1	1	1	0	0	0	0	0	0	0	0	0	3	1	2	0	28	0	12	0	53	2	3.7
	0	0	0	0	0	0	0	0	2	0	13	1	0	0	0	0	5	0	2	0	29	0	20	0	68	2	2.9
	1	0	0	0	0	0	2	0	4	0	7	0	0	0	0	0	2	0	1	0	11	0	28	1	63	1	1.5
Total	22	1	8	0	25	5	20	0	24	0	51	1	0	0	15	0	36	4	44	1	203	1	155	2	608	15	2.4
Laryngeal Cases.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	1	7	1	14.2
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	1	0	5	1	29.0
	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	7	0	0.0
	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	0	7	1	14.2
	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	1	23.3
	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	2	0	7	1	14.2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	4	0	0.0
	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	1	0	1	0	2	0	6	2	33.3
	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	3	0	1	0	7	0	0.0
	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3	0	0.0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	4	0	0.0
	0	0	1	1	0	0	2	1	1	0	1	0	1	1	0	0	0	0	0	0	1	0	11	0	19	3	15.2
Total	2	0	4	2	1	0	7	1	6	1	2	0	1	1	2	1	5	3	5	0	14	1	35	1	84	10	11.9
All Cases.	1	0	0	0	0	0	1	0	3	0	4	0	0	0	1	0	4	1	3	0	16	0	29	1	63	2	3.1
	6	1	1	0	4	0	5	0	1	0	2	0	0	0	1	0	3	0	0	0	23	1	13	0	61	2	3.2
	3	0	0	0	4	0	3	0	2	0	6	0	0	0	2	0	6	2	4	0	21	0	3	0	54	2	3.7
	2	0	0	0	2	1	3	0	0	0	4	0	0	0	1	0	9	2	4	0	12	0	5	0	43	1	2.3
	4	0	0	0	0	1	3	0	0	0	3	0	0	0	0	0	2	1	6	0	8	0	7	0	35	2	5.7
	4	0	1	1	3	1	3	0	1	0	4	0	0	0	4	0	1	0	2	0	20	0	10	0	53	2	3.7
	1	0	0	0	0	0	1	0	0	0	2	0	0	0	1	1	3	0	7	1	15	0	10	1	41	1	2.4
	0	0	0	0	3	1	0	0	3	1	2	0	0	0	3	1	0	0	1	1	16	0	18	0	54	4	7.4
	2	0	3	0	2	0	1	0	5	0	4	0	0	0	2	0	0	0	11	0	30	1	16	0	76	1	1.3
	0	0	0	0	1	1	1	0	3	0	1	1	0	0	0	0	4	1	2	0	28	0	17	0	50	2	3.3
	0	0	4	0	3	1	1	0	3	0	13	1	0	0	0	0	5	0	2	0	21	0	23	0	75	2	2.6
	1	0	1	1	0	0	5	1	6	0	8	0	1	1	0	0	2	0	1	0	12	0	39	1	78	4	5.1
Total	24	1	12	2	26	5	27	1	30	1	53	1	1	1	17	1	41	6	49	1	222	2	190	3	692	25	3.6



# SUMMARY OF THE ANTITOXIN TREATMENT OF DIPHTHERIA DURING THE YEAR 1899.

The following tables are compiled on the same principles as in the report for 1898. Deaths from all causes are included, even if complicated by other infectious disease :—

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... ..	1,320	216	16·3	1,351	217	16·0
North-Western ...	493	130	26·3	843	147	17·4
Western ... ..	970	115	11·8	991	117	11·8
South-Western ...	513	77	15·0	629	78	12·4
Fountain ... ..	841	92	10·9	902	93	10·3
South-Eastern... ..	936	177	18·9	1,070	182	17·0
Park ... ..	1,098	158	14·4	1,239	163	13·2
Brook ... ..	867	117	13·5	990	129	13·0
Total ... ..	7,038	1,082	15·38	8,015	1,126	14·05

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	46	35·1	132	47	35·6
North-Western ...	79	17	21·5	88	20	22·7
Western ... ..	85	25	29·4	87	27	31·0
South-Western ...	52	12	23·0	53	12	22·6
Fountain ... ..	56	16	28·5	56	16	28·5
South-Eastern ...	95	32	33·7	95	32	33·7
Park ... ..	104	30	28·9	109	35	32·1
Brook ... ..	67	12	17·9	67	12	17·9
Total ... ..	669	190	28·4	687	201	29·3



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 ... ..	70	34	48·5	70	34	48·5
North-Western ...	53	22	41·5	57	23	40·3
Western ... ..	24	15	62·5	24	15	62·5
South-Western ...	30	8	26·7	30	8	26·7
Fountain ... ..	48	16	33·3	48	16	33·3
South-Eastern ...	67	28	41·8	67	28	41·8
Park ... ..	45	15	33·3	46	16	34·7
Brook ... ..	40	9	22·5	40	9	22·5
Total ... ..	377	147	39·1	382	149	39·1

ON THE OUTBREAK OF ENTERIC FEVER AND ENTERITIS WHICH OCCURRED AT LEAVESDEN ASYLUM DURING THE SPRING AND SUMMER OF 1899, CONSIDERED FROM A CLINICAL POINT OF VIEW.

(By W. A. DENSHAM, formerly Assistant Medical Officer, Leavesden Asylum.)

For some years periodical outbreaks of diarrhœa have occurred among the patients. There is no record of any special symptoms accompanying the diarrhœa, and there has hitherto been apparently no cause to suspect the existence of typhoid fever.

In April and May last diarrhœa set in with about its usual severity, and a large number of patients were attacked. The cases were put under observation and it soon became apparent that the illness was something more than simple, diarrhœa. Several of the patients were evidently seriously ill, with high or irregular temperatures persisting for some weeks, followed by slow convalescence. There was at this time no undoubted case of enteric fever, but Dr. Goodall found that the blood of several of the suspicious cases reacted positively to the Widal test. An increasing number of patients continued to fall ill, and on June 9th an isolation block containing three large wards was opened, all patients suffering from diarrhœa and illness of a doubtful character being transferred to these wards.

The isolation block remained open until August 18th, a period of about 10 weeks, and during this time 137 patients were treated, 97 males and 40 females; of this number five males and three females belonged to the staff of the asylum. There were 24 deaths. Fifteen of the cases were found to be suffering from phthisis and other diseases not connected with the outbreak. The remainder may be conveniently classified as follows:—



1. Enteric fever.
2. Enteritis. Under this head come the large majority of the cases isolated.
3. Diarrhœa, with slight initial pyrexia.
4. Diarrhœa, continuous and intractable, with no other symptoms or physical signs.

1. To take first the cases of enteric fever: 19 altogether were notified, 15 patients and four staff.

Of the latter, Nurse E. had a typical attack of enteric, with hæmorrhage and a relapse. The blood gave a good reaction to Widal's test with a dilution of 1 in 40. Gravedigger H. was less typically enteric. He had continuous pyrexia for nearly three weeks, the temperature rising in the second week to 105·6 degrees; pea-soup stools and some doubtful spots, but no distension or tenderness of the abdomen, and no apparent enlargement of the spleen. His blood gave no reaction on two occasions, and a doubtful reaction on the third, with a 1 in 20 dilution.

Nurse B. gave a history of a doubtful illness of three weeks' duration. When first seen her temperature was normal, and there was nothing to help in the diagnosis. Her blood gave a good reaction down to 1 in 40.

Laundrymaid D.'s history was also very doubtful. For some days she had a continuous temperature, with numerous rose-red spots and a thickly-coated dry and brown tongue. She was accordingly notified as a case of enteric, but on the sixth day of observation her temperature fell to normal, and she quickly recovered. Unfortunately her blood was not tested.

For a few days after the isolation block was opened there was no definite case of enteric fever among the imbeciles isolated. The blood of three gave a positive reaction. Of these, two were, from the history, probably convalescent enterics, one, whose illness dated from April 19th, being the earliest recorded case. The third had a history of only one week's illness with irregular pyrexia, and resembled in every way the cases to be described later on. His blood, however, gave a strong Widal reaction on two occasions.

After a few days clinical evidences began to be more abundant, and the death on June 23rd of the patient Gooch rendered the presence of enteric fever among the imbeciles certain.

This patient was found to have lost his appetite on June 15th, his temperature being 102·4 degrees. As the temperature continued high, he was transferred on the 17th to isolation. On admission his general condition was good, and he was cheerful. There was no diarrhœa, the tongue was fairly clean, and nothing could be made out in the abdomen. On the 22nd the temperature rose to 104·2 degrees, and he became very restless, complaining of pain in the right hypochondrium. The abdomen was a little distended, there was no tenderness, and the patient was inclined to smile if pressure was applied. He died on the following day, and there was found to be acute general peritonitis following extensive ulceration. This case illustrates the difficulty experienced in determining the exact condition of imbecile patients.

Three other cases diagnosed as enteric died, and in all typical lesions were found. In one of these (Palmer) the temperature kept pretty constantly at 104 degrees, with much delirium. Cold baths every four hours were tried, with marked effect on the pulse and delirium, but death took place on the twelfth day. In another fatal case (Cross) the administration of a mixture containing 3 grs. of lead acetate and 15 minims of acetate of morphia for diarrhœa had a serious effect. After four doses he became gradually cyanosed, breathing short and gasping, and pulse extremely feeble. The medicine was stopped, and he revived, dying twelve days later from general peritonitis following perforation.



Among the recovery cases was a female patient (Hoyle), who apparently suffered from perforation followed by general peritonitis. It had been extremely difficult to keep her in bed, and one day in the third week of illness she became suddenly collapsed after an excursion to the window. Her face was pale, eyes sunken, pulse 132 running. The temperature fell 3 degrees, and she complained of great pain in the epigastrium. There was marked tenderness in the right iliac region, and breathing was entirely thoracic. A little later the abdomen became distended, and the tenderness general. Vomiting commenced, and continued with the other symptoms for four days. She was put on nutrient enemata with a liberal allowance of brandy. On the fourth day improvement commenced, and she ultimately recovered. The remaining recovery cases included one of double pneumonia in the first week, and a case of thrombosis of the left femoral vein.

2. The majority of the cases isolated, and the more interesting because of the unusual character of the illness, come under the heading enteritis. The numbers were roughly 80, males and females, and among these there were 18 deaths.

The chief symptoms observed were the following:—

*Diarrhœa*.—This, although copious and continued in some cases, was not by any means a constant symptom. It occurred at the onset in a majority of cases, and first drew attention to the fact that the patient was ill. Many were constipated throughout. This is noticeable in the four members of the male staff ward, none of whom had any diarrhœa. The discharges were in many cases of a moderately brown colour, and mostly very offensive. They contained no blood.

*Vomiting*.—This was only observed in a few cases, and was not a prominent symptom.

*Sweating* was very noticeable, and was often profuse. It occurred at all times of the day, and continued often after the temperature had fallen and convalescence commenced.

*Headache* was present in some cases, but was difficult to determine in the imbecile patients.

*Abdominal pain* was common, but not marked; tenderness was only present in a few instances. Among other constant features were a foul breath and coated tongue: the latter was especially marked, often being dry and brown.

The *pulse* was markedly compressible.

The *temperature* showed great variations, ranging from pyrexial periods of 24 hours up to 14 days.

One of the most striking features among these cases was the tendency to *lobar pneumonia*, which affected especially the upper lobes. There were 12 definite cases with this complication, and of these eight died. In some of these the lungs were primarily tuberculous, with an acute pneumonia grafted on to the chronic condition. One or two cases of ordinary acute pneumonic tuberculosis are not included. The most severe cases of enteritis, and especially those complicated with pneumonia, occurred as a rule among the debilitated and older patients.

*Post-mortem* examinations were made in the majority of the fatal cases. A more or less chronic inflammation of the mucous membrane of the stomach and small and large intestines was constantly found. In some cases the condition was more acute, especially in the small intestine; in one or two instances there were some minute follicular ulcers, but this was not common. In addition to the pneumonia mentioned above, other noticeable features were enlargement of the mesenteric glands, and in some cases of the spleen.



Following are the notes of four cases, with temperature charts. These together are typical of all the rest. The notes are very scanty, but few of the patients could answer questions or give any account of their illness.

F. J., 28, male. Imbecile. There was a history of copious diarrhoea for three days before admission. June 11th, no diarrhoea; tongue coated, face flushed, apparently no abdominal pain or tenderness. 14th, loose yellow motions. 17th, sweating freely, diarrhoea stopped. 22nd, sweating freely. 29th, discharged.

E. M., 24, female. Chronic mania. History of diarrhoea. On admission, June 13th, face flushed, tongue coated white, little dry; pulse small and compressible. Patient complains of pain in stomach; abdomen rather rigid, and palpitation appears painful. Taking food badly. The condition remained the same until the 24th, when her temperature became normal, and the motions normal; they had been loose previously, but there was no diarrhoea. She was discharged on June 30th in her usual health.

G. C., 66, male. Dementia. This case is included chiefly because the blood gave a strong Widal reaction. Some initial diarrhoea caused him to be put under observation. When first seen, there were no symptoms. His pulse was good and tongue clean. He complained of a little headache for two days, and was a little low-spirited, but was discharged a week later in his normal condition.

G. J., 24, male. Imbecile. Illness commenced on June 13th, with diarrhoea. On admission, 17th June, this patient was obviously very ill; the face was flushed, the lips and teeth covered with sordes, and the tongue thickly coated. There was apparently no pain or tenderness in abdomen; spleen not enlarged. Nothing could be made out in the chest, but air entry very poor all over. Pulse small but regular. 22nd, pulse good. Tongue dry and brown. General condition the same. 24th, pulse markedly dicrotic. Motions loose and very offensive. July 3rd, much better; appetite good; pulse better. 10th, tongue still lightly coated. 18th, discharged in usual health.

