

Reports for the year 1893 of the statistical committee and the medical superintendents of the infectious hospitals and imbecile asylums, also of the ambulance and training ship "Exmouth" committees (8th year of issue) / Metropolitan Asylums Board.

Contributors

Metropolitan Asylums Board (London, England). Statistical Committee.
Hunt, Jackson.
Shadwell, Arthur.
Long, D. S.

Publication/Creation

London : printed by McCorquodale & Co., 1894.

Persistent URL

<https://wellcomecollection.org/works/gu6c5pa3>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

Metropolitan Asylums Board.

REPORTS FOR THE YEAR
1893

OF THE

STATISTICAL COMMITTEE

AND THE

MEDICAL SUPERINTENDENTS OF THE INFECTIOUS HOSPITALS
AND IMBECILE ASYLUMS,

ALSO OF THE

AMBULANCE AND TRAINING SHIP "EXMOUTH" COMMITTEES.

(8TH YEAR OF ISSUE.)

LONDON

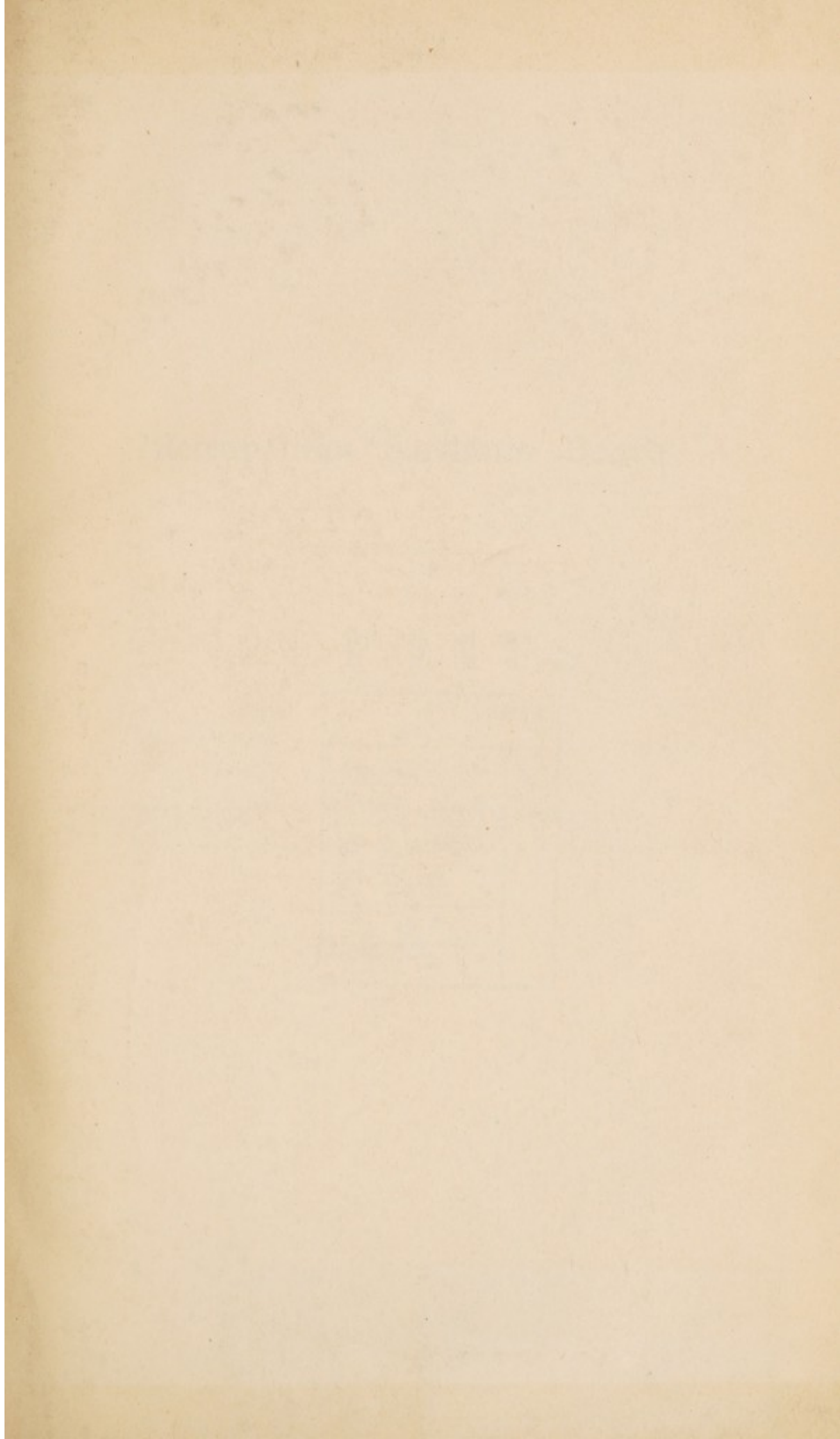
PRINTED BY MCCORQUODALE & CO., LIMITED, CARINGTON STREET, N.W.

1894.

MEDICAL RESEARCH
COUNCIL LIBRARY

No.....

Lent to Prof. Greenwood,
School of Hygiene.



WELLCOME INSTITUTE LIBRARY	
Coll	we!MOmec
Call	Ann. Rep
No.	WX 28
	. BE 5
	M 6 2
	1893



22501660262

Metropolitan Asylums Board.

R E P O R T S

OF

STATISTICAL COMMITTEE, &c.,

1893.

Metroplitan Asylums - Bonds.

REPORTS

STATISTICAL COMMITTEE, &c.

1883.

METROPOLITAN ASYLUMS BOARD.

MEDICAL RESEARCH COUNCIL

LIBRARY.

No.

~~1893~~ 14436

REPORTS FOR THE YEAR

1893

OF THE

STATISTICAL COMMITTEE

AND THE

MEDICAL SUPERINTENDENTS OF THE INFECTIOUS HOSPITALS
AND IMBECILE ASYLUMS,

ALSO OF THE

AMBULANCE AND TRAINING SHIP "EXMOUTH" COMMITTEES.

(8TH YEAR OF ISSUE.)

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

1894.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30300149>

TABLE OF CONTENTS.

NAMES OF MEMBERS OF STATISTICAL COMMITTEE	PAGES 9
--	------------

PART I.—Report of the Statistical Committee.

Subjects referred to in the Report :—

i. GENERAL OBSERVATIONS :	
(1.) Increase of Fever and Smallpox admissions	11
(2.) Insufficiency of Hospital accommodation... ..	11
(3.) Difficulties of providing additional accommodation ...	12
(4.) Gore Farm Hospital used for both Smallpox and Scarlet Fever cases	14
(5.) Hospital reconstruction	14
(6.) Diphtheria accommodation	15
(7.) Cases of mistaken diagnosis	16
(8.) Staff illness in Hospitals	16
(9.) Ambulance work	21
(10.) Cholera arrangements	22
(11.) Additional accommodation for Imbeciles	23
(12.) Training Ship " Exmouth "	23
ii. NOTIFICATION STATISTICS AND SPOTTED MAPS : Observations	24
iii. OBSERVATIONS ON THE VARIOUS STATISTICAL TABLES (FEVER)	24
iv. OBSERVATIONS ON THE VARIOUS STATISTICAL TABLES (SMALLPOX)	33
v. OBSERVATIONS ON FEVER AND SMALLPOX STATISTICS OF PAST YEARS	34
vi. OBSERVATIONS ON THE VARIOUS STATISTICAL TABLES (IMBECILES)	38
vii. GENERAL SUMMARY of numbers of persons who have been admitted to the Managers' various Institutions	41

PART II.—Fever Hospitals.

REPORTS OF THE MEDICAL SUPERINTENDENTS—

Eastern Hospital... ..	42
North-Eastern Hospital	49
North-Western Hospital... ..	61
Western Hospital	68
South-Western Hospital... ..	71
Fountain Hospital	73
South-Eastern Hospital	76
Northern Hospital	82
Gore Farm Hospital	85

PART II.—Fever Hospitals—continued.

FEVER STATISTICS (TABLES)—

Past Years.

	PAGES
1. Table B. Scarlet Fever—Mortality at various ages of 69,752 cases	29
2. „ C. Diphtheria—Mortality at various ages of 7,932 cases	30
3. „ D. Enteric Fever—Mortality at various ages of 8,689 cases	31
4. „ E. Typhus Fever—Mortality at various ages of 2,160 cases	32
5. „ F. Admissions and deaths each year, 1870–1893 ...	35

Tables for the Year 1893.

6. Table of Maximum number of patients under treatment ...	27
7. Table I. Admissions, discharges and deaths	90–91
8. „ II. Monthly admissions, discharges, and deaths ...	92–3–4
9. „ III. Admissions from the several Parishes and Unions, and deaths	95–98
10. „ IV. Scarlet Fever, admissions and deaths	99–100
11. „ V. „ complications	101
12. „ VI. „ and coexistent diseases	102
13. „ VII. Diphtheria, admissions and deaths	103–104
14. „ VIII. „ complications	105
15. „ IX. „ and coexistent diseases	106
16. „ X. Enteric Fever, admissions and deaths	107–108
17. „ XI. „ complications	109–110
18. „ XII. „ and coexistent diseases	111
19. „ XIII. Typhus Fever, admissions and deaths... ..	112
20. „ XIV. Miscellaneous diseases	113–122

FEVER STATISTICS (GRAPHIC)—

1. Diagrams of weekly notifications, 1890–1893	24
2. Diagram of monthly admissions, 1872–1893... ..	28

PART III.—Smallpox Hospitals.

REPORTS OF THE MEDICAL OFFICERS—

Hospital Ships	123
Appendix. On Smallpox Statistics	134
Gore Farm Hospital	85
Report of the Medical Officer of the River Ambulance Service, Dr. T. B. Brooke	153
Report of Dr. Long on History of Smallpox Epidemic, 1893 ...	161

SMALLPOX STATISTICS (TABLES)—

Past Years.

1. Table G. Admissions and deaths each year, 1870–1893 ...	36
2. Smallpox mortality in London since 1838	37

PART III.—Smallpox Hospitals—continued.**SMALLPOX STATISTICS (TABLES)—continued.***Tables for the year 1893.*

	PAGES
3. Non-Smallpox cases admitted... ..	124
4. „ „ „ which developed Smallpox after admission	125
5. Fatal cases of Smallpox complicated by intercurrent disease	127
6. Table A. Confluent and discrete cases	142-143
7. „ B. Extended classification of “doubtfully” vaccinated cases	144-145
8. „ C. Cases successfully vaccinated during incubation period	146-148
9. „ D. Cases stated to have been re-vaccinated	149-152
10. „ I. Admissions, discharges, and deaths	173-176
11, 12, 13. Tables II A., II B., and II C. Condition as regards vaccination of patients admitted	177-188
14. Admissions to North Wharf Shelter	154
„ „ at each Wharf during each month	155
15. Analysis of cases returned home	156
16. Cases detained in Shelters in each month	157
17. Details of „ „ „ „	158
18. Cases infected in Salvation Army and other Shelters	161

SMALLPOX STATISTICS (GRAPHIC)—

1. Diagrams of age-distribution... ..	138-139
2. Chart representing progress of disease amongst vagrants and resident population	161A

PART IV.—Imbecile Asylums and Schools.**REPORTS OF THE MEDICAL SUPERINTENDENTS—**

Leavesden Asylum	189
Caterham Asylum	193
Darenth Asylum	197
Darenth Schools	225

LUNACY AND IMBECILITY STATISTICS (TABLES)—

1. Admissions, discharges, and deaths during 1893—	
Asylums	200-201
Schools	233
2. Admissions, discharges, and deaths since 1870—	
Asylums	201
Schools	233
3. Admissions, discharges, and deaths, with mean annual mortality and proportion of recoveries, 1884-1893—	
Asylums	202-203
Schools	234
4. Classification of mental condition of patients admitted during 1893, Asylums	204

PART IV.—Imbecile Asylums and Schools—continued.**LUNACY AND IMBECILITY STATISTICS (TABLES)—continued.**

	PAGES
5. Classification of mental condition of patients resident at end of 1893, Asylums	205
6. History of the annual admissions, with discharges and deaths and numbers remaining of each year's admissions—	
Asylums	206-209
Schools	236
7. Causes of death and ages of the decedents, 1893—	
Asylums	210-215
Schools	237
8. Length of residence of patients discharged recovered and of those who died, 1893—	
Asylums	216-217
Schools	237
9. Ages of patients resident at end of each year, 1884-1893—	
Asylums	216-217
Schools	238
10. Ages of admissions, discharges, and deaths, 1893—	
Asylums	218-219
Schools	239
11. Employments of patients—	
Asylums	220-221
Schools	239
12. Occupations of patients previous to admission and condition as to marriage 1893, Asylums	222-224
13. Probable causes of mental condition of patients admitted in 1893, Schools	235
14. Progress of children in schools	240-241

PART V.—Ambulance Committee.

REPORT	242
STATISTICS (TABLES)—	
1. Number of patients removed in Ambulances, 1881-1893 ...	257
2. Journeys made and mileage run by vehicles and horses, 1886-1893	258
3. Number of persons conveyed in Steamboats, 1884-1893 ...	259
4. Steamboats—Hours under steam, &c.	259
Regulations for removal of patients in Ambulances	260

PART VI.—Report of Dr. Shadwell as to the Board's Cholera Arrangements

261-274

PART VII.—Training Ship "Exmouth"—

1. Report of the Committee	275-279
2. ,, Captain-Superintendent	280-292
STATISTICS (TABLE)—	
Admissions, discharges, and deaths, 1876-1893	280

STATISTICAL COMMITTEE.

1894.

Chairman—MR. JACKSON HUNT,
23, Montagu Square, W.

THE CHAIRMAN OF THE BOARD,
THE VICE-CHAIRMAN OF THE BOARD, } *Ex Officio Members.*

MR. W. M. ACWORTH, 47, St. George's Square, S.W.

Capt. Sir DOUGLAS GALTON, K.C.B., J.P., D.C.L., F.R.S., LL.D., 12, Chester Street, Grosvenor Place, S.W.

MR. H. HARDCASTLE, J.P., 38, Eaton Square, S.W.

MR. R. M. HENSLEY, Glenton House, Putney Bridge Road, Putney, S.W.

Sir V. H. B. KENNETT-BARRINGTON, 65, Albert Hall Mansions, Kensington Gore, W.

Mrs. M. E. LAWRIE, 30, Albert Gate, S.W.

MR. A. C. SCOVELL, J.P., 39, Eccleston Square, S.W.

MR. R. STRONG, J.P., Helstonleigh, Champion Park, Camberwell, S.E.

MR. H. H. SWIFT, 45, Westbourne Terrace, Hyde Park, W.

Professor W. R. SMITH, M.D., D.Sc., F.R.S. Ed., 74, Great Russell Street, Bloomsbury Square, W.C.

MR. T. DUNCOMBE MANN, *Clerk to the Board.*

CHIEF OFFICES—Norfolk House, Norfolk Street, Strand, London, W.C.

STATISTICAL COMMITTEE

MEMORANDUM

Faint, illegible text consisting of several paragraphs of a memorandum. The text appears to be a list of names and possibly titles, arranged in a structured format typical of a committee report. The lines are too light and blurry to read accurately.

Very truly yours,

Mr. T. [Name], Secretary

Metropolitan Asylums Board.

ANNUAL REPORT OF THE STATISTICAL COMMITTEE FOR THE YEAR 1893.

*The Managers of the
Metropolitan Asylum District.*

28th March, 1894.

i. GENERAL OBSERVATIONS.

- (1.) CONTINUED INCREASE OF FEVER AND SMALLPOX ADMISSIONS.—We have again to record a considerable increase in the number of fever and smallpox patients admitted to the Managers' hospitals. In the seven years which have passed since 1886 the total annual admissions (smallpox and fever cases) have been 6,596, 5,219, 5,777, 8,361, 7,873, 16,624, and 21,129 respectively.

Whether the very high figures of the past two years were entirely due to the effects of compulsory notification and the increased popularity of the Managers' hospitals, or whether there was not a somewhat greater prevalence of scarlet fever, diphtheria and smallpox amongst an increased population, we have not, owing to the comparatively recent establishment of compulsory notification in London, sufficient evidence to prove.

- (2.) INSUFFICIENCY OF HOSPITAL ACCOMMODATION.—But from whatever cause or causes the increased demands on the Managers' hospitals may have arisen, we cannot but regret that the insufficiency of the accommodation provided should have been such as to compel the Managers at so early a period of the year as the 13th May to warn the various local sanitary authorities that the accommodation at the Managers' disposal would shortly be exhausted, and that those authorities would be called upon to make provision for their own infectious sick. In a few weeks the Managers' worst anticipations were realised, and from about the middle of June to near the end of the year the removal of large numbers of patients was, as stated in the Ambulance Committee's Report on p. 242, "deferred from day to day for so many days that

“ultimately many remained at home until the termination of their illness.”

To this pass the Managers had been brought, not through any failure to recognise sufficiently early the immensely increased responsibilities cast upon them by the sudden removal, by the Legislature, of all restrictions on the admission of patients to their hospitals, but by the almost insuperable difficulties encountered by the Managers in obtaining proper sites for the erection of additional hospitals.

(3.) DIFFICULTIES OF PROVIDING ADDITIONAL HOSPITAL ACCOMMODATION.—

The number of suitable sites within or near localities where hospitals were most required was known to be very small, and the opposition to the acquisition of any of them by the Managers has always been very great. So far back as October, 1890, the Managers employed surveyors to ascertain what eligible sites were available for the purpose. The north-eastern districts were then most in need of an additional hospital, and, in the first instance, a site was suggested in the neighbourhood of Stoke Newington. This failed to meet with the approval of a majority of the Managers, and subsequently a site was chosen at Tottenham. The Managers applied to the Local Government Board for power to purchase it, but their application was unsuccessful.

When every effort to obtain a suitable site to the acquisition of which less objection was likely to be made had proved abortive, the Managers, in the summer of 1892, found themselves face to face with a severe outbreak of scarlet fever.

It was apparent that additional accommodation must be provided. The proposal to purchase the site at Tottenham was revived, and the Managers made urgent appeals on the subject to the Local Government Board.

That Board went through the usual routine of official local inquiries, &c., with the result that the Board consented to the purchase of the site, upon the condition that it should only be used *for twelve months*.

Within six weeks and four days from the date of possession of the land being obtained a temporary wooden hospital for 500 patients had been erected. The Board having spent £54,445 in the erection of this hospital, at the expiration of twelve months, the Local Government Board, after a second public inquiry, sanctioned its permanent use, on condition (*inter alia*) that the Managers should reserve for the use of Tottenham patients 100 beds, a percentage to the population of that district which is greater than the Managers themselves have ever yet been able to provide for the Metropolis.

In the meantime, the Managers had endeavoured to obtain a site for a hospital in the south-west of London, and applied to the Local Government Board for their sanction to the purchase of one near Tooting Bec Common. This proposal also failed to meet with the approval of that Board. At the time this decision was communicated to the Managers (on the 29th April, 1893) there were indications that as great, if not greater, demands would be made for hospital accommodation in the ensuing autumn than had been made in the previous year. As an alternative, therefore, and with the desire to do everything in their power to mitigate the misery and distress which the Managers felt must be extensively experienced so soon as it became impossible for all applicants to be received into their hospitals, the Managers submitted to the Local Government Board a much less desirable site at Lower Tooting. To the purchase of this site that Board consented, and plans for the erection of a permanent hospital upon it are in preparation. But in the meantime the Managers were compelled, by the pressure of immediate demands for admission, to erect on a portion of the estate a wood-and-iron hospital at a cost of £117,029. This hospital was constructed to accommodate 406 patients, and was erected in about eight weeks.

As a site for a convalescent fever hospital the Managers selected the Grangewood Estate at Norwood, but the purchase of this also the Local Government Board declined to sanction, on the ground that "they had not only to consider its desirability in itself as a site for a convalescent fever hospital, but also their responsibility to the public in permitting its acquisition for that purpose." At the time when they gave this decision, the Local Government Board were aware of the fact that a local syndicate, formed to purchase the estate and so prevent a hospital being built, had so entirely failed in obtaining local support as actually to offer their purchase to the Managers for the purpose, and at the price originally proposed, with the addition of their expenses out of pocket. As this site was in every respect eminently suitable for a convalescent hospital, the Managers were at a loss to understand the refusal, and applied to the Local Government Board for the reasons, but failed to obtain them.

The loss of Grangewood involves serious consequences. The south side of London presents special features which render it apparently impossible to find another site in anything like so convenient a position.

Sites for acute hospitals at Hither Green and Shooter's Hill have been sanctioned by the Local Government Board, but in the latter case the Board's sanction was only given upon condition (*inter alia*)—"That

“ none of the hospital buildings to be occupied by patients shall be erected within 150 yards from the Shooter’s Hill Road.”

- (4.) THE GORE FARM CONVALESCENT HOSPITAL USED FOR BOTH SMALLPOX AND SCARLET FEVER CASES.—During the year the Managers’ difficulties were further complicated by the rapid increase of smallpox, which compelled them to close the Gore Farm Hospital at Darenth against the reception of scarlet fever convalescents on the 6th March.

The wards were immediately disinfected, and smallpox patients were admitted to the upper hospital on the 12th March. Fortunately it was not found necessary to use the old wooden huts on the lower ground, and as the summer advanced, the Managers, having regard to the pressing need of beds for scarlet fever cases and to the fact that all fear of smallpox becoming seriously epidemic seemed to have passed away, sanctioned the use of these huts for scarlet fever convalescents, and the first batch was admitted on the 28th June.

The Managers were aware that in permitting the use of buildings for scarlet fever cases in such close proximity to those in use for smallpox cases they were sharing a great responsibility with the medical officer on whose advice the arrangements were being made. But the result justified their action, and on p. 87 Dr. Matthews, the Medical Superintendent, states: . . . “no single instance occurred of infection being transferred from one hospital to the other.”

- (5.) HOSPITAL RECONSTRUCTION.—In connection with the scheme of hospital provision now under the Managers’ consideration, it must be remembered that the hospitals at Hampstead, Fulham, and Deptford, hastily constructed of wood and iron at times when smallpox was epidemic in London, have given indications that they will not for long remain in a condition fit for the reception of patients, notwithstanding extensive repairs. Some of the buildings are therefore being replaced by brick structures. But, in order to co-ordinate the action of the several Hospital Committees, and to secure broad lines of uniformity as regards the fundamental points which should govern the preparation of any schemes for the general reconstruction of these hospitals, the Managers on 30th September, 1893, instructed the General Purposes Committee to consider and report: (a) As to the expediency of the Managers giving directions for the preparation of ground plans, which should indicate in what manner and to what extent it was proposed to replace by permanent buildings the existing temporary structures at the fever hospitals; and (b) as to the advisability of the Managers

settling certain principles of construction as a basis for the guidance of the Hospital Committees of Management.

- (6.) DIPHTHERIA ACCOMMODATION.—It will be within the recollection of the Managers that it was not until the end of October, 1888, that they were called upon to admit diphtheria patients into their hospitals. At first only 94 beds in two hospitals were set apart for the reception of these cases; but each year the number admitted has materially increased, as will be seen from the following figures:—

Year ...	...	1889	1890	1891	1892	1893
Admissions ...	...	722	949	1,312	2,009	2,848

In the past year the diphtheria accommodation was not sufficient to meet all demands, so that the figures, like those for scarlet fever, represent the actual admissions, but not the number that would have been admitted had there been room for all applicants.

At the end of 1893 the beds set apart for diphtheria cases numbered 252, distributed as follows:—

Eastern	Hospital	...	...	48 beds.
North-Western	„	...	...	88 „
Western	„	...	...	36 „
South-Western	„	...	...	52 „
South-Eastern	„	...	...	28 „
Total				...	<u>252 beds.</u>

On the 18th March, 1893, the Managers instructed a Special Committee to consider and report upon the increase of admissions of cases of diphtheria into the Managers' hospitals, and generally upon the whole question of the accommodation which was then provided for the treatment of such cases, and to make such recommendations as regards its enlargement, improvement, and distribution as the past experience and the probable necessities of the future might appear to demand.

In submitting their Report to the Board on the 13th May, the Special Committee referred to the annually increasing number of patients received into the Managers' hospitals, and stated that the whole of the beds hitherto provided at those hospitals for cases of diphtheria had on several occasions been exhausted. In the opinion of the Committee,

“ these facts and figures show that the Managers may not unreasonably anticipate
 “ a far greater proportionate number of patients suffering from diphtheria being
 “ admitted into their hospitals in the future than in the past; but, although your
 “ Committee are convinced of the urgent need of making further provision for the
 “ accommodation of diphtheria (as well as of scarlet fever), they feel that it would be

“ premature to make any suggestions as to its enlargement, improvement, or distribution
 “ until additional hospital sites are at the disposal of the Board.

“ When these additional sites shall have been acquired by the Managers, your
 “ Committee consider that, in designing the hospitals to be erected thereon, particular
 “ attention should be paid to the probable increase in the number of diphtheria
 “ patients, and the accommodation for patients in such hospitals so designed and
 “ distributed as to admit of a greater proportionate number of diphtheria patients
 “ being accommodated and isolated than is the case in some of the hospitals of the
 “ Managers where cases of diphtheria are now received.”

It will be appropriate here to draw attention to the following observations made in the Ambulance Committee's Report on p. 252 :—

“ It is in connection with patients suffering from this disease (diphtheria) that
 “ an insufficiency of hospital accommodation makes itself most acutely felt. The
 “ unavoidable delay sometimes experienced in ascertaining if and where a vacant
 “ bed exists, and the deplorable necessity of transporting some patients to a hospital
 “ at a considerable distance from their homes or the general hospital to which they
 “ have in the first instance been taken, cause, it is feared, a great increase both of
 “ risk and discomfort to the sufferer and certainly much dissatisfaction to all
 “ concerned.”

- (7.) CASES OF MISTAKEN DIAGNOSIS.—In the course of the year no fewer than 732 patients, or a percentage on the total admissions of 3·9 were, after admission at the fever hospitals, found not to be suffering from the diseases mentioned in the medical certificates upon which they were removed to hospital.

The largest number of cases of mistaken diagnosis admitted at any one hospital was, as was the case last year, at the Eastern Hospital, where 208, or 7·2 per cent., were received.

Of the patients admitted at the Hospital Ships, 81, or 3·3 per cent., were not suffering from smallpox. The percentage was much less after the 17th July, the date on which the shelters at South Wharf were opened for the detention, till such time as the accuracy of the original diagnosis could be either confirmed or disproved, of cases as to which the Board's Medical Officer on the spot was in doubt. A list of the cases—32 in number—which were detained in these buildings is given on p. 158.

- (8.) STAFF ILLNESS IN THE FEVER AND SMALLPOX HOSPITALS.—On the next page 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 presumably contracted infectious diseases in the performance of their duties. There were 2,484 persons employed during the course of the year, of whom 130, or 5·2 per cent., fell ill with fever, diphtheria, or measles, and two died.

PART I.—ANNUAL REPORTS, 1893. STATISTICAL COMMITTEE'S REPORT, 1893.

NATURE OF DISEASE.	OFFICERS.	Eastern Hospital.	North-Eastern Hospital.	North-Western Hospital.	Western Hospital.	South-Western Hospital.	Fountain Hospital.	South-Eastern Hospital.	Northern Hospital.	Gore Farm Hospital.	SUMMARY (Fever Hospitals.)		Hospital Ships and Gore Farm Hospital (Smallpox).	RESULTS.									
		Number of Officers.	Number of days wanted.	Number of Officers.	Number of days wanted.	Number of Officers.	Number of days wanted.	Number of Officers.	Number of days wanted.	Number of Officers.	Number of days wanted.	Number of Officers.	Number of days wanted.		Number of Officers.	Number of days wanted.							
Scarlet Fever	Asst. Medical Officers	1	28	4	120	1	61	1	70	1	24	1	56	4	202	F.H. one remained under treatment at end of year; others recovered.							
	Nurses	1	28	4	120	1	61	1	70	1	24	1	56	10	415	F.H. one remained under treatment at end of year; others recovered.							
	Assistant Nurses	4	204	16	547	3	145	2	93	1	41	2	74	3	134	N.E.H. three, F.H. two, remained under treatment at end of year; others recovered.							
	Laundrymaids	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Ward Servants	12	97	3	152	1	29	4	263	2	66	1	47	2	111	S.W.H. one, F.H. one, remained under treatment at end of year; rest recovered.							
	Housemaid	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Needlewoman	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
Diphtheria	Porter	1	44	1	44	1	44	1	44	1	44	1	44	1	44	Recovered.							
	Ambulance Driver	1	44	1	44	1	44	1	44	1	44	1	44	1	44	Recovered.							
	Asst. Medical Officer	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Nurses	1	28	1	28	1	28	1	28	1	28	1	28	1	28	N.E.H. one remained under treatment at end of year; rest recovered.							
Concurrent Diphtheria and Scarlet Fever	Assistant Nurses	2	83	2	83	2	83	2	83	2	83	2	83	2	83	Recovered.							
	Ward Servants	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Laundrymaids	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
Diphtheria followed by Enteric Fever	Kitchenmaid	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Laundrymaid	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
Enteric Fever	Nurse	1	34	1	34	1	34	1	34	1	34	1	34	1	34	Died.							
	(Nurses)	2	108	2	108	2	108	2	108	2	108	2	108	2	108	Died.							
	Assistant Nurses	1	97	1	97	1	97	1	97	1	97	1	97	1	97	Recovered.							
Measles	Ward Servants	4	221	4	221	4	221	4	221	4	221	4	221	4	221	Recovered.							
	Porter	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
Smallpox	(Assistant Nurse)	1	29	1	29	1	29	1	29	1	29	1	29	1	29	Recovered.							
	Wardmaid	1	19	1	19	1	19	1	19	1	19	1	19	1	19	Recovered.							
	Nurse	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Assistant Nurse	1	28	1	28	1	28	1	28	1	28	1	28	1	28	N.E.H. one remained under treatment at end of year; rest recovered.							
Smallpox	Ward Servants	1	60	1	60	1	60	1	60	1	60	1	60	1	60	W.H. patients removed to Hospital Ships.							
	Messroom-maid	1	30	1	30	1	30	1	30	1	30	1	30	1	30	Recovered.							
Smallpox	Porter	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
	Steward's Clerk	1	28	1	28	1	28	1	28	1	28	1	28	1	28	Recovered.							
TOTALS		22	1,037	28	978	12	553	13	656	15	387	6	229	26	1,536	4	201	4	197	130	5,794	8	209
Number employed *...	Males	30	44	21	23	28	28	29	32	32	71	311	80										
	Females	296	253	253	258	219	178	295	203	238	2,173	227											
TOTALS		326	297	284	261	247	198	327	235	309	2,484	307											
Number engaged during the year...	Males	8	17	7	4	8	20	8	4	24	100	50											
	Females	129	174	109	94	69	178	129	66	62	1,010	186											
TOTALS		137	191	116	98	77	198	137	70	86	1,110	236											
Number that left during the year...	Males	9	13	8	3	7	...	9	4	29	82	22											
	Females	125	55	123	88	73	20	118	62	143	807	122											
TOTALS		134	68	131	91	80	20	127	66	172	889	144											

* This gives the total number of individuals who have been on the books of the Hospitals in the course of the year, and must not be taken as giving either the average staff or the number employed at any one time.

NATURE OF BUSINESS	PERIOD
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...

As shown in the summary, 307 persons were employed on the hospital ships during the year, and of that number six contracted smallpox, or 1·9 per cent., and all recovered. In regard to these cases, Dr. Ricketts observes on p. 130 that one developed the disease

“three days after joining the hospital. She had not previously visited the hospital, and one is forced to conclude that the disease was contracted from an independent source. Of the other five, the vaccination in two cases was altogether unsuccessful, and in three it was not successful until the third attempt.”

A porter employed at the Gore Farm Hospital also contracted Smallpox.

- (9.) **AMBULANCE WORK.**—The Ambulance Committee commence their Report on p. 242 with a reference to the deficiency of beds in the Managers' hospitals, and to the difficulties of increasing the hospital accommodation. The Committee also describe the system of selecting patients for admission to the Board's hospitals during the time when they could only be received as beds became vacant by deaths and discharges, and detail the arrangements made to meet the serious outbreak of smallpox in the Metropolis, and refer to the necessity for the provision of additional ambulance stations to cope with the increasing work of the service, and to other matters of interest.

During the year 20,885 fever, diphtheria, and smallpox patients were removed from their homes to the various hospitals of the Managers; 6,813 convalescent patients were transferred to the country hospitals; 7,206 recovered patients were brought back to London from the latter hospitals, and 593 patients were removed to other places than the Managers' hospitals, exclusive of 468 who were taken from the out-patient departments of general hospitals to their homes, owing to there being no vacant beds in the Managers' hospitals, and of 170 enteric patients who were removed from their homes to the general hospitals, where the Managers had made arrangements for the reception of this class of patients.

Altogether, 36,976 removals were effected by the land ambulance service during 1893, and the various vehicles made 24,017 journeys, and ran 245,311 miles.

The steamboats of the river ambulance service conveyed 10,652 passengers to and from the hospital ships at Long Reach, and of that number 2,364 were patients taken to the hospital ships, 2,053 were recovered patients brought back to London, and 6,235 were visitors staff, workmen, &c.

The vessels were under steam for 698 days, travelled 28,341 miles, and carried, besides the passengers before mentioned, 1,676 parcels of stores, &c., weighing 56 tons 5 cwt. 96 lbs.

- (10.) CHOLERA.—On the 22nd June, the Local Government Board wrote to the Managers and adverted to their letter to them of the 24th August, 1892, in which, in view of the severe outbreak of cholera then in progress at Hamburg, and the consequent risk of the introduction of the disease into London, they drew attention to the duty which might devolve upon the Managers of making a certain amount of hospital provision for the Metropolis generally, irrespective of parochial boundaries, which could be utilised on the first appearance of cholera in London, and urged the Managers to immediately place themselves in communication with the authorities of the hospitals, infirmaries, and similar institutions in London, with the view of arranging what accommodation could be placed at the disposal of the Managers for cholera patients, in the event of the necessity arising.

The Board went on to state that they fully recognised the promptitude and zeal with which the Managers adopted and carried out that suggestion, and they had no doubt that, if cholera had been imported into London, the arrangements made by the Managers for the reception in hospital of cholera patients would have been of the greatest assistance to the sanitary authorities in dealing with the disease, and they forwarded for the information of the Managers a copy of a memorandum by the Board's Medical Officer, from which it would be seen that there was reason for reviewing the arrangements for preventing the extension of any cholera that might be imported.

The Board therefore asked the Managers to take into their consideration the question of renewing or extending the temporary arrangements made the previous year with the authorities of hospitals, infirmaries, and similar institutions in London for placing accommodation at the disposal of the Managers for cholera patients.

Long previous to the receipt of this communication, namely, on the 18th March, the Managers had considered it expedient to appoint a competent person to assist in arranging administrative details and conducting inquiries into the reorganisation of measures for dealing with a possible outbreak of cholera in 1893, and had engaged the services of Dr. Arthur Shadwell for the purpose.

In Dr. Shadwell's report on p. 261 will be found fully detailed the arrangements made on behalf of the Board for dealing with cholera.

(11.) ADDITIONAL ACCOMMODATION FOR IMBECILES.—In our last report we referred to the fact that the Managers had empowered the General Purposes Committee to look out for a site, and to submit a scheme for the establishment thereon of an asylum infirmary, in or within an easy distance of the Metropolis. In the beginning of the year the Managers also instructed that committee to consider the expediency and practicability of renting some building in which from 250 to 500 helpless imbeciles could be received pending the erection of the proposed infirmary. On the 9th December the Managers decided to apply to the Local Government Board for permission to purchase the Tooting Lodge Estate as a site for the proposed asylum infirmary. The Board had refused to sanction the purchase of this estate as a site for a convalescent fever hospital. If the Board accede to the Managers application,* it will enable them to at once take the necessary steps for the erection of the infirmary, which is so much needed for the accommodation of the increasing number of helpless, feeble, and very aged patients, who require permanent infirmary treatment.

(12.) TRAINING SHIP "EXMOUTH."—The reports of the Committee and Captain-Superintendent of this vessel for the year 1893 will be found on pp. 275-292.

The number of boys admitted during the year was 299, while the number discharged was 257.

Of the latter number, 102 entered the royal navy, 90 the mercantile marine, 28 the army as musicians, and 34 were returned to their respective parishes and unions. There were three deaths.

At the end of the year there remained 581 boys under training (including 17 who were admitted from extra Metropolitan parishes and unions), as compared with 539 at the end of 1892.

In a postscript to their report, the Training Ship Committee call attention to the fact that the number of boys entered into the royal navy from the "Exmouth" during the year was 102, whilst the aggregate number of similar entries from all the training ships in the United Kingdom was 93.

This fact is of interest to the Managers, not only as showing that the average physical condition of the boys must be good, but that their training for sea service has been conducted with intelligent zeal, and that the reputation of the "Exmouth" for turning out smart seamanlike lads is being fully maintained.

* The Local Government Board sanctioned the purchase of this estate on the 2nd March, 1894.

ii. NOTIFICATION STATISTICS AND SPOTTED MAPS.

The table on the succeeding page shows the number of notifications of, and deaths from, those notifiable diseases which are eligible for admission to the Managers' hospitals, the ratio of such notifications and deaths to the population, the number of notifications of other notifiable diseases, and the grand total of cases notified during 1893.

The appended diagrams show the cases of scarlet and enteric fevers, diphtheria, and smallpox which were notified during each week of the four years that the present system of notification of infectious disease has been compulsory in London.

Graphic statistics of the prevalence of the principal fevers throughout the Metropolis will be found upon reference to the spotted maps enclosed in the pocket at the end of this volume.

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

Scarlet Fever cases are spotted on four maps—one for each quarter of the year. This was done because not only were the cases too numerous to be shown clearly on one map of the size selected, but because it was thought that quarterly maps would have the additional interest of illustrating and comparing the prevalence of the disease during the different seasons of the year. The wide-spread prevalence of the disease is clearly shown in the maps, and especially in some of the northern, eastern, and south-eastern districts.

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

On the *Enteric Fever* map, a few considerable aggregations of cases are apparent, notably at Hackney, Bethnal Green, and Poplar.

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

Typhus fever has, for some years past, been practically stamped out in London, and there are very few cases now occurring.

Of smallpox the most notable outbreaks occurred in Kensington, St. Marylebone, Mile End, Whitechapel, Poplar, Lambeth, Battersea, Camberwell, and Greenwich.

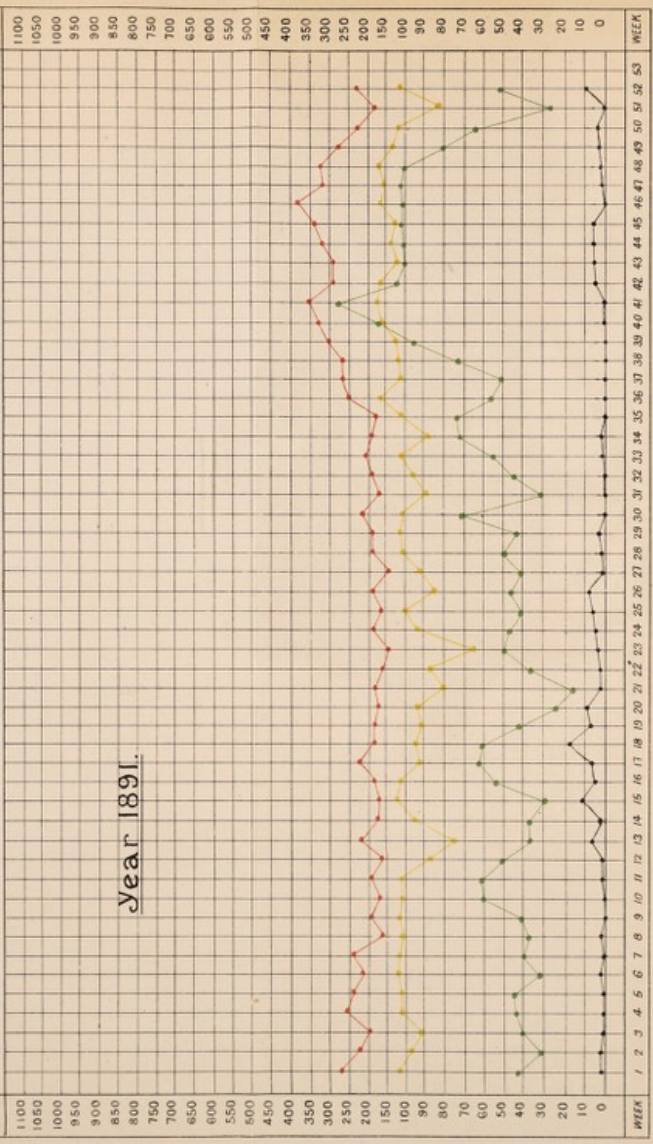
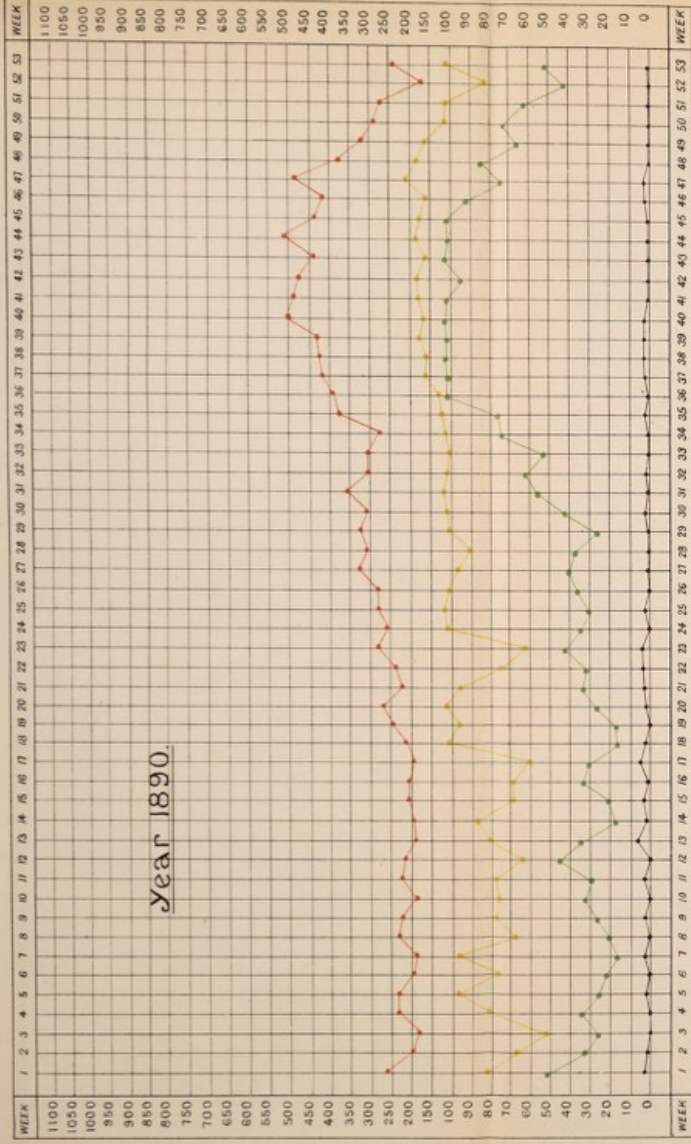
iii. FEVER STATISTICS, 1893.

It will be observed that additions have been made to the statistical tables, and that they have been renumbered, and now consist of 14 separate tables, instead of 11, as in former years.

The three additional tables show the coexistent diseases present during attacks of scarlet fever, diphtheria, and enteric fever.

METROPOLITAN ASYLUMS BOARD.

CHART showing the cases of Scarlet fever (red line---), Enteric fever (green line---), Diphtheria (yellow line---), and Smallpox (black line---) notified in the Metropolitan Asylums during each week of the undermentioned years.

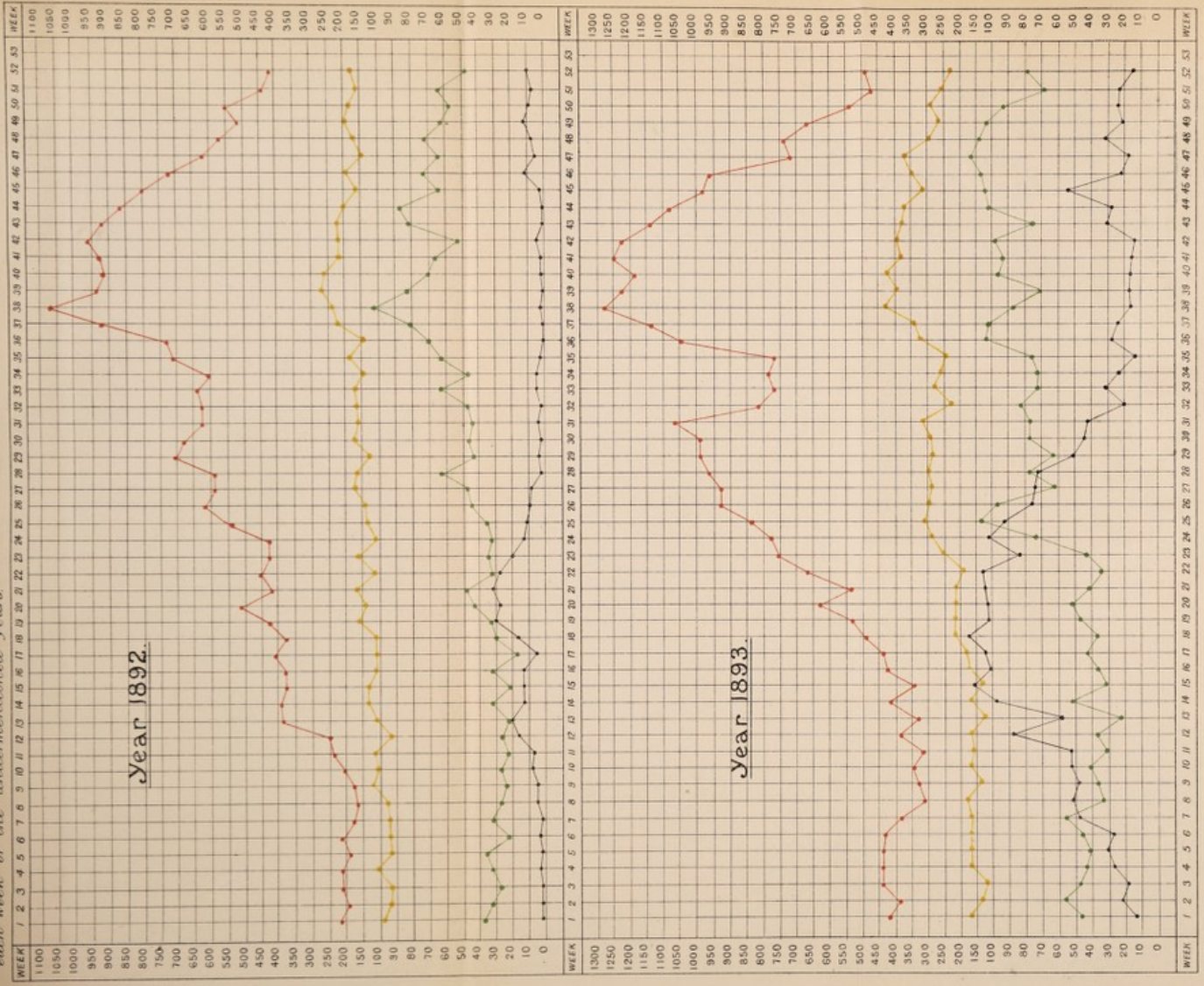




СЛАВОВА СМУЛОВА НАТИЛОПОСОПТАМ

METROPOLITAN ASYLUMS BOARD.

CHART showing the cases of Scarlet fever (red line), Enteric fever (green line), Diphtheria (yellow line), and Smallpox (black line) notified at the Metropolitan Asylums during each week of the under-mentioned years.



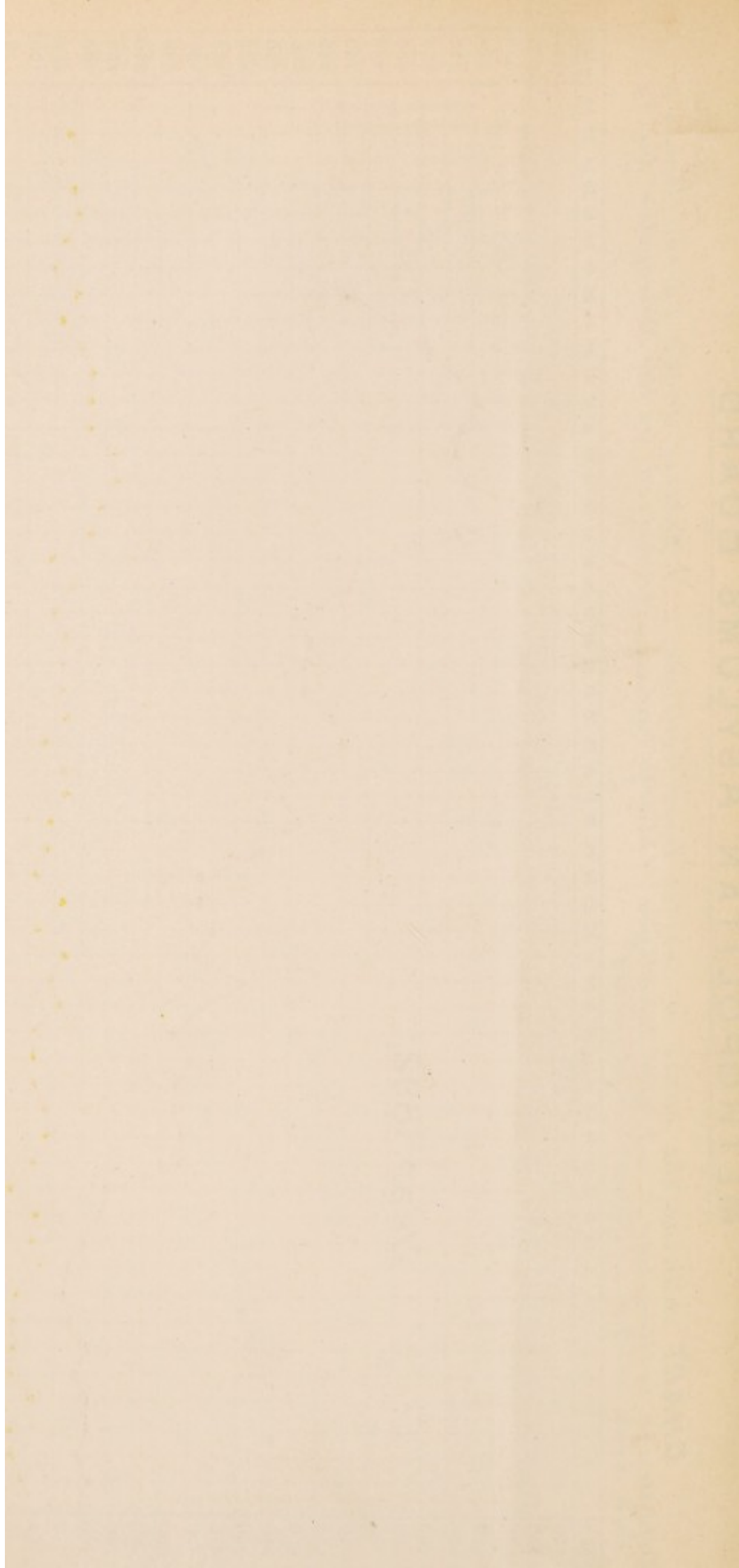


TABLE A.

Local Authorities in whose Districts the cases were resident.	Estimated Population, 1893.	NOTIFICATIONS OF, AND DEATHS FROM, THOSE NOTIFIABLE DISEASES WHICH ARE ELIGIBLE FOR ADMISSION TO THE MANAGERS' HOSPITALS.										NOTIFICATIONS OF OTHER NOTIFIABLE DISEASES.							Grand Total of Notifications.				
		NOTIFICATIONS.					DEATHS.					Total Deaths.	Annual Rate per 1,000 persons living.	Relapsing Fever.	Membranous Group.	Continued Fever.	Cholera.	Erysipelas.		Puerperal Fever.	Total.		
		Smallpox.	Scarlet Fever.	Diphtheria.	Enteric or Typhoid Fever.	Typhus Fever.	Total Notifications.	Annual Rate per 1,000 persons living.	Smallpox.	Scarlet Fever.	Diphtheria.											Enteric or Typhoid Fever.	Typhus Fever.
WEST DISTRICTS.																							
Kensington	167,029	102	943	358	97	1	1,501	9.0	10	52	83	17	—	162	0.97	—	15	11	2	273	9	310	1,811
Fulham	104,735	30	706	231	59	1	1,027	9.8	2	33	64	17	—	116	1.11	—	20	5	5	156	18	204	1,231
Hammersmith	103,044	17	665	273	67	—	1,022	9.9	3	36	53	15	—	107	1.04	—	6	4	1	183	18	212	1,234
Paddington	120,421	68	778	279	67	1	1,193	9.9	4	33	70	21	—	128	1.06	—	10	5	—	240	18	273	1,466
Chelsea	98,182	43	589	227	76	—	985	9.5	1	32	52	17	—	102	1.04	—	9	1	1	206	5	222	1,157
St. George, Hanover Square	76,043	23	591	116	68	—	798	10.5	3	25	34	12	—	74	0.97	—	7	2	2	82	3	96	894
Westminster	54,829	47	420	81	41	—	589	10.7	—	14	7	—	—	46	0.84	—	2	—	2	84	5	93	682
St. James, Westminster	24,000	52	113	46	22	—	233	9.7	1	2	14	6	—	23	0.96	—	—	3	—	33	3	39	272
NORTH DISTRICTS.																							
Marylebone	189,726	179	913	384	94	2	1,572	11.3	5	68	94	20	—	187	1.34	—	17	3	2	379	10	411	1,983
Hampstead	73,380	14	516	161	35	—	736	9.9	2	20	38	8	—	68	0.93	—	5	3	—	78	5	91	817
St. Pancras	233,336	120	2,589	763	169	—	3,641	15.6	9	100	201	27	—	337	1.44	—	21	3	5	656	24	709	4,350
Islington	327,919	122	2,989	863	263	1	4,238	12.9	2	94	500	47	1	344	1.05	—	38	7	1	702	40	788	5,026
Hackney	240,584	65	2,505	921	363	—	3,854	16.0	4	74	206	53	—	337	1.40	—	44	7	4	499	18	572	4,426
CENTRAL DISTRICTS.																							
St. Giles	38,641	73	238	73	32	—	416	10.8	4	14	22	6	—	46	1.19	—	5	—	—	98	2	105	521
St. Martin-in-the-Fields	14,034	11	102	25	6	—	144	10.3	2	2	8	1	—	13	0.93	—	2	—	—	9	—	11	155
Strand	23,788	32	140	74	11	—	257	10.8	1	19	22	1	—	43	1.81	—	2	—	—	22	—	24	281
Holborn	32,690	30	311	95	41	1	473	14.6	1	12	22	13	—	48	1.47	2	3	—	—	95	2	102	580
Clerkenwell	65,589	17	731	279	68	—	1,095	16.7	—	30	76	10	—	116	1.77	1	25	8	3	229	1	267	1,362
St. Luke	41,577	16	361	145	32	—	554	13.3	1	28	46	12	—	87	2.09	—	10	1	—	168	2	181	735
City of London	35,870	27	299	65	27	1	419	11.7	3	8	11	—	—	22	0.61	—	3	1	3	76	—	83	502
EAST DISTRICTS.																							
Shoreditch	123,440	28	1,008	484	117	1	1,633	13.3	3	39	137	16	—	195	1.58	—	30	4	4	317	10	365	2,003
Bethnal Green	129,620	79	1,488	708	138	—	2,413	18.6	7	71	136	25	—	239	1.84	—	38	4	4	426	18	490	2,903
Whitechapel	75,178	99	811	292	62	1	1,175	15.6	5	32	61	8	—	106	1.41	—	6	—	—	216	9	231	1,406
St. George-in-the-East	45,493	58	485	234	44	—	816	17.9	1	14	62	4	—	81	1.78	—	6	1	1	112	5	125	941
Limehouse	57,115	80	710	229	115	3	1,137	19.9	8	35	61	18	1	123	2.15	—	11	1	—	186	6	204	1,341
Mile End Old Town	108,041	115	1,179	343	146	—	1,783	16.5	8	40	80	29	—	157	1.45	1	9	—	—	282	5	297	2,080
Poplar	169,141	217	1,853	1,103	390	1	3,594	21.2	12	105	168	62	1	348	2.06	—	46	36	1	566	10	659	4,253
SOUTH DISTRICTS.																							
St. Saviour, Southwark	26,854	18	210	85	21	—	334	12.4	—	18	17	3	—	38	1.42	—	4	—	—	54	1	59	393
Newington	59,953	80	594	175	46	1	896	14.9	7	42	45	13	—	107	1.78	—	14	2	1	144	4	165	1,061
St. Olave, Southwark	117,672	64	1,101	454	66	—	1,685	14.3	6	51	93	13	—	163	1.39	—	24	1	1	284	6	316	2,001
Bermondsey	12,903	11	117	31	6	—	165	12.8	1	6	7	2	—	16	1.24	—	1	—	—	36	1	38	203
Rotherhithe	84,246	55	570	206	47	1	879	13.0	4	30	80	8	1	123	1.46	—	23	1	—	188	5	217	1,096
Lambeth	40,020	90	302	100	29	—	521	10.4	13	16	31	8	—	68	1.70	—	6	3	—	80	4	93	614
Battersea	280,284	163	2,247	770	159	3	3,282	11.7	5	69	185	36	1	296	1.06	—	59	59	30	581	27	756	4,038
Wandsworth	158,105	116	1,491	625	128	2	2,262	14.9	12	40	167	22	—	241	1.52	—	35	9	1	432	19	496	2,838
Greenwich	172,143	34	1,291	416	118	1	1,860	10.8	1	53	113	18	—	185	1.07	—	37	5	2	436	23	497	3,125
Camberwell	245,143	143	1,854	490	141	—	2,628	10.7	11	73	130	27	—	241	0.98	—	25	5	8	357	22	406	2,642
Lewisham (excluding Penze)	77,473	26	567	201	45	—	839	10.8	5	11	53	9	—	78	1.01	—	2	2	—	171	8	185	1,024
Woolwich	41,854	61	258	26	28	—	373	8.9	4	16	8	5	—	23	0.79	—	1	2	2	50	1	56	429
Plumstead	94,596	60	765	216	44	—	1,085	11.5	2	48	85	11	—	146	1.54	—	21	3	—	132	10	166	1,251
Port Sanitary Authority	—	10	2	—	20	—	32	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	34
Totals	4,306,411	2,813	36,901	13,026	3,663	22	56,425	13.1	186	1,587	3,196	675	5	5,649	1.31	4	668	205	86	9,700	397	11,060	67,485

No.	Name	Age	Sex
1	John Smith	25	Male
2	Mary Jones	22	Female
3	James Brown	30	Male
4	Sarah White	28	Female
5	Robert Green	35	Male
6	Elizabeth Black	32	Female
7	William Gray	40	Male
8	Jane Red	38	Female
9	Thomas Blue	45	Male
10	Anna Yellow	42	Female
11	George Purple	50	Male
12	Charlotte Pink	48	Female
13	Henry Orange	55	Male
14	Isabella Green	52	Female
15	Richard Blue	60	Male
16	Lucy Yellow	58	Female
17	Samuel Purple	65	Male
18	Rebecca Pink	62	Female
19	Benjamin Orange	70	Male
20	Esther Green	68	Female
21	Samuel Blue	75	Male
22	Ann Yellow	72	Female
23	Joseph Purple	80	Male
24	Elizabeth Pink	78	Female
25	David Orange	85	Male
26	Frances Green	82	Female
27	Samuel Blue	90	Male
28	Ann Yellow	88	Female
29	Joseph Purple	95	Male
30	Elizabeth Pink	92	Female

Summary of Table I. (p. 91).—On the last day of 1892 there were 3,548 fever, diphtheria, and other patients in the fever hospitals then open.

During the first three months of the year 1893 the number under treatment declined until the minimum, 2,199, was reached on the 24th March. After that date the number gradually rose, until it attained 3,224 on the 19th July, remaining at about that figure until the opening, on the 30th October, of the new Fountain Hospital at Lower Tooting, and the subsequent temporary use as dormitories of one of the day rooms in each of the pavilions at the Northern Hospital afforded additional accommodation, when the number under treatment rose rapidly until the maximum, 3,558, for the year was reached on the 5th December.

The following was the distribution of patients amongst the various hospitals on that day:—

HOSPITAL.	BEDS OCCUPIED.					
	Scarlet.	Diphtheria.	Typhus.	Enteric.	Other Diseases.	TOTAL.
Eastern Hospital	235	48	...	44	9	336
North-Eastern Hospital...	499	...	...	...	...	499
North-Western „ ...	262	86	...	24	1	373
Western „ ...	300	34	...	18	2	354
South-Western „ ...	264	52	...	23	6	345
Fountain „ ...	377	...	...	...	...	377
South-Eastern „ ...	348	26	1	7	...	382
Northern „ ...	779	...	...	...	...	779
Gore Farm „ ...	113	...	...	...	...	113
TOTALS	3,177	246	1	116	18	3,558

The total number of patients under treatment during the year was 22,222, as compared with 18,120 in the preceding year.

The total admissions were 18,674, as compared with 16,276 in 1892, 7,809 in 1891, 8,334 in 1890, 5,772 in 1889, 5,152 in 1888, and 6,537 in 1887. Up to the latter year the largest number admitted in any one year had been 2,867 in 1882.

The total discharges during the year were 16,975, and the deaths were 1,982, or a total mortality of 10·53, as compared with 10·55 in the preceding year.

Summary of Table II. (p. 94).—The total monthly admissions of all cases were lowest in February, and highest in November.

The accompanying diagram shows the monthly admissions of each kind of fever from the date of opening of the first of the Managers' hospitals in 1872 to the end of 1893.

The curves relating to the scarlet and enteric fevers clearly indicate the seasonal prevalence of those diseases. During the twenty-two years the scarlet fever admissions fell to the minimum seven times in February, four times in March, five times in April, four times in June, once in September, and once in December (1888); while the maximum number was reached once in January (1888), once in July, three times in September, ten times in October, five times in November, and twice in December. The enteric fever admissions fell to the minimum three times in March, five times in April, six times in May, seven times in June, and once in July; and rose to the maximum twice in September, twelve times in October, seven times in November, and once in December.

Typhus fever has only occurred in the Metropolis in small local outbreaks.

Diphtheria cases were not admitted to the Managers' hospitals until the 23rd October, 1888. During the years 1889 and 1891 the minimum admissions took place in January, in 1890 in April, and in February in 1892 and 1893; and the maximum admissions of 1889 and 1893 in November, of 1890 and 1891 in September, and of 1892 in August.

Summary of Table III. (p. 98).—Scarlet fever, diphtheria, and enteric cases were admitted from every parish and union in the district.

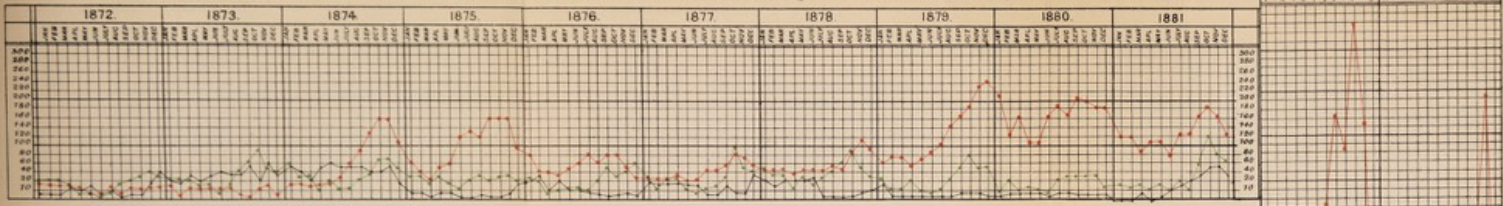
Summary of Table IV. (p. 100).—This table shows the scarlet fever admissions and deaths at various ages. Up to the year 1888 it had been the custom to give the aggregate admissions and deaths of patients in the first five years of life, but the Committee being of opinion that the table would be much more valuable if the figures were given for each of such years separately, it has since been arranged accordingly.

The total admissions of scarlet fever cases in 1893 were 14,548: the female were 454 in excess of the male admissions. The total mortality, calculated on the admissions, was 6·2 per cent., being as nearly as possible equal amongst each sex.

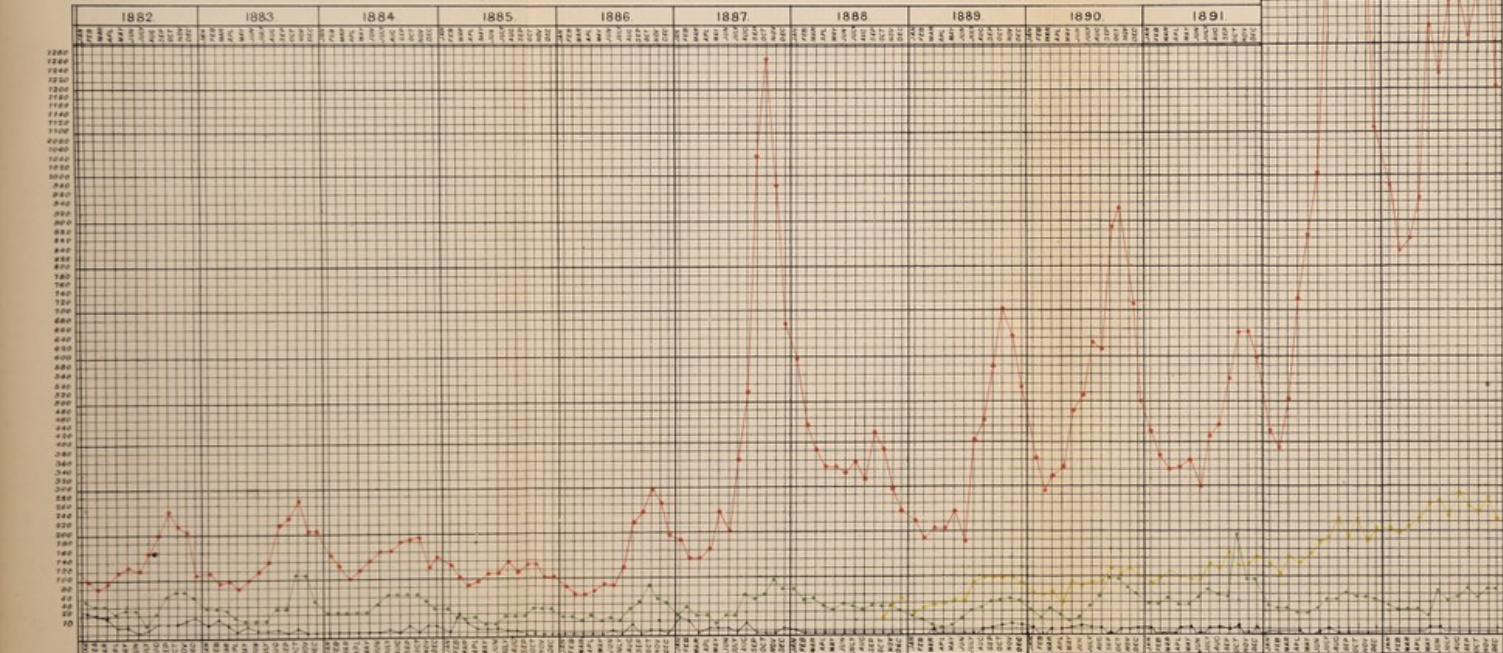
The following table is a summary of the tables in this and previous Annual Reports:—

METROPOLITAN ASYLUMS BOARD.