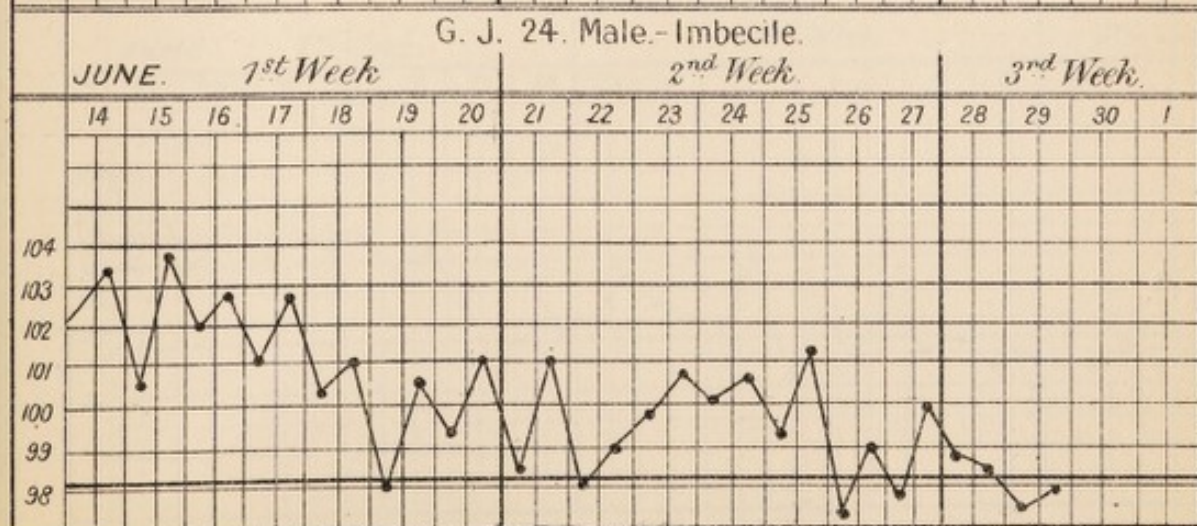
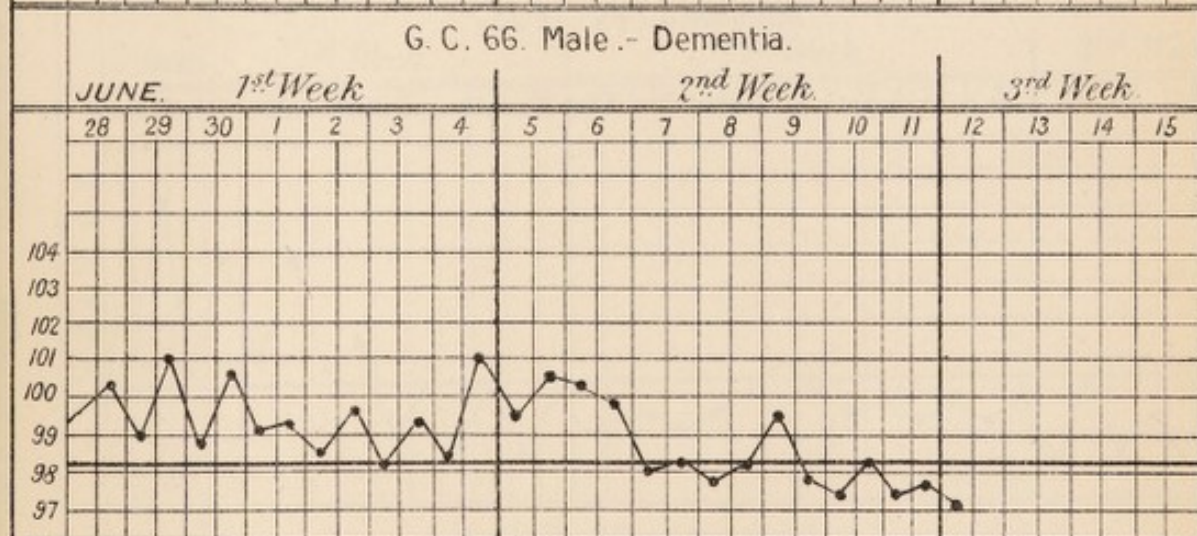
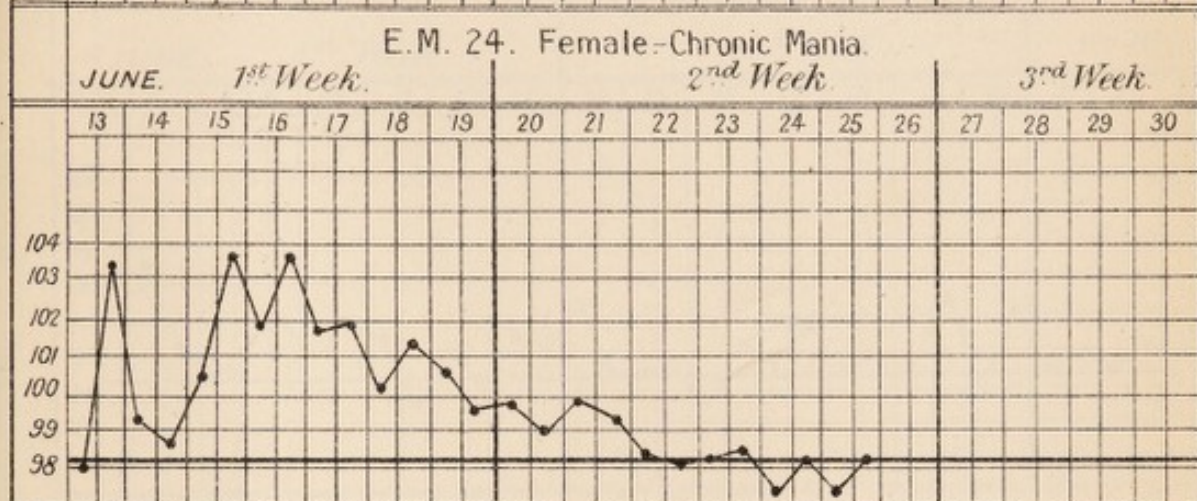
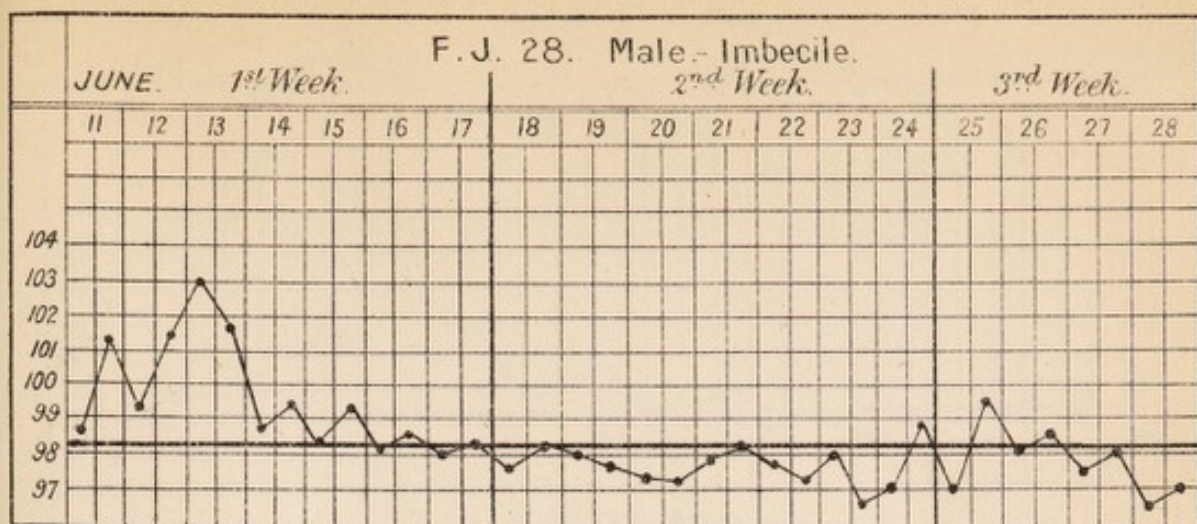
The notes of the four cases which occurred among the male staff of the asylum are rather fuller, and correspondingly interesting.

G. B., 33, fireman. Illness commenced June 15th with headache and feverishness, but patient had been off his food for a week previously. June 17th, bed. 18th, epistaxis. On admission, June 19th, face flushed, pulse full and regular. Tongue dirty white, moist. Complains of severe headache and pains and stiffness at back of neck. There is some tenderness over right parotid, nothing abnormal in chest or abdomen. No diarrhoea. 21st, about the same; tongue very dirty and breath offensive. Stiffness of neck better; profuse epistaxis after blowing nose. No pain or tenderness in abdomen. 24th, the same. Right conjunctivitis. 26th, better. Temperature falling; tongue the same. 29th, headache gone. Bowels opened with aperient. July 3rd, sleeps well; takes well; tongue cleaner. 10th, discharged.

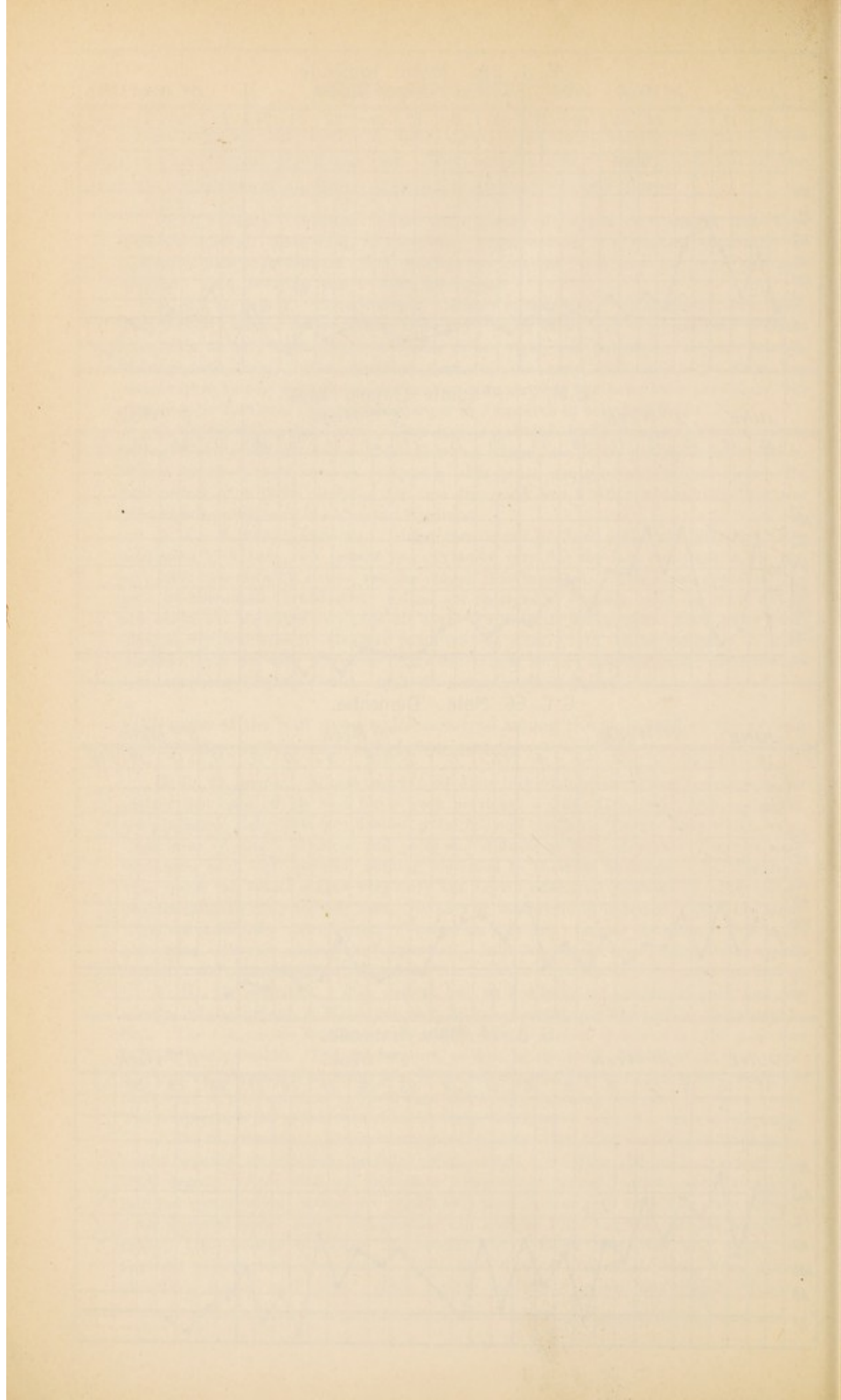
F. H., 19, attendant. This patient had no headache or abdominal pain, and was constipated throughout. When first seen he was cheerful, and objected to being kept in bed. The tongue was thickly coated and the breath extremely offensive; the pulse was full and compressible. The temperature, as seen by the chart, was of an unusual type. The patient complained of some pain in the left scapular region in the second week, but there were no physical signs. The tongue and breath remained the same for three weeks. The temperature fell to sub-normal in the fourth week, and continued so until his discharge.

J. D., 24, attendant. Illness commenced on June 12th with vomiting and headache, loss of appetite, constipation; no pains; some cough. On June 15th his temperature was 100.2 degrees. June 16th, on admission, temperature normal, patient cheerful; pulse full and compressible; colour not particularly good; slight pain in left hypochondrium; a few doubtful spots. Later: temperature has risen to 103.8 degrees; patient perspiring freely. 17th, patient still looks ill; tongue dirty; slight tenderness over spleen, no apparent enlargement; spots faded. 19th, good deal of abdominal pain. 21st, patient cheerful; tongue still dirty. 24th, tongue still dirty brown, and breath offensive.

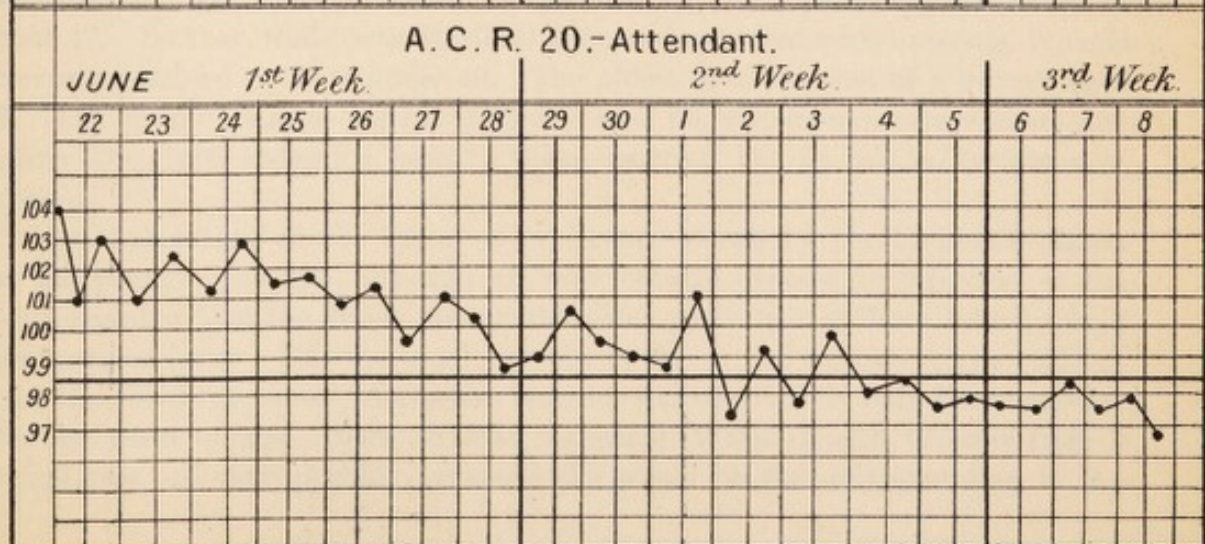
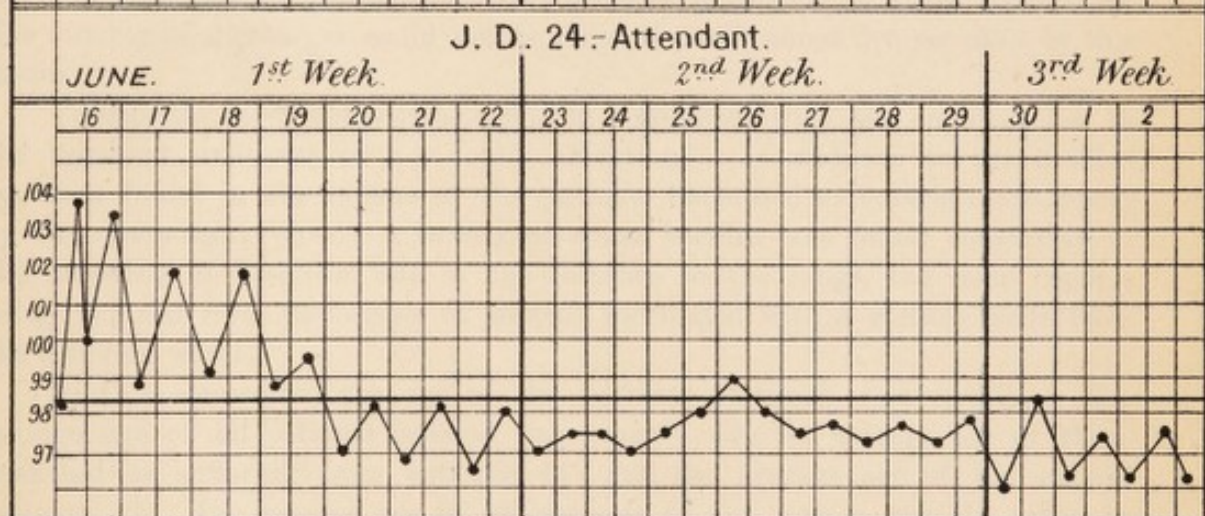
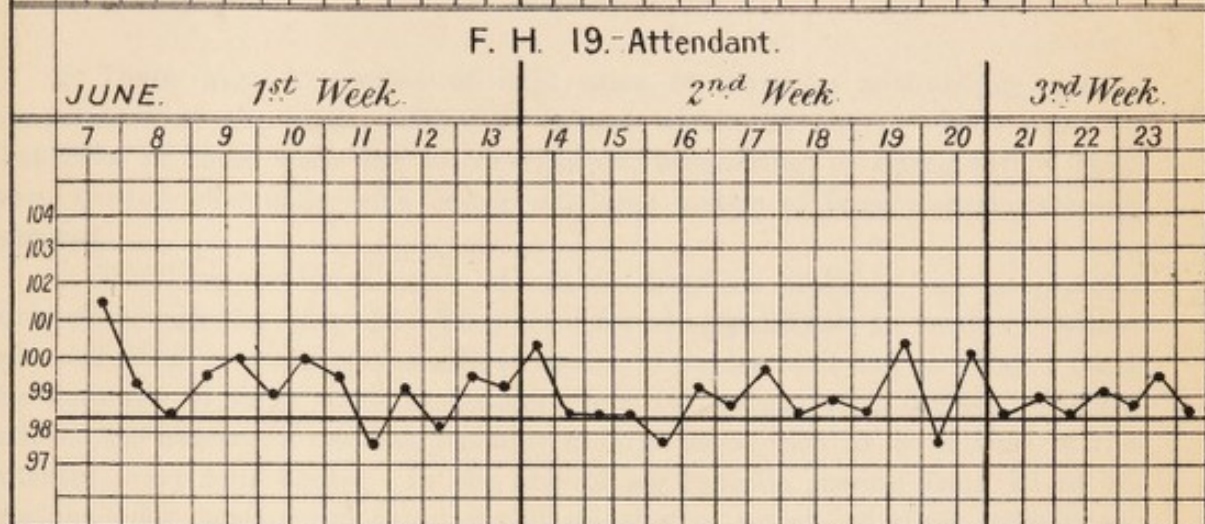
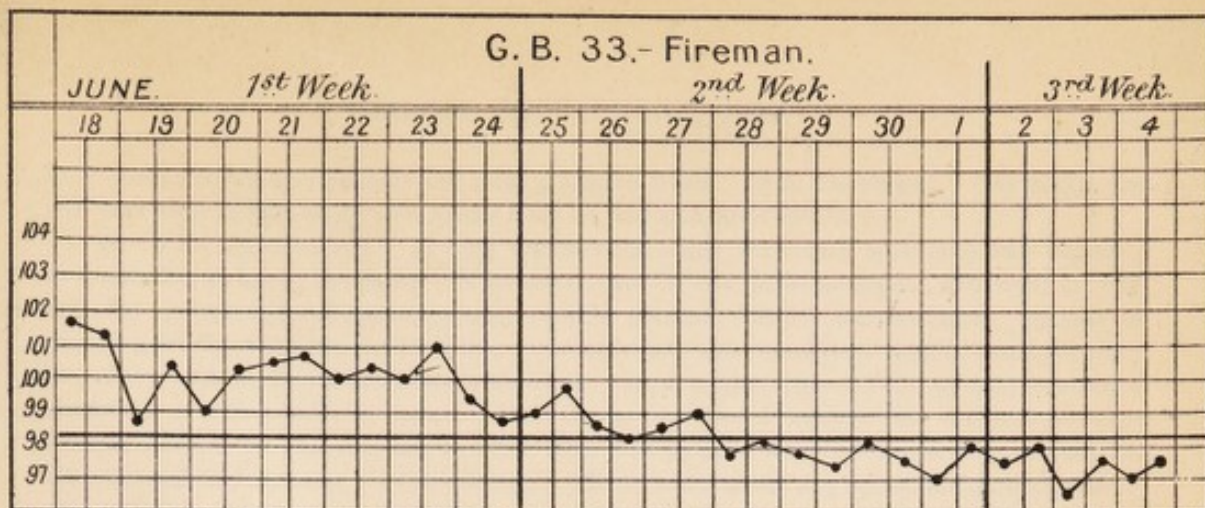




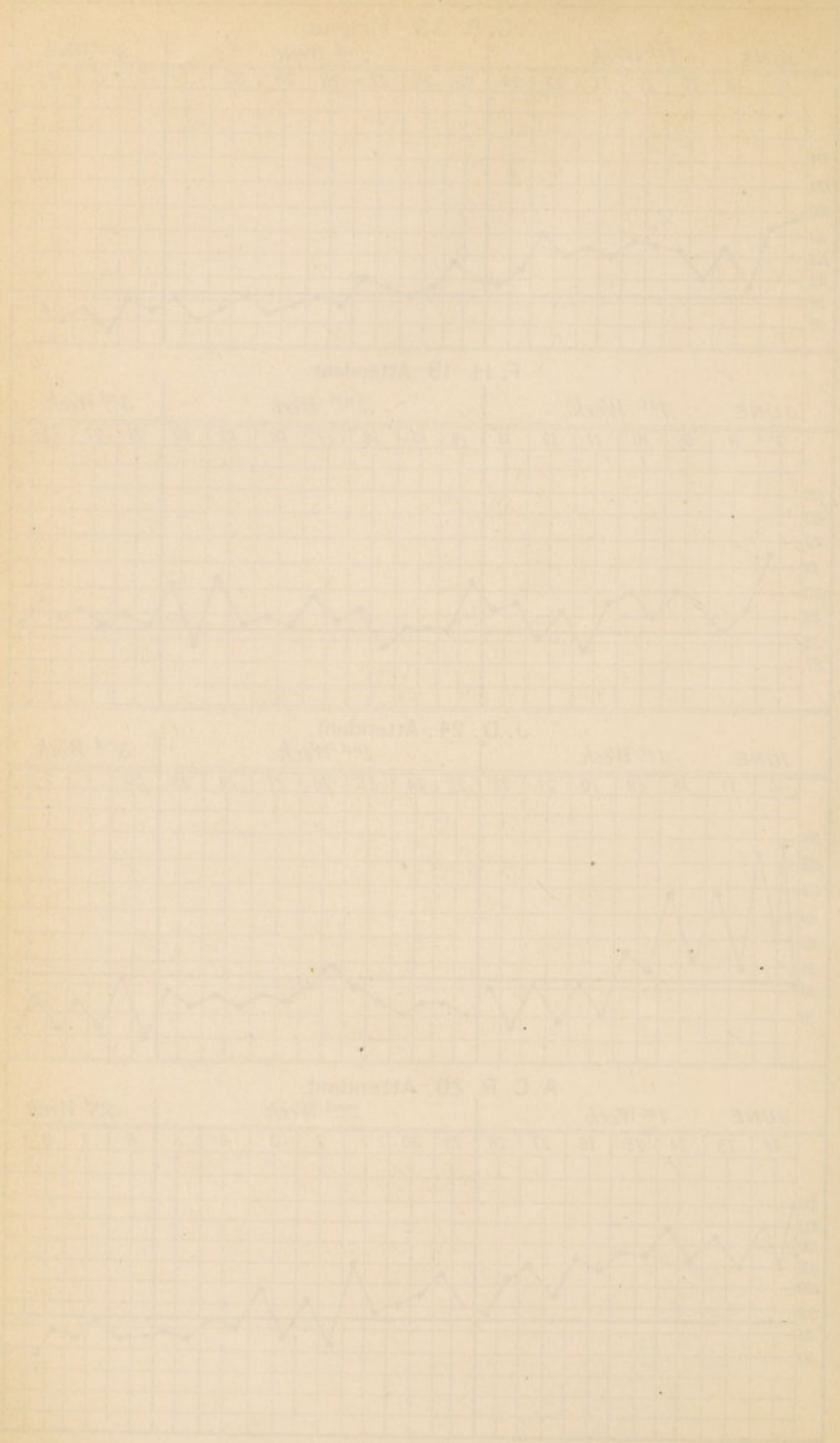














July 10th, getting up; patient still weak; tongue clean. 13th, discharged. Convalescence was very slow in this case; two weeks later he was still unfit for duty.

A. C. R., 20, attendant. Attack commenced June 18th with shivering and hot fits; no headache, sickness, or pains. Two days later he had some headache, and went to bed the day following. Appetite good, bowels normal. 22nd, on admission, patient is sweating freely, but does not look ill; some epistaxis this morning; tongue coated white; no pains; nothing found in chest or abdomen. 23rd, slight rigor. 27th, patient continues cheerful, sweating still at times. The illness continued uneventful, the temperature became normal on the 4th, and a week later the patient was discharged in good health. He returned to duty after a week's leave. There were never any spots, abdominal tenderness or fulness.

3. There were a number of mild cases of diarrhœa with slight rise of temperature at the onset, falling to normal within 24 hours. It is probable that most of these were due to constipation, over-eating, or eating filth. They were treated effectually with castor oil, large masses of feces sometimes being removed.

4. The long-continued cases of simple diarrhœa probably had no especial connection with the epidemic. They were found very difficult to treat. Creasote was successful in some of the milder cases: in the worst it had no effect. Salol and bismuth in large doses (a drachm every two hours) were useless. Opium reduced the number of motions, but only in large doses, such as 20 minims of the tincture every four hours. In the case of an imbecile passing from 10 to 15 motions a day, large rectal injections of solution of nitrate of silver were tried. The number of discharges could not be reduced below about five *per diem* by this means.

Perhaps the most noteworthy point in connection with the epidemic lies in the apparent existence of a "double infection." In addition to the bacillus typhosus found in the organs of the patients diagnosed as enteric (*vide* report by Dr. Cartwright Wood), a variety of colon bacillus was found constantly in the intestines and spleen, and in one instance in the lungs, the same bacillus being obtained from the organs of animals inoculated with a culture made from the drinking water.

In this connection the age of the patients attacked is interesting. The average age of all patients isolated was roughly 42; the average age of those described as suffering from enteritis 44; and the average age of the enteric patients 23. The average age of all patients in the asylum may be taken as about 47. So that, while patients of all ages were attacked with enteritis, typhoid fever was confined to those under 40. The oldest case was that of a woman aged 39. The blood of a male patient (Cooper), aged 66, whose temperature chart and history are given, showed a positive Widal reaction, but he had no symptoms of typhoid.

In explanation of the apparent preference shown by the bacillus typhosus for the younger patients, although all were equally exposed to infection, it has been suggested that the illness among the older patients may have been typhoid in a modified form. This was not borne out by the clinical or *post-mortem* evidence or by the blood reactions. A positive reaction was obtained in only three patients over 40 years of age. One of these, a female (Watson), aged 67, was from a clinical point of view possibly typhoid: she would be the only exception to the



statement made above. The illness of the other two bore no resemblance to typhoid fever.

Presuming the existence of this "double infection," it is not easy to say definitely under which heading the illness of the male attendants should be classed. The Widal reaction should have been useful here, but it cannot be said that the results were of much service in the diagnosis of these cases.

#### OBSERVATIONS ON THE SERUM REACTION IN CERTAIN OF THE CASES OF FEVER OCCURRING AT THE LEAVESDEN ASYLUM.

(By E. W. GOODALL, M.D. Lond., Medical Superintendent of the Eastern Hospital.)

In the recent outbreak of fever at the Leavesden Asylum I examined the serum reaction in 53 cases.

In all these cases I tested the agglutinative property of the serum on a specimen of typhoid bacillus kindly given to me by Dr. Cartwright Wood (B. typh. 39 in the subjoined table). This organism was obtained from a case of enteric fever that died in a London hospital. It would, perhaps, have been better to have used the particular variety of B. typhosus isolated by Dr. Wood from one of the Leavesden cases; but as this organism was not obtained till after I had tested most of the cases with B. typh. 39, I thought it advisable to keep to that variety in the remaining cases. In some of the 53 cases I also tested the serum reaction with four other bacilli. In 45 cases the bacillus employed was one given me by Dr. Wood (called B. Leavesden 6 in the table) which he had isolated from one of the fatal cases of fever (not enteric) at the asylum. This bacillus was smaller and less active than the typhoid bacillus. In 37 cases I examined the effect of the serum on a specimen of Gaertner's B. enteritidis given me by Dr. Wood (B. Gaertner W. in the table). In 19 of the cases I also tested the reaction on two bacilli kindly given me by Dr. Durham, of Cambridge (Morseele and Gaertner D. in the table); one was a variety of Gaertner's bacillus and the other a similar organism.