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



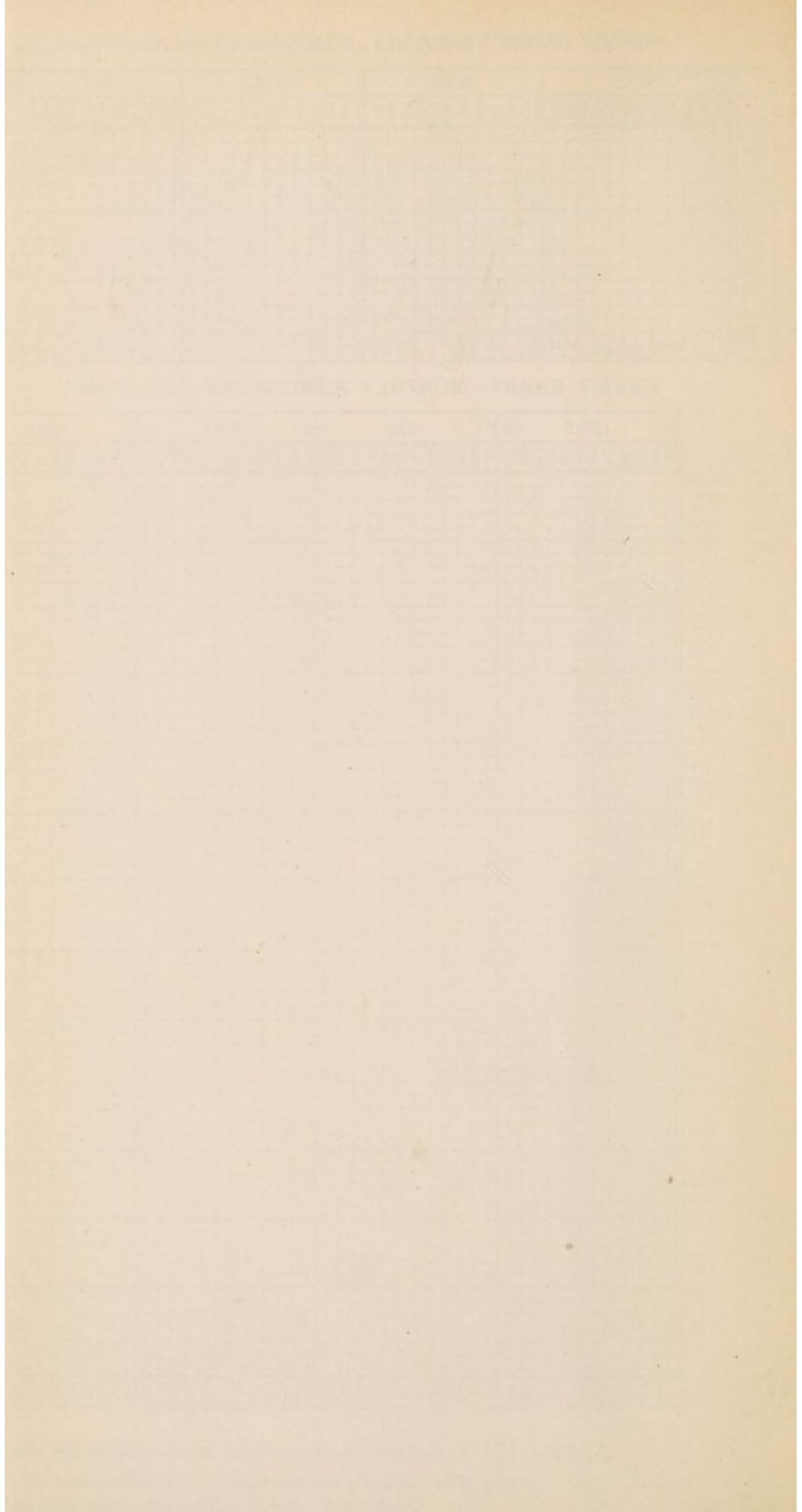
FEVER CHART- MONTHLY ADMISSIONS (Continued)



1892												1893											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

1894												1895											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

NOTE.—(1.) Diphtheria cases were not admitted into the Board's Hospitals until the 23rd October, 1888.
 (2.) The high figure attained by the admissions in 1887 was attributed partly to an unusual prevalence of Scarlet Fever in that year, and partly to the issue in July of an Order by the Local Government Board authorising the admission of patients upon the Order of a Relieving Officer or Master of a Workhouse, accompanied by a Certificate signed by a Poor Law Medical Officer or by any registered Medical Practitioner.



SCARLET FEVER.—TABLE B—*Showing Mortality at various ages of 69,752 cases admitted into the Board's Hospitals in the years 1871 to 1893.*

AGES.	MALES.			FEMALES.			TOTAL.		
	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Combined Mortality per cent.
Under 5 ...	9,767	1,834	18·8	9,828	1,741	17·7	19,595	3,575	18·2
5 to 10 ...	13,637	797	5·8	15,126	801	5·3	28,763	1,598	5·6
10 to 15 ...	5,759	144	2·5	6,585	173	2·6	12,344	317	2·6
15 to 20 ...	2,214	70	3·2	2,477	60	2·4	4,691	130	2·8
20 to 25 ...	932	22	2·4	1,312	40	3·0	2,244	62	2·8
25 to 30 ...	390	17	4·4	667	20	3·0	1,057	37	3·5
30 to 35 ...	240	12	5·0	348	15	4·3	588	27	4·6
35 to 40 ...	92	8	8·7	167	7	4·2	259	15	5·8
40 to 45 ...	53	5	7·7	65	3	4·2	118	8	5·7
45 to 50 ...	17	—		31	1		48	1	
50 to 55 ...	16	1		15	—		31	1	
55 to 60 ...	4	1		3	—		7	1	
And upwards	1	—		6	1		7	1	
Totals	33,122	2,911	8·8	36,630	2,862	7·8	69,752	5,773	8·3
<i>Cases under 5 years of age admitted during the years 1888 to 1893.</i>									
Under 1 ..	224	63	28·1	194	66	34·0	418	129	30·9
1 to 2 ...	773	203	26·3	728	200	27·5	1,501	403	26·8
2 to 3 ...	1,429	309	21·6	1,482	328	22·1	2,911	637	21·9
3 to 4 ..	2,106	344	16·3	2,095	299	14·3	4,201	643	15·3
4 to 5 ..	2,355	261	11·1	2,447	258	10·5	4,802	519	10·8
Totals	6,887	1,180	17·1	6,946	1,151	16·6	13,833	2,331	16·8

N.B.—(1) The above tables include deaths within 48 hours after admission, as well as deaths from inter-current maladies.

(2) 2,172 cases are excluded from the first table as they were patients admitted into hospitals which also received convalescent patients from other hospitals, and in taking the ages of patients for the purposes of this return it was impossible from the returns in the possession of the Committee to identify the two classes. This accounts for the difference between the total in this table and that in Table F, p. 35.

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. The total mortality of males is greater than that of females by 1·0 per cent.

Summary of Table V. (p. 101).—Shows certain of the complications observed amongst the scarlet fever cases under treatment during the past year.

Summary of Table VI. (p. 102).—This is a table which has been prepared by the medical superintendents of “coexistent diseases more or less prejudicial to recovery present during the attack of scarlet fever.

Summary of Table VII. (p. 104).—Shows the admissions and deaths at various ages of diphtheria cases during the past year.

The following table is a summary of the tables in this and previous Annual Reports for 1888, 1889, 1890, 1891, and 1892 :—

DIPHTHERIA.—TABLE C—*Showing Mortality at various ages of 7,932 cases admitted into the Board's Hospitals in the years 1888 to 1893.*

AGES.	MALES.			FEMALES.			TOTAL.		
	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Combined Mortality per cent.
Under 1 ...	75	50	66·7	71	52	73·3	146	102	69·9
1 to 2 ...	232	152	65·5	215	139	64·7	447	291	65·1
2 to 3 ...	316	197	62·3	323	191	59·1	639	388	60·7
3 to 4 ...	412	221	53·6	414	195	47·1	826	416	50·4
4 to 5 ...	399	170	42·6	514	230	44·8	913	400	43·8
Total under 5	1,434	790	55·1	1,537	807	52·5	2,971	1,597	53·8
5 to 10 ...	1,157	326	28·2	1,305	379	29·0	2,462	705	28·6
10 to 15 ...	370	42	11·4	515	51	9·9	885	93	10·5
15 to 20 ...	223	12	5·4	365	11	3·0	588	23	3·9
20 to 25 ...	150	7	4·7	276	15	5·4	426	22	5·2
25 to 30 ...	92	7	7·6	177	6	3·4	269	13	4·8
30 to 35 ...	59	2	3·4	78	3	3·8	137	5	3·6
35 to 40 ...	33	3	9·1	54	2	3·7	87	5	5·7
40 to 45 ...	23	3	} 15·6 }	27	3	} 17·7 }	50	6	} 16·8 }
45 to 50 ...	10	—		17	4		27	4	
50 to 55 ...	6	2		7	2		13	4	
55 to 60 ...	4	1		7	—		11	1	
And upwards	2	1		4	2		6	3	
Totals ...	3,563	1,196	33·6	4,369	1,285	29·4	7,932	2,481	31·3

Diphtheria, like scarlet fever, is most fatal to infant children. The maximum mortality occurs in the first year of life, when it reaches the high percentage of 69·9, subsequently falling with every additional year of life to the minimum of 3·6 per cent. amongst persons between 30 and 35 years of age.

The death rate of females is less than that of males by 4·2 per cent.

Summary of Table VIII. (p. 105).—Shows certain of the complications observed in the diphtheria cases under treatment during the past year.

Summary of Table IX. (p. 106).—This is a table which has been prepared by the Medical Superintendents of “coexistent diseases more or less prejudicial to recovery present during the attack of diphtheria.”

Summary of Table X. (p. 108).—Shows the admissions and deaths at various ages of enteric cases during the year.

The following table is a summary of the tables in this and previous Annual Reports :—

ENTERIC FEVER.—TABLE D—*Showing Mortality at various ages of 8,689 cases admitted into the Board's Hospitals in the years 1871 to 1893.*

AGES.	MALES.			FEMALES.			TOTAL.		
	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Combined Mortality per cent.
Under 5 ...	141	17	12·1	125	16	12·8	266	33	12·4
5 to 10 ...	578	53	9·2	565	49	8·7	1,143	102	8·9
10 to 15 ...	1,088	109	10·0	931	156	16·8	2,019	265	13·1
15 to 20 ...	1,021	148	14·5	934	198	21·2	1,955	346	17·7
20 to 25 ...	674	148	22·0	645	120	18·6	1,319	268	20·3
25 to 30 ...	471	108	22·9	386	84	21·8	857	192	22·4
30 to 35 ...	262	79	30·2	241	49	20·3	503	128	25·4
35 to 40 ...	152	46	30·3	147	37	25·2	299	83	27·8
40 to 45 ...	85	22	} 35·4 {	78	17	} 23·4 {	163	39	} 29·2 {
45 to 50 ...	43	20		55	13		98	33	
50 to 55 ...	19	9		21	4		40	13	
55 to 60 ...	6	3		8	4		14	7	
And upwards	8	3		5	1		13	4	
Totals ...	4,548	765	16·8	4,141	748	18·1	8,689	1,513	17·4

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

(2) The total number does not correspond with Table F, p. 35, for similar reasons to those given in note 2 to Table B, p. 29.

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

The lowest death rate is amongst patients between 5 and 10 years of age; it then increases with each quinquennium, until it attains a percentage of 27·8 amongst patients between 35 and 40 years of age and of 29·2 amongst the patients of ages from 40 to 60 and upwards.

The male sex is evidently more liable to attack by this disease; but its fatality is greater amongst females by 1·3 per cent. 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.

Summary of Table XI. (p. 110).—Shows the complications observed in the enteric fever cases under treatment during the past year.

Summary of Table XII. (p. 111).—This is a table which has been prepared by the Medical Superintendents of “coexistent diseases more or less prejudicial to recovery during the attack of enteric fever.”

Table XIII. (p. 112).—Shows the admissions and deaths at various ages of typhus fever cases at the Eastern and South-Western Hospitals.

The following table is a summary of the tables in this and former Annual Reports:—

TYPHUS FEVER.—TABLE E.—*Showing Mortality at various ages of 2,160 cases admitted into the Board's Hospitals in the years 1871 to 1893.*

AGES.	MALES.			FEMALES.			TOTAL.		
	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Mortality per cent.	Cases Admitted.	Died.	Combined Mortality per cent.
Under 5 ...	40	1	2·5	48	1	2·1	88	2	2·3
5 to 10 ...	105	1	1·0	139	—	—	244	1	0·4
10 „ 15 ...	168	4	2·4	207	11	5·3	375	15	4·0
15 „ 20 ...	162	10	6·2	197	18	9·1	359	28	7·8
20 „ 25 ...	123	28	22·8	124	22	17·7	247	50	20·2
25 „ 30 ...	76	21	27·6	82	15	18·3	158	36	22·8
30 „ 35 ..	75	25	33·3	85	22	25·9	160	47	29·4
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 ...	42	21	50·0	54	21	38·9	96	42	43·8
50 „ 55 ...	22	15	68·2	38	21	55·3	60	36	60·0
55 „ 60 ...	14	9	64·3	18	15	83·3	32	24	75·0
And upwards	16	12	75·0	22	15	68·2	38	27	71·1
Totals ...	975	219	22·5	1,185	217	18·3	2,160	436	20·2

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 F, p. 35, for similar reasons to those given in note 2 to Table B, p. 29.

Young children appear to be less liable to attack by typhus fever than adolescents or adults. At all ages more females than males have been admitted.

The death rate of females is less by 4·2 per cent. than that of males. The mortality in both sexes is greatly influenced by age. Up to the twentieth year the rate does not exceed 7·8 per cent.; but in the quinquennium 20 to 25 it suddenly rises to 20·2 per cent., and increases during every later age-period.

Summary of Table XIV. (pp. 113-122).—Shows the total admissions during the year of patients having other diseases than scarlet, enteric, and typhus fevers and diphtheria. The form of the table is so arranged as to show not only the diseases from which the patients actually suffered, but also the diseases from which they were stated to be suffering by the certificate under which they were removed to hospital.

The percentage of these cases of mistaken diagnosis was, as regards scarlet fever cases, 1·6; diphtheria cases, 8·8; and enteric cases, 37·8.

Amongst the 232 cases certified as scarlet fever, there were 30 of measles, 13 of pneumonia, 27 of tonsillitis, and 16 of erythema,

and 58 had no obvious disease. Amongst the 251 cases certified as diphtheria, were 4 of measles, 22 of pharyngitis, and 161 of tonsillitis.

Amongst the 213 cases certified as enteric fever, were 23 of febricula, and 56 of pneumonia.

iv. SMALLPOX STATISTICS, 1893.

Table I. on pp. 173-176 shows the number of smallpox patients admitted from each parish or union during each month of the year 1893, and the total admissions for the year. It also shows the total deaths and discharges, and the number remaining under treatment at the beginning and end of the year.

The fears entertained by the Managers at the end of 1892 that smallpox would be very prevalent during 1893, and which led them in the early part of the year to take extra precautions to ensure the rapid removal of cases to the hospital ships were, unfortunately, amply justified.

On the 1st January there were 39 patients remaining under treatment. During the month 91 were admitted, 145 in February, 244 in March, 434 in April, and 507 in May. As is usual, the disease then began to be less prevalent, and the admissions declined from 307 in June to 209 in July, 93 in August, 71 in September, 72 in October, 122 in November, and 81 in December.

The increase in the last two months of the year was quite in accordance with the recognised behaviour of smallpox.

Altogether (excluding 24 non-smallpox cases detained in the shelters at South Wharf) 2,455 patients suffering from smallpox, or certified to be so suffering, were admitted into the Managers' hospitals during the year. But of this number 77 were, after admission, found not to be suffering from smallpox. In the early part of the year smallpox cases were admitted into the South-Eastern Hospital pending removal to the hospital ships. Of the total admissions 2,441 were admitted at the hospital ships, 11 at Gore Farm Hospital, and three at the shelters at South Wharf. 1,552 patients were transferred from the hospital ships to Gore Farm Hospital.

The deaths numbered 184, of which one occurred at the South Wharf Shelter, 178 at the hospital ships, and five at the Gore Farm Hospital.

For information regarding the spread of the disease we refer to the Report of Dr. Long, the second medical officer of the river ambulance service, on pp. 161-172.

Table II.—On pp. 177-188 are tables which supply detailed particulars concerning the vaccination of patients admitted.

In Table IIc. (which is a continuation of Tables IIa. and IIb.) it will be seen that primary vaccination cicatrices were present in 1,624 cases, of whom 42 died. In 252 cases there was "no evidence" as to cicatrices—(these were cases said to have been vaccinated, but bearing no visible evidence of the operation, and cases in which no statement was made, but the nature of the eruption or other cause prevented any observations of the marks if any existed)—of whom 44 died; and in 500 cases vaccination cicatrices were absent, 94 of whom died. Ten of the 73 patients who were not suffering from disease at the time of their admission, afterwards developed the disease, and one died.

Dr. Ricketts, the Medical Superintendent, in an appendix to his Annual Report (pp. 134-152), submits other statistical tables bearing on the relation of smallpox to vaccination.

v. FEVER AND SMALLPOX STATISTICS OF PAST YEARS.

On the two succeeding pages are returns which show the annual admissions and deaths of patients at the Managers' fever and smallpox 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 smallpox, and the annual average mortality from scarlet and enteric fevers for certain specified years before and since the establishment of the Managers' hospitals.

the opening of the first Hospital on the 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.	Relapsing Fever.	Diphtheria	Typhus.	Enteric.	Scarlet.	Diphtheria	Typhus.	Enteric.
1870 (25th Jan. to 15th May)	...	...	...	...	218	218	...	...	...	...	14	14	12.84	...	...	...	1.88	0.10	0.15	0.30
1871	...	...	...	...	...	...	...	...	...	...	...	...	Scarlet	...	...	...	0.58	0.11	0.12	0.27
1872 (15 months to 31st Dec., 1872)	108	...	134	279	343	864	11	...	30	57	70	168	10.78	...	23.62	21.96	0.28	0.08	0.05	0.24
1873	92	...	401	381	271	1,145	6	...	91	56	58	211	6.55	...	23.15	15.13	0.19	0.09	0.08	0.27
1874	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
1875	1,182	...	65	299	269	1,815	160	...	16	78	54	308	13.69	...	23.85	24.68	1.06	0.17	0.04	0.23
1876	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
1877	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
1878	679	...	168	484	233	1,564	91	...	47	100	40	278	14.34	...	26.25	20.26	0.49	0.15	0.04	0.28
1879	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
1880	1,949	...	28	415	239	2,464	242	...	6	43	37	328	12.30	...	20.68	15.63	0.82	0.14	0.02	0.19
1881	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
1882	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
1883	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
1884	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
1885	1,353	...	53	220	229	1,855	130	...	7	36	46	219	9.47	...	12.17	15.82	0.18	0.23	0.01	0.15
1886	1,780	...	10	333	74	2,197	151	...	4	47	22	224	9.04	...	42.10	14.85	0.17	0.21	0.00	0.15
1887	5,900	...	35	441	161	6,537	489	...	4	61	59	613	9.54	...	11.59	14.59	0.36	0.23	0.00	0.15
1888	4,408	99	1	450	194	5,152	501	46	...	72	60	679	9.89	59.35	...	14.64	0.30	0.00	0.17	
1889	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
1890	6,537	942	16	498	341	8,334	510	316	5	93	81	1,005	7.86	33.55	25.66	19.68	0.21	0.33	0.00	0.15
1891	5,262	1,312	18	755	462	7,809	357	397	1	106	102	963	6.67	30.63	5.88	14.52	0.14	0.34	0.00	0.13
1892	13,093	2,009	19	430	725	16,276	839	583	2	65	140	1,629	7.28	29.35	9.76	13.20	0.27	0.46	0.00	0.10
1893	14,548	2,848	2	544	732	18,674	901	865	1	110	105	1,982	6.11	30.42	50.00	20.54	0.37	0.76	0.00	0.16
Totals	71,922	7,932	2,307	9,041	6,759	97,961	6,023	2,482	478	1,602	1,390	11,975	9.84	34.37	20.69	20.65	...	...	...	...

Average Annual Mortality per 1,000 of estimated population of London before the opening of the Managers' Hospitals, extracted from the Registrar-General's Returns:—

Scarlet Fever (only obtainable for 13 years), 1859 to 1871, both inclusive	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.07	...	...	...
Enteric Fever ditto	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Average Annual Mortality per 1,000 of estimated population of London from Scarlet Fever during the past 13 years, and from Enteric Fever during the past 3 years, extracted from the Registrar-General's Returns	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.32	...	...	...
Increase	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Decrease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTE.—1. From the 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 the 23rd October, 1888.
 4. The Mortality rates of patients in the Managers' Hospitals are calculated according to the Registrar-General's formula.

Table G—Showing the Admissions and Deaths of Patients and Mortality per cent. at the Managers' SMALLPOX HOSPITALS during each year since the opening of the first Hospital on the 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.	Annual Mortality per 1,000 of estimated Population.
	Smallpox.	Other Diseases.	Total.	Smallpox.	Other Diseases.	Total.		
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		0·01
1876	2,134	16	2,150	372	1	373	21·64	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		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	...	0·01
1893	2,376	118	2,494	180	...	180	...	...
Totals	59,738	1,175	60,913	10,081	47	10,128	...	...
Average annual mortality per 1,000 of estimated population of London during the 22 years (1849 to 1870 inclusive) before the opening of the Managers' Hospitals, extracted from the Registrar-General's Returns								0·27
Average annual mortality per 1,000 of estimated population of London during the past 22 years (1872 to 1893 inclusive) extracted from Registrar-General's Returns								0·16
Increase ... ..								...
Decrease								0·11

It will be observed that, comparing the mortality from scarlet fever during the 13 years preceding the establishment of the Managers' hospitals with the mortality during the past 13 years, the latter shows a decline of 70 per cent.

The mortality rates of enteric fever for the three years 1891 to 1893 inclusive show a decline of 57 per cent. as compared with the three years immediately preceding the opening of the Managers' hospitals.

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

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. It will be seen that the actual mortality rates during the seven years, 1886-1892, were far lower than at any period dealt with in the Registrar-General's returns.

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	288
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	186	43	11

vi. IMBECILITY STATISTICS, 1893.

The Reports of the Medical Superintendents of the asylums for adult imbeciles and of the schools for imbecile children will be found on pp. 189-239.

The numerical results of the year's work at the several imbecile establishments are as under:—

	Asylums.			Schools.			Grand Totals.		
	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.
On the 1st January, 1893, the several Asylums and Schools contained	2,266	2,751	5,017	604	369	973	2,870	3,120	5,990
There were admitted during the year from the several Parishes and Unions (including re-admissions)	246	194	440	88	72	160	334	266	600
Transfers	45	44	89	...	...	...	45	44	89
The total number under treatment being	2,557	2,989	5,546	692	441	1,133	3,204	3,386	6,590
Of that number there were discharged	59	36	95	17	17	34	76	53	129
Transferred ... ..	...	...	...	45	44	89	45	44	89
And there died	217	218	435	40	23	63	257	241	498
Leaving under treatment on the 31st December, 1893	2,281	2,735	5,016	590	357	947	2,871	3,092	5,963

The total number remaining under treatment in the asylums and schools at the end of 1893 showed a decrease of 27 as compared with the number at the end of 1892.

*Adult Imbeciles.—Statistics—Summary of Table I. (p. 201).—*This shows the total admissions, re-admissions, discharges, and deaths for the year at the three asylums for adults.

Of the total number of patients discharged, 22 had recovered, 21 had improved, and 49 had not improved. There was also 1 discharge entered as "Not insane."

The total number of patients who died was 435, as compared with 495 in 1892.

The average number daily resident in the three asylums was 5,020; the highest number resident on any one day was 5,057; and the lowest number was 4,989.

*Summary of Table II. (p. 201).—*This shows the admissions re-admissions, discharges, transfers, and deaths which have taken place at the three asylums since the opening of the first in September, 1870, up to the end of 1893.

The total admissions during this period of over 23 years were 17,323, of whom 15,757 were admitted for the first time, 123 were re-admissions, and 1,143 were transfers from one asylum to another. This latter number does not balance with the transfers shown amongst the discharges, as it includes a number of patients received from Hampstead Asylum when it was closed in 1876, as well as a number of children over 16 years of age received from the imbecile schools.

Of the discharges, 12 were not insane, 739 had recovered, 963 had improved, 957 had not improved, and 367 were transfers from one asylum to another.

The deaths numbered 9,248.

Summary of Table III. (pp. 202-203).—This shows the admissions, discharges, transfers, and deaths, with the mean annual mortality and proportion of recoveries per cent. of the admissions, for the year 1884, and for each subsequent year.

The total percentage of recoveries during the past year was 4·5, and the percentage of deaths on the average number daily resident was 8·7.

Summaries of Tables IV. (p. 204) and V. (p. 205).—In the first of these summaries is a classification, under the usual denominations of mental disease, of the mental condition of the patients admitted during the year 1893 direct from the several parishes and unions, and in the second summary similar information is afforded as to all the patients resident in the several asylums on the last day of that year.

Of the total number of 5,016 then resident, 1,450 are classified as suffering from imbecility, 1,337 from dementia, 484 from dementia and epilepsy, 393 from imbecility and epilepsy, 294 from chronic mania, 246 from idiocy, 218 from senile dementia, and 176 from melancholia.

Summary of Table VI. (pp. 208-209). 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 the 31st December, 1893.

Of the 529 patients admitted during the year 1893, 11 had at the close of the year been discharged as recovered (including 1 not insane), 8 as improved, and 12 as not improved, and 43 had died.

Of the 5,016 patients remaining under treatment, upwards of 2,222 had been resident in the asylums over ten years.

Summary of Table VII. (pp. 212-215). Shows the causes of death during the year 1893, together with the ages of the decedents, calculated from the ages stated in the orders of admission.

There were 435 deaths during the year, 21 having been caused by senile decay, 70 by phthisis, 57 by heart diseases, 24 by exhaustion of dementia, and 41 by epilepsy. There was one death caused by accident.

Summary of Table VIII. (p. 217).—This table shows the length of residence of those discharged as recovered and of those who have died during the year 1893.

Of the 435 deaths, no fewer than 79 were of patients who had been resident upwards of 18 years.

Summary of Table IX. (pp. 216-217).—This table shows the age of patients resident in the several asylums on the 31st December, 1884, and on the same day in each subsequent year, calculated from the ages stated on the orders of admission.

Of the 5,016 patients remaining in the several asylums on the 31st December, 1893, upwards of 2,000 were over 50 years of age, six being over 90 years.

Summary of Table X. (p. 219).—This table shows the ages of the admissions, discharges, and deaths during the year 1893, calculated from the ages stated on the orders of admission.

The total discharges numbered 95.

The total deaths numbered 435, of whom 333 were upwards of 40 years of age, and 102 upwards of 70 years.

Summary of Table XI. (pp. 220-221).—This table shows the departments where patients were employed on 31st December, 1893. 834 out of a total of 2,281 males, and 845 out of 2,735 females, were usefully employed in and about the asylums.

Summary of Table XII. (pp. 222-224).—This shows the occupations previous to admission, and condition as to marriage, of the patients admitted during the year 1893.

Of the 291 males admitted, 38 were described as labourers, 8 as porters, and 118 had no settled occupation; 160 were stated to be single, 65 married, 29 widowers, and as regards 37 the condition as to marriage was unknown.

Of the 238 females, 20 were servants, 15 needlewomen, 15 charwomen, and 156 were without settled occupations; 139 were stated to be single, 43 to be married, 33 widows, and in 23 cases the condition as to marriage was unknown.

Imbecile Children.—The statistics relating to the children and older patients under treatment at the Darenth Schools and Pavilions will be found attached to the Report of the Medical Superintendent, Dr. Walmesley, pp. 233 to 239.

vii. GENERAL SUMMARY.

In conclusion, the Committee submit the following brief summary of the numbers of infectious patients, imbeciles (adult and children), and boys who have been under the care of the Managers in the several hospitals, asylums, and training ship "Exmouth" since the opening of the first institution (the temporary hospital for relapsing fever at Hampstead) in 1870:—

INSTITUTIONS.	Admitted direct from Homes or Parishes and Unions.	Numbers remaining in the various Institutions, 31st Dec., 1893.
Fever Hospitals	97,961	3,270
Smallpox Hospitals (including the Shelters at South Wharf)	60,874	84
Asylums for Adult Imbeciles	*15,757	5,016
Schools for Imbecile Children	*2,290	947
Training Ship "Exmouth"	5,271	581
Totals	182,153	9,898

* Re-admissions are not included.

(Signed) JACKSON HUNT,
Chairman of the Committee,
 1893-4.

METROPOLITAN ASYLUMS BOARD,
 Chief Offices: Norfolk House, Norfolk Street,
 Strand, W.C.

PART II.

REPORTS OF THE MEDICAL SUPERINTENDENTS OF THE SEVERAL INFECTIOUS HOSPITALS FOR THE YEAR 1893.

No. 1.

REPORT OF DR. E. W. GOODALL, MEDICAL SUPERINTENDENT OF THE EASTERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

EASTERN HOSPITAL,
HOMERTON, N.E.,
January 23rd, 1894.

To the Committee of Management.

MADAM AND GENTLEMEN,

I beg to present to you my Annual Report and Statistical Tables for 1893.

On December 31st, 1892, 370 patients remained under treatment. The admissions during the year numbered 2,861, making the total treated 3,231. Of these 1,269 were discharged, 1,282 were transferred to other Hospitals of the Board, and 372 died, leaving under treatment on December 31st, 1893, 308 patients. The gross mortality for the year is 12·86.

At the end of 1892, 272 Scarlet Fever patients remained in the Hospital; 1,964 were admitted during the year, making the total under treatment 2,236. Of these 662 were discharged, 1,221 were transferred to other Hospitals of the Board, and 135 died, leaving under treatment 218. The mortality per cent. of the Scarlet Fever cases is 6·78; but the 135 deaths put down as due to Scarlet Fever include 17 in which the fatal termination was brought about by some other affection, either present before

or contracted during convalescence from the attack of Scarlet Fever for which the patient was admitted—viz., Measles, eight; Diphtheria, six; Tuberculosis, two; and the effects of Scalds, one. Making allowance for these cases the Scarlet Fever mortality is 5.92 per cent.

Forty-six Diphtheria patients remained in the Hospital on December 31st, 1892; 510 were admitted during the year, making the total treated 556. Of these 279 were discharged, 57 were transferred to other Hospitals of the Board, and 181 died, leaving under treatment 39. The mortality per cent. is 35.24.

Twenty-nine Enteric cases remained at the end of 1892; 178 patients were admitted, making the total number under treatment for this disease 207; 145 were discharged, and 28 died, leaving in the Hospital 34. The mortality per cent. is 15.95. Amongst the 28 fatal cases is included one in which the patient succumbed to an affection of the heart from which he had been suffering severely before he contracted Enteric Fever.

Only one case of Typhus Fever was under treatment during the year.

The combined mortality of the Scarlet Fever, Diphtheria, and Enteric cases is 12.86 per cent.

Twenty-three cases of disease other than those mentioned above remained under treatment on December 31st, 1892; 204 such cases were admitted during the year, making a total under treatment of 227; of these 182 were discharged, and 28 died, leaving 17 in the Hospital at the end of the year. The mortality per cent. of these cases is 13.27.

Four cases of Smallpox were admitted. They remained only a short time in this Hospital, to which they were brought because it was too late in the evening to send them to the Hospital Ships at Long Reach.

I append a return showing the number of members of the staff warded on account of diseases which they presumably contracted in the performance of their duties. Those who remained under treatment at the end of 1892 made good recoveries. During 1893 one charge nurse, four assistant-nurses, and two wardmaids contracted Scarlet Fever; all had mild attacks. One assistant medical officer (Dr. Rogers), one charge nurse, and two assistant nurses contracted Diphtheria; in no case was the attack more than moderately severe, though in the instance of one of the assistant nurses there was subsequent paralysis. The assistant medical officer owed his attack to a case of Tracheotomy, to which he had to pay almost constant attention on account of the continual re-formation of membrane in the windpipe below the tracheotomy wound. The patient subsequently made a good recovery. The two assistant nurses were employed on ambulance duty, and I have no doubt contracted the disease from some severe cases of Diphtheria they were called upon to remove. Two charge nurses, one assistant nurse, and four ward-

maids contracted Enteric Fever; one of the wardmaids had a very severe attack, and the assistant nurse a relapse. Six out of these seven members of the staff were employed in the Enteric wards.

Alice Carr, charge nurse of a Diphtheria ward, was taken ill with that disease on January 2nd; she had suffered from a severe attack of Diphtheria (followed by paralysis) upwards of two years previously, while in the Managers' service. She was recovering from the attack of Diphtheria when symptoms of Enteric Fever set in; they rapidly became grave, and the attack ended fatally on February 6th. Nurse Carr had been promoted to the rank of charge nurse only a short time before her death, and in her the Managers lost a valuable and promising officer.

One wardmaid and one porter contracted Smallpox. The wardmaid had a severe, the porter a modified, attack. Both had been vaccinated in infancy, but not revaccinated.

Minor illnesses (such as Tonsillitis) were much less prevalent among the staff than during the previous year.

The work of cleaning and painting the Hospital was commenced in February, and completed by the end of June. A useful and much-needed addition to the laundry has been made by the erection of a building containing two sorting-rooms. The mortuary has been re-arranged and much improved. The appliances for extinguishing fire have been rendered more efficient by the addition of six hydrants in the grounds of the Hospital, with the requisite hose and fittings; the Hospital has been placed in telephonic communication with the nearest fire station, and certain members of the subordinate staff have been periodically drilled in the use of the fire-extinguishing apparatus. During the latter part of the autumn a system of hot-water pipes was placed in the four Diphtheria wards which were very inadequately warmed by means of open fireplaces. The new apparatus has been found during the recent very cold weather to act very satisfactorily, and I am hoping to see the same system introduced into the four Enteric wards.

In my last annual report I stated that certain measures you had taken with respect to the engagement of trained charge and assistant nurses had been followed by satisfactory results. I can still say the same as regards charge nurses, but not as regards trained assistant nurses (those, that is, who are now officially recognised by the Managers as first assistant nurses); for lately I have experienced much difficulty in obtaining efficient members of this class. I have recently addressed a communication to you in which I gave what I believe to be the causes of this difficulty, the principal one being that inasmuch as the value and necessity of a three years' training is being more fully recognised by the public, the training schools, and nurses themselves, the one-year trained nurse is becoming more scarce. Hence, for their

first assistants, the Managers will have to look in the future to their untrained second assistants ; and it seems to me that, in order to convert these latter into efficient first assistants, some method of disciplinary and technical training should be established, and measures should be taken by which the Managers should obtain more control (with respect to length of service) over their assistant nurses than they at present possess.

To my colleagues, Messrs. Fox, Spurrell, and Dr. Richards, I am indebted for aid in the compilation of the statistical tables. To the former I owe my special thanks for the manner in which he has superintended the administration of the Hospital at times during the past year when I have been absent.

I beg to append three papers*—one by my late colleague Dr. Rogers on the operation of Tracheotomy, and two by myself—reports on the Tracheotomies of the past two years, and on Secondary Diphtheria occurring in patients convalescing from Scarlet Fever in 1893.

I am,

Your obedient Servant

(Signed) E. W. GOODALL,

Medical Superintendent.

* Only the Report of Dr. Goodall on Secondary Diphtheria is included in this Volume.

(APPENDIX.)

REPORT ON CASES OF DIPHTHERIA ARISING AMONGST SCARLET
FEVER CONVALESCENTS DURING 1893.(By DR. GOODALL, *Medical Superintendent of the Eastern Hospital.*)

The following is a Table of these cases, showing the wards in which they occurred, &c. :—

No.	Sex.	Age.	Ward.	Attacked with Diphtheria.	Days after admission.	Result.
1	M.	3	Patience	Feb. 2	34	Died.
2	F.	8	Patience	April 29	78	Recovered.
3	F.	1	Hope	Aug. 8	29	Died.
4	F.	4	West Hut	Sept. 9	34	Died.
5	M.	4	Courage	Oct. 1	25	Recovered.
6	M.	6	Courage	Oct. 8	18	Recovered.
7	F.	1	Temperance	Oct. 28	42	Died.
8	M.	3	Charity Hut	Nov. 10	11	Died.
9	M.	4	Charity Hut	Nov. 26	13	Died.
10	M.	2	Charity Hut	Nov. 30	35	Recovered.

[There were, besides, two cases of measles with membranous laryngitis (such as would commonly be termed measles and diphtheria) occurring amongst scarlet fever convalescents; but each of these cases could be traced to previous cases of simple measles; and from an etiological point of view they differ from the so-called post-scarlatinal diphtheria; therefore I have not included them (as I did last year) amongst the latter cases.]

From the above Table it will be seen that there were 10 cases of post-scarlatinal diphtheria, of which six were fatal. They occurred in four of the permanent wards and two of the huts; there are 10 permanent wards and three huts; so that six wards and one hut escaped. In 1892 only one ward and one hut escaped.

Case 6 was infected by case 5, case 10 by case 9, and case 9 by case 8. Seven cases remain, therefore, whose origin is sought. First with respect to the influence of overcrowding; cases 1, 4, and 8 occurred in wards in which the floor space per bed was considerably below the amount that, in my opinion, should be allotted to fever patients; on the other hand, cases 2, 3, 5, and 7 occurred in wards in which upwards of 144 square feet were allowed per bed. Between the occurrence of cases 1 and 2 Patience ward had been thoroughly cleaned and painted, and the beds reduced to what I consider the proper number. Hope, Courage, and Temperance wards had all been treated in like manner during the second quarter of the year. The avoidance of overcrowding has therefore not absolutely prevented the occurrence

of diphtheria in some of the wards ; but it is to be noted that, comparing 1892 with 1893, fewer wards were attacked, and fewer instances of the disease (both absolutely and relatively) arose during the latter than during the former year, even when the cases of measles set down in the 1892 table are excluded.

The existence of some defect in the drainage system of a ward is by some considered to be a frequent cause of these cases of diphtheria, but I could not find any such in connection with the cases under discussion. If the drainage system was at fault one would expect to find more cases of secondary sore throat (including diphtheria) than actually have occurred. The number of these cases (over and above the ten cases of diphtheria) was by no means excessive* ; four occurred in Patience ward, three in Fortitude ward, and two in each of the other permanent wards, except Temperance, Gladness, and Faith, in which wards there were no cases. Of the three huts there were three cases in Charity, four in Joy, and none in the West hut, which, however, was only in use for a little over three months. Of these 24 cases of secondary sore throat two only (in Charity on December 7th and 9th) occurred in connection with an outbreak of diphtheria. The charge nurse of Fortitude ward had a mild attack of diphtheria, which commenced on October 26th ; Fortitude is below Courage ward, in which two cases of diphtheria had arisen two or three weeks before ; but I could not trace the nurse's attack to these ; and no cases of diphtheria broke out amongst the patients in Fortitude. The two cases of secondary sore throat in that ward occurred on August 10th and November 5th ; both were very mild cases.

Nor do I believe that diphtheria is carried from the diphtheria to the scarlet wards by the air, by the drains, or by members of the staff. With respect to the drains it is to be observed that Joy hut, in which, in spite of its being overcrowded, no case of secondary diphtheria has occurred since its erection in July, 1892, is the nearest of all the scarlet wards to the diphtheria block ; and the drains from this hut run into the same large drain into which (nearer its termination in the main sewer outside the hospital) the drains from the diphtheria wards are conducted. But there is another way open for diphtheria to gain an entrance into a scarlet fever ward, viz., by direct introduction by means of patients suffering from the disease. In 1892 the only case of secondary diphtheria that occurred in Charity hut was due to a case of diphtheria which had been admitted as scarlet fever, but which was found after a day or two to be diphtheria pure and simple. Case 3 (in the 1893 table) may also have been caused in the same way. A little girl was admitted into Hope ward on July 29th certified to be suffering from scarlet fever ; no rash was to be seen (it was stated to have been present on the 21st), but there was slight desquamation. There was deposit only on the uvula and both tonsils, which, however, became distinctly membranous by the 31st, on which day the patient, being suspected of having diphtheria and not scarlet fever, was removed to a separate room ; three weeks later

* It must be remembered, however, that a large number of convalescent patients over three years of age are transferred to the Northern Hospital.

she again had a membranous inflammation of the fauces and nasal passages, from which she recovered. In my opinion she had diphtheria with a relapse, and I think she was very possibly the cause of case 3. In the remaining cases (1, 2, 4, 5, 7, and 8) no such obvious cause was to be found. In my report to you last year I suggested that diphtheria may have been introduced into the wards by patients who were suffering from diphtheria and scarlet fever combined, the symptoms of diphtheria being masked by scarlet fever; but this view must, I think, be abandoned; for though no doubt a considerable number of scarlet fever cases will be found to have a condition of throat differing little or not at all from what is seen in many cases of diphtheria, yet clinical and bacteriological observations go to prove that such cases are not true diphtheria; it is very rare to see them accompanied by "croup," or followed by paralysis; and if the exudation upon the fauces (which may be membranous) be examined, the bacillus diphtheriæ is very rarely found. Such cases must be looked upon as scarlet fever pure and simple, and I cannot attribute to them the instances of secondary diphtheria occurring in the scarlet fever wards.

But though diphtheria is not likely to gain an entrance into a scarlet ward either by means of obvious cases or under the disguise of scarlet fever, it may perhaps creep in undetected in a much more subtle way. Children are frequently sent up to the Hospital certified to be suffering from scarlet fever, with the history of having had a sore throat and rash a few days or even a week or two before; on arrival no rash is to be seen, there is no desquamation, and some parts of the fauces (usually the tonsils) are slightly ulcerated. Sometimes these cases demonstrate that they are not scarlet fever by developing that disease in the Hospital, and I think it may be fairly suggested that some of them are very mild cases of diphtheria, perhaps at a late stage of the disease. That, apart from symptoms, and as far as naked eye appearances are concerned, diphtheria may occur in these unrecognised forms has been demonstrated incidentally by Dr. Sidney Martin* in his well-known researches on the pathology of diphtheria. No doubt it would be comparatively easy to ascertain whether there is any truth in this suggestion by isolating all these doubtful cases instead of sending them into a scarlet fever ward; but the number of isolation beds available when the Hospital is full (as it has been for the last two years) is quite inadequate for this purpose.

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

* Report of Medical Officer to Local Government Board for 1891-2, page 148, case 1.

No. 2.

REPORT OF DR. R. A. BIRDWOOD, MEDICAL SUPERINTENDENT
OF THE NORTH-EASTERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

NORTH-EASTERN FEVER HOSPITAL,
ST. ANN'S ROAD, SOUTH TOTTENHAM,
23rd January, 1894.

To the Committee of Management.

In response to the invitation from the Statistical Committee, my colleagues have contributed short summaries† of subjects included in the "Reports and Tables" annually submitted to the Board. In dealing with the large numbers of patients admitted into the Managers' Hospitals it is desirable that whilst the statistical methods of the past are maintained unaltered, that they should be amplified and supplemented by detailed grouping, explanatory comments, and records of clinical observations. In these Reports the numerical and tabular form has been adopted.

390 patients remained in Hospital at the beginning of the year.

3,131 were admitted. Of these 94 were not obviously suffering from Scarlet Fever at the time of admission; 27 were infected in Hospital, five dying.*

2,327 were discharged to their homes.

623 were transferred to other Hospitals of the Board.

146 died.

425 remained in Hospital at the end of the year.

The mortality for the year for all patients was 4.68 in 100.

The highest number of patients in Hospital at midnight was 566 on the 10th March, and we had then 34 beds ready for the reception of arrivals. The lowest number was on the 1st January.

* One patient was admitted twice during the year—in January with Measles, and in November with Scarlet Fever. One patient not suffering from Scarlet Fever was returned in last year's Report as having Scarlet Fever, the correction is included in this year's returns.

† Only two Reports, *i.e.*, those relating to Post-Scarlatinal Diphtheria, and Chickenpox and Measles, respectively, are included in this Volume.

At my request Mr. Turner has prepared the following statement from the notes supplied by the Ambulance Nurses :—

In 2,460 instances amongst the patients discharged since the Hospital was opened the dates of the initial illness and rash were noted ;

In 1,067 both occurred on the same day ;

In 821 the rash occurred on the second day ;

In 358 " " third day ;

In 133 " " fourth day ; and

In 81 " " a later day.

From which it is evident that in about three-quarters of the patients sent to Hospital the certain recognition of the disease is possible early in the illness.

The wards allow about 1,700 cubic feet, including obstructions, for each of 20 beds. During the greater part of the year I have placed 30 patients in some of the wards, and 40 babies in the cot wards. The space allotted to each patient has accordingly at times been reduced to 850 cubic feet for babies and 1,100 cubic feet for others.

The returns of Albuminuria, Diphtheria, and Mortality I now submit to you demonstrate that overcrowding alone, even to this extreme limit, does not explain the incidence of Post-Scarlatinal Diphtheria, nor the excess of kidney mischief. The mortality for Scarlet Fever is shown on Table I. to be 4·36 ; Albuminuria and Nephritis in the list of complications together amount to 393 instances amongst 3,064 patients ; whilst from Appendix A (prepared for me by Dr. Buchanan), it will be seen that 11 patients were reported as having suffered from Post-Scarlatinal Diphtheria, and of these seven died. I commend the paper for the Managers' earnest consideration, as containing suggestions of the method of the introduction of Diphtheria infection into the Scarlet Fever wards, as a valuable contribution in the discussion of the question " Whether Diphtheria and Scarlet Fever patients should be admitted into any one of the Managers' Hospitals, unless the nurses and others in attendance on these two diseases are kept as distinct as they were when Smallpox and Fever patients were treated in adjoining Hospitals ? "

The dangers I apprehend are the introduction of the infection of Diphtheria into the Scarlet Fever wards, the inability to isolate each and every decided or suspected Diphtheria patient, and the great risk involved in allowing convalescent children to play in the spaces between the huts, for these courts are damp from diminished sunlight and stagnant air. These courts also are unwholesome, because the children congregate about the open gullies. To meet this latter danger, the Board have purchased a

field away from the buildings as a recreation ground, and on this field, I hope, there will be a winter garden for convalescent patients.

A risk of neglect also occurs, for accommodation is provided in the Hospitals for a certain number of patients and the least number of staff for those patients. If 30 or 40 are placed in a ward built for 20, we are unable to increase the staff required for the increased number of patients, for there is insufficient accommodation for them. The staff required to attend 20 patients cannot possibly attend on 30. Some of their duties must be neglected.

Regarded from a public health aspect it is of vital importance that the Managers should find room for every patient they are asked to remove. It seems to me quite clear that they may safely do so for a short time if they allow 1,000 cubic feet of air space, exclusive of obstructions, provided that some efficient system of ventilation, warming and day rooms for convalescents is adopted; and that the professional, nursing, domestic, and every other department are proportionately augmented to do the work without strain. In building a hospital of 500 beds, and allowing 2,000 cubic feet for each, provision should be made for a staff sufficient to nurse and attend at least 700 patients in times of epidemic emergency. I believe that it is better for individuals and for the community to temporarily reduce the space allotted to each bed than to refuse to admit patients. The difficulties and dangers of the former are administrative and remediable; the harm done by the other is unknown and incalculable.

The rate of mortality in this hospital—4·52 in 100—estimated from the deaths attributed to Scarlet Fever is higher than it really is. The explanation of this apparent death rate may be considered under two headings—the methods adopted for calculating the rate, and the possibility of saving some of the lives by reforms in administration. Under the former, we include in the returns of Scarlet Fever all patients who have had Scarlet Fever during their stay in Hospital. Any deaths due to some other cause are counted amongst the deaths caused by Scarlet Fever—for instance, five who had had Scarlet Fever were infected with Measles, and died of Measles; similarly two of burns, one of a scald, one of Tuberculosis, 12 of Diphtheria, and eight of various other conditions, in all 28 patients. Suppose we omit the Scarlet Fever patients dying of Diphtheria as possibly deaths properly attributable to Scarlet Fever, we still have 16 deaths that should not be counted in calculating Scarlet Fever mortality. If a convalescent Scarlet Fever patient is infected with Measles in Hospital and dies of Measles; or if a badly burnt child suffers from the Scarlet Fever associated with burn and dies of the burn; or if some patient with a serious malady from the surgical wards of a general Hospital is admitted with surgical Scarlet Fever and dies of the disease for which the operation was done, then these deaths should not be counted as deaths due to Scarlet Fever, but as recoveries from Scarlet Fever

and deaths due to the other conditions. If these 28 deaths are excluded, then the Scarlet Fever mortality of this Hospital is reduced to 3·57 in 100. I suggest the following consideration as likely, if carried out, to result in a reduction of even this rate.

Twenty-seven patients (included in the tables amongst other diseases) were infected with Scarlet Fever in Hospital, and of these five died; 36 patients were infected with Measles in Hospital, and of these five died (see Appendix B, prepared for me by Mr. Turner). Sufficient and separate isolation accommodation should be provided for each and every patient when, in the opinion of the Medical Officer admitting the patient, there is any doubt as to the correctness of the diagnosis of Scarlet Fever. I suppose that, during the past two years, this has occurred oftener than in previous years, as, owing to the inability of the Managers to admit patients at once, the medical certificates were dated some days before admission. The symptoms of Scarlet Fever are evanescent, and none may be present at the time of admission. It is not till the late evidence of Scarlet Fever appears that the diagnosis of the medical certificate can be confirmed. These patients should not be returned to their homes, and they should not be sent to the infectious wards, so as neither to give the disease to others nor to take it themselves. Much the same applies to all other infectious diseases. There ought to be ample isolation accommodation for every doubtful or certain instance of Measles, Diphtheria, or Chickenpox, and probably, also, for some other conditions. The first suggestion therefore is "that the isolation accommodation of this hospital should be increased."

The other point for consideration is whether the treatment of the patients permits of such improvement as to hold out a hope and expectation of a reduced death rate. The Managers have recently dealt with the nursing question, and I trust that when the reform is in operation it will be evident that the Managers have dealt with it successfully.

It is with pleasure that I direct the Managers' attention to the appended reports.* They indicate the work done in a Fever Hospital. I trust that this new departure on the part of the Statistical Committee will result in the collection and publication of information valuable to the medical profession and beneficial to the Fever stricken patient. A copy of the reports might well be handed to every student attending the Board's Hospitals. Mr. Skinner, the Steward's clerk, has compiled Table IV., and the following table shows the duration of the patients' stay in Hospital. This table applies to Scarlet Fever only, and indicates the period before recovery and freedom from infection of all patients discharged to their homes. The table of transfers indicates when they are convalescent, and the table of deaths the interval between admission and death.

* Not included in this Volume.

Scarlet Fever for the year 1893.

Discharged, having been in Hospital										No. of Patients.
6 weeks, and under	...	...	...	...	...	...	...	...	...	124
7 "	...	...	...	...	...	...	...	...	...	271
8 "	...	...	...	...	...	...	...	...	...	434
9 "	...	...	...	...	...	...	...	...	...	420
10 "	...	...	...	...	...	...	...	...	...	293
11 "	...	...	...	...	...	...	...	...	...	212
12 "	...	...	...	...	...	...	...	...	...	155
13 to 26 weeks	...	...	...	...	...	...	...	...	...	362
Over 26 "	...	...	...	...	...	...	...	...	...	2
Total										2,273
Transferred										
Within 1 week's stay in Hospital	...	...	...	...	...	...	...	...	...	3
" 2 "	...	...	...	...	...	...	...	...	...	27
" 3 "	...	...	...	...	...	...	...	...	...	107
" 4 "	...	...	...	...	...	...	...	...	...	215
" 5 "	...	...	...	...	...	...	...	...	...	149
" 6 "	...	...	...	...	...	...	...	...	...	66
" 7 "	...	...	...	...	...	...	...	...	...	25
" 8 "	...	...	...	...	...	...	...	...	...	14
" 9 "	...	...	...	...	...	...	...	...	...	4
" 10 "	...	...	...	...	...	...	...	...	...	7
" 11 "	...	...	...	...	...	...	...	...	...	...
" 12 "	...	...	...	...	...	...	...	...	...	1
" 13 "	...	...	...	...	...	...	...	...	...	2
" 14 "	...	...	...	...	...	...	...	...	...	1
Total										621
Died										
During 1st week in Hospital	...	...	...	...	...	...	...	...	...	39
" 2nd, 3rd and 4th weeks in Hospital	...	...	...	...	...	...	...	...	...	62
" 5 to 8	...	...	...	...	...	...	...	...	...	25
" 9 to 12	...	...	...	...	...	...	...	...	...	9
" 13 to 16	...	...	...	...	...	...	...	...	...	2
" 16 weeks and upwards	...	...	...	...	...	...	...	...	...	...
Total										137

I desire to express my appreciation of my good fortune in having had Mr. Chenoweth associated with me in the opening and administration of this Hospital. I am greatly indebted to him for his capable and zealous co-operation.

During my absence, from the 25th March to the 29th July, Mr. F. Meadows Turner was the Medical Superintendent.

I have the honour to be,

Your obedient Servant,

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

*(APPENDIX A.)*POST-SCARLATINAL DIPHThERIA AT THE NORTH-EASTERN
HOSPITAL IN 1893.

The total cases of definite post-scarlatinal diphtheria during the year have been 11, details of which are given in the accompanying table. The table takes no account of scarlet fever accompanied in its acute stage by membranous exudation on the fauces of which there have been several cases. Of these latter it can only be said that the state of the fauces was in the majority of cases reconcilable with scarlet fever conditions, although with regard to some it has been impossible to affirm that they do not represent coexisting scarlet fever and diphtheria.*

The table does not take account of cases admitted with diphtheria uncomplicated with scarlet fever. Seven admissions were so diagnosed and isolated, and to these no spread of the disease in the hospital has been traced.

It will be seen that of the 11 cases, Nos. 2 and 6 can be accounted for by personal infection from the previous cases 1 and 5 respectively. Of the remaining nine, No. 8 was associated with the admission to the ward of a child, the course of whose disease suggested diphtheria rather than scarlet fever; No. 11 presumably contracted diphtheria from a girl who developed a suspicious sore throat ten days after admission; No. 5 was in the same ward as a child with suspicious laryngeal symptoms at the end of a severe attack of scarlet fever; No. 1 had a similar history. I can find no facts throwing light upon Nos. 3, 4, 7, 9, and 10.

The possibility of a diphtheria patient being admitted to a scarlet fever ward, either as a scarlet fever or as a doubtful case, has not perhaps received sufficient attention in searching for the origin of post-scarlatinal diphtheria. The experience of epidemics, especially among communities of school age, has so frequently pointed to hardly characteristic sore throats as the means of communicating diphtheria, that it is somewhat remarkable that so little reference to the possible agency of such cases is to be found in reports on post-scarlatinal diphtheria in different hospitals. If the number of cases not suffering from scarlet fever annually admitted to scarlet fever wards be taken into consideration, it can, I think, hardly be said that such an agency is an improbable one.

It is by no means unusual for cases to be received in which scarlet fever has been certified, but in which on admission no rash is present, the tongue is not characteristic, while upon the throat it is impossible to found a diagnosis of scarlet fever. Such a case is sent, and in the absence of extensive isolation accommodation rightly sent, to a scarlet fever ward. During its stay there it may or may not desquamate, or give other evidence of scarlet fever; and if it do not there is, at all

* In five cases of scarlet fever fatal in the acute stage the appearance of the fauces was diphtheritic.

events, a possibility of its being a case of inflamed throat without membrane that is in its nature diphtheritic and capable of infecting others with diphtheria.

As an example of the introduction of diphtheria in another way I may give the following case :—

A. A., æt. 8, on December 27th had a sore throat and vomited; on the 29th a rash appeared; she was certified as scarlet fever, and admitted to the North-Eastern on December 30th. On admission the rash was profuse, scarlet, punctiform, with punctæ rather larger than usual, and distributed over the whole body with the exception of the face. Fauces swollen, with multiple raised yellowish patches on tonsils and back of pharynx. Glands in neck enlarged. Tongue furred, papillæ not enlarged.

She was sent to a scarlet fever ward. On the 31st the rash was fading, and the fauces in much the same condition. On January 1st and 2nd some membrane was syringed from uvula and palate, her evening temperature had at no time been higher than 38·3°, and she did not seem ill.

On January 3rd she had a fresh well-marked punctate scarlet rash. Fauces more swollen, some vomiting, evening temperature 39·3°. On January 5th she had a profuse matured scarlet fever rash, uvula and fauces covered with thick membrane and tongue peeling leaving enlarged papillæ. She was isolated on January 3rd, and has made good progress.

I may give, too, a case of slight faucial inflammation in an adult following definite exposure to diphtheria infection :—

M. H., æt. 28; admitted to Ward 11 on December 9th. A slight case of scarlet fever; temperature normal since the 10th, and no complications. On December 16th she nursed, and believes she kissed, baby A. B. (case No. 11), who, later in the day, was found to show definite signs of diphtheria. On December 20th her tonsils and uvula were inflamed and swollen; her temperature rose to 38·2 deg. Her fauces remained inflamed for about ten days, though without membrane throughout; her temperature was above normal till the 23rd.

If the fact of infection had not transpired, and the woman had been sent between December 16th and 20th to a convalescent hospital and there developed her sore throat, there would be nothing to indicate its nature; and if she infected other cases with which she came into contact there, no evidence would be forthcoming of the manner in which they had been infected.

The fact that diphtheria often attacks a convalescent scarlet fever patient as an isolated instance in a ward where there has apparently been no previous diphtheria, and the fact that it so frequently does not then spread in the ward, may, perhaps, be taken too much as an evidence of the exclusion of personal communication as a cause of the attack. But this is explicable, if we allow that there is great variability in the capacity of different cases to transmit infection,* and that a very important factor may be the directness with which it is transmitted. Thus a case of unrecognised diphtheria might remain an indefinite time in a scarlet fever ward without infecting other patients, until by some accident, such as kissing, or the

* Cf. W. H. Power: "Report on Diphtheria at Pirbright," Local Government Board Reports, 1882, p. 62.

common use of handkerchief or spoon, a direct infection was established with some one case. Case 11 is an instance in point.

I may mention that this year's experience does not give much support to the contention that overcrowding of patients, as such, is productive of diphtheria. In order to meet the urgent demand for room it has been necessary in many of the wards of the hospital to put in 30 beds instead of the proper 20, thereby reducing the floor space from 144 to 96 square feet per bed. At different times throughout the year this overcrowding has been taking place in one ward or another, and in some instances has lasted several months. In each case a condition arose which seemed particularly likely to bring out any relation existing between overcrowding and diphtheria, yet this disease has shown no special incidence on the overcrowded wards, and when it has occurred in them it has in no instance spread to more than one other case.*

It is worth noting that the 11 cases of post-scarlatinal diphtheria represent an incidence of .36 per cent. on the 3,064 scarlet fever admissions during the year. This figure approximates to the average annual incidence in the Board's acute hospitals from 1884 to 1887 before any diphtheria cases were admitted, and is very considerably less than the percentage in any year at any of these hospitals since 1888, with the exception of the South-Western Hospital from 1889-91. (A summary of the figures will be found in the *Transactions of the Epidemiological Society*, vol. xii., p. 94.)

It will be interesting to see if the records of future years enable any conclusions to be drawn as to a greater incidence upon hospitals for scarlet fever and diphtheria as opposed to those for scarlet fever only. Should this prove to be the case, it may be remembered that, under existing isolation arrangements there are probably greater opportunities for the admission of doubtful cases to scarlet fever wards in hospitals for both diseases.

* Undoubted diphtheria, has, of course, been isolated at once, but cases which, although suspicious, could not be definitely diagnosed as diphtheria have had, of necessity, to remain in the ward, with the only precaution of preventing them, as far as possible, from having any articles in common with other patients.

Table of Cases of Post-Scarlatinal Diphtheria in 1893.

No.	Name.	Sex.	Age.	Date of Admission.	Date of Scarlet Fever rash.	Date of first symptom of Diphtheria.	Number of days between admission and onset of Diphtheria.	Character of attack.	Result.	POSSIBLE ORIGIN.	Ward.
1	A. C.	M	4	Mar. 24 ...	Mar. 23 ...	April 6 ...	13	Faucial and laryngeal	Tracheotomy; died.	In opposite bed was C. T., 7; admitted February 8th. Got up end of February. On March 20th had albuminuria; high temperature. Membranous patches on fauces cleared up by March 31st. Remained in ward...	20
2	V. C.	M	5	Mar. 13 ...	Mar. 12 ...	April 10 ...	28	Faucial and laryngeal	Tracheotomy; recovered.	Next bed to A. C.	20
3	A. G. W.	M	8	Feb. 9 ...	Feb. 9 ...	April 18 ...	68	Laryngeal ...	Tracheotomy; recovered.	Not known	18
4	L. C.	F	4	Mar. 8 ...	Mar. 8 ...	April 19 ...	42	Faucial ...	Recovered ...	Not known	5
5	A. P.	M	1	Mar. 25 ...	April 3 ...	April 23 ...	29	Laryngeal ...	Tracheotomy; died.	In the same ward A. S., 3; admitted March 28th with Scarlet Fever. Fauces continuously inflamed since admission. Symptoms of laryngeal obstruction about April 19th; tracheotomy, April 30th; died, April 23rd. No membrane seen and no post-mortem allowed ...	8
6	L. W.	F	2	Mar. 24 ...	Mar. 23 ...	May 1 ... (Rhinorrhoea on April 28)	37	Faucial and laryngeal	Tracheotomy; died.	Opposite bed to A. P.	8
7	W. W.	M	3	May 17 ...	May 17 ...	July 9 ...	53	Faucial and laryngeal	Tracheotomy; died.	Not known	21
8	J. H.	M		June 7 ...	June 3 ...	Aug. 1 ...	54	Faucial and laryngeal	Tracheotomy; died.	In the same ward J. K., 1½; disease doubtful on admission on July 12th. No rash or history of rash. Never desquamated, much inflammation of fauces; was discharged August 15th A. W., 6; in same ward, had attack of laryngitis July 16th, recovered by August 1st. No membrane seen	1
9	G. R.	M	11	June 2 ...	June 2 ...	Aug. 2 ...	61	Faucial ...	Recovered ...	Not known	17
10	M. A.	F	3	Aug. 14 ...	Aug. 14 ...	Sept. 19 ...	26	Laryngeal ...	Tracheotomy; died.	Not known	4
11	A. B.	M	9 m'ths.	Nov. 21 ...	Nov. 17 ..	Dec. 15 ...	24	Faucial and laryngeal	Tracheotomy; died.	In the same ward was B. H., 15; admitted December 1st, desquamating. On December 10th had sore throat, with membranous exudation on uvula. She nursed A. B. on morning of December 11th	11

(APPENDIX B.)

CHICKENPOX.

From the opening of the hospital on October 8th, 1892, till December 31st, 1893—*i.e.*, 15 months—63 cases of chickenpox have been under treatment. Of these all but four suffered from scarlet fever also.

Out of this number one case died, being complicated with diphtheria and scarlet fever, 49 were discharged, and 13 remained under treatment at the end of the year.

Ten cases showed evidence of the disease on admission, nine of which were isolated immediately. The other was sent to a general ward, where the nature of the disease was recognised, and the case isolated the same day. No patients were infected from this one.

One case developed symptoms four days after admission; one case, six days; one, eight days; one, 10 days; one, 12 days; one, 13 days; one, 14 days; one, 18 days; and one 19 days after admission.

Since the period of incubation may range from 12 to 19 days at most, the first four cases undoubtedly contracted the infection outside the hospital, and were admitted during the latent period. The other five may have done the same, though it is possible that some may have been infected in hospital.

Two isolated cases, one group of two cases and one group of three cases, broke out in wards not known to be infected with chickenpox, at periods longer than 19 days after the patients were admitted.

In each case patients with chickenpox were being treated in the isolation ward at the time when infection probably occurred, so that infection may have been carried by clothes or other agencies. Or cases of chickenpox may have occurred too mild to be recognised and caused the outbreaks.

The remaining cases were all infected in the hospital. Eight separate outbreaks occurred in the general wards. In two of these two cases were attacked (including the original source of infection); in two more, three cases; in one, four cases; in one, eight cases; in one, nine cases; and in one, 14 cases. The largest outbreak occurred in a ward chiefly composed of children under three years of age. Three cases were isolated in the chickenpox ward, who afterwards developed the disease there, respectively 13, 15, and 23 days after their removal.

Of the 63 cases, 34 were males and 29 females. One was under one year old, two between one and two years, 16 between two and three years, 16 between three and four years, nine between four and five years, seven between five and six years, nine between six and seven years, and three were above seven years old.

In 18 cases the exposure to infection was only for one short period, usually less than 12 hours. The time from the exposure to the development of the first signs of eruption was, in one case, 12 days; in one case, 13 days; in two cases, 14 days; in four cases, 15 days; in one case, 15 or 16 days; in three cases, 16 days; in one case, 17 days; in three cases, 18 days; and in two cases, 19 days.

The following notes refer to the above-mentioned cases :—

- A. A case developed chickenpox on November 7th, 1892, in ward 11. A second developed it on November 24th, but had meanwhile been transferred to ward 7. In the latter ward two cases broke out on December 9th and two on December 12th.
- B. A case developed chickenpox in ward 14 on April 28th, 1893. A second broke out on May 14th.
- C. Two cases developed chickenpox in ward 1 on July 6th, 1893. A third broke out on July 22nd.
- D. A case developed chickenpox in ward 14 on August 5th, 1893. A second broke out on August 19th.
- E. A case developed chickenpox in ward 8 on September 28th, 1893. A second case broke out on October 14th, and a third on October 28th. The latter had been transferred to ward 10 on October 20th, and was not isolated from there till October 29th.
Another case broke out in ward 10 on November 13th.
- F. A case developed chickenpox in ward 13 on November 2nd, 1893. A second case broke out on November 15th, and others on November 27th, December 3rd, and two on December 4th. One of the latter was transferred to ward 8 on December 4th, a short time before the disease was recognised and the patient isolated. A second case broke out in ward 8 on December 19th.
- G. A case developed chickenpox in ward 2 on November 6th, 1893. Other cases broke out on November 22nd and November 23rd.

MEASLES.

During the same period—October 8th, 1892, to December 31st, 1893—50 cases of measles have been under treatment. Of these, seven had measles only, one developed scarlet fever in hospital, the others all had scarlet fever on admission.

Out of this number five cases died, three of whom were under two years of age, one under three years, and one under four years.

45 cases were discharged.

The high mortality was partly due to the tender years of most of the children attacked, but still more to the fact that many were seriously ill from scarlet fever or Bright's disease before they developed measles.

Twenty-eight patients were males, and 22 were females. Nine patients were between one and two years old, 17 between two and three, 15 between three and four, seven between four and five, one was 17 years old, and one was 19 years.

Nine cases showed evidence of the disease on admission, of whom one was peeling from scarlet fever. Six were isolated immediately, three went to the general wards but were isolated later, and of these only one, who went to the babies' ward, started an outbreak.

Four other cases probably contracted the disease outside the hospital, two of whom developed the rash two days, one seven days and one 14 days after admission.

A case has been catalogued as measles where the rash appeared six weeks after admission, but the diagnosis was doubtful.

The remaining 36 cases contracted the disease in hospital.

There were three outbreaks in the general wards—one of four cases, one of 12 cases among the patients, besides a nurse, and one of 23 patients. The two latter occurred in wards occupied by babies mostly under three years old.

In 14 cases the exposure to infection was only for a short period. The first set were infected in ward 7 by a child who was admitted there on January 5th, and isolated on the morning of the 6th. The nurse attending fell ill on January 12th, and developed a measles rash on January 18th. Four of the children developed a rash on the same day, two on January 21st and one on January 23rd. The remainder were infected from a child whose temperature began to rise on the 13th day after admission—June 25th. On 26th it had coryza and was isolated, developing a measles rash on 27th. One case developed the rash on July 9th, two on the 10th, three on the 11th, and one on the 14th.

Thus four cases developed a rash 12 days after infection, one 13 days, two 14 days, five 15 days, one 17 days, and one 18 days.

MISCELLANEOUS.

During the same period—October 2nd, 1892, to December 31st, 1892—50 cases of measles have been under treatment. Of these, seven had measles only, one developed scarlet fever in hospital, the others all had scarlet fever on admission. Out of this number five cases died, three of whom were under two years of age, one under three years, and one under four years.

The high mortality was mainly due to the tender years of most of the children attacked, but still more to the fact that many were brought in from scarlet fever or bright's disease before they developed measles.

Twenty-eight patients were males, and 22 were females. Nine patients were between one and two years old, 17 between two and three, 15 between three and four, seven between four and five, one was 17 years old, and one was 19 years.

Five cases showed evidence of the disease on admission, of whom one was passing from scarlet fever. Six were isolated immediately, three went to the general wards but were isolated later, and of these only one, who went to the babies' ward, started an outbreak.

Four other cases probably contracted the disease outside the hospital, two of whom developed the rash two days, one seven days and one 14 days after admission. A case has been catalogued as measles when the rash appeared six weeks after

admission, but the diagnosis was doubtful.

The remaining 56 cases contracted the disease in hospital.

No. 3.

REPORT OF DR. WILLIAM GAYTON, MEDICAL SUPERINTENDENT
OF THE NORTH-WESTERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

NORTH-WESTERN HOSPITAL,

HAMPSTEAD,

January 11th, 1894.

To the Committee of Management.

MADAM AND GENTLEMEN,

With the termination of the year 1893, it is again my official duty to lay before you the report of the work completed in this Hospital.

Compared with similar periods, the past 12 months shows an unprecedented number of cases of each class of disease coming under treatment. This may probably be attributed mainly to three causes: the greater prevalence of Scarlet Fever and Diphtheria, the growing popularity of the Hospitals of the Metropolitan Asylums Board, and the immediate notification to the proper authorities of the occurrence of every case of infectious disorder.

During the past year the total admissions into the Hospital have been no less than 3,557, of whom 2,064 were suffering from Scarlet Fever, 1,249 from Diphtheria, 123 from Enteric, and 121 from diseases other than Fever. In the same period 126 have died from Scarlet Fever, 332 from Diphtheria, 31 from Enteric Fever, and 23 from other diseases. 894 were transferred to the Northern Hospital as convalescents, and 2,236 were discharged, leaving 327 under treatment on the last day of the year.

Of the Scarlet Fever cases, as already stated, there were 126 deaths, or a mortality of 5.98 per cent., including those complicated with Diphtheria, a detailed list of which is appended.

*Cases of Diphtheria occurring in 1893 amongst Patients convalescent from
Scarlet Fever.*

Date of Attack.	Name.	Age.	Time after Admission.	Form of Attack.	Result.	Ward.
1893.						
February 3rd ...	F. M.	6	2 weeks...	Laryngeal and Faucial ...	Died ...	2
February 20th...	E. B.	9	5 ,, ...	Faucial	Recovered	6
February 21st ...	F. B.	10	4 ,, ...	Faucial	Recovered	5A
February 27th...	H. M.	3	3 ,, ...	Laryngeal and Faucial ...	Recovered	8
March 7th ...	A. C.	5	7 ,, ...	Laryngeal and Faucial ...	Died ...	2
March 11th ...	E. M.	6	4 ,, ...	Faucial	Recovered	3
March 17th ...	A. S.	4	3 ,, ...	Laryngeal, Faucial, and Nasal	Died ...	8
April 21st ...	M. H.	4	4 ,, ...	Faucial and Nasal ...	Died ...	5A
May 7th	W. T.	5	4 ,, ...	Laryngeal and Faucial ...	Recovered	8
May 29th	H. W.	6	3 ,, ...	Laryngeal, Faucial, and Nasal	Died ...	5A
May 29th	M. P.	12	1 week ...	Faucial	Recovered	8A
June 24th... ..	H. J.	12	10 weeks...	Faucial	Recovered	8A
June 26th... ..	M. W.	11	13 days ...	Faucial	Recovered	9A
August 6th ...	F. S.	8	3 weeks...	Faucial	Died ...	4B
August 10th ...	R. P.	6	23 days ...	Laryngeal and Faucial ...	Died ...	6A
August 20th ...	F. S.	20	10 ,, ...	Faucial	Recovered	8A
August 26th ...	C. S.	8	6 weeks...	Faucial	Recovered	7
September 14th	P. S.	2	4 ,, ...	Faucial	Died ...	6A
September 25th	F. R.	4	16 days ...	Laryngeal and Faucial ...	Died ...	7A
October 1st ...	J. L.	7	16 ,, ...	Faucial	Recovered	6
October 9th ...	E. R.	9	4 weeks...	Faucial	Recovered	4B
October 24th ...	P. S.	6	24 days ...	Laryngeal, Faucial, and Nasal	Died ...	8A
November 1st ...	E. G.	3	23 ,, ...	Laryngeal and Faucial ...	Died ...	7A
November 10th	T. P.	4	13 ,, ...	Faucial	Died ...	6
November 15th	E. W.	6	28 ,, ...	Faucial	Recovered	6A
December 11th	J. N.	10	9 weeks...	Faucial	Recovered	8
December 24th	P. D.	10	30 days ...	Faucial	Recovered	6A
December 26th	R. D.	4	59 ,, ...	Laryngeal and Faucial ...	Recovered	8A

Recovered	...	...	...	16
Died	...	...	...	12
Total	...	...	...	28

A comparison of this table with those submitted on former occasions shows a considerable increase in the number of Post-Scarlatinal Diphtheritic attacks during the year. Much importance, I think, should be attached to the fact that the chief influence favouring the incidence of the disease is

personal susceptibility, and that local conditions act chiefly by producing a condition of system favourable to receive the germ when brought in contact with it, especially a congested state of the mucous membrane of the throat, as particularly exists in, and after, Scarlet Fever.

The relative death-rate of the undermentioned diseases is as follows, as calculated by the recognised formula:—

Diphtheria ...	...	...	...	26·4 per cent.
Enteric ...	...	...	...	25·4 „
Other diseases ...	...	...	...	19·3 „

The number of persons received during the year in practically a moribund condition deserves consideration. It is not to be inferred that the removal was of any advantage to the sufferers themselves, but that they should not die in the midst of healthy people, to whom they would probably communicate infection, is some justification for the adoption of the practice. To us, however, whose aim is the restoration to health of those who are placed under our care, the occurrence of such fatalities is dispiriting.

During 1893 these cases have been very numerous, thus:—

Within 24 hours 65 died ...	...	}	Diphtheria ...	49
			Scarlet Fever ...	9
			Enteric ...	2
			Other diseases...	5
„ 48 „ 71 „ ...	...	}	Diphtheria ...	59
			Enteric ...	1
			Scarlet Fever ...	11

136

Although the whole of these must necessarily appear among the number that have died of the several diseases, if subtracted they reduce the mortality as under:—

Scarlet Fever to ...	...	...	5·03 per cent.
Diphtheria „ ...	...	...	17·86 „
Enteric „ ...	...	...	22·90 „

It is, however, a fair ground for contention that, if a certain given number of Hospitals death rates are to be compared, the class of case and the condition in which they are received should be as nearly similar as possible; otherwise, with a very large influx of persons actually dying, the results as to treatment may—indeed, must—in the course of any year or series of years, be utterly erroneous.

Scarlet Fever.—Those precautions which in respect of Scarlet Fever prove successful for the protection of a household must also be the real defence for the public. All national or international preventive measures against the diffusion of such a disease as Scarlet Fever must in their essence be devices for effectual individual control. When, however, we look around and consider the normal social condition of the people from whom our cases are mostly drawn, we see at once that with regard to very many of them isolation and disinfection are but empty words. To avoid the risk of transmitting the disease, those who have any intercourse with the patient should as seldom as possible, and only after disinfection, come into contact with other persons; but these precautions are totally disregarded in the houses of the poor, and how under such circumstances can it be hoped to prevent the spread of such a dangerous infectious disease?

The year 1893 is remarkable for the extent to which Scarlet Fever was distributed over the 12 months, and it forms another example where the mortality deviated from the usual order of having the least mortality in the second quarter. The enormous amount of sickness, indicated by the deaths, is a serious matter, but, making due allowance for the increase of population, the progress of Scarlet Fever in London is not discouraging, having regard to the fact that last year proved to be the thirteenth in which the mortality from this disease was below the previous decennial average. More effective ventilation of the sewers and house drains might probably be productive of good, for we know that they give off offensive gases, and although chemists may differ as to the precise composition of these exhalations, there is plenty of proof that they possess morbid principles, and it is not easy sometimes to disassociate Scarlet Fever from the presence of foul air as an exciting cause.

Diphtheria.—A larger number of cases of this disease have been treated in this Hospital during the past year than in any other hospital of the Board.

1,325 have come under observation in the twelve months; and to those who are familiar with such cases the amount of work entailed will be admitted as enormous—*per se*, the anxiety in connection with Diphtheria is long continued and severe; the disappointments in results are various and but too numerous; while the dangers to those in close attendance are lamentably frequent, as illustrated by the several, and in some cases severe misfortunes that have befallen members of the medical and nursing staff. Compared with the general and other Hospitals, we have much cause for thankfulness that no actual fatality has occurred; irretrievably damaged health, however, is as much, and in some instances more, to be sympathised with than the occurrence of actual death. The

increasing prevalence of Diphtheria, notwithstanding that hygienic laws are observed, and that the necessity for the prompt suppression of defects is brought home to landlords, builders, and tenants, is a matter of some disappointment. Judging by the figures for the past four years, which run as under—

1890	1,382	} Deaths from Diphtheria in London
1891	...	...	1,435
1892	...	...	1,885
1893	...	...	3,165

it would almost seem that a regular annual increase may be looked for rather than any diminution. If this be so, clearly the accommodation at present provided is altogether inadequate. It is, notwithstanding, a moot question as to whether it is justifiable to increase the number of such patients treated at any given Hospital. Personally, my opinion is to the contrary, and in this you agreed when declining in January last to set aside a larger complement of beds than those then, and now, available.

In connection with Diphtheria is intimately associated the question of tracheotomy, an operation that up to a comparatively short time ago was considered to be one only to be resorted to as an absolute last chance. Now, however, it is the practice that when certain symptoms are present, no delay is allowed, as experience has shown that it makes all the difference in prognosis whether the operation is performed when the child is fairly strong, or when its powers have been brought down by the disease to their minimum. Of the 78 cases that required operative interference during the year 34 recovered, or 43·5 per cent., the youngest being 14 months old. No doubt the important point in procuring good results after tracheotomy, and indeed one of vital importance, is the nursing; therefore, particularly reliable, gentle, and above all obedient attendants are imperatively needed.

Enteric Fever.—Until March there were practically few cases, and for the whole year 123 patients only have come under treatment; this is a larger number, however, than in the previous year. These came from various parishes, and particularly from Hackney; and in connection with this class of disease I would mention the infection of an Assistant Nurse—the second only that has occurred among the staff engaged in the nursing of Enteric—who, although she recovered, had a typical and fairly severe attack. Want of care in the handling of patients, and the treatment of their dejecta, was the probable cause, I apprehend, of this solitary attack.

The 27th July, 1893, marks an important epoch in the history of this, the oldest Hospital under the Board, as upon that date was laid the foundation-stone of the new Administrative block. In connection with this

work four wards had to be given up, two for demolition, the others for administrative and residential purposes, our accommodation being thereby reduced by upwards of 120 beds; the alternative, however, would have been the postponement indefinitely of a priceless boon.

In March last our then Chaplain, the Rev. H. R. Jellie, became so physically unfit for duty as to necessitate the engagement temporarily of a substitute. His condition continuing steadily to decline, his resignation was tendered and accepted, the vacancy being filled by the Rev. R. B. Raffles, to whom the thanks of the staff are due for the zeal, kindness, and thoughtfulness he has shown since the time he has held office. By the patients his ministrations, I have reason to know, have also been cordially and thankfully accepted.

The neuralgic form of influenza in November and December was of frequent occurrence, and attacked a somewhat large proportion of the nursing staff, no less than 15 (almost at the same time) being prostrated by its effects. Its sudden invasion and brief duration have always been the most striking characters of this strange disease, but no serious complications ensued, nor were there any relapses observed.

At the risk of again treading old ground, I cannot resist repeating our complaints against the fair that is held upon all plausible occasions in the Fleet Road, and which appears to perpetuate its annoyance in spite of entreaties and threats. I have, unfortunately, during the year, as a sick man, had personal experience of the irritating character of the noises which arise therefrom, and have had a proportionate and intense desire for its total and speedy suppression.

The kindness and generosity of those in the neighbourhood of the Hospital have been continued in the past, as in former years, by the gifts of fruit, flowers, &c. To the editors of very many of the illustrated papers for pictures for framing, and for books, we are also gratefully indebted.

As Scarlet Fever is communicable from person to person, or through the agency of persons, and by clothing, &c., it follows that when upon the return of a patient from Hospital another of the same family is attacked shortly afterwards, one or other of these factors are held responsible, and what more natural than that the recently discharged patient should be selected rather than the clothing, carefully folded, perhaps wrapped up and laid by, or, on account of its delicacy of structure or original cost, omitted to be given over to the sanitary authorities at the time of disinfection. Only a fractional percentage of such cases have arisen during the year; but to reduce this still further, I suggested that the recommendation made by the Medical Officer of Health for Nottingham should be adopted—namely, to send out a warning card with each discharged patient, setting forth the

desirability of isolating the patient for a short time, and prohibiting the use of a bed with another person. With regard also to Diphtheria patients, in whom paralysis does not present itself sometimes for weeks after convalescence is apparently established, I also recommended that the prominent symptoms should be brought under the notice of the friends in a similar way, in order that means might at once be taken to arrest or treat the approaching trouble. These suggestions, although meeting with your approval, did not receive the acquiescence of another Committee of the Board, except so far as referred to the latter suggestion.

As in all Infectious Hospitals where nurses and servants are hurriedly engaged in busy times, a somewhat large amount of illness usually occurs; not more than usual, however, has occurred here in the past twelve months, and it is with unfeigned satisfaction that I report once more that no death has occurred in the Nursing Staff since my connection with the Institution.

To the unwearied energy that my colleagues, Drs. Winter and Hughes, have brought to the discharge of their extremely onerous medical duties, and to their ever ready help and co-operation, I desire to bear testimony. I am also indebted to them for the compilation of the statistical tables appended.

The conclusion of my twenty-third year of office, with the same pleasant relationship as has hitherto existed, renders the continuance of my work to be of an agreeable character, and gives me cause for satisfaction and grateful recognition of the uniform courtesy, good feeling, and support at all times afforded me in the discharge of my multifarious duties by you, the Members of the North-Western Committee.

I am, Madam and Gentlemen,

Your obedient Servant,

(Signed) WM. GAYTON,

Medical Superintendent.

No. 4.

REPORT OF DR. R. M. BRUCE, MEDICAL SUPERINTENDENT OF THE
WESTERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

WESTERN HOSPITAL,

FULHAM, S.W.,

23rd January, 1894.

To the Committee of Management.

LADIES AND GENTLEMEN,

I beg to present my Report for the year 1893.

The cases treated during the year numbered 3,069, including 309 which remained in the Hospital at the close of 1892. There were 2,749 admissions, 2,486 discharges, of which 1,511, or 60 per cent., were transferred to Convalescent Hospitals, and 276 deaths, leaving 307 under treatment at the end of the year.

The total mortality was 9·99 per cent.

Of Scarlet Fever 2,295 cases were admitted, 11 of which were transferred from Gore Farm Hospital, 2,161 were discharged, and 166 died. The deaths include 28, which were due to intercurrent infectious disease—viz., 26 to Diphtheria, and two to Measles.

The mortality per cent. was 7·16.

Twenty-one cases died within 48 hours after admission.

The Diphtheria admissions numbered 256, the discharges 143, and the deaths 94. Of these 42, or 44 per cent., occurred within 48 hours after admission.

The mortality per cent. was 38·13.

Tracheotomy was performed in 21 cases, with four recoveries.

The Enteric Fever admissions numbered 54—47 were discharged, and nine died.

The mortality per cent. was 16·36.

Of other diseases 144 cases were admitted—135 were discharged, and seven died.

The mortality per cent. was 4·91.

The Scarlet Fever cases were, on the whole, of a more severe type than in 1892, the more common complications incidental to the disease being present in higher proportion.

Post-Scarlatinal Diphtheria was diagnosed in 30 cases, the percentage incidence calculated on the completed cases being 1·2. Particulars of these cases are given in the subjoined table :—

Initials.	Age.	Sex.	Ward.	Admitted.	Contracted Diphtheria.	Days after admission.	Result.	REMARKS.
M. M.	3	F	2	12th November, 1892	7th January, 1893	56	D	Laryngeal and Faucial. Died of Nephritis.
T. C.	2	M	16	9th „ „	7th „ „	50	D	Laryngeal.
A. W.	2	F	12	18th December, „	8th February, „	52	D	Faucial and Laryngeal.
K. D.	4	F	12	10th January, 1893	8th „ „	29	R	Palatine Paralysis.
W. G.	4	M	9	1st February, „	1st March, „	29	D	Faucial and Laryngeal.
F. C.	4	F	2	11th March, „	20th April, „	40	D	Faucial.
E. H.	2	F	15	8th May, „	29th May, „	21	D	Laryngeal.
W. C.	3	M	15	16th „ „	4th June, „	19	D	Faucial and Laryngeal.
C. B.	2	F	15	4th April, „	9th „ „	66	D	Laryngeal.
G. B.	4	M	3	30th June, „	12th July, „	12	D	Laryngeal.
G. P.	2	M	3	24th „ „	13th „ „	19	D	Laryngeal.
W. S.	2½	M	3	29th „ „	20th „ „	21	D	Laryngeal.
S. S.	1	M	15	19th July, „	22nd „ „	3	D	Laryngeal.
N. B.	8	F	5B	5th „ „	24th August, „	50	D	Measles and Laryngeal Diphtheria.
A. A.	3	M	3	7th August, „	2nd September, „	26	R	Laryngeal.
A. G.	3	M	5B	19th „ „	11th „ „	23	D	Measles and Laryngeal Diphtheria.
E. N.	6	F	12	1st September, „	11th „ „	10	D	Faucial Cerebellar Abscess.
M. R.	3	M	12	17th August, „	21st „ „	35	R	Faucial.
H. D.	3	M	10	14th September, „	2nd October, „	18	D	Laryngeal.
A. E.	2½	F	8	8th October, „	25th „ „	17	D	Laryngeal.
H. M.	4	M	16	14th „ „	29th „ „	15	D	Cardio-Gastric Crisis, Fau- cial and Laryngeal.
W. S.	2½	M	2	3rd „ „	30th „ „	27	D	Faucial.
A. B.	2½	F	16	12th „ „	31st „ „	19	D	Laryngeal.
G. D.	3	M	2	21st „ „	1st November, „	11	D	Laryngeal.
G. J.	1½	M	5B	7th „ „	1st „ „	25	D	Laryngeal.
C. S.	30	F	16	10th „ „	2nd „ „	23	R	Faucial.
A. H.	21	F	16	5th November, „	10th „ „	16	R	Faucial.
J. B.	1	M	16	18th August, „	14th „ „	88	D	Laryngeal.
F. W.	2½	M	15	30th October, „	16th „ „	15	D	Cardio-Gastric Crisis.
I. H.	3	F	13	16th „ „	24th „ „	38	D	Laryngeal.

Four patients in one ward contracted Smallpox after admission, and were duly transferred to the Hospital Ships. Vaccination was performed in such cases as it was deemed necessary, and no further attacks supervened. The source of the infection could not be traced.

The miscellaneous diseases constituted 6·2 per cent. of the total admissions. Three cases certified as Scarlet Fever were found to have Smallpox, and of the cases certified to be suffering from Diphtheria, 79 were afterwards diagnosed as Tonsillitis.

During the year 13 members of the staff suffered from infectious diseases. Eight contracted Scarlet Fever—viz., an Assistant Medical Officer, two assistant-nurses, four ward servants, and an ambulance driver. One of the ward-servants had had a typical attack a year previously.

An Assistant Medical Officer and a ward-servant contracted Diphtheria, and an assistant-nurse and ward-servant Enteric Fever. A laundry-maid who had recently joined the service, and had not been re-vaccinated, contracted Smallpox. All of these recovered, the Assistant Medical Officers after very severe attacks. A needlewoman died of Bronchitis early in the year.

During the summer months the Hospital buildings, both ward and administrative, were painted externally throughout, and restored where necessary.

The roadway surrounding the administrative blocks has been thoroughly repaired and supplemented by granite kerbing in suitable places, and the surface drainage relaid.

Much-needed improvements have been effected in the ward appurtenances. New kitcheners have been provided throughout, and the w.c's and slop-sinks replaced by others of a modern pattern. The bath-rooms attached to the wards and old administrative building have been practically remodelled, glazed stoneware baths being substituted for those worn out, and new lavatory basins fixed in place of the old wooden range. The flooring has been relaid in terrazzo paving, and the walls faced with a dado of tiling.

The means available for extinguishing fire are now, I think, fully compatible with the needs of the Institution in this particular. Several additions have been made to the hand fire appliances, a fire-main has been laid round the new huts, hydrants fixed in convenient positions, and communication established with the neighbouring fire station.

Plans for the erection of a new laundry and artificers' workshops were approved during the year. The old laundry has since been demolished, and adequate provision made for carrying on the work of the department during the building of the new one by the extension of the temporary laundry erected last year.

The Committee have recently decided that further accommodation for cases of Diphtheria and for isolation purposes is imperatively necessary. I hope that these very important additions will be commenced with as little delay as possible after the acquisition of the extra land required for the purpose.

I am, Ladies and Gentlemen,

Your obedient Servant,

(Signed) R. M. BRUCE,

Medical Superintendent.

No. 5.

REPORT OF DR. F. OSBORNE, ACTING MEDICAL SUPERINTENDENT
OF THE SOUTH-WESTERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

SOUTH-WESTERN HOSPITAL,
LANDOR ROAD, STOCKWELL, S.W.,
January, 1894.

To the Committee of Management.

LADIES AND GENTLEMEN,

In the absence of Dr. Caiger, who was transferred to the Fountain Hospital on the 18th of last August, I beg to present the Annual Report for 1893.

During the year 3,200 cases came under treatment, an increase of 177 on the number treated in 1892. The admissions numbered 2,855; the discharges, including transfers, 2,566; and the deaths, 307. 327 remained in the Hospital at the end of the year.

Of the total admissions 2,046 were cases of Scarlet Fever, 585 of Diphtheria, 125 of Enteric Fever, one of Typhus, and 98 suffered from other diseases.

The total percentage mortality was 10·79, made up as follows:—Scarlet Fever, 4·92 per cent.; Diphtheria, 27·18 per cent.; Enteric Fever, 21·77 per cent.; other diseases, 18·36 per cent.

No less than 61 of the fatal cases of Diphtheria died within 48 hours of admission, and the larger proportion of this number within 24 hours of admission.

Tracheotomy was performed on 34 cases, with a recovery of 13, or 38·5 per cent.

Of the fatal Enteric cases, four died within 16 hours of admission.

Among the 3,200 cases treated, the following diseases supervened:—Measles two, Röheln six, Pertussis two, Varicella one, and Diphtheria 16, of which latter disease five died. Of these 16 cases of secondary Diphtheria, seven arose in wooden huts, of which the allowance per bed of floor-space was only 100 square feet.

The structural alterations which have been effected during the year comprise the provision of proper quarters for the male staff, and the accommodation for the female staff, which has been hitherto so inadequate, has been supplemented by the construction of cubicles for 22 assistant nurses

over the kitchen and servants' mess-room of the upper Hospital. This increase of accommodation, which was sanctioned by the Committee early in the year, also provided for the addition of nine new cubicles and two bedrooms, which it was decided to build as an upper storey to the adjoining administrative block, but owing to the inordinate delay in completing the work on the part of the builder, it was decided to release him from carrying out this portion of the contract, and to throw it into the larger scheme for centralising and otherwise improving the administrative buildings, which at your instruction formed the subject of a special report prepared by Dr. Caiger dealing with the general administrative requirements of the institution. As a result of this report, you, after having given full consideration to the matter, instructed Mr. Aldwinckle to prepare plans in order to deal with the subject as a whole in the way which from an architectural point of view seemed best.

The scheme is an extensive one, comprising the provision of a central block to contain suitable mess-rooms for the female staff, sitting-rooms for the nurses, and a sufficient number of bedrooms to accommodate the whole of the charge nurses, together with more suitable quarters for the matron and a new much-needed laundry, which shall be competent to deal with the requirements of the Institution. It is hoped that the scheme, which also includes the centralisation of the boiler power, a general overhauling of the drainage, and the re-making of the roads, will be sufficiently advanced to allow of the work being commenced in the spring.

The plans, after some modification by the Committee, were approved by the Board, and are now awaiting the sanction of the Local Government Board.

A new discharge block for Scarlet Fever patients has been built immediately inside the gates, and is probably the most complete thing of its kind to be seen in the country.

The footpath in the Landor Road, and the boundary fence along this frontage, continue in the same deplorable condition, as has been the case for so many years.

During the year 77 of the staff were warded for illness. Of these four contracted Scarlet Fever, 11 Diphtheria, 41 some other form of sore throat, and 21 Influenza. All have made a complete recovery.

I take this opportunity of acknowledging the great assistance I have received from my fellow Officers, and I have the honour to remain,

Your obedient Servant,

(Signed) FRANK OSBORNE,

Acting Medical Superintendent.

No. 6.

REPORT OF DR. F. F. CAIGER, MEDICAL SUPERINTENDENT OF
THE FOUNTAIN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

FOUNTAIN HOSPITAL,

24th January, 1894.

To the Committee of Management.

MADAM AND GENTLEMEN,

The construction of this Hospital was begun on August 23rd, and on October 30th the first ward was occupied by patients. From this date the wards were opened at an average of nearly one daily.

Provision has been made for 406 patients, allocated as follows : 390 beds for Scarlet Fever in 16 wards of 24 beds (three of the wards, however, had to be shortened in compliance with the requirements of the Local Government Board, thereby representing an aggregate loss of 10 beds), 16 beds in separation rooms, off the large wards, for the accommodation of cases of other diseases co-existent with Scarlet Fever, and 16 beds contained in 12 rooms which are reserved for the purposes of isolation.

Accommodation has been provided in separate rooms or cubicles for 88 nurses and 100 other members of the subordinate staff, which, together with the provision for the principal officers, brings up the total number of beds in the institution to exactly 600.

The site comprises an area of a little over 10 acres, and in view of the fact that there are no two-storied buildings, it will be evident that there is none too much room. The difficulties incidental to the rapid construction and simultaneous equipment of the buildings being now over, a three months' experience of the Hospital in full working order entitles me to state that the general arrangement of the buildings is very satisfactory from the administrative point of view. I should have preferred a less number of beds in the wards than 24, more space for the out-of-door recreation of the patients, and somewhat more commodious accommodation for the Assistant Medical Officers, the Matron, and the Steward ; but the large number of single-storied

buildings which it was found necessary to place on an all too limited site, necessarily entailed some degree of cramping in one direction or another.

The latter point, however, is capable of remedy, and should the Committee decide to provide quarters for the Steward outside the Administrative block, at a spot just inside the gate, and in close proximity to the men's quarters, it would not only mean putting the Steward in a very suitable place, but it would leave his present two rooms free to be occupied by the Matron and Assistant Medical Officers, whose present accommodation is certainly capable of improvement.

The title "Temporary Building," as applied to this Hospital, is hardly appropriate, except in so far as the walls are constructed of wood and iron rather than of bricks and mortar. The foundations, the drainage, the machinery, the steam, gas and water supplies, and the internal fittings generally, which represent the main source of expenditure on these buildings, are as sound in construction, and as permanent in character, as can be found in any brick-built institution provided for a similar purpose.

When it is mentioned that there are over four miles of carefully laid and accurately tested drains, nearly nine miles of steam piping, and about the same length of gas and water mains, comprising over 20 miles of well-jointed piping, it is a matter of surprise that the work should have been completed in so short a space of time.

A complete system of fire-alarms and other electric appliances has been provided, thereby tending to diminish the risk of a serious outbreak of fire, and at the same time to facilitate administration. In view, however, of their inflammable nature, and the close aggregation of the buildings, the possibility of a rapid extension of fire, should such an event occur, must be ever borne in mind. A liberal installation of fire-hydrants, supplied from the high-pressure main, and a large supply of hand-buckets has been provided, with the object of diminishing this risk as far as possible, and the necessity for using the greatest care with reference to fire has been constantly impressed upon the staff.

All the patients' airing courts and the main routes of foot traffic have been tar-paved, and the drainage is of the most modern construction, there being complete separation of the surface water from the foul drains, and, in compliance with the requirement of the District Board of Works Surveyor, an additional separation of infected from non-infected drains.

The admissions up to the 31st December numbered 462, of which 461 were cases of Scarlet Fever. Ninety-five were discharged and 17 died, showing a Scarlet Fever mortality of either 5.94 per cent. or 3.68 per cent., according as to whether the death rate is calculated on the Registrar-General's formula, or whether it is taken from the number of admissions and

deaths simply. The true death rate of the 461 cases when completed will lie somewhere between these figures, probably slightly over 4 per cent.

One case of Influenza was admitted certified as Scarlet Fever, and was discharged after having been kept under observation for a week.

It is satisfactory to record the fact that no case of Secondary Diphtheria had occurred among the Scarlet Fever convalescents by the end of the year.

The wards are well heated, well ventilated, bright, and cheerful, and the Committee will probably have noticed that their comfort and appearance are greatly enhanced by their possessing an extra two feet in breadth. They measure 26 feet instead of 24 feet in width, which latter figure has hitherto been customarily adopted in the construction of similar buildings. Each bed commands a cubic space of 2,000 feet, the extra amount of floor space being compensated by a corresponding curtailment in the height of the ward. This relative proportion is more satisfactory from every point of view, whereas the expense of construction is practically the same.

Influenza has been very prevalent amongst the staff during the last two months of the year, and was a source of considerable administrative inconvenience.

The services rendered by Miss Wachter in the opening of this Hospital have been simply invaluable, and I take this opportunity of recording the untiring energy displayed both by her and Mr. Kellett, the Steward, in their respective departments. The whole of the staff worked well, and their hearty co-operation under conditions which, for a time, entailed considerable personal discomfort to all, was most reassuring.

I have the honour to remain,

Madam and Gentlemen,

Your obedient Servant,

(Signed) FRED. FOORD CAIGER,

Medical Superintendent.

No. 7.

REPORT OF DR. JOHN MACCOMBIE, MEDICAL SUPERINTENDENT
OF THE SOUTH-EASTERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

SOUTH-EASTERN HOSPITAL,
NEW CROSS, S.E.,
January, 1894.

To the Committee of Management.

MADAM AND GENTLEMEN,

I beg to present my Annual Report and Statistical Tables for the year 1893.

The total number of patients treated during the year was 3,497: 1,061 were discharged recovered, 1,757 were transferred to the Convalescent Hospitals of the Board, and 307 died, leaving 372 cases in the Hospital on December 31st.

Scarlet Fever.—2,719 cases were admitted direct from their homes, and 63 from other Hospitals of the Board, 821 were discharged recovered, 1,754 were transferred to the Convalescent Hospitals of the Board, and 179 died, showing a mortality of 6·46 per cent. This mortality includes 30 deaths from Diphtheria, acquired in the Hospital during convalescence; were these deducted from the deaths, the mortality would be 5·38 per cent. Five Scarlet Fever patients died of superadded Measles.

The type of the disease was unusually severe in the early months, and fairly severe during the remainder of the year.

The number of cases transferred to the Convalescent Hospitals formed nearly two-thirds of the cases treated.

The following Tables (A, B, and C) are of much interest as showing the occurrence of Diphtheria during the acute and convalescent stages of Scarlet Fever.

TABLE A.—*Diphtheria contracted before Admission during Acute Stage of Scarlet Fever.*

Initials.	Sex.	Age.	Admitted.	Onset of Scarlet Fever.	Diphtheria on Admission.	Result.
L. H.	F	3	April 18 ...	April 15 ...	Diphtheria on Admission	Died April 22.
G. H.	M	3	" 21 ...	" 19 ...	"	" April 24.
P. E.	M	15	May 12 ...	May 10 ...	"	" June 1.
E. McC.	F	3	" 30 ...	" 29 ...	"	" June 23.
F. D.	M	6	June 15 ...	June 12 ...	"	" July 1.
M. C.	F	9	August 6 ...	August 4 ...	"	Discharged Oct. 6.
F. P.	M	2	" 12 ...	" 9 ...	"	Died August 14.
A. L.	M	10	" 26 ...	" 22 ...	"	Discharged Oct. 20.
L. S.	F	7	September 30	September 23 ...	"	Discharged Jan. 19.
A. B.	F	6	" 30	" 29 ...	"	Died October 9.
C. B.	F	7	November 6	October 23 ...	"	Still in Hospital.
L. T.	F	9	December 5	December 3 ...	"	" "
I. C.	M	28	" 9	? ...	"	" "
A. O'S.	F	16	" 13	December 11 ...	"	" "

From Table A it will be seen that 14 cases were found on admission to be suffering from Diphtheria in the acute stage of Scarlet Fever. Seven died and four remained in Hospital at the end of the year. All the cases presented membrane on the fauces, five cases (F. P., F. D., E. McC., P. E., and A. L.) developed laryngeal symptoms; four (L. S., A. O'S., C. B., and G. H.) developed paralysis as a sequela.

Bacterioscopic examination of membrane on the fauces of three of the cases was made, and revealed the presence of the Klebs-Löffler Bacillus. Thus 10 out of the 14 cases developed laryngeal symptoms or showed the presence of the Diphtheria Bacillus.

Out of 2,719 cases of Scarlet Fever 14 alone showed membrane in the acute stage, and in no other instance did membrane occur in this stage.

TABLE B.—*Diphtheria contracted before Admission during Convalescence from Scarlet Fever.*

Initials.	Sex.	Age.	Admitted.	Onset of Scarlet Fever.	Onset of Diphtheria.	Result.
L. M.	F	7	September 8	Desquamating on Admission	August 29 ...	Discharged Dec. 12.
E. P.	F	2	" 11	"	? ...	Died September 12.
P. S.	F	5	" 28	"	September 24	Discharged Jan. 19.
D. S.	F	$\frac{5}{12}$	" 28	"	" 26	Died October 3.
H. F.	F	7	October 6 ...	September 16 ...	October 4 ...	Discharged Dec. 22.
A. B.	F	6	" 21 ..	October 10 ...	" 9 ...	Still in Hospital.
C. B.	M	16	November 25	Desquamating on Admission	November 23	Discharged Dec. 20.
R. M.	F	3	December 11	"	December 8 ...	Died December 16.

From Table B it will be seen that eight cases were admitted suffering from Diphtheria which had been contracted before admission, during their convalescence from Scarlet Fever; one died, and one remained in Hospital at the end of the year.

TABLE C.—*Diphtheria occurring in Hospital during convalescence from Scarlet Fever.*

Initials.	Sex.	Age.	Admitted.	Onset of Scarlet Fever.	Onset of Diphtheria.	Ward.	Result.
E. H.	F	18	Jan. 1 ...	Dec. 28 ...	Jan. 29 ...	12	Dischd. March 1
J. H.	M	23	„ 28 ...	Jan. 19 ...	Feb. 9 ...	2	„ June 9
G. M.	M	12	„ 31 ...	„ 12 ...	„ 15 ...	3	Died Feb. 19
M. L.	F	8	„ 3 ...	„ 1 ...	„ 20 ...	1	Dischd. March 30
W. C.	M	7	Feb. 6 ...	„ 26 ...	„ 28 ...	2	„ April 21
J. P.	M	2	Jan. 17 ...	?	March 1 ...	2	Died March 6
T. K.	M	3	„ 21 ...	Jan. 21 ...	„ 4 ...	4	„ „ 10
H. F.	M	3	Feb. 14 ...	Feb. 14 ...	„ 12 ...	3	„ „ 16
J. M.	M	18	„ 27 ...	„ 27 ...	„ 24 ...	2	Dischd. May 13
K. W.	F	4	Jan. 31 ...	Jan. 28 ...	„ 26 ...	12	„ „ 5
E. M.	F	1½	March 8 ...	March 5 ...	„ 26 ...	8	„ June 9
J. C.	F	11	Feb. 26 ...	Feb. 24 ...	„ 28 ...	1	„ May 12
S. H.	F	5	„ 6 ...	„ 3 ...	April 3 ...	12	Died April 10
C. T.	M	8	March 20 ...	March 18 ...	„ 23 ...	2	Dischd. June 8
W. B.	M	4	April 1 ...	„ 31 ...	„ 25 ...	2	„ „ 20
C. N.	F	9	„ 18 ...	April 11 ...	„ 29 ...	9	„ July 7
A. W.	M	4	„ 21 ...	„ 11 ...	May 8 ...	2	„ June 20
S. N.	M	8	„ 21 ...	„ 19 ...	„ 12 ...	2	„ July 7
T. O.	M	5	„ 24 ...	„ 21 ...	„ 13 ...	5	Died May 21
F. E.	F	5	May 2 ...	„ 28 ...	June 4 ...	9	„ June 14
E. B.	M	2	„ 2 ...	May 1 ...	„ 24 ...	2	Dischd. Aug. 18
W. H.	M	4	June 17 ...	June 13 ...	„ 30 ...	12	Died July 8
E. P.	F	2	July 3 ...	July 1 ...	July 28 ...	20	„ Aug. 7
M. C.	F	4	„ 22 ...	„ 17 ...	Aug. 8 ...	9	„ „ 17
B. T.	F	11	„ 31 ...	„ 27 ...	„ 19 ...	10	„ „ 26
G. M.	M	6	„ 29 ...	„ 29 ...	„ 19 ...	10	„ „ 25
A. S.	F	2	„ 28 ...	„ 15 ...	„ 22 ...	20	„ „ 29
W. T.	M	4	Aug. 10 ...	Aug. 8 ...	Sept. 10 ...	4	„ Sept. 24
M. E.	F	2	July 10 ...	July 8 ...	„ 11 ...	20	„ Oct. 23
W. P.	M	5	Aug. 19 ...	Aug. 12 ...	„ 12 ...	2	„ Sept. 16
W. H.	M	20	Sept. 2 ...	„ 27 ...	„ 19 ...	4	Dischd. Nov. 24
S. C.	M	4	Aug. 26 ...	„ 23 ...	„ 24 ...	1	Died Sept. 26
E. V.	F	11	Sept. 1 ...	„ 25 ...	„ 26 ...	20	Dischd. Nov. 3
R. S.	M	4	„ 2 ...	„ 27 ...	„ 27 ...	18	Died Sept. 29
A. J.	F	1½	„ 7 ...	„ 15 ...	Oct. 1 ...	20	Dischd. Dec. 1

TABLE C (continued).

Initials.	Sex.	Age.	Admitted.	Onset of Scarlet Fever.	Onset of Diphtheria.	Ward.	Result.
T. P.	M	6	Sept. 21 ...	Sept. 17 ...	Oct. 3 ...	4	Dischd. Nov. 24
E. B.	F	17	" 27 ...	" 23 ...	" 6 ...	11	Died Oct. 15
W. D.	M	1 $\frac{1}{2}$	June 27 ...	June 25 ...	" 8 ...	20	" " 9
L. G.	F	2	Sept. 3 ...	Aug. 18 ...	" 8 ...	13	" " 13
R. H.	M	8	" 7 ...	Sept. 4 ...	" 12 ...	20	Dischd. Dec. 2
E. P.	F	3	" 28 ...	" 24 ...	" 16 ...	10	" " 29
V. H.	F	4	" 30 ...	" 26 ...	" 26 ...	13	Died Nov. 3
L. J. M.	F	3	Aug. 30 ...	Aug. 13 ...	Nov. 1 ...	20	" " 6
L. P.	M	2	Oct. 26 ...	Oct. 26 ...	" 7 ...	13	" " 11
O. M.	M	2	" 6 ...	" 1 ...	" 9 ...	10	" " 20
F. G.	M	6	Nov. 1 ...	" 25 ...	" 11 ...	11	Dischd. Dec. 29
S. H.	M	3	Oct. 16 ...	" 8 ...	" 14 ...	Iso.	Died Nov. 17
E. D.	F	17	" 23 ...	" 15 ...	" 14 ...	11	Dischd. Jan. 19
M. B.	F	14	Aug. 25 ...	Aug. 23 ...	" 17 ...	11	Died Nov. 22
A. J.	F	2	Nov. 15 ...	Oct. 29 ...	" 21 ...	20	" " 26
G. B.	M	5	Sept. 29 ...	Sept. 26 ...	" 25 ...	10	Dischd. Dec. 29
J. F.	F	5	Nov. 7 ...	Oct. 11 ...	Dec. 1 ...	11	Died " 24
G. W.	M	13	" 17 ...	Nov. 15 ...	" 4 ...	2	Dischd. Jan. 19
N. W.	M	13	" 30 ...	" 30 ...	" 12 ...	4	" Dec. 19
L. M.	M	4	Dec. 2 ...	" 25 ...	" 13 ...	3	Died Jan. 8

From Table C it will be seen that 55 cases contracted Diphtheria in Hospital during their convalescence from Scarlet Fever and 30 died.

Wards 2 and 20 showed the greatest prevalence, having respectively 11 and nine cases; next in order came wards 10 and 11, with five cases each.

Each of these wards accommodated from 26 to 28 patients, and were fully occupied throughout the year, except when closed for cleaning.

Ward 5 was used for Scarlet Fever until Midsummer, ward 8 was closed for several months, and ward 18 was open throughout the year, except when closed for cleaning and painting, and these were the wards that showed the smallest number of cases of Post-Scarlatinal Diphtheria.

The hut of 1892 escaped the incidence of Post-Scarlatinal Diphtheria entirely. This ward had remained unoccupied from the beginning of the year to the 3rd of June, and was after then fully occupied.

It is noticeable that the smallest incidence of Post-Scarlatinal Diphtheria was in the wards 5, 8, 18, and hut, and that these wards are the nearest Scarlet Fever wards in the Hospital to the Diphtheria ward.

As each case occurred it was removed from the ward and isolated.

There appears to be no causal connection between any of the cases, except perhaps a few of those in 2 and 11.

The nurses in Diphtheria wards were separate and distinct from those in Scarlet Fever wards.

Two of the Assistant Medical Officers were deputed to attend to the cases in Scarlet Fever wards exclusively, whilst the remaining Assistant Medical Officer attended to the cases in Diphtheria, Enteric, and Isolation wards.

The whole question of the incidence of Diphtheria on Scarlet Fever convalescents is engaging my closest attention.

Diphtheria.—241 cases were admitted direct from their homes, and 143 were discharged recovered. One was transferred to a Convalescent Hospital, and 96 died, showing a mortality of 39·91 per cent.

The type of the disease, which was exceptionally severe during 1892, remained so for the first four months of 1893, but was afterwards less severe. Thirty-six cases died within 48 hours of admission; were these deducted from the deaths, the mortality would be 26·9 per cent. Twelve of these admissions were of the hæmorrhagic type, and in addition 42, or 17·4 per cent., required tracheotomy to relieve dyspnœa—18 out of these required to be operated on immediately on admission, or a few hours thereafter.* The notes on these cases of tracheotomy by Mr. Frederick Thomson form a separate and valuable paper as an appendix to this Report.†

Enteric Fever.—Sixty-one cases were admitted direct from their homes, 40 were discharged recovered, and 14 died, showing a mortality of 24·47 per cent. No reliable deduction can be drawn from this mortality having regard to the fact that the cases treated were so few in number.

Health of Staff.—Fourteen officers contracted Scarlet Fever—one Assistant Medical Officer, two nurses, nine assistant-nurses, and two ward-maids; all these recovered.

Ten officers contracted Diphtheria—two nurses, four assistant-nurses, one laundrymaid, and three wardmaids; all these recovered. Of these, three were officers in Diphtheria wards, one was a wardmaid in the receiving room, and the remaining six apparently contracted the disease in the following Scarlet Fever wards—4, 11, 13, and 18. One laundrymaid contracted concurrent Diphtheria and Scarlet Fever, and she died.

One general porter contracted Enteric Fever, and he recovered. The health of the officers was otherwise fairly good, though some suffered from Tonsillitis, Colds, Rheumatism, and other minor ailments.

* Tracheotomy was performed on 42 patients, and of these 17 or 40·5 per cent. recovered.

† These notes are not included in this volume.

One nurse suffered from a poisoned inoculation of hand, necessitating the amputation of a finger.

On June 2nd the officers' laundry was totally destroyed by fire, and the patients' laundry partly. Notwithstanding the interruption of the laundry arrangements, the admission of patients was not interrupted for a single day. It has since been necessary to work day and night, and will continue to be so until the completion of the new laundry.

I gladly acknowledge the assistance which my fellow officers have rendered me in carrying on the work of the Hospital, and I thank you for your continued confidence and support.

I remain, Madam and Gentlemen,

Your obedient Servant,

(Signed) JOHN MACCOMBIE,

Medical Superintendent.

No. 8.

REPORT OF DR. F. N. HUME, MEDICAL SUPERINTENDENT OF
THE NORTHERN HOSPITAL.

(For Statistics, see pp. 90 to 122.)

NORTHERN HOSPITAL,
WINCHMORE HILL, LONDON, N.,
January, 1894.

To the Committee of Management.

MADAM AND GENTLEMEN,

I beg to present my Annual Report for 1893.

During the year the total number of patients treated has been 6,560; exceeding by more than 1,000, and, with the exception of 1892, by more than 3,000 the number treated in any previous year since the opening of the Hospital. 5,803 patients were admitted, 5,770 were discharged, and 39 died.

The percentage mortality was 0·67.

Of the admissions 5,729 were Scarlet Fever and 74 Diphtheria cases; of the latter five contracted Scarlet Fever.

The Diphtheria block was closed for repair in July, and since that date no further Diphtheria convalescents have been admitted.

Among complications arising during Scarlatinal convalescence, Stomatitis, Tonsillitis, Otitis, and Nephritis were the most numerous.

A general increase in the number of complications may be attributed to the fact that in times of pressure patients are transferred from the acute Hospitals at an early date in their convalescence.

Of diseases incidental to convalescence, Diphtheria was, as has heretofore been the case, the most important. 41 cases occurred, with 30 deaths. The incidence of the disease was, however, less than in the previous year, rather more than one per cent. of Scarlet Fever patients being attacked in 1892, while in 1893 the percentage of attacks was 0·7.

The cases, as is indicated by the mortality, were generally of a severe type.

Of the wards occupied by Scarlet Fever patients, only two pavilions and two huts escaped, but it is observable that the pavilions on the south side were the least affected.

A tabular statement, giving particulars of the cases, is appended.

Return of Diphtheria Cases, 1893.

No.	Initials.	Age.	Admitted Acute Hospital.	Admitted Northern Hospital.	Attack.	Result.	Pavilion	Weather, Temperature, &c.
1	H. W. ...	4	Nov. 4/92	Nov. 25/92	Feb. 5/93	Recovered ...	16	Ground very wet, commencing frost.
2	T. J. C. ...	6	Jan. 25/93	Feb. 23/93	" 24/93	Died Mar. 29	23	Cold, wet.
3	E. H. ...	15	Dec. 16/92	Jan. 26/93	" 27/93	Died " 13	13	"
4	C. B. ...	3	Jan. 22/93	Feb. 14/93	Mar. 8/93	Died " 15	7	Fine, ground dry.
5	M. W. ...	20	" 15/93	" 8/93	" 12/93	Died " 16	21	" "
6	T. H. ...	6	Dec. 21/92	Jan. 11/93	" 22/93	Died " 25	21	" "
7	R. P. ...	11	Feb. 17/93	Mar. 9/93	" 29/93	Recovered ...	12	" "
8	E. D. ...	4	" 14/93	" 9/93	" 31/93	Died Apr. 6	7	" "
9	E. F. ...	10	Jan. 27/93	Feb. 23/93	Apr. 1/93	Recovered ...	24	" "
10	A. W. ...	7	Feb. 16/93	Mar. 29/93	" 10/93	Recovered ...	18	" "
11	F. T. ...	4	Mar. 5/93	" 25/93	" 4/93	Died Apr. 9	4	" "
12	M. G. ...	5	" 30/93	Apr. 27/93	May 6/93	Died May 15	23	" "
13	E. R. ...	7	Apr. 7/93	May 6/93	" 14/93	Died " 18	10	" "
14	M. F. ...	4	" 17/93	" 12/93	" 19/93	Recovered ...	8	Showers on 15th and 17th.
15	W. H. ...	1	Mar. 21/93	" 4/93	" 21/93	Died May 25	7	Showery.
16	E. S. ...	15	Apr. 3/93	Apr. 26/93	" 23/93	Died " 29	16	No rain from 20th to 29th.
17	A. P. ...	6	" 10/93	May 12/93	" 25/93	Died June 8	16	
18	C. T. ...	8	Mar. 27/93	" 19/93	" 27/93	Died " 2	11	
19	J. O. ...	6	Apr. 24/92	" 17/93	June 2/93	Recovered ...	19	
20	M. R. ...	13	May 4/93	June 10/93	" 14/93	Recovered ...	19	Chilly, cloudy, 9th to 12th.
1	W. B. ...	5	Mar. 6/93	" 10/93	" 17/93	Died June 20	18	Very hot.
22	M. J. ...	8	May 16/93	" 9/93	" 21/93	Recovered ...	6	"
23	J. H. ...	12	" 16/93	" 10/93	" 30/93	Died July 6	21	Dull, showery, 26th to 28th.
24	M. L. ...	5	June 13/93	July 7/93	July 9/93	Died " 16	8	Rain 8th & 9th, very hot.
25	E. R. ...	6	" 9/93	" 4/93	" 11/93	Recovered ...	23	
26	T. D. ...	6	July 8/93	Aug. 12/93	Aug. 19/93	Died Aug. 20	4	Fine, hot.
27	T. S. ...	4	May 12/93	June 30/93	Sept. 6/93	Died Sept. 7	12	Fine.
28	G. P. ...	2	June 20/93	July 17/93	" 8/93	Died " 9	4	Showery.
29	H. W. ...	3	Aug. 20/93	Sept. 9/93	" 14/93	Died " 17	2	Fine, cold.
30	H. W. ...	2	" 22/93	" 15/93	" 17/93	Died " 22	7	Cold, damp.
31	B. W. ...	8	" 22/93	" 15/93	Oct. 3/93	Died Oct. 6	7	Wet.
32	F. P. ...	8	June 29/93	July 20/93	" 6/93	Died " 10	13	Cold, wet.
33	A. B. ...	8	Aug. 28/93	Oct. 5/93	" 24/93	Died " 29	16	Fine, cold.
34	C. W. ...	5	Sep. 26/93	" 27/93	Nov. 11/93	Recovered ...	6	Fine, frost.
35	E. A. ...	10	Oct. 17/93	Nov. 4/93	" 25/93	Died Dec. 4	1	Rain, snow 17th to 20th, subsequently frost.
36	C. S. ...	8	Sept. 28/93	" 16/93	" 26/93	Died Nov. 30	17	
37	E. S. ...	5	Oct. 17/93	" 10/93	Dec. 1/93	Died Dec. 4	7	Ground very wet since Nov. 26th.
38	J. P. ...	6	Nov. 8/93	" 30/93	" 7/93	Died " 24	2	Dull, cold, wet.
39	L. J. ...	3	" 18/93	Dec. 9/93	" 13/93	Died " 19	6	Wet.
40	F. W. ...	3	" 29/93	" 16/93	" 17/93	Recovered ...	3	"
41	E. B. ...	5	" 7/93	" 21/93	" 18/93	Died Dec. 21	4	Dull, foggy.

Two deaths were due to Measles, of which 39 cases occurred. Of these 11 were admitted while in the incubation stage of the disease.

On January 23rd a child admitted six days previously, developed Smallpox. She was isolated, and on the following day removed to the Hospital Ships. The staff and patients who had possibly been infected by her were re-vaccinated, and no further cases occurred.

Enteric Fever occurred in one case. The disease developed three days after the admission of the patient—a child aged 11—and after a course of moderate severity, ended in recovery.

During the year the accommodation of the Hospital has varied according to circumstances. In the autumn of 1892 the number of beds was raised to 972. This number was reduced during the first half of 1893, until in June it reached the normal level of 680; in November, owing to pressure upon the Board's Hospitals, it was again increased to 800.

The additional Hospital accommodation provided, or in contemplation, by the Board will, it is to be hoped, prevent in the future the subjection of any of the Board's Hospitals to undue pressure during periods of exceptional prevalence of Fever.

In the course of the year the drainage improvements, the tar paving of the airing courts, and the new administrative buildings, all of which were commenced in 1892, have been completed. The pavilions have been cleaned throughout, a great improvement being effected in the wards by the painting of their walls.

The whole of the Hospital bedding has also been cleaned and re-made.

The health of the staff has been satisfactory. Three assistant-nurses and one laundrymaid contracted Scarlet Fever; all recovered. No other illness of serious importance occurred.

I submit the statistical tables for the year, and remain,

Madam and Gentlemen,

Your obedient Servant,

(Signed) F. N. HUME,

Medical Superintendent.

No. 9.

REPORT OF DR. C. E. MATTHEWS, MEDICAL SUPERINTENDENT
OF THE GORE FARM HOSPITAL.

(For Statistics, see pp. 90 to 122.)

GORE FARM HOSPITAL,
DARENTH, DARTFORD, KENT,
30th January, 1894.

To the Committee of Management.

LADIES AND GENTLEMEN,

I beg to present to you my Report for 1893.

The work of the Hospital during the past year, in many respects, has been of an unusually anxious character.

The number of Fever cases admitted amounts to 1,032, which with the 628 cases remaining in Hospital on 31st December, 1892, brings the total up to 1,660.

Of these, 111 were transferred during February and March to other Hospitals of the Board (in order to prepare the Hospital for the reception of Smallpox), 1,438 were discharged recovered, and 6 died, leaving 105 Fever cases under treatment at the end of the year.

With regard to the mortality, one patient died from Pericarditis, which may be regarded as a natural consequence of the Scarlatinal poison, and the remaining 5 patients died from intercurrent attacks of Diphtheria, and not from Scarlet Fever at all. The rate of mortality directly attributable to Scarlet Fever thus becomes 0·08 and not 0·48 as given in the table of statistics. The rate of mortality, even including the deaths from Diphtheria, is unusually low for patients of the class received into the Board's Hospitals, and I feel convinced would compare favourably with the results obtained from patients who are not treated in Hospital.

The list of diseases incidental to convalescence includes 12 of Whooping Cough, 19 of Varicella, 16 of Diphtheria, 59 of Ulcerative Stomatitis, 2 of Erysipelas, and 1 of Measles. This record proves the paramount necessity

of providing ample accommodation for isolation in Convalescent Fever Hospitals.

A brief appendix is added to this report relative to the incidence of Post-Scarlatinal Diphtheria.

The reception of Fever patients occupied two periods of the year. The first period closed on the 6th March, the last of the patients on that date being either transferred to London Hospitals or discharged to their homes.

On the 12th March the Hospital was opened for Smallpox. This disease had been steadily increasing in the Metropolis from the beginning of the year, and in view of the possible requirement of Gore Farm for its reception, instructions had previously been issued by you for the cleaning, painting, and disinfecting of all the Hospital buildings infected by Scarlet Fever. The progress of this work was conducted with as much rapidity as the nature of the task and the grave responsibilities attaching to it admitted.

The measures of disinfection that were adopted proved entirely satisfactory, and the Hospital was re-opened for Smallpox within a week of its being closed without a single case contracting Scarlet Fever.

The number of Smallpox cases admitted during the year was 1,563. Of these, 10 were admitted direct from their homes, 1,552 were transferred from the Hospital Ships, and 1 was transferred from the Eastern Hospital; 9 of the transferred patients, including the one from the Eastern Hospital, were suffering from concurrent attacks of Smallpox and Scarlet Fever.

1,535 patients were discharged recovered, 4 were transferred to the Hospital Ships, and 5 died, leaving 19 patients under treatment on the 31st December, 1893.

The Smallpox mortality, according to formula, was 0·32. The deaths proceeded from some intercurrent disorders—viz., 2 from Erysipelas, and 1 each from Pneumonia, Phlebitis, and Heart Disease. In addition to this mortality, an infant prematurely born in Hospital died within a few hours of birth.

There were 3 miscarriages, of which one child was definitely covered with the eruption of Smallpox; and there was one natural delivery of a healthy female child, which was subsequently discharged from Hospital along with the mother. These maternity cases do not appear in the Smallpox statistics.

As stated above, the Hospital was closed for Fever on 6th March. In consequence, however, of the pressure upon the accommodation of the London Hospitals, it was decided to re-open the Lower Hospital for Fever, and this was done on 29th June. From this time up to the end of the year, the Hospital was used simultaneously for the reception of convalescent Smallpox

and Fever patients. At the beginning of this period, *i.e.*, 29th June, the Upper Hospital contained upwards of 200 Smallpox cases, and at the end, *i.e.*, 31st December, 19 cases. The Lower Hospital provided accommodation for 200 Fever cases, and was kept filled almost to the end of the year.

By your direction an entirely separate Staff and Hospital administration was organised for each disease, and it is satisfactory to record that no single instance occurred of infection being transferred from one Hospital to the other.

The few cases related above of concurrent Fever and Smallpox were admitted from other Hospitals of the Board, and were isolated in one of the empty Blocks in the Smallpox Hospital.

In order to minimise the risk of Fever patients catching Smallpox special precautions were taken, at your request, by the Medical Superintendents of the London Hospitals to transfer only patients who showed evidence of previous vaccination. These measures, and the careful observance of regulations issued to the staff, are, to a great extent, responsible for the successful result which attended the simultaneous admission of these two diseases at Gore Farm.

This experience offers an interesting contribution to the controversy as to the aerial convection of Smallpox.

The distance between the two Hospitals is about 1,000 feet, and on the opposite side of the Smallpox Hospital, at about the same distance from it as the Fever Hospital, are situate the Darenth Asylum and Schools. None of the inmates of these Institutions to my knowledge contracted Smallpox during the period treated of. A belt of trees surrounds the Smallpox Hospital on nearly every side, but it cannot be contended that this offers an effectual bar to the passage of Smallpox germs.

There seems to me sufficient evidence from this experience for assuming that the diffusion of Smallpox through the air does not extend to a distance of 1,000 feet, and that, provided personal conveyance of infection can be excluded, a Smallpox Hospital may exist at this distance with impunity to the surrounding population.

A measure of some importance in the history of Gore Farm Hospital passed the Board during the year—*viz.*, the proposal to increase the permanent accommodation from 600 to 1,000 beds, together with the necessary staff and administrative accommodation. The first portion of this commission, in the shape of eight additional blocks, each accommodating 50 patients, is in active process of execution, and the second portion, it is to be hoped, will speedily follow, as the need of further administrative and staff accommodation was seriously felt, even before this great enlargement of the Hospital was decided upon.

The causes which led the Board to increase their accommodation for this disease were fully explained in a Report of the Smallpox Hospitals Committee of the 20th June.

It will suffice here to mention that at one period during the recent outbreak the amount of accommodation for Smallpox created anxious fears lest it should prove inadequate. Happily the disease did not assume very serious proportions, and an opportunity was thus given the Board to improve its defences against a more serious outbreak in the future.

During the year 42 officers were warded through illness. One charge nurse, Hannah Edwards, I regret to say, died of a chronic malady, one charge nurse suffered the loss of a finger from a poisoned wound, three assistant nurses and one wardmaid contracted Scarlet Fever, and one porter a mild attack of Smallpox. He had been vaccinated seven months before with doubtful success. In addition to this case, a former member of the staff developed Smallpox four days after leaving the service. She was a wardmaid, who had worked continuously for seven months prior to leaving the Hospital in Smallpox wards; she had been re-vaccinated four times unsuccessfully, and was then regarded by me as insusceptible.

The number of staff, exclusive of contractor's men, who were exposed more or less directly to the infection of Smallpox was 204, but none of these took the disease except the two cases mentioned above.

I gladly acknowledge the assistance afforded me by my colleagues and fellow-workers in every department of the Hospital, and testify with much pleasure to the ready manner in which the subordinate staff complied with the rules that were framed with a view to prevent the transference of infection from one Hospital to the other.

I am, Ladies and Gentlemen,

Your obedient Servant,

(Signed) C. E. MATTHEWS,

Medical Superintendent.

(APPENDIX.)

NOTE ON POST-SCARLATINAL DIPHTHERIA.

Thirteen cases of Post-Scarlatinal Diphtheria occurred at the Lower Hospital between 29th June and 31st December.

In the following Table the cases are given in the order of their occurrence, and further particulars are shown in separate columns.

Return of Diphtheria cases between 29th June and 31st December.

No.	Initials.	Age.	Sex.	Ward.	Admitted Acute Hospital.	Admitted Gore Farm Hospital.	Date of Attack.	Days after Admission	Result.
1	A. E.	7	F	4	8 June	30 June	1 July	1	Recovered.
2	N. J.	4	F	3	10 June	29 June	3 July	4	Died.
3	D. S.	3	F	5	3 June	30 June	5 July	5	Tracheotomy; died.
4	L. H.	5	F	1	17 May	5 July	7 July	2	Recovered.
5	E. D.	5	F	6	29 May	1 July	21 July	20	Tracheotomy; recovered.
6	R. H.	4	M	5	17 June	9 July	26 July	17	Tracheotomy; died.
7	F. J.	2	F	7	9 June	5 July	27 July	22	Tracheotomy; recovered.
8	E. A.	4	F	2	6 June	15 July	30 July	15	Tracheotomy; recovered.
9	F. L.	8	F	12	23 June	17 July	30 July	13	Recovered.
10	M. R.	4	F	4	8 July	2 Aug.	3 Aug.	1	Died.
11	S. S.	4	F	5	20 Aug.	13 Sept.	20 Sept.	7	Tracheotomy; recovered.
12	W. C.	11	F	6	5 Sept.	21 Sept.	26 Sept.	5	Recovered.
13	E. W.	4	M	7	18 Aug.	8 Sept.	22 Oct.	44	Recovered.

The wards into which these patients were admitted had been unoccupied from 6th March to 29th June, and had been thoroughly cleansed in the meanwhile.

Case (1) was the first of a group of four: he was undoubtedly incubating the disease when admitted. This patient was isolated at once, and isolation was practised in every case as soon as the disease was diagnosed. Case (10) was another instance of the introduction of the disease in the latent period, and it is possible that some others contracted Diphtheria before they were admitted to the Hospital.

The mode of development of the disease in Hospital could not be determined, and is merely matter for conjecture, but every care was taken to prevent the spread of infection.

Tracheotomy was required in six of the cases, and of these four recovered and two died.

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

FEVER STATISTICS.—TABLE I.—*Showing the*

EASTERN HOSPITAL.									
DISEASES.	Remain- ing on 31st Dec., 1892.	Admitted during 1893.		Total under treatment during 1893.	Discharged during 1893.		Died during 1893.	Mortality per cent.	Remain- ing on 31st Dec., 1893.
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.			
Scarlet	272	1,963	1	2,236	662	1,221	135	6.78	218
Diphtheria	46	510	...	556	279	57	181	35.24	39
Enteric	29	178	...	207	145	...	28	15.95	34
Typhus ... ..	...	1	...	1	1	...	...	...	...
Other diseases	23	208	...	231	182	4	28	13.27	17
Totals	370	2,860	1	3,231	1,269	1,282	372	12.86	308
NORTH-EASTERN HOSPITAL.									
Scarlet	385	3,037	...	3,422	2,252	621	132	4.36	417
Diphtheria ... ..	...	7	...	7	2	1	2	33.33	2
Enteric ... ..	...	3	...	3	...	...	1	50.00	2
Other diseases	5	84	...	89	73	1	11	13.02	4
Totals	390	3,131	...	3,521	2,327	623	146	4.68	425
NORTH-WESTERN HOSPITAL.									
Scarlet	322	2,064	...	2,386	1,152	868	126	5.98	240
Diphtheria	76	1,249	...	1,325	900	26	332	26.48	67
Enteric	13	123	...	136	90	...	31	25.41	15
Typhus ... ..	...	...	...	...	...	...	...	...	...
Other diseases	1	121	...	122	94	...	23	19.32	5
Totals	412	3,557	...	3,969	2,236	894	512	14.22	327
WESTERN HOSPITAL.									
Scarlet	269	2,295	11	2,575	662	1,499	166	7.16	248
Diphtheria	21	256	...	277	136	7	94	38.13	40
Enteric	14	54	...	68	47	...	9	16.36	12
Typhus ... ..	...	...	...	...	...	...	...	...	...
Other diseases	5	144	...	149	130	5	7	4.91	7
Totals	309	2,749	11	3,069	975	1,511	276	9.99	307
SOUTH-WESTERN HOSPITAL.									
Scarlet	267	2,009	37	2,313	1,196	763	101	4.92	253
Diphtheria	57	585	...	642	432	...	160	27.18	50
Enteric	20	125	...	145	95	...	27	21.77	23
Typhus ... ..	...	1	...	1	...	...	1	100.00	...
Other diseases	1	98	...	99	80	...	18	18.36	1
Totals	345	2,818	37	3,200	1,803	763	307	10.79	327

*Admissions, Discharges, and Deaths during 1893.***FOUNTAIN HOSPITAL.**

DISEASES.	Remain- ing on 31st Dec., 1892.	Admitted during 1893.		Total under treatment during 1893.	Discharged during 1893.		Died during 1893.	Mortality per cent.	Remain- ing on 31st Dec. 1893.
		Direct from homes.	From other Hospitals of Board.		Re- covered.	To other Hospitals of Board.			
Scarlet	461	...	461	95	...	17	5·94	349
Diphtheria
Enteric
Typhus
Other diseases	1	...	1	1	...	...	...	...
Totals	462	...	462	96	...	17	5·94	349

SOUTH-EASTERN HOSPITAL.

Scarlet	307	2,719	63	3,089	821	1,754	179	6·46	335
Diphtheria	21	241	...	262	143	1	96	39·91	22
Enteric	6	61	...	67	40	...	14	24·47	13
Typhus ... ..	...	...	...	...	...	...	...	...	...
Other diseases	3	76	...	79	57	2	18	23·52	2
Totals	337	3,097	63	3,497	1,061	1,757	307	9·61	372

NORTHERN HOSPITAL.

Scarlet	749	...	5,729	6,478	5,688	1	39	0·68	750
Diphtheria	8	...	74	82	82	...	...	...	...
Enteric ... ..	...	...	...	...	...	...	...	...	...
Other diseases ... ..	...	...	...	...	...	...	...	...	...
Totals	757	...	5,803	6,560	5,770	1	39	0·67	750

GORE FARM HOSPITAL.

Scarlet	628	...	1,032	1,660	1,438	111	6	0·48	105
Other diseases ... ..	...	...	..	...	...	...	...	...	...
Totals	628	...	1,032	1,660	1,438	111	6	0·48	105

SUMMARY.

Scarlet	3,199	14,548	6,873	17,747	13,966	6,838	901	6·11	2,915
Diphtheria	229	2,848	74	3,077	1,974	92	865	30·42	220
Enteric	82	544	...	626	417	...	110	20·54	99
Typhus ... ..	...	2	...	2	1	...	1	50·00	...
Totals	3,510	17,942	6,947	21,452	16,358	6,930	1,877	10·37	3,234
Other diseases	38	732	...	770	617	12	105	14·32	36
Grand Totals	3,548	18,674	6,947	22,222	16,975	6,942	1,982	10·53	3,270

NOTES.—The Scarlet Fever mortality includes 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. To calculate the mortality at the Fountain Hospital for this year according to this formula is misleading. The true death rate is slightly over 4 per cent.

FEVER STATISTICS.—TABLE II.—Showing the Monthly Admissions

EASTERN HOSPITAL.												
MONTH.	ADMISSIONS.								DEATHS.	DISCHARGES.		
	Scarlet.		Diphtheria.		Enteric.	Typhus.	Other Diseases.	Total.		Re-covered.	To other Hospitals of Board.	
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.								
January ...	172	...	43	...	13	...	27	255	45	137	161	
February ...	99	...	63	...	5	...	17	184	44	99	92	
March ...	56	...	43	...	...	...	8	107	24	91	72
April ...	176	...	33	...	...	...	14	223	19	71	61
May ...	161	1	55	...	2	...	14	233	38	68	104	
June ...	190	...	48	...	16	1	17	272	27	84	96	
July ...	231	...	38	...	26	...	20	315	41	86	140	
August ...	180	...	48	...	20	...	16	264	35	97	146	
September ...	212	...	36	...	25	...	20	293	30	153	100	
October ...	170	...	35	...	17	...	19	241	18	135	109	
November ...	182	...	44	...	30	...	23	279	36	132	113	
December ...	134	...	24	...	24	...	13	195	15	116	88	
Totals ...	1,963	1	510	...	178	1	208	2,861	372	1,269	1,282	
NORTH-EASTERN HOSPITAL.												
January ...	234	...	...	...	...	...	4	238	17	168	...
February ...	250	...	...	...	...	...	6	256	13	177	...
March ...	254	...	...	...	...	...	8	262	17	242	...
April ...	132	...	...	...	...	...	4	136	7	152	...
May ...	244	...	...	...	...	...	5	249	8	205	89
June ...	237	...	1	...	...	...	18	256	14	152	...
July ...	221	...	1	...	...	...	6	228	17	195	40
August ...	350	...	...	...	...	...	10	360	15	292	54
September ...	215	...	2	...	...	...	2	219	9	189	102
October ...	319	...	1	...	1	...	9	330	3	214	91	
November ...	311	...	...	...	...	...	6	317	10	157	123
December ...	270	...	2	...	2	...	6	280	16	184	124	
Totals ...	3,037	...	7	...	3	...	84	3,131	146	2,327	623	
NORTH-WESTERN HOSPITAL.												
January ...	112	...	84	...	5	...	4	205	43	225	20	
February ...	89	...	76	...	2	...	3	170	30	155	20	
March ...	149	...	95	...	2	...	3	249	35	170	64	
April ...	146	...	107	...	15	...	13	281	45	119	105	
May ...	229	...	122	...	4	...	17	372	56	118	110	
June ...	169	...	116	...	16	...	11	312	36	198	83	
July ...	214	...	111	...	12	...	13	350	44	174	122	
August ...	190	...	134	...	16	...	16	356	54	254	60	
September ...	207	...	109	...	17	...	9	342	50	196	87	
October ...	182	...	106	...	10	...	14	312	34	198	75	
November ...	213	...	112	...	13	...	10	348	47	234	72	
December ...	164	...	77	...	11	...	8	260	38	195	76	
Totals ...	2,064	...	1,249	...	123	...	121	3,557	512	2,236	894	
WESTERN HOSPITAL.												
January ...	134	...	23	...	3	...	2	162	23	72	77	
February ...	127	11	11	...	3	...	7	159	16	83	114	
March ...	146	...	29	...	2	...	12	189	24	84	85	
April ...	158	...	13	...	1	...	12	184	19	58	90	
May ...	253	...	18	...	2	...	18	291	22	60	132	
June ...	194	...	18	...	12	...	10	234	29	75	136	
July ...	230	...	20	...	5	...	13	268	22	93	162	
August ...	248	...	15	...	3	...	12	278	25	76	174	
September ...	189	...	18	...	3	...	9	219	18	80	141	
October ...	247	...	25	...	7	...	24	303	24	89	159	
November ...	212	...	24	...	5	...	18	259	26	72	142	
December ...	157	...	42	...	8	...	7	214	28	133	99	
Totals ...	2,295	11	256	...	54	...	144	2,760	276	975	1,511	

of various Diseases, with Discharges and Deaths from all causes during 1893.