The cases I examined may clinically be divided into four groups:—

1. Cases, 14 in number, which, either from definite symptoms or *post-mortem* evidence, were certainly enteric fever. Four were fatal.
2. Cases, 14, of pyrexia of some duration, "continued fever," with no definite clinical evidence of enteric fever. None of the cases I examined were fatal.
3. Cases, 11, of a similar nature, but having diarrhœa. One of these was fatal.
4. Five cases of pneumonia (two fatal); four of phthisis (two fatal); three of simple diarrhœa; one of cancer of the stomach (fatal); and one of pleurisy with effusion.

The dilution of the serum was effected by means of graduated capillary tubes in the manner recommended by Mr. Pakes. In the following table the results are



shown, no reaction being reckoned to be positive unless complete clumping of the bacilli took place within half an hour with a 1 in 40 dilution of serum :—

Bacillus ... ..	Typh. 39.		Leavesden 6.		Gaertner W.		Morseele.		Gaertner D.	
	+	—	+	—	+	—	+	—	+	—
Nature of reaction with a } 1 in 40 dilution ... }										
Nature of case clinically, &c.—										
1. Enteric Fever ... ..	9	5	0	12	1	10	0	5	0	5
2. Pyrexia ... ..	3	11	0	14	0	13	0	6	0	6
3. Pyrexia with Diarrhoea...	3	8	0	9	0	7	0	5	0	5
{ Pneumonia ... ..	0	5	0	3	0	2	...	...	...	...
{ Phthisis ... ..	0	4	0	4	0	2	0	1	0	1
4. Diarrhoea ... ..	0	3	0	2	0	2	0	2	0	2
{ Carcinoma of Stomach ...	0	1	0	1	...	...	...	...	...	...
{ Pleuritic Effusion ...	0	1	...	...	...	...	...	...	...	...
Total ... ..	15	38	0	45	1	36	0	19	0	19

It will be seen that, except in one instance, no positive reaction was obtained with any of the bacilli except the typhoid bacillus. The exception was in a male patient, aged 21 years, who had clinically an attack of enteric fever. His blood was tested twice, at intervals of 23 days. On the first occasion a 1 in 40 dilution was positive with *B. typh.*, but negative with a 1 in 20 of *B. Leavesden*. On the second occasion it was tested with all five bacilli. With the typhoid bacillus a 1 in 40 dilution caused only partial clumping, and a 1 in 20 was negative with both the bacilli termed Morseele and Gaertner D. But with the Leavesden bacillus a good reaction was obtained with a 1 in 40 dilution of the serum, though with a 1 in 200 there was no reaction.

In none of the cases which clinically were certainly not enteric fever (class 4) was there a positive reaction with the *B. typh.* Of the 14 enteric fever cases examined nine gave a positive and five a negative reaction. Of the five negative cases two were fatal, and the characteristic intestinal lesions of enteric fever were found *post mortem*. In the one case the serum was examined only once, in the other it was examined twice, at intervals of 20 days, with a negative result on the first occasion and an imperfect clumping with a 1 in 20 dilution on the second. In one of the three remaining negative cases a complete reaction was obtained with a 1 in 20 dilution, and a partial with a 1 in 40, the blood being tested once only. In the second case the serum was examined three times at intervals of 19 and six days. On the first occasion it reacted strongly in 1 in 20 dilution, incompletely in 1 in 40; on the second occasion incompletely in 1 in 20, not at all in 1 in 40; and on the third not at all in 1 in 20; so that the agglutinative property of the serum was gradually getting weaker. In these two cases, therefore, slight evidence of enteric fever was afforded by the serum reaction.

The third negative and not-fatal case was of much interest. The patient was the gravedigger of the asylum, a man 40 years of age. From clinical evidence I pronounced his case to be certainly one of enteric fever, yet on three occasions,



separated by intervals of 23 and 16 days, I examined his blood with negative results, there being only very incomplete clumping on the second occasion with the B. Gaertner W. with a 1 in 20 dilution of serum, and on the third occasion with B. typh. with a 1 in 20 dilution. The serum was examined three times with B. Leavesden, twice with the B. Gaertner W., and once with the two other bacilli, with negative results.

Classes 2 and 3 may be dealt with together. Out of 25 cases examined, six gave a positive reaction with B. typh. Though none of these six cases were typically enteric fever from clinical evidence, yet five were of such a nature that I think a positive serum reaction was enough to turn the balance in favour of that disease. In one of these five the reaction was well marked with a dilution of 1 in 200, and in three others there was a partial reaction with the same dilution. The sixth patient was ill away from the asylum, but his illness may have been atypical enteric fever.

Besides these cases in which there was a marked serum reaction, there were five cases in classes 2 and 3, returned as negative in the table, in which a partial reaction was obtained. In all these five cases there was a marked reaction with a 1 in 20 dilution, and in four a partial reaction with a 1 in 40.

In view of the fact that occasionally a case in which there is even *post-mortem* evidence of enteric fever will give a negative reaction, it would have to be admitted that one or two of the negative cases of classes 2 and 3 were after all cases of enteric fever. On the other hand, some fatal cases of these classes furnished no *post-mortem* evidence of that disease. In not one of the cases in which clinically the illness was certainly not enteric fever was even a partial serum reaction obtained.

Reckoning as positive cases all those in which either the *post-mortem* or the clinical or the serum-reaction evidence was clear, there were certainly 20 cases of enteric fever amongst the 53 cases examined. And there were five additional cases where both the clinical and serum-reaction evidence, as far as they went, were in favour of a diagnosis of enteric fever. I would, in fact, go so far as to say that in 25 of the 53 cases that diagnosis was justifiable.

There was another fatal case of enteric fever the serum of which I did not examine; and enteric fever was diagnosed in a member of the staff who was taken ill and treated at home, where he died. So that there were probably 27 cases of enteric fever in all.

I think this outbreak distinctly showed the value of the serum test as an aid in diagnosis. The first cases were very doubtful clinically as to whether any of them were cases of enteric fever. But the serum reaction being positive, a diagnosis of enteric fever was made. Later typical cases, some fatal, occurred.

There is one interesting point about the outbreak, unconnected with the question of serum diagnosis. If a given population be exposed to the infection of enteric fever, the number of individuals who contract the disease will largely depend upon their ages. For it is a well-known fact that enteric fever, like most infectious diseases, has its predilection for certain ages. The special ages for this disease are from 5 to 30. The majority of the inmates of the Leavesden Asylum are old or elderly. Of the 25 cases stated above to be enteric fever, 19 were between the ages 17 and 27; and there was one case of each of the following



ages: 30, 39, 40, 47, 50, and 66. This age-incidence is in accordance with the natural behaviour of the disease. The infection, however conveyed, was a mixed one, consisting probably of more pathogenic organisms than the *B. typhosus*. But the disease followed its usual bent, and as a rule picked out the young and left the old. This would probably explain why there were so few cases of enteric fever compared with the total number of cases constituting the outbreak.

#### A CASE OF LAPAROTOMY AND SUTURE OF THE INTESTINE FOR PERFORATION IN ENTERIC FEVER IN A CHILD: DEATH.

(By C. BOLTON, B.Sc., M.D., B.S. Lond., Assistant Medical Officer, Eastern Hospital.)

Margaret O., aged eight years, was admitted to the Eastern Hospital on September 27th, 1899, suffering from enteric fever. The illness commenced on September 13th, and the attack was moderately severe, the abdomen being distended, numerous spots visible, the spleen easily felt, bronchitis present, and Widal's reaction positive (1 in 50). The patient progressed favourably, and the temperature reached normal on October 7th (24th day), remaining so until October 11th, when a relapse occurred. The relapse was much more severe than the primary attack, the tongue being dry and brown, and the temperature reaching 104 degrees almost every evening. The bath treatment (at a temperature of 70 degrees) was employed when the temperature reached 102·2 degrees and over.

On October 21st, the patient complained of abdominal pain, and became somewhat collapsed, but there was no distension; the liver dulness was normal, consequently perforation was not thought to have occurred.

On October 22nd, at 3 a.m., the temperature fell to 97 degrees, the pulse was good, and liver dulness present.

At 9 a.m., the temperature was 97 degrees, the pulse failing, the abdomen much distended, and the liver dulness absent.

At 1.30 p.m., *laparotomy* was performed under chloroform.

An incision, 4 inches long, was made in the median line of the abdomen, beginning just below the umbilicus. Some gas and a little dirty fluid with faecal odour escaped from the peritoneal cavity when it was opened. The cæcum was almost immediately found, and the small intestine followed up until the perforation was detected in the ileum at a point about 12 inches from the cæcum. A small plug of lymph covered the aperture in the gut, and there were flakes of lymph on the intestines in the immediate vicinity, but not elsewhere. The gut was emptied for about 1 inch on each side of the perforation by squeezing the semi-fluid contents through the aperture. Six Lembert's sutures were then introduced transversely to the long axis of the gut, and at intervals of a little over a quarter of an inch, closing the aperture by the invagination of a small longitudinal strip of intestinal wall, and finally three small sutures were introduced through the peritoneum only between the four median Lembert's sutures. The intestine was replaced, and the peritoneal cavity irrigated with sterilised saline solution. The



wound was completely closed by thick silk sutures, taking up all the coats of the abdominal wall, and superficial horsehair sutures were used to bring the edges of the skin together. The pulse was fairly good after the operation, which lasted one hour from the commencement of the anæsthetic.

On October 23rd, the patient died of cardiac failure at 7 a.m., about 16 hours after the operation.

*Post-mortem.*—The abdominal cavity was in the same condition as at the operation, and there was no extension of peritonitis. The sutures were sealed by lymph. The lumen of the gut was very slightly narrowed, and the bowel held water under pressure. On slitting it up, the invaginated portion formed a projection into the lumen about 2 inches long and less than a quarter of an inch deep. The perforation occurred at the base of an ulcer apparently about the size of a sixpenny piece. No portions of the sutures were to be seen on the mucous surface. There was no second perforation, although many deep ulcers were present.

*Remarks.*—The utility of the operation for perforation of an intestinal ulcer in enteric fever is now beyond all question, and the objections that have been raised to it vanish when we review the successes that have been attained, but the percentage of recovery after this operation cannot be estimated unless failures as well as successes are published.

In his paper published in the *Lancet* on February 25th, 1899, Mr. Platt, of Manchester, reviews the subject, and states that up to that date there have been recorded 103 cases of operation, with 21 recoveries; 13 of the cases, with three recoveries, being operated upon in England. He records three cases operated upon by himself, with one recovery. It is probable that there have been several unpublished failures. The tables in his paper show that if the operation is performed between 12 and 24 hours after perforation, there is the greatest chance of recovery, the primary shock having passed away; but that after 24 hours the chances of success are very small. The chances are also greater if the perforation occurs at a late stage of the disease, and in a mild case are much greater than in a severe one.

With regard to the operation itself, a very important point is to waste no time during its performance or in looking farther afield than the neighbouring portions of bowel for a second perforation. An incision may be made in either the median or right semilunar line, and the perforation should be looked for towards the pelvis, or by finding the cæcum and following up the gut from it. The aperture should be closed by invaginating a longitudinal strip of intestine by means of Lembert's or Halstead's sutures, after emptying the gut if it is loaded, and without paring the edges of the perforation. A single row of stitches is usually sufficient. If the gut is badly ulcerated, the formation of an artificial anus is preferable to resection, on account of the time saved and the less severe nature of the operation. The abdomen should be cleansed with saline or some mild antiseptic solution, and probably the introduction of a drainage tube is better than completely stitching up the wound. It is always possible for a suture to involve another ulcer, and so lead to a later perforation, as pointed out by Dr. Goodall in his remarks upon a similar operation in these reports for 1897.

The present case was unfavourable in that the perforation occurred on the 10th day of a relapse, which was of a severe nature, and also because the operation



was undertaken more than 24 hours after the perforation, owing to the obscure nature of the symptoms. Otherwise it presented no difficulty, and the condition of the gut at the autopsy was such as to encourage future attempts. In the paper above mentioned, six operations in relapses are given, with only one recovery.

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AN INTRA-ABDOMINAL ABSCESS OF DOUBTFUL ORIGIN OCCUR-  
RING IN CONNECTION WITH ENTERIC FEVER: OPERATION:  
RECOVERY.

(By C. BOLTON, B.Sc., M.D., B.S. Lond., Assistant Medical Officer, Eastern Hospital.)

Esther S., aged six years, was admitted to the Eastern Hospital on November 11th, 1898, certified as suffering from enteric fever.

The history stated that she had been taken ill on November 4th; vomited on November 5th; had diarrhœa on the 6th, and spots on the abdomen on the 10th.

On admission, the temperature was 103 degrees. She was a well-nourished child; the tongue dry and furred; the abdomen distended and resonant all over; the spleen not felt, and no spots visible; sonorous and sibilant rhonchi were heard over the whole chest, and rales at the left base. Widal's reaction, 5 per cent. negative, 50 per cent. bacilli stopped moving, and stuck together in twos and threes. Subsequently the patient had diarrhœa, the motions being light and loose, and from four to five stools a day being passed. She progressed favourably, and the temperature fell by lysis, reaching the normal on November 22nd (19th day).

November 23rd.—The temperature went up to 101·6 degrees. No fresh symptoms.

November 28th (25th day).—Patient complained of abdominal pain. The abdomen was a little distended, and the walls rigid. Nothing further could be made out.

December 1st.—A tender indefinite elastic swelling could be felt in the hypogastric region, like a distended bladder.

December 2nd.—Tumour extended as high as umbilicus; was quite fixed; the upper margin rounded and hard; resonant at the upper part, but dull below.

*Rectal Examination.*—A soft elastic swelling was felt, which extended round the rectum in front and in the region of the utero-sacral ligaments.

December 3rd.—A prominent swelling could be seen around the umbilicus, which was sharply defined above, but which faded away into an indefinite fulness below. The outline above was hard, tender, and rounded. It was dull on percussion.

December 4th.—Swelling more prominent above and to left of the umbilicus. Since November 23rd the temperature had been very irregular, varying between 99 degrees and 101 degrees, and on one occasion reaching 102 degrees.