SOUTH-WESTERN HOSPITAL.

MONTH.	ADMISSIONS.								DEATHS.	DISCHARGES.	
	Scarlet.		Diphtheria.		Enteric.	Typhus.	Other Diseases.	Total.		Re-covered.	To other Hospitals of Board.
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.							
January ...	122	...	45	...	13	...	4	184	22	145	33
February ...	138	15	33	...	9	...	8	203	25	149	74
March ...	118	22	24	...	8	...	4	176	18	117	54
April ...	153	...	46	...	3	...	8	210	19	107	76
May ...	218	...	48	...	4	1	8	279	19	97	88
June ...	168	...	56	...	14	...	12	250	29	113	110
July ...	193	...	44	...	...	...	15	252	18	174	56
August ...	184	...	60	...	12	...	11	267	32	181	57
September ...	202	...	60	...	16	...	13	291	30	215	56
October ...	192	...	51	...	11	...	6	260	40	143	64
November ...	151	...	68	...	19	...	3	241	29	169	44
December ...	170	...	50	...	16	...	6	242	26	193	51
Totals ...	2,009	37	585	...	125	1	98	2,855	307	1,803	763

FOUNTAIN HOSPITAL.

January ...	...	...	...	...	...	...	...	...	...	...	...
February ...	...	...	...	...	...	...	...	...	...	...	...
March ...	...	...	...	...	...	...	...	...	...	...	...
April ...	...	...	...	...	...	...	...	...	...	...	...
May ...	...	...	...	...	...	...	...	...	...	...	...
June ...	...	...	...	...	...	...	...	...	...	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	...	...	...	...	...
October ...	36	...	...	...	...	...	...	36	...	...	...
November ...	337	...	...	...	...	...	...	337	11	...	...
December ...	88	...	...	...	...	...	1	89	6	96	...
Totals ...	461	...	...	...	...	...	1	462	17	96	...

SOUTH-EASTERN HOSPITAL.

January ...	197	...	8	...	2	...	7	214	28	84	140
February ...	123	27	14	...	3	...	9	176	23	87	85
March ...	126	36	21	...	9	...	9	201	28	154	61
April ...	178	...	28	...	3	...	4	213	29	87	73
May ...	230	...	16	...	2	...	13	261	25	57	149
June ...	268	...	24	...	8	...	11	311	27	70	162
July ...	299	...	16	...	4	...	6	325	24	46	191
August ...	248	...	22	...	3	...	7	280	25	82	204
September ...	285	...	24	...	9	...	3	321	26	124	174
October ...	273	...	20	...	3	...	4	300	22	87	164
November ...	274	...	23	...	5	...	2	304	24	79	215
December ...	218	...	25	...	10	...	1	254	26	104	139
Totals ...	2,719	63	241	...	61	...	76	3,160	307	1,061	1,757

NORTHERN HOSPITAL.

January ...	...	281	...	11	...	...	...	292	2	450	1
February ...	...	378	...	7	...	...	...	385	...	403	...
March ...	...	318	...	16	...	...	...	334	7	359	...
April ...	...	386	...	16	...	...	...	402	2	368	...
May ...	...	660	...	9	...	...	...	669	5	446	...
June ...	...	535	...	8	...	...	...	543	6	563	...
July ...	...	480	...	7	...	...	...	487	2	546	...
August ...	...	560	...	...	...	...	...	560	1	581	...
September ...	...	515	...	...	...	...	...	515	4	509	...
October ...	...	505	...	...	...	...	...	505	3	524	...
November ...	...	628	...	...	...	...	...	628	1	516	...
December ...	...	483	...	...	...	...	...	483	6	505	...
Totals ...	...	5,729	...	74	...	...	...	5,803	39	5,770	1

FEVER STATISTICS.—TABLE II. (continued)—Showing the Monthly Admissions of various Diseases, with Discharges and Deaths from all causes during 1893.

GORE FARM HOSPITAL.											
MONTH.	ADMISSIONS.								DEATHS.	DISCHARGES.	
	Scarlet.		Diphtheria.		Enteric.	Typhus.	Other Diseases.	Total.		Re-covered.	To other Hospitals of Board.
	Direct from Homes.	From other Hospitals of Board.	Direct from Homes.	From other Hospitals of Board.							
January	134	...	...	...	...	...	134	1	359	...
February	1	227	54
March	64	57
April
May
June	43	...	...	...	...	...	43	..	...	...
July	223	...	...	...	...	...	223	3	63	...
August	135	...	...	...	...	...	135	1	133	...
September	145	...	...	...	...	...	145	...	150	...
October	172	...	...	...	...	...	172	...	168	...
November	90	...	...	...	...	...	90	...	167	...
December	90	...	...	...	...	...	90	...	107	...
Totals	1,032	...	...	...	...	...	1,032	6	1,438	111

SUMMARY.											
January ...	971	415	203	11	36	...	48	1,258	181	1,640	432
February ...	826	431	197	7	22	...	50	1,095	152	1,380	439
March ...	849	376	212	16	21	...	44	1,126	153	1,281	393
April ...	943	386	227	16	22	...	55	1,247	140	962	405
May ...	1,335	661	259	9	14	1	75	1,684	173	1,051	672
June ...	1,226	578	263	8	66	1	79	1,635	168	1,255	587
July ...	1,388	703	230	7	47	...	73	1,738	171	1,377	711
August ...	1,400	695	279	...	54	...	72	1,805	188	1,696	695
September ...	1,310	660	249	...	70	...	56	1,685	167	1,616	660
October ...	1,419	677	238	...	49	...	76	1,782	144	1,558	662
November ...	1,680	718	271	...	72	...	62	2,085	184	1,526	709
December ...	1,201	573	220	...	71	...	42	1,534	161	1,633	577
Grand Totals...	14,548	6,873	2,848	74	544	2	732	18,674	1,982	16,975	6,942

PART II.—ANNUAL REPORTS, 1893. FEVER STATISTICS, 1893. FEVER STATISTICS—TABLE III.—Showing the Admissions and Deaths of Patients from the several Parishes and Unions during 1893.

Table with columns for Parishes and Unions, Eastern Hospital, North-Eastern Hospital, North-Western Hospital, Western Hospital, South-Western Hospital, Fountain Hospital, South-Eastern Hospital, Northern Hospital, Gore Farm Hospital, and Summary. Rows include parishes like Kennington, Fulham, Paddington, Chelsea, St. George's, Westminster, St. Marylebone, St. Pancras, Hampstead, Edgware, Haverley, St. Giles and St. George, Bloomsbury, Strand, Holborn, London, City of, Shoreditch, Bethnal Green, Whitechapel, St. George-in-the-East, Stepney, Mile End Old Town, Poplar, St. Saviour's, St. Olave's, Lambeth, Wandsworth & Clapham, Camberwell, Greenwich, Woolwich, Lewisham, Port of London Sanitary Authority, Beyond Met. Area, and Born in Hospital. Summary columns include Total Admissions, Total Deaths, Total Deaths, and various fever statistics.

Year	Month	Day	Hour	Latitude	Longitude	Altitude	Temperature	Humidity	Wind	Clouds	Remarks
1880	Jan	1	10	30	120	100	50	80	SE	10	Clear
1880	Jan	2	11	30	120	100	50	80	SE	10	Clear
1880	Jan	3	12	30	120	100	50	80	SE	10	Clear
1880	Jan	4	13	30	120	100	50	80	SE	10	Clear
1880	Jan	5	14	30	120	100	50	80	SE	10	Clear
1880	Jan	6	15	30	120	100	50	80	SE	10	Clear
1880	Jan	7	16	30	120	100	50	80	SE	10	Clear
1880	Jan	8	17	30	120	100	50	80	SE	10	Clear
1880	Jan	9	18	30	120	100	50	80	SE	10	Clear
1880	Jan	10	19	30	120	100	50	80	SE	10	Clear
1880	Jan	11	20	30	120	100	50	80	SE	10	Clear
1880	Jan	12	21	30	120	100	50	80	SE	10	Clear
1880	Jan	13	22	30	120	100	50	80	SE	10	Clear
1880	Jan	14	23	30	120	100	50	80	SE	10	Clear
1880	Jan	15	24	30	120	100	50	80	SE	10	Clear
1880	Jan	16	25	30	120	100	50	80	SE	10	Clear
1880	Jan	17	26	30	120	100	50	80	SE	10	Clear
1880	Jan	18	27	30	120	100	50	80	SE	10	Clear
1880	Jan	19	28	30	120	100	50	80	SE	10	Clear
1880	Jan	20	29	30	120	100	50	80	SE	10	Clear
1880	Jan	21	30	30	120	100	50	80	SE	10	Clear
1880	Jan	22	31	30	120	100	50	80	SE	10	Clear

FEVER STATISTICS.—TABLE IV.—Scarlet Fever

EASTERN HOSPITAL.				NORTH-WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.			
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	13	1	10	5	23	4	8	9	1	17	3
1 to 2	51	10	52	17	103	10	29	21	6	50	27
2 to 3	64	14	60	9	124	8	43	47	8	90	10
3 to 4	76	5	81	6	157	9	80	88	9	168	15
4 to 5	101	8	104	9	205	17	79	108	17	187	17
5 to 10	379	18	432	15	811	27	446	408	19	854	27
10 to 15	146	2	172	9	318	41	204	194	5	398	41
15 to 20	66	...	60	...	126	6	89	67	1	156	6
20 to 25	14	1	36	4	50	3	28	39	1	67	3
25 to 30	9	1	15	...	24	1	12	24	...	36	1
30 to 35	6	...	6	...	12	...	10	14	...	24	...
35 to 40	...	...	3	...	3	...	4	7	...	11	...
40 to 45	...	...	3	1	3	1	4	...	...	4	1
45 to 50	1	...	1	...	2	...	1	...	...	1	...
50 to 55	1	...	...	...	1	...	1	...	...	1	...
55 to 60	...	...	1	...	1	...	...	...	...	...	...
And upwards	...	...	...	...	...	...	...	...	...	...	...
Totals...	927	60	1,036	75	1,963	135	1,038	1,026	68	2,064	126
NORTH-EASTERN HOSPITAL.				WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.			
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	20	5	7	1	27	4	11	12	4	23	11
1 to 2	48	11	45	11	93	12	42	37	12	79	28
2 to 3	100	13	87	13	187	16	70	71	17	141	33
3 to 4	137	12	130	13	267	16	82	103	8	185	21
4 to 5	147	10	142	7	289	13	107	117	12	224	25
5 to 10	575	12	635	14	1,210	16	396	484	19	880	35
10 to 15	306	2	304	4	610	3	186	220	3	406	6
15 to 20	116	...	80	1	196	2	91	87	2	178	4
20 to 25	42	1	39	...	81	...	38	56	...	94	...
25 to 30	24	1	23	1	47	...	15	23	1	38	1
30 to 35	12	...	6	...	18	1	7	16	...	23	1
35 to 40	2	...	4	...	6	...	5	9	1	14	1
40 to 45	2	...	2	...	4	...	4	...	...	4	...
45 to 50	...	...	1	...	1	...	1	1	...	2	...
50 to 55	1	...	...	...	1	...	1	2	...	3	...
55 to 60	...	...	...	...	...	...	1	...	...	1	...
And upwards	...	...	...	...	...	...	...	...	...	...	...
Totals...	1,532	67	1,505	65	3,037	182	1,057	1,238	79	2,295	166
NORTH-EASTERN HOSPITAL.				WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.			
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	...	...	...	...	...	Under 1	...	...	...	...	Under 1
1 to 2	...	...	...	...	...	1 to 2	...	...	...	...	1 to 2
2 to 3	...	...	...	...	...	2 to 3	...	...	...	...	2 to 3
3 to 4	...	...	...	...	...	3 to 4	...	...	...	...	3 to 4
4 to 5	...	...	...	...	...	4 to 5	...	...	...	...	4 to 5
5 to 10	...	...	...	...	...	5 to 10	...	...	...	...	5 to 10
10 to 15	...	...	...	...	...	10 to 15	...	...	...	...	10 to 15
15 to 20	...	...	...	...	...	15 to 20	...	...	...	...	15 to 20
20 to 25	...	...	...	...	...	20 to 25	...	...	...	...	20 to 25
25 to 30	...	...	...	...	...	25 to 30	...	...	...	...	25 to 30
30 to 35	...	...	...	...	...	30 to 35	...	...	...	...	30 to 35
35 to 40	...	...	...	...	...	35 to 40	...	...	...	...	35 to 40
40 to 45	...	...	...	...	...	40 to 45	...	...	...	...	40 to 45
45 to 50	...	...	...	...	...	45 to 50	...	...	...	...	45 to 50
50 to 55	...	...	...	...	...	50 to 55	...	...	...	...	50 to 55
55 to 60	...	...	...	...	...	55 to 60	...	...	...	...	55 to 60
And upwards	...	...	...	...	...	And upwards	...	...	...	...	And upwards
Totals...	250	10	211	7	461	17	250	211	10	461	17

Admissions and Deaths at various Ages during 1893.

SOUTH-EASTERN HOSPITAL.						GORE FARM HOSPITAL.					
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.	Admitted.		Died.	Admitted.	Died.	Admitted.	Died.
Under 1	14	3	6	1	20	4	...	...	...	...	...
1 to 2	40	6	34	5	74	11	...	...	...	...	...
2 to 3	84	20	82	22	166	42	...	...	...	...	...
3 to 4	107	19	101	21	208	40	...	...	...	...	1
4 to 5	116	13	119	15	235	28	...	...	...	...	8
5 to 10	567	18	552	21	1,119	39	...	...	...	...	...
10 to 15	268	5	281	5	549	10	...	...	...	...	2
15 to 20	98	1	84	2	182	3	...	...	...	...	1
20 to 25	34	...	44	1	78	1	...	...	...	...	...
25 to 30	15	...	29	1	44	1	...	...	...	...	...
30 to 35	5	...	13	...	18	...	...	...	...	...	...
35 to 40	2	...	11	...	13	...	...	...	...	...	...
40 to 45	3	...	4	...	7	...	...	...	...	...	...
45 to 50	4	...	1	...	5	...	...	...	...	...	...
50 to 55	...	...	...	...	...	...	...	...	...	...	...
55 to 60	1	...	...	...	1	...	...	...	...	...	...
And upwards...	...	...	...	...	...	...	...	...	...	...	...
Totals	1,358	85	1,361	94	2,719	179	...	...	...	...	6

NORTHERN HOSPITAL.						SUMMARY.					
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.	Admitted.		Died.	Admitted.	Died.	Admitted.	Died.
Under 1	Under 1	...	...	...	...	...
1 to 2	...	1	...	...	1	1 to 2	70	22	50	14	36
2 to 3	...	1	...	...	1	1 to 3	244	55	228	56	111
3 to 4	...	5	...	...	6	2 to 3	432	86	404	81	486
4 to 5	...	2	...	...	4	3 to 4	568	69	617	72	167
5 to 10	...	11	...	...	18	4 to 5	675	66	733	72	141
10 to 15	...	1	...	...	2	5 to 10	2,820	109	3,049	112	1,408
15 to 20	10 to 15	1,332	14	1,430	30	5,869
20 to 25	3	15 to 20	531	10	466	11	2,762
25 to 30	1	20 to 25	197	2	257	8	44
30 to 35	25 to 30	84	2	136	3	21
35 to 40	30 to 35	54	3	73	...	5
40 to 45	1	35 to 40	14	...	38	2	3
45 to 50	40 to 45	13	...	11	2	2
50 to 55	45 to 50	7	...	5	...	...
55 to 60	50 to 55	4	...	3	...	...
And upwards	55 to 60	2	...	1	...	...
Totals	...	21	...	18	39*	And upwards	...	...	...	...	...
	Grand Totals	7,047	438	7,501	463	14,548
	Totals	...	...	...	...	901

Transferred cases.

FEVER STATISTICS.—TABLE V.—SCARLET FEVER CASES—*List of Complications, 1893.*

COMPLICATIONS	NUMBER OF CASES AT EACH HOSPITAL.										SUMMARY.
	Eastern Hospitals.	North-Eastern Hospital.	North-Western Hospital.	Western Hospital.	South-Western Hospitals.	Fountain Hospital.	South-Eastern Hospital.	Northern Hospital.	Gore Farm Hospital.		
Abscess Mastoid ...	8	14	6	13	8	...	4	2	...	55	
Abscesses, other ...	59	72	...	4	23	...	32	...	...	190
Adenitis of Convalescence ...	299	Not tabulated	188	255	199	6	51	34	4	1,036	
Albuminuria ...	121	192	92	474	103	2	153	43	17	1,197	
Bronchitis ...	14	33	10	48	32	...	21	5	...	163	
Cervical Cellulitis ...	20	17	11	7	Not tabulated	...	9	...	...	64
Corneal Ulcer ...	3	8	2	...	2	...	3	...	...	18
Endocarditis ...	1	19	...	6	4	...	21	...	...	51
Empyema ...	1	8	2	2	2	...	3	...	...	18
Laryngitis ...	8	9	...	12	5	...	17	6	2	59	
Meningitis ...	1	4	1	6	1	...	1	...	...	14
Nephritis ...	126	201	54	110	76	1	116	35	...	719	
Ophthalmia ...	18	22	6	34	21	...	8	32	...	141	
Pericarditis ...	1	7	...	7	4	...	2	...	1	22	
Otitis... ...	185	358	246	315	262	7	197	113	...	1,683	
Pleurisy ...	3	19	3	10	9	2	8	1	1	56	
Pneumonia Lobar ...	7	28	4	18	9	...	21	5	1	93	
" Lobular	12	35	20	57	Not tabulated	6	32	6	...	168	
Pyæmia ...	6	9	...	7	2	...	...	...	...	24
Relapse of Disease ...	7	14	15	24	16	...	22	22	4	124	
Rheumatism... ...	29	103	42	94	115	5	69	15	7	479	
Stomatitis ...	10	Not tabulated	13	45	30	...	23	117	59	297	
Tonsillitis of Convalescence ...	15	Not tabulated	14	86	42	...	11	113	44	325	

FEVER STATISTICS.—TABLE VI.—*Coexistent Diseases more or less prejudicial to recovery present during the attack of Scarlet Fever, 1893.*

DISEASES.	Eastern Hospital.		North-Eastern Hospital.		North-Western Hospital.		Western Hospital.		South-Western Hospital.		Fountain Hospital.		South-Eastern Hospital.		Northern Hospital.		Gore Farm Hospital.		TOTAL.	
	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.
Chickenpox	6	29	6	48	20	4	9	39	16	1	..	..	6	29	..	141	19	63	310
Diphtheria...	2	10	..	11	63	18	13	30	33	16	..	..	18	61	..	41	17	129	204
Enteric Fever	..	..	3	..	3	1	2	..	2	..	..	..	..	..	..	1	..	7	2
Erysipelas ...	..	2	..	..	..	4	..	8	3	..	..	..	..	3	..	2	..	3	21
German Measles	..	..	..	..	..	..	2	..	..	6	..	..	..	..	..	..	..	2	6
Influenza ...	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	..	5
Measles ...	3	24	2	39	6	7	6	23	1	2	..	..	3	16	..	39	1	21	151
Mumps ...	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	10	..	..	13
Smallpox ...	1	5	..	..	..	..	..	4	..	..	..	..	..	..	1	..	..	1	10
Tuberculosis	2	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3	2
Whooping Cough...	8	1	21	..	17	2	11	22	12	2	..	..	12	..	21	..	12	81	60

FEVER STATISTICS.—TABLE VII.—*Diphtheria*

EASTERN HOSPITAL.				NORTH-WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.				
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.		
Under 1	6	6	5	4	11	10	6	2	13	6	19	8
1 to 2	17	13	11	21	30	24	43	21	32	21	75	42
2 to 3	23	19	22	27	45	31	59	27	44	20	103	47
3 to 4	33	21	25	35	58	34	72	35	72	25	144	60
4 to 5	22	11	27	24	49	20	66	24	72	28	138	52
5 to 10	70	24	86	38	156	49	181	38	232	63	413	101
10 to 15	20	1	29	7	49	3	54	7	68	5	122	12
15 to 20	13	3	30	2	43	4	39	2	46	2	85	4
20 to 25	9	...	17	...	26	2	10	...	46	1	56	1
25 to 30	5	2	9	...	14	2	13	...	33	2	46	2
30 to 35	3	...	9	...	12	1	7	...	15	...	22	...
35 to 40	4	...	5	...	9	...	5	1	8	...	13	1
40 to 45	2	...	3	...	5	1	4	...	4	1	8	1
45 to 50	1	...	1	...	2	...	...	...	3	1	3	1
50 to 55	...	...	...	...	...	...	...	...	1	...	1	...
55 to 60	...	...	1	...	1	...	...	...	1	...	1	...
And upwards	...	...	...	...	...	...	...	...	...	...	...	...
Totals	228	100	282	81	510	181	559	157	690	175	1,249	332
NORTH-EASTERN HOSPITAL.				WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.				
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.		
Under 1	...	...	...	...	...	Under 1	...	...	...	...	...	...
1 to 2	1	...	1	...	2	1 to 2	11	3	7	1	18	4
2 to 3	...	...	...	...	...	2 to 3	10	9	9	5	19	16
3 to 4	...	...	...	...	...	3 to 4	15	7	7	3	22	13
4 to 5	...	...	1	...	1	4 to 5	16	8	18	10	34	18
5 to 10	...	...	2	...	2	5 to 10	32	10	46	10	78	20
10 to 15	1	1	...	...	2	10 to 15	17	5	16	2	33	7
15 to 20	...	...	...	...	...	15 to 20	6	...	10	...	16	...
20 to 25	...	...	...	...	...	20 to 25	5	...	9	1	14	...
25 to 30	1	...	...	...	1	25 to 30	4	1	4	...	8	1
30 to 35	...	...	...	...	...	30 to 35	2	...	1	...	3	...
35 to 40	...	...	...	...	...	35 to 40	1	...	1	...	2	...
40 to 45	...	...	...	...	...	40 to 45	3	2	...	...	3	2
45 to 50	...	...	...	...	...	45 to 50	...	...	...	...	1	...
50 to 55	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	55 to 60	2	1	...	...	...	1
And upwards	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	3	1	4	1	7	2	125	54	131	40	256	94
NORTH-EASTERN HOSPITAL.				WESTERN HOSPITAL.				SOUTH-WESTERN HOSPITAL.				
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.		
Under 1	...	...	...	...	...	Under 1	...	...	...	...	...	...
1 to 2	...	...	...	...	...	1 to 2	...	...	...	...	...	...
2 to 3	...	...	...	...	...	2 to 3	...	...	...	...	...	...
3 to 4	...	...	...	...	...	3 to 4	...	...	...	...	...	...
4 to 5	...	...	...	...	...	4 to 5	...	...	...	...	...	...
5 to 10	...	...	...	...	...	5 to 10	...	...	...	...	...	...
10 to 15	...	...	...	...	...	10 to 15	...	...	...	...	...	...
15 to 20	...	...	...	...	...	15 to 20	...	...	...	...	...	...
20 to 25	...	...	...	...	...	20 to 25	...	...	...	...	...	...
25 to 30	...	...	...	...	...	25 to 30	...	...	...	...	...	...
30 to 35	...	...	...	...	...	30 to 35	...	...	...	...	...	...
35 to 40	...	...	...	...	...	35 to 40	...	...	...	...	...	...
40 to 45	...	...	...	...	...	40 to 45	...	...	...	...	...	...
45 to 50	...	...	...	...	...	45 to 50	...	...	...	...	...	...
50 to 55	...	...	...	...	...	50 to 55	...	...	...	...	...	...
55 to 60	...	...	...	...	...	55 to 60	...	...	...	...	...	...
And upwards	...	...	...	...	...	And upwards	...	...	...	...	...	...
Totals	...	...	...	...	...	Totals	...	...	...	...	...	...

Admissions and Deaths at various ages during 1893.

SOUTH-EASTERN HOSPITAL.				NORTHERN HOSPITAL.							
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	1	1	1	1	2	Under 1	...	...	...	...	...
1 to 2	8	5	10	6	18	1 to 2	...	...	...	...	...
2 to 3	10	7	13	6	23	2 to 3	...	...	...	...	...
3 to 4	19	11	12	9	31	3 to 4	...	...	...	...	...
4 to 5	12	8	18	8	30	4 to 5	...	...	...	...	...
5 to 10	36	16	36	13	72	5 to 10	...	...	...	...	...
10 to 15	8	2	12	1	20	10 to 15	...	...	...	...	...
15 to 20	2	...	10	...	12	15 to 20	...	...	...	...	...
20 to 25	5	1	7	...	12	20 to 25	...	...	...	...	...
25 to 30	6	...	5	1	11	25 to 30	...	...	...	...	...
30 to 35	...	...	1	...	1	30 to 35	...	...	...	...	...
35 to 40	2	...	3	...	5	35 to 40	...	...	...	...	...
40 to 45	...	...	...	...	...	40 to 45	...	...	...	...	...
45 to 50	1	...	1	...	2	45 to 50	...	...	...	...	...
50 to 55	1	...	...	...	1	50 to 55	...	...	...	...	...
55 to 60	...	...	...	...	...	55 to 60	...	...	...	...	...
And upwards...	1	...	...	...	1	And upwards...	...	...	...	...	...
Totals	112	51	129	45	241	Totals	...	...	...	...	...

SUMMARY.											
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 1	Under 1	...	...	...	...	...
1 to 2	1 to 2	...	...	...	...	...
2 to 3	2 to 3	...	...	...	...	...
3 to 4	3 to 4	...	...	...	...	...
4 to 5	4 to 5	...	...	...	...	...
5 to 10	5 to 10	...	...	...	...	...
10 to 15	10 to 15	...	...	...	...	...
15 to 20	15 to 20	...	...	...	...	...
20 to 25	20 to 25	...	...	...	...	...
25 to 30	25 to 30	...	...	...	...	...
30 to 35	30 to 35	...	...	...	...	...
35 to 40	35 to 40	...	...	...	...	...
40 to 45	40 to 45	...	...	...	...	...
45 to 50	45 to 50	...	...	...	...	...
50 to 55	50 to 55	...	...	...	...	...
55 to 60	55 to 60	...	...	...	...	...
And upwards...	And upwards...	...	...	...	...	...
Grand Totals	1,314	444	1,534	421	2,848	Grand Totals	...	...	...	...	865

PART II.—ANNUAL REPORTS, 1893.
 FEVER STATISTICS.—TABLE VIII.—*Diphtheria Cases.*
List of Complications, 1893.

COMPLICATIONS.	NUMBER OF CASES.								TOTALS.
	Eastern Hospital.	North-Eastern Hospital.	North-Western Hospital.	Western Hospital.	South-Western Hospital.	Fountain Hospital.	South-Eastern Hospital.	Northern Hospital.	
Nephritis	3	1	...	2	1	...	1	...	8
Paralysis, various	63	...	177	43	85	...	39	...	407
Pneumonia, Lobar	3	...	... } 31 }	6	3	...	1	...	13
Pneumonia, Lobular	6	...	31	3	1	...	4	...	45
Relapse of Disease	7	..	Not tabulated	3	16	...	3	...	29

FEVER STATISTICS.—TABLE IX.—*Coexistent Diseases more or less prejudicial to recovery present during the attack of Diphtheria, 1893.*

DISEASES.	Eastern Hospital.		North-Eastern Hospital.		North-Western Hospital.		Western Hospital.		South-Western Hospital.		Fountain Hospital.		South-Eastern Hospital.		Northern Hospital.		Gore Farm Hospital.		TOTAL.	
	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.	Before Admission.	After Admission.
Chickenpox	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
German Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	4	12	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Mumps	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Smallpox	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	3	..	6	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

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

EASTERN HOSPITAL.				NORTH-WESTERN HOSPITAL.							
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 5	5	...	...	...	5	...	1	...	...	1	...
5 to 10	13	...	12	1	25	...	1	...	...	1	...
10 to 15	31	8	19	...	50	...	2	...	16	6	...
15 to 20	19	2	15	5	34	...	...	...	15	5	...
20 to 25	18	4	12	1	30	...	3	...	11	2	...
25 to 30	7	1	4	1	11	...	...	...	7	3	...
30 to 35	4	1	7	2	11	...	2	...	3	1	...
35 to 40	3	1	1	...	4	...	1	...	4	2	...
40 to 45	1	...	4	...	5	...	1	...	4	1	...
45 to 50	...	...	2	1	2	...	...	...	2	1	...
50 to 55	...	...	...	...	...	...	...	...	...	...	...
55 to 60	...	...	...	...	...	...	...	...	...	...	...
And upwards	1	...	...	...	1	...	...	...	...	...	...
Totals	102	17	76	11	178	Totals	59	11	64	20	123
											31
NORTH-EASTERN HOSPITAL.				WESTERN HOSPITAL.							
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 5	...	...	...	...	...	Under 5	1	...	...	...	...
5 to 10	1	...	...	...	1	5 to 10	3	...	...	...	5
10 to 15	...	...	...	...	...	10 to 15	7	...	4	...	11
15 to 20	1	1	1	...	2	15 to 20	5	1	5	...	10
20 to 25	...	...	...	...	...	20 to 25	5	2	6	...	11
25 to 30	...	...	...	...	...	25 to 30	3	...	5	...	8
30 to 35	...	...	...	...	...	30 to 35	3	1	2	...	5
35 to 40	...	...	...	...	...	35 to 40	...	1	3	...	3
40 to 45	...	...	...	...	...	40 to 45	...	...	...	...	...
45 to 50	...	...	...	...	...	45 to 50	...	...	...	...	...
50 to 55	...	...	...	...	...	50 to 55	...	...	...	...	...
55 to 60	...	...	...	...	...	55 to 60	...	...	...	...	...
And upwards	...	...	...	...	...	And upwards...	...	...	...	...	...
Totals	2	1	1	...	3	Totals	27	5	27	4	54
				1							9

Admissions and Deaths at various ages during 1893.

SOUTH-WESTERN HOSPITAL.					SOUTH-EASTERN HOSPITAL.						
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 5	1	...	2	...	3	Under 5	...	...	...	...	...
5 to 10	6	1	7	...	13	5 to 10	...	...	...	...	...
10 to 15	11	1	8	1	19	10 to 15	...	...	...	...	...
15 to 20	14	2	16	3	30	15 to 20	...	...	...	...	...
20 to 25	12	2	9	5	21	20 to 25	...	...	...	...	...
25 to 30	5	3	9	...	14	25 to 30	...	...	...	...	...
30 to 35	6	2	6	1	12	30 to 35	...	...	...	...	...
35 to 40	3	1	2	1	5	35 to 40	...	...	...	...	...
40 to 45	4	...	1	1	5	40 to 45	...	...	...	...	...
45 to 50	1	2	1	1	2	45 to 50	...	...	...	...	...
50 to 55	1	...	...	...	1	50 to 55	...	...	...	...	...
55 to 60	...	...	...	...	...	55 to 60	...	...	...	...	...
And upwards...	...	...	...	...	...	And upwards...	...	...	...	...	...
Totals	64	14	61	13	125	Totals	...	...	...	...	27

FOUNTAIN HOSPITAL.					SUMMARY.						
AGES.	MALES.		FEMALES.		TOTAL.	AGES.	MALES.		FEMALES.		TOTAL.
	Admitted.	Died.	Admitted.	Died.			Admitted.	Died.	Admitted.	Died.	
Under 5	Under 5	...	...	...	...	...
5 to 10	5 to 10	...	...	...	...	...
10 to 15	10 to 15	...	...	...	...	...
15 to 20	15 to 20	...	...	...	...	...
20 to 25	20 to 25	...	...	...	...	...
25 to 30	25 to 30	...	...	...	...	...
30 to 35	30 to 35	...	...	...	...	...
35 to 40	35 to 40	...	...	...	...	...
40 to 45	40 to 45	...	...	...	...	...
45 to 50	45 to 50	...	...	...	...	...
50 to 55	50 to 55	...	...	...	...	...
55 to 60	55 to 60	...	...	...	...	...
And upwards...	And upwards...	...	...	...	...	...
Totals	Grand Totals	...	...	...	...	...

FEVER STATISTICS.—TABLE XI.—*Enteric*

COMPLICATIONS.	NUMBER		
	Eastern Hospital.	North-Eastern Hospital.	North-Western Hospital.
Abscesses, various	4	...	3
Hæmorrhage	13	1	15
Multiple Neuritis... ..	...	...	...
Nephritis	2	...	...
Parotitis	2	...	1
Perforation	6	...	5
Periostitis	2	...	...
Peritonitis	1	...	5
Phlebitis	1	...	...
Pleurisy	1	...	...
Pneumonia, Lobar ... ..	...	1	...
Pneumonia, Lobular ... ..	...	...	23
Postfebrile Insanity	2	...	2
Relapse of Disease	26	...	10

Fever Cases. List of Complications, 1893.

OF CASES.					TOTALS.
Western Hospital.	South-Western Hospital.	Fountain Hospital.	South-Eastern Hospital.	Northern Hospital.	
1	4	...	1	...	13
6	10	...	...	...	45
1	...	...	...	...	1
...	...	...	...	...	2
...	...	...	1	...	4
4	8	...	...	...	23
1	3	...	1	...	7
1	1	...	1	...	9
...	3	...	2	...	6
...	...	...	...	...	1
...	2	...	3	...	6
2	1	...	1	...	27
...	1	...	...	...	5
4	17	...	2	...	59

FEVER STATISTICS.—TABLE XIII.—*Typhus Fever Admissions and Deaths at various ages during 1893.*

AGES.	MALES.		FEMALES.		TOTAL.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
EASTERN AND SOUTH-WESTERN HOSPITALS.						
Under 5 ... ..	...	...	...	...	...	...
5 to 10 ... ..	...	...	...	...	...	..
10 to 15	1	1	...	...	1	1
15 to 20	1	...	...	...	1	..
20 to 25 ... ..	...	...	...	...	...	...
25 to 30 ... ..	...	...	...	...	...	...
30 to 35 ... ..	...	...	...	...	...	...
35 to 40 ... ..	...	...	...	...	...	...
40 to 45 ... ..	...	...	...	...	...	...
45 to 50 ... ..	...	...	...	...	...	...
50 to 55 ... ..	...	...	...	...	...	..
55 to 60 ... ..	...	...	..	...	...	...
And upwards ... ..	...	...	...	...	..	...
Totals	2	1	..	...	2	1

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

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.		
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.	
Scarlet Fever	}	GENERAL DISEASES.					
		<i>Febrile.</i>					
		Chickenpox	1	...	4	...	
		Erysipelas	3	1	...	...
		Febricula	4	...	...	...
		Influenza	1	...	...	...
		Measles	5	2	4	...	
		„ German ... ..	...	...	...	...
		Pyæmia	1	1	...	...
		Variola ... ..	...	...	...	...
		Whooping-cough	1	...	2	1	
		Syphilis	1	...	...	...
		LOCAL DISEASES.					
		<i>Nervous System.</i>					
		Meningitis ... ..	...	...	...	...
		„ Tubercular ... ..	...	...	2	2
		Chorea ... ..	...	...	1	...
		<i>Circulatory System.</i>					
		Heart Disease ... ..	...	...	1	...
		<i>Respiratory System.</i>					
		Bronchitis	2	...	...	...
		Catarrh ... ..	...	...	...	...
		Empyema ... ..	...	...	1	...
		Empyema & Necrosis of Fibula	...	...	1	1
		Laryngitis ... ..	...	...	...	...
		Pneumonia, Lobular	2	...	3	1	
		„ Lobar	1	...	5	2	
		„ and Empyema ... ..	...	...	1	...
		Pleurisy ... ..	...	...	2	...
		Rhinitis	1	...	...	...
		Tuberculosis	1	1	...	...
		<i>Digestive System.</i>					
		Dentition and Diarrhœa	1	1	...	...
		Diarrhœa	1	...	...	...
		„ and Vomiting ... ..	...	...	1	1
		Pharyngitis	4	...	...	...
		Tonsillitis	2	...	7	1	
		Ulcerative Enteritis ... ..	...	...	...	...
		<i>Diseases of the Supra-Renal Capsule.</i>					
		Malignant new growth ... ..	...	...	1	1
		<i>Diseases Urinary System.</i>					
		Nephritis	1	...	1	...	
		<i>Diseases Organs of Locomotion.</i>					
		Necrosis of Femur ... ..	...	...	1	...
		Periostitis... ..	...	...	...	...
		<i>Skin Disease.</i>					
		Acne ... ..	...	...	...	...
		Eczema	1	...	2	...	
		Erythema... ..	12	...	1	...	
		Herpes ... ..	...	...	...	...
		Scabies	1	...	...	...
		Adenitis	1	...	...	...
		Abscess	3	...	...	...
		<i>Local Injuries.</i>					
		Burn ... ..	...	...	1	...
		<i>Surgical Operation</i>					
		Cellulitis of Arm ... ..	...	...	1	...
		<i>Not classified.</i>					
		Cellulitis of Arm ... ..	...	...	...	...
		Infantile Enteritis ... ..	...	...	...	...
		No obvious disease	11	...	37	1	
Carried forward ...		232	...	62	6	80	11

Miscellaneous Diseases admitted during 1893.

NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN 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.
...	1	...	...	...	...	...	6	...
...	3	1
...	...	2	...	...	...	...	...	2	...	8	...
...	...	3	...	...	...	1	...	...	...	5	...
10	3	2	...	3	1	...	...	6	3	30	9
...	...	1	...	3	...	...	...	...	...	4	...
...	1	1
...	...	3	...	...	...	...	...	...	...	3	...
...	1	...	4	1
...	...	1	...	...	...	...	...	1	...	3	...
...
...	1	...	...	...	...	...	1	...
...	2	2
...	1	...
...	1	...
...	2	...
...	1	...	...	...	...	...	1	...
...	1	...	...	...	...	...	1	...
...	...	1	...	...	...	...	...	1	1	1	1
...	...	1	...	...	...	...	...	1	...	7	1
...	...	1	...	...	...	...	...	3	...	10	2
...	1	...
...	2	...
...	1	...
...	1	1
...	1	1
...	1	...
...	1	1
...	1	1
...	1	1
...	2	...	6	...
...	...	11	...	3	...	...	...	4	...	27	1
...	...	1	1	...	...	...	...	...	...	1	1
...	1	1
...	1	...	...	...	...	...	3	...
...	1	...	1	...
...	1	...	1	...
...	1	...	...	...	...	...	1	...
...	3	...
...	...	2	...	...	...	...	...	1	...	16	...
...	1	...	1	...
...	1	...
...	1	...
...	3	...
1	1	...	...	...	...	...	...	...	...	2	1
...	1	...
...	...	1	...	...	...	...	...	...	...	1	...
...	1	1	1	1
2	...	1	...	4	...	...	...	3	...	58	1
13	4	30	1	18	1	1	...	28	5	232	28

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

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	232	... ..	62	6	80	11
Diphtheria		GENERAL DISEASES.				
		<i>Febrile.</i>				
		Erysipelas	2	1	...	...
		Febricula ... ..	...	...	...	...
		Influenza	1	...	...	...
		Measles	2	1	...	...
		Mumps	1	...	...	...
		Pyæmia	1	1	...	...
		Varicella	1	...	...	...
		Whooping-cough	1	...	...	...
		Syphilis ... ..	...	...	...	...
		<i>Not classified.</i>				
		Gout ... ..	...	...	...	...
		Purpura Hæmorrhagica... ..	...	...	...	...
		Leuchæmia ... ..	...	...	...	...
		LOCAL DISEASES.				
		<i>Circulatory System.</i>				
		Purulent Pericarditis ... ..	...	...	...	...
		Pericarditis ... ..	...	...	...	...
		<i>Respiratory System.</i>				
		Bronchitis	2	1	...	...
		Empyema ... ..	...	...	...	...
		Laryngitis	1	...	...	...
		Pleurisy	1	...	...	...
		Pneumonia	1	...	...	...
		„ Lobular ... ..	...	...	...	...
		<i>Digestive System.</i>				
	<i>Mouth.</i>					
	Stomatitis ... ..	...	...	...	...
	<i>Palate and Fauces.</i>					
	Faucial Abscess ... ..	...	...	...	...
	Tonsillitis	27	...	...	...
	Ulceration of Fauces	4	...	...	...
	<i>Pharynx.</i>					
	Pharyngitis	20	...	...	...
	<i>Stomach.</i>					
	Dyspepsia ... ..	...	...	...	...
	<i>Intestines.</i>					
	Acute Gastro Enteritis	1	...	...	...
	<i>Urinary System.</i>					
	Nephritis and Tonsillitis	1	...	...	...
	Renal Disease, Chronic... ..	...	...	...	...
	<i>Skin Disease.</i>					
	Eczema, Impetigo ... ..	...	...	...	...
	Herpes	2	...	...	...
	<i>Tumours.</i>					
	Cervical Abscess	1	...	...	...
	No obvious disease	1	...	...	...
	251		71	4	...	
Carried forward ...	483	... ..	133	10	80	11

of Miscellaneous Diseases admitted during 1893.

NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN 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.
13	4	30	1	18	1	1	...	28	5	232	28
...	2	1
...	1	...	1	...
...	...	2	...	...	...	...	...	...	...	3	...
1	1	...	...	...	...	...	...	1	...	4	2
...	1	...
...	1	1
...	1	...
...	1	...
1	...	1	...	...	...	...	...	...	...	2	...
...	1	...	...	...	...	...	1	...
...	1	1	1	1
...	1	1	1	1
...	...	1	1	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	1	...
...	2	1
1	1	...	...	...	...	...	...	...	...	1	1
...	...	3	...	...	...	...	...	...	...	4	...
1	1	...	...	...	...	...	3	...
2	2	...	..	1	...	...	...	...	...	4	2
...	...	1	1	...	...	...	...	2	2	3	3
...
1	...	3	..	2	...	...	...	2	1	8	1
...	1	...	...	...	...	...	1	...
20	...	79	...	25	...	...	...	10	...	161	...
...	1	1	..	...	2	...	7	1
...	22	...
2
...	1	...	...	...	...	...	1	...
...	1	...
...	1	...	...	...	...	...	1	...
...	1	...
1	2	...
...	1	...
...	1	...
1	1	...
...	2	...
...	1	...
2	...	1	...	2	...	...	...	...	...	6	...
32	4	91	2	37	1	...	...	20	5	251	16
45	8	121	3	55	2	1	...	48	10	483	44

FEVER STATISTICS—TABLE XIV. (continued)—Details

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	483	...	133	10	80	11
Enteric Fever ...	}	GENERAL DISEASES.				
		<i>Febrile.</i>				
		Cholera Nostras ...	...	...	...	...
		Febricula ...	8	...	...	...
		Influenza ...	4	...	...	...
		Measles ...	...	...	...	...
		Pertussis ...	...	...	...	...
		Pyæmia ...	2	2	...	...
		Syphilis ...	...	...	...	...
		<i>Not classified.</i>				
		Alcoholism ...	1	...	...	...
		Purpura ...	1	...	...	...
		Rheumatism ...	1	...	...	...
		Exophthalmic Goitre ...	...	...	...	...
		LOCAL DISEASES.				
		<i>Nervous System.</i>				
		Hemiplegia ...	1	1	...	...
		Meningitis ...	...	...	...	...
		” Tubercular ...	3	3	...	...
		Paralysis of Insane... ..	...	...	...	...
		<i>Circulatory System.</i>				
		Morbus Cordis... ..	2	1	...	...
		Ulcerative Endocarditis... ..	...	...	...	...
		<i>Respiratory System.</i>				
		Coryza ...	...	...	...	...
		Bronchitis ...	3	1	...	...
		Collapse of Lung ...	...	...	...	...
		Empyema ...	...	...	...	...
		Peripheral Neuritis and Pneumonia ...	...	...	...	...
		Phthisis ...	...	...	...	...
	Pleurisy ...	3	...	...	...
	Pleurodynia ...	...	...	...	...
	Pleuro-pneumonia and Pericarditis ...	1	...	...	...
	Pneumonia ...	9	3	...	...
	” Lobar ...	...	...	...	...
	Tuberculosis ...	2	1	...	...
	<i>Digestive System.</i>					
	<i>Salivary Glands.</i>					
	Parotid Abscess ...	1	...	...	...
	<i>Mouth.</i>					
	Stomatitis ...	...	...	...	...
	<i>Fauces.</i>					
	Tonsillitis ...	2	...	...	...
	<i>Stomach.</i>					
	Gastritis ...	1	...	...	...
	<i>Intestines.</i>					
	Duodenal Ulcer ...	...	...	...	...
	Colitis, ulcerative ...	2	1	...	...
	Constipation ...	1	...	...	...
	Diarrhœa ...	2	...	...	...
	Enteritis ...	...	...	...	...
	” Gastro ...	...	...	...	...
	Perityphlitis ..	...	...	...	...
	184	Carried forward ...	50	13	...	...
Carried forward... ..	667	...	183	23	80	11

of Miscellaneous Diseases admitted during 1893.

NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN 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.
45	8	121	3	55	2	1	...	48	10	483	44
...
1	1	...
14	...	1	...	...	...	...	...	...	...	23	...
...	...	1	...	1	...	...	...	1	...	7	...
1	1	...
...	1	...	...	...	...	...	1	...
...	2	2
1	1	...
...	...	1	1	...	...	...	...	...	...	2	1
...	1	...
2	3	...
1	1	...
...
...	1	1
1	1	...	...	3	2	...	...	...	...	4	3
...	1	1	4	4
1	1	...
4	1	...	...	...	...	...	...	...	...	6	2
...	1	1	1	1
...	1	...	1	...
...	4	3	...	...	...	...	7	4
1	1	...
...	...	1	...	...	...	...	...	1	...	1	...
...	1	1	...	...	...	...	1	1
...	1	1	...	...	...	...	1	1
3	...	1	...	...	...	...	...	...	...	7	...
...	1	...	...	...	...	...	1	...
...	1	...
19	5	...	...	12	4	...	...	10	2	50	14
...	...	6	1	...	...	...	...	...	...	6	1
2	2	1	1	...	...	...	...	1	...	6	4
...
...	1	...
1	1	...
...	2	...	...	...	...	...	4	...
...	...	1	...	...	...	...	...	...	...	2	...
...	1	1	...	...	...	...	1	1
1	1	...	...	...	...	...	...	...	...	3	2
3	3	...	...	...	...	...	7	...
3	...	1	...	2	...	...	...	1	...	9	...
...	...	3	...	3	3	...	...	...	...	6	3
2	2	...
3	1	1	...	...	...	...	...	...	...	4	1
64	11	18	3	35	15	...	...	17	4	184	46
109	19	139	6	90	17	1	...	65	14	667	90

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

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ..	667	... ..	183	23	80	11
Brought forward— Enteric Fever }	184	... ..	50	13	...	...
Enteric Fever (contd.) ...	}	<i>Rectum.</i>				
		Ischio-rectal Abscess	1	...	...	...
		<i>Liver.</i>				
		Catarrhal Jaundice... ..	...	...	...	...
		Hepatic Abscess ... ..	...	...	...	...
		Icterus ... ..	...	...	...	...
		<i>Digestive System.</i>				
		<i>Peritonæum.</i>				
		Peritonitis	3	1	...	...
		„ tubercular ... ..	...	...	...	...
		<i>Urinary System.</i>				
		Malignant Disease of Kidney	...	...	...	...
		Nephritic Abscess ... ..	...	...	...	...
		<i>Generative System.</i>				
		Pelvic Cellulitis	1	...	...	...
	Suppurating Ovarian Cyst ...	1	1	...	...
	Gonorrhœa	1	...	...	...
	<i>Skin Disease.</i>					
	Furunculosis ... ..	...	...	...	...
	Herpes	1	...	...	...
	Whitlow	1	...	...	...
	No obvious disease	3	...	...	...
	213		62	15	...	...
Typhus Fever	}	GENERAL DISEASES.				
		<i>Not classified.</i>				
		Acute Rheumatism... ..	...	...	...	...
	LOCAL DISEASE.					
	<i>Respiratory System.</i>					
	Pneumonia ... ..	...	..	...	...
	Tuberculosis	1	...	...	...
	<i>Generative System.</i>					
	Dysmenorrhœa	1	...	...	...
	5		2	...	...	...
Carried forward ...	701	... ..	197	25	80	11

of Miscellaneous Diseases admitted during 1893.

NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN 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.
109	19	139	6	90	17	1	...	65	14	667	90
64	11	18	3	35	15	...	...	17	4	184	46
...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	1	...	...	...	...	...	1	...
1	1	...	...	...	...	...	...	...	...	1	1
1	...	...	...	...	...	...	...	...	...	1	..
...	...	1	...	...	...	...	...	...	...	4	1
...	...	1	1	1	1	...	...	...	...	2	2
1	1	...	...	...	...	...	...	...	...	1	1
1	1	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	1	...	...	...	...	...	2	1
...	...	...	...	...	...	...	...	...	...	1	.
1	...	...	...	...	...	...	...	...	...	1	.
...	...	...	...	1	...	...	...	...	...	2	...
...	...	...	...	...	...	...	...	...	...	1	...
1	...	1	...	4	...	...	...	..	...	9	...
70	14	21	4	43	16	...	...	17	4	213	53
...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	2	...	2	...
...	...	..	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	...	...	1	...
...	...	..	...	...	...	...	...	3	...	5	...
115	22	142	7	98	18	1	...	68	14	701	97

FEVER STATISTICS—TABLE XIV. (continued)—Details

Diseases as certified on admission.	Number of Cases.	Disease as diagnosed after admission.	EASTERN HOSPITAL.		NORTH-EASTERN HOSPITAL.	
			No. of Cases.	No. of Deaths.	No. of Cases.	No. of Deaths.
Brought forward ...	701	...	197	25	80	11
Smallpox ...	}	GENERAL DISEASES.				
		<i>Febrile.</i>				
		Chickenpox ...	1	...	...	...
		<i>Not classified.</i>				
		Acute Rheumatism ...	...	...	...	...
		LOCAL DISEASE.				
		<i>Circulatory System.</i>				
		Ulcerative Endocarditis...	...	...	...	...
		<i>Respiratory System.</i>				
		Pneumonia ...	...	...	...	...
		<i>Skin Disease.</i>				
		Acute Eczema...	...	...	...	...
		Erythema Papulatum ...	...	...	...	...
<i>Tumour.</i>						
Carcinoma Uteri ...	...	...	...	...
Smallpox ...	4	...	...	...
No obvious disease ...	...	...	...	...
Uncertified ...	13	...	5	...	...
}	}	LOCAL DISEASES.				
		<i>Digestive System.</i>				
<i>Fauces.</i>						
Tonsillitis...	...	...	...	...
Infants with mothers ...	2	...	...	...	...
Mothers with infants ...	}	...	3	...	...
Born in Hospital ...		...	2	...	...
Cases dying in 1893, but admitted in 1892 ...		...	1	...	...
Case admitted in 1892 ...		...	...	3	...	
(See note on page 49.)		...	...	...	1	
...	16	...	6	3	4	...
GRAND TOTALS ...	717	...	208	28	84	11

of Miscellaneous Diseases admitted during 1893.

NORTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		FOUNTAIN HOSPITAL.		SOUTH-EASTERN 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.
115	22	142	7	98	18	1	...	68	14	701	97
...	1	...
...	1	...	1	...
...	1	1	1	1
...	2	2	2	2
...	1	...	1	...
...	1	...	1	...
...	1	1	1	1
...	4	...
...	1	...	1	...
...	8	4	13	4
...	...	2	...	...	...	...	...	...	...	2	...
...	...	2	...	...	...	...	...	...	...	2	...
5	1	...	...	...	...	...	...	...	..	11	1
...	2	...
1	2	...
...	3
...	1	...
6	1	...	...	...	...	...	...	...	...	16	4
121	23	144	7	98	18	1	...	76	18	732	105

PART III.

No. 10.

REPORT OF DR. T. F. RICKETTS, MEDICAL SUPERINTENDENT OF
THE SMALLPOX HOSPITAL SHIPS.

(For Statistics, see pp. 142 to 188.)

HOSPITAL SHIPS, LONG REACH,
NEAR DARTFORD, KENT,
1st February, 1894.

To the Committee of Management.

LADIES AND GENTLEMEN,

On December 31st, 1892, 39 patients remained in the Hospital: 2,441 have been admitted during the past year; 64 patients, one of whom was not suffering from Smallpox, remained in the Hospital on December 31st, 1893, besides 19 at the Convalescent Hospital at Darenth.

At the beginning of the year patients were treated on the "Atlas" only. The "Castalia" was opened for the reception of patients on the 20th January. On the 11th March the Hospital contained 203 patients, and on the following day convalescent patients were first sent to the Gore Farm Hospital. On the 6th August the "Castalia" was closed, preparatory to her being docked for repairs. The "Atlas" alone was used for the treatment of patients until the end of the year.

The largest number of patients under treatment at one time in the Hospital was 237, on the 4th May. The largest number of Smallpox patients under treatment in both Hospitals was 571, on 15th May. The largest number admitted during a month was in May, when there were 536 admissions. The largest number admitted in one day was 30, on 1st May.

Eighty-one patients were not suffering from Smallpox on admission to the Hospital. Of these, eight were infants who were admitted with their mothers; four of the eight proved to be in the incubation period of Smallpox, and developed the disease here; three of these four died. Another of the eight died here of another disorder. The remaining 73 patients were suffering on admission from the following diseases:—

Varicella	...	26	Intertrigo	...	1
Syphilis	...	10	Herpes Frontalis...	...	1
Acne	...	8	Pleurisy	...	1
Erythema	...	5	Psoriasis	...	1
Measles	...	3	Scabies	...	1
Febricula	...	3	Typhus	..	1
Urticaria	...	2	Undiagnosed	...	1
Impetigo	...	2	No symptom of disease		
Lichen	...	2	on admission in		4
Tuberculosis	...	1			

Under the head of Lichen are included one case of Lichen Pilaris and one case of an unclassified papular eruption. By the term "Febricula" is meant a transient attack of Pyrexia, unaccompanied by other symptoms, or accompanied only by slight symptoms not characteristic of any known disorder. The case "Undiagnosed" was that of a patient admitted with an eruption which was not that of Smallpox, but the nature of which could not be determined at the stage at which it came under observation.

Of the above 73 cases Smallpox subsequently developed in 10, one of which was fatal. Two more of the 73 patients died of other disorders.

I append full particulars of the 14 cases in which Smallpox supervened after admission, and also of the three cases in which death resulted from other diseases. The cases under consideration do not appear in the Statistical Tables.

Cases in which Smallpox, not present on admission, was developed subsequently.

No.	Initials.	Age.	Sex.	Disease with which Admitted.	Date of				Result.	Statement as to Primary Vaccination.	No. of Scars.	Collective Area.	Fraction foetoid.	Re-vaccination.	Type of Disease.	Remarks.
					Admission.	Initial illness.	Eruption.	Discharge or Death.								
1	A. S.	25	M	Febricula	10 Jan.	21 Jan.	23 Jan.	29 Mar.	Recovery	No statement	None	sq. in.	Re-vaccination at Hospital unsuccessful	Discrete	Discharged from Gore Farm.	
2	E. A. H.	25	M	Syphilis	13 Mar.	26 Mar.	30 Mar.	24 April	Recovery	In infancy	1	'38	Not re-vaccinated	Discrete	Discharged from Gore Farm.	
3	A. D.	28	M	Varicella	25 April	9 May	12 May	2 June	Recovery	In infancy	2	'54	Not re-vaccinated	Discrete	Discharged from Gore Farm.	
4	F. S.	22	F	Syphilis	27 April	9 May	10 May	7 June	Recovery	In infancy	4	'74	Re-vaccination at Hospital unsuccessful	Discrete	Discharged from Gore Farm.	
5	L. M.	4	F	Varicella	18 May	None	1 June	3 July	Recovery	Not vaccinated	None	...	May 18th, successfully	Discrete	A few spots.	
6	J. M.	12	F	Syphilis	20 May	None	3 June	14 June	Recovery	In infancy	5	'83	May 22nd, successfully	Discrete	Three spots.	
7	L. M.	22	F	Lichen Pilaris	29 May	7 June	Un-recorded.	17 July	Recovery	Not vaccinated	None	...	May 30th, successfully	Discrete	Complicated by Erysipelas.	
8	E. M. L.	27	F	Unrecognised	3 June	13 June	16 June	4 July	Death	Not vaccinated	None	...	Vaccination at Hospital unsuccessful	Discrete	Complicated by Pyæmia.	
9	J. M.	3	F	Varicella	16 June	26 June	29 June	27 Nov.	Recovery	Not vaccinated	None	...	June 22nd, successfully	Confluent	Complicated by Pyæmia.	
10	J. B.	9	F	Varicella	1 July	11 July	13 July	8 Aug.	Recovery	Not vaccinated	None	...	July 6th, successfully	Discrete		

In the following cases the patient was admitted during the incubation period of Smallpox :—

11	B. E. G.	2 mths	F	Nil, admitted with Mother	8 June	None	18 June	4 July	Death	Not vaccinated	None	...	June 8th, successfully	Discrete	Complicated by Diarrhoea.
12	— T.	1 mth	M	Nil, admitted with Mother	6 July	None	10 July	13 July	Death	Not vaccinated	None	...	July 6th, successfully	Discrete	
13	H. C.	5 weeks	M	Nil, admitted with Mother	11 July	None	16 July	4 Aug.	Recovery	Not vaccinated	None	...	July 11th, successfully	Discrete	A few spots.
14	J. A. H.	9 days	M	Nil, admitted with Mother	3 Aug.	None	10 Aug.	18 Aug.	Death	Not vaccinated	None	...	August 6th, successfully	Confluent	

Deaths among patients not suffering from Smallpox.

No.	Initials.	Age.	Sex.	Disease with which admitted.	Date of		Cause of Death.
					Admission.	Death.	
1	— L.	1 week	M	Nil; admitted with mother	4 July	18 July	Asthenia.
2	D. D.	21 years	M	Acne	18 August	3 Sept.	Chronic Nephritis.
3	E. C.	5 weeks	M	Scabies	26 August	17 Sept.	Diarrhoea.

The total number of cases admitted here, as I have said, was 2,441. The total number of deaths was 183. The gross mortality calculated by the Registrar-General's formula was, therefore, 7·62 per cent. The total number of patients admitted with Smallpox was 2,360. The number of deaths among patients admitted with Smallpox was 176. The mortality among patients admitted with Smallpox was, therefore, 7·58 per cent. These numbers include deaths which occurred at the Convalescent Hospital.

Taking into account the patients not admitted with Smallpox, but contracting it in the Hospital, the number of patients suffering from Smallpox was 2,374, and the number of deaths among those so suffering was 180, the mortality being 7·71 per cent.

Besides the Smallpox patients treated here, 16 were treated only at other institutions of the Board. Of these four died. The total number of patients admitted to the institutions of the Board with Smallpox was, therefore, 2,376, and the mortality 7·71 per cent.

This case mortality is, I am glad to say, the lowest ever recorded at the Board's Hospitals. The case mortality in 1892 was previously the lowest. Calculated by the Registrar-General's formula it was 10·83 per cent. for cases of Smallpox admitted to institutions of the Board. The mortality for 1893, therefore, shows a decrease of 3·12 per cent. Part of this decrease is due to the fact that in the first part of the year the proportion of adults to children was larger than usual, the class in which there is always the highest mortality (unvaccinated children) being consequently smaller than usual. In the last half of the year the proportions of the various classes may be regarded as normal. In the first half of the year the mortality was 7·39 per cent. In the last six months it was 8·29 per cent., which is still a reduction of 2·24 per cent. on the lowest previously recorded mortality.

A certain number of cases died of intercurrent disorders. I give a list of these cases here, but do not include those cases in which death was the result of an ordinary complication of Smallpox.

FATAL CASES OF SMALLPOX COMPLICATED BY INTERCURRENT DISEASE.

No.	Initials.	Age.	Sex.	Date of Smallpox Eruption.	Type of Disease.	Intercurrent Disease.	Date of Death.	Statement as to Primary Vaccination.	No. of Scars.	Collective Area.	Practiced.	Re-vaccination.	Remarks.
1	C. M.	7	F	23 Jan.	Discrete	Scarlet Fever, Diphtheria	27 Jan.	Not	None	sq. in.	...	...	Convalescing from Scarlet Fever on admission.
2	E. W.	48	F	26 Mar.	Discrete	Cerebral Hæmorrhage	5 May	Not	None	...	...	...
3	J. L.	31	M	18 May	Discrete	Epilepsy	12 May	Infancy	1	.09	all	not	
4	A. I.	72	M	17 May	Discrete	Erysipelas	2 June	Infancy	None	...	...	not	Died at Gore Farm Hospital.
5	J. H.	42	M	20 May	Discrete	Erysipelas, Acute Nephritis	24 June	Infancy	...	unrecorded	...	...
6	D. J. S.	44	M	20 May	Discrete	Erysipelas	2 June	Infancy	2	.98	all	not	
7	E. B.	25	F	2 June	Discrete	Secondary Syphilis, Erysipelas	10 June	Infancy	3	.57	all	not	
8	M. L. D.	45	F	13 June	Discrete	Chronic Nephritis, Erysipelas, Uræmia.	20 June	Infancy	None	...	...	not	
9	P. B.	53	F	2 July	Confluent	Erysipelas	18 July	Infancy	2	.24	all	not	
10	D. G. F.	7 wks.	F	3 July	Discrete	Erysipelas of Leg	18 July	29 June	4 vesicles	...	...	...
11	S. G.	16	F	19 July	Discrete	Rheumatic Fever, Pericarditis	22 Aug.	Infancy	3	under .50	†	not	
12	W. S.	25	M	22 July	Confluent	Tertiary Syphilis	29 July	Does not know	2	1.04	none	not	
13	S. B.	11	M	1 Oct.	Discrete	Scarlet Fever, Pericarditis	24 Nov.	Infancy	4	2.25	none	not	Scarlet Fever and Pericarditis present on admission. Died at Gore Farm Hospital.
14	C. C.	15	M	2 Oct.	Confluent	Scarlet Fever, Nephritis, Pericarditis.	11 Oct.	Infancy	Obscured by rash	...	...	...	Scarlet Fever, &c., present on admission.
15	W. S.	7 mos.	M	13 Nov.	Discrete	Scarlet Fever	21 Nov.	4 Nov.	2 vesicles	...	...	...

A few of the patients were admitted with or developed some infectious disease other than Smallpox. In 10 cases Smallpox was complicated on admission by the presence of Scarlet Fever. Nine patients developed Scarlet Fever during their stay in the Hospital. With the exception of Erysipelas, no other infectious disease attacked patients admitted with Smallpox. Considerable difficulty was found in maintaining proper isolation in such cases, the isolation accommodation in the Hospital being inadequate. Indeed, it was found necessary to adopt the clumsy and costly method of transferring many of the patients suffering from Scarlet Fever and Erysipelas to the Gore Farm Hospital, in order that they might be properly isolated there.

For details of the history of the spread of Smallpox in the Metropolis during the year, reference should be made to the interesting appendix to this report on this subject from the pen of Dr. Long, the Second Medical Officer of the River Ambulance Service (p. 161).

Ninety cases were admitted during the year from Dartford and adjacent districts.

It will be of interest to mention three cases in which Smallpox was contracted by persons employed on the river in the vicinity of the Hospital:—The first case was that of a bargee who was employed on a barge which was moored at the river bank opposite the Ships; the second was that of a man who was employed on a dredger, which was moored in the middle of the river, opposite the "Castalia"; the third was that of a man who was employed on a Thames Conservancy barge, and engaged in the mooring of the "Castalia." None of these men came into contact with any of the staff of the Hospital. I should mention, however, that the evidence in the second case was not conclusive. This man left his dredger, and paid a short visit to his home at Greenwich about the time he must have contracted the disease, so that, although I could not ascertain that he was exposed to infection in Greenwich, it is possible that he caught Smallpox there.

For information as to vaccination of the patients admitted reference should be made to the usual Statistical Tables, and to the Appendix to this Report on vaccination statistics.

Several alterations and additions to the Hospital have been made during the year. The accommodation for both female and male staff was found to be inadequate. A wooden hut for male staff was in consequence erected, and the accommodation for female staff was increased by the conversion of some store-rooms in the female staff building into cubicles. Additional store-room accommodation has been provided by utilizing parts of the holds of the "Atlas" and "Endymion." These store-rooms have wisely been lighted by means of electric accumulators in connection with the dynamos, the necessity for using oil lamps on board the ships being thus avoided.

During the summer you engaged a Naval Architect to inspect the plates of the hull of the "Castalia." He reported that in places they were dangerously thin. In consequence you obtained the permission of the Managers to have the vessel dry docked, and the necessary repairs executed. The vessel left her moorings on 22nd August, and returned to them on 16th November. The vessel before being unmoored was disinfected under the supervision of Dr. Collingridge, the Medical Officer of Health to the Port Sanitary Authority. No case of Smallpox arose among those employed on her.

The general health of the staff during the year has been good. Throat affections have been common, but there has been very little serious illness. A wardmaid contracted Scarlet Fever from a patient. Six members of the permanent staff, I regret to say, contracted Smallpox, in addition to five men who were working temporarily at the Hospital in the employment of contractors.

I append a statement of the number of staff of all kinds who were employed at the Hospital during the year, classified in the same way that they were classified in the return given in the Annual Report for the year 1892. Class I. includes members of the medical and nursing staffs. Class II. includes ward-maids and laundry-maids, who may be considered to be somewhat less directly exposed to infection of Smallpox. Class III. those whose duties did not, as a rule, necessitate their entering the wards or their being directly exposed to infection in other ways. Class IV. contractors' workmen, and men temporarily employed at the Hospital. I must repeat that this classification is arbitrary, and that no great weight should be attached to it.

Year.	Class.	Number employed.	Number Contracting Smallpox.
1893	I.	124	2
	II.	82	1
	III.	114	3
	IV.	145	5
Total	...	465	11

In the following tabular statement the number entering the service of the Hospital during the year is given—that is, the number during the year newly exposed to infection. The same classification is adopted :—

Year.	Class.	Number entering Service.	Number Contracting Smallpox.
1893	I.	108	2
	II.	64	1
	III.	73	3
	IV.	145	5
Total	...	390	11

I give here, in a tabular form, particulars of the 11 cases where Smallpox was contracted :—

PERMANENT STAFF.

No.	Initials.	Joined Staff.	Service.	Initial Illness.	Eruption.	Type of Disease.	Result.	Re-vaccination.
1	L. H.	12 Jan., 1893	Messroom-maid	26 Jan.	27 Jan.	Mild discrete	Recovery	Jan. 20, successfully. Twice previously unsuccessfully after joining.
2	S. E.	14 Feb., 1893	Assistant-Nurse	24 Feb.	28 Feb.	Mild discrete	do.	Three times unsuccessfully after joining.
3	B. P.	17 Feb., 1893	Ward-maid	1 Mar.	4 Mar.	Confluent	do.	Do.
4	H. H.	24 Feb., 1893	Steward's Clerk	6 Mar.	9 Mar.	Mild discrete	do.	Mar. 1, successfully. Twice previously unsuccessfully after joining.
5	T. W.	26 Feb., 1893	Porter	7 Mar.	10 Mar.	Very mild discrete	do.	Mar. 5, successfully. Twice previously unsuccessfully after joining.
6	B. H.	4 March, 1893	Nurse	7 Mar.	10 Mar.	Mild discrete	do.	Mar. 4, successfully.

TEMPORARY WORKMEN.

No.	Initials.	Entered Hospital.	Occupation.	Initial Illness.	Eruption.	Type of Disease.	Result.	Re-vaccination.
1	W. W.	11 April ...	Builder's Labourer	25 Apr.	28 Apr.	Mild discrete	Recovery	Vaccinated twice unsuccessfully.
2	E. B.	9 April ...	Painter	29 Apr.	1 May	Discrete	do.	Escaped vaccination.
3	T. G.	11 April ...	Builder's Labourer	30 Apr.	2 May	Mild discrete	do.	Do.
4	F. S.	17 April ..	Bricklayer	9 May	11 May	Discrete	do.	Escaped vaccination because he professed to have had Smallpox.
5	H. W.	14 May ...	Coal Porter	25 May	26 May	Discrete	do.	Escaped vaccination.

It will be seen that of the six members of the permanent staff who have contracted Smallpox one, No. 6, developed it three days after joining the Hospital. She had not previously visited the Hospital, and one is forced to conclude that the disease was contracted from an independent source. Of the other five, the vaccination in two cases was altogether unsuccessful, and in three it was not successful until the third attempt. It has, I believe, always been the practice at this Hospital until recently, as it probably is at other Smallpox Hospitals, to vaccinate members of the staff immediately after joining the Hospital, and again at intervals of three or four days, if the first operation is unsuccessful. Now, if the first operation is successful, the person vaccinated may be said to have attained (for a certain length of time) complete protection against Smallpox. But when using stored lymph, as one is bound to do in an institution of

this kind, it is a good deal a matter of chance whether the vaccination is successful on the first occasion, whether it is so on the second occasion, or even on the third occasion. I find that under these conditions it is the greatest fallacy to suppose that because a person has been vaccinated three times unsuccessfully that person is insusceptible to vaccination, and therefore by implication to Smallpox. I have had several instances in which I have succeeded in vaccinating a person successfully after three unsuccessful attempts by myself or other persons. In the Table I have given there are, unfortunately, instances where the absence of protection in these circumstances has been proved by an attack of Smallpox. In my Report for 1892 I gave particulars of a case where the absence of protection, after three unsuccessful attempts at vaccination, was shown by a subsequent successful vaccination immediately followed by an attack of Smallpox. If the vaccination is successful on the second or third attempt, it is still a matter of chance whether Smallpox is developed. It is well known that cases of Smallpox occur when vaccination has been successfully performed during the incubation period of the disease. Among the cases admitted into this Hospital this year there have been between 70 and 80 such cases; these cases are referred to in the Appendix to this Report on vaccination statistics, and are classified in a table there. On reference to that table it will be seen that such cases have occurred even when the vaccination has been performed in the first few days of the incubation period. These cases are exactly on a par with the cases of Smallpox occurring among the staff after successful vaccination some days after exposure to infection of the disease, and the conclusion to be drawn is that the staff cannot be guaranteed protection from Smallpox unless new members are protected when they come to reside in the Hospital. It may be suggested that the difficulty might be met by secluding new members of the staff until they have become protected, but as a matter of fact that is impossible, since events have shown that a person is not safe from infection in any part of the Hospital.

In the light of the unfortunate experience I had in this matter in the Spring of the year, I adopted the only plan which seemed satisfactory, and made it a rule that no new member of the staff should be admitted to the Hospital until re-vaccination had been successfully performed, unless satisfactory evidence were produced that sufficient protection against Smallpox already existed; sufficient protection being shown by the presence of scars left by a former attack of Smallpox, or successful vaccination within three years. Exceptions were made in the case of persons who had been re-vaccinated three times unsuccessfully in the immediate past, but such persons were re-vaccinated two or three times again after joining the

Hospital. I reported the steps I had taken in this matter to you last Spring, and on my recommendation you consented to compensate such persons for any loss of time incurred in submitting to these regulations. The plan has been strictly carried out, and I am glad to say, since it has been adopted, no more cases of Smallpox have occurred among your staff.

The regulations, of course, cannot be made to apply to men employed by contractors and others on temporary labour at the Hospital. In their case it is an extremely difficult matter to carry out any satisfactory regulations as to vaccination. One can only aim at vaccinating all such men when they arrive at the Hospital, and after proper intervals, if they are employed for more than three days, and the first vaccination is unsuccessful. But, as I have pointed out, this practice does not ensure protection, and many of these men leave the Hospital when they have only been once vaccinated, and before the result of their vaccination can be ascertained, so that their protection depends a good deal on the chance of success of that one operation. With one exception, all the five temporary workmen who contracted Smallpox in 1893 developed the disease after they had left the Hospital. These workmen have, as is natural, a great objection to be vaccinated, because if the operation is successful it is apt to prevent them from working. As a consequence, they resort to all sorts of devices to evade vaccination. They make false statements as to the date at which they were last vaccinated, they assert that they have had Smallpox, they exchange vaccination certificates, and assume the names of comrades who are known to be protected. Of course one discounts all their statements, and takes all possible precautions against their evading the regulations. Very few, in fact, did succeed in evading them. And it is remarkable that out of the five cases quoted above, no less than four escaped vaccination by one means or another.

In consequence of the difficulty of applying satisfactory regulations in the case of these men, it is probable that cases of Smallpox will occur among them from time to time in future. But I venture to predict that, if the present regulations are carried out as regards the permanent staff, these accidents will be confined to the temporary workmen.

During the last few months of the year I have been without the valuable assistance of Miss Wachter, the Matron, who was transferred to assist in opening the new Fever Hospital which the Managers have erected at Tooting.

I have to thank my present colleagues, Dr. Frith and Dr. Barnes, as well as the other gentlemen who assisted me in the earlier part of the year, for their skill and energy in the treatment of the patients, and in making and recording the valuable observations as to their vaccination, and especially for their help during that portion of the year when the work was exceptionally arduous.

I am, Ladies and Gentlemen,

Your obedient Servant,

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

(APPENDIX.)

VACCINATION STATISTICS.—YEAR 1893.

In this Appendix I propose to offer some statistical tables bearing on the relation of vaccination to Smallpox, in addition to those published annually by the authority of the Managers, and to make some remarks on these tables and the facts on which they are based.

Besides the table of monthly admissions, there are three tables which have been published annually in their present form since the year 1890. These tables, which are identical in form, deal respectively with the cases of males, of females, and of the two sexes combined. I do not see any facts brought out by classifying the cases into males and females, beyond the mere fact that the males preponderate, therefore in referring to these tables I need only consider Table IIc.

In this table the cases are divided into three classes:—

1. Cases with vaccination cicatrix or cicatrices present;
2. Cases in which there was "no evidence" as to cicatrices; and
3. Cases in which vaccination cicatrix was "absent."

These two latter classes are perhaps hardly described as clearly as they might be. Class 2 contains those cases in which the evidence as to vaccination was inconclusive. A definition of this class is given in a note to this table, but the definition is hardly wide enough, as will be seen from the classification of these cases in Table I. of this Appendix. Class 3 of course does not include all cases in which the vaccination cicatrix was absent, since such of those cases as were stated to have been vaccinated are included in class 2. Class 3 may, for practical purposes, be considered to be the "unvaccinated" class, although a few cases are included here in which no statement, or an uncertain statement, as to vaccination was obtained; one is not able, therefore, to describe these cases as all "admittedly unvaccinated."

In the classification of the vaccinated cases in Table IIc., the points taken into account are the number and area of the scars, and the fraction of that area, which can be described as foveated. The whole object, I take it, of classifying the cases in this elaborate way is to discover whether the amount of protection against Smallpox afforded by vaccination depends on any of these points. That is a matter on which on *a priori* grounds different opinions may be held. Considering that scars vary in size and in appearance in the course of years, and that vaccinia must be regarded as a specific fever, it is not at first sight apparent what the characteristics of the inoculation cicatrices have to do with the amount of protection afforded. But, after all, it is a question of fact which, provided proper observations are made, ought to be, and can be, settled in course of time by such statistics.

I have said "provided proper observations are made," and the question occurs, can sufficiently accurate observations of cicatrices be made by different observers for any dependence to be placed on the results? Granted an ordinarily careful observer,

I think there is not much doubt of that. During the past year, when over 2,000 cases passed through our hands, the observations as to vaccination scars were made at this Hospital by at least six different persons; care in supervision had, of course, to be exercised, especially in the case of a new observer. But though the labour involved in collecting these statistics has been considerable, I think there is no doubt that even in times of considerable pressure accurate observation is possible. The area of scars is fairly easily ascertained in the great majority of cases, and I have found that observations by different observers, who were used to the work, have not materially differed. The estimation of "foveation" is much more difficult. Foveation is, perhaps, the most tangible measure of what I may call the "goodness" of a scar. But I regard this as the point on which least dependence can be placed; it is so very much a matter of opinion. Yet I was surprised to find that on this point observers working together varied so little.

Granting that it is possible to ensure fairly accurate observations on the qualities of scars, it is of course only of use to classify the cases in the way that is done if sufficiently satisfactory criteria can be obtained as to the relative efficacy of the vaccination in the different classes; it is clear that the incidence of the disease on the various classes, except as regards age, is useless as a criterion, because no comparison can be made with the frequency with which the same classes occur among the general vaccinated population. The most useful comparison is as to the incidence of the vaccinated cases in the different classes as regards the age. A very large number of cases would be required, however, before any satisfactory result would appear. The most one can say, after classifying the 1,600 cases occurring last year, is that in Class A (with vaccination scars of half a square inch or more in area) the incidence of the cases in the earlier years is comparatively less than in the other classes.

The other criterion of the relative amount of protection afforded in the different classes is the fatality. No doubt fatality is the most satisfactory criterion, if there is a sufficient number of cases. But it is obvious that with only 42 deaths no conclusions can be drawn. The fatality among cases showing vaccination scars is less than three per cent. A very large number of cases must therefore be collected before any trustworthy result will appear. After a certain number of years a satisfactory result might be obtained by combining the statistics of previous years into one table. Probably the Managers have in view some such plan. I think it would be worth while to publish such a *resumé* every year. In this connection there is one point worth referring to. In the present tables the deaths are indicated by small figures placed against the cases to which they refer. This plan does well enough when the deaths are few, but if such a *resumé* as I have suggested were published, it naturally suggests itself that there would be less confusion by publishing the deaths in a separate though similar table.

There is another method of estimating the efficacy of the protection afforded by vaccination, or by different kinds of vaccination scars, besides those adopted in the Managers' tables. I refer to the severity of the disease. Although this test is not

so satisfactory from some points of view as the fatality, it is obvious that, if such a division between severe and mild cases can be adopted as to throw a sufficiently large number into the former class, a result will be obtained with far fewer cases than if the fatality is taken as the criterion. It would be best, of course, to choose the dividing line, so that an approximately equal number would fall into each class. But though not impracticable, such a classification is inconvenient. It is most convenient to divide cases into confluent and discrete. This classification—indeed, any classification of the kind—is open to objection, since no two men could, independently, classify the same series of cases in the same way. No doubt men working together would agree with some degree of accuracy, but such a classification can only be regarded as a rough one.

I have drawn up in Table A of this Appendix a classification of cases occurring during 1893, dividing the cases into confluent and discrete. Among the former I have included the fatal hæmorrhagic cases. In this table are included all the cases admitted during the year, with the exception of 15 cases which were admitted to other institutions of the Managers. It will be seen that, out of 2,361 cases, 285 are classed as confluent. This is not a very large number, our standard of "confluence" being high; consequently the table gives results differing only in a slight degree from those obtained by considering the fatality. The somewhat remarkable fact appears that among the unvaccinated the proportion of confluent to discrete cases is considerably less in the early years of life than among adults. This fact is, of course, well known to medical men who have had any considerable experience in Smallpox cases.

I hope at a future time to suggest a classification according to severity which shall be more useful for statistical purposes, as well as more accurate than that I have adopted in this table, and I believe that with such a classification, statistics of the cases treated at this Hospital may be obtained, which would form a valuable supplement to those already published by the Managers.

During the year 252 cases were admitted to this and other institutions of the Managers, in which the evidence as to vaccination was inconclusive, and 44 of these cases were fatal. It is no doubt unsatisfactory, for the purposes of comparison, to have to deal with such a class, including as it does this year nearly one quarter of the total number of deaths. In some of the earlier statistics on vaccination only two classes of cases were considered—viz., those vaccinated and those unvaccinated; apparently the only evidence as to vaccination that was accepted being the presence or absence of scars. An absolute reliance, however, ought not to be placed on this evidence. There is no doubt that cases occur in which vaccination has been successfully performed, although cicatrices are not present when the attack of Smallpox supervenes. There is a small class, too, but naturally a very fatal class, in which the rash is too abundant over the upper part of the arm for an assertion to be made that scars are absent. Such cases are not common, because even in very severe cases of Smallpox the amount of rash on the arms is usually not excessive, and even when the rash becomes thick in this situation, proper observations may be made,

unless the removal has been delayed until the development of the rash is advanced. Unfortunately, if a proper observation cannot be made on the patient's admission, it is seldom that it can be made at all while the patient is under treatment, since in these cases the amount of scarring and staining of the skin which follows the disappearance of the rash prevents, in most cases, observation of the vaccination cicatrices even more than did the eruption. In certain cases, again, I have found that, although some marks were present on the upper arm, their character was so doubtful that there was no probability that they were due to vaccination. For these reasons it would be unfair and inaccurate not to give due weight to the "statement" as to vaccination, and recognise the existence of a class of cases in which the evidence of vaccination is inconclusive. Occasionally observation of cicatrices is prevented by some exceptional cause, as, for example, by the presence of a scar from a burn; and sometimes by an omission the condition of the cicatrices fails to be observed at all. One is obliged to include these cases also among cases in which the evidence as to vaccination is inconclusive.

It will be seen, then, that this class of "doubtful" cases consists of cases in which the evidence was incomplete from very various reasons. It seemed to me that it would be of interest to classify them, and I have done so in Table B.

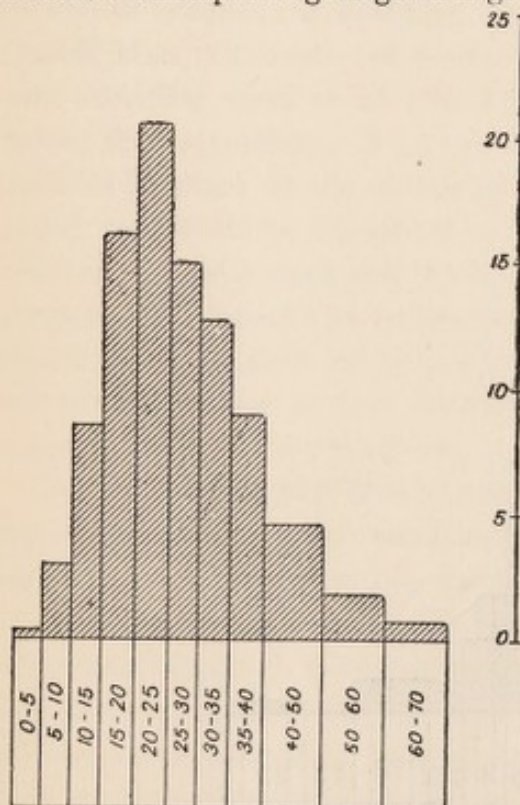
From that table it will be seen that most of the doubtful cases belonged to class 1, the class where the scars were absent, although the patient was stated to have been vaccinated. It is an interesting question how far the statement that these patients were vaccinated can be accepted. The fatality in this class is heavy—between 16 and 17 per cent. But, of course, it is begging the question to be guided by this consideration. That many patients in this class are really unvaccinated there can be very little doubt. In the case of adults, as a general rule, the statement as to vaccination must necessarily be a second-hand one, and often the statement amounts to no more than an impression that the patient has been vaccinated. In the case of children one has better opportunity of being correctly informed, although here one is apt to be misled sometimes through ignorance on the parents' part—sometimes wilfully. It often happens that the parents state on the removal of a child that the child is vaccinated, but that, on further enquiries, the parents admit that the operation was unsuccessful, or that it had never been performed at all. These misstatements are accounted for to some extent by an impression that sometimes exists that if a confession is made that the child was unvaccinated the parents may be liable to a penalty; and I am able sometimes to obtain correct information on assuring them that no advantage will be taken of any information they give me. It is probable that in some cases the parents are really of opinion that their child has been successfully vaccinated when that is not the case, through the carelessness, or even something worse, of the medical man who performed the operation. In one case a confession was made by a mother that her child's vaccination was not successful, and that the medical man had returned an untrue certificate of vaccination.

On the other hand, on examining the table, it will be seen that the age distribution of these cases corresponds very much more nearly with that of the

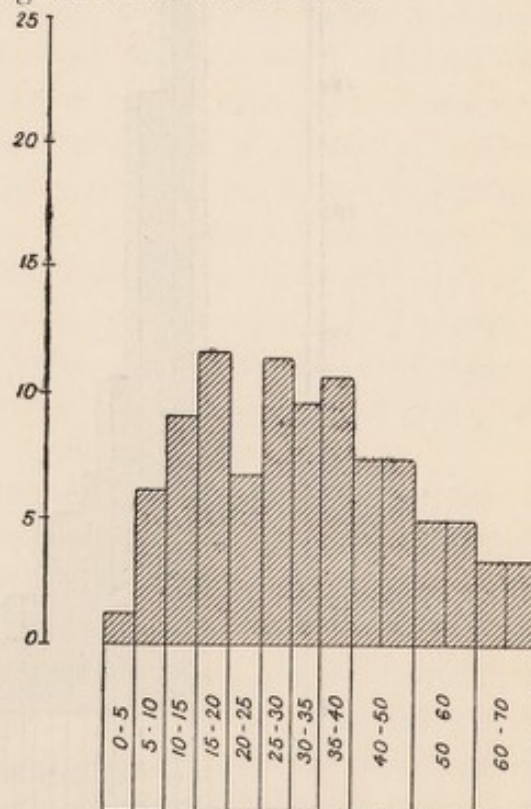
vaccinated than with that of the unvaccinated. And in some cases, from circumstantial evidence, I have been convinced that scars had at one time existed, but that they had become obliterated in course of years.

In class 2 there are 25 cases in which the rash on the arms was too abundant to allow of a satisfactory examination: here, as observation of the scars was impossible, we must take the statement as presumptive evidence as to vaccination. The fatality in this class is naturally very high—about 48 per cent. In classes 3 and 4 the fatality was between 7 and 8 per cent.

Now, in considering the vaccination statistics of Smallpox cases, it is clear that in comparing the vaccinated with the unvaccinated class, it would never do to leave out of consideration these doubtful cases among which the fatality is so high, a class which includes nearly a quarter of the total deaths. Although, as I have suggested, these cases no doubt include many that are unvaccinated, there is no real evidence which would justify the inclusion of any group of these cases among the unvaccinated. Examine the total of all four classes. The only test applicable is that of distribution according to age. In neither class is there such a preponderance of cases in the earlier ages as would justify one in saying that the class was chiefly composed of unvaccinated cases. The age distribution is made clearer by representing the numbers graphically. In the following diagram 100 doubtful cases are taken, and divided according to age periods of five years. In the periods after 40, the numbers are obtained by halving the number of cases occurring in each decade. For comparison, a corresponding diagram is given for vaccinated cases.



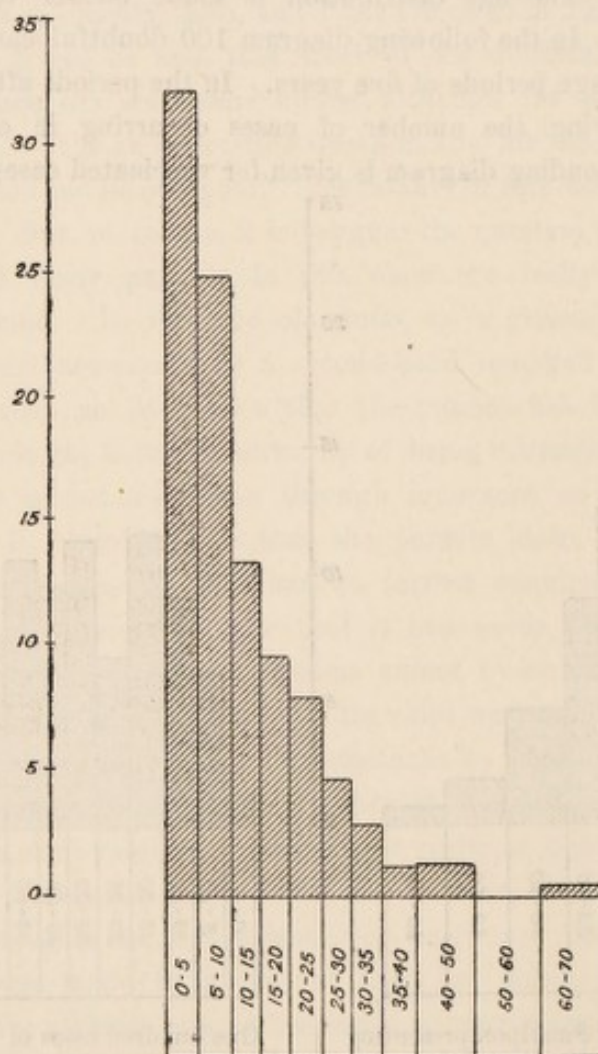
One hundred cases of Smallpox presenting vaccination cicatrices, distributed into age periods of five years.



One hundred cases of Smallpox in which the evidence as to vaccination was inconclusive, distributed into age periods of five years.

It will be seen that towards the end of life, after the age of 40, the number of cases in the "doubtful" class is, in proportion, largely in excess of that in the vaccinated. This is probably due to the fact that, in the later years of life, it is more common for cases to occur in which the scars have become obliterated, hence in these years a larger proportion of cases which are really vaccinated falls into this class than in the earlier years. On account of the large proportion of cases occurring in the later years, the rest of the figure becomes stunted; but another point comes out—viz., that in the earlier years also there is a larger proportion of cases than in the vaccinated class. This is probably due to the presence here of a considerable number of unvaccinated cases; but, on the whole, it may be said that the bulk of the cases occurs in the middle years of life rather than at its extremes, and that, therefore, the diagram corresponds much more nearly with that of the vaccinated than of the unvaccinated.

I give here a similar diagram for unvaccinated cases. This may be compared with the diagram for doubtful cases, and also with that for the vaccinated. The diagram for vaccinated cases, of course, would only differ minutely if the doubtful cases were included, since it deals with a far larger number of cases.



One hundred cases of Smallpox in which evidence of vaccination was absent, distributed into age periods of five years.

Combining the cases in which the evidence of vaccination was inconclusive, with the vaccinated cases, we get 86 deaths out of 1,876 cases. This gives a fatality of about $4\frac{1}{2}$ per cent. The fatality among unvaccinated cases was 18·8 per cent.

The fatality among unvaccinated cases is, of course, very large in infancy; but it is interesting to observe that the fatality among unvaccinated cases of 20 years of age and upwards was $23\frac{1}{2}$ per cent., while among vaccinated and doubtfully vaccinated cases of the same ages combined the fatality was only $5\frac{1}{2}$ per cent. This is striking evidence of the amount of protection in adult life afforded by vaccination performed in infancy.

In a foot-note on Table II. of the Smallpox statistics published by the Managers, it is stated that the tables include cases which were successfully vaccinated or revaccinated after having been infected with Smallpox—that is to say, cases which were previously unvaccinated, but were vaccinated during the period when they were incubating Smallpox, are included among the unvaccinated cases, and cases about whose previous vaccination there was doubt, but who were vaccinated during the same period, are included among the cases doubtfully vaccinated; in fact, the description of the doubtfully vaccinated and unvaccinated cases must be taken to apply to the condition of these cases at the time they were infected with Smallpox.

I doubt whether this is a very satisfactory plan: cases which have been successfully vaccinated during the incubation period, though not previously, can hardly be said to be unvaccinated, nor is the description rendered accurate by saying it applies to the time of infection; it would not be fair, of course, to include these cases in the vaccinated class, although technically they are vaccinated, and the choice lies between including them as at present, or taking them out of the tables and publishing them separately. It is useful to include such cases in comparing the incidence of Smallpox on the vaccinated and unvaccinated, but if such cases were numerous, they would be a source of error in comparing the death rate. However, the number of them is small, and is never likely to be considerable. It is of chief importance that it should be understood how these cases are dealt with. I may mention that, in the tables and figures I have given in this Appendix, these cases are classed in the same way as they are classed in those tables to which I have been referring, in order that the tables may be all comparable.

These cases which have been vaccinated or revaccinated during the period of incubation of Smallpox are of considerable medical interest. I think an impression prevails that vaccination after exposure to infection of Smallpox is a very much more certain protection against Smallpox, if it is done early enough, than it really is. In my Annual Report I gave some instances in which members of the staff had developed Smallpox after being successfully vaccinated in the incubation period. In these cases the longest period between the date of successful vaccination and the onset of the disease was six days. I have had no fewer than six patients admitted here during the year who had been successfully vaccinated 11 days or more before the appearance of the rash; in one remarkable case the successful operation was performed 15 days before the rash appeared.

In Table C 77 cases are tabulated in which the vaccination was successfully performed during the period of incubation. For the purposes of classification, a period of 15 days before the appearance of the rash has been divided into four parts, the first part consisting of the first five days, the second and third parts of three days each, and the fourth part of the last part of the period, dating from the fourth day before the appearance of the rash. The cases have been arranged in corresponding classes. In the first class there are naturally very few cases, but the cases are fairly evenly distributed among the other classes.

In Table II. of the Smallpox statistics no account is taken of cases which are stated to have been revaccinated. In dealing with the vaccination scars no attempt has been made to differentiate primary scars from scars due to vaccination. So that if, for instance, a case presented two scars due to primary vaccination, and two due to revaccination, the case would be classed as presenting four scars. It is necessary that the two varieties of scars should not be distinguished, because in the vast majority of cases stated to have been revaccinated neither the patient nor the examiner can make the distinction. In most so-called revaccinated cases there is apparently only one set of scars, and it is impossible to say whether they are due to primary or secondary vaccination. In such cases one has no means of forming an opinion as to whether one of the vaccinations was unsuccessful, or whether the scars have become obliterated. I do not recollect more than two or three cases during the year in which there was satisfactory evidence that the revaccination was successful.

In Table D these cases in which there was a statement of revaccination, have been taken out from Table IIc., and classified separately; no conclusions can, of course, be drawn from so few cases.

T. F. RICKETTS.

TABLE A.

AGES.	Class I.—Vaccinated Cases.										Class II.—Cases in which evidence as to Vaccination was inconclusive.	Class III.—Cases in which evidence of Vaccination was absent.				
	Half and upwards of one-half square inch total area.		One-third but less than one-half square inch total area.		Less than one-third square inch total area.		Area unrecorded.		Total.							
	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.				Discrete.	Confluent.	Discrete.	Confluent.
Under 1 year	30	7
From 1 to 2 years	23	5
" 2 " 3 "	21	12
" 3 " 4 " ... ..	...	...	...	...	1	...	...	...	1	...	...	1	...	28	5
" 4 " 5 "	1	...	1	...	3	...	...	...	5	...	1	1	...	17	10
" 5 " 6 " ... ..	...	...	1	1	4	...	1	...	6	1	1	...	...	25	6
" 6 " 7 "	3	...	2	...	3	...	1	...	9	...	1	...	...	17	8
" 7 " 8 "	5	...	...	1	...	...	...	...	5	1	3	...	...	24	3
" 8 " 9 "	5	...	2	...	4	...	...	...	11	...	3	3	...	21	5
" 9 " 10 "	7	...	6	...	4	...	...	...	17	...	1	4	...	11	4
" 10 " 11 "	7	...	3	...	6	...	2	...	18	...	2	1	3	3	3	
" 11 " 12 "	13	...	1	...	4	...	4	...	22	...	3	1	11	2	2	
" 12 " 13 "	15	...	4	...	3	...	...	...	22	...	3	1	11	1	1
" 13 " 14 "	22	...	2	...	10	...	2	...	36	...	3	1	11	7	7	
" 14 " 15 "	26	...	6	...	7	...	2	...	41	...	7	...	13	4	4	
" 15 " 20 "	179	1	31	...	35	3	12	2	257	6	20	9	34	13	13	
" 20 " 25 "	202	8	50	3	49	3	18	2	319	16	10	7	27	12	12	
" 25 " 30 "	127	9	33	1	53	...	17	2	230	12	19	10	14	10	10	
" 30 " 35 "	102	5	33	4	51	2	14	...	200	11	17	7	5	9	9	
" 35 " 40 "	51	4	23	2	40	7	20	1	134	14	20	7	3	3	3	
" 40 " 50 "	34	3	21	1	61	4	20	4	136	12	28	9	7	6	6	
" 50 " 60 "	14	...	8	2	17	2	11	...	50	4	20	4	...	1	1	
" 60 " 70 "	2	...	...	...	6	...	6	1	14	1	16	1	...	4	4
" 70 " 80 " ... ..	...	...	...	...	3	...	...	...	3	...	5	...	1	...	...
" 80 years and upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	815	30	227	15	364	21	130	12	1536	78	183	67	357	140	140	

TABLE I—VINTAGE					ALONE	
Year	Growth from one-half acre to one acre		Half and upwards of one-half acre to one acre		Total	Per cent
	Crop	Yield	Crop	Yield		
...	...	...	...	...	...	Under 1 year
...	...	...	...	...	...	From 1 to 2 years
...	...	...	...	...	...	" " 2 "
1	...	...	...	...	...	" " 3 "
2	...	1	...	1	...	" " 4 "
3	1	1	...	...	...	" " 5 "
4	...	2	...	...	...	" " 6 "
...	1	...	...	...	...	" " 7 "
6	...	2	...	...	...	" " 8 "
7	...	0	...	7	...	" " 9 "
8	...	0	...	7	...	" " 10 "
9	...	1	...	18	...	" " 11 "
10	...	4	...	25	...	" " 12 "
11	...	5	...	32	...	" " 13 "
12	...	0	...	30	...	" " 14 "
13	...	11	1	178	...	" " 15 "
14	2	11	3	202	...	" " 16 "
15	1	11	0	127	...	" " 17 "
16	4	11	2	103	...	" " 18 "
17	2	11	4	45	...	" " 19 "
18	1	11	0	14	...	" " 20 "
19	2	0	...	14	...	" " 21 "
20	...	...	...	2	...	" " 22 "
21	...	...	...	...	...	" " 23 "
...	...	...	...	...	...	24 years and upwards
...	10	227	50	819	...	Total ...

PART III.—ANNUAL REPORTS, 1893. SMALLPOX HOSPITAL SHIPS, 1893.

TABLE B.—Cases in which the evidence as to Vaccination was inconclusive.

AGES.	CLASS I.—Cases stated to have been vaccinated, in which Cicatrix was absent.		CLASS II.—Cases in which the absence of Cicatrices could not be asserted on account of the abundance of the eruption.						CLASS III.—Cases in which observation of Cicatrices was not made, or was impossible from causes other than the abundance of the eruption.						CLASS IV.—Cases in which it was doubtful whether the Cicatrices were the result of vaccination.						ALL CLASSES.			
			Stated to have been vaccinated.		No statement, or statement uncertain.		TOTAL.		Stated to have been vaccinated.		No statement, or statement uncertain.		TOTAL.		Stated to have been vaccinated.		No statement, or statement uncertain.		TOTAL.					
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		
Under 1 year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
From 1 to 2 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" 2 " 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
" 3 " 4	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
" 4 " 5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
" 5 " 6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
" 6 " 7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...
" 7 " 8	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	3
" 8 " 9	5	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	5	2
" 9 " 10	3	1	1	1	...	...	1	1	...	...	...	...	...	1	...	...	...	...	...	1	3	1
" 10 " 11	2	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	4	...
" 11 " 12	3	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1	4	...
" 12 " 13	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	5	...
" 13 " 14	3	...	...	...	...	...	...	...	2	...	1	...	3	...	1	...	...	...	...	1	8	...
" 14 " 15	4	2	1	9	1	9	1	29	3	
" 15 " 20	18	1	2	1	4	1	1	1	1	1	3	3	...	17	3	
" 20 " 25	9	1	4	1	4	1	6	...	3	9	...	29	7	
" 25 " 30	15	4	5	3	5	3	5	1	4	4	...	24	5	
" 30 " 35	13	3	1	...	1	1	2	1	5	1	3	...	2	...	1	...	3	...	27	5	
" 35 " 40	16	2	5	3	5	3	3	3	...	2	11	...	37	6	
" 40 " 50	18	2	6	3	6	3	2	1	2	1	11	6	1	24	5	
" 50 " 60	15	4	3	3	...	5	1	1	...	6	1	17	2	
" 60 " 70	12	1	5	1	1	...	5	1
" 70 " 80	3	1	1	1	1	
" 80 years and upwards	
TOTAL	149	25	25	12	1	1	26	13	17	3	2	...	19	3	53	3	5	...	58	3	252	44		

PART III.—ANNUAL REPORTS, 1893. SMALLPOX HOSPITAL SHIPS, 1893.

TABLE C.—Cases Vaccinated or Revaccinated after Infection with Smallpox.

AGES.	CLASS I.—Cases in which vaccination was performed from the 11th to 15th day before the day on which the rash appeared.						CLASS II.—Cases in which vaccination was performed from the 8th to 10th day before the day on which the rash appeared.						CLASS III.—Cases in which vaccination was performed from the 5th to 7th day before the day on which the rash appeared.						CLASS IV.—Cases in which vaccination was performed on the 4th day before the day on which the rash appeared, or later.						CLASS V.—Cases in which the day of the incubation period on which vaccination was performed could not be ascertained.						TOTAL.	
	Previously vaccinated.		Evidence as to previous vaccination inconclusive.		Evidence of previous vaccination absent.		Previously vaccinated.		Evidence as to previous vaccination inconclusive.		Evidence of previous vaccination absent.		Previously vaccinated.		Evidence as to previous vaccination inconclusive.		Evidence of previous vaccination absent.		Previously vaccinated.		Evidence as to previous vaccination inconclusive.		Evidence of previous vaccination absent.		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.	Admitted.	Died.						
Under 1 year	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2				
From 1 to 2 years	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	1				
2 " 3 "	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1					
3 " 4 "	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...					
4 " 5 "	1	...	...	...	...	...	...	...	...	...	...	...	...	3	1					
5 " 6 "	1	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	3	...					
6 " 7 "	3	...					
7 " 8 "	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...				
8 " 9 "	4	...					
9 " 10 "	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...					
10 " 11 "	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
11 " 12 "	1	...	...	...	...	...	...	...	...	...	...	...	5	...					
12 " 13 "					
13 " 14 "	2	...					
14 " 15 "	0	...				
15 " 20 "	4	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	3	1					
20 " 25 "	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	1					
25 " 30 "	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...					
30 " 35 "	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...
35 " 40 "	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...
40 " 50 "	...	1	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50 " 60 "					
60 " 70 "					
70 " 80 "					
80 years and upwards	3	...					
TOTAL	4	3	...	13	...	2	1	10	...	2	17	...	1	...	4	1	5	1	1	...	14	2	...	77	7				

Date		Description		Amount		Balance	
Month	Year	To	By	Dr	Cr	Dr	Cr
Jan	1901						
Feb	1901						
Mar	1901						
Apr	1901						
May	1901						
Jun	1901						
Jul	1901						
Aug	1901						
Sep	1901						
Oct	1901						
Nov	1901						
Dec	1901						
Total							

Class A, B, C, and upwards of 1000		Number of years		Period of years		AGONS	
Year	Three	Four	Five	Six	Seven	Eight	Nine
Under 1 year							
From 1 to 2 years							
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							

No. 11.**REPORT OF DR. T. B. BROOKE, MEDICAL OFFICER OF THE
RIVER AMBULANCE SERVICE.**

SOUTH WHARF,
ROTHERHITHE STREET, S.E.,
December, 1893.

To the Committee of Management.

LADIES AND GENTLEMEN,

I beg to submit a report upon the work of the River Ambulance Service, in so far as it falls within the department over which your Committee exercise the control. I only regret that such a report must of necessity be incomplete in some respects, in so far as it relates to the work of the whole year. For when I first began my duties under the Ambulance Committee, on January 27th, 1893, there was at that time no record kept of the cases admitted at the Wharves, other than a merely numerical one of the cases coming to and going from the Wharves, which was kept by the Superintendent of the River Service. It was not until March 31st that any record was kept by myself, when I was supplied, by the Ambulance Committee's direction, with a register for patients admitted as suffering from Smallpox. Again, the information obtained from patients in the receiving-room is often incorrect. This will be easily understood when it is remembered that the patients often arrive after a long journey in an ambulance, and are consequently not in a state of mind calculated to afford the most reliable information respecting their movements for some days prior to their admission.

Commencing my duties, as I have already stated, on January 27th, 1893, I became impressed with the necessity for an Isolation Hospital at this Wharf, as at that time any doubtful case had to be sent to the South-Eastern Hospital, where it was difficult, if not impossible, to efficiently isolate cases from all contact with the portions of the Hospital devoted to the Fever cases.

It was, therefore, with much satisfaction that I learned that the Ambulance Committee intended to erect at the South Wharf shelters for cases presenting doubtful symptoms. These shelters were built in two blocks—one of two wards and a kitchen, and one of four wards and a kitchen, with a store-room for each block. Each ward contains one bed only, and has separate lavatory accommodation.

The first patient was admitted into these shelters on July 17th, and was discharged on the 18th as not suffering from Smallpox. The patient, a child, suffered from Measles. Three weeks previously the child's mother had been removed with Smallpox.

On the 29th April I was glad to have the assistance of Dr. Long at the North Wharf, as Smallpox had become somewhat prevalent in the eastern districts of the Metropolis, and the presence of a medical man at that Wharf in epidemic times is almost a necessity, if only to avoid the great delay and detention of the ambulances, and thus to facilitate the working of the land service.

It may also here be mentioned that in the early part of May two large road ambulances, capable of accommodating four recumbent patients, were placed at the North Wharf for the reception of patients. They were provided in order that patients might be placed in them, when necessary, to await the arrival of the steamer at the Wharf, and thus to allow the road ambulances which brought the patients to the Wharf to return, without any delay, to the Ambulance Station.

Admissions to the North Wharf movable Shelters.

	May.	June.	July.	Total.
No. of Patients ...	81	34	15	130
„ „ Occasions...	37	26	7	70
„ „ Days... ..	23	19	6	47
„ „ Hours ...	88	47	15	150

It will be seen that they have been used on 70 occasions, and have accommodated 130 patients. The largest number present at one time was six, and the largest number in one day nine. The time spent by each patient in the shelters was never longer than about $3\frac{3}{4}$ hours, the average being just over two hours. In the early part of the winter they were fitted with gas stoves, a bed having to be sacrificed in each for the purpose. Owing to the small number of the admissions they have not been required for use since the summer, except on one occasion for a few minutes only.

There has not been a death at the Wharf during the year.

The following table shows the admissions of Smallpox cases at each Wharf during the year 1893 :—

TABLE A.

Month.	At South Wharf.	At North Wharf.	Totals.			Remarks.
	Total.	Total.	M.	F.	Total.	
January ...	88	9	65	32	97	In addition, 5 cases were returned home as not suffering from Smallpox. One patient, a female aged three months, died of Semi-confluent Smallpox while on steamboat "Albert Victor" at South Wharf. The body was removed to South-Eastern Hospital Mortuary.
February ...	112	38	112	38	150	3 cases returned home as not suffering from Smallpox.
March ...	162	79	159	82	241	11 cases returned home as not suffering from Smallpox.
April... ..	268	145	252	161	413	16 cases returned home as not suffering from Smallpox.
May	372	139	280	231	511	28 cases returned home as not suffering from Smallpox. On 24th May a male patient died on board the Ambulance steamboat "Albert Victor," when alongside the Wharf, from hæmorrhagic Smallpox. The body was removed to the Mortuary at the South-Eastern Hospital; and on May 29th a female patient died on board the same vessel when off Plumstead, on her passage to the Ships.
June	246	66	172	140	312	41 cases returned home as not suffering from Smallpox.
July	137	63	96	104	200	31 cases returned home as not suffering from Smallpox.
August ...	85	12	47	50	97	11 cases returned home as not suffering from Smallpox. On 9th August a female patient died from hæmorrhagic Smallpox on board the Ambulance steamer "Maltese Cross," when off East Greenwich, on her passage to the Ships.
September	58	12	34	36	70	8 cases returned home as not suffering from Smallpox.
October ...	34	40	41	33	74	14 cases returned home as not suffering from Smallpox.
November...	71	51	66	56	122	7 cases returned home as not suffering from Smallpox.
December...	55	22	45	32	77	8 cases returned home as not suffering from Smallpox. On December 7th, 1 male patient, aged three months, died on board the steamboat "Red Cross" while at the South Wharf. The body was removed by steamer to the Mortuary at the Ships.
	1,688	676	1369	995	2,364	

A very noticeable feature of the epidemic in the early part of the year was the large number of male patients as compared with the number of females. In the first three months no fewer than 336 males were admitted and only 152 females. The males were principally those of the vagrant class, and came chiefly from common lodging houses and Salvation Army shelters. It will also be noticed that during the month of April the number of admissions rose rapidly. A serious feature in connection with this was that it occurred particularly amongst the residential population.

On May 15, the Wharves were visited by the Medical Officers of Health of the Metropolitan District, who afterwards proceeded in the Ambulance Steamer "Maltese Cross" to the Hospital Ships at Long Reach.

In order to obviate the necessity for sending cases arriving late at night and clearly suffering from Smallpox to the South-Eastern Hospital, to be detained there until the morning, it was arranged as from June 5th that a boat should lie alongside the South Wharf all night for the reception of patients.

Towards the end of July we lost the services of Dr. Birdwood, who returned to the North-Eastern Fever Hospital, and who, since the early part of March, had acted as General Medical Superintendent of Smallpox arrangements, the value of whose aid and experience was much appreciated.

During August the transference of the Staff connected with the Hospital arrangements at South Wharf to the control of the Hospital Ships Committee was completed.

The following Table (B) shows the non-Smallpox cases, which were diagnosed each month :—

TABLE B.—*Analysis of cases returned during the year 1893.*

Month.	Varicella.	Measles.	Syphilis.	Urticaria.	Acne.	Lichen.	Enteric.	Erythema.	Eczema.	Impetigo.	Nil.	Total.	Smallpox Admissions.
January ...	4	...	...	...	...	...	...	...	...	...	1	5	97
February ...	...	...	...	1	...	...	1	...	1	...	...	3	150
March ...	9	...	1	...	1	...	...	...	...	...	...	11	241
April ...	15	...	1	...	...	...	...	...	...	...	...	16	413
May ...	26	...	1	...	...	...	...	...	...	1	...	28	511
June ...	31	3	2	...	...	1	1	1	...	1	Tonsillitis. 1	41	312
July ...	26	1	1	...	1	...	...	...	2	...	...	31	200
August ...	10	...	1	...	...	...	...	...	...	...	...	11	97
September ...	6	...	2	...	...	...	...	...	...	...	...	8	70
October ...	10	...	3	...	...	...	...	1	...	...	...	14	74
November ...	4	...	2	...	...	...	...	...	...	...	Nil. 1	7	122
December ...	6	...	1	...	...	...	...	1	...	...	...	8	77
	147	4	15	1	2	1	2	3	3	2	3	183	2,364

It will be noticed that in June 31 cases of Chickenpox were brought to the wharves. This disease was at this time particularly prevalent in districts in which Smallpox also existed.

The following Table (C) shows the number of doubtful cases admitted to the shelters at South Wharf from the date of their opening to the end of the year, and the nature of the disease from which the patient suffered.

TABLE C.—*Patients detained in Shelters.*

	Detained in Shelters.	Returned Home.	Transferred to Ships.	Died.	
July	4	4	
August	4	3	...	1	George Rider died from Hæmorrhagic Smallpox on August 11th, 1893.
September ...	5	3	2	...	
October... ..	7	6	1	...	
November ...	5	4	1	...	
December ...	7	5	1	..	

Nature of disease of above cases.

Chickenpox	...	...	...	...	...	..	13
Syphilis	...	...	...	...	...	...	5
Measles	...	...	...	...	...	...	2
Erythema	...	...	...	...	...	...	2
Erysipelas	...	...	...	...	...	...	1
Smallpox (treated in shelters)	...	...	...	...	...	...	2
Smallpox transferred to Ships	...	...	...	...	...	...	5
Nil	...	...	...	...	...	..	1
							<u>32</u>

For the details of the above-enumerated cases I would refer to the list on next page:—

Cases detained for Observation in the Shelters at South Wharf.

	Name.	Parish.	Date of Admission.	Date of Discharge.	How disposed of.
1	J. R.	Bloomsbury ...	July 17	July 18	Returned home.
2	W. R.	Lambeth ...	July 25	July 27	Do.
3	C. W.... ..	St. Marylebone	July 26	July 27	Do.
4	G. C.	Wandsworth	July 28	July 29	Do.
5	G. R.	Lambeth ...	Aug. 8	... ..	Developed Hæmorrhagic Small-pox, and died on August 11th.
6	E. M.	Woolwich ...	Aug. 16	Aug. 16	Returned home.
7	Y. C.	Port of London	Aug. 17	Aug. 29	Returned to Albert Dock.
8	E. H.	Wandsworth	Aug 25	Aug. 29	Returned home.
9	E. L.	Poplar	Sept. 7	Sept. 8	Sent to Hospital Ships.
10	E. D.	Whitechapel...	Sept. 10	Sept. 12	Do.
11	F. P.	Kensington ...	Sept. 15	Sept. 18	Returned home.
12	E. A.... ..	St. Saviour's...	Sept. 22	Sept. 30	Do.
13	G. S.... ..	Poplar	Sept. 25	Sept. 30	Do.
14	A. C.... ..	Camberwell	Oct. 2	Oct. 5	Do.
15	W. S.... ..	... ..	Oct. 3	Oct. 9	Do.
16	W. W.	Lambeth ...	Oct. 10	Oct. 18	Do.
17	S. B.	Greenwich ...	Oct. 15	Oct. 23	Do.
18	F. M.... ..	St. Pancras ...	Oct. 20	Oct. 27	Do.
19	A. A.	Poplar	Oct. 21	Oct. 24	To Hospital Ships.
20	R. L.	Paddington ...	Oct. 25	Nov. 6	Returned home.
21	T. H.	Kensington ...	Nov. 6	Nov. 7	Do.
22	L. B.	Wandsworth	Nov. 8	Nov. 28	To Hospital Ships.
23	J. A.	Strand	Nov. 14	Nov. 27	Returned home.
24	E. S.	Poplar	Nov. 16	Nov. 25	Do.
25	D. B.... ..	Kensington ...	Nov. 25	Dec. 2	Do.
26	H. W.	Fulham... ..	Dec. 2	Dec. 7	Do.
27	J. T.	Paddington ...	Dec. 2	Dec. 14	Do.
28	E. B.	Chelsea... ..	Dec. 9	Dec. 16	Do.
29	H. W.	Greenwich ...	Dec. 17	Dec. 23	Do.
30	J. W.	Greenwich ...	Dec. 17	Dec. 23	Do.
31	H. T.	Poplar	Dec. 21	Dec. 23	Sent to Hospital Ships.
32	J. G.... ..	Greenwich ...	Dec. 31	... ..	Remaining in Shelters on night of the 31st of December, 1893.

Total number of admissions to shelters 32

Returned home, not Smallpox	24	} 32
Transferred to Hospital Ships	... ..	5
Treated in shelters for modified Variola	... ..	2
Died in shelter	... ..	1

To exemplify the infinite use the shelters have been, I will give one or two cases. One, G. R., admitted August 8th, whose appearance on admission

was almost identical with that of a patient, J. A., admitted from Charing Cross Hospital on November 14th, and it was only the detention in the shelters which could, in my opinion, have enabled any one to differentiate between the two cases.

The case of G. R. proved to be one of Hæmorrhagic Smallpox, and ended fatally on the third day after admission. No diagnostic eruption appeared until that day, some ten hours before his death.

The other case, that of J. A., ended in profuse desquamation, and all the marked symptoms of syphilis, with recovery and discharge after fourteen days' detention.

I might also mention that at any rate I have admitted two cases into the shelters, G. W. and W. W., and in neither of which was I able to form a diagnosis. The eruption was so slight and so abortive that it was impossible to say even on their discharge if they had really suffered from Smallpox or not, and yet such cases as these are often the source of the greatest danger, because frequently no medical advice is obtained or, if obtained, the case being such a mild one precautions are either not taken or are carried out in a very inefficient manner.

And so in many instances I have been able to trace several severe cases originating in one such mild case as I have described, and for which in some instances no medical advice had been sought at all.

On September 27th, 1893, an unvaccinated child, aged three months, was sent to the Wharf certified as suffering from Smallpox. The patient had a fairly copious papular and vesicular eruption upon the face and body generally, the papules large, some with an inflamed base, many vesicles broken down and scabbing, some papules still appearing. The eruption appeared first on the face on September 21st. I based my diagnosis that the case was one of varicella upon the following facts: the child was not ill, as we generally expect to find a young unvaccinated child suffering from Smallpox; the eruption was not uniform, it had evidently not all come out at once, it was too superficial. I vaccinated this child, and returned it, unfortunately the vaccination did not "take," and it was again unsuccessfully vaccinated some little time later, and it was not until some weeks later that this child was successfully vaccinated by the public vaccinator. At the same time of my sending this case back, a case or cases of Smallpox were said to have existed in the house from which it was sent, subsequent events proving this to be the case.

On December 9th, 1893, a female patient, aged 30, vaccinated at 16 years of age, was sent to the Wharf. On admission she had a scanty papular eruption on the face, each papule surrounded by a slightly reddened areola, and with a somewhat hardened base. There was a history of severe

prodromal symptoms. The eruption appeared first on the back on December 7th; she was perfectly well on December 1st; she had headache, backache, and pains in the limbs on December 3rd; vomiting on December 4th, and shivering on December 5th. To judge by an ordinary examination of the eruption and the history of severe prodromal symptoms, this might easily have been mistaken for a case of Smallpox; but on examining the eruption on the face more carefully, I found one or two broken vesicles very much like those seen in Chickenpox, being very superficial, situated on the temple, and almost concealed by the hair.

These led me to examine the eruption on the body, and upon the upper third of the thigh, and on the inner side I found two large unbroken vesicles, and a third one in the groin, all very typical of Varicella.

I vaccinated this patient at once, and detained her until I found the vaccination was successful, when I sent her home.

I will conclude by remarking that, with reference to the last case but one above given, that it is not very unusual to find cases of Chickenpox and Smallpox existing in the same house and at the same time.

Towards the end of May forms were sent out to the Medical Officers of Health of the Districts to which a case might be returned as not suffering from Smallpox, to obtain the following information:—

1st. If the vaccination performed at the Wharf before the case was sent away had been successful.

2nd. If Smallpox had developed since the return of the case.

Sixty-one of such forms duly filled up have been received.

In 31 cases the vaccination was successful. In 30 cases it was unsuccessful.

In no case was it stated that Smallpox had occurred as a consequence of the removal of the patients to the Wharves.

In conclusion, I beg to thank both the Ambulance and Hospital Ships Committees, to whom I am indebted for much cordial support.

I have the honour to be,

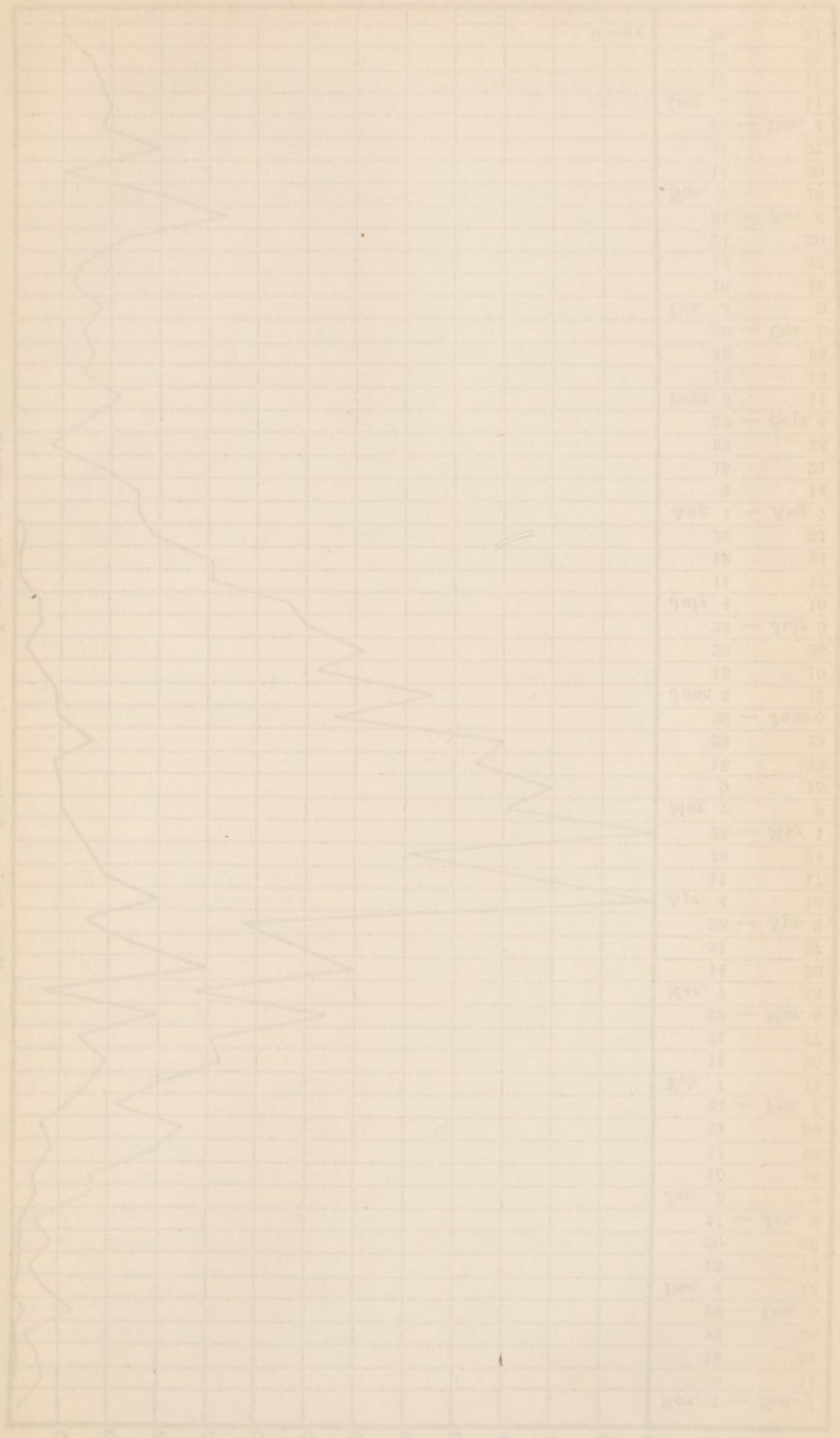
Ladies and Gentlemen,

Yours obediently,

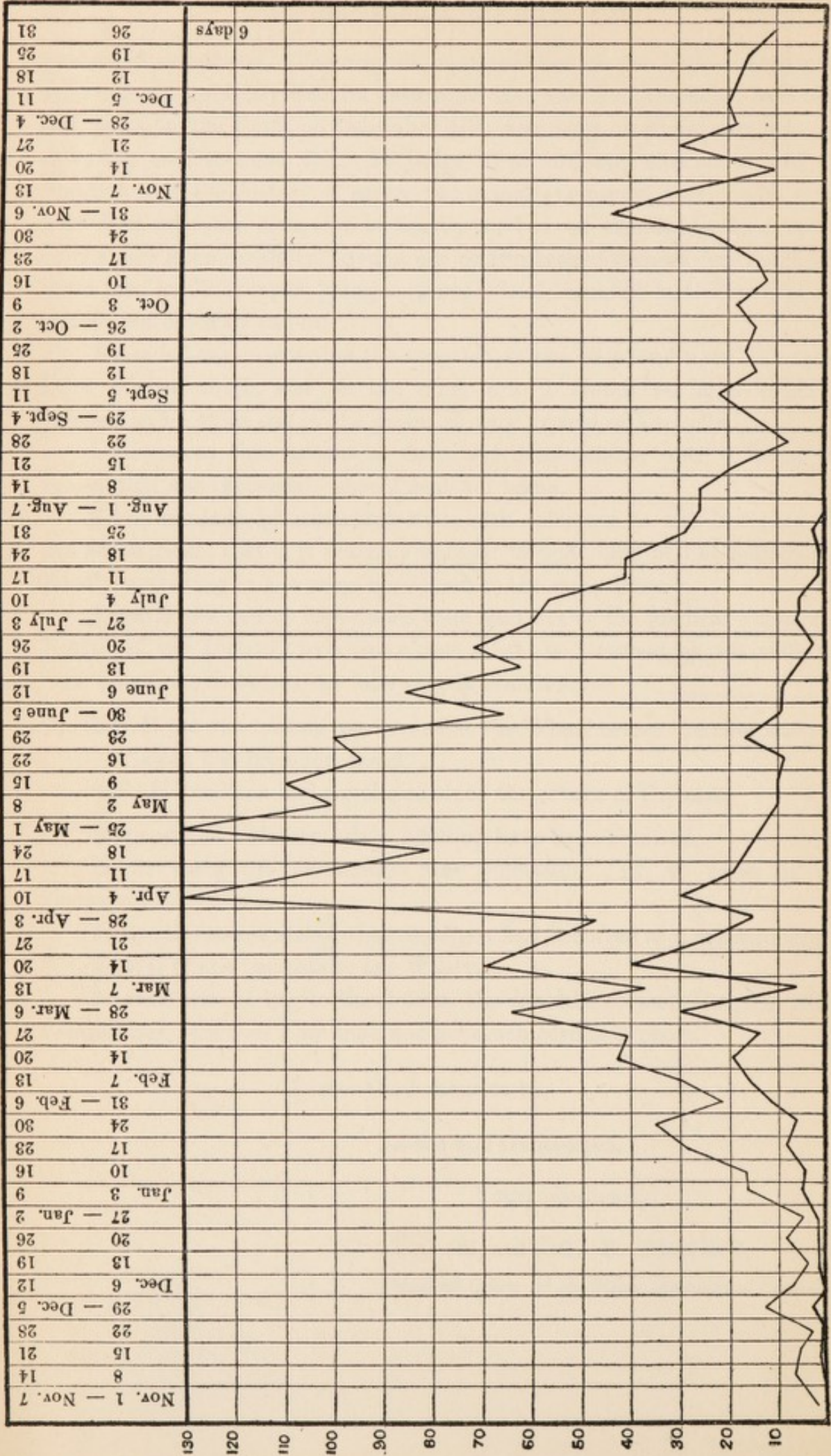
(Signed) T. B. BROOKE,

Medical Officer of the River Ambulance Service.

Station 1000 - 1000 ft. depth



WEEKLY ATTACKS.



Upper line = all classes.

Lower line = vagrants.

HISTORY OF THE SMALLPOX EPIDEMIC OF 1893.

By DR. D. S. LONG, *Second Medical Officer River Ambulance Service.*

The Smallpox epidemic of 1893 had its origin about the end of October or beginning of November, 1892, and an account of the outbreaks at Lower Holloway, Hackney Wick, and North Peckham, will be found in the Medical Superintendent's Report for that year.

The accompanying chart represents graphically the progress of the disease. The upper line represents the total number of people attacked for each week, each case being reckoned, as throughout this paper, according to the date of the first appearance of the eruption. As the progress of the disease among the vagrant classes is an important feature for at least the first six months, the attacks among them are represented by a second line, the space between the two lines obviously representing the attacks among those who for our purposes were not vagrants.

In tracing the course of the epidemic it will be convenient to consider (1) cases occurring amongst vagrants and in public institutions; (2) other cases occurring on (A) the north side of the river, and (B) the south side.

I. VAGRANTS.

The following table shows how many patients traced their infection to various free shelters and lodging-houses:—

	Dec., '92.	Jan., '93.	February.	March.	April.	May.	June.	July.	Totals.
Salvation Army Shelters—									
(a) Blackfriars ... ..	...	...	3	3	6	16	3	...	31
(b) Lisson Street, Edgware Road	3	2	3	8	11	5	...	...	32
(c) Horseferry Road, Westminster ... ..	...	...	1	7	5	1	...	...	14
(d) Others	1	2	5	6	8	...	1	...	23
Medland Hall, Ratcliff ... ..	...	1	8	...	4	1	2	...	16
Common Lodging-houses	3	6	23	63	40	22	16	6	179
Casual Wards	3	8	4	3	1	1	...	...	20
Free Shelters generally ... ..	...	1	4	2	3	...	...	...	10
TOTALS	10	20	51	92	78	46	22	6	325

Here, as throughout this paper, cases are referred to the places where they were at the time of infection, and not to the places from which they were removed. Class (d), under Salvation Army Shelters, includes cases referred to shelters at which only few people were infected, such as those in Stanhope Street Clare Market, Quaker Street Spitalfields, Royal Mint Street, St. John's Square Clerkenwell, West India Dock Road and perhaps others. The common lodging-houses were very numerous, and they behaved very much like private houses, in

that an outbreak in any one seldom extended beyond one or two generations. The following are the most important :—

St. Peter's Chambers, 33, Great Peter Street, Westminster.—Ten cases, occurring at intervals from December 30th to May 9th.

Victoria Home.—Two institutions, one in the Whitechapel Road and the other in Commercial Street. From the former, 11 cases, between January 25th and May 6th : from the latter, 13, between February 28th and April 26th ; and four other cases of which it was not stated which was meant.

London County Council Lodging-house, Parker Street, Drury Lane.—Ten cases between March 4th and May 10th.

As regards the 20 cases ascribed to Casual Wards (of which there are 25 in London), three were doubtfully so ascribed, and in eight cases the patient could only remember that he had been at some casual ward or other about the time of infection ; so there are only nine cases which can be traced to definite casual wards. As there were at least 35 cases admitted direct from these places, it seems that they played the part of filters in removing vagrant infection rather than that they assisted in the spread of the disease.

Some of the workhouses and infirmaries played this part very effectually, and the precautions taken, whatever they were, were eminently successful, in that none of the inmates were infected. At others, the precautions were not so good. Patients were from some institutions almost invariably removed from large wards, instead of isolation wards, and not infrequently after the eruption had been out three, four, or even more days. Re-vaccination of people who had been exposed to infection seems scarcely to have been thought of at some institutions, and at others it had been practised on only very few of the people infected therein, and then too late to ward off the attack.

The following is a list of the more important :—

	A.	B.
Marylebone Infirmary, to May 1st	6	—
" " July	—	3
" Workhouse	7	1
Chelsea Infirmary, December, 1892, and January ...	1	4
" " May	1	—
" Workhouse	2	—
St. George-in-the-East Workhouse and Infirmary ...	12	6
St. George, Hanover Square, Infirmary	10	—
" " Workhouse	2	—
Whitechapel Infirmary	15	1
Lewisham Workhouse, February and March	3	—
" " May	—	1
Fulham Infirmary... ..	1	6
Wandsworth Workhouse and Infirmary	4	—
Lambeth Infirmary	3	1
Bloomsbury Workhouse	3	1
St. Pancras, November and December, 1893	1	3
Poplar and Stepney Sick Asylum	10	16

disease cropped up over the rest of the Metropolis. As regards distribution, it was mainly the parts inhabited by poor people that were selected, and there does not seem to be any evidence that a larger percentage of people were attacked in the more thickly-populated parts than elsewhere. In the West End and suburbs, the disease selected the islands of poor people which are scattered amongst the more well-to-do. The reason probably is that the poorer a person is the less likely is he to consult a medical man or to trouble about minor ailments, and Smallpox in vaccinated persons is often a very minor ailment: also these people are far too ready to diagnose chickenpox, and to leave it to take care of itself. It will be seen that it is the cases which are not recognised or only moved late that do most of the mischief.

The first group to be considered commenced in a small way in *Spitalfields* early in February. Very probably it was connected with several lodging-houses and two free shelters in the neighbourhood. In April it showed a tendency to travel in a north-easterly direction towards Bethnal Green, and by the end of May it had quite taken up that position. It then travelled farther east, almost as far as Victoria Park, and died out early in October. During the early months the cases were mostly unconnected with one another, and their origins could not be traced. From the middle of July onwards they occurred in groups from a small number of houses, in each case traceable to cases removed late or not at all. The cases from this group were never very numerous—say about 15 a month.

Stepney.—On March 10th a man was attacked at 92, Heath Street; on the 17th, a boy at the same house, and a girl at No. 97; these three were unisolated until April 8th. From March 28th to April 22nd about 44 people were attacked in the immediate neighbourhood. At first they were confined to the same street and to Senrab Street and Old Church Road, parallel streets, which have houses back to back with the infected ones in Heath Street. As time went on the circle widened.

Bloomsbury :

- (a) * On January 28th one case at 8, Lumber Court, West Street (West Street connects St. Andrew's Street with Shaftesbury Avenue).
- (b) (?) An unrecognised case.
- (c) Four cases at 9, Lumber Court, a month after (a).
- (d) A fortnight later (March 10–15th) six cases, all infected at 9, Lumber Court.
- (e) (?) Several unrecognised cases.
- (f. 1) 14 cases in 14 different houses in the immediate neighbourhood (April 7th–11th) with two other cases a few days later, and also a case of "Spots" unremoved.
- (g) 13 cases (April 21st–29th), 10 of which occurred in the previously infected houses, those being selected where the previous patients had remained longest unremoved, or had not been removed at all.

Eight cases occurred in the same neighbourhood during the following five or six weeks.

Not improbably Covent Garden Market was the place where the infection was disseminated; a fair number of the men including the earlier cases were porters there,

* The letters *a*, *b*, *c* represent the 1st, 2nd, 3rd 'generations' of attacked persons, such generations occurring at fortnightly intervals.

and some of the cases belonging to neighbouring minor outbreaks were also connected with the Market. These should be classed as:—

(*f.* 2) Eight cases in four houses, situated in Eagle Street near Red Lion Street, and about Drury Lane; these gave rise to only two cases later on.

This outbreak, which seemed to have been fairly got under by the end of April, broke out again in two places at the beginning of June. One's reasons for looking upon it as a recrudescence are (1), the situations; one in Little Pulteney Street and its courts, the other in Sardinia Street, the other side of Drury Lane, are both immediately contiguous to the previous outbreak. (2.) The interval was a month, which would leave just time for two generations of unrecognised cases. In some of the houses we know there had been previous unremoved cases, and in several others several people were attacked simultaneously, indicating a probable common origin in the same house. (3.) Throughout the year one finds, as one would expect, that each generation of a local outbreak is diffused over a greater number of days than the preceding one. The first generation of the Little Pulteney Street one consisted of about 26 cases, spread over more than a fortnight. This is in sequence with the previous generations around Lumber Court, not only as regards time diffusion, but also as regards magnitude. The second generation consisted of about 12 cases, mostly in the old houses, occurring during the latter half of June. There were also a few straggling cases later. The Sardinia Street outbreak was very similar, only smaller (*a*) 9, (*b*) 7, and a few later cases.

Tottenham Court Road.—There was a fairly continuous succession of apparently unconnected cases from a narrow strip 200 yards wide, extending along the western side of this road, there being none from the east side; it lasted from the beginning of March to the end of July. During the latter two months it seemed to be entirely kept up by cases described as "Spots," "Chickenpox" and unremoved Smallpox.

Edgware Road.—Between 50 and 60 cases were attacked in April, May and June, in an area $\frac{3}{4}$ mile by $\frac{1}{2}$ mile, extending along this road with its centre very near the Salvation Army Shelter in Lisson Street; this fact is suggestive though there is no direct evidence of the outbreak being secondary to the Shelter. Though most of the affected houses produced two crops of cases, no arrangement of generations can be traced in the outbreak as a whole; this shows that it was not due to only one or two primary sources of infection but to many, no one of which did very much harm by itself.

Smaller Outbreaks in the Spring and Summer.—For a month from the middle of April, 11 cases occurred near High Street, Poplar, five cases from one house perhaps being connected with a few that occurred at South Bromley. An almost continuous chain of one or two cases a fortnight, mostly in the West Ferry Road, Millwall, but finishing up near the West India Dock Road, lasted from the middle of June to the end of October; one or two missing connecting links were represented by unremoved cases of "Spots." A case in Wendon Street, Old Ford, not removed for three weeks gave rise to eight other cases in the same house. At a house near the Bancroft Road, Mile End, nine cases occurred in a week; we never

heard of the person who infected these, but it is inconceivable that he was not an inmate of the same house. Such instances, though these two are perhaps the biggest, are numerous.