December 6th.—*Operation* under chloroform. A longitudinal incision, 3 inches long, was made just to the left of the umbilicus, and having the latter for its centre. The skin and subcutaneous tissues were very thick, hard, and matted



together. A small abscess was found superficial to the abdominal muscles, and after a little dissection a hole, admitting the little finger, was found leading through the abdominal wall into a large intra-abdominal abscess cavity. The pus which escaped was thick and smelt quite sweet; no faecal odour. On introducing the finger, the lower wall of the cavity was found to be formed by Douglas's pouch, rectum, uterus, and broad ligaments, with pockets burrowing in various directions. At the sides, back, and front the wall was quite hard and smooth, no abdominal organs being felt. A drainage tube was stitched in, and the superficial abscess plugged with gauze, the wound being closed above and below the tube with silkworm gut sutures. After the operation the temperature fell to normal, and remained so till January 10th, 1900. Bacteriological examination of the pus. *Streptococcus* only. No tubercle or other bacillus.

December 30th.—The abscess cavity had narrowed down to a sinus, and the tube was removed, the cavity being plugged with gauze.

January 10th (five weeks after operation).—Temperature rose to 100 degrees; vomiting; wound quite healed.

January 16th.—Diarrhoea. Spots. Widal's reaction positive (1 in 20).

January 29th.—Temperature reached normal after a typical attack of enteric fever.

February 27th.—Patient discharged from hospital. The scar quite sound, but bulging slightly during coughing.

*Remarks.*—The chief interest of this case lies in the question whether the illness commenced with an attack of enteric fever, during which a perforation of the intestine occurred with a localised suppurative peritonitis as the result, a relapse of the disease subsequently taking place.

The onset of the illness, the character of the temperature curve, the dry and furred tongue, the distended abdomen, the diarrhoea and bronchitis all present the clinical picture of enteric fever in a child; and in the event of no abscess having occurred, the case would have been so diagnosed, notwithstanding the apparently negative character of the Widal's reaction. It is also well known that in certain cases a relapse of enteric fever may occur over a month after the primary attack.

Presuming the illness to have been enteric fever, the exact cause of the abscess must be left a matter for conjecture, in the absence of more definite evidence.

If the supposition that the patient had enteric fever is discarded, it must be concluded that the abscess was the result of tuberculous glands, appendicitis, or some other disease, and that the supposed relapse was really a primary attack of enteric fever contracted in the ward.

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#### A CASE OF ENTERIC FEVER: PERFORATION OF INTESTINAL ULCER: LAPAROTOMY: DEATH.

(By J. E. BEGGS, M.D. Cantab., formerly Assistant Medical Officer, Park Hospital.)

F. G. M., a male, aged 14 years, was admitted to the Park Hospital on 15th February, 1899, suffering from an attack of enteric fever, which had commenced on the 9th with headache and pains in the limbs. The patient, on admission, was dull, apathetic, and slightly deaf. The temperature was



102 degrees F., the pulse 120, and the respirations 24. The tongue was furred and beginning to become dry, the abdomen slightly distended, and the spleen just palpable below the costal margin. He had slight bronchitis, and five enteric spots were seen on the body. He was delirious during the night, and tried to get out of bed.

The bowels were confined for the first two days, and then became rather loose, acting four or five times during the 24 hours. The motions were light in colour, containing usually a few curds, and there were some streaks of blood with the stool on the 20th February.

During this time the temperature had ranged usually between 102 degrees and 103.6 degrees F. On the 23rd, it began to fall slightly in the morning, reaching normal on the 25th, though still rising in the evening over 102 degrees F. The pulse rate diminished to 96, and the patient seemed a little better. The diarrhoea became gradually less, and the bowels were confined on the 26th.

On the 2nd and 3rd March, the evening temperature, which had not been higher than 101 degrees F. for two days, rose to 103 degrees and 104 degrees F. respectively. Early on the morning of the 4th March he began to complain of great pain across the abdomen, just above the umbilicus. The abdomen was slightly distended, and there was very little movement with respiration. It was tender to percussion, and the muscular wall had become very rigid. Vomiting occurred twice and the bowels acted. The pulse had increased in rapidity to 120 per minute.

During the day the distension of the abdomen became greater, and, on account of the pain, 10 minims of liquor morphinae hydrochloratis were given by mouth. At 5 p.m., the abdominal distension had markedly increased; the liver dulness was entirely lost, and there was also resonance in the left hypochondrium. The lower part of the abdomen was dull on percussion in both iliac regions and in the hypogastrium, the upper limit of the dulness extending to a point midway between the umbilicus and the pubic symphysis. The abdominal wall moved slightly with respiration. A little dulness had been made out over the caecum three hours earlier. The patient was sleeping at this time from the effects of the morphia, and expressed himself when disturbed as feeling better. A diagnosis of commencing peritonitis following perforation was made, and it was decided to perform laparotomy.

The patient was put under ether at 7.30 p.m., 16 hours after the onset of the symptoms of perforation, the operation lasting a little over an hour.

An incision was made in the right linea semilunaris about 5 inches long, and with its centre opposite to the anterior superior spine of the ilium. As soon as the peritoneum was opened some slightly turbid fluid gushed out and a little gas escaped. By turning the patient to the right and mopping out the abdominal cavity, about 15 ounces of fluid were removed. The vermiform appendix then presented at the wound.

Some of the ileum was withdrawn, and almost at once an ulcer appeared, with a perforation in it about the size of the end of a probe, and from which gas and a little liquid bowel contents escaped. The ulcer was from  $\frac{3}{4}$  to 1 inch long and from  $\frac{1}{2}$  to  $\frac{3}{4}$  inch wide, and of a white appearance. It was mopped over with a sterilised swab, and sutures were then passed through the peritoneum into the muscular coat, but keeping just clear of the whitened area. Seven sutures were passed and tied, thus invaginating the bowel and making it apparently water-tight



A further portion of the bowel was then withdrawn and examined for other perforations, and at this stage a gland was found, near to the attachment of the mesentery, which was suppurating. After incising the mesentery, an endeavour was made to shell out the gland, but the capsule gave way during the attempt. After removal, the mesentery was closed by two sutures. On further examination of the bowel a good many more ulcers were seen, with some flakes of lymph adherent to them, but no other perforation was discovered. The abdominal cavity was dried with sponges, and the wound closed by sutures, which included all the layers of the abdominal wall. A drainage tube was inserted into the pelvis from the lower angle of the wound, and a sterilised dressing applied. The sponges and towels used were all sterilised by steam immediately before the operation, and the instruments boiled. At the close of the operation, 20 minims of brandy were given hypodermically; and, after removing the patient to bed, an enema of  $1\frac{1}{2}$  ounces of brandy and hot water was administered.

He rallied well after the operation. There was no sickness, but he complained frequently of thirst. He had very little sleep during the night. The bowels acted once, and the nutritive enemata, which had been given every three hours, were retained. During the night the discharge from the wound soaked through the dressing, and when this was changed the movement of the abdominal wall was noticed to be better than it had been on the previous evening, but the distension was slightly greater. Some serous fluid, which was slightly coloured with blood, was withdrawn with a syringe from the drainage tube. The temperature was slightly over 100 degrees F., and the pulse about 120 per minute. An attempt was made during the afternoon to give a little milk and water by mouth, but it caused vomiting at once, the vomit being of a greenish-black colour and with an offensive odour. During the latter part of the day he complained of some pain in the abdomen, for which a hypodermic injection of morphine was given.

From this time the patient became gradually worse. The temperature oscillated usually between normal and 103 degrees F., but it rose rather suddenly to 106 degrees F. on the morning of his death. The pulse became gradually more rapid in rate, and the wave smaller and shorter. Vomiting was constant, whenever anything was given by mouth, though it was decidedly less on the 7th March, the stomach having been washed out with water on the previous evening. The nutritive enemata were generally retained, but, with the exhaustion of the discharge and the limitation necessarily imposed upon the amount of fluids given, emaciation became a very marked feature towards the end, and a bed sore formed over the sacrum on the day before his death. The abdominal distension gradually increased, and the pain, which was relieved for a time by the operation, became finally so great as to necessitate the patient being kept constantly under the influence of morphine.

The operation wound from the first showed no signs of repair. Sloughing took place along its edges, so that on the fourth day after the operation coils of intestine became exposed. The discharge became gradually more copious in amount and offensive in character. He began to ramble on the morning of the 12th March, though up till then his mental condition had been normal. During the day he became rapidly worse, and died early on the morning of the 13th March, nine days after the occurrence of the perforation.

At the *post-mortem* examination some adhesions were found shutting off the



site of the operation from the general peritoneal cavity. About 5 oz. of offensive pus were found in the pelvis. The ulcer which had perforated was 22 inches distant from the ileo-cæcal valve. It was  $1\frac{1}{2}$  inches across, and was adherent to the front of the psoas. This caused the stitches to give way during its removal, so that it was not possible to test whether the bowel was still water-tight. Two ulcers were discovered higher up the ileum, and 15 nearer to the valve, from most of which the sloughs had separated. There were four more on the valve itself and at the commencement of the cæcum. They varied to some extent in size, the largest being about  $1\frac{1}{2}$  inches across, and extending almost to the serous coat of the bowel. The mesentery had failed to unite at the place from which the gland was removed, and a surface discharging pus was exposed there.

The mesenteric glands generally were soft, but none of them appeared to be suppurating.

*Remarks.*—Perforation occurred in this case at about the period of the illness when it is most commonly seen, viz., early in the fourth week.

The case was one of ordinary severity, and was in accordance with Fitz's observation "that there is no relation between the frequency with which perforation occurs and the severity of the attack." All the ordinary signs of perforation, with the exception of a fall in the temperature, were present, and in this case there was also complete loss of liver dulness. This is said not to be a common feature, but when present it is of very considerable help in making a diagnosis. The occurrence of marked leucocytosis is considered to be of value in favour of a diagnosis of perforation. For, though sometimes the white cells increase in enteric fever without the occurrence of any complication, still the effect of complications in causing an increase is very marked and undoubted.

The operation was performed during the second 12 hours after the occurrence of the perforation, and it is at this time, according to Keene, that it offers the best chance of recovery. The collapse that ensues from the perforation will have passed away, and operations at a later period are very rarely successful. The lateral opening of the abdomen was chosen; it renders the finding of the perforation usually a more easy task, but increases the difficulty of cleansing the peritoneum. No attempt was made to wash out the peritoneum, but the coils of intestine were sponged with mops of wool surrounded by gauze. Finney, in the "Jolus Hopkins Bull." July, 1897, advocates this plan of treating the peritoneum in suppurative peritonitis from any cause.

The invagination of the bowel was successful in closing the perforation, but the ulcer was so large, involving one-third of the lumen, that I think in a similar case it would probably be wiser to draw a coil of intestine out of the wound and make an artificial anus, rather than to attempt to close the opening. The presence of a suppurating mesenteric gland was a most unfortunate complication. It caused a considerable prolongation of the operation, and, as the condition seen at the autopsy showed, it had not been treated satisfactorily. The stitches had cut through, and there was a suppurating surface discharging into the peritoneum. It would, I think, have been unwise to leave it untouched, as rupture and discharge of its contents into the peritoneal cavity must almost certainly have occurred.

At the present time several cases have been published where the perforation has been successfully treated by operation. Keene,\* in his table, gives 16

\* "Complications and Sequelæ of Typhoid Fever."



recoveries out of 83 patients operated upon. The mortality is unquestionably very high in cases for which no surgical treatment is adopted. Murchison estimated it at 90 per cent., and in those cases where general peritonitis had supervened, after such perforation, at 95 per cent.

Such being the case, one should in all cases, where a positive diagnosis can be made, and where the condition is not so grave as to preclude an operation, perform laparotomy, and treat the condition upon the same principles as one would if the perforation had arisen from appendicitis or any other cause.

The number of cases in this country that have been successful is up to the present very small, but enough has been done to show that it undoubtedly gives the best chance of recovery from what is otherwise an almost hopeless condition.

## TWO CASES OF RELAPSE OR SECOND ATTACK IN VARICELLA.

(By L. FALKENER, M.A., M.R.C.S., Assistant Medical Officer, Western Hospital.)

In October and November, 1899, a small epidemic of varicella occurred in one of the wards of the Western Hospital. Fourteen patients took the disease, and two of them had a repetition of the disease on the 11th and 28th days respectively, dating from the onset of the rash in the primary attack.

Appended below is a list of the cases, and by this it will be seen that there were probably two primary sources of infection in the ward, viz., Logan B—t and Geo. B—n.

Date of Incidence of Rash.	Name.	Period of Incubation from Logan B—t.	Period of Incubation from Geo. B—n.
		Days.	Days.
26 October, 1899 ..	Logan B—t (11th day of admission)		
1 November, " ...	Geo. B—n (17th day of admission)		
9 " " "	Ethel L. " " " " " "	14	...
10 " " "	Alfred S. " " " " " "	15	...
10 " " "	Emma D. " " " " " "	15	...
11 " " "	Elsie L—v—k " " " " " "	16	10
13 " " "	Eliz. P. " " " " " "	18	12
13 " " "	Ethel N. " " " " " "	18	12
14 " " "	Mabel P. " " " " " "	19	13
15 " " "	Elsie L—l—k " " " " " "	...	14
22 " " "	Lavinia C. " " " " " "	...	...
24 " " "	Mabel P. (second attack) ..	...	...
27 " " "	Violet L—l—k " " " " " "	...	...
28 " " "	Geo. B—n (second attack) ...	...	...
28 " " "	Wm. J. S. " " " " " "	...	...
11 December, " ...	Julienne K. ... " " " " " "	...	...

The cases were all typical ones of varicella and presented no difficulties in diagnosis.

I have shown the list of cases because I consider it demonstrates that Elsie L—l—k in all probability caught the disease from Geo. B—n's first attack. Now Elsie L—l—k had a typical attack of varicella, and therefore if this argument



is in accordance with fact, George B——n's first attack must have been of the same nature.

Appended are short notes of the two cases:—

*Case No. 1.*—Geo. B——n, aged 2½ years, admitted 16th October, 1899. Certified scarlet fever on admission. He was found to have congenital syphilis in a very marked degree. He was excessively marasmic.

Abdomen was full; legs were very markedly œdematous; a macular rash was present about the ankles, elbows, and buttocks; desquamation was present over these areas of rash; the tongue was peeled and the papillæ prominent; the bridge of nose was very sunken and broad; he had snuffles.

A sister of his was admitted the same day into another ward; she also was suffering from congenital syphilis.

George's temperature was 96 degrees F. for one day after admission and remained continuously subnormal up to the last time I saw him (29th January, 1900), with the exception of a day or two's rise at the onset of various attacks.

1st November.—He exhibited the eruption of varicella.

1st, 2nd, and 3rd November.—Three crops appeared. They were located on the scalp, the back, and the legs.

There were three or four dozen pocks in all. Typical clear vesicles were present on the first day, and they were shortly followed by scabbing. This first attack was very mild, and the vesicles were smaller than in the second attack, the scabs also fell at an earlier date.

28th November.—He exhibited a second attack of varicella, this being the 28th day of disease dating from the first appearance of the primary attack.

One pock on right sole; one pock on left sole; two pocks on right palm; five pocks on face; nine pocks on scalp; lots on trunk; none in the mouth.

29th November.—One or two fresh pocks appeared at night.

30th November.—No further pocks.

These were true typical varicella vesicles, and were followed by scabbing. The vesicles were larger than in the first attack, and the scabs remained *in situ* for a longer period.

8th December.—He presented symptoms of scarlet fever.

1st March.—He is still in hospital.

*Case No. 2.*—Mabel Lilian P., aged 2 years, admitted 7th October, 1899.

7th October.—She had a mild attack of scarlet fever, from which she made a satisfactory and uniform recovery.

14th November.—About a dozen pocks of varicella appeared.

15th November.—A few more pocks.

16th November.—No more pocks. These were quite typical, and were followed by scabs.

24th November.—A varicella eruption broke out again, this being the 11th day dating from the first appearance of the primary attack. There were about two or three dozen pocks on the trunk and one on the face; there were none in the mouth.

25th November.—Some fresh pocks appeared, but these were the last. In this secondary attack the eruption was again quite typical.

22nd December.—She was discharged, cured.



## CONCERNING THE DIAGNOSIS OF MORBILLI BY MEANS OF THE SPECIFIC SPOTS IN THE MOUTH (FILATOW'S SPOTS).

(By L. FALKENER, M.A., M.R.C.S., Assistant Medical Officer, Western Hospital.)

Apparently the first observer to distinguish these spots as something special to and distinctive of morbilli was Filatow, who described them in his work "Acute Infections—Krankheiten," in 1895, and to Filatow therefore we seem to be indebted for the discovery. Filatow described them as small white shreds of epithelium located on the buccal and labial mucosa. In one case a patient was isolated six days before the exanthem.

The credit of the discovery has been ascribed to N. Flindt. Flindt, in 1880, described certain spots in the mouth two days before the rash appeared, but from his description I think he cannot have observed the spots described by later observers.

H. Koplik, of New York, seems to have been the next to bring them to notice, which he did in his contribution to the December number of "Archives of Pediatrics," 1896, and it was not till after his paper was published that the subject was really taken up. Koplik's description differs from that of Filatow in two particulars:—(1) He describes these spots as bluish-white in colour. (2) He does not attribute the whiteness to any shedding of the epithelium.

Sobel (*New York Medical Journal*, 15th October, 1898) states that the spots occur on the mucous membrane of the cheeks, lips, and rarely (in one instance) on the tongue, and that they do not occur on the gums, pharynx, and hard or soft palate.

Several others have also written on this subject, quoting the descriptions of Filatow or Koplik.

My own acquaintance with these spots dates from Koplik's excellent paper in the *Medical Record*, 9th April, 1898, and by means of his description I was enabled to distinguish the specific spots for the first time in May, 1898. From that date up to the present I have seen, on the days of disease during which the specific spots should certainly be present, 59 cases of morbilli. Appended below is a list of these cases; but before I mention them in order I should like to make a few observations with regard to these spots of Filatow, subsequently and independently also described by Koplik.

**DIFFICULTY IN OBSERVING THE SPOTS.**—First of all I would lay stress, as most writers have done, on the difficulty of seeing the spots at all in many cases. It is true that at their maximum of efflorescence they may be readily observed and distinguished in quite a poor daylight, and even by yellow lamplight, but at their first appearance and in many cases (especially if mild) they may be extremely difficult to see at any time, and may only be represented by three or four spots altogether.

**ONSET AND DURATION.**—Filatow is credited with isolating a case six days before the appearance of the exanthem, but it is not stated that these specific spots were present at that time. Knöspel (*Prag. Med. Wochschr.*, 1898, No. 41), in describing his 41 cases of morbilli in which these spots were present, found them in one case five days before the exanthem, in six cases four days before, and in three cases three days before the exanthem. Koplik (*Medical Record*, 9th April,



1898) cites 16 cases, and amongst them the earliest appearance of these specific spots of Filatow was three days before the rash. Amongst my own cases it will be seen that there were five cases in which they appeared three days before the rash, but I have never seen them earlier than this. In many cases I have been on the look-out for fresh cases of morbilli in an infected ward, and have carefully examined the mouths every day in a good light, but so far these five cases are the earliest I have seen.

Three days, or 72 hours, as Koplik puts it, before the appearance of the exanthem seems, then, to be probably about the earliest date for the appearance of these spots. On the other hand, whenever the mucosa has been examined for them, they have always been in evidence the day previous to the exanthem; to this statement there is no exception amongst my cases.

Then as to duration. In all my cases they were present on the first day of the rash, whenever the case had come under observation on that day. In some cases they disappeared after the first day; this was in mild cases; but speaking generally the spots were nearly always present on the first and second days of the rash. In many cases they were present on the third day as well, but by this time, if present at all, they were nearly always quite faint. In a few cases they were present also on the fourth day; and in four cases on the fifth day: the exanthem in these cases having been very well marked. Later than the fifth day I have never seen them.

In most cases they disappeared earlier than the rash, but in one or two cases both disappeared simultaneously.

The disappearance of the spots is often very rapid: on the one day they may be well marked and easily distinguishable, and on the next they may have entirely disappeared.

Here again, then, it is possible for those who do not believe in the true value of these spots to underrate their constancy: it is possible that in some cases they may have expected to find them too soon or too late: and the only two dates that seem to me to be fairly constant (absolutely constant amongst the few cases I have been able to collect) are the day of the first appearance of the definite onset of the exanthem and the day preceding it. On the day preceding the exanthem there may be a suspicion of a rash either on the back, about the mouth and chin, or the edges of the scalp: what Koplik calls "an indistinct spotting around the lips and *alæ nasi*, but not an eruption."

COLOUR.—Koplik constantly refers to them as "bluish-white" in colour, and subsequent writers have always used the same description. Filatow, on the other hand, called them white. In this point I must say I agree with Filatow. When I first saw the spots I was only aware of Koplik's description, and the principal doubt I had in my mind as to their identity consisted in the fact that the colour was white, and I could by no means make out any bluish tinge about them. This was in a case in which the rash had not yet appeared: however, the spots agreed so closely with Koplik's description in other respects, that I isolated the case and the next day the rash appeared.

APPEARANCE IN OTHER RESPECTS.—These spots appear as very fine white specks: often quite minute in size and difficult to see; at other times three or possibly five or six times as large, and then very readily visible, even with the reflected light of an oil lamp. Around these white specks the mucosa is injected so as to form a



red areola. On rubbing the spots with the handle of a teaspoon it will be found that they are not at all easily removed. On the first day of their appearance, however, the red areola may be absent, and it may then be quite impossible with the closest scrutiny to feel quite confident about them, although one may have one's suspicions very strongly aroused: such was the case in No. 44 of my series, when it was first seen; when once, however, the spots appear, the red areola very quickly ensues, and the spots then generally become quite typical. At first the spots may be very few in number, perhaps only one or two, or else half-a-dozen, and this is especially the case on the first and last days of their appearance. Sometimes there is only a very small number throughout the attack (in one of my cases four was the greatest number ever visible at any one time in the course of the illness), but in others they become very numerous, so that the whole of the affected areas may be covered with them.

In this connection, Koplik says: "nor do they coalesce to become plaque-like "in form: they retain the punctate character." Large plaques they certainly do not form, but in many cases, when the spots are abundant, one can see that some are no longer mere specks, but spots of some little size, and on examining them more closely one can see that each bigger spot is composed of three or more tiny specks more or less united together, so that they are no longer discretely punctate, but decidedly confluent punctate: others, however, remaining discrete. When they become confluent the white substance which composes the summits of the spots gets more heaped up and becomes at the same time more loosely attached to its base, so that by rubbing a teaspoon over its surface the white substance much more readily comes away. But, although this is so with the bigger spots, the smaller specks retain their white substance under this treatment, and one can then feel sure of their nature, for if it were not for the smaller spots it would be very difficult to distinguish the condition from that of aphthous stomatitis, which the bigger spots closely resemble. Whilst the white substance in these cases has been increasing in this way, the red areolæ have followed suit, so that by this time the whole mucosa has become bright red in colour. When the time for its disappearance occurs the white substance comes away in a very short space of time, leaving the base of the same colour as the rest of the mucosa, so that it is then impossible to distinguish any sign of the former presence of Filatow spots, for there is no subsequent ulceration or loss of tissue.

**HISTOLOGY.**—These little spots really arise as fine papillæ, and the epithelium on the summits of these papillæ becomes pulpy and whitened: at the same time the papilla itself and the area immediately around it becomes injected, thereby giving rise to the red areola around each white speck. Filatow, who first described them, clearly took this view of their nature. Slawyk (*Deutsch. Med. Woch. Schr.*, 1898, No. 17) says they may be picked off with the forceps without pain or bleeding, and they are then seen under the microscope to consist of large masses of epithelium undergoing fatty changes.

**SITUATION.**—The commonest and prevailing site for these spots is on the buccal mucosa, on which they have a partiality for certain localities. If the spots are few in number, the most likely spot is opposite to and on a level with the bases of the lower milk molars on either side: here they often form a small cluster. Another very favourite site is the corresponding situation with regard to the upper milk molars, where also they may form a cluster. Another spot



is opposite to the line of junction of the upper and lower teeth when the jaw is closed : in this place they often form a thin straggling line. At other times they may be so numerous as to cover the whole buccal mucosa without preference for any particular portion of it.

Next to the buccal mucosa the inner surface of the lower lip is the site most commonly affected. In this locality they are more difficult to see, as the specks remain more discrete, and are also smaller : they are best seen close to the fornix of the lip and the jaw. On the labial mucosa the spots are usually very readily seen, and in marked cases are very densely distributed.

On the inner surface of the upper lip the spots are only occasionally seen, and they are always very much less marked than on the lower lip.

The areas described above form the extent of Koplik's area of distribution. He says : "I have never seen them elsewhere." They do, however, extend a little further than this, but only in occasional cases. For instance, amongst my 59 cases I have seen them twice invading the gum of the lower jaw. In the first case they were only present on the lower half of the gum, but in the other case they were present up to the whitish margin closely surrounding the canine and milk molar teeth, whilst on the thin periodontal margin in question a very fine grey filmy exfoliation was present.

Again, the spots often extend as far back as the posterior fornix of the jaws and the cheek, and in six cases they extended on to the mucosa separating the posterior molar of the upper from that of the lower jaw on either side ; and in two cases I saw innumerable and definite Filatow spots on the soft palate, within  $\frac{1}{3}$  or  $\frac{1}{2}$  in. of the inner side of the junction between the two jaws.

Elsewhere I have not seen them. Sobel, however (*New York Med. Journal*, 15th October, 1898), describes them as occurring in one instance on the tongue. He makes no note, however, as to which surface of the tongue it was on which he saw them.

**DIFFERENTIAL DIAGNOSIS FROM OTHER SPOTS IN THE MOUTH.**—In spite of what has been said on this point, this is not by any means always easy, especially on the first day of their appearance, when the spots themselves may not be particularly typical, and the child may present no other symptoms of morbilli. If, however, one re-examines the spots in 12 or 24 hours' time, a positive diagnosis can usually be made.

The conditions most closely simulating Filatow's spots are to my mind the following :—

1. Certain spots congenital in nature which are often present on the buccal mucosa. These, when present, are about the size of a medium-sized Filatow spot. They are definitely papular, and they are not erasible ; but in colour they are always yellowish instead of white, and consequently when once distinguished would no longer give rise to future errors. These yellow spots, of course, are permanent structures.

2. One writer, Rolly (*Münch. Med. Woch. Scr.*, 1899, No. 38), says that small curds of milk form the only real difficulty. This should not be so, in that curds of milk would not be fixed to the mucosa at all, whilst Filatow spots are firmly adherent.

3. *Thrush*.—Here the spots are so very large, and the distribution so anomalous for Filatow spots, that there is no difficulty in distinguishing the two conditions,



thrush occurring so often on the soft palate in the middle line, on the tonsils, and on the dorsum of the tongue, where Filatow spots practically do not occur.

4. *Aphthous Stomatitis*.—This to my mind is the one great difficulty in differential diagnosis. Of course a large plaque of stomatitis is easily excluded, as, for instance, the plaque so often seen on the buccal mucosa, level with the first molar teeth; but smaller spots of stomatitis, and especially the small fugitive ones that one so often encounters at the commencement of febrile disorders (*e.g.*, scarlatina), and which vanish within a few days, offer great difficulties in diagnosis from Filatow spots, especially on the first day of their appearance. The principal differences, however, are these:—Aphthous spots are usually much more easily erased with the handle of a teaspoon; they often lack the red areola; some of them are generally too big, thereby casting doubt on the others; they are generally too opaquely white for Filatow spots; and besides these points, ulceration is often present at the bases of the spots.

With regard to diseases other than morbilli, Sobel (*New York Medical Journal*, 15th October, 1898) writes:—"With the exception of the case in "question" (morbilli), "I have never seen this phenomenon in any of the "thousand adult mouths and throats which were also examined within the past two "months. During the months of April, May, and June I took especial pains to "examine the buccal mucous membrane of children affected with various skin "eruptions—varicella, urticaria, scarlatina, vaccinia, purpura simplex and hæmorrhagica, congenital syphilis, erythema multiforme, scabies, miliaria, eczema, rôtheln, "impetigo simplex and contagiosa, drug eruptions (bromides, antipyrine)—and in "no case were similar spots observed."

To this I can likewise bear witness, for since May, 1898, to the present date, March, 1900, I have paid especial attention to this point, and excluding the presence of morbilli, I have never seen them in any of the 2,000 or more mouths I have examined during this period. The 2,000 cases include rôtheln 28 cases, diphtheria and antitoxin rashes, erythema multiforme of origin other than diphtheria antitoxin, scarlet fever, enteric fever, typhus two cases, vaccinia, thrush, stomatitis, simple tonsillitis, miliaria, eczema, mumps, pertussis, coryza, &c.

As a definite means of diagnosis I would especially lay stress on the utility of these spots in the following conditions where the diagnosis is often notoriously difficult:—

1. *Rôtheln*.—This is perhaps the disease or condition *par excellence* that simulates morbilli, and it is the one in which the greatest difficulty in differential diagnosis occurs. Filatow spots are invariably absent in this disease, and to this statement all writers on the subject are agreed; so that by means of these spots one can accurately separate the two diseases if seen on the appropriate days, and the subsequent course of events can be relied upon to show that the diagnosis so made has been correct. As stated above, I have seen 28 cases of this disease since May, 1898, and in none of them were Filatow spots present. I may add that I saw them all from the commencement of the exanthem.