Portobello Road:

- (a) A girl, M. K., aged 12, attacked at 412, Portobello Road on September 23rd, who remained at home until October 24th.
- (b & c) Her father, attacked (?) October 8th, who died unremoved on October 22nd; two others in same house and three next door, all removed about October 23rd, immediately after the discovery that the disease was Smallpox.
- (d) About 36 people, the great majority of whom were attacked on November 3rd and 4th. Most of them lived within a 100 yards of M. K.'s house, and some of them were supplied from her father's milkshop.
- (e) Less than 20 people, many of whom lived some little way off, and had only an obscure connection with the previous cases; some had visited, but hardly any actually occurred, in the previously attacked houses.
- (f, &c.) About 20 more or less scattered cases occurred in December.

Coincidentally there was an allied but much smaller outbreak rather farther north, viz., on the Queen's Park Estate and east thereof. On September 21st a man was attacked at 60, Barnsdale Road, and previous cases are stated to have occurred in the neighbourhood. Dr. Dudfield, the M.O.H. for Kensington, believes it was here that M. K. was attacked. This man was not removed until October 29th. He infected a woman living at 53, Lydford Road, who, attacked on October 22nd, was not removed until November 10th. Besides four cases directly attributable to this latter, eight others were probably indirectly connected with them, though five of these referred their infection to six unremoved cases of "Spots," or Smallpox, in four different houses.

Devons Road.—An outbreak occurring on an area of a few acres only at the western end of this road lasted about two months, commencing early in October. It consisted of about 38 cases occurring in eight houses, situated in Devons Road Eastward, Hawgood and Gale Streets. It was remarkable in that nearly every attack was traced by direct infection to some previous case.

* IIb.—LONDON SOUTH OF THE THAMES.

Disregarding a few isolated and scattered attacks, which did not give rise to fresh attacks, we may say that the disease was very much later in establishing itself in the various parts of South London than it was elsewhere. The order was somewhat as follows:—

(1892).	December	North Peckham.
(1893).	January	South Peckham (until end of February).
"	February	Bermondsey and East Greenwich.
"	" (later)	Deptford.
"	" "	Woolwich and Plumstead.
"	March 10th	Camberwell and Stockwell.
"	April	Rotherhithe, Southwark and Walworth.
"	" (end of)	Battersea.
"	May	Peckham (second outbreak).
"	"	Vauxhall.

* See the Smallpox Map in the pocket at the end of this Volume.

A good number of cases came from Woolwich and Plumstead in the course of the year, but never very many at the time. Naturally many of them were connected with the Arsenal, and at times it seemed that the disease was being disseminated there, but there was never any satisfactory evidence that this took place to any considerable extent. The more important outbreaks are—

Peckham.—A girl attending Woods Road School was attacked on January 15th, and removed on February 5th. She infected eight people (including her sisters) at the same school and one other; these infected nine others. Only two other cases are known to have occurred in the neighbourhood.

East Greenwich or Marsh Lane School.—A woman was attacked at Blackwall Lane about January 1st, and removed on the 31st. She infected at least two people, one being a woman living in the Glenister Road, the very centre of the residences of the following; she was attacked on February 11th, and her two children on the 24th; all three were removed in reasonable time, and no more cases are known of for a month, except a woman at 3, Ordnance Row, which is nearly a mile off:—

- (a) From about March 18th or 19th to about the 26th or 28th, 22 cases occurred, 16 of whom attended Marsh Lane Schools.
- (b) A fortnight later there were 33 more cases, six of whom were Marsh Lane children; almost all the rest were older members of the same households from which the previous children had been removed. A few ascribed their illness to unremoved Marsh Lane children who had had "Chickenpox" or had "ailed."
- (c) About 12, all from previously infected houses, none of them being Marsh Lane children.

There were a few straggling cases later, otherwise East Greenwich was practically free for the rest of the year.

Rotherhithe.—Although there had been a fairly continuous succession of a few cases in the region of Dockhead and the western end of the Southwark Park Road since the beginning of the year, there were no cases in Rotherhithe until—

- (a) A boy of 13 was attacked on March 31st at 18, Fulford Street, Paradise Street; he remained at large until April 25th.
- (b) and (c) Are not clearly separable, but from April 26th to May 20th at least 55 people were attacked in that and the adjoining streets. Many of generation (c) came from houses infected by generation (b). A good many children were attacked and came from two schools but it is doubtful whether these schools played any prominent part in the dissemination.

There were other outlying cases which were probably connected with this outbreak.

Battersea.—From May onwards there were several small outbreaks in Battersea and Wandsworth, and as they were all chargeable to the Wandsworth and Clapham Union, they gave an impression to many people of one large outbreak.

- (1.) (a) A child who had "Chickenpox" at 160, York Road.
- (b) Nine people who were attacked with Smallpox a fortnight later, May 17th and 23rd including two sisters, a barber who had the shop, and some of his family who lived in a neighbouring street, two customers, and another.

(c) Two people from a few doors off.

At the same time as (a) there were two cases a quarter of a mile off, followed by (b) two or three more.

(2.) (a) A man who had visited a case of Chickenpox developed Smallpox on June 5th, and was not removed until July 11th. He lived at 23, Sterndale Road, between two or three miles from the last-mentioned outbreak. Owing to the long time he remained at home some of the cases he infected directly can be more conveniently considered to belong to (c) and (d), though strictly they belong to (b).

(b) Three cases, June 18th to 21st.

(c) Sixteen cases, mostly between July 3rd and 12th.

(d) Eight cases, July 16th to 21st.

All these cases lived very close to (a) or had visited infected people who did.

(3.) (a) A baby perhaps belonging to 2 (b) who was attacked on June 26th, at 32, Alfred Street, Battersea Park Road, and removed on July 4th.

(b) Five cases, July 14th-15th.

(c) Three cases, August 2nd. One being due to a case of unremoved Smallpox.

(d) Two cases, August 18th and 20th.

All these had been infected in the immediate neighbourhood of Alfred Street.

(4.) (a) One case at 22, Colestown Street, at junction of Battersea Bridge and Battersea Park Roads, attacked September 7th, and removed on the day of eruption.

(b) Three cases; (c) two cases; (d) one case.

Besides these four groups there were other disconnected cases in the Wandsworth and Clapham Union.

Lambeth Walk :

(a) Unknown.

(b) Eleven cases June 21st to 29th, among the family and employés of a greengrocer, at 120, Lambeth Walk, and the immediate neighbours. Six of these cases were removed on the day the eruption appeared.

(c) Two cases July 9th and 11th.

A study of the whole epidemic tends to show that the following is the type of the local outbreak :—

A person is attacked not very severely, and is recognised either after some weeks or not at all, simply because no one thinks of Smallpox. Next, a few people get it a fortnight later, as at Stepney, and also remain unrecognised; this stage may be wanting, or apparently wanting, as at Rotherhithe. Next comes a big outbreak of perhaps 20 or 30 cases, some being severe, and the disease is at last recognised; most of these cases are removed rather late, *i.e.*, about the fifth or sixth day, and so the next generation is pretty big. As now the cases are looked out for they are recognised and removed almost immediately they occur, and probably there will be only very few cases if any in the next generation. During the second big generation at the original centre, there will be the first big generation of the surrounding parts, and it seems to be that the disease is quite unexpected even at a very short distance from the original centre, and that these cases remain unremoved for five or six days, until the inhabitants are impressed with the fact that Smallpox is amongst them.

Hence there is a generation around a centre a fortnight later than in the centre itself. This suggests that it would be well if all the medical men of a neighbourhood were informed directly Smallpox were discovered, especially if the case or cases had remained long unremoved. However, this will not make the people call in the medical man early. The direction in which an outbreak spreads depends upon circumstances. It appears to have great difficulty in crossing the main thoroughfares, and canals act as a block though perhaps not to such a great extent; and it extends too in the directions where the poorer people live. As I said before I don't believe it is the overcrowding in itself so much as the poverty and the concomitant carelessness about disease. The outbreaks though mainly in the thickly populated parts are mostly not in the overcrowded parts. And there are many overcrowded parts with very narrow streets, big houses and very small back yards, such as Spitalfields, Bethnal Green, St. George-in-the-East, Southwark and Bermondsey, where though Smallpox often broke out here and there, it never produced well marked outbreaks.

Some of the outbreaks have differed from the type I have sketched. For instance, in the Portobello Road outbreak the second big generation was almost completely suppressed by the very prompt removal of all the cases in the previous generation; it consisted mainly of visitors and outsiders, and hardly any of the houses produced secondary cases. The Medical Officer of Health states in one of his Reports that, among other precautions, house-to-house visitation was practised for the purpose of re-vaccination and seeking out infectious people. Considering the start this outbreak had before it was recognised, it seems probable that it would have been very much larger had it not been met so promptly. The Lambeth Walk outbreak too was immediately suppressed by the prompt removal of the patients.

In some ways outbreaks in houses resemble outbreaks in localities—first cases are usually removed late and later cases early. Two generations in one house are very common; three are decidedly rare, and four almost unknown. A very large number of houses have produced no secondary attacks, and we have had no means of ascertaining the precautions which lead to so happy a result. But of the secondary attacks extremely few had been re-vaccinated, and those who had, had been done too late to protect them from their attack, many of them only one or two days before the eruption appeared. This is very unfortunate, as secondary attacks ought to be almost unknown in houses where primary cases have been recognised early. In some cases only some of the household were re-vaccinated. We occasionally heard that "Granny" was not done because she was old and it was considered unnecessary. It is too often forgotten that vaccinated children of six years old, or even younger, are not infrequently susceptible of Smallpox in a mild form, with, perhaps, only half-a-dozen pocks; they are infectious, and their disease is scarcely to be recognised unless it is looked for. In a house where Smallpox has occurred, all persons who have not been vaccinated for four years should be re-vaccinated.

Fifty-nine of our cases attributed their disease to unremoved cases of Smallpox,

numbering, at least, 41; 31 more to 28 cases of "Chickenpox." Two of the local outbreaks are to be ascribed to "Chickenpox." Thirty-four ascribed theirs to at least 34 cases of "Spots;" 14 others to various complaints, such as measles, complicated or not with Spots or Chickenpox, Influenza, with or without Spots, German Measles, or some slight ailment. Some of these diagnoses were made by chemists and other irresponsible persons.

A certain number who had been diagnosed wrongly, or not at all in the first place, were afterwards removed with the people they had infected, and, as has been seen, many of the local outbreaks have been due to such cases. Yet it seems that a great many more ought to have come down to the Ships. Our experience is that very few, if any, cases are free from infection at the end of a fortnight. Fourteen instances occurred where attacks in the same house or (in a few cases only) in two adjoining houses were separated by an interval of almost exactly a month, a double incubation period. One can't help suspecting that in most of these an intermediate case would have been found if it had been looked for. There were a great many instances, too, where the apparent first generation in a house consisted of several cases following one another at short intervals; I have already given a few of the more remarkable instances of this: here also the original source should have been looked for in the same house.

Occupations.—Eighteen cases occurred amongst people connected with Hospitals, mostly nurses. A few had never been vaccinated at all, and of the rest only one had been revaccinated, and that was seven days after she had been infected. Since the cases from which the majority of these were infected were known, most of these attacks should have been prevented.

Four medical men, three of whom had attended Smallpox, were attacked; none of them had been re-vaccinated during the last 20 years.

There were seven Disinfectors attacked, six of whom belonged to the Sanitary Authorities, one Sanitary Inspector, one Sanitary Engineer, and one Deputy Relieving Officer, none of whom had been re-vaccinated.

A large number of people doing laundry work were attacked, some of whom are known to have contracted it from infected clothing. There were 18 cases where no clue could be discovered of any other source of infection; this number does not include ironers and others who had nothing to do with unwashed clothes. I have also not included dyers and cleaners who in some cases seem to have received infected clothing.

In the publican trade there were 27 attacks among people connected with the bar, and two among members of publicans' families who did not go into the bar. With these may be mentioned one billiard marker, one coffee-stall keeper, one attendant from a sausage shop, and one or two from cocoa rooms.

The undertaker who put M. K.'s father into his coffin at Portobello Road was attacked and gave it to his family. Instead of being warned beforehand, he was told it was a case of Fever he had to bury.

Though many people contracted the disease by visiting infected houses, 11

are recorded to have paid this visit on the day of the removal of the infecting person, generally at the last moment, to say "Good-bye." Owing to the prompt despatch of ambulances by the Asylums Board, this number is, happily, a small one. One can only suggest that every medical man should notify the case direct to Norfolk House by telegram immediately he has made his diagnosis. Could not the expense of such telegrams be added to the notification fees?

There have been a certain number of cases who most probably contracted the disease from people in the initial stage of the illness. Whether it be true or not that Smallpox is less infectious before the third day of the eruption, it is clear that it is quite infectious enough to demand every precaution from the outset.

Origin of the Epidemic.—As there were no indigenous cases in London from the middle of August, 1892, to the end of October, one must admit in general terms that the epidemic was brought in from outside; but when one tries to trace it in, one can find hardly any evidence whatever.

Fifty-eight people contracted it out of London.

Of these—

Thirty-five can be absolved from infecting others.

Four probably did not do so.

Six infected only one or two each, there being no other cases in their neighbourhoods for many weeks.

Eight might have, but are not known to have.

Of the remainder—

One (January 1st) infected (?), Salvation Army Shelter, Blackfriars, and Holborn (?) Shoreditch, and St. George's Casual Wards.

One (January 6th) infected the Victoria Home (common lodging-house), Whitechapel Road.

One (January 20th) was removed on January 24th, from St. George-in-the-East.

One (February 26th) infected Salvation Army Barracks, Limehouse.

One (March 29th) infected Salvation Army Shelter, Blackfriars.

These people are thus distributed as regards time :—

November	...	2	June	...	...	7
December	...	1	July	...	...	2
January	...	6	August	...	...	3
February	...	5	September	...	...	1
March	...	10	October	...	...	1
April	...	11	November	...	...	2
May	...	5	December	...	...	2

To the end of April they were mostly vagrants.

The difficulty of tracing the connection between the different outbreaks, and between the vagrant and other classes, is equally great, and the lack of evidence must not be taken too seriously. One reason may be that outbreaks hardly ever are

given rise to by people who can trace their infection, as in such cases the attack does not come as a surprise, it is recognised and precautions are taken accordingly. It may be that a very large number of cases escaped recognition during the year.

On reference to the chart it will be seen that the curve of the attacks amongst the whole population follows the curve of those amongst the vagrants, and that ever since the disease was stamped out amongst the latter, it has only smouldered amongst the rest of the community, and even if it has got a start, as in the Portobello Road outbreak, it has been promptly stamped out. The few cases that occurred in November and December, 1892, were due to small local outbreaks, which were quickly got under and were entirely comparable to the cases which have occurred during the last seven months since August, 1893. The areas which continued producing cases throughout the spring and summer were not infected until the disease was amongst the vagrants. If it is true then that *we cannot control the disease amongst the community generally until we have controlled it amongst the vagrants*, our first efforts should be directed to preventing the disease spreading amongst them.

Though this epidemic does not teach us anything new, it illustrates again the evil effects of not revaccinating those who have been exposed to infection, and those who come in contact with it in their work, whether it be in nursing or disinfecting, or in any other way; also of overlooking cases, or of leaving them for four or five days after their eruptions have appeared in large wards full of sick and destitute people.

One (January 2nd) infected at Salvation Army Station, Blackfriars, and
 Holborn (?) Spandish, and St. George's General Ward.
 One (January 6th) infected the Victoria House (common lodging-house),
 Whitechapel Road.
 One (January 20th) was removed on January 21st, from St. George's
 in-the-East.
 One (February 20th) infected Salvation Army Station, Kingsland.
 One (March 20th) infected Salvation Army Station, Blackfriars.

These people are thus distributed as regards time:—

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

To the end of April they were mostly vagrants.
 The difficulty of tracing the connection between the different outbreaks, and
 between the vagrants and other classes is equally great, and the lack of evidence
 must not be taken too seriously. The reason may be that outbreaks hardly ever

PART III.—ANNUAL REPORTS, 1893. SMALLPOX STATISTICS, 1893.

SMALLPOX STATISTICS.—TABLE L.—Return showing the Numbers of Smallpox Patients Admitted from each Parish or Union during each Month of the Year 1893; the Total Admissions, Discharges, and Deaths during the Year, and the condition of the Patients as to Vaccination.

Table with columns for months (Jan-Dec), Vaccination Cicatrix or Cicatrices (Present/No Evidence/Absent), Total Admissions, Deaths, Discharges, and Remaining in Hospital. Rows list parishes/wards across W, N, C, E, and S districts.

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. NOTE 2.—This Table includes (a) cases stated to have been re-vaccinated and which are dealt with separately in Table D, p. 149-152 of the Report of the Medical Superintendent of the Smallpox Hospital Ships; and (b) cases which were vaccinated or re-vaccinated after having been infected with Smallpox, and which appear separately in Table C, p. 146-148 of the same Report.

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

PART III.—ANNUAL REPORTS, 1893. SMALLPOX STATISTICS, 1893. SMALLPOX STATISTICS—TABLE III.—Showing the condition as regards Vaccination of MALE Patients admitted during 1893.

Table with columns for Ages, Area of Cicatrix or Cicatrices (Class A, B, C), Formation of Scars (Number of Scars: Four or more, Three, Two, One, Not recorded), Deaths amongst Vaccinated Cases (Class A, B, C), and Total Deaths. Rows include age groups from Under 1 year to 80 years and upwards, and a TOTAL row at the bottom.

N. B.—(1) The small figures indicate the number of Deaths in each sub-division of the Classes. * Note 1.—In this column are included those 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. * Note 2.—This Table includes (a) cases stated to have been re-vaccinated and which are dealt with separately in Table D, p. 147-152 of the Report of the Medical Superintendent of the Smallpox Hospital Ship; and (b) cases which were vaccinated or re-vaccinated after having been infected with Smallpox, and which appear separately in Table C, p. 145-146, of the same Report.

PART III.—ANNUAL REPORTS, 1893. SMALLPOX STATISTICS, 1893.
SMALLPOX STATISTICS.—TABLE II_B (continued)—Showing the condition as regards Vaccination of FEMALE Patients admitted during 1893.

AGES.	CASES WITH VACCINATION CICATRIX OR CICATRICES PRESENT.																				Deaths amongst Vaccinated Cases.		Cases in which there was "No evidence" as to Cicatrix.		Cases in which Vaccination Cicatrix was "absent."															
	AREA OF CICATRIX OR CICATRICES.																				Total Vaccinated Cases Admitted.	Total Deaths amongst Vaccinated Cases.	Total Admissions.	Total Deaths.	Total Admissions.	Total Deaths.														
	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.																								
	Number of Scars.					Number of Scars.					Number of Scars.					Number of Scars.																								
	Four or more.					Three.					Two.					One.											Not recorded.													
	Formation of Scars.					Formation of Scars.					Formation of Scars.					Formation of Scars.																								
Head and face.	Upper arms.	Lower arms.	Upper trunk.	Lower trunk.	Head and face.	Upper arms.	Lower arms.	Upper trunk.	Lower trunk.	Head and face.	Upper arms.	Lower arms.	Upper trunk.	Lower trunk.	Head and face.	Upper arms.	Lower arms.	Upper trunk.	Lower trunk.																					
Under 1 year...	1																																							
From 1 to 2 years...																																								
2 3																																								
3 4																																								
4 5	1					1																																		
5 6																																								
6 7	1																																							
7 8																																								
8 9	2					1																																		
9 10																																								
10 11																																								
11 12	4	1																																						
12 13	2	1	3	1	1																																			
13 14	8	2	1	1																																				
14 15	9	2	1	1	1																																			
15 20	33	8	5	1	3	1																																		
20 25	26	6	5	1	3	1																																		
25 30	14	1	3	3	2																																			
30 35	6	1	1	7	2	3																																		
35 40	4	2	0	1	1	1																																		
40 50	4	2	1	1	1																																			
50 60	3			1	1																																			
60 70																																								
70 80																																								
80 years and upwards																																								
TOTAL	119	24	25	5	50	14	7	137	6	6	13	4	12	2	17	2	14	2	3	10	2	3	7	1	4	2	2	1	2	1	2	1	2	1	2	1	2	1	2	

N.B.—(1) The small figures indicate the number of Deaths in each sub-division of the Classes.
 * NOTE.—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.
 NOTE 2.—This Table includes (a) cases stated to have been re-vaccinated and which are dealt with separately in Table D, p. 149-152 of the Report of the Medical Superintendent of the Smallpox Hospital Ships; and (b) cases which were vaccinated or re-vaccinated after having been infected with Smallpox and which appear separately in Table C, on p. 146-148 of the same Report.

TABLE I		TABLE II	
Year	Value	Year	Value
1901	100	1901	100
1902	105	1902	105
1903	110	1903	110
1904	115	1904	115
1905	120	1905	120
1906	125	1906	125
1907	130	1907	130
1908	135	1908	135
1909	140	1909	140
1910	145	1910	145
1911	150	1911	150
1912	155	1912	155
1913	160	1913	160
1914	165	1914	165
1915	170	1915	170
1916	175	1916	175
1917	180	1917	180
1918	185	1918	185
1919	190	1919	190
1920	195	1920	195
1921	200	1921	200
1922	205	1922	205
1923	210	1923	210
1924	215	1924	215
1925	220	1925	220
1926	225	1926	225
1927	230	1927	230
1928	235	1928	235
1929	240	1929	240
1930	245	1930	245
1931	250	1931	250
1932	255	1932	255
1933	260	1933	260
1934	265	1934	265
1935	270	1935	270
1936	275	1936	275
1937	280	1937	280
1938	285	1938	285
1939	290	1939	290
1940	295	1940	295
1941	300	1941	300
1942	305	1942	305
1943	310	1943	310
1944	315	1944	315
1945	320	1945	320
1946	325	1946	325
1947	330	1947	330
1948	335	1948	335
1949	340	1949	340
1950	345	1950	345
1951	350	1951	350
1952	355	1952	355
1953	360	1953	360
1954	365	1954	365
1955	370	1955	370
1956	375	1956	375
1957	380	1957	380
1958	385	1958	385
1959	390	1959	390
1960	395	1960	395
1961	400	1961	400
1962	405	1962	405
1963	410	1963	410
1964	415	1964	415
1965	420	1965	420
1966	425	1966	425
1967	430	1967	430
1968	435	1968	435
1969	440	1969	440
1970	445	1970	445
1971	450	1971	450
1972	455	1972	455
1973	460	1973	460
1974	465	1974	465
1975	470	1975	470
1976	475	1976	475
1977	480	1977	480
1978	485	1978	485
1979	490	1979	490
1980	495	1980	495
1981	500	1981	500
1982	505	1982	505
1983	510	1983	510
1984	515	1984	515
1985	520	1985	520
1986	525	1986	525
1987	530	1987	530
1988	535	1988	535
1989	540	1989	540
1990	545	1990	545
1991	550	1991	550
1992	555	1992	555
1993	560	1993	560
1994	565	1994	565
1995	570	1995	570
1996	575	1996	575
1997	580	1997	580
1998	585	1998	585
1999	590	1999	590
2000	595	2000	595

AGE		From to		Location of		Number of	Class A, B, C, and grade of wood
From	To	From	To	From	To		
Under 1 year	1	1	1	1	1	1	1
From 1 to 2 years	2	2	2	2	2	2	2
"	3	3	3	3	3	3	3
"	4	4	4	4	4	4	4
"	5	5	5	5	5	5	5
"	6	6	6	6	6	6	6
"	7	7	7	7	7	7	7
"	8	8	8	8	8	8	8
"	9	9	9	9	9	9	9
"	10	10	10	10	10	10	10
"	11	11	11	11	11	11	11
"	12	12	12	12	12	12	12
"	13	13	13	13	13	13	13
"	14	14	14	14	14	14	14
"	15	15	15	15	15	15	15
"	16	16	16	16	16	16	16
"	17	17	17	17	17	17	17
"	18	18	18	18	18	18	18
"	19	19	19	19	19	19	19
"	20	20	20	20	20	20	20
"	21	21	21	21	21	21	21
"	22	22	22	22	22	22	22
"	23	23	23	23	23	23	23
"	24	24	24	24	24	24	24
"	25	25	25	25	25	25	25
"	26	26	26	26	26	26	26
"	27	27	27	27	27	27	27
"	28	28	28	28	28	28	28
"	29	29	29	29	29	29	29
"	30	30	30	30	30	30	30
"	31	31	31	31	31	31	31
"	32	32	32	32	32	32	32
"	33	33	33	33	33	33	33
"	34	34	34	34	34	34	34
"	35	35	35	35	35	35	35
"	36	36	36	36	36	36	36
"	37	37	37	37	37	37	37
"	38	38	38	38	38	38	38
"	39	39	39	39	39	39	39
"	40	40	40	40	40	40	40
"	41	41	41	41	41	41	41
"	42	42	42	42	42	42	42
"	43	43	43	43	43	43	43
"	44	44	44	44	44	44	44
"	45	45	45	45	45	45	45
"	46	46	46	46	46	46	46
"	47	47	47	47	47	47	47
"	48	48	48	48	48	48	48
"	49	49	49	49	49	49	49
"	50	50	50	50	50	50	50
"	51	51	51	51	51	51	51
"	52	52	52	52	52	52	52
"	53	53	53	53	53	53	53
"	54	54	54	54	54	54	54
"	55	55	55	55	55	55	55
"	56	56	56	56	56	56	56
"	57	57	57	57	57	57	57
"	58	58	58	58	58	58	58
"	59	59	59	59	59	59	59
"	60	60	60	60	60	60	60
"	61	61	61	61	61	61	61
"	62	62	62	62	62	62	62
"	63	63	63	63	63	63	63
"	64	64	64	64	64	64	64
"	65	65	65	65	65	65	65
"	66	66	66	66	66	66	66
"	67	67	67	67	67	67	67
"	68	68	68	68	68	68	68
"	69	69	69	69	69	69	69
"	70	70	70	70	70	70	70
"	71	71	71	71	71	71	71
"	72	72	72	72	72	72	72
"	73	73	73	73	73	73	73
"	74	74	74	74	74	74	74
"	75	75	75	75	75	75	75
"	76	76	76	76	76	76	76
"	77	77	77	77	77	77	77
"	78	78	78	78	78	78	78
"	79	79	79	79	79	79	79
"	80 years and upwards	80	80	80	80	80	80
Total		...	...	...	...	...	...

Note: In this column are included those stated to have been vaccinated.

PART IV.

REPORTS OF THE MEDICAL SUPERINTENDENTS OF
THE SEVERAL ASYLUMS FOR IMBECILES FOR 1893.

No. 12.

REPORT OF DR. H. CASE, MEDICAL SUPERINTENDENT OF THE
LEAVESDEN ASYLUM.

(For Statistics, see pp.* 200 to 224.)

LEAVESDEN ASYLUM,

NEAR WATFORD, HERTS,

January, 1894.

To the Committee of Management.

GENTLEMEN,

I have the honour to place before you my Report, with the usual statistical tables for the year 1893.

On the 1st January, 1893, we had under treatment 889 males and 1,098 females—total, 1,987. The changes that have occurred during the year are as follows:—

	Males.	Females.	Total.
Admitted	156	95	251
Readmitted	4	...	4
Discharged	33	12	45
Died	117	85	202
Remaining in the Asylum 31st December, 1893	899	1,096	1,995

The total number under care during the year was 1,049 males and 1,193 females.

The highest number resident on any one day was 2,001; the lowest, 1,980.

The average number resident during the year was 1,991.

The admissions in number have been fewer than the previous year, 255 as against 336, yet throughout the year the Asylum has been practically full, as the average daily number resident shows.

If such an assertion were possible, I should say the quality of those we have received has been worse than ever, and we have to write them down one after another—physical condition “much impaired,” mental condition “unimprovable.”

I still think the transfers we receive from the County Asylums are of much better stamina than the patients sent direct from the various parishes, and seeing that these after careful treatment have been written down “incurable,” the amount of dilapidation entrusted to our care can be readily imagined.

Four males were readmitted, one of which had been transferred to Colney Hatch about six months previously, having developed suicidal tendencies. He came back to us much improved, and was shortly afterwards discharged as recovered. I believe a change of Asylum, with different surroundings, often does good, even in the most chronic cases. Another had been discharged who was said to be epileptic. We kept him under supervision for six months, during which time he had no fit, and showed no sign of mental derangement; the second time he was carefully watched for three months with the same result. He is again with his relatives.

The other two are still here, but we hope soon to give them a chance of again earning their livelihood.

We have been enabled to discharge as recovered 13 males and five females; also 10 males as improved. I think this record may be considered fairly good, but we hope for far better results when the Institution, about to be erected by the Board in or near the Metropolis, relieves us of the decrepit and more or less moribund patients we now have to treat.

Nine males and seven females have been removed to a County Asylum for treatment.

One male was discharged as not insane, after being under observation for a month.

The death rate, 10·1 per cent., calculated on the daily average number resident, is the lowest since 1888. I attribute this largely to the phenomenal weather we experienced throughout the year. The causes of death are shown in Table VII., and I think it worthy of note that only one death took place from thoracic disease other than phthisis or heart disease.

Two inquests were held, one on June 7th on the body of C. W., a male, aged 63, who fell from a height whilst attempting to escape by lowering himself from a dormitory window with the aid of sheets tied together. The verdict given was “that he died from injuries received from a fall from a

window whilst attempting to escape." The other was held September 5th on the body of C. F. B., a male, aged 48. This man was accidentally scalded whilst having a Turkish bath; the attendant turned on the hot instead of the cold needle tap. The verdict was "shock from scald."

Both these cases were reported at the time to the Local Government Board and to the Commissioners in Lunacy, who were satisfied with the action immediately taken by the Committee to prevent any recurrence of such fatalities.

I am pleased to state that there has been no disease of an infectious nature during the year, although Scarlet Fever has been rife in the neighbourhood, and visitors to patients were stopped for about two months, owing to its prevalence in London.

Dr. Walmsley, having been appointed Medical Superintendent of the Darenth Schools, left us on March 25th, taking with him the good wishes of the staff, with whom he had harmoniously worked for 13 years. Dr. Blair was appointed Senior Assistant Medical Officer in his stead; Dr. Ernest Hill at the same time being appointed Junior Assistant Medical Officer. Dr. Hill left us on September 29th, having been appointed Senior Assistant at the Fountain Fever Hospital; and Dr. Hallett, who had been taking temporary duty at Banstead Asylum, joined the service here.

I regret to have to record the deaths during the year of three of our employés—John Minett, who had performed the duties of hall-porter for about 11 years; Walter Tye, whose post was that of stores-porter and butcher; and William Waterton, second-class attendant. The two last had just been granted pensions when they died.

John Costiff, who had been baker since the opening of the Asylum, left on May 13th. He was suffering from severe phlegmonous inflammation of the left arm, also chronic rheumatism of feet and ankles, which rendered him quite unfit for further duty. He is now in receipt of a pension. Biscoe Haynes was stricken with right hemiplegia on the 8th October. He had been in the service 23 years, and his pension, which has been granted by the Board, is now under consideration of the Local Government Board.

Entertainments for the patients have been numerous and varied. Mr. Frampton Day's son and friends performed a piece called the "Arabian Nights" in February, which was much appreciated.

Our Chairman, Mr. Nathan Robinson, and friends, commenced the autumn season with one consisting of instrumental and vocal music, which gave immense pleasure to a large number of our patients and attendants. Mr. Silvester also gave us a performance—an operetta, written by himself, called "Who Stole the Tarts?" Needless to say, it elicited well-merited

applause. Mr. Barclay's Company (introduced by Mr. Pyne) played "Our Boys," and was considered a great treat.

Just before Christmas our own troupe performed Talfourd's burlesque, "Atalanta." I must once again state that these entertainments are essentially curative agents for our patients, and tend largely to relieve the monotonous work of our attendants.

The following additions and improvements have been made during the year:—

Horsehair Drying Room.—This room is fitted with galvanised iron tank for steaming the hair, and hot-water pipes and racks have been fixed for drying same.

Fireproof Floor, No. 2 Infirmary.—The old floor joists have been removed over upholsterers' shop and wrought-iron girders substituted, and the spaces filled in with coke breeze concrete.

A Brickdust Tennis Court has been made for the use of the female attendants and such of the patients as may be able to play.

Gasworks.—Alterations have been made, consisting of the removal of three old retorts and fixing a new bench of six retorts in their place; a new chimney shaft has been built at the other end of the retort house to equalise the draft; a new and larger boiler has taken the place of the old one; also a new tank has been built under ground, capable of holding 16,000 gallons, for the storage of rain water from the roofs, for supplying the boiler.

Water Closets.—Several pedestal seats have been fixed in those ward w.c.'s where the old seats were out of repair.

Hot Water Apparatus.—A new hot water apparatus has been built in the airing court between Infirmary Wards Nos. 1 and 3, by which means one boiler will heat the water for both Infirmaries, instead of two as formerly, one of which was most unsatisfactory.

Gas Reflectors have been fixed in the corridors on the male and female side for the purpose of economising the consumption of gas, and meters have been placed in each block.

The management of the farm by our Steward has again shown a very favourable result, notwithstanding the late exceptionally dry season.

My best thanks are due to my colleagues, medical and others, for their hearty co-operation in the working of the institution.

Thanking you, Gentlemen, for your continued confidence,

I am,

Your obedient Servant,

(Signed) H. CASE,

Medical Superintendent.

No. 13.

REPORT OF DR. G. STANLEY ELLIOT, MEDICAL SUPERINTENDENT
OF THE CATERHAM ASYLUM.

(For Statistics, see pp. 200 to 224.)

CATERHAM ASYLUM,

CATERHAM, SURREY,

*December 31st, 1892.**To the Committee of Management.*

MADAM AND GENTLEMEN,

I have the honour of submitting to you my Annual Report upon the general condition of the Asylum for the year 1893, together with the usual statistical tables affording information regarding the histories of the patients admitted, discharged, and deceased, and of those remaining under care at the end of the year.

The numerical results of the past year may be learned from the subjoined table:—

	Males.	Females.	Total.
On the 1st of January, 1893, the Asylum contained	941	1,071	2,012
There have been admitted during the year	86	76	162
The total number under treatment has been	1,027	1,147	2,174
Of this number there have been discharged	17	17	34
There have died	72	66	138
Remaining under treatment at the close of the year	938	1,064	2,002

THE ADMISSIONS.

There have been 56 less admissions than during the previous year. The patients admitted were the subjects of various forms of Insanity, comprising cases of Chronic Mania, Dementia, Idiocy, and Imbecility; these diseased conditions being in many cases complicated by Epilepsy. The majority of those received were in a very feeble and helpless condition, and utterly incapable of being occupied in any industrial pursuit. Table X.

reveals the fact that more than 29 per cent. were between 60 and 90 years of age. But little reliability can be placed on the causes of Insanity given by relatives, as, owing to interested reasons or ignorance, facts which would be of value in accounting for the origin of the disease are often withheld, and some trivial event is stated as the exciting cause, whilst the real predisposing one is not given. However, as far as I have been able to obtain reliable histories, heredity, alcoholism, either direct or indirectly, Epilepsy, and poverty, appear to have been the most potent factors in the causation of mental disease.

THE DISCHARGES.

The discharges numbered 34, consisting of four as recovered, nine as improved, one escape (not retaken), and 20 transferred to the County Asylum as having given evidence of being either dangerous to themselves or others, and unfit, therefore, for further detention here.

THE DEATHS.

The total number of deaths during the year was 138, and the percentage six on the average number resident. It is noteworthy that this is the lowest percentage of deaths recorded in this Asylum for the past nine years. Amongst the causes certified 10 were due to Epilepsy, 20 to Heart Disease, 10 to Pulmonary Consumption, whilst no less than 19 cases of Senile Decay added to the sum of mortality.

GENERAL HISTORY.

The average number of patients resident during the year was 2,010, and the highest number resident on any one day 2,021.

It is a matter of congratulation that there has been an entire freedom from epidemic disease, and that no fatal casualty has occurred during the year.

The Commissioners in Lunacy made their periodical visit of inspection in June, and the Local Government Board Inspectors have also visited the Asylum during the year and left satisfactory records as to the condition of the Asylum in the visitor's book.

The general health of the patients has been very satisfactory.

A very important structural addition has been carried out during the past year.

It being found that one of the two existing rain-water reservoirs, each of which was capable of storing 180,000 gallons, was amply sufficient for this purpose, even during the most rainy season, and as a difficulty had hitherto been experienced in having an ample supply of water at all times available

for use in the event of a fire occurring, or any accident to the pumping machinery, it was decided to utilise one of the reservoirs for the purpose of storing pure water. This work was carried out under the personal supervision of the foreman of works, and every sanitary precaution adopted in the conversion of the reservoir for this purpose. Extensive sanitary improvements have also been made with regard to the w.c.'s in the Asylum, which have been reconstructed, the objectionable lead D traps being removed, and white-glazed enamel S traps substituted. A special pan has replaced the old long hopper, and two-gallon syphon cisterns have taken the place of the one-and-a-half gallon valve cisterns, and new seats and pipes have been added. Although this alteration has increased the consumption of water per head it has very materially improved this important part of the sanitary system of the Asylum. The usual large contract for painting and cleaning a portion of the building was carried out in addition to several minor alterations and improvements.

All the patients that are capable of being usefully occupied—and I regret to have to add that they are decreasing yearly in number—have been utilized in the industrial work of the farm, garden, laundry, sewing-room, wards, &c., and undoubtedly reaped the beneficial effects of being thus engaged in some occupation, however light, instead of passing their necessarily uneventful lives in monotonous idleness.

The amusements provided have been of the usual varied character, the weekly associated dances during the winter months, and the picnics in the Home Wood during the summer, being especially appreciated.

I have again to thank several Members of the Committee for contributing to the happiness of the patients by bringing down concert parties from London, and my colleague, Dr. Campbell, continues to give me most valuable help in organising the musical portion of the entertainments.

The Royal Marriage Day was celebrated here as a national holiday, and a special dinner of Christmas fare provided for all the patients.

It has not been necessary to have recourse to mechanical restraint during the year; indeed, I have always held the opinion that such a form of restraint is only justifiable under the most exceptional circumstances, such as to prevent a maniacal or suicidal patient from self-inflicting bodily injury, or for strictly surgical purposes. I think there can be little doubt that such restraint otherwise tends to intensify the excitement by demoralising and irritating the patient, thus exercising an influence rather for evil than for good in the treatment of the insane.

A fire occurred in the earth-drying shed one evening in February last, owing to the overheating of the flue used for drying the earth required for the airing-court closets. The Asylum steam fire alarm was, however, at

once sounded, and almost immediately the Asylum Fire Brigade were on the spot and promptly extinguished the fire, happily before any serious mischief had been occasioned.

My acknowledgments are due to the various members of the staff who have assisted me in the general work of the Asylum.

In conclusion, I beg to thank you sincerely for the kind and valuable support and assistance you have given me in the discharge of my duties during an exceptionally responsible and trying year of office.

I have the honour to be,

Madam and Gentlemen,

Your obedient Servant,

(Signed) G. STANLEY ELLIOT,

Medical Superintendent.

No. 14.

REPORT OF DR. T. B. DYER, MEDICAL SUPERINTENDENT OF
THE DARENTH ASYLUM.

(For Statistics, see pp. 200 to 224.)

DARENTH ADULT ASYLUM,
NEAR DARTFORD, KENT,
January, 1894.

To the Committee of Management.

LADIES AND GENTLEMEN,

I have the honour to submit to you the Annual Report for the year 1893. The following table will explain the changes which have occurred during this year, and the various statistical tables are also appended :—

	Males.	Females.	Total.
In the Asylum, 1st January, 1893	436	582	1,018
Admitted during the year... ..	45	67	112
Discharged during the year	9	7	16
Died during the year... ..	28	67	95
Remaining in the Asylum 31st December, 1893	444	575	1,019

This year, again, we have admitted patients over 16 years of age, chiefly from the Schools, with the exception of 23 females from County Asylums who had been discharged from them as chronic and harmless cases. At present the vacancies caused by deaths and discharges have proved sufficient to relieve the Schools, but we shall not be able to take many more of the helpless cases of the Schools, as our present accommodation for this class is nearly exhausted. When, however, the new Asylum is built to receive the chronic and aged infirm, as is contemplated, we shall have more room for the helpless cases again.

The deaths have been more numerous this year, but the great cold of

last winter, and the influenza during the winter months, caused much sickness amongst the patients, and was in many cases followed by secondary lung mischief. Only one inquest was held, that being on a female patient aged 84, who had slipped off her chair, fracturing two ribs. Broncho-Pneumonia following accelerated her death.

The discharges were but few: two females as improved, nine males and three females as not improved, but who had become dangerous to others; also two females that were unable to be signed for by the Dartford Magistrates under the Lunacy Act of 1890.

At the latter part of the year there has been much sickness amongst the staff, principally from Influenza and Pneumonia, and from which our *head female attendant, Mrs. Eager, is now suffering. During the spring I regret to say that one of the female attendants died from the effects of Gastric Ulcer.

Since having stopped the admission of patients from Parishes and Unions, we are getting very short of fresh working patients, as most of those transferred from the Schools are practically useless for helping in the wards or shops. As many old cases as possible, however, are usefully employed in the various shops, farm, and different departments of the Asylum as usual.

We have to thank an amateur company from London for kindly giving two theatrical performances to the patients this year. The weekly dances or amusements in the winter, and the cricket in the summer, continue to be much appreciated. The annual summer fête was thoroughly enjoyed, the weather being favourable. Walks in the neighbourhood are also indulged in by the patients at times, and by the kindness of the Dartford Chrysanthemum Society about 50 of the patients were invited to the winter show, which visit they much enjoyed. The extra fare and the amusements provided on the Royal Wedding Day gave also much pleasure.

In consequence of the damp penetrating the walls of the Asylum in bad weather, the Committee have had the whole of the front of the administrative block cemented during this spring, and it has had the desired effect of keeping this portion dry. The shops have been extended, and additional space provided for the workers, thus adding greatly to their daily comfort. The workroom used for the mending of the male patients' linen was found to be too small for the numbers employed, and the Committee have sanctioned the Matron's store-room to be used for this purpose. The change is working very satisfactorily.

* Since died, January 12th, 1894.

During the year we have had visits from the Local Government Board Inspectors, the Commissioners in Lunacy, and also a visit of inspection by the late Lord Mayor of London, Alderman Sir Stuart Knill.

Since the appointment of the present Chaplain, the Rev. M. Jenkins, services to the adult patients have been held on Sunday mornings instead of the afternoon as formerly, about 500 patients attending.

I have again to thank the Committee for their continued kindness and support, and the officers and staff for their co-operation.

I am, Ladies and Gentlemen,

Your obedient Servant,

(Signed) T. B. DYER,

Medical Superintendent.

LUNACY STATISTICS.—TABLE I.—*Showing*

	LEAVESDEN ASYLUM.					
	Males.	Females.	Total.	Males.	Females.	Total.
In the Asylums, 1st January, 1893...	...	...	...	889	1,098	1,987
Admitted for the first time during the year, direct from the several Parishes and Unions ...	156	95	251	...	...	...
Re-admitted during the year...	4	...	4	...	...	...
Admitted from other Asylums of the Board ...	...	...	...	160	95	255
Total under care during the year ...	...	...	...	1,049	1,193	2,242
Discharged—						
Not insane ...	1	...	1	...	...	...
Recovered ...	13	5	18	...	...	...
Improved ...	10	...	10	...	...	...
Not improved ...	9	7	16	...	...	...
To other Asylums of Board...	...	...	...	...	...	...
Not certified ...	...	...	...	...	...	...
Died ...	117	85	202	...	...	...
Total discharged (for various reasons) and died during the year ...	...	...	...	150	97	247
Remaining in the Asylums, 31st December, 1893...	...	...	...	899	1,096	1,995
Average numbers resident during the year ...	...	...	...	894	1,097	1,991
Highest number resident on any one day ...	...	...	...	901	1,100	2,001
Lowest number resident on any one day ...	...	...	...	893	1,087	1,980

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 23 $\frac{82}{105}$ years, direct from the several Parishes and Unions ...	3,409	3,404	6,813	...	...	...
Re-admissions ...	49	15	55	...	...	...
Admitted from other Asylums of Board ...	182	232	414	...	...	...
Total of cases admitted ...	...	...	...	3,631	3,651	7,282
Discharged—						
Not certified ...	...	...	...	...	...	...
Not insane ...	1	5	6	...	...	...
Recovered ...	188	113	301	...	...	...
Improved ...	190	141	331	...	...	...
Not improved ...	227	239	466	...	...	...
To other Asylums of Board ...	44	33	77	...	...	...
Died ...	2,082	2,024	4,106	...	...	...
Total discharged and died during the 23 $\frac{82}{105}$ years ...	...	...	...	2,732	2,555	5,287
Remaining 31st December, 1893 ...	...	...	...	899	1,096	1,995
Average numbers resident during the 23 $\frac{82}{105}$ years ...	...	...	...	824	1,040	1,864

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

the Admissions, Re-admissions, Discharges, and Deaths during the Year 1893.

CATERHAM ASYLUM.						DARENTH ASYLUM.						SUMMARY.					
Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
...	...	...	941	1,071	2,012	...	...	...	436	582	1,018	...	...	...	2,266	2,751	5,017
86	76	162	...	...	...	...	23	23	...	...	...	242	194	436	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	4	...	4	...	...	...
...	...	...	...	...	...	45	44	89	...	...	...	45	44	89	...	...	...
...	...	...	86	76	162	...	...	...	45	67	112	...	...	...	291	238	529
...	...	...	1,027	1,147	2,174	...	...	...	481	649	1,130	...	...	...	2,557	2,989	5,546
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
2	2	4	...	...	...	...	...	...	...	...	...	15	7	22	...	...	...
4	5	9	...	...	...	...	...	...	...	...	...	14	7	21	...	...	...
11	10	21	...	...	...	9	2	11	...	...	...	29	20	49	...	...	...
...
...
72	66	138	...	...	...	28	67	95	...	...	...	217	218	435	...	...	...
...	...	...	89	83	172	...	...	...	37	74	111	...	...	...	276	254	530
...	...	...	938	1,064	2,002	...	...	...	444	575	1,019	...	...	...	2,281	2,735	5,016
...	...	...	940	1,070	2,010	...	...	...	445	574	1,019	...	...	...	2,279	2,741	5,020
...	...	...	945	1,076	2,021	...	...	...	449	586	1,035	...	...	...	2,295	2,762	5,057
...	...	...	938	1,064	2,002	...	...	...	446	561	1,007	...	...	...	2,277	2,712	4,989

the Opening of the First Asylum to the present date, 31st December, 1893.

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

CATERHAM ASYLUM.						DARENTH ASYLUM.						SUMMARY.					
Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
702	3,330	7,032	...	...	...	775	1,136	1,911	...	...	...	7,886	7,870	15,756	...	...	...
29	28	57	...	...	...	2	9	11	...	...	...	71	52	123	...	...	...
128	204	332	...	...	...	369	329	698	...	...	...	679	765	1,444	...	...	...
...	...	...	3,859	3,562	7,421	...	...	...	1,146	1,474	2,620	...	...	...	8,636	8,687	17,323
...	...	...	...	...	...	7	14	21	...	...	...	7	14	21	...	...	...
4	2	6	...	...	...	...	...	...	...	...	...	5	7	12	...	...	...
222	170	392	...	...	...	30	21	51	...	...	...	438	301	739	...	...	...
256	153	409	...	...	...	110	113	223	...	...	...	556	407	963	...	...	...
169	156	325	...	...	...	77	89	166	...	...	...	473	484	957	...	...	...
87	48	135	...	...	...	73	82	155	...	...	...	204	163	367	...	...	...
185	1,972	4,157	...	...	...	405	580	985	...	...	...	4,672	4,576	9,248	...	...	...
...	...	...	2,921	2,498	5,419	...	...	...	702	899	1,601	...	...	...	6,355	5,952	12,307
...	...	...	938	1,064	2,002	...	...	...	444	575	1,019	...	...	...	2,281	2,735	5,016
...	...	...	832	1,048	1,880	...	...	...	307	458	765	...	...	...	1,963	2,546	4,509

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

LUNACY STATISTICS.—TABLE III.—*Showing the Admissions, Discharges, and Admissions for the year 1884,*

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.																		
1884	...	58	96	...	...	154	1	8	9	4	7	11	4	7	11	...	...	...
1885	...	73	97	...	...	170	7	9	16	4	5	9	3	6	9	...	...	...
1886	...	65	86	...	...	151	...	1	1	4	1	5	9	5	14	...	...	...
1887	...	82	92	...	...	174	2	1	3	6	2	8	7	4	11	...	...	...
1888	...	73	83	...	...	156	5	4	9	4	1	5	5	5	10	...	...	...
1889	...	142	122	...	...	264	3	4	7	10	5	15	5	11	16	...	...	...
1890	...	163	157	...	...	320	12	9	21	7	7	14	5	6	11	...	...	...
1891	...	179	150	...	...	329	13	8	21	14	12	26	7	†9	16	...	...	...
1892	...	185	152	...	...	337	17	7	24	7	4	11	13	14	27	...	...	...
1893	...	160	95	...	...	255	13	5	18	10	...	10	10	7	17	...	...	...
CATERHAM ASYLUM.																		
1884	...	100	103	...	...	203	4	11	15	5	9	14	4	4	8	...	...	...
1885	...	62	51	...	...	113	8	6	14	4	2	6	1	...	1	...	...	...
1886	...	118	92	...	...	210	6	5	11	4	4	8	3	2	5	...	...	...
1887	...	105	91	...	...	196	8	5	13	9	6	15	3	5	8	...	...	...
1888	...	83	81	...	...	164	6	6	12	4	1	5	8	7	15	...	...	...
1889	...	92	79	...	...	171	13	4	17	1	2	3	6	7	13	...	...	...
1890	...	121	123	...	...	244	5	2	7	4	3	7	5	6	11	...	...	...
1891	...	104	108	...	...	212	*3	4	7	2	5	7	5	7	12	...	...	...
1892	...	103	115	...	...	218	*5	2	7	5	3	8	6	8	14	...	...	...
1893	...	86	76	...	...	162	2	2	4	4	5	9	11	10	21	...	...	...
DARENTH ASYLUM.																		
1884	...	57	67	...	...	124	6	7	13	3	4	7	8	14	22	...	...	...
1885	...	40	54	22	30	146	23	10	33	...	...	...	9	8	17	...	...	...
1886	...	46	63	20	8	137	...	...	...	27	21	48	3	10	13	...	...	...
1887	...	41	39	12	69	161	...	...	...	19	20	39	4	7	11	...	...	...
1888	...	49	70	124	46	289	...	...	...	18	14	32	2	6	8	21	40	61
1889	...	128	113	26	9	276	...	...	...	26	10	36	8	6	14	...	...	...
1890	...	74	86	...	...	160	...	...	...	3	23	26	11	8	19	52	42	94
1891	...	59	92	...	...	151	7	12	†19	4	8	12	8	4	12	...	...	...
1892	...	24	20	11	31	86	...	...	...	3	2	5	10	4	14	...	...	...
1893	23	45	44	112	...	2	†2	...	2	2	9	3	12	...	...	...
SUMMARY.																		
1884	...	215	266	...	...	481	11	26	37	12	20	32	16	25	41	...	...	...
1885	...	175	202	22	30	429	38	25	63	8	7	15	13	14	27	...	...	...
1886	...	229	241	20	8	498	6	6	12	35	26	61	15	17	32	...	...	...
1887	...	228	222	12	69	531	10	6	16	34	28	62	14	16	30	...	...	...
1888	...	205	234	124	46	609	11	10	21	26	16	42	15	18	33	21	40	61
1889	...	362	314	26	9	711	16	8	24	37	17	54	19	24	43	...	...	...
1890	...	358	366	...	...	724	17	11	28	14	33	47	21	20	41	52	42	94
1891	...	342	350	...	...	692	23	24	47	20	25	45	20	20	40	...	...	...
1892	...	312	287	11	31	641	22	9	31	15	9	24	29	26	55	...	...	...
1893	...	246	194	45	44	529	15	9	24	14	7	21	29	20	49	...	...	...

* 1 Not insane.

† Not certified.

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

DIED.			Remaining 31st December.			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.
53	73	126	890	1,091	1,981	898	1,095	1,993	1·7	8·3	5·8	5·9	6·6	6·3
58	89	147	891	1,079	1,970	895	1,085	1,980	9·4	9·2	9·7	6·4	8·2	7·4
58	58	116	885	1,100	1,985	893	1,095	1,988	0·0	1·1	0·6	6·5	5·3	5·8
52	93	145	900	1,092	1,992	895	1,092	1,987	2·4	1·1	1·7	5·8	8·5	7·3
76	76	152	883	1,089	1,972	890	1,090	1,980	6·8	4·8	5·7	8·5	7·0	7·7
124	109	233	883	1,082	1,965	887	1,085	1,972	2·1	3·2	2·6	13·9	10·0	11·8
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
69	65	134	931	1,078	2,009	930	1,082	2,012	4·0	10·6	7·3	7·4	6·0	6·6
74	64	138	906	1,057	1,963	913	1,060	1,973	12·9	11·7	12·3	8·1	6·0	6·9
78	69	147	933	1,069	2,002	915	1,061	1,976	5·0	5·4	5·2	8·5	6·5	7·4
75	74	149	943	1,070	2,013	928	1,072	2,000	7·6	5·4	6·6	8·0	6·9	7·4
78	85	163	930	1,052	1,982	936	1,068	2,004	7·2	7·4	7·3	8·3	7·9	8·1
83	72	155	919	1,046	1,965	930	1,048	1,978	14·1	5·0	9·9	8·9	6·8	7·8
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
36	40	76	308	474	782	308	476	784	10·5	10·4	10·4	11·6	8·4	9·6
36	59	95	302	481	783	298	447	745	37·0	11·9	22·6	12·0	13·1	12·7
26	37	63	312	484	796	310	481	791	...	...	...	8·3	7·6	8·0
25	34	59	317	531	848	307	483	790	...	...	...	8·1	7·0	7·4
31	40	71	418	547	965	330	530	860	...	...	...	9·3	7·5	8·2
54	53	107	484	600	1,084	467	588	1,055	...	...	...	11·5	9·0	10·1
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
158	178	336	2,129	2,643	4,772	2,136	2,653	4,789	5·1	19·7	7·6	7·3	6·7	7·0
168	212	380	2,099	2,617	4,716	2,106	2,592	4,698	19·2	10·7	14·6	7·9	8·1	8·0
162	164	326	2,130	2,653	4,783	2,118	2,637	4,755	2·0	2·4	2·4	7·6	6·2	6·9
152	201	353	2,160	2,693	4,853	2,130	2,647	4,777	4·1	2·0	3·0	7·1	7·6	7·3
185	201	386	2,231	2,688	4,919	2,156	2,688	4,844	3·3	3·5	3·4	8·5	7·4	7·9
261	234	495	2,286	2,728	5,014	2,284	2,721	5,005	4·1	2·5	3·5	11·4	8·5	9·8
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

LUNACY STATISTICS.—TABLE IV.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients admitted during the year 1893 direct from the several Parishes and Unions.*

MENTAL DISEASES.	LEAVESDEN ASYLUM.			CATERHAM ASYLUM.			DARENTH ASYLUM.			SUMMARY.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Mania ... ..	...	...	...	1	2	3	...	...	...	1	2	3
Mania (Chronic)...	...	...	...	6	12	18	...	4	4	6	16	22
Mania and Epilepsy ...	...	...	...	1	3	4	...	...	...	1	3	4
Melancholia... ..	3	...	3	3	3	6	...	...	...	6	3	9
General Paresis	10	5	15	9	3	12	...	...	..	19	8	27
Dementia	63	34	97	26	18	44	...	17	17	89	69	158
Dementia and Paralysis	...	1	1	1	...	1	...	...	...	1	1	2
Dementia and Epilepsy	29	11	40	6	...	6	...	...	...	35	11	46
Senile Dementia... ..	10	9	19	4	10	14	...	...	...	14	19	33
Idiocy	6	13	19	2	3	5	...	...	...	8	16	24
Imbecility	29	9	38	22	14	36	...	...	...	51	23	74
Imbecility and Epilepsy	1	5	6	5	8	13	...	...	...	6	13	19
Of Weak Mind	7	3	10	...	...	...	...	2	2	7	5	12
Mental Stupor ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Adolescent Insanity ...	...	1	1	...	...	..	...	...	...	...	1	1
Alcoholic Derangement	1	1	2	...	...	...	...	...	...	1	1	2
Idiocy and Epilepsy ...	...	3	3	...	...	...	...	...	...	...	3	3
Not Insane	1	...	1	...	...	...	...	...	...	1	...	1
Totals	160	95	255	86	76	162	...	23	23	246	194	440

LUNACY STATISTICS.—TABLE V.—*Classifying, under the usual denominations of Mental Disease, the Mental Condition of the Patients resident in the Asylum on the 31st December, 1893.*

MENTAL DISEASES.	LEAVESDEN ASYLUM.			CATERHAM ASYLUM.			DARENTH ASYLUM.			SUMMARY.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Mania	30	7	37	1	11	12	...	...	...	31	18	49
Mania, Chronic	55	78	133	20	79	99	22	40	62	97	197	294
Mania and Epilepsy ...	3	8	11	...	2	2	6	...	6	9	10	19
Melancholia... ..	12	55	67	44	60	104	3	2	5	59	117	176
General Paresis	12	11	23	16	5	21	5	3	8	33	19	52
Dementia	206	266	472	359	386	745	23	97	120	588	749	1,337
Dementia and Paralysis	9	50	59	46	35	81	8	11	19	63	96	159
Dementia and Epilepsy	84	130	214	73	112	185	39	46	85	196	288	484
Senile Dementia ...	48	68	116	22	4	26	20	56	76	90	128	218
Idiocy	56	52	108	27	20	47	36	55	91	119	127	246
Imbecility	279	155	434	325	350	675	186	155	341	790	660	1,450
Imbecility and Epilepsy	69	141	210	5	...	5	85	93	178	159	234	393
Of Weak Mind	25	24	49	...	...	...	11	17	28	36	41	77
Mental Stupor	7	20	27	...	...	...	...	...	...	7	20	27
Delusional Insanity ...	4	15	19	...	...	...	...	...	...	4	15	19
Epilepsy & Incipient Dementia } ...	...	13	13	...	...	...	...	...	...	...	13	13
Delusional Insanity } and Epilepsy } ...	...	1	1	...	...	...	...	...	...	...	1	1
Alcoholic Derangement	...	2	2	...	...	...	...	...	...	...	2	2
Totals	899	1,096	1,995	938	1,064	2,002	444	575	1,019	2,281	2,735	5,016

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

YEAR.	ADMITTED.							OF EACH YEAR'S ADMISSIONS, DISCHARGED AND DIED IN 1893.														
	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.
LEAVESDEN ASYLUM.																						
1870 (part of)...	468	556	...	...	...	...	1,024	...	...	...	...	...	...	...	...	...	...	...	8	5	13
1871 ...	520	545	...	...	...	...	1,065	...	...	...	...	...	...	...	...	...	...	...	6	8	14
1872 ...	163	256	...	...	...	...	419	...	...	...	...	...	...	...	...	...	...	...	2	9	11
1873 ...	141	165	...	...	41	30	377	...	...	...	...	...	...	...	...	...	...	...	1	3	4
1874 ...	115	149	1	...	1	13	279	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1875 ...	111	108	1	1	...	...	221	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1876 ...	158	79	...	...	126	184	547	...	...	...	...	...	...	...	...	...	...	...	4	5	9
1877 ...	95	...	...	...	1	4	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1878 ...	69	1	1	...	13	...	84	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1879 ...	80	89	...	...	...	...	169	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1880 ...	92	75	...	...	...	...	167	...	...	...	...	...	...	...	...	...	...	...	1	1	2
1881 ...	85	71	4	1	...	...	161	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1882 ...	82	85	3	2	...	...	172	...	...	...	...	...	...	...	...	...	...	...	1	2	3
1883 ...	75	106	5	1	...	...	187	...	...	...	...	1	...	1	...	...	...	...	3	2	5
1884 ...	56	96	2	...	...	...	154	...	...	...	...	...	...	...	...	...	...	...	1	2	3
1885 ...	71	97	2	...	...	...	170	...	...	...	...	1	...	1	...	...	...	...	...	1	1
1886 ...	62	83	3	3	...	...	151	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1887 ...	80	92	2	...	...	...	174	...	...	...	...	...	...	...	...	...	...	...	4	3	7
1888 ...	71	83	2	...	...	...	156	...	...	...	...	...	...	...	...	...	...	...	2	4	6
1889 ...	140	121	2	1	...	...	264	1	...	1	...	...	...	...	...	...	...	...	6	3	9
1890 ...	162	155	1	2	...	...	320	...	...	...	...	...	...	...	...	...	...	...	12	9	21
1891 ...	176	148	3	2	...	...	329	1	1	...	...	1	2	3	...	...	...	10	7	17	
1892 ...	181	149	4	2	...	1	337	5	3	8	5	5	3	4	7	...	...	...	35	14	49
1893 ...	156	95	4	...	...	...	255	7	1	8	5	5	4	1	5	...	...	...	18	4	22
Totals ...	3,409	3,404	40	15	182	232	7,282	13	5	18	10*	10	10	7	17	...	...	...	117	85	202
CATERHAM ASYLUM.																						
1870 (part of) ...	156	202	...	...	...	...	358	...	...	...	...	...	...	...	...	...	...	...	3	4	7
1871 ...	664	870	...	...	...	...	1,534	...	...	...	...	...	1	1	...	...	...	...	6	9	15
1872 ...	259	161	...	...	...	...	420	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1873 ...	183	167	1	...	...	...	351	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1874 ...	240	169	2	3	72	36	522	...	...	...	...	...	...	...	...	...	...	...	2	2	4
1875 ...	158	180	...	...	...	...	338	...	...	...	...	...	...	...	...	...	...	...	...	3	3
1876 ...	173	170	5	5	33	167	553	...	...	...	...	...	...	...	...	...	...	...	...	2	2
1877 ...	178	56	2	...	...	1	237	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1878 ...	157	47	...	...	17	...	221	...	...	...	...	...	...	...	...	...	...	...	2	...	2
1879 ...	176	84	...	...	6	...	266	...	...	...	...	2	1	3	...	...	...	...	3	1	4
1880 ...	122	87	2	6	...	...	217	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1881 ...	122	105	...	...	...	...	227	...	...	...	...	...	...	...	...	...	...	...	1	2	3
1882 ...	81	85	...	2	...	...	168	...	...	...	...	...	...	...	...	...	...	...	...	3	3
1883 ...	73	37	3	3	...	...	116	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1884 ...	98	102	2	1	...	...	203	...	...	...	...	1	1	2	...	...	...	...	3	2	5
1885 ...	59	48	3	3	...	...	113	...	...	...	...	1	...	1	...	...	...	...	1	1	2
1886 ...	115	91	3	1	...	...	210	...	...	1	1	2	1	...	1	...	...	...	1	3	4
1887 ...	103	90	2	1	...	...	196	...	...	...	...	...	...	...	...	...	...	...	6	3	9
1888 ...	83	81	...	...	...	...	164	...	...	1	...	1	1	...	1	...	...	...	1	3	4
1889 ...	92	78	...	1	...	...	171	...	...	1	...	1	...	...	...	...	...	...	4	2	6
1890 ...	119	122	2	1	...	...	244	...	...	1	1	2	1	2	3	...	...	...	6	6	12
1891 ...	104	108	...	...	...	...	212	...	...	...	...	...	...	...	...	...	...	...	6	8	14
1892 ...	101	114	2	1	...	...	218	1	2	3	...	...	2	2	...	...	...	...	11	5	16
1893 ...	86	76	...	...	...	...	162	1	...	1	3	3	4	3	7	...	...	...	14	5	19
Totals ...	3,702	3,330	29	28	128	204	7,421	2	2	4	4	5	9	11	10	21	72	66	138

* Includes 1 not insane.

Admissions since the opening of the Asylums, with the Discharges and Deaths and the remaining on the 31st December, 1893.

TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS TO 31ST DECEMBER, 1893.															REMAINING OF EACH YEAR'S ADMISSIONS, 31ST DECEMBER, 1893.		
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.
15	8	23	25	19	44	24	44	68	12	4	16	314	400	714	78	81	159
20	15	35	29	23	52	49	48	97	15	10	25	336	358	694	71	91	162
12	6	18	12	11	23	14	14	28	5	14	19	115	167	282	5	44	49
9	4	13	8	6	14	16	21	37	10	5	15	119	125	244	20	34	54
7	2	9	2	7	9	12	16	28	2	...	2	89	103	192	5	34	39
5	3	8	3	5	8	17	13	30	...	...	...	69	62	131	18	26	44
12	3	15	18	7	25	11	12	23	...	...	...	180	166	346	63	75	138
7	...	7	5	...	5	3	...	3	...	...	...	59	1	60	22	3	25
5	...	5	4	...	4	3	...	3	...	...	...	51	1	52	20	...	20
3	3	6	3	5	8	3	6	9	...	...	...	56	50	106	15	25	40
8	4	12	9	8	17	8	2	10	...	...	...	56	33	89	11	28	39
10	7	17	6	5	11	5	3	8	...	...	...	52	42	94	16	15	31
3	6	9	3	5	8	3	3	6	...	...	...	54	53	107	22	20	42
3	2	5	5	8	13	4	7	11	...	...	...	53	56	109	15	34	49
1	8	9	3	3	6	4	7	11	...	...	...	33	58	91	17	20	37
4	9	13	5	3	8	5	5	10	...	...	...	46	48	94	13	32	45
2	...	2	3	1	4	7	3	10	...	...	...	32	44	76	21	38	59
4	3	7	5	2	7	5	4	9	...	...	...	48	47	95	20	36	56
4	3	7	4	2	6	5	3	8	...	...	...	42	30	72	18	45	63
9	4	13	9	4	13	5	8	13	...	...	...	76	47	123	43	59	102
14	11	25	10	8	18	6	6	12	...	...	...	72	66	138	61	66	127
12	5	17	7	8	15	6	10	16	...	...	...	66	40	106	88	87	175
12	6	18	7	1	8	9	8	17	...	...	...	46	23	69	111	114	225
7	1	8	5	...	5	4	1	5	...	...	...	18	4	22	126	89	215
88	113	301	190	141	331	228	244	472*	44	33	77	2,082	2,024	4,106	899	1,096	1,995
4	4	8	7	13	20	6	7	13	2	1	3	94	134	228	43	43	86
47	31	78	50	30	80	47	36	83	19	6	25	444	608	1,052	57	159	216
24	12	36	24	10	34	11	9	20	16	11	27	167	101	268	17	18	35
19	10	29	19	6	25	13	19	32	11	8	19	99	107	206	23	17	40
18	24	42	30	13	43	...	...	...	36	18	54	192	122	314	38	33	71
13	11	24	10	8	18	8	8	16	1	3	4	108	118	226	18	32	50
2	11	13	21	13	34	5	9	14	...	...	...	136	204	340	47	105	152
...	...	...	14	4	18	3	3	6	1	...	1	127	33	160	35	17	52
5	3	8	11	1	12	3	5	8	1	...	1	104	25	129	50	13	63
6	4	10	9	4	13	13	1	14	...	...	...	119	40	159	35	35	70
7	4	11	11	7	18	8	7	15	...	...	...	74	53	127	24	22	46
3	2	5	6	5	11	10	4	14	...	...	...	66	59	125	37	35	72
9	10	19	5	5	10	2	5	7	...	...	...	41	47	88	24	19	43
11	4	15	4	3	7	3	1	4	...	1	1	39	17	56	19	14	33
7	12	19	8	10	18	4	4	8	...	...	...	51	47	98	30	30	60
2	2	4	...	1	1	3	2	5	...	...	...	34	29	63	23	17	40
12	5	17	7	6	13	7	4	11	...	...	...	58	39	97	34	38	72
7	4	11	6	2	8	6	6	12	...	...	...	44	36	80	42	43	85
4	4	8	6	...	6	4	4	8	...	...	...	41	42	83	28	30	58
8	2	10	4	3	7	5	8	13	...	...	...	45	27	72	30	39	69
6	5	11	3	3	6	4	5	9	...	...	...	46	38	84	62	72	134
5	2	7	1	2	3	2	3	5	...	...	...	26	30	56	70	71	141
2	2	4	...	1	1	...	4	4	...	...	...	16	11	27	85	97	182
1	...	1	3	3	4	4	3	7	...	...	...	14	5	19	67	65	132
22	168	390	256	153	409	171	157	328†	87	48	135	2,185	1,972	4,157	938	1,064	2,002

* Includes 1 male and 5 females not insane. † Includes 2 males and 1 female not insane.