2. *Early Laryngitis of Morbilli*.—When laryngitis occurs in morbilli before the eruption, and is of a marked character with much recession, the case is frequently certified and sent in to us as one of laryngeal diphtheria; but if on examination these spots are seen, one can at all events be quite sure of one thing, and that is, that, whatever else the child may have, it most certainly has morbilli:



and it was by means of Filatow's spots that Nos. 23, 40, and 56 in my series were diagnosed on admission as having morbilli, although sent to us as diphtheria (no rash at all being present on admission).

3. *Morbilli sine Eruptione*.—Of this, No. 39 is a very striking and undoubted example. He was the last unprotected case in a ward ravaged by morbilli who had not contracted the disease. On the 21st November, 1899, he presented atypical early symptoms of morbilli. His face became slightly puffy, he was irritable and drowsy and resented any disturbance, he had a marked morbilloid cough, thin rhinorrhœa, increased salivation, and a very marked morbilloid odour of the breath; there was no lachrymation, no rise of temperature, no exanthem, no Filatow spots.

November 22nd.—There was one very small and ill-defined Filatow spot on the left buccal mucosa, and also a nondescript white spot further back.

November 23rd.—The child was very much better and looked lively again. The cough had disappeared. Four very definite Filatow spots were present on the right buccal mucosa, clustered into one site.

November 24th.—No Filatow spots were visible on this day.

November 28th.—No exanthem had appeared at all up to this date, although very carefully searched for, and the boy was quite well again.

Such a case as this without the pathognomonic sign would generally leave one in a very doubtful state of mind as to the correct diagnosis, but when one has well-marked morbilloid symptoms and the undoubted presence of these spots of Filatow, although no exanthem may be present, I think one can rest quite assured that the case is most certainly one of morbilli.

Further observation of the spots may settle the question as to the existence of measles without catarrh, which is at present in dispute.

4. *Antitoxin Rashes or Erythema Multiforme from other Causes*.—It is well known how very closely some of these rashes simulate morbilli. It is true that catarrh may be more or less completely absent, but still the rash itself may be so very suggestive that if one did not have these spots to fall back on, one would frequently be left in some little doubt about the case. Filatow's spots are invariably absent in these cases.

All observers are not agreed as to the value of these spots of Filatow, and there are several difficulties that lie in one's path, the principal ones of which appear to me to be the following:—

1. Generally the necessity of a very good light and of very careful inspection.
2. A correct previous knowledge of their periods of incidence and duration.
3. An adequate acquaintance with this and other conditions for which it might be mistaken, so as to be able to avoid any error in diagnosis.

In this connection I would again lay stress on the close similarity often represented between these spots in certain atypical stages of their existence and those of aphthous stomatitis.

For myself, whenever I have felt definitely sure of the identity of the spots seen with those of Filatow, the further course of events has invariably confirmed the diagnosis; and I may further say that every case of morbilli I have seen since May, 1898, if seen on the appropriate days, has invariably presented these spots.

Finally, I feel sure that these spots of Filatow will soon be known as the most typical and pathognomonic sign of morbilli which we at present possess, and that they will be generally recognised as such by the profession at large.



No. of the Case.	Date of first notice of the Exanthem.	Initials.	Age.	Days of appearance of Filatow Spots before the appearance of the Exanthem.				Days of appearance of Filatow Spots on the day of the first appearance of the Exanthem and five days after it.						Remarks.
				4	3	2	1	1	2	3	4	5	6	
1	May 7/98	P. K....	4	...	...	...	1	1	0	...	...	...	...	The course of the temperature chart after scarlet fever aroused the suspicion.
2	" 18 "	C. W....	6	...	...	...	1	1	2	0	...	...	...	
3	" 19 "	E. J. J....	6	...	...	...	...	1	2	3	0	...	...	
4	" 21 "	L. S....	2	...	...	...	...	1	2	0	...	...	...	Certified scarlet fever. He was only seen on this one day.
5	June 4 "	V. W. H....	3½	...	...	2	1	1	2	3	4	5	0	
6	" 8 "	A. Y....	11	...	...	...	...	...	2	...	...	...	...	
7	" 10 "	G. B....	2	...	...	...	...	1	2	3	0	...	...	Certified diphtheria.
8	" 13 "	L. R....	2	...	...	...	...	1	2	0	...	...	...	
9	" 21 "	M. P....	3	...	...	2	1	1	2	3	0	...	...	
10	" 24 "	B. R. F....	2	...	...	...	...	...	2	3	4	0	...	Not seen after this one day.
11	" 29 "	A. B....	4	...	...	...	...	...	2	0	...	...	...	
12	" 30 "	T. G. B....	4	...	...	...	...	*1	...	...	...	...	...	
13	Aug. 6 "	M. W....	5	...	...	...	...	1	2	3	0	...	...	Cases seen on one particular day at Epsom Workhouse.
14	Jan. /99	F. A....	1½	...	...	...	...	1	...	...	...	...	...	
15	" "	F. R....	3	...	...	...	...	...	...	3	...	...	...	
16	" "	W. W....	1½	...	...	...	...	...	2	...	...	...	...	This case developed the exanthem on the following day.
17	" "	R. B....	3	...	...	...	...	...	...	...	4	...	...	
18	" "	F. C....	1	...	...	...	...	...	2	...	...	...	...	
19	" "	A. B....	4	...	...	...	...	...	...	3	...	...	...	Early laryngitis of morbilli, with recession simulating laryngeal diphtheria, diagnosed morbilli on admission.
20	" "	N. W....	2	...	...	...	...	...	...	3	...	...	...	
21	" "	H. L....	4	...	...	...	...	...	...	...	4	...	...	
22	" "	E. C....	1½	...	...	...	1	...	...	...	...	...	...	Morbili sine eruptione. Filatow spots were present 22nd and 23rd November.
23	July 8 "	S. F....	5	...	...	*2½	1	1	2	3	0	...	...	
24	" 28 "	W. A. B....	1	...	...	*2	1	1	2	0	...	...	...	
25	Aug. 30 "	M. Y....	4	...	...	...	...	1	2	3	0	...	...	Early laryngitis of morbilli, certified laryngeal diphtheria, diagnosed morbilli on admission.
26	Oct. 21 "	A. S....	3	...	...	...	...	...	2	3	0	...	...	
27	" 26 "	F. E. B....	1½	...	...	...	...	1	2	0	...	...	...	
28	" 29 "	G. E. C....	4	...	...	...	...	1	2	0	...	...	...	Cases seen on one particular day at the Fountain Hosp. R. M. developed the exanthem two days later.
29	Nov. 6 "	C. D....	3	...	...	...	...	1	2	3	4	5	0	
30	" 9 "	E. J. S....	2	...	...	...	1	1	2	3	4	5	0	
31	" 9 "	E. G....	1	...	...	...	1	1	0	...	...	...	...	Only seen this one day.
32	" 8 "	P. H....	2	...	...	...	...	1	2	3	0	...	...	
33	" 14 "	L. N....	1½	...	...	0	1	1	2	0	...	...	...	
34	" 13 "	J. S. A....	1½	...	...	0	1	1	2	0	...	...	...	No observation was made after first day of exanthem.
35	" 20 "	H. G. A....	4	...	...	0	1	1	2	3	0	...	...	
36	" 20 "	E. E. W....	1½	...	...	0	1	1	2	3	0	...	...	
37	" 21 "	G. W....	4	...	...	0	1	1	2	3	4	0	...	Early laryngitis of morbilli, with recession simulating laryngeal diphtheria, diagnosed morbilli on admission.
38	" 22 "	D. W....	2½	...	0	2	1	1	2	0	...	...	...	
39	" "	A. P....	3	...	...	...	...	...	...	...	...	...	...	
40	Nov. 24/99	S. A....	4	...	*3	2	1	1	2	0	...	...	...	Cases seen on one particular day at the Fountain Hosp. R. M. developed the exanthem two days later.
41	Dec. 4 "	G. E. M....	5	0	3	2	1	1	2	3	0	...	...	
42	" 3 "	W. P....	2	...	...	...	...	...	2	...	...	...	...	
43	" 3 "	E. H....	7	...	...	...	...	...	...	3	...	...	...	Only seen this one day.
44	" 3 "	R. M....	1½	...	...	2	...	...	...	...	...	...	...	
45	" 12 "	E. B....	4	...	3	2	1	1	2	0	...	...	...	
46	" 24 "	E. A. B....	4	...	...	...	...	1	2	3	0	...	...	No observation was made after first day of exanthem.
47	" 28 "	H. G....	2	...	...	...	...	*1	...	...	...	...	...	
48	Jan. 8/00	W. N....	2	...	...	...	...	1	2	0	...	...	...	
49	" 23 "	H. D....	5	...	...	...	...	1	2	3	0	...	...	Early laryngitis of morbilli, with recession simulating laryngeal diphtheria, diagnosed morbilli on admission.
50	Feb. 10 "	C. H....	3	...	...	...	...	1	2	0	...	...	...	
51	" 12 "	F. W....	4	...	...	0	1	1	0	...	...	...	...	
52	" 12 "	B. A....	4	...	...	...	1	1	2	3	4	5	0	No observation was made after first day of exanthem.
53	" 16 "	S. A....	3	0	0	2	1	1	2	3	0	...	...	
54	" 16 "	A. K....	2½	0	0	0	1	1	...	...	...	...	...	
55	" 28 "	N. S....	1	...	...	...	...	1	2	0	...	...	...	Early laryngitis of morbilli, with recession simulating laryngeal diphtheria, diagnosed morbilli on admission.
56	Mar. 4 "	F. H....	4	...	*3	2	1	1	2	0	...	...	...	
57	" 2 "	E. G....	5	...	...	...	...	*1	2	0	...	...	...	
58	" 15 "	B. B....	1½	0	3	2	1	1	0	...	...	...	...	No observation was made after first day of exanthem.
59	" 19 "	M. J....	2½	...	...	...	...	*1	2	3	...	...	...	

N.B.—An asterisk (\*) denotes that this day was the day of admission to hospital.  
These cases were all consecutive.



Amongst these 59 cases the morbilli were subsequent to scarlet fever in 27 cases.

" " " diphtheria in 5 "

" " were uncomplicated in .. 22 "

In five cases the previous history was not very certain .. 5 "

My cases then are 59, and Filatow spots were present in 59.

Koplik's cases are 16, and Filatow spots were present in 16.—*Med. Record*, April, 1898.

Sobel's cases are 35, and Filatow spots were present in 35.—*New York Med. Journal*, 15th October, 1898.

Slawyk's cases are 52, and Filatow spots were present in 45, but seven were not sufficiently carefully examined for the spots. Of these, 32 broke out in hospital, and Filatow spots were present in 31.—*Deutsche Med. Woch.*, 1898, No. 17.

Rolly's cases are 78, and Filatow spots were present in 67; or 74, and Filatow spots were present in 67, if four are excluded who had the rash on first examination.—*Münch. Med. Woch.*, 1899, No. 38.

Finkelstein's cases are five, and Filatow spots were present in five.—*Berliner Klin. Woch.*, 4th July, 1898.

Libman's\* cases are 50, and Filatow spots were present in 50.—*Med. Record*, 11th June, 1898.

Knöspel saw the spots in 41 cases, but he does not say if these cases were all consecutive.

I need hardly point out the great importance of Filatow's and Koplik's discovery from a practical point of view. It enables us to accurately differentiate certain conditions, which would otherwise be beyond our powers; and it enables us to diagnose morbilli at an earlier stage, and thereby either avoid introducing infection, or effect an earlier removal of the infection, the result of the latter being a perceptible diminution of incidence of morbilli in a ward when this is acted upon.

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\* Five of these cases were in adults.



## THE PRODROMAL RASHES OF MEASLES.

(By A. J. ADKINS, M.D. Lond., M.R.C.S., L.R.C.P., D.P.H., Assistant Medical Officer, Park Hospital.)

Rashes appearing on the first and second day of the disease, and differing in character from the true measles eruption, would seem to be of sufficient frequency to merit more notice than has hitherto been given to them.

They occurred in 25 out of a total number of 80 cases admitted to or arising after scarlet fever in the Park Hospital during the past two years.

With a solitary exception, they may all be included under the following clinical varieties given in order of frequency :—

1. Diffuse erythema.
2. Spotty or blotchy erythema.
3. Urticaria.

1. *Diffuse Erythema*.—In 13 out of the 25 cases the rash appeared as a faint diffuse erythema on either the first or second day.

Other terms applied to it in the notes are “faint continuous erythema,” “faint erythema,” and “indefinite erythema.”

The redness completely disappeared on pressure with the finger.

In some cases the rash covered the whole of the trunk and limbs ; in others, only the trunk or a portion of it was affected.

The duration was generally short—a few hours or a day—a distinct interval being left between it and the true measles eruption.

In nine cases it preceded the onset of catarrhal symptoms.

The chief importance of these rashes lies in the fact that they may lead to a diagnosis of scarlet fever, appearing as they do on the same day as the true rash of that disease, and being usually unaccompanied by catarrhal signs.

Four of the included cases were sent to scarlet fever wards on admission, the correct diagnosis being made later on the development of catarrh and the typical eruption.

The following conditions should make one suspect the possibility of measles :—

- (a) A history of infection.
- (b) Absence of early vomiting.
- (c) The presence of an irritating cough which often precedes the nasal and ophthalmic catarrh. Two cases admitted into scarlet fever wards, and specially reported by the nurses as having very troublesome coughs, proved afterwards to be measles.
- (d) The indefinite and transient nature of the rash, and absence of decided punctation.
- (e) The absence of the characteristic scarlet fever tongue.
- (f) Absence of spotty injection on fringe of soft palate.



In one instance, where the rash occurred only on the trunk, flannel was assigned as the cause. Local irritation often produces a very similar appearance to the rash.

The following is quoted as an example of this variety :—

N. P. In hospital for scarlet fever—

December 3rd, 1898.—Diffuse erythema of body and limbs. No catarrh.

Temperature, 102·4 degrees Fahr.

December 4th.—No rash.

December 5th.—Typical measles eruption.

2. *Spotty or Blotchy Erythema*.—In six cases, all after scarlet fever, the rash consisted of faint red spots of various sizes, some not raised and the others very slightly so. According to their size, a spotty or blotchy condition of skin was produced.

They usually passed in a gradual manner into the typical measles eruption, but differed from it in their early stage as follows :—

- (a) The face was untouched, except in one case, where the spots were few and limited to the upper border of the mouth at its angles.
- (b) The rashes faded completely on pressure with the finger, were indefinite, and varied much in intensity, being fairly marked at one time, disappearing in an hour or two, only to reappear.
- (c) Catarrhal signs were absent in five out of the six cases.

It will be seen that some of these cases might easily be mistaken for rōtheln. Example :—

C. B. In hospital with scarlet fever—

June 25th (afternoon).—Temperature, 100·8 degrees.

June 27th (morning).—On trunk there are sparsely scattered spots, fading on pressure, and varying much in intensity.

June 29th.—Rash now on face as well as trunk.

June 30th.—Typical measles eruption.

3. *Urticaria*.—In five cases, all following scarlet fever, the early rash presented the characters of an urticaria, there being wheals of short duration scattered over the body generally without any preference for special parts.

No definite interval existed between it and the measles eruption of the fourth day.

Catarrhal signs were present in all except one case.

This rash might easily lead to the diagnosis of acute urticaria. Example :—

A. B.—

January 6th.—Injection of left conjunctiva. Temperature, normal.

January 7th (afternoon).—Temperature, 104 degrees. Urticarial rash.

January 9th.—Typical measles eruption.

The case not included under either variety was interesting, as showing the



effect of a healthy wound on the localisation of the early rash. The history was as follows:—

F. F. In hospital for scarlet fever and burn of right thigh in upper part—

April 19th, 1898.—Wound healthy. Spotty condition of abdomen.

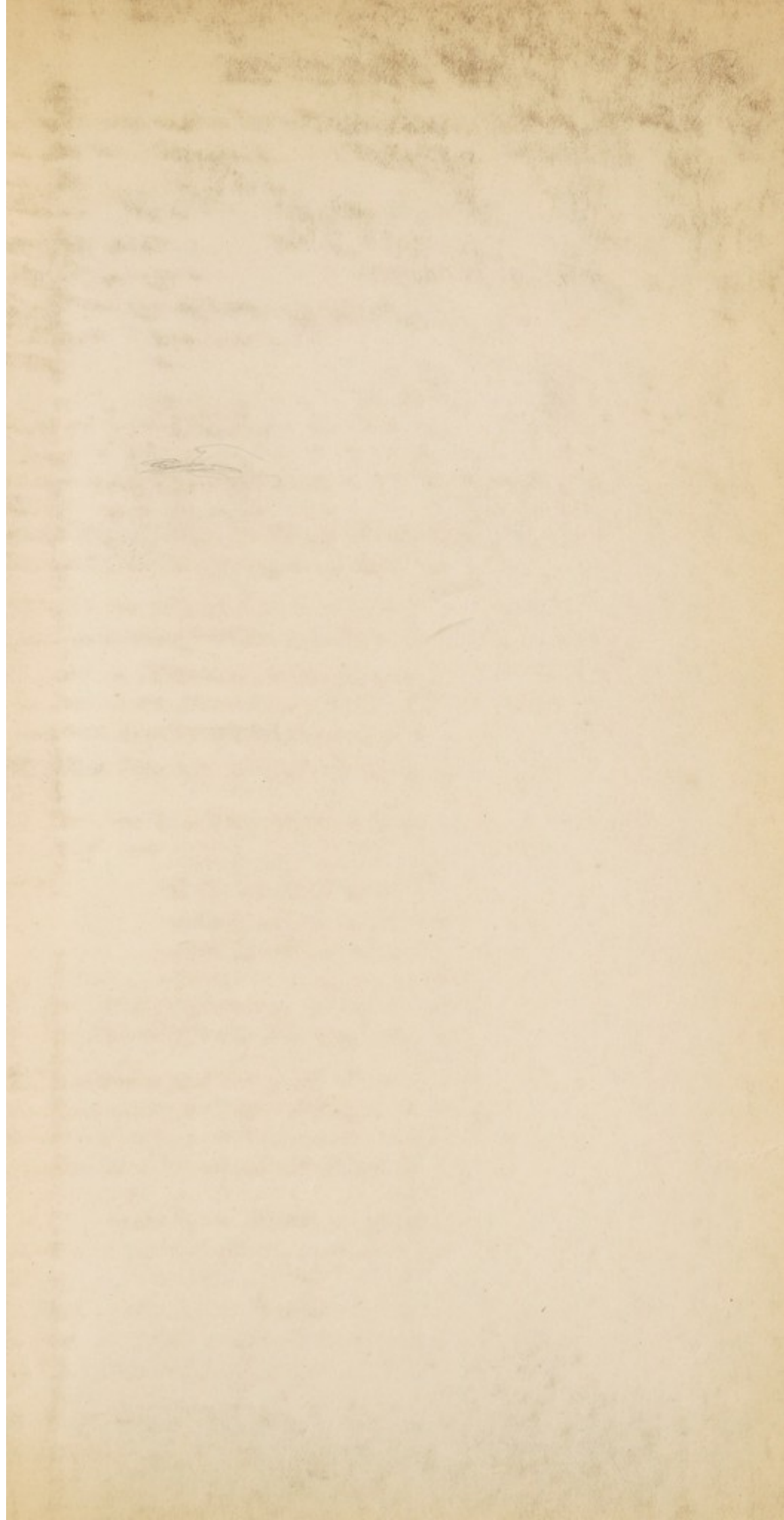
April 20th.—A few papules round wound.

April 22nd.—Papules larger and thicker over right lower part of abdomen and upper part of thigh round wound, producing a somewhat measly-looking rash. Face quite clear. Catarrhal symptoms for the first time to-day.

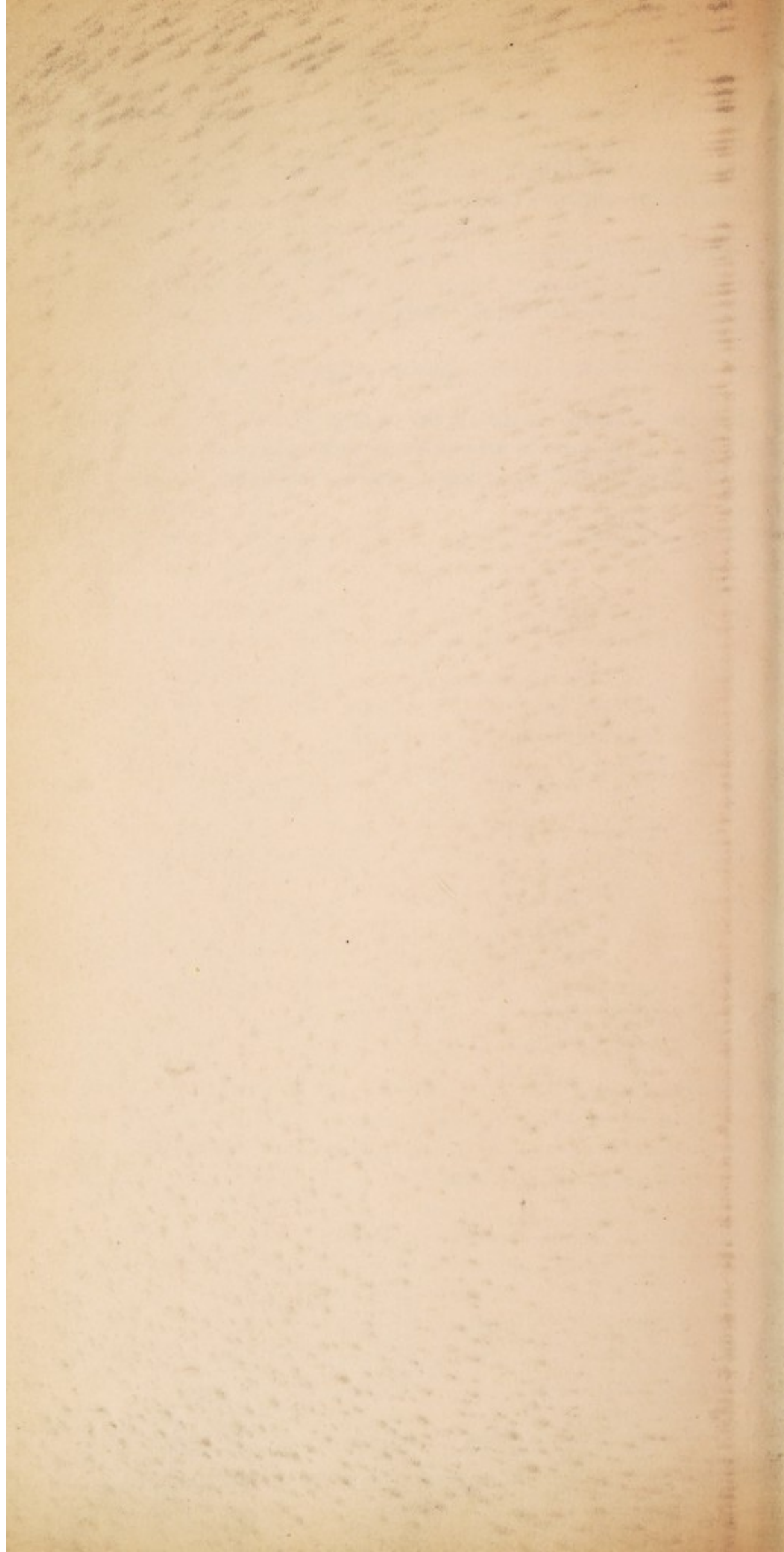
April 23rd.—Typical eruption on face as well as body and limbs.

In conclusion, notwithstanding that the statistical element in this note is of little value, owing to the comparatively small number of cases, there is every reason to believe that earlier isolation of measles might be procured if these early rashes were more recognised.











Scarlet Fever, 1<sup>st</sup> Quarter 1899.

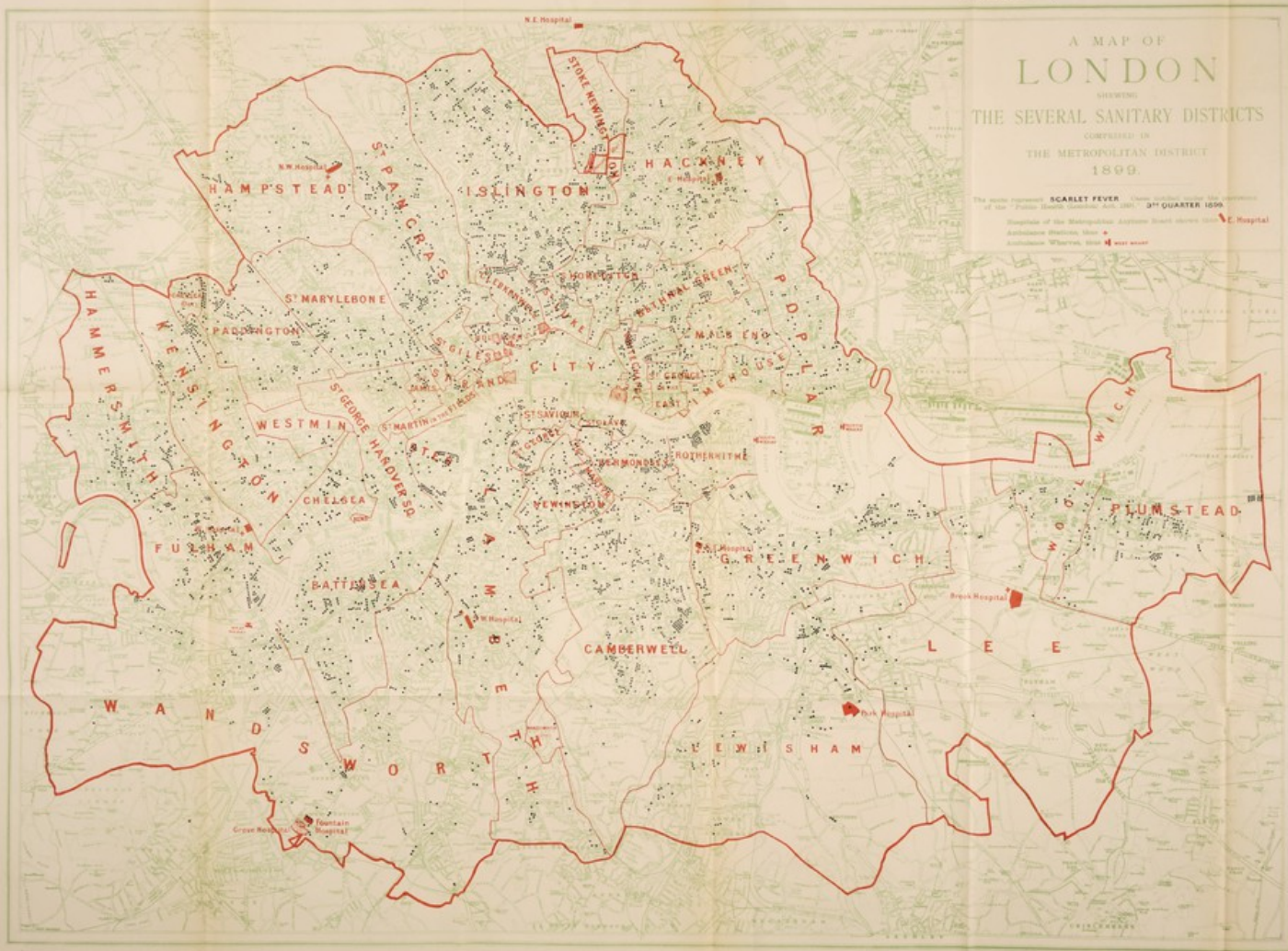




Scarlet Fever 2<sup>nd</sup> Quarter 1899.













A MAP OF  
LONDON  
SHOWING  
THE SEVERAL SANITARY DISTRICTS  
COMPRISED IN  
THE METROPOLITAN DISTRICT  
1899.

The spots represent **DIPHTHERIA** Cases notified under the provisions of the Public Health (London) Act, 1891. **PER SIX MONTHS 1920.**

Hospitals of the Metropolitan Asylums Board shown thus  **L. Hospital**  
Ambulance Stations, thus  **A.**  
Ambulance Wagon, thus  **W.**





The acute organism **DIPHTHERIA** (Group isolated under the description  
of the "Folien-Schwarz-Kolonien" disk 1000) **LAST 6 MONTHS 1030**

Diagnosis of the *Streptococcus* *Asplasma* found shows that **E. Hospital**  
Schleissheim Station, (last +  
Antitoxin "Wasser, (last + **last month**









The extra payment for **ENTERIC FEVER** (name entitled under the provisions of the "Public Health Gentian Act 1901")

Hospitals of the Metropolitan Asylums Board shown near  **E. Hospital**

Andersen Studios, Glas +

Andersen "Whites, Glas +  **W. Hospital**