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

YEAR.	ADMITTED.							OF EACH YEAR'S ADMISSIONS, DISCHARGED AND DIED IN 1893.														
	New Cases.		Relapsed Cases.		From other Asylums of Board.		Total.	Recovered.			Impr'ved.			Not Improved.			To other Asylums of Board.			Died.		
	Males.	Females.	Males.	Females.	Males.	Females.		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
DARENTH ASYLUM.																						
1880	...	163	...	...	25	54	242	...	...	...	...	...	...	...	...	...	...	...	...	12	12
1881	...	15	...	1	...	13	29	...	...	...	...	...	...	...	...	...	...	...	...	1	1
1882	...	152	185	...	1	78	17	433	...	...	...	...	1	...	1	...	...	...	...	5	5
1883	...	107	153	...	...	6	8	274	...	...	...	...	1	...	1	...	...	...	...	3	4
1884	...	57	67	...	...	...	...	124	...	...	...	...	...	...	...	...	...	...	...	2	2
1885	...	40	54	...	...	22	30	146	...	...	...	...	...	...	...	...	...	...	...	1	3
1886	...	45	62	1	1	20	8	137	...	...	...	...	1	1	...	...	...	...	...	1	...
1887	...	41	35	...	4	12	69	161	...	...	...	...	1	1	...	...	...	...	...	2	4
1888	...	49	70	...	...	124	46	289	...	...	...	1	1	2	...	2	...	...	...	...	4
1889	...	127	112	1	1	26	9	276	...	...	...	...	1	...	1	...	...	...	...	5	7
1890	...	74	86	...	...	...	...	160	...	...	...	...	1	1	...	...	...	...	...	6	9
1891	...	59	92	...	...	...	...	151	...	...	...	...	3	...	3	...	...	...	...	3	13
1892	...	24	19	...	1	11	31	86	...	...	...	1	1	1	...	1	...	...	...	1	2
1893	23	...	...	45	44	112	...	2	*2	...	...	...	...	...	...	...	...	1	1	
Totals	...	775	1,136	2	9	369	329	2,620	...	2	2	...	2	2	9	3	12	...	...	28	67
SUMMARY.																						
Part of } 1870	...	624	758	...	...	...	...	1,382	...	...	...	...	...	...	...	...	...	...	...	11	9
1871	...	1,184	1,415	...	...	...	...	2,599	...	...	...	...	...	1	1	...	...	...	...	12	17
1872	...	422	417	...	...	...	...	839	...	...	...	...	...	...	...	...	...	...	...	2	9
1873	...	324	332	1	...	41	30	728	...	...	...	...	...	...	...	...	...	...	...	1	4
1874	...	355	318	3	3	73	49	801	...	...	...	...	...	...	...	...	...	...	...	3	3
1875	...	269	288	1	1	...	...	559	...	...	...	...	...	...	...	...	...	...	...	1	3
1876	...	331	249	5	5	159	351	1,100	...	...	...	...	...	...	...	...	...	...	...	4	7
1877	...	273	56	2	...	1	5	337	...	...	...	...	...	...	...	...	...	...	...	1	...
1878	...	226	48	1	...	30	...	305	...	...	...	...	...	...	...	...	...	...	...	2	...
1879	...	256	173	...	...	6	...	435	...	...	...	...	2	1	3	...	...	...	...	4	1
1880	...	214	323	2	6	25	54	626	...	...	...	...	...	...	...	...	...	...	...	2	13
1881	...	207	191	4	2	...	13	417	...	...	...	...	...	...	...	...	...	...	...	1	4
1882	...	315	355	3	5	78	17	773	...	...	...	...	1	...	1	...	...	...	...	6	10
1883	...	255	296	8	4	6	8	577	...	...	...	...	2	...	2	...	...	...	...	6	7
1884	...	211	265	4	1	...	...	481	...	...	...	...	1	1	2	...	...	...	...	4	6
1885	...	170	199	5	3	22	30	429	...	...	...	...	2	...	2	...	...	...	...	2	5
1886	...	222	236	7	5	20	8	498	...	...	1	1	2	1	1	2	...	...	...	2	4
1887	...	224	217	4	5	12	69	531	...	...	...	...	1	1	...	...	...	...	...	12	10
1888	...	203	234	2	...	124	46	609	...	...	1	1	2	3	...	3	...	...	...	3	11
1889	...	359	311	3	3	26	9	711	1	...	1	2	...	2	1	...	1	...	...	15	12
1890	...	355	363	3	3	...	...	724	...	...	1	1	2	1	3	4	...	...	...	24	24
1891	...	339	348	3	2	...	...	692	...	1	1	...	...	4	2	6	...	...	...	19	28
1892	...	306	282	6	4	11	32	641	6	5	11	5	1	6	4	6	10	...	...	47	21
1893	...	242	194	4	...	45	44	529	8	3	11	5	3	8	8	4	12	...	...	33	10
Grand Totals	...	7,886	7,870	71	52	679	765	17,323	15	9	24	15	7	22	30	20	50	...	...	217	218

* Uncertified.

the Annual Admissions since the opening of the Asylum, with the Discharges and admissions remaining on the 31st December, 1893.

TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS, 31ST DECEMBER, 1893.															REMAINING OF EACH YEAR'S ADMISSIONS, 31ST DECEMBER, 1893.		
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	11	12	...	3	3	3	114	117	13	74	87
...	2	2	...	5	5	...	1	1	...	...	...	...	12	12	...	9	9
8	4	12	20	14	34	8	16	24	2	1	3	106	106	212	86	62	148
7	6	13	9	8	17	14	17	31	...	1	1	70	84	154	13	45	58
7	3	10	8	7	15	7	8	15	...	...	...	26	38	64	9	11	20
6	3	9	13	9	22	3	5	8	2	2	4	20	41	61	18	24	42
...	...	...	10	14	24	1	8	9	2	1	3	29	29	58	24	19	43
...	...	...	14	4	18	3	6	9	...	4	4	21	27	48	15	67	82
...	...	...	14	12	26	7	6	13	56	67	123	28	31	59	68	...	68
...	...	...	12	17	29	15	5	20	11	3	14	54	38	92	62	59	121
...	...	...	...	...	...	10	5	15	...	...	...	27	32	59	37	49	86
7	12	19	4	8	12	7	1	8	...	...	...	15	25	40	26	46	72
...	...	...	...	3	3	1	...	1	...	...	...	5	2	7	29	46	75
...	2	2	...	...	...	...	...	...	...	...	...	1	1	2	44	64	108
37	35	72*	110	113	223	77	89	166	73	82	155	405	580	985	444	575	1,019
19	12	31	32	32	64	30	51	81	14	5	19	408	534	942	121	124	245
37	46	113	79	53	132	96	84	180	34	16	50	780	966	1,746	128	250	378
36	18	54	36	21	57	25	23	48	21	25	46	282	268	550	22	62	84
28	14	42	27	12	39	29	40	69	21	13	34	218	232	450	43	51	94
25	26	51	32	20	52	12	16	28	38	18	56	281	225	506	43	67	110
18	14	32	13	13	26	25	21	46	1	3	4	177	180	357	36	58	94
4	14	28	39	20	59	16	21	37	...	...	...	316	370	686	110	180	290
7	...	7	19	4	23	6	3	9	1	...	1	186	34	220	57	20	77
0	3	13	15	1	16	6	5	11	1	...	1	155	26	181	70	13	83
9	7	16	12	9	21	16	7	23	...	...	...	175	90	265	50	60	110
7	11	28	26	27	53	17	20	37	...	3	3	133	200	333	48	124	172
3	11	24	12	15	27	15	8	23	...	...	...	118	113	231	53	59	112
20	20	40	28	24	52	13	24	37	2	1	3	201	206	407	132	101	233
21	12	33	18	19	37	21	25	46	...	2	2	162	157	319	47	93	140
5	23	38	20	21	41	15	19	34	...	...	...	110	143	253	56	61	117
2	14	26	18	13	31	11	12	23	2	2	4	100	118	218	54	73	127
4	5	19	19	20	39	15	15	30	2	1	3	119	112	231	79	95	174
1	7	18	25	8	33	14	16	30	...	4	4	113	110	223	77	146	223
8	7	15	24	14	38	16	13	29	56	67	123	111	103	213	114	75	189
7	6	23	25	24	49	25	21	46	11	3	14	175	112	287	135	157	292
20	16	36	13	11	24	20	16	36	...	...	...	145	136	281	160	187	347
24	19	43	12	18	30	15	14	29	...	...	...	107	95	202	184	204	388
4	8	22	7	5	12	10	12	22	...	...	...	67	36	103	225	257	482
8	3	11	5	3	8	8	4	12	...	...	...	33	10	43	237	218	455
37	316	763†	556	407	963	476	490	966‡	204	163	367	4,672	4,576	9,248	2,281	2,735	5,016

... includes 7 males and 14 females not certified. † Includes 2 males and 1 female not insane and 7 males and 14 females not certified. ‡ Includes 3 males and 6 females not insane.

PART IV.—ANNUAL REPORTS, 1893.
LUNACY 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	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
CEREBRAL OR SPINAL DISEASES—												
Epilepsy	1	...	...
Apoplexy	1	...
Tumour
Brain Wasting	1	...	...	...
General Paresis	1	5	2	...
THORACIC DISEASE—												
Phthisis	1	1	1	1	1	...	11	...	8	...
Pneumonia	1
Cancer of Breast	1	1
Morbus Cordis	1	1
ABDOMINAL DISEASES—												
Renal Disease
Perihepatetic Abscess
Shock from Scald...
Cancer of Liver
Typhlitis
Cancer of Uterus
Rupture of Gall Bladder and Duodenum
Gastro-Intestinal Catarrh
Cancer of Pylorus
Senile Decay	1
Tuberculosis	1
Fall from window
Totals	1	1	1	1	1	...	12	2	15	5
CATERHAM												
CEREBRAL OR SPINAL DISEASES—												
Apoplexy and Paralysis
Epilepsy and Convulsions	2	1	1	4
General Paresis	1	...	1	1
Exhaustion of Mania
" " Melancholia
" " Dementia...
" " Idiocy	1	...	...	...	...	...	1	...	...	...	...
" " Imbecility	1	...	...	...	...
Hydrocephalous	1	...
Encephalitis	2
Abscess of Brain	1
Tumour of Brain
Sarcoma of Brain
THORACIC DISEASE—												
Bronchitis
Pneumonia...
Phthisis	1	1	...	1
Pericarditis
Cardiac Disease
ABDOMINAL DISEASE—												
Peritonitis
Gangrenous Stomatitis
Cancer of Stomach
Bright's Disease
Diffuse Abscess of Hip
Gangrene of Foot
Schirrus of Mamma
Senile Decay
Totals	1	...	...	...	...	...	...	1	5	2	3	9

Death during the year 1893, 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.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Ma'es.	Females.	Males.	Females.	TOTAL.
2	3	1	1	...	3	...	...	...	1	...	...	...	...	...	...	3	9	12
1	...	1	1	...	1	1	...	...	...	...	...	...	...	...	...	3	2	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
4	1	16	5	21	4	12	11	1	6	...	...	...	...	...	55	27	82	
1	1	3	...	1	...	...	...	...	...	...	...	...	...	...	10	4	14	
8	...	2	2	1	...	...	...	...	...	...	...	...	...	...	...	33	4	37
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	2
...	1	...	4	6	6	1	6	...	2	...	...	...	...	...	8	20	28	
...	...	...	1	1	3	...	...	...	...	...	...	...	...	...	...	1	4	5
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
17	8	24	17	31	19	14	20	1	12	...	...	...	...	...	...	117	85	202

ASYLUM.																		
...	...	...	1	2	1	1	...	...	1	...	...	...	...	...	...	3	3	6
1	...	...	3	2	2	...	...	...	...	...	...	...	...	2	...	8	10	18
3	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	6	2	8
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	2	1	2	9	3	3	1	1	...	...	...	...	...	...	...	16	8	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	1	2	3
2	...	5	1	...	1	...	...	...	...	...	...	...	...	...	...	7	2	9
2	2	1	2	...	...	...	...	...	...	...	...	...	...	...	...	4	6	10
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	2	...	...	4	4	9	1	...	...	...	...	...	...	...	...	13	7	20
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	2	12	1	3	...	1	...	...	...	...	3	16	19
10	10	12	11	20	13	17	15	2	4	...	1	...	...	2	...	72	66	138

PART IV.—ANNUAL REPORTS, 1893.
LUNACY STATISTICS.—TABLE VII. (continued)—Showing the
calculated from the ages stated

DARENTH												
CAUSES OF DEATH.	16		17		18		19		20 to 29		30 to 39	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
CEREBRAL OR SPINAL DISEASES—												
Apoplexy	1
Epilepsy	2	...	...	2	2	1	...
General Paralysis	1	...	2
Dementia and Paralysis
Abscess of Brain	1	...	...	...
THORACIC DISEASE—												
Phthisis	1	...	3	6	2	6
Heart Disease	1	...	2
Pneumonia...	1	...	...	2	1	4
Bronchitis
ABDOMINAL DISEASE—												
Peritonitis
Diarrhoea	1	1
Intestinal Obstruction	1	...	...
Cirrhosis
Renal Disease	1	...	...
Cancer
Inquest
Totals	2	2	...	5	15	5	16
SUM												
CEREBRAL OR SPINAL DISEASES—												
Apoplexy and Paralysis	1
Epilepsy	2	...	...	4	4	2	4
General Paresis	1	2	6	5
Dementia and Paralysis
Exhaustion of Mania
Exhaustion of Melancholia
Exhaustion of Dementia
Exhaustion of Idiocy	1	...	...	...	...	...	1	...	...	...	...
Exhaustion of Imbecility	1	...	...	...
Hydrocephalous	1	...
Encephalitis	2
Abscess of Brain	1	...	1
Tumour of Brain	1	...
Sarcoma of Brain	1
Brain Wasting	1	...	...	...
Carried forward	1	...	...	...	...	2	...	1	7	7	10	14

causes of Death during the year 1893, 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		Ages not known.		TOTAL.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	TOTAL.
...	...	1	...	1	...	...	3	...	...	...	...	...	...	2	4	6
...	1	...	...	...	2	...	1	...	...	...	...	...	...	3	8	11
1	...	...	1	...	...	...	...	...	...	...	...	...	...	3	4	7
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	2	...	1	1	...	1	...	...	...	...	...	...	...	8	15	23
...	1	...	...	1	2	...	...	...	2	...	...	...	...	1	8	9
...	2	1	1	1	2	2	1	...	2	...	...	...	...	6	14	20
...	...	...	...	...	1	...	2	...	...	1	...	...	...	1	3	4
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	1
...	...	...	...	1	1	1	2	...	...	...	...	...	...	1	4	5
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
1	7	3	3	7	10	4	9	...	5	1	...	...	...	28	67	95

MARY.

1	...	2	2	3	2	2	3	...	1	...	...	...	...	8	9	17
3	4	1	4	2	7	...	1	...	1	...	...	2	...	14	27	41
5	2	4	1	3	...	...	...	...	...	...	...	...	...	19	10	29
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
2	2	1	2	9	3	3	1	1	...	...	...	...	...	16	8	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
4	1	16	5	21	4	12	11	1	6	...	...	...	...	55	27	82
15	10	26	14	39	17	17	16	2	8	...	...	2	...	119	89	208

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

					SUMMARY											
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.
Brought forward					1	2	...	1	7	6	10	14
THORACIC DISEASE—																
Bronchitis
Pneumonia ... ..					...	...	...	...	...	...	1	...	...	2	1
Phthisis ... ..					...	...	1	1	1	1	2	...	15	7	10
Cancer of Breast ... ..					...	...	...	...	...	...	...	...	...	...	...
Pericarditis ... ..					...	...	...	...	...	...	...	...	...	...	...
Morbus Cordis ... ..					...	...	...	...	...	...	...	...	...	...	1
Cardiac Disease ... ..					...	...	...	...	...	...	...	...	...	...	...
Disease of the Heart ... ..					...	...	...	...	...	...	...	...	...	1	...
ABDOMINAL DISEASE—																
Peritonitis
Gangrenous Stomatitis ... ..					...	...	...	...	...	...	...	...	...	...	...
Renal Disease ... ..					...	...	...	...	...	...	...	...	...	1	...
Diarrhœa ... ..					...	...	...	...	...	...	...	...	...	...	1
Perihepatetic Abscess ... ..					...	...	...	...	...	...	...	...	...	...	...
Cancer of Stomach ... ..					...	...	...	...	...	...	...	...	...	...	...
Cancer of Liver ... ..					...	...	...	...	...	...	...	...	...	...	...
Cancer of Uterus ... ..					...	...	...	...	...	...	...	...	...	...	...
Cancer of Pylorus ... ..					...	...	...	...	...	...	...	...	...	...	...
Intestinal Obstruction ... ..					...	...	...	...	...	...	...	...	...	1	...
Typhilitis ... ..					...	...	...	...	...	...	...	...	...	...	...
Rupture of Gall Bladder, &c. ... ..					...	...	...	...	...	...	...	...	...	...	...
Gastro Intestinal Disease ... ..					...	...	...	...	...	...	...	...	...	...	...
Bright's Disease ... ..					...	...	...	...	...	...	...	...	...	...	...
Senile Decay ... ..					...	...	...	...	...	...	...	...	...	...	...
Tuberculosis ... ..					...	...	...	...	...	...	...	...	...	...	...
Diffuse Abscess of Hip ... ..					...	...	...	...	...	...	...	...	...	...	...
Gangrene of Foot ... ..					...	...	...	...	...	...	...	...	...	...	...
Shock from Scald ... ..					...	...	...	...	...	...	...	...	...	...	...
Schirrus of Mamma ... ..					...	...	...	...	...	...	...	...	...	...	...
Fall from Window ... ..					...	...	...	...	...	...	...	...	...	...	...
Inquest ... ..					...	...	...	...	...	...	...	...	...	...	...
Grand Totals					1	...	1	1	1	3	3	1	22	18	23	

causes of Death during the year 1893, together with the Ages of the Decedents, on the orders of Admission.

—Continued.

40 to 49		50 to 59		60 to 69		70 to 79		80 to 89		90 to 99		Ages not known		TOTAL.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	TOTAL.
15	10	26	14	39	17	17	16	2	8	...	...	2	...	119	89	208
...	...	...	...	...	2	1	3	...	...	1	...	...	...	2	5	7
2	3	6	2	1	3	2	1	...	2	...	...	...	...	13	17	30
10	4	3	5	2	...	1	...	...	...	...	...	...	...	45	25	70
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	1	...	4	6	6	1	6	...	2	...	...	...	...	8	20	28
...	2	...	...	4	4	9	1	...	...	...	...	...	...	13	7	20
...	1	...	...	1	2	...	...	...	2	...	...	...	...	1	8	9
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	1	1	4	1	2	...	...	...	...	...	...	2	7	9
...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	2	3
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	1	...	1	...	...	...	...	...	...	...	...	...	2	...	2
...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	1	2
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	2
...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	2	3
...	...	...	...	...	...	2	12	1	5	...	1	...	...	3	18	21
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
28	25	39	31	58	42	35	44	3	21	1	1	2	...	217	218	435

LUNACY STATISTICS.—TABLE VIII.—*Showing the length of residence of*

LENGTH OF RESIDENCE.	LEAVESDEN ASYLUM.					
	RECOVERED.			DIED.		
	M.	F.	Total.	M.	F.	Total.
Under 1 Month ... ..	...	...	...	5	...	5
From 1 to 3 Months	2	...	2	7	1	8
" 3 to 6 "	6	1	7	13	3	16
" 6 to 9 "	2	3	5	11	3	14
" 9 to 12 "	2	1	3	5	2	7
" 1 to 2 Years ... ..	...	...	...	17	13	30
" 2 to 3 " ... ..	...	...	...	11	7	18
" 3 to 5 "	1	...	1	12	10	22
" 5 to 7 " ... ..	...	...	...	6	5	11
" 7 to 10 " ... ..	...	...	...	1	6	7
" 10 to 12 " ... ..	...	...	...	4	2	6
" 12 to 14 " ... ..	...	...	...	1	2	3
" 14 to 16 " ... ..	...	...	...	1	...	1
" 16 to 18 " ... ..	...	...	...	4	5	9
" 18 to 20 " ... ..	...	...	...	2	2	4
" 20 and upwards... ..	...	...	...	17	24	41
Totals	13	5	18	117	85	202

LUNACY STATISTICS.—TABLE IX.—*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 25	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
LEAVESDEN ASYLUM.														
1884	17	9	23	16	25	2	33	12	26	14	169	133
1885	19	11	23	19	25	2	36	11	26	14	172	133
1886	19	13	25	19	24	3	37	12	26	16	176	153
1887	20	13	24	22	26	2	38	14	28	17	185	163
1888	23	17	27	25	28	2	41	14	29	16	184	163
1889	26	20	28	28	31	6	44	15	30	16	191	163
1890	1	2	5	2	7	8	7	6	4	7	126	77
1891	4	1	4	4	11	5	10	8	9	8	123	77
1892	6	2	16	2	9	9	10	5	9	11	120	83
1893	5	3	9	4	18	3	11	14	14	8	132	100
CATERHAM ASYLUM.														
1884	2	2	5	4	11	9	20	4	185	163
1885	4	3	5	5	10	12	18	9	175	177
1886	3	5	4	8	6	12	13	20	16	174	163
1887	2	2	1	8	7	7	10	12	24	18	178	153
1888	2	3	2	8	8	7	12	14	25	19	170	157
1889	3	4	4	9	9	9	13	15	26	21	165	157
1890	1	...	...	4	2	2	3	4	5	2	8	5	148	111
1891	1	1	3	3	3	4	5	6	4	7	6	145	111
1892	5	2	4	6	5	8	8	12	9	11	147	111
1893	1	3	6	8	7	9	10	13	12	14	140	111
DARENTH ASYLUM.														
1884	6	...	11	1	22	18	23	15	34	23	69	111
1885	8	4	4	14	19	15	5	3	...	44	140	93
1886	1	1	10	6	5	5	4	11	2	1	...	...	166	153
1887	3	1	9	18	9	24	23	18	16	17	21	20	116	143
1888	32	28	35	23	33	23	29	14	32	22	133	143
1889	27	8	42	32	33	29	30	25	27	14	153	153
1890	6	3	16	8	25	21	26	17	25	20	158	133
1891	3	6	8	6	16	9	27	22	26	19	178	143
1892	7	9	9	18	15	11	15	14	26	24	189	143
1893	1	...	13	16	13	13	15	22	19	14	17	17	208	143
SUMMARY.														
1884	23	9	96	19	52	24	67	36	80	41	423	411
1885	27	15	31	36	49	22	51	26	44	67	487	403
1886	1	1	29	22	35	28	36	20	51	26	46	32	516	473
1887	3	1	31	33	34	54	56	27	64	43	73	55	479	403
1888	57	48	64	56	69	32	82	42	86	57	487	403
1889	56	32	74	69	73	44	87	55	83	51	509	473
1890	1	...	7	9	24	2	35	33	38	25	37	29	432	311
1891	1	8	10	15	13	31	19	43	34	42	33	446	331
1892	18	13	29	26	29	28	33	31	44	46	456	343
1893	1	...	19	22	28	25	40	34	40	41	43	39	480	403

those discharged recovered, and of those who have died during the year 1893.

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
...	1	...	1	...	...	...	...	...	...	...	...	...	6	...	6
...	5	1	6	...	...	...	...	...	...	2	...	2	12	2	14
1	1	2	8	1	9	...	...	...	...	...	...	7	2	9	21	4	25
1	1	2	4	3	7	...	...	...	...	...	...	3	4	7	15	6	21
...	1	1	2	...	...	...	...	...	...	2	1	3	6	3	9
...	8	9	17	...	...	...	2	2	4	...	...	...	27	24	51
...	7	6	13	...	...	...	3	13	16	...	...	...	21	26	47
...	5	5	10	...	...	...	11	16	27	1	...	1	28	31	59
...	7	9	16	...	...	...	3	6	9	...	...	...	16	20	36
...	5	5	10	...	...	...	1	2	3	...	...	...	7	13	20
...	4	4	...	...	...	6	11	17	...	...	...	10	17	27
...	5	2	7	...	...	...	1	10	11	...	...	...	7	14	21
...	3	...	3	...	...	...	...	2	2	...	...	...	4	2	6
...	1	3	4	...	...	...	1	...	1	...	...	...	6	8	14
...	2	4	6	...	...	...	...	4	4	...	...	...	4	10	14
...	10	13	23	...	...	...	...	1	1	...	...	...	27	38	65
2	2	4	72	66	138	...	...	...	28	67	95	15	7	22	217	218	435

the 31st December in 1884, 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.
196	231	194	242	107	213	75	164	14	35	...	...	1	...	...	...	10	16	890	1,091	1,981
198	236	209	247	107	214	66	156	11	19	...	...	...	...	...	...	8	11	891	1,079	1,970
202	237	194	259	103	216	66	158	5	6	...	...	...	...	...	...	8	10	885	1,100	1,985
196	250	198	259	102	197	76	142	...	...	...	...	...	...	...	...	7	14	900	1,092	1,992
190	247	195	260	104	202	55	131	...	...	...	...	...	...	...	...	7	13	883	1,089	1,972
180	256	198	259	94	192	56	122	...	...	...	...	...	...	...	...	5	...	883	1,082	1,965
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	...	...	5	12	899	1,096	1,995
205	180	168	201	146	209	135	190	48	81	6	26	...	...	...	...	3	...	931	1,078	2,009
195	175	160	194	140	204	137	183	55	79	7	22	...	...	...	...	...	...	906	1,057	1,963
190	184	165	190	151	216	139	181	60	70	9	17	...	...	...	...	...	...	933	1,069	2,002
186	180	170	192	155	204	142	180	58	73	8	29	2	1	...	...	...	...	943	1,070	2,013
180	182	165	189	150	190	149	184	60	74	7	28	...	...	...	...	...	...	930	1,052	1,982
184	190	151	178	149	180	142	177	63	72	9	33	1	...	...	...	...	...	919	1,046	1,965
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
35	68	22	66	36	47	29	59	11	46	9	14	1	2	...	...	...	...	308	474	782
28	70	26	65	20	45	34	55	12	51	5	17	1	1	...	...	...	...	302	481	783
35	67	23	72	17	45	36	56	11	42	2	20	...	2	...	...	...	...	312	484	796
27	56	20	70	23	42	36	58	11	43	3	14	...	1	...	...	...	...	317	531	848
29	65	28	67	21	39	31	68	13	33	2	18	...	1	...	...	...	...	418	547	965
46	86	37	75	25	55	43	66	19	42	2	17	...	...	...	...	...	...	484	600	1,084
52	97	39	65	26	67	42	63	22	46	4	11	...	1	...	...	...	...	441	551	992
56	105	39	81	25	62	42	64	22	49	4	14	...	1	...	...	...	...	446	580	1,026
54	108	39	77	23	62	36	59	19	38	4	12	...	3	...	...	...	...	436	582	1,018
49	102	42	69	18	71	30	51	14	37	5	11	...	3	...	...	...	...	444	575	1,019
436	479	384	509	289	469	239	413	73	162	15	40	2	2	...	...	10	19	2,129	2,643	4,772
421	481	386	506	267	463	235	394	78	149	12	39	1	1	...	...	8	11	2,099	2,617	4,716
437	488	382	521	271	477	241	395	76	118	11	37	...	2	...	...	8	10	2,130	2,653	4,783
409	486	388	521	280	443	318	312	69	116	11	43	2	1	...	...	7	14	2,160	2,693	4,853
399	494	388	516	275	431	235	383	73	107	9	46	...	1	...	...	7	13	2,231	2,688	4,919
410	432	386	512	268	427	241	365	82	114	11	50	1	...	...	...	5	...	2,286	2,728	5,014
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	2,281	2,735	5,016

LUNACY STATISTICS.—TABLE X.—*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	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 15 to 20	24	17	41	...	...	...	...	...	3	1	4	5	2	7	
„ 20 to 30	26	15	41	...	...	...	2	1	3	1	1	2	11	2	13
„ 30 to 40	29	21	50	...	...	...	6	2	8	4	3	7	18	5	23
„ 40 to 50	24	11	35	...	...	...	...	...	...	5	2	7	17	8	25
„ 50 to 60	19	5	24	...	...	...	3	...	3	4	...	4	24	17	41
„ 60 to 70	18	12	30	...	...	...	1	2	3	1	...	1	27	19	46
„ 70 to 80	16	12	28	...	...	...	1	...	1	2	...	2	14	21	35
„ 80 to 90	3	2	5	...	...	...	...	...	...	...	...	...	1	11	12
„ 90 and upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ages unknown	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Totals	160	95	255	...	...	...	13	5	18	20	7	27	117	85	202

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	36	34	70	...	...	...	1	1	2	2	2	4
„ 20 to 30	...	2	2	9	9	18	...	...	...	4	5	9	5	15	20
„ 30 to 40	...	5	5	...	...	...	...	...	...	2	...	2	5	16	21
„ 40 to 50	...	3	3	...	1	1	...	...	...	1	...	1	1	7	8
„ 50 to 60	...	8	8	...	...	...	...	...	...	...	...	...	3	3	6
„ 60 to 70	...	3	3	...	...	...	...	...	...	1	1	2	7	11	18
„ 70 to 80	...	1	1	...	...	...	...	...	...	...	...	...	4	9	13
„ 80 to 90	1	4	5
„ 90 and upwards
Ages unknown	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Totals	...	23	23	45	44	89	...	...	...	9	7	16	28	67	95

of the Admissions, Discharges, and Deaths during the year 1893,
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 „ ...	12	9	21	...	...	...	...	...	...	1	1	2	1	1	2
„ 20 to 30 „ ...	11	12	23	...	...	...	1	...	1	6	3	9	5	2	7
„ 30 to 40 „ ...	10	9	19	...	...	...	...	...	...	3	3	6	4	8	12
„ 40 to 50 „ ...	17	9	26	...	...	...	1	2	3	2	3	5	8	11	19
„ 50 to 60 „ ...	12	14	26	...	...	...	...	...	...	...	3	3	14	11	25
„ 60 to 70 „ ...	15	11	26	...	...	...	...	...	...	3	2	5	22	14	36
„ 70 to 80 „ ...	6	12	18	...	...	...	...	...	...	...	...	...	16	14	30
„ 80 to 90 „ ...	3	...	3	...	...	...	...	...	...	...	...	...	2	4	6
„ 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ages unknown ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	86	76	162	...	...	...	2	2	4	15	15	30	72	66	138

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 „ ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
„ 15 to 20 „ ...	36	26	62	36	34	70	...	...	...	5	3	8	8	5	13
„ 20 to 30 „ ...	37	29	66	9	9	18	3	1	4	11	9	20	21	19	40
„ 30 to 40 „ ...	39	35	74	...	...	...	6	2	8	9	6	15	27	29	56
„ 40 to 50 „ ...	41	23	64	...	1	1	1	2	3	8	5	13	26	26	52
„ 50 to 60 „ ...	31	27	58	...	...	...	3	...	3	4	3	7	41	31	72
„ 60 to 70 „ ...	33	26	59	...	...	...	1	2	3	5	3	8	56	44	100
„ 70 to 80 „ ...	22	25	47	...	...	...	1	...	1	2	...	2	34	44	78
„ 80 to 90 „ ...	6	2	8	...	...	...	...	...	...	...	...	...	4	19	23
„ 90 and upwards...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ages unknown ...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...
Grand Totals...	246	194	440	45	44	89	15	7	22	44	29	73	217	218	425

LUNACY STATISTICS.—TABLE XI.—*Showing the Departments*

DEPARTMENTS.	LEAVESDEN ASYLUM.	CATERHAM ASYLUM.	DARENTH ASYLUM.	SUMMARY. MALES.
MALES.				
Blocks	119	172	40	331
Centre and Hall	10	7	4	21
Coaling	8	5	2	15
Stores	4	3	4	11
Kitchen	31	12	...	43
Bakehouse	10	2	4	16
Mess Room... ..	4	7	1	12
Tailor's Shop	8	7	16	31
Shoemaker's Shop	5	8	15	28
Upholsterer's Shop	31	20	16	67
Painter's Shop	1	2	...	3
Grounds	82	41	50	173
Laundry	22	19	...	41
Farm .. ... ..	...	...	24	24
Gas House	4	4	...	8
Engine House and Fitter's Shop	2	2	...	4
Attending to Earth Closets and Drains ... ..	...	3	...	3
Residences ... ..	...	...	...	..
Carpenters	2	...	..	2
Bricklayers ... ..	...	...	...	...
Medical Superintendent's Residence	...	...	...	...
Lodge ... ..	...	1	..	1
Steward's Residence ... ..	...	...	...	..
Total	343	315	176	834
Total number of Patients in Asylum	899	938	444	2,281

where Patients were employed on 31st December, 1893.

DEPARTMENTS.	LEAVESDEN ASYLUM.	CATERHAM ASYLUM.	DARENTH ASYLUM.	SUMMARY. FEMALES.
FEMALES				
Laundry	39	37	24	110
Work Room	17	22	12	51
Helpers in Blocks	121	195	90	406
Needlework in Blocks	93	77	50	220
Centre	7	9	4	20
Mess Room	6	5	2	13
Kitchen ... ..	...	1	6	7
Medical Superintendent's Residence	...	2	1	3
Steward's Residence ... ..	...	1	1	2
Matron's Residence	1	1	1	3
Mending Room Corridors ... ..	...	...	20	20
Total	284	350	211	845
Total number of Patients in Asylum	1,096	1,064	575	2,735

LUNACY STATISTICS.—TABLE XII.—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.																				
Accountant				1	1														1	1
Baker		2			2												2			2
Barber							1			1							1			1
Bath-chairman				1	1														1	1
Bill-poster							1			1							1			1
Blacksmith		1			1		2			2							3			3
Bookbinder	2				2										2					2
Boot Clicker	1	1			2										1	1				2
Bootmaker							1	2		3						1	2			3
Brass Finisher... ..		1			1											1				1
Bricklayer		1		1	2	1				1					1	1			1	3
Butcher						2				2					2					2
Cabman	2	1			3										2	1				3
Canvasser			1		1												1			1
Carman	3	6	1		10										3	6	1			10
Carpenter				1	1		3			3						3			1	4
Chairmaker								1		1									1	1
Chemist				1	1		1			1						1			1	2
Cigar Maker			1		1												1			1
Clerk	3	7			10				2	2					3	7		2		12
Cloth Worker							1			1						1				1
Coachman						1				1					1					1
Coachsmith	1				1										1					1
Coal Trimmer... ..						1				1					1					1
Compositor			1		1												1			1
Cook	1				1										1					1
Cooper			1		1												1			1
Costermonger								1		1							1			1
Decorator		1	1		2											1	1			2
Draper's Assistant	2				2										2					2
Engineer						2	1			3					2	1				3
Engine Fitter		1			1											1				1
Fishmonger		1			1											1				1
French Polisher		1			1	2	2			4					2	3				5
Fruit-seller		1			1											1				1
Gardener				1	1		1	2		3						1	2	1		4
Glazier		1			1											1				1
Goldbeater								1		1									1	1
Grocer's Assistant	1		1		2										1		1			2
Hawker								1		1										1
Horsekeeper							1			1						1				1
Japanner		1			1											1				1
Labourer	7	3	4	6	20	8	5		5	18					15	8	4	11		38
Laundryman							1			1						1				1
Market Porter... ..								1	1	2							1	1		2
Mast Maker			1		1												1			1
Mattress Maker				1	1														1	1
Messenger			1		1		1			1						1	1			2
Milkman	1				1										1					1
Musician						1				1					1					1
No occupation... ..	40	3	1	7	51	19	1	1	1	22	45			45	104	4	2	8		118
Painter		2		1	3											2			1	3
Pianoforte Maker			1		1												1			1
Plasterer		1			1											1				1
Police Constable	1				1										1					1
Policeman, Railway		1			1											1				1
Carried forward	65	37	15	21	138	37	23	7	12	79	45			45	147	60	22	33		262

admission, and condition as to Marriage of the Patients admitted during the year 1893.

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.	
<i>MALES—continued.</i>																					
Brought forward ...	65	37	15	21	138	37	23	7	12	79	45	...	...	...	45	147	60	22	33	262
Porter ...	5	1	1	1	8	...	...	...	...	...	...	...	...	...	...	5	1	1	1	8
Potman ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Printer ...	1	...	...	1	2	...	1	...	...	1	...	...	...	...	...	1	1	...	1	3
Publican ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Sawyer ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Seal Engraver ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Ship's Stoker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Shoemaker ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Silversmith ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	...	1
Soldier ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Stationer ...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Straw Hat Dyer ...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Sugar Baker ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Tailor ...	2	...	1	...	3	...	...	...	...	...	...	...	...	...	...	2	...	1	...	3
Unknown ...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1
Umbrella Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Waiter ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Watchman ...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	1
Total ...	76	40	20	24	160	39	25	9	13	86	45	...	...	...	45	160	65	29	37	291

LUNACY STATISTICS.—TABLE XII. (continued).—Showing the Occupations previous to admission, and condition as to Marriage of the Patients admitted during the year 1893.

OCCUPATIONS.	LEAVESDEN ASYLUM.					CATERHAM ASYLUM.					DARENTH ASYLUM.					SUMMARY. FEMALES.				
	NUMBERS.					NUMBERS.					NUMBERS.					NUMBERS.				
	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.	Single.	Married.	Widowed.	Unknown.	Total.
FEMALES.																				
Bonnet Maker ...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	1	1	
Book Folder ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	1	
Box Maker ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...	...	1	
Caretaker ...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	1	...	...	1	
Charwoman ...	4	1	1	1	7	1	...	4	1	6	1	...	1	...	2	6	1	6	2	15
China Rivetter ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Domestic Servant ...	5	1	4	...	10	4	1	...	2	7	3	...	...	3	12	2	4	2	20	
Dressmaker ...	1	...	...	...	1	...	1	...	...	1	...	...	1	...	1	1	1	1	...	3
Flower Maker ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Governess ...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1
Hawker ...	...	1	...	...	1	...	...	1	...	1	...	...	...	...	...	1	1	...	...	2
Housekeeper ...	...	...	...	...	...	1	...	...	1	2	1	...	...	1	2	...	...	1	...	3
Housewife ...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	1
Laundress ...	1	1	...	...	2	...	...	2	1	3	...	...	...	...	1	1	2	1	...	5
Needlewoman ...	3	...	3	2	8	1	3	...	1	5	1	...	1	...	2	5	3	4	3	15
No occupation ...	37	11	5	8	61	20	15	5	1	41	48	3	2	1	54	105	29	12	10	156
Nurse ...	1	...	...	...	1	1	...	1	...	2	...	...	...	...	2	...	1	...	...	3
Schoolmistress ...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	1
Silk Worker ...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1
Tailoress ...	...	...	...	...	...	1	...	1	1	3	...	...	...	...	1	...	1	1	1	3
Tie Maker ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Waitress ...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	2	1	1	...	...	2
Total ...	54	17	13	11	95	30	21	14	11	76	55	5	6	1	67	139	43	33	23	238

No. 15.

REPORT OF DR. WALMSLEY, MEDICAL SUPERINTENDENT OF
DARENTH SCHOOLS AND PAVILIONS.

(For Statistics, see pp. 233 to 241.)

DARENTH SCHOOLS AND PAVILIONS,
NEAR DARTFORD, KENT,
January, 1894.

To the Committee of Management.

LADIES AND GENTLEMEN,

I have the honour to present to you the following Report upon the condition and progress of the Institution during the year 1893.

On the 1st of January, 1893, there were in the Schools and Pavilions 973 patients—viz., 604 males and 369 females.

	Males.	Females.	Totals.
Admitted during the year	88	72	160
Discharged	62	61	123
Died	40	23	63
Remaining 31st December, 1893	590	357	947
Highest number resident on any one day	608	369	977
Lowest ,, ,, ,,	583	242	925
Average number during year	592	354	946

THE ADMISSIONS.

Very noticeable is the unfavourable nature of a large proportion of the admissions as regards recovery or improvement, many are in a feeble and diseased condition, anæmic, badly nourished, and have evidently been exposed to all the influences that are destructive of healthy life—unfavourable surroundings, unwholesome or too little food. Bad and unsuitable food is a fertile source of rickets, which often causes thickening

and enlargement of the skull; some mothers distinctly diet their offspring for stupidity. This is an unfavourable material from which to effect cures.

All the children are carefully examined on admission, and at regular intervals; such as are in any degree educable attend school.

THE DEATHS.

The death rate has been unfavourably influenced by the Influenza, which is responsible for 10 deaths. Twenty-four are due to Epilepsy—the fits, which are severe and occur in rapid succession, speedily dissipate the very limited stock of nerve-energy possessed by so many of these physically feeble epileptics. Fully two-thirds of all idiots die of Phthisis or general Tuberculosis.

THE DISCHARGES.

Eighty-nine patients above the age of 16 have, during the year, been transferred to the Adult Asylum. This has relieved the Schools and Pavilions of many cases unsuitable for detention therein, and, as a consequence, it has not been found necessary to suspend the admission of patients from the various parishes.

It will be observed that the percentage of those discharged recovered is greater than in previous years. It is, however, right to add that not all of those so discharged would come under the category of Idiot or Imbecile; they are rather those on the border-line of imbecility—of unstable mental equilibrium—easily unhinged when exposed to adverse influences, as exhaustion following fever, anæmia, deprivation of food, insanitary conditions of life, &c. Residence here, with the attendant advantages of pure air, liberal dietary, cleanliness, and good attention, restores these subjects to their average physical and mental condition.

GENERAL HISTORY.

The present affords a suitable opportunity of passing in critical review and examining into the condition—mental and physical—of the inmates; also of briefly indicating the principle upon which is based the educational system, here in operation, for advancing the position and raising in the scale of Humanity those who come into the world pre-natally handicapped by hereditary taint, the real predisposing cause of arrested or imperfect mental development.

Out of a population of 950, there are 512 totally helpless—can neither wash, dress, nor feed themselves—200 of these are crippled. There are 360 Epileptics requiring constant care and continuous supervision by night and day. There are 24 blind, and 12 deaf and dumb patients.

Perhaps two-thirds or more of all idiots are of the scrofulous constitution. In the Infirmaries are to be seen patients exhibiting the local and general manifestation of this diathesis—viz., enlarged and suppurating glands, skin eruptions, eye defects, ear troubles, strumous ulcers, and abscesses; others are crippled, paralysed, maimed, deformed, tuberculous, cretinous, &c.

In the Idiot and Imbecile the state of imperfection of the nervous system renders them slow in perceiving impressions from without; their senses are dulled, their sensibility obtuse, and thus they are capable of but a slight degree of attention; they see badly, hear badly, feel badly. This defect of observation and attention extends so far, in some instances, as to prevent the acquisition and conservation of the ordinary acts that go to make up the routine of life.

Speech defects may be considered as almost gauges to the state of mind growth.

Of the 950 patients—

360 articulate distinctly.

290 „ indistinctly.

300 „ not at all.

In this last class it is not merely that they have no speech, they have not the brain organisation enabling them to acquire even its rudiments.

Like children, many imbeciles are bright and cheerful, and have within them dormant faculties that may be trained to use; their lot—provided with healthy occupation and varied amusements in Asylums especially adapted for their needs—may be rendered happy enough. The more capable may be taught to perform routine work of the most mechanical and least intellectual kind; their intelligence will develop with their work, but in all probability their fingers will always be nimbler than their brains.

The leading idea of the system of management is that the training must not be too exclusively mental—the feebler the intelligence the greater should be the relative proportion of physical to mental training, *i.e.*, physical training as a means of education in the sense of educating and developing faculty; the child's mind is approached and trained exclusively by physical impressions acting through the senses, thus stimulating brain activity and mind-growth.

By means of a progressive educational system, based upon the recognition of this principle, an attempt is made to bring as many of the different senses as possible into action at the same time, for the recognition of objects constantly met with in daily life.

The pupils are taught to recognise objects not only by sight, but also by touch and by the muscular sense, thus developing deftness of hand and correctness of eye.

Proper physical training also pre-supposes proper physical care with regard to nutrition, food, regular meals, suitable clothing, bathing, abundant supply of fresh air, such a gentle course of discipline as engenders orderly habits and some measure of self-control (no chastisement of any description whatever is practised), a system of combined exercise and recreation—musical drill, dancing, singing, out and in-door games, various gymnastic exercises (dumb-bells, staves, &c.), designed to bring the different sets of muscles into active action.

This careful physical exercise and training is absolutely necessary to produce the highest state of vitality in the body; and the brain, being a part of the body, participates in its increased power—the physique is improved, the mental capacity increased to some extent, and the moral character strengthened.

The lessons themselves are made attractive by their simplicity of treatment, and by the suitability and variety of the illustrations:—Modelling in clay; drawing with coloured chalks; writing and copying from print or from written characters; reading, with movable letters; embroidery of outlines; formation of geometrical patterns; weaving—a name given to plaiting strips of different coloured paper; mosaic work, with coloured tablets; building with bricks. Natural history objects:—Animals; plants; vegetables; fruits. Exercises for the improvement of speech. Many of the children are, of course (by reason of muscular weakness), “clumsy” in using their fingers. Various devices are had recourse to with a view to correcting this defect.

Religious instruction is imparted to all such as are in any degree capable of benefiting by it.

Some 350 of the children attend the Chapel services, and join heartily in the singing. Their behaviour is most exemplary.

There are 271 children on the school register, 155 boys and 116 girls.

Of these, 170 have made good progress, 40 have slowly improved, 35 have learnt a little, and 26, through absence, sickness, &c., have made no progress.

During the year 2,500 articles of clothing have been made in the schoolroom.

In the workshops the older boys, under competent tradesmasters, are taught some trade—shoemaking, tailoring, mat making, upholstering, gardening, &c.; the work done is of a really useful and substantial character.

Twenty-seven work as tailors, and have made during the year 201 jackets, 47 vests, 186 pairs of trousers, 6 bed-quilts, 34 aprons, and have repaired 2,402 jackets, 1,489 vests, 3,781 pairs of trousers. Value of work done, £185 19s.

The 30 shoemakers have produced 500 pairs of boots and shoes, and have

repaired 2,668 pairs; 99 pairs of locked gloves have been manufactured. Value of work done, £193 18s. 6d.

The older girls, in suitable workrooms and class-rooms, are taught sewing—by needle and machine—knitting, dressmaking, and cutting out, the rougher kinds of laundry work, and the various domestic duties.

In the workrooms 6,786 articles of clothing have been made during the year.

That the work of training is difficult, necessarily of long duration, and often apparently futile, may be taken for granted; but it is a matter of the first importance that it should be done at all. Idiots form no exception to the law that every form of organised life is capable of being changed for better or worse by surrounding circumstances.

Though the Institution, by its very nature, is intended to be in the main protective and preventive, and primarily seeks to confer benefits rather than to earn profits, it is, nevertheless, satisfactory to be able to record that a gratifying proportion of its educable inmates have finally attained a profitable proficiency in the various forms of manual labour—industrial and domestic.

It is impossible to speak too highly of the conscientious, energetic, and successful manner in which the Schoolmistress, Miss Hoatson, discharges the honourable duties devolving upon her, and of the creditable way in which the work of her department is always performed. Through her hands have passed, and are passing, all such as are in any degree educable.

EPIDEMIC OR ZYMOTIC DISEASE, AND OTHER DISORDERS INCIDENTAL TO CHILD LIFE.

Influenza visited the Institution during the early part of the year, attacking 150 patients and 35 attendants, and again during the latter part of year, attacking 107 patients and 49 attendants. The peculiar tendency of this last outbreak—of a milder type than former epidemics—was to attack more especially the throat and larynx. There is an increase in the number of fatal cases of chest disease, due to Pneumonia following on Influenza.

Infectious Fevers.—During the year there have been several cases of Chickenpox, but one case only of Scarlet Fever, this case was, of course, at once isolated, and fortunately other cases did not appear. It is obvious that an epidemic breaking out would be favoured by such an aggregation of susceptible material as is present here.

Ringworm.—Cases of Ringworm occur from time to time—its great contagiousness is well known. The spores or seeds of the fungus, either by personal contact or through the medium of the atmosphere, are capable of transplanting the disease on a suitable soil. The only way to keep it out of

the Schools is to make sure, by constant inspection, that no child has it, any case detected is at once isolated, and the spread of the disease prevented. When Ringworm attacks the body it is easily eradicated, but in Ringworm of the scalp its obstinacy to treatment (often extended over many months) is due to the anatomical fact that the fungus is present around the roots of the hairs in the deep air sacks and follicles, this fully accounts for the difficulty in effecting anything like a rapid recovery, even in the most favourable circumstances. There is now no case of Chronic Ringworm in the Schools.

Ophthalmia.—No case of contagious Ophthalmia has occurred during the year. The immunity from this distressing and baneful affection (unfortunately too often prevalent in schools) is, in my opinion, attributable to the healthiness of the situation, with its comparatively high elevation, the free circulation of air, and the liberal dietary. There are, however, a few cases, while not actually suffering from Ophthalmia, have eyelids in a condition prone to that disease in the presence of an exciting cause; such cases are commonly known as "weak eyes." The subjects are generally in an unhealthy anæmic condition. The strumous constitution also predisposes it. Regular watch is kept over these cases, so that they may be isolated on the first appearance of active mischief. Experience has shown that children affected with granular Ophthalmia require isolation and treatment for many months, and sometimes for years. We shall probably never entirely get rid of this form of eye-trouble, since fresh cases are constantly being imported from the outside.

AMUSEMENTS.

Due attention is given to the amusements of the patients—regular weekly dances, concerts, theatricals, the summer fête, the Christmas-tree, and the seasonable festivities; visits to the local flower-shows, magic-lantern entertainments. The more intelligent children are taken out for walks beyond the Asylum grounds. The majority spend several hours during the day in the summer in the extensive recreation ground attached to the Schools; they romp about freely, or engage in the various outdoor sports—cricket, football, &c.—and thus obtain abundant physical exercise. The crippled patients are taken around the grounds in wheeled chairs, or, in charge of the attendants, obtain passive exercise by means of the existing swings.

This free play is an essential part of the training of imbecile children. It should never be omitted, and it should be independent of the weather. It tends greatly to the success of other means of training.

STRUCTURAL ALTERATIONS AND ADDITIONS.

The shoemakers' shops, which were inconveniently crowded, have been considerably enlarged, and their usefulness extended.

The infectious block has been cleansed and re-painted throughout.

The work of erecting iron staircases to each of what are known as the "healthy blocks" is about to be commenced, thus affording a second means of escape from the upper floors in the event of fire. In the other blocks and pavilions the dormitories are on the ground floor.

Plans have been approved for the extension of the laundry, which at present is inadequate to the demands made upon its resources; also for the provision of a new staff block, containing suitable recreation room for the use of the whole staff, and a new and commodious needle-room, with linen store attached.

The new building will be about 117 feet by 30 feet, and three storeys in height. On each of the two upper storeys will be 14 separate bedrooms for the female attendants.

VISITORS.

During the year the Institution has been visited by the Local Government Board Inspectors and the Lunacy Commissioners, by representatives of various public bodies at home and abroad, gathering information relative to the training and management of idiots and imbeciles, and by students from the London medical schools.

Notable is the visit of the late Lord Mayor—Sir Stuart Knill—who manifested a lively interest in the patients and in the working of the Institution. Such an expression of sympathy (as this visit implies) with the work carried on here has a salutary and stimulating influence on all engaged therein.

IS INSANITY INCREASING?

Available evidence conclusively shows that there has been during the 20 years, 1871-91, a progressive diminution of the hereditary form—congenital idiocy—of mental disease, no doubt due to the fact that an ever increasing number of lunatics now have the benefit of treatment in asylums; the restraints of confinement, of course, tend largely to lower the ratio of congenital increase.

THE STAFF.

The very trying character of the duties which Nurses and Attendants have to discharge in connection with idiots and imbeciles is well known. The cleanliness and comfort of the children requires unremitting labour day and night. In their last report the Lunacy Commissioners say:

"The duration of service is good, only 18 per cent. being unable to count more than one year's service here, a fact which is especially satisfactory,

having regard to the delicate and trying duties which devolve upon them, which, so far as we could see, are discharged with kindness and efficiency. We found the patients quiet and comfortable, and in a satisfactory condition both as to the care of their persons and neatness of dress.

“The wards generally were in excellent order, bright with plants and flowers, and very clean, and free from unpleasant odours.”

In charge of 13 of the blocks and pavilions occupied by the boys are married couples of mature age, the majority of these have for a number of years been in the service here, and have acquired experience in the management of the children and capacity in dealing with them which is invaluable. They stand practically in the position of foster parents to their unfortunate charges, and I can testify how watchfully and conscientiously their work is done.

Officers—with the view of strengthening and encouraging the sentiment of a community of interests—are careful to cultivate personal relations with the staff.

In the hope of relieving somewhat the monotony of an existence spent in constant intercourse with everything that is troublesome and unsightly in human nature, social gatherings, with music and singing, have been established.

Such gatherings possess no disadvantages—on the contrary, they tend to promote that general good humour and contentment essential in an Institution concerned with the training and improvement of imbecile children.

All due care is exercised in selecting the junior nurses. They are drawn largely from the neighbourhood, and from reputable families. Experience shows that they quickly acquire a readiness in dealing with the children here.

My acknowledgments are due to the heads of the several departments for their cordial co-operation in the work of the Institution, and for their unceasing efforts to maintain it at the highest possible level of efficiency.

Dr. Ridley is indefatigable in promoting the musical and theatrical entertainments. These performances, and they occur frequently, afford pleasure and profitable relaxation, not only to the patients, but to the whole community.

I beg leave to tender to the Committee of Management the expression of my gratitude for counsel and encouragement extended to me, and the assurance of my earnest endeavour to fulfil the expectations and requirements of my office.

I have the honour to be,
Ladies and Gentlemen,
Your obedient Servant,
(Signed) FRANCIS H. WALMSLEY, M.D.,
Medical Superintendent.

IMBECILITY STATISTICS—DARENTH SCHOOLS AND PAVILIONS.

TABLE I.—*Showing the Admissions, Re-admissions, Discharges, and Deaths during the Year 1893.*

	Males.	Females.	Total.
In the Asylum, 1st January, 1893	604	369	973
	Males.	Females.	Total.
Admitted for the first time during the Year (direct from the several Parishes & Unions)	86	69	155
Re-admitted during the Year	2	3	5
Admitted from other Asylums of Board ...	—	—	—
	88	72	160
Total under care during the Year	692	441	1,133
	Males.	Females.	Total.
Discharged—			
Recovered	4	7	11
Improved	2	4	6
Not Improved	11	6	17
To other Asylums of Board	45	44	89
Died... ..	40	23	63
Total discharged (for various reasons) and died during the Year ...	102	84	186
Remaining in the Asylum, 31st December, 1893	590	357	947
Average numbers resident during the Year	592·5	354·9	946·14
Highest number resident on any one day	608	369	977
Lowest number resident on any one day	588	342	925

TABLE II.—*Showing the Admissions, Re-admissions, and Discharges from the opening of the Asylum to the present date, 31st December, 1893.*

	Males.	Females.	Total.	Males.	Females.	Total.
Admitted during the period of 19 years (direct from the several Parishes & Unions)	1,376	914	2,290			
Re-admissions	50	40	90			
Admitted from other Asylums of Board ...	229	210	439			
Total of Cases Admitted				1,655	1,164	2,819
	Males.	Females.	Total.			
Discharged—						
Recovered	33	37	70			
Improved	112	90	202			
Not Improved	139	70	209			
To other Asylums of Board	414	340	754			
Died	367	270	637			
Total Discharged and Died during the 19 years				1,065	807	1,872
Remaining 31st December, 1893				590	357	947
Average numbers resident during the 19 years				342·3	230·7	577·7

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 1884, and for each subsequent year.

Year.	Admitted.						Discharged.						Died.			Remaining 31st December in each year.			Average Numbers Resident.			Percentage of Recoveries on Admissions.			Percentage of Deaths on Average Numbers Resident.								
	From Parishes and Unions.			From other Asylums of Board.			Recovered.		Improved.		Not Improved.		To other Asylums of Board.		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.																Total.			
1884 ...	62	28	90	...	...	90	2	1	3	6	3	9	8	2	10	...	...	...	19	17	36	370	252	622	361.6	255.4	615.0	3.22	3.57	3.33	5.25	6.70	5.85
1885 ...	49	28	77	...	...	77	3	1	4	7	5	12	2	1	3	22	32	54	28	10	38	357	233	590	356.6	248.8	605.4	6.12	3.57	5.19	7.85	4.01	6.27
1886 ..	66	34	100	...	...	100	1	2	3	3	5	8	2	...	2	20	8	28	15	7	22	381	246	627	358.0	243.2	601.2	1.51	5.88	3.00	4.19	2.87	3.65
1887 ...	84	62	146	...	...	146	...	8	8	11	5	16	3	...	3	12	69	81	17	14	31	422	212	634	404.1	245.3	649.4	...	12.90	5.47	4.20	5.70	4.70
1888 ..	74	40	114	21	40	61	2	...	2	7	5	12	14	8	22	124	46	170	29	12	41	341	221	562	417.3	217.6	635.4	2.10	...	1.14	6.94	5.51	6.45
1889 ...	94	62	156	...	...	156	1	1	2	3	4	7	5	3	8	26	9	35	9	10	19	391	256	647	365.5	249.3	614.8	1.06	1.62	1.30	2.46	4.04	3.07
1890 ...	96	62	158	52	42	94	2	1	3	8	3	11	13	9	22	...	...	...	12	10	22	504	337	841	466.4	311.6	777.8	1.35	0.95	1.15	2.57	3.24	2.82
1891 ...	108	64	172	...	...	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	...	...	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	...	...	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

(For the years from the opening of the Asylum down to and including 1880, see Report for 1886.)

TABLE IV.—*Showing the probable causes of the Mental Condition of the Patients admitted during the Year 1893.*

CAUSES.	Males.	Females.	Total.
I. CONGENITAL—			
Fright of mother during pregnancy	5	4	9
Anxiety and worry of mother during pregnancy	8	3	11
Fright of mother during pregnancy, and difficult labour ...	7	4	11
Fright and anxiety of mother during pregnancy, and tedious labour	4	4	8
Tedious or difficult labour	4	7	11
Injury to mother during pregnancy	3	2	5
Excessive intemperance of parents	6	8	14
Unknown	10	6	16
Premature labour	4	3	7
II. ACQUIRED—			
Epilepsy	6	3	9
Convulsions	1	1	2
Measles	1	1	2
Severe injury to patient	3	1	4
Fright of patient	4	5	9
Illness of patient	4	1	5
Unknown	8	4	12
Not ascertained	10	15	25
Totals	88	72	160

In 24 cases there was a history of Intemperance in the parents.

In 21 cases there was a history of Insanity in the parents or near relatives.

In 4 cases there was a history of Imbecility in the parents.

In 6 cases there was a history of Epilepsy in the parents.

In 20 cases there was a history of Consumption in the family.

In 4 cases the parents were first cousins.

In 3 cases the parents were second cousins

TABLE VI.—*Showing the Causes of Death during the year 1893, together with the Ages of the Decedents, calculated from the Ages stated on the Orders of Admission.*

CAUSES OF DEATH.	Under 5		5 to 10.		10 to 15.		15 to 20.		20 to 25.		TOTAL.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.
CEREBRAL OR SPINAL DISEASES—													
Epilepsy	2	1	9	8	3	1	...	...	14	10	24
Hydrocephalus	1	...	...	...	...	...	1	...	1
THORACIC DISEASE—													
Pneumonia...	1	...	1	...	...	...	2	2
Phthisis	3	...	1	2	...	...	1	...	5	2	7
Heart Disease	1	...	...	...	1	...	1
ABDOMINAL DISEASE—													
Diarrhœa	1	...	...	1	...	...	...	...	1	1	2
Marasmus	1	2	5	1	4	...	2	1	12	4	16
Influenza	2	...	1	2	2	2	1	...	6	4	10
Totals	9	3	17	15	10	4	4	1	40	23	63

TABLE VII.—*Showing the length of Residence in those Discharged Recovered, and in those who have Died during the year 1893.*

LENGTH OF RESIDENCE.	RECOVERED.			DIED.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 Month...	1	1	2
From 1 to 3 Months	1	1
" 3 ,, 6 ,,	1	3	4
" 6 ,, 9 ,,
" 9 ,, 12 ,,
" 1 ,, 2 Years	3	3	5	4	9
" 2 ,, 3 ,,	12	6	18
" 3 ,, 5 ,, ..	3	...	3	2	...	2
" 5 ,, 7 ,,	6	3	9
" 7 ,, 10 ,,	2	2	7	3	10
" 10 ,, 12 ,,	5	1	6
" 12 ,, 14 ,, ..	1	1	2	1	...	1
" 14 ,, 16 ,,	1	1
" 16 ,, 18 ,,	1	1	...	...	...
" 18 ,, 20 ,,
Totals	4	7	11	40	23	63

TABLE VIII.—Showing the Ages of Patients resident in the Asylum on 31st December, 1893; calculated from the Ages stated on the Orders of Admission.

Years ending December 31st.	Under 16.		16.		17.		18.		19.		20.		20 to 29.		30 to 39.		40 to 49.		50 to 59.		60 to 69.		70 to 79.		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

TABLE IX.—*Showing the Ages of the Admissions, Discharges, and Deaths during the Year 1893, calculated from the Ages stated on the Orders of Admission.*

AGES.	THE ADMISSIONS. (Age from 5 years to 16 years.)						THE DISCHARGES.						THE DEATHS.		
	From Parishes and Unions.			From other Asylums of the Board.			Recovered.			Removed, Improved, or Otherwise.			Males.	Females.	Total.
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.			
From 5 to 10 years	44	37	81	...	...	...	...	...	...	3	4	7	10	3	13
„ 10 „ 15 „	34	23	57	...	...	...	...	2	2	4	5	9	17	14	31
„ 15 „ 20 „	10	12	22	...	...	...	4	1	5	36	28	64	10	5	15
„ 20 „ 30 „	...	...	...	...	...	...	...	4	4	19	20	39	3	1	4
„ 30 „ 40 „	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...
„ 40 „ 50 „	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Total ...	88	72	160	...	...	...	4	7	11	62	61	123	40	23	63

TABLE X.—*Showing the Departments where Patients were employed on the 31st December, 1893.*

MALES.		FEMALES.	
Departments.	Numbers Employed.	Departments.	Numbers Employed.
Blocks (B, C, D, E, F, G) ...	38	Laundry ...	14
Tailors' Shop ...	27	Work Room ...	10
Shoemakers' Shop ...	26	Helpers in Blocks—	
Mat Making ...	1	(A, I, K, L, M, N, O, J) ...	57
Dispensary ...	1	Needlework in Blocks ...	5
Pavilions (A, B, C, D, E, H) ...	38	Centre ...	1
Food Cart ...	1	Kitchen ...	2
		Corridor ...	1
		Pavilions (J, K) ...	12
Total No. of Males employed ...	132	Total No. of Females employed	102
Total No. of Patients in Asylum	590	Total No. of Patients in Asylum	357

TABLE XI.—*Showing the occupations of Patients in the Tailors' and Shoemakers' Shops.*

OCCUPATIONS OF BOYS.	NUMBERS EMPLOYED IN EACH GRADE, WITH THE QUALITY OF THE WORK.			
	Indifferent.	Fair.	Good.	Excellent.
I. TAILORS—				
1. Preliminary Work ...	...	...	4	...
2. Sewing Seams and Linings ...	...	2	...	3
3. Felling ...	...	...	...	...
4. Buttonholing ...	...	...	1	2
5. Repairing ...	...	2	6	4
6. Machining ...	...	...	1	2
II. SHOEMAKERS—				
1. Preliminary Work ...	1	1	1	1
2. Closing Uppers ...	...	...	2	2
3. Repairing ...	...	1	2	9
4. Finishing ...	...	...	2	1
5. Riveting ...	...	...	2	1

27 Tailors and 26 Shoemakers.

TABLE XII.—Showing the progress of Children in the School during the year 1893.

							CLASSES.							Total.	
							1	2	3	4	*5	6	7		
SPEECH—															
1	Make no attempt ...	...	...	...	...	...	...	...	19	...	...	...	19	
2	Make a few articulate sounds ...	...	...	...	...	...	...	5	...	...	2	7		
3	Speak indistinctly ...	...	...	...	...	...	5	4	24	24	2	16	22	97
4	Speak fairly ...	...	...	...	...	...	25	27	11	10	1	16	17	107
5	Speak well... ...	...	...	...	...	...	10	6	...	...	...	1	...	17
*5th Class (Deaf and Dumb) taught to speak and read on fingers.															
READING—															
1	Know no words or letters ...	...	...	...	...	...	...	...	7	11	...	9	27	
2	Know a few letters ...	...	...	...	...	...	...	...	1	21	6	7	25	60
3	Know a few words at sight ...	...	...	...	...	...	...	...	...	...	8	8	16	
4	Know all the letters ...	...	...	...	...	...	...	1	15	6	4	10	2	38
5	Know easy words by spelling ...	...	...	...	...	...	...	5	20	...	6	8	...	39
6	Read fairly... ...	...	...	...	...	...	34	31	...	...	...	...	...	65
7	Read fluently ...	...	...	...	...	...	24	...	...	...	1	...	...	25
SPELLING—															
1	Spell words of one and two letters ...	...	...	...	...	...	...	...	16	6	...	29	11	62
2	Spell words of one syllable ...	...	...	...	...	...	...	9	12	...	2	...	...	23
3	Spell words of one and easy ones of two syllables ...	...	...	...	...	...	12	16	6	...	4	...	...	38
4	All words of one, two, and some of three syllables ...	...	...	...	...	...	25	10	...	...	...	...	...	35
5	Words of one, two, and three syllables ...	...	...	...	...	...	21	...	...	...	...	...	...	21
WRITING—															
1	Do nothing but scribble ...	...	...	...	...	...	...	...	5	11	1	12	29	
2	Form strokes on a slate ...	...	...	...	...	...	...	...	14	...	11	17	42	
3	Form letters on a slate ...	...	...	...	...	...	...	...	29	15	10	21	15	90
4	Form letters in copy-books ...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Write easy words in copy-books ...	...	...	...	...	...	30	17	...	...	4	...	...	51
6	Write fairly ...	...	...	...	...	...	20	4	7	...	2	...	...	33
7	Write well, dictation, transcription, &c. ...	...	...	...	...	...	20	...	...	...	...	...	...	20
COUNTING AND TABLES—															
1	Cannot count at all ...	...	...	...	...	...	...	...	...	14	...	18	32	
2	Count to 10 ...	...	...	...	...	...	...	...	6	26	6	19	20	77
3	Count to 50, and repeat to 3 × 12 ...	...	...	...	...	...	...	2	5	4	5	14	6	36
4	Count to 100, to 6 × 12 and questions ...	...	...	...	...	...	17	19	21	4	2	...	...	63
5	Count to 1,000, to 12 × 12 and all questions ...	...	...	...	...	...	26	16	3	...	...	...	...	45
6	The above, and money tables ...	...	...	...	...	...	18	...	...	...	...	...	...	18
ARITHMETIC—															
1	Recognise neither objects nor number ...	...	...	...	...	...	...	...	...	7	...	40	47	
2	Recognise objects and numbers to 5 ...	...	...	...	...	...	...	...	32	10	33	4	79	
3	Recognise objects and numbers to 20 ...	...	...	...	...	...	...	2	28	2	...	...	32	
4	Can work addition sums ...	...	...	...	...	...	...	16	3	...	6	...	25	
5	Work easy sums in simple rules ...	...	...	...	...	...	38	21	5	...	4	...	68	
6	Simple and compound money sums ...	...	...	...	...	...	13	...	...	...	...	...	13	
7	Beyond the above ...	...	...	...	...	...	7	...	...	...	...	...	7	

TABLE XII. (continued)—Showing the progress of Children in the School during the year 1893.

						CLASSES.							Total.	
						1	2	3	4	5	6	7		
CLOCK LESSON—														
1	Know neither hours nor minutes	...	...	...	...	...	3	...	...	...	...	44	47
2	Know some of the hours	...	...	...	...	...	3	10	...	...	...	...	13
3	Know all the hours	...	...	...	...	...	12	13	19	...	...	...	44
4	Know the hours and quarters	...	...	...	...	...	15	5	...	...	...	...	20
5	The above and 5 minutes	...	...	...	...	...	...	3	...	...	...	...	3
6	Can tell the time to a minute	...	...	...	...	...	24	9	...	...	...	...	33
COLOUR LESSON—														
1	Recognise no colour	...	...	...	...	...	1	4	6	...	...	...	11
2	Know the colour "red"	...	...	...	...	...	...	2	...	...	...	22	24
3	Know one or two simple colours	...	...	...	...	...	...	5	23	6	6	14	54
4	All simple and compound shades	7	12	25	5	17	27	8	101
5	Know and match all shades	...	...	...	...	...	17	23	...	...	2	...	42
6	Simple, compound, and match them all	...	...	...	...	...	34	...	...	...	1	...	35
SHOP LESSON—														
1	Know no coins or weights	...	...	...	...	...	...	30	...	...	...	...	30
2	Know a few coins...	...	...	...	...	...	...	12	6	2	...	6	26
3	Know a few coins and weights	...	...	...	...	...	20	7	...	...	...	...	27
4	Know all coins and some weights	...	...	...	...	...	24	10	...	...	...	...	34
5	Know all coins and weights	...	...	...	...	...	18	8	...	...	...	...	26
6	Coins, weights, and calculate fairly	...	...	...	...	...	4	...	...	...	...	...	4
KINDERGARTEN DRAWING—														
1	No knowledge of drawing at all...	...	...	...	...	...	...	23	4	...	...	...	27
2	Can make straight lines	...	...	...	...	...	2	10	6	9	23	...	50
3	Can form outlines...	...	...	...	...	...	12	19	7	5	10	10	63
4	Can draw objects	...	...	...	...	...	39	16	18	...	4	...	77

PART V.

ANNUAL REPORT OF THE AMBULANCE COMMITTEE FOR THE YEAR 1893.

22nd January, 1894.

*To the Managers of the
Metropolitan Asylum District.*

GENERALLY.

DEFICIENCY OF FEVER HOSPITAL ACCOMMODATION.

In submitting our Report for the year 1893, we regret to record the fact that owing to a deficiency of beds (especially for Scarlet Fever cases), which lasted several months, the removal of a large number of patients was deferred from day to day for so many days, that, ultimately, many remained at home until the termination of their illness. It is, moreover, certain that when this state of things became known, in many cases it was considered futile to make any applications at all. Had sufficient accommodation existed, it is estimated that as many as 6,000 Scarlet Fever cases would have been under treatment at one time—a number nearly double that which was actually attained.

PROVISION OF ADDITIONAL ACCOMMODATION A WORK OF TIME, AND AFTER EXPERIENCE OF ALTERED CONDITIONS.

The provision of greatly increased hospital accommodation will necessarily be a work of time, and must be based on reliable estimates, not so much of the average as of the maximum prevalence of the diseases to be admitted. Such information was not available previous to the enforcement of notification in London at the end of 1889. Hence, at the passing of the Public Health Act in 1891, the Managers had but the experience of two years to guide them. But the introduction of compulsory notification, and the growing popularity of the Board's Hospitals, have increased the demands for admission to such an extent, that whereas in 1890 the Managers admitted 42 per cent. of the total number of cases of Scarlet Fever notified in London, in 1892 the percentage had risen to 48, and in the first four months of 1893 to 54 per cent.

DIFFICULTIES OF OBTAINING SITES FOR HOSPITALS.

That the Managers found themselves unable to grapple with this rapid increase was due principally to the opposition raised to their acquisition of additional sites. In spite of all difficulties, however, they succeeded in increasing their accommodation by some 900 beds—viz., by the establishment of a hospital at Tottenham for about 500 beds in 1892, and of one in the past year at Lower Tooting for about 400 beds; and, further, at the close of the year they were in possession of vacant land at Lower Tooting, Lewisham, and Shooter's Hill. The three latter sites will suffice for Hospitals to contain in the aggregate about 1,500 beds, and the Managers already have before them plans for the Hospital which it is intended to erect at Shooter's Hill.

When Hospitals have been erected on the sites already purchased, and on the land which must be obtained for one or more Convalescent Hospitals for the Southern Districts, it is hoped that sufficient accommodation may exist for all ordinary requirements of the Metropolis.

REDUCTION OF ACCOMMODATION IN EXISTING HOSPITALS DURING 1893 AS COMPARED WITH THAT PROVIDED IN 1892.

On several occasions during the year questions have been asked by Managers regarding the decreased accommodation for patients provided in the Hospitals during 1893, as compared with that provided in 1892; and it is therefore desirable that the causes of such decrease should be here placed on record in the following statement:—

HOSPITAL.	Total accommodation in		Extent of Reduction.	REASONS OF REDUCTION.
	1892.	1893.		
Eastern	502	356	146	The demolition of certain wooden huts, and the reduction of the number of beds in the permanent wards under medical advice.
North-Eastern	600	500	100	Reduction of number of beds in wards under medical advice.
North-Western	499	384	115	Demolition of wards to make way for new administrative buildings.
Western	376	366	10	Ward used for Staff purposes.
South-Western	400	400	...	
South-Eastern... ..	458	462	...	Increase of four beds.
Northern	972	800	172	Reduction of beds in wards under medical advice.
Gore Farm	836	200	636	Use of Upper Hospital for Small-pox cases.
Totals	4,643	3,468	1,179	

The opening of the Fountain Hospital has reduced the nett loss of beds to 773, and this figure will shortly be further reduced by the provision of additional beds at the Eastern, the South-Western, and the Western Hospitals.

SYSTEM OF SELECTING PATIENTS FOR ADMISSION TO THE HOSPITALS.

When in the early summer the accommodation in the Managers' Hospitals became exhausted, the system of selecting patients for the beds becoming vacant daily by deaths and discharges which was adopted in like circumstances in the autumn of 1892, was again enforced—namely, when no bed could be obtained, of requiring the application to be renewed from day to day, with a statement of the circumstances appearing to render the case one of urgency, and then each day a selection was made by the officers employed in the Ambulance Department of those cases which appeared to be most in need of hospital treatment and isolation.

This system was not adopted until after very careful consideration ; but it did not go unchallenged, and various alternative suggestions were made to the Managers, such as restricting the admissions to patients provided with Relieving Officers' Orders, or to those recommended by the Sanitary Officers. We are convinced, however, that it was the best system, having regard to all circumstances, that could have been enforced.

One practical consequence of the revision of the available accommodation each day was to cause the work of removal to be commenced somewhat later than is customary when the vacant beds are sufficient to meet all demands. This resulted in the officers of the service being employed for longer hours and in the last removals being effected much later in the day than usual ; indeed, in some instances in the early hours of the following day. But this additional strain has been borne by the staff at the stations, and by the Nurses, with a cheerful willingness of which it is impossible to speak too highly.

ALTERATION OF THE MANAGERS' REGULATIONS FOR THE REMOVAL AND ADMISSION OF PATIENTS TO THEIR HOSPITALS.

From the time of the first admission of patients, not paupers, the Managers have not allowed the removal of any patient to their Hospitals, unless a medical certificate was handed to the ambulance nurse at the time of removal. Such a certificate was looked upon as a protection to the Managers and their Officers if a patient was found not to be suffering from the certified disease, but developed an infectious disease as a result of his admission to Hospital.

During the past year, however, representations were made on behalf of

certain Sanitary Authorities that the means of obtaining removal of patients would be simplified, and the removal itself facilitated, if a copy of the Notification Certificate were accepted as a sufficient authority for the patient's admission to the Hospital.

After careful consideration we came to the conclusion that the responsibility for the removal of a patient rests primarily with the medical practitioner who notifies the case to the Medical Officer of Health, and, secondly, with the person who makes the application for the removal. We, therefore, with a view of facilitating prompt removal and of avoiding delay in the preliminaries, have given instructions to the Ambulance Nurses to accept as a medical certificate a copy of the Notification Certificate bearing the official stamp of the Medical Officer of Health or of the Sanitary Authority, or in some other way showing on the face of it evidence that it has been issued by the Sanitary Authority.

INCREASED WORK OF AMBULANCE SERVICE WILL NECESSITATE PROVISION OF ADDITIONAL AMBULANCE STATIONS.

The strain thrown upon the three existing Ambulance Stations by the enormous increase of work during the past year has shown the necessity for further ambulance accommodation, even with no addition to the number of the Managers' present Hospitals. But in view of the establishment of at least three additional Hospitals for acute cases, and a fourth for convalescing cases, we think that the time has arrived when it becomes our duty to prepare and submit to the Board proposals for the establishment of more Ambulance Stations in contiguity to some of the new Hospitals. Such proposals are now under our consideration.

TEMPORARY AMBULANCE SHELTER PROVIDED AT TOOTING.

It may be here mentioned that a temporary shelter for a few ambulances and horses has been erected on land adjoining the new Fountain Hospital at Lower Tooting, and this has greatly relieved the work of the South-Eastern Ambulance Station.

INSPECTION OF RIVER AMBULANCE SERVICE AND SMALLPOX HOSPITALS.

On the 15th May, the Smallpox arrangements of the Board (including the Wharves, Ambulance Steamboats, Hospital Ships, and Convalescent Hospital at Gore Farm) were inspected by Members of the Society of Medical Officers of Health.

PROPOSED AMBULANCE SERVICE FOR REMOVAL OF PERSONS OF UNSOUND
MIND.

A proposal, made by certain of the Poor Law Authorities, that the Board's Ambulance arrangements should be extended so as to embrace the removal of patients of unsound mind from the Metropolitan Workhouses and other places of detention to the Metropolitan Lunatic and Imbecile Asylums was referred to us for consideration and report by the General Purposes Committee, to whom the question had been referred by the Board.

In our Report we expressed the opinion that it would be possible to effect the removal of patients of unsound mind by the staff and horses employed at the various Ambulance Stations, but that it would be necessary to provide special uniforms for the men, and to employ special vehicles, the latter to be kept in a place entirely apart from those used for the removal of infectious cases. We also expressed a doubt whether it would be wise to take any immediate action in the matter, as the idea of placing the removal of persons of unsound mind in the hands of a central authority was so novel that few Boards of Guardians appeared to have given serious attention to the subject, or to have expressed any wish for a change of the existing practice. But we thought it was a matter for consideration whether or not the Sub-Committee, who had been deputed to look out for a site for a proposed Imbecile Infirmary, should be instructed to see that the site they might recommend for purchase should contain sufficient land for the erection thereon, if thought fit, of an Ambulance establishment, which might be the head-quarters of an entirely distinct Ambulance service.

In the result our suggestion was adopted, and the Board gave instructions to the Sub-Committee accordingly.

INCREASED PREVALENCE OF SMALLPOX AND APPOINTMENT OF A MEDICAL
OFFICER FOR THE RIVER SERVICE.

The outbreak of Smallpox, which commenced towards the end of 1892, found the Board's Ambulance services, both on land and river, after seven years of comparative inactivity, prepared to deal promptly and adequately with the situation.

The rapid increase in the prevalence of the disease during the early part of the year induced us, with the sanction of the Managers, to appoint Dr. Brooke, on the 23rd January, 1893, as Medical Officer of the River Service, to inspect all patients brought to the Wharves, with a view of revising the diagnosis in each case, and in any case in which it might appear necessary to accompany the patient to the Hospital Ships.

ISOLATION OF DOUBTFUL CASES OF SMALLPOX.

Before the appointment of Dr. Brooke—viz., on the 10th December, 1892—the Managers, at the instance of the Smallpox Hospitals Committee, appointed a Special Committee to consider and report to the General Purposes Committee upon the question of the provision of isolation accommodation for doubtful cases of Smallpox.

The Committee, in considering the question, had reports on the subject from Dr. Birdwood, formerly Medical Superintendent of the Hospital Ships and from Dr. MacCombie, the Medical Superintendent of the South-Eastern Hospital. The Committee came to the conclusion that it was highly desirable that the Board's Fever Hospitals should, as far as possible, be kept free from contact with Smallpox, and that the isolation accommodation necessary for doubtful cases of Smallpox should be provided at the South Wharf instead of, as heretofore, at the South-Eastern Hospital.

A recommendation to that effect was adopted by the Managers, and the shelters designed for the purpose were completed in the beginning of July. They consist of two detached corrugated iron buildings lined with wood—one, containing four separate rooms, with a nurses' duty room; and the other, two separate rooms and a nurses' duty room—and they have proved valuable additions to the Smallpox arrangements.

CONTROL OF ALL STAFF AND MATTERS CONNECTED WITH THE TREATMENT OF PATIENTS TRANSFERRED TO THE SMALLPOX HOSPITALS COMMITTEE.

In the course of the year a slight alteration in the management of the River Service, so far as the treatment of patients is concerned, has been made.

When the Service was originally started in 1884-5, during the Smallpox epidemic, the sole control of the Medical Officers and the nurses employed at the Wharves and on the Ambulance Steamboats during the transfer of patients to the Hospital Ships, rested with the Ambulance Committee; but at the end of the epidemic, in the spring of 1886, it was thought desirable to place the control of the nursing staff (the services of the Medical Officers having at the time been dispensed with) under the Hospital Ships Committee, together with the responsibility of providing for the maintenance and treatment of the patients while on board the boats. It seemed therefore expedient that, for the time being, the control of the medical and nursing staff employed at the South Wharf in connection with the newly-erected shelters, and the responsibility for providing all necessaries required in those shelters, should also be transferred to the Smallpox Hospitals Committee. In the event of a serious epidemic of

Smallpox occurring it might, however, be found necessary to reconsider this arrangement.

APPOINTMENT OF GENERAL SUPERINTENDENT OF SMALLPOX ARRANGEMENTS.

The variety and extent of the Smallpox arrangements induced the Managers on the 18th March to authorise the Smallpox Hospitals Committee to appoint Dr. Birdwood, formerly Medical Superintendent of the Hospital Ships, but at the time Medical Superintendent of the North-Eastern Fever Hospital, to the position of General Superintendent of those arrangements, with powers of supervision over all engaged in this department of the Board's work, from the extreme outposts occupied by the nurses engaged on Smallpox work at the several Ambulance Stations and throughout the River Service to the Hospital Ships, and thence to the convalescent hospital at Gore Farm, Darenth. On the 29th July, when Smallpox had become less prevalent, Dr. Birdwood's appointment ceased, and he resumed his duties at the North-Eastern Fever Hospital.

DISSEMINATION OF INFORMATION AS TO SPREAD OF SMALLPOX.

As the Managers are already aware, the introduction to and dissemination of Smallpox within the Metropolis during the early part of the year were mainly due to persons of the vagrant class who entered London from places in the provinces where the disease was prevalent. As a result many of the casual wards, shelters, and common lodging houses became infected, and appeared likely to continue to act as centres for the further spread of the disease, in the absence of concerted action to counteract their influence. It had already been suggested to the various parochial authorities that an effective means to that end would be a systematic medical inspection of such places, but there appeared to be almost insuperable difficulties in the way of its uniform adoption, difficulties mainly due to the number of separate authorities exercising control over the various kinds of lodging places.

We thought, however, that important assistance might be rendered to the various authorities if they could be kept informed as to the places from which patients had been admitted, and their movements prior to admission, so far as they could be ascertained, and, in accordance with our instructions, Dr. Brooke, the Medical Officer of the River Ambulance Service, has obtained much valuable information, and has forwarded it to the Clerk to the Board, who has circulated it weekly, in a digested form, amongst the Medical Officers of Health, the Medical Officers of Poor Law Infirmaries and Workhouses, the Police Superintendents, and other interested persons.

LAND SERVICE.

REMOVALS TO THE MANAGERS' HOSPITALS.

On reference to Appendix A it will be seen that the total number of Fever patients removed to the Managers' Hospitals during the year was 18,496, as compared with 16,118 in 1892, 7,725 in 1891, and 8,235 in 1890. The removals of Smallpox patients numbered 2,389, as compared with 306 in 1892, 64 in 1891, and 26 in 1890.

The average daily removals of Fever patients in the first six months of the year were 43, and the last six months 55, as compared with 28·3 and 59·5 respectively in 1892.

The aggregate removals during the year, including the transfer of patients from one Hospital to another, numbered 36,976. Of this number 13,266 were effected by the Eastern Station, 11,359 by the Western Station, and 12,351 by the South-Eastern Station (including the removals effected by the Fountain Ambulance Shelters).

Appendix B exhibits the number of journeys made and miles run by the horses and vehicles during the year.

The following were the greatest numbers of patients removed to Hospital in a day by the several stations:—Eastern Station, on 6th November, 62 patients (6 others were sent for, but for various reasons were not removed); Western Station, on 4th November, 41 patients; and the South-Eastern Station, on November 18th, 48 patients.

The heaviest week's work was for the Eastern Station, that ended on the 11th November, when 360 removals (including transfers, &c.) were effected and 2,501 miles were travelled; for the Western Station, that ended on the 4th November, when 324 removals were effected and 2,125 miles were travelled; and for the South-Eastern Station, that ended on the 11th November, when 336 removals were effected and 2,243 miles were travelled.

SMALLPOX PATIENTS.

In our Report for the year 1892 we drew attention to the fact that in the last month of that year 40 cases of Smallpox were admitted from 17 different districts, nine being from Salvation Army Shelters and Casual Wards, and we remarked that great care and watchfulness would have to be exercised during the early months of the following year if the onset of the disease was to be again successfully met.

The fears we entertained of a widespread recrudescence of the disease were unfortunately realised. Cases began to occur in almost every district of the Metropolis, at first almost exclusively amongst tramps and other

persons accustomed to avail themselves of the lodgings afforded in Casual Wards, Salvation Army Shelters, and common lodging houses, and who were infected by persons of the same class coming into London from places in the provinces where the disease existed in epidemic form. Principally through the medium of these persons the disease was later on spread amongst the settled population of London.

Inasmuch as no fewer than 2,557 patients, certified to be suffering from Smallpox, were removed from their homes during the year, it seems probable that the Metropolis has narrowly escaped a severe epidemic of the disease. Whether this be so or not, the experience of the year has amply justified the persistence of the Managers, in spite of adverse criticism, in maintaining the River Ambulance Service and the Hospital Ships in a complete state of readiness. As a consequence, cases as they were notified were rapidly removed and isolated.

MONTHLY ADMISSIONS.

The number of patients admitted to the Smallpox Hospitals was 98 in January, 153 in February, 251 in March, 440 in April, and 537 in May. In the subsequent months the numbers declined from 327 in June to 215 in July, 99 in August, 70 in September, and 77 in October; but in the last two months of the past year the disease has shown signs of increased prevalence, the admissions numbering 128 in November, and 89 in December. Some of these cases proved not to be Smallpox, and were discharged after being detained in isolation wards a few hours or days.

OUTBREAK AT KENSINGTON.

The outlook for the New Year is not hopeful. If the disease is to be kept within moderate bounds the vigilance of all engaged in sanitary work will have to be constant and unwearied. That it has been so in the past year there is encouraging evidence. As an instance, we would draw attention to the recent alarming outbreak of the disease in the parish of Kensington. In that parish, about the end of September, an unrecognised case of Smallpox occurred in a house in the Portobello Road. The patient, thought to be suffering from Chickenpox, was treated at home. Her father, who kept a small milk shop and distributed milk from door to door in the neighbourhood, was attacked, and it was not until he was dying that a second medical opinion was obtained. The cause of death was certified to be confluent Smallpox. In the meantime the disease had been spread amongst the neighbours and customers of the deceased, and cases began to develop in rapid succession. In all, some 70 persons were attacked. The action taken by the Medical Officer of Health was prompt. The services of the Vaccination

Officers were at once made available, and house to house visitations were made, and stringent disinfection measures were enforced, with the result that the outbreak was remarkably limited in area, and was soon subdued.

TOTAL REMOVALS.

The total number of patients certified to be suffering from Smallpox removed from their homes during the year was 2,557, but only 2,356 of that number were permitted to proceed to the Hospital Ships by the Medical Officers who inspected the patient before they embarked on the Ambulance Steamboats.

NON-SMALLPOX CASES.

All of the 201 patients who were, in the opinion of those Officers, not suffering from Smallpox were returned to their homes, with the exception of one who was admitted into the South-Eastern Fever Hospital.

SMALLPOX IN FEVER HOSPITALS.

In the course of the year, eight patients under treatment in the Fever Hospitals were found to be suffering from Smallpox, and were transferred to the Hospital Ships, or to the Convalescent Hospital at Gore Farm.

FEVER PATIENTS.

At the commencement of the year there were 3,559 patients in the Managers' Hospitals, distributed as follows:—

Hospital.	Scarlet.	Diphtheria.	Typhus.	Enteric.	Other Diseases.	Total.
Eastern Hospital ...	284	58	—	34	—	376
North-Eastern Hospital	392	—	—	—	—	392
North-Western Hospital	303	90	—	12	2	407
Western Hospital ...	263	34	—	13	2	312
South-Western Hospital	267	58	—	19	1	345
South-Eastern Hospital	311	19	—	11	2	343
Northern Hospital ...	746	10	—	—	—	756
Gore Farm Hospital ...	628	—	—	—	—	628
Totals	3,194	269	—	89	7	3,559

This was a greater number by 1,718 than at the beginning of the preceding year. The number under treatment fell to the minimum (2,199) for the year by the 24th March. After this date the number rose slowly during April, and then rapidly during May and June, and less rapidly in

July, until the number of 3,224 was attained on the 19th of that month, and at about that figure it remained until the number of beds was increased by the opening, on the 30th October, of the new Fountain Hospital at Lower Tooting, and by one of the day-rooms in each of the pavilions at the Northern Hospital being again used as dormitories. Then the number under treatment again rose rapidly until the maximum (3,538) for the year was reached on the 5th December.

ENTERIC FEVER PATIENTS.

The accommodation for patients suffering from Enteric Fever was, so soon as it became evident in 1892 that every available bed would be required for the Scarlet Fever cases, reduced to the lowest point, and remained so during 1893, the arrangements made with the general Hospitals for the reception of such cases as the Managers might be unable to accommodate being continued. In all 170 cases were removed to the general Hospitals.

DIPHTHERIA PATIENTS.

The total number of patients removed to the Managers' Hospitals certified at the time of removal to be suffering from this disease or from "Diphtheritic Membranous Croup" was 3,194, as against 2,349 in 1892, 1,481 in 1891, 1,049 in 1890, and 770 in 1889. Of that number 47 per cent. were removed during the first half and 53 per cent. during the second half of the year.

It is in connection with patients suffering from this disease that an insufficiency of Hospital accommodation makes itself most acutely felt. The unavoidable delay sometimes experienced in ascertaining if and where a vacant bed exists, and the deplorable necessity of transporting some patients to a Hospital at a considerable distance from their homes, or the general Hospital to which they have in the first instance been taken, cause, it is feared, a great increase both of risk and discomfort to the sufferer, and certainly much dissatisfaction to all concerned.

PATIENTS CONVEYED TO OTHER PLACES THAN THE MANAGERS' HOSPITALS.

Under the powers conferred by Section 79 (3) of the "Public Health (London) Act, 1891," 593 persons suffering from dangerous infectious disorders were conveyed in the Managers' Ambulances during the year 1893. Of these 26 were stated to have Measles, 362 Scarlet Fever, 72 Enteric Fever, 58 Diphtheria, 53 Erysipelas, 14 Smallpox, three Puerperal Fever, two Continued Fever, one Influenza, and two Cholera. Of the total number removed, no fewer than 270 were conveyed from different distant parts of London to the London Fever Hospital, Liverpool Road, Islington.

The total sum received by the Managers under this Section of the Act during 1893 was £214 6s., of which £54 15s. was in respect of the services of nurses. In four cases payment was remitted on account of the want of means of the patients.

A copy of the regulations relating to the removal of patients to the Managers' Hospitals and to other places is annexed (see Appendix D).

AMBULANCE STATIONS.

The Eastern, Western, and South-Eastern Stations have been maintained in complete repair.

At the Eastern Station the wood paving has been replaced by blue Staffordshire bricks, at a cost of £439 6s. 3d.; sleeping accommodation for eight additional men has been obtained by converting part of the fodder loft into cubicles, at a cost of £185; the greater part of the hot-water system has been renewed, and a new boiler and expansion tank provided for the heating apparatus; a new boiler has been provided, and a portion of the cold water service has been re-laid, all at a cost of £200 1s. 7d.

At the Western Ambulance Station the male staff mess-room has been enlarged, at a cost of £31 14s.

During the year four old ambulances and two omnibuses have been condemned; and nine new ambulances, an omnibus, and a cab have been purchased, at a cost of £921 15s.

Eleven new sets of single harness have been purchased for £80 17s.

It has also been considered advisable to replace the flat India-rubber air beds used in some of the ambulances by fluted ones; and the cost of these, and of others required to replace worn-out beds and for the additional vehicles (42 beds and pillows in all), amounted to £219 6s.

The erection of temporary shelters for ambulances, horses, and men at the Fountain Hospital has already been referred to, p. 245.

STAFF.

We regret to record the death of Mrs. Blake, Housekeeper at the South-Eastern Station.

RIVER SERVICE.

STEAMERS.

The three Ambulance Steamers "Red Cross," "Maltese Cross," and "Albert Victor," and the steam pinnace "Swallow," underwent the usual Board of Trade survey, and their passenger certificates have been renewed.

The distance run collectively by the steamers was 28,341 miles, and they conveyed 10,652 patients and other passengers, and 56 tons 5 cwt.

96 lbs. of stores, &c., to and from the Hospital Ships at Long Reach (see Appendix C).

The Managers' steamers caused no damage to any vessel or craft during the year; but, as in former years, several barges and other craft have come into collision with the steamers while lying at their moorings. The damage sustained has been in every instance made thoroughly good, and the total amount recovered in respect thereof during the year was £174 10s. 6d., making a total of £1,633 13s. 10d. recovered since 1885, in which year the present system of insurance against damage of all kinds, without the usual restrictive clauses, was first adopted.

NEW STEAMBOAT.

The difficulties in providing for the conveyance of patients when one or other of the above-named Ambulance Steamboats was laid up for repairing damages, or for Board of Trade survey, and the possibility of accidents happening in the future which, by laying up one or more of the boats, might leave the service inadequately provided for, induced us to recommend the Managers to build a fourth steamboat, in general accordance with particulars and plans prepared by Mr. Thomson, the Superintendent of the River Ambulance Service.

The Managers advertised for tenders, and the plans and specifications sent in were submitted to a professional assessor. Eventually the designs of Messrs. J. Stewart & Son, Ltd., of 22, Billiter Street, E.C., were accepted. The amount of their tender was £9,417, and the work of building the vessel is progressing.

WHARVES, &C.

The wharves and piers, and the houses and other buildings in connection therewith at Fulham, Rotherhithe, and Blackwall, continue to be maintained in a satisfactory state of repair. The fences, however, at West and South Wharves will soon require partial if not entire renewal.

A contract has been entered into for the purchase of the freehold of the premises immediately adjoining the north side of North Wharf.

At the South Wharf, as before-mentioned on page 247, shelters for doubtful Smallpox patients have been erected. One (No. 315) of the four houses in Rotherhithe Street which adjoin this wharf and belong to the Managers, together with one room in No. 313, two rooms in No. 317, and one room in No. 319, have been set apart for the accommodation of the Medical Officer and the nurses and servants employed in connection with the Hospital wards of the steamboats and the shelters for doubtful cases on the wharf. This arrangement is, however, in some respects unsatisfactory, and

we have under consideration a proposal for the erection of special buildings for the accommodation of the Hospital staff.

STAFF.

During the prevalence of Smallpox it was found necessary to engage sufficient men to form three crews for the steamers, but on the disease declining the services of the third crew were dispensed with. The cost of the staff is considerably increased by the existing necessity for keeping a boat alongside the South Wharf all night for the reception and accommodation of patients who may arrive too late in the evening for transport to Long Reach. We think it would be more economical to construct for this purpose a small ward on shore.

COST OF AMBULANCE SERVICES.

The total payments made during the year ended on the 31st December last were as under :—

	£	s.	d.
For the Eastern Station	5,286	4	6
„ South-Eastern Station	4,857	19	7
„ Western Station	5,032	15	4
	<u>£15,176</u>	<u>19</u>	<u>5</u>
Enlargement of Western Station—			
Expenditure out of Loan Account	£818	6	3
„ „ General „	311	5	0
	<u>£1,129</u>	<u>11</u>	<u>3</u>
Fountain (temporary) Station—			
On account of erection of Station	500	0	0
River Service	7,483	17	1
To which must be added—			
(1) Payments for overhauling machinery of and repairs of the Steamers	819	19	11
(2) Repairs to piles at North Wharf and re- tarring South Wharf	201	10	10
	<u>£8,505</u>	<u>7</u>	<u>10</u>
Expenditure out of Loan Account—			
Erection of Shelters at South Wharf	1,727	12	3
On account for construction of new Ambulance Steamboat... ..	1,968	15	10

In the expenditure at the three Ambulance Stations is included a sum of £1,221 18s. for new vehicles, harness, and beds, which were required to replace worn-out vehicles, &c., and to meet the increased work of the service (*vide* p. 253).

With regard to the ambulance nurses who have, as in previous years, been drawn for Fever purposes from the Hospitals in proximity to the Ambulance Stations, or, for Smallpox purposes, from the staff of the Hospital Ships, it may be mentioned that, for purposes of account and comparison as between the different institutions of the Board, the cost of their services have been assumed to be fairly represented by a fixed charge of 2s. 6d. per journey, and in the aggregate these charges amount to no less a sum than £2,629 13s. 6d. for the past year.

(Signed) AUGUSTUS C. SCOVELL,
Chairman of Committee.

APPENDIX A.—LAND AMBULANCE SERVICE.

Number of Patients removed by the Ambulances of the Board.

	From 1881 to 1890.	1891	1892	1893	TOTALS.
FEVER:—					
From homes to Hospitals ...	35,123	7,725	16,118	18,496	77,462
Convalescents to Northern and other Hospitals ... }	9,487	2,392	7,682	6,813	26,374
Recovered cases from Northern Hospital to Town Hospitals for discharge ... }	8,254	2,206	4,572	5,670	20,702
Recovered cases discharged from Northern Hospital conveyed from Eastern and Western Hospitals to South-Eastern Hospital ... }	...	...	100	60	160
Recovered cases from Gore Farm Hospital to Town Hospitals for discharge ... }	309	137	2,205	1,536	4,187
Recovered cases from Gore Farm Hospital conveyed from the South-Eastern Hospital to the Western, South-Western, and Eastern Hospitals ... }	...	...	183	126	309
From Hospitals to homes ...	*2,678	140	220	279	3,317
From general Hospitals to homes, owing to want of room in the Managers' Hospitals ... }	...	...	...	468	468
Enteric Fever cases from homes to general Hospitals ... }	...	...	...	170	170
Total Fever Patients ...	55,851	12,600	31,080	33,618	133,149
SMALLPOX:—					
From homes to Hospitals and Wharves ... }	14,006	64	306	2,389	16,765
From Hospitals to Wharves ...	4,890	63	200	331	5,484
Other transfers ...	...	...	5	1	6
From Hospitals and Wharves to homes ... }	10,358	...	10	44	10,412
Total Smallpox Patients	29,254	127	521	2,765	32,667
Conveyance of Patients to other places than the Managers' Hospitals ... }	130	126	432	593	1,281
Grand Totals ...	85,235	12,853	32,033	36,976	167,097

* Includes some Smallpox cases.

N.B.—(1) The Eastern Ambulance Station commenced work on the 14th July, 1881, at London Fields; the South-Eastern Station on the 1st October, 1883; and the Western Station on the 9th July, 1884.

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

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

Return of Work for the Twelve Months ended 31st December, 1893.

PARTICULARS OF WORK.	Number of Journeys.	MILES RUN.				
		By Horses.				By Vehicles.
		1	2	3	4	
REMOVALS FROM HOME—						
Fever Patients to London } Hospitals	16,902	156,672	192	...	...	156,864
Smallpox Patients to London } Hospitals	215	2,717	105	...	...	2,822
Smallpox Patients to Wharves }	1,952	24,999	77	...	...	25,076
Non-Smallpox Patients returned } home	184	2,806	...	...	...	2,806
Other Patients returned home ...	28	184	...	...	...	184
Patients sent for, but for various } causes not removed	753	5,441	26	...	...	5,467
Enteric Fever cases from Homes } to general Hospitals	160	1,384	...	...	...	1,384
TRANSFERS BETWEEN HOSPITALS—						
Fever Convalescents to and } from Northern Hospital ...	1,159	526	18,434	...	173	19,133
Fever Convalescents from } Gore Farm Hospital	413	...	9,568	...	34	9,602
Fever Convalescents to other } Hospitals	266	1,751	1,125	...	...	2,876
Smallpox Patients to Wharves }	205	1,099	...	...	...	1,099
Smallpox Patients to Gore } Farm Hospitals	2	...	34	...	...	34
Patients from general Hospitals } to Homes	426	3,665	12	...	...	3,677
RECOVERED PATIENTS TAKEN HOME—						
From Hospitals:—Fever ...	289	2,307	...	...	...	2,307
From Wharves:—Smallpox ...	47	625	36	...	...	661
Service Requirements	424	3,138	175	...	34	3,347
Conveyance of Hospital Stores ...	2	...	34	...	...	34
Conveyance of Ambulance } Committee	7	7	76	...	...	83
	23,434	207,321	29,894	...	241	237,456
CONVEYANCE OF PATIENTS TO OTHER PLACES THAN MANAGERS' HOSPITALS	583	7,563	292	...	...	7,855
Totals for 1893	24,017	214,884	30,186	...	241	245,311
Totals for 1892	17,607	147,606	27,497	...	3,535	178,638
Totals for 1891	8,254	66,129	12,958	...	791	79,873
Totals for 1890	8,644	67,443	14,167	415	2,405	84,423
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
Grand Totals	78,246	637,333	111,054	647	10,772	759,794

APPENDIX C.—RIVER SERVICE.

Number of Patients, Visitors, Staff, &c., conveyed to and from the Hospital Ships during the year 1893.

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	97	33	3	107	240
February	150	64	7	209	430
March	241	141	15	258	655
April	413	187	65	294	959
May	511	390	444	389	1,734
June	312	414	170	467	1,363
July	200	290	362	509	1,361
August	97	178	263	369	907
September	70	119	119	395	703
October	74	45	215	382	716
November	122	73	399	348	942
December	77	119	133	313	642
Totals for year 1893	2,364	2,053	2,195	4,040	10,652
Totals for 1892	298	335	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	14,062	12,699	3,659	10,945	41,365

STEAMERS.

STEAMER.	Fires alight.		Under Steam.		Under Way.		Coal consumed.		Number of days when under steam.	Distance run.
	Hours.	Mins.	Hours.	Mins.	Hours.	Mins.	Tons.	Cwt.		Miles.
"Red Cross"	4,081	30	3,864	10	926	25	377	14	232	8,812
"Maltese Cross"	4,125	25	3,840	40	1,025	52	452	18½	252	10,481
"Albert Victor"	3,369	4	3,176	48	861	5	397	8¾	206	8,907
"Swallow"	93	25	55	35	18	34	1	5	8	141
Totals	10,669	24	10,937	13	2,831	56	1,229	6	698	28,341

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

Number, 1,676. Weight, 56 tons 5 cwt. 96 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 Annual Reports for 1884 and 1885.

APPENDIX D.—AMBULANCE SERVICE.

Removal of Persons suffering from Infectious Diseases.

1. Apply on Week Days between 9 a.m. and 8 p.m., } To the Chief }
 } Offices: } Postal Address: Norfolk House, Norfolk Street,
 } } Strand, W.C.
 } } Telegraphic Address: Asylums Board, London.
 } } Telephone Number, 2587.

N.B.—Applications in the latter part of the day must be dispatched in time to reach the Offices before 8 p.m.

- At Night, between 8 p.m. and 9 a.m., and on Sundays, Christmas Day, and Good Friday, } To the }
 } Ambulance } Eastern Ambulance Station, Brooksby's Walk,
 } Stations: } Homerton, N.E.
 } } South-Eastern Ambulance Station, New Cross
 } } Road (near Old Kent Road Railway Station),
 } } S.E.
 } } Western Ambulance Station, Seagrave Road,
 } } Fulham, S.W.

2. REMOVAL TO THE BOARD'S HOSPITALS.

- (a) Only persons suffering from Smallpox, Fevers, or Diphtheria are admitted into the Board's Hospitals.
 (b) Every application must state the name, age, and full address of the patient, from what disease suffering, and in cases of fever the particular kind of fever; and also the name of the person making the application.
 (c) Unless a Medical Certificate, or a copy of the Notification Certificate bearing the official stamp of the Medical Officer of Health, or of the Sanitary Authority, or in some other way bearing on the face of it evidence that it has been issued by the Sanitary Authority, be handed to the Ambulance Nurse the patient will not be removed.
 (d) Patients should leave all valuables, money, &c., and all outside clothing at home, should wear body linen only, and be wrapped in the blankets provided for the purpose.
 (e) The Ambulance Nurse will leave, at the house from which the patient is removed, a notice stating the Hospital to which the patient is to be taken, and a copy of the regulations as to visiting, &c.

3. CONVEYANCE TO OTHER PLACES.

- (a) Persons suffering from any Dangerous Infectious Disease may be conveyed by Ambulance to places other than the Board's Hospitals.
N.B.—Dangerous Infectious Diseases include the following: Smallpox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Scarletina or Scarlet Fever, Typhus, Typhoid, Enteric, Relapsing, Continued and Puerperal Fevers, and Measles.
 (b) Every application for an Ambulance must state:—
 (i.) Name, sex, and age of patient.
 (ii.) Description of disease, and in the case of fever, the particular kind of fever.
 (iii.) Full address *from* which the patient is to be conveyed.
 (iv.) Full address *to* which the patient is to be conveyed.
 (c) The patient must be provided with a Medical Certificate of the nature of the disease, to be handed to the Driver of the Ambulance.
 (d) The charge for the hire of the Ambulance, including (when the patient is over ten years of age) the services of a male attendant, is 5s. This amount must be paid to the Driver, who will give an official receipt for the same.
 (e) One person only will be allowed to accompany the patient, and such person may be conveyed back to the place from which the patient was conveyed. If desired, a nurse will be supplied at an additional charge of 2s. 6d. for her services.
 (f) The Ambulances may be sent outside the Metropolitan district only by special sanction of the Ambulance Committee or of the Clerk to the Board, and in such cases an extra charge will be made of 1s. for every mile outside the Metropolitan area.

4. The Drivers of the Board's Ambulances are not allowed to loiter on their journeys or to stop for refreshments, on pain of instant dismissal. It is particularly requested that any breach of this regulation, or any neglect or incivility on the part of the Drivers, Nurses, or Attendants may be immediately reported to the undersigned.

The Servants of the Board are forbidden to accept any gratuities or refreshments.

By Order, T. DUNCOMBE MANN,

Clerk to the Board.

Dated 22nd January, 1893.

N.B.—PENALTY—By Section 70 of the "Public Health (London) Act, 1891," it is enacted that—"It shall not be lawful for any owner or driver of a public conveyance knowingly to convey, or for any other person knowingly to place in any public conveyance, a person suffering from any dangerous infectious disease, or for a person suffering from any such disease to enter any public conveyance, and if he does so he shall be liable to a fine not exceeding £10"

PART VI.

REPORT BY DR. SHADWELL AS TO THE BOARD'S CHOLERA ARRANGEMENTS.

30th December, 1893.

*To the Cholera Committee of the
Metropolitan Asylums Board.*

GENTLEMEN,

I have the honour to submit to you a Report on the arrangements made this year on behalf of the Metropolitan Asylums Board for dealing with Cholera, to which I have added a brief survey of the present epidemic in Europe, with special reference to this country.

The responsibilities of the Board in relation to Cholera fall under two main heads:—(1) Transport of the sick; (2) Hospital accommodation.

TRANSPORT OF THE SICK.—The first step taken was to provide suitable Ambulance Stations throughout the Metropolitan area, that is, places where the special Cholera litters belonging to the Board might be housed so as to be within a short distance of, and readily available for, any cases that might occur in any part of London. I have previously, in my Report of last June, dealt in detail with this part of the subject, and will therefore dismiss it briefly. I succeeded in arranging 133 stations, nearly all of which I personally visited to assure myself of their suitability for the purpose. The accompanying list (see Appendix A) gives them in full. One—namely, 3, Rose Lane, which is a yard belonging to the Limehouse Guardians—has recently been refused by them, but there is an alternative place in the same district. In my opinion the stations enumerated form a fairly adequate provision in every district, except that of South Bermondsey or Rotherhithe, on the borders of Deptford. I made many attempts, in co-operation with the Medical Officer of Health for Rotherhithe, to obtain more stations in this district, but without success. There are yards and other suitable places, but the owners all declined permission to use them, on the ground that the

presence of a Cholera litter would be seized by the labour agitators, who seem to exercise great influence in Rotherhithe, as a pretext for causing trouble among the working men. This is a pity, for there is probably no district in London more susceptible to an attack of Cholera than Rotherhithe. Of the above-mentioned stations, only one was brought into use this year. In the month of September an ambulance was placed at the Workhouse, Parish Street, at the request of Dr. Wightwick, Medical Officer to the District of St. Olave's, Southwark. I have no doubt that the majority of the stations arranged this year would be available next summer, if necessary, but of course they would need revision.

The next point that engaged my attention was the condition of the ambulances. The Board possesses 82 wheeled litters, constructed with a view to Cholera, of the type used by the St. John Ambulance Society for accidents. Thirty-six of these were built in 1892, and are of the most recent pattern. The rest were built in 1884 or 1885. None have ever been used. On July 6th I visited South Wharf with Sir Douglas Galton, to inspect the older litters which were stored there. We found that, though satisfactory in other respects, they are open to one great objection for use with Cholera patients. There is practically no protection from the wheels, which rise on each side above the level of the couch whereon the patient lies, and as Cholera cases are frequently given to extremely violent movements, it might easily happen that a patient would thrust an arm through the spokes of the wheel. Mr. Thomson suggested that the defect might be remedied by a wire or wicker screen on each side of the couch, and he fitted up a specimen litter accordingly in a very ingenious way. I had, however, meanwhile inspected the newer litters stored at the Eastern Ambulance Station, and found that 12 of them had been fitted with an arrangement devised by Mr. Shirley Murphy—namely, a mackintosh ground sheet, which hooks on to the cover all round, thus completely enclosing the patient. The object of this arrangement is to retain all matters discharged by the patient during transit, and prevent their being dispersed in the street; but I found that the sheet, when hooked up, also forms an efficient protection against the wheels, and makes it impossible for the patient to leap off the couch. It seemed better, therefore, to provide more litters with ground sheets, which kill two birds with one stone, than to fit them with wheel-screens. Accordingly 24 new ground sheets were ordered, and fitted by the St. John Ambulance Society. It was not thought advisable to provide any more at the time, as they are apt to deteriorate by keeping, and if additional ones should be required, the necessity would be foreseen in plenty of time to have them made.

We thus had 36 litters fully equipped for immediate use, and they were

distributed thus:—12 at the Eastern Ambulance Station, Homerton; 12 at West Wharf, Fulham; and 12 at South Wharf, Rotherhithe. From these three depôts litters could be supplied to any part of London within a few hours.

The only remaining question connected with transport is that of bearers to work the litters. In 1892 negotiations were entered into with the Volunteer Medical Staff Corps to supply bearers, but no arrangement was effected. Communications were resumed last July, and eventually satisfactory terms were settled. A form of agreement was signed early in September by 42 members of the Medical Staff Corps for twelve months, so that these gentlemen will be available until September, 1894. In my opinion there would be no difficulty in obtaining the services of an indefinite number of senior medical students and junior qualified men at a few hours' notice, except during the summer vacation, when more time would be required to get them together. Grey linen overalls were provided for the bearers to the number of 24. It was not thought necessary to lay in a larger stock, as these articles can be supplied by the maker in a few hours.

HOSPITAL ACCOMMODATION.—In the month of June circulars were sent out to the Hospitals and Infirmaries which had promised beds in 1892, with the result shown in the accompanying table (see Appendix B). It will be seen that in all 1,687 beds were promised. So far as numbers are concerned, this may be considered fairly satisfactory; but when the distribution of the beds is examined, the result will be found extremely unsatisfactory. While beds are plentiful in the centre of London, some very large districts remain without any accommodation whatever, so far as the Board is concerned. Particularly I would point to an immense area in the south and south-east, including the whole of Wandsworth, Battersea, and Camberwell, and part of Lambeth. All these districts contain a large proportion of very poor inhabitants, who are particularly susceptible to Cholera. Any cases occurring among them would have to be carried several miles, which would be very bad for the patients, for locomotion is so injurious to persons suffering from this disease that some authorities maintain that the death-rate is directly proportionate to the distance traversed. Taking the most optimistic view of the situation, no one can, after the experience of last September, deny the possibility, and even probability, of isolated cases, or batches of cases, occurring in such districts as Wandsworth and Battersea. It is my duty, therefore, to point out the striking lack of accommodation at the disposal of the Board.

In the month of August copies of lists of Ambulance Stations and of Hospital beds were forwarded with a covering explanatory letter (see Appendix C) to the Medical Officers of Health of the several Metropolitan

Districts. As the Committee is aware, no need arose to set the special Cholera service in motion. Two suspected cases were notified to the Board, and were removed in ordinary ambulances from Hackney and St. George's-in-the-East respectively. I carefully investigated both, and satisfied myself that they were not Cholera.

While congratulating the Committee on the fortunate result, I should like them to know that the progress of the Cholera was very carefully watched throughout the summer and autumn, and that the arrangements were all in order before danger appeared on the horizon. The machinery could have been set in motion at a few hours' notice, and I believe with some confidence that had the call been made the work would have been carried out to the satisfaction of the Committee and of the public. The ground on which I feel emboldened to say this is the unfailing goodwill and readiness to oblige shown by all the responsible officials whose co-operation was sought in the making and carrying out of arrangements. Municipal London is a labyrinth of complex jurisdictions, but complexity disappears in action when the individuals are willing. The only difficulties encountered emanated from the public, in whose interest the arrangements were made. In this respect our enlightened British democracy has shown no more intelligence than the benighted peasantry of Russia.

CHOLERA IN 1892-3.

At the outset it may not be out of place to refer to an opinion which has found frequent expression in the newspapers, and seems to be widely prevalent, to the effect that Cholera is always more or less present on the Continent, and that the outbreak of 1892-3 offered to England no greater danger than that which she has successfully encountered on many previous occasions. This opinion, advanced with the laudable but superfluous intention of allaying an alarm which does not exist, is erroneous. Asiatic Cholera, of which alone I speak, has prevailed in Europe on certain definite occasions, separated by intervals of complete remission. On each occasion it has been freshly introduced from the East, and after over-running the Continent with greater or less rapidity, has lingered for a series of years and then completely disappeared. The present is the fourth of these pandemic visitations, the others having commenced in the years 1830, 1847, and 1865 respectively. Since the year 1866, when London suffered from a severe outbreak, England has not been exposed to such danger as that which has threatened her in 1892-93, unless we except the year 1873, when the remains of the 1865 visitation blazed up again in Northern Europe, and several cases reached our shores. At any rate, the present circumstances are

such as have not occurred for 20 years ; for, though an outbreak took place in 1884–85, it was of limited distribution, being confined almost entirely to the Mediterranean sea-board ; it was, in fact, epidemic but not pandemic, which makes a great deal of difference. Besides, on that occasion, the introduction from the East was never proved. Our escape, therefore, at that time justified only a very qualified confidence in face of the recent far more formidable situation, as, indeed, the result has proved.

Epidemiologically, then, the present visitation of Cholera must be classed with the great pandemic outbreaks which have devastated Europe in the past, and the last of which disappeared nearly 20 years ago. Its commencement presented one singular feature, namely, two independent points of origin, each with its own route of diffusion—one in the east and the other in the west of Europe. The western stream, which was the earlier, but much the less important, began in April, 1892—no one knows how—at Nanterre ; afterwards spreading to Paris, and then to Rouen and Havre. The other came directly from Asia, across the Caspian Sea, reaching Baku on June 18th, and rapidly over-ran the greater part of Russia. In some parts of the Empire, chiefly the Caucasus and the central provinces along the Volga, the mortality was unprecedented ; but the northern and western governments escaped for the most part very lightly. Altogether, however, the epidemic of 1892 was the most severe that has ever visited Russia, with only two exceptions. By the middle of August—that is, two months after its first appearance on the Caspian—Cholera was already in Germany, Holland, and Belgium ; but whether imported from France or Russia we do not know. In all three countries cases occurred over a wide area ; but the mortality was small, except in the notable case of Hamburg, which exhibited to the full all the traditional horrors attaching to the word Cholera. In September Galicia was attacked, and somewhat later Hungary, but in neither case to any alarming extent. During the autumn several ships arrived at English ports with Cholera on board, and thirteen cases occurred on shore ; but they were all individuals who had recently landed, and no spread of the disease took place.

To summarise. In 1892 the following countries were seriously attacked by Cholera—Russia, Germany, Holland, Belgium, France, and Austro-Hungary. In the three most affected the mortality was as follows :—

Russian Empire	...	...	...	...	269,075
German Empire	...	...	...	...	8,500
France	...	...	...	...	4,542

During the winter the epidemic died down, but did not wholly disappear in any part of Europe where it had previously prevailed. In January

cases were reported from Russia, from Hamburg and Halle in Germany, from France, Holland, Galicia, and Hungary; and so it continued through the first months of the year. In April and May the disease appears to have reached a minimum, but still existed in Russia, Galicia, and Brittany. Particularly in the last country, it prevailed in epidemic form at Lorient and other neighbouring places. Towards the end of May it began to show signs of renewed activity in France, at Morbihan and Toulouse. One case also occurred in Hamburg. In June it began to revive in Russia, and also appeared on the Mediterranean at Marseilles and Cette. At this time it was undoubtedly prevalent over a large area in France, and the same month brought news of the terrible outbreaks at Mecca and Jeddah. In July a great extension of the epidemic took place. Spain, Italy, Hungary, Transylvania, Roumania, and Smyrna were all attacked. And finally, during the following month, every country in Europe became more or less affected, except Scandinavia, and perhaps Switzerland.

In England our first experience occurred on June 25th, when the *Myrtle Branch* arrived in the Tyne from Nantes with a man on board who died of Cholera the same day. On July 17th the *Altmore* arrived at Gravesend from Marseilles with a case, which was proved to be Cholera by bacteriological examination. Two days afterwards the *Blue Jacket* brought two more cases from Marseilles to Cardiff, and later in the month others were detected at Gravesend. In August infected vessels from various ports arrived in the Thames, the Humber, and the Mersey; but, in spite of this and of the spread of the epidemic abroad, the possibility of danger to England was industriously pooh-poohed by the Press, with very few exceptions. On the 24th of August, however, a boy was taken ill suddenly in Hull, and died with all the symptoms of Cholera. A portion of his intestine was forwarded to Dr. Klein for bacteriological examination, and pronounced by him to give proof of Asiatic Cholera. Meantime the attention of the Local Government Board had been attracted by the marked increase in mortality from Diarrhœa at Grimsby, and a medical inspector was sent down there to investigate the circumstances. A suspicious case, occurring on August 30th, was bacteriologically examined and pronounced to be Asiatic Cholera. On September 1st, a second case at Grimsby was declared, and on the same day another at Hull. By this time it was plain that Cholera had established itself on the Humber, and investigation showed that it had undoubtedly been present for some weeks before it was definitely recognised. The first case at Hull in all probability occurred on August 16th, but the patient recovered too rapidly to permit of bacteriological examination. The first case at Grimsby was not later than August 10th, and probably as early as August 2nd, in the person of the stewardess of a ship running between

Grimsby and Antwerp, an infected port. Suspicions were aroused in the town during the month, but the local authorities strenuously denied that that there was any foundation for the rumours of Cholera.

Early in September I visited Grimsby and Hull for the purpose of judging how far there was danger of the disease spreading to London. I found very active measures being taken in both places, and soon made up my mind that very little danger need be apprehended from Hull at any rate, on account of the excellent state of preparation and thorough sanitary organisation of the town. At Grimsby it was different. In certain important respects the town was in a dangerously insanitary condition, which could not be viewed without grave anxiety, considering the special character of the place as the centre of our fish trade, and the popularity as a pleasure resort of the neighbouring Cleethorpes, which was also affected. Events proved that there was abundant ground for anxiety. On September 5th a case of Cholera occurred at Rotherham in the person of a man who had visited Grimsby on the previous day, and it was followed by another on the 10th. On the 7th a case was reported from Doncaster as having occurred on the receipt of a consignment of oysters from Cleethorpes. On the 9th another occurred at Leicester, and again oysters from Cleethorpes were concerned. I do not propose to go through the whole list in detail, but will merely mention that during September and October cases were reported from the following places:—Leeds, Rotherham, Bradford, Doncaster, Retford, Hartlepool, Boston, Gainsborough, Leicester, Hereford, Middleton, Ashbourne, Liverpool, Manchester, Yarmouth, Halifax, Derby, Newcastle, Shields, Gloucester, Ashton-under-Lyne, Keighley, Ilkeston, Rowley Regis, Idle, Malton, and perhaps some others. In the majority the nature of the disease was fully established, and in a considerable proportion of them a direct connection with Grimsby could be traced. There can be no doubt that it constituted a genuine Cholera focus.

London is omitted from the above list as deserving special notice. During the summer a few suspicious cases were reported, but there is no reason to suppose that any true Cholera occurred before September 5th, when a case at Westminster attracted great attention, because the patient happened to be a sweeper in the House of Commons. She died on September 6th, and a bacteriological examination took place. Attempts to hush up or garble the result were made, and drew from Dr. Klein the explicit declaration that, in his opinion, the case was one of typical Asiatic Cholera. It was followed, on September 11th, by a fatal case at the Fulham Workhouse. At the request of the Medical Officer I attended the *post-mortem* examination; and, from the history of the case, the *post-mortem* appearances, and the bacteriological examination, have no doubt whatever that the patient died

of Asiatic Cholera. On the 12th a third case occurred in Kennington Road, Lambeth, and on the 26th a fourth in Southwark. The undoubted cases of Cholera in London, therefore, were as follow:—

Date of Death.	Locality.
1—September 6th	Westminster.
2—September 11th	Fulham.
3—September 12th	Lambeth.
4—September 26th	Southwark.

These were all fatal. The Medical Officers of the London County Council made careful inquiries into other suspected cases, of which there were a considerable number, and came to the conclusion that none of them were Cholera. If this be so, there were four cases and four deaths, which means a mortality of 100 per cent. It seems more likely that others did occur, but escaped attention; and, at any rate, there are strong grounds for thinking that two cases admitted to St. Bartholomew's Hospital on the 17th and 18th of September were true Cholera, though both recovered.

The outbreak at Greenwich Workhouse in October deserves a word of notice. It began early in October in the workhouse, but some cases had previously occurred outside, in the town. Only elderly people were affected. The number of cases was 244, and the deaths 11. The symptoms resembled those of Cholera in a mild form, but a general survey of the facts leads to the conclusion that the disease was certainly not true Asiatic Cholera. At the same time, many of the circumstances were so suggestive of that disease, and the outbreak presented so many points of analogy with one of true Cholera, that it could not be regarded without considerable anxiety. One may say that if it was not Cholera it might have been.

With the advance of autumn the disease, which had taken no serious hold anywhere except in Grimsby, completely disappeared.

Regarded as a whole, the European visitation of Cholera in 1893 presents one very encouraging feature: although spread over an exceedingly large area, it occasioned comparatively little mortality. That this should be the case where it was so destructive last year was only to be expected, for Cholera is seldom bad in the same place two years running; but we should naturally have anticipated greater mortality in the countries that escaped in 1892, such as Italy, Spain, the South of France, and Turkey. That the fortunate result, both there and at home, is in some measure due to increased knowledge and improved sanitary conditions we may reasonably believe; but it is difficult to help thinking that the exceptionally dry season had more to do with it. And in this connection it is worthy of note that almost all the cases of Cholera in England occurred in that part of the

country which was least affected by the drought, namely, on the northern side of a line drawn from the Wash to the Severn. Another season might bring less fortunate weather. And this brings me to the prospects of the coming year.

The latest news at the close of 1893 is that a serious outbreak has occurred at Teneriffe (which further emphasises the pandemic character of the present wave), that a marked recrudescence has taken place at St. Petersburg, and that the disease still lingers in Turkey. That we do not hear of it elsewhere is probably due to the fact that Cholera, having ceased for the time being to be a sensational topic, receives but scanty attention from the Press. At any rate, we know that it is still "in the wind." Next summer we may expect with some confidence to witness a revival, and we ought not to be surprised if the effects in some localities prove more disastrous than in 1893. For ourselves, the events of the past year have plainly shown that we cannot afford to neglect any measure of precaution, or indulge in any relaxation of vigilance, not only by water, but also on land.

I have the honour to be,

Your obedient Servant,

(Signed) ARTHUR SHADWELL,

M.A., M.B. OXON, M.R.C.P.

APPENDIX A.

List of Ambulance Stations.

EAST LONDON.		
<i>Poplar</i> ...	Poplar Hospital, Dock Road. Hale Street Yard, High Street. Coventry Cross, Bromley. Police Station, Cubitt Town. Police Station, Bow Road.	<i>St. Pancras</i> ... Royal Free Hospital, Gray's Inn Road. University College Hospital, Gower Street. Mortuary, Cambridge Street. London Temperance Hospital, Hampstead Road. Relief Station, Leighton Road. Infirmary, Dartmouth Park Hill. North-Western Hospital, Camden Town. Tailors' Institute, Queen's Crescent.
<i>Limehouse</i> ...	3, Rose Lane, White Horse St. Police Station, West India Dock Road.	<i>Hampstead</i> ... Vestry Hall, Haverstock Hill. Workhouse, New End. Stone Yard, Lithos Road.
<i>Mile End Old Town</i> }	Vestry Hall, Bancroft Road.	
<i>Bethnal Green</i> ...	Workhouse, Victoria Park. Police Station, Bethnal Green Road. Vestry Hall, Church Row.	
<i>Shoreditch</i> ...	Workhouse, Reeves Place, Hoxton. North-Eastern Hospital for Children, Hackney Road. Workhouse, Shepherdess Walk. Town Hall, Old Street	
<i>Whitechapel</i> ..	London Hospital. Sailors' Home, Well Street.	
<i>St. George's-in-the-East</i>	Infirmary, Raine Street, Old Gravel Lane. Yard, 250, Cable Street.	
<i>St. Luke's</i> ...	Coroner's Court, Warwick Pl.	
<i>Clerkenwell</i> ...	Stone Yard, Spencer Place Coroner's Court, Northampton Road. Vestry Hall, Rosoman Street.	
NORTH LONDON.		
<i>Hackney</i> ...	Workhouse, Sidney Road. Eastern Hospital (Ambulance Station), Homerton. Old Town Hall, Mare Street. German Hospital, Dalston. Police Stn., Stoke Newington. Metropolitan Hosp., Kingsland Road.	
<i>Islington</i> ...	Workhouse, St. John's Road. Great Northern Hospital, Upper Holloway. Police Station, Hornsey Road. Police Station, Caledonian Rd. Town Hall, Upper Street. London Fever Hospital.	
		CENTRAL LONDON.
		<i>Holborn</i> ... Town Hall, Gray's Inn Road. Italian Hospital, Queen's Sq.
		<i>St. Giles</i> ... Stone Yard, Board of Works, High Holborn. Mortuary at Workhouse, Endell Street. King's College Hospital.
		<i>St. Martin's-in-the-Fields</i> } Charing Cross Hospital.
		<i>St. James</i> ... Workhouse, Poland Street.
		<i>St. Marylebone</i> ... Stone Yard, Grove Road. Workhouse, Marylebone Road. Middlesex Hospital.
		<i>Westminster</i> ... Vestry Wharf, Millbank Pier. Vestry Wharf, Millbank St. Police Station, Rochester Row.
		<i>St. George's, Hanover Sq.</i> St. George's Hospital. Mortuary at Vestry Hall, Mount Street. St. George's Workhouse, Buckingham Palace Road. Vestry Depot, Belgrave Wharf.
		WEST LONDON.
		<i>Chelsea</i> ... Workhouse, Britten Street, King's Road. Workhouse, Kensal Road. Vestry Wharf, No. 2, Lot's Rd. Police Station, Walton Street.

<i>Kensington</i> ...	Workhouse, Marloes Road. Relief Offices, Mary Place, Walmer Road, Notting Hill. Infirmiry, Rockham Street, Notting Hill.	<i>St. George-the- Martyr.</i> }	Workhouse, Mint Street.
<i>Paddington</i> ...	Workhouse, Harrow Road. St. Mary's Hospital.	<i>St. Olave's</i> ...	Guy's Hospital. Workhouse, Parish St., Tooley Street.
<i>Hammersmith</i> ...	No. 148, Railway Arch, Ux- bridge Road. Vestry Hall, Broadway, Ham- mersmith. Vestry Wharf, Chancellors. Police Station, Shepherd's Bush.	<i>Newington</i> ...	Board's Depot, Manor Place. Police Station, Rodney Road. Workhouse, Westmoreland Road, Walworth.
<i>Fulham</i> ...	Workhouse, Fulham Palace Rd. Vestry Yard, Munster Road. Vestry Yard, Trafalgar House, Fulham Road. West Wharf, Wandsworth Bridge Road.	<i>Bermondsey</i> ...	Old Mortuary, Abbey Street. Police Station, Upper Grange Road.
	SOUTH LONDON.	<i>Rotherhithe</i> ...	Workhouse Infirmiry, Lower Road. South Wharf.
<i>Wandsworth</i> ...	Police Station, Richmond Rd., Putney. Board of Works' Wharf, Bell Lane, Wandsworth. Mortuary, Defoe Rd., Tooting. Depot, 158, Streatham High Rd. Parish Yard, Wandsworth Rd. Police Station, Trinity Road. Workhouse, St. John's Hill. Workhouse, Garrett Lane. Clapham Relief Stn., Bromell's Road.	<i>Camberwell</i> ...	Police Station, Camberwell Green. Workhouse, Havil Street, Peckham Road. Birkbeck Workhouse, Willow- brook Road. Workhouse, Gordon Road, Peckham. St. Saviour's Infirmiry, Dul- wich Grove.
<i>Battersea</i> ...	Relief Station, Latchmere Rd. Police Station, Hyde Lane, Battersea Bridge Road. Police Station, Battersea Park Road.	<i>Greenwich</i> ...	South-Eastern Hospital Police Station, Evelyn Street, Deptford. Relief Stn., Mary Ann Build- ings, High Street, Deptford. Vestry Offices, Relief Station, Royal Hill. Workhouse, East Greenwich.
<i>Lambeth</i> ...	St. Thomas's Hospital. Workhouse, Prince's Road. Workhouse, Renfrew Road. Relief Station, 65, Stockwell Road. Relief Station, Elder Road West Norwood. Vestry Depot, Dorset Street, Clapham Road. Police Station, Gresham Road, Brixton Road.	<i>Lewisham</i> ...	Board of Works Depot, Moles- worth St., Lewisham High Road. Town Hall, Catford. Board's Depot, Waldram Rd., Forest Hill. Police Station, Howson Road, Brockley. Police Station, Catford Hill. Workhouse, Lewisham Road.
<i>St. Saviour's, Southwark.</i>	Christ Church, Workhouse, Marlborough Street. Board of Works' Sheds in Lavington Street.	<i>Plumstead</i> ..	Yard in Church Lane, Charlton. Police Station, Lee Green. Yard, Woodstock Road, Burnt Ash Lane. Yard, Maxey Road. Infirmiry, Plumstead.
		<i>Woolwich</i> ...	Yard at Town Hall, Woolwich.

APPENDIX B.

List of Institutions which have promised to provide Accommodation for Patients.

Name of Sanitary District in which the accommodation is situate.		No. of Beds.	In what Building.	Notice required, and other Remarks.
<i>Western Division of Metropolis</i>	Fulham	50	Fulham Union Infirmary, Fulham Palace Road, Hammersmith.	24 hours' notice. Not available after October.
	Kensington	80	St. Marylebone Infirmary, Rackham St., Notting Hill.	48 hours' notice.
	„	40	Kensington Workhouse, Mary Place, Notting Dale.	3 days' notice.
	„	32	Kensington Workhouse, Marloes Road.	24 hours' notice.
	Chelsea	60	St. George's Infirmary, Fulham Road.	Not available after October.
	Paddington	40	Paddington Infirmary, Harrow Road.	
	„	50	St. Mary's Hospital, Cambridge Place, W.	
	St. George's, Hanover Sq.	26	St. George's Hospital, Hyde Park Corner, W.	7 days' notice.
	St. James', Westminster ...	30	Workhouse, Poland Street.	
	Westminster	20	Westminster Hospital, Broad Sanctuary.	24 hours' notice.
<i>Northern Division of Metropolis</i>	St. Marylebone	60	Marylebone Workhouse, Northumberland Street.	7 days' notice.
	„	30	Middlesex Hospital, Mortimer Street, W.	Not available be- fore Sept. 18th.
	St. Pancras	80	St. Pancras Infirmary, Dartmouth Park Hill.	12 hours' notice.
	„	100	St. Pancras Workhouse, Pancras Road, N.W.	
	„	12	London Temperance Hospital, Hampstead Road.	4 days' notice.
	„	36	Central London Sick Asylum, Cleveland Street.	48 hours' notice.
	Islington	50	Islington Workhouse, Cornwallis Road, Holloway.	
	„	33	Great Northern Hospital, Holloway Road, N.	14 days' notice.
	Hackney	24	Metropolitan Hospital, Kingsland Road.	
	„	25	German Hospital, Dalston.	
„	12	Hackney Workhouse, Sidney Road, Homerton.		
		890		

APPENDIX B (*continued*).

Name of Sanitary District in which the accommodation is situate.		No. of Beds.	In what Building.	Notice required, and other Remarks.
<i>Central Division of Metropolis</i>	St. Martin-in-the-Fields ...	15	Charing Cross Hospital	24 hours' notice.
	Strand	10	French Hospital, Shaftesbury Avenue.	No answer.
	„	?	King's College Hospital, Portugal Street, W.C.	
	St. Giles'	50	St. Giles' Infirmary, Endell Street, W.C.	
	Holborn	4	Italian Hospital, 40 & 41, Queen Square, W.C.	
City	20	St. Bartholomew's Hospital, West Smithfield.		
<i>Eastern Division of Metropolis</i>	Shoreditch	16	Shoreditch Workhouse, Reeves Place, Hoxton.	24 hours' notice.
	Whitechapel	40	Whitechapel Infirmary, Baker's Row.	
	„	100	London Hospital, Whitechapel Road, E.	50 immediately. 50 under pressure.
	St. George's-in-the-East ...	50	Infirmary, Raine Street, Old Gravel Lane.	48 hours' notice, children only.
	Limehouse	30	East Lond. Hosp. for Children, Glann's Road, Shadwell, E.	
Mile End Old Town... ..	?	Workhouse Infirmary, Baucroft Road.	Offer every as- sistance in their power.	
<i>Southern Division of Metropolis</i>	Plumstead	60	Woolwich Infirmary, Plumstead.	No answer.
	Greenwich	?	Seamen's Hospital.	
	„	60	Greenwich Infirmary.	3 days' notice.
	Rotherhithe	92	St. Olave's Infirmary, Lower Road.	
	St. Olave's	50	Guy's Hospital.	
	St. Saviour's	100	Workhouse, Marlboro' St., Blackfriars Road.	No answer.
	Newington	?	W'khouse, Westmoreland Rd., Walworth.	
Lambeth	?	St. Thomas's Hospital, Westminster Bridge Road.	No answer.	
„	100	Workhouse, Princes Road.	7 days' notice.	
		1,687		

APPENDIX C.

THE METROPOLITAN ASYLUMS BOARD,

NORFOLK HOUSE,

NORFOLK STREET, W.C.

25th August, 1893.

DEAR SIR,

CHOLERA.

I enclose a list of the Board's Cholera Ambulance Stations, and of the Hospitals and Infirmaries which have promised to provide accommodation for patients.

Ambulances will not be placed at the said stations unless Cholera actually appears in an epidemic form in London. Any isolated cases that occur, and are notified to the Board, will be removed by the ordinary Ambulance Service.

If it should become necessary to bring the Special Cholera Service into use, a staff of bearers will be provided by the Board; but, in case of emergency, the Cholera Ambulances will be at the disposal of Medical Officers of Health, or any medical men, for the removal of patients, in order to avoid delay.

Yours faithfully,

T. DUNCOMBE MANN,

Clerk to the Board.

To

The Medical Officer of Health

for

PART VII.

ANNUAL REPORT FOR 1893 OF THE COMMITTEE OF MANAGEMENT OF THE TRAINING SHIP “EXMOUTH.”

January, 1894.

*To the Managers of the
Metropolitan Asylum District.*

The Committee for the Training Ship “Exmouth” beg to submit the 18th Annual Report (for 1893) of the Captain-Superintendent, and in doing so take the opportunity of briefly reviewing the matters with which they have had to deal in the course of the last twelve months.

On reference to the statistics it will be seen that during the year 299 boys were admitted and that 257 were discharged.

Of those discharged 102 entered the Royal Navy, as against 83 in the year 1892; 90 entered the Mercantile Marine, as against 69; 28 entered the Army as musicians, as against 66; while 34 were returned to their respective Parishes and Unions, leaving 581 under training on the 31st December last. There were three deaths.

The net expenditure incurred during the twelve months ended at Michaelmas last, excluding “works of a special character,” was £19,881 11s. 11d., as against £19,239 13s. 2d. for the previous twelve months. Nearly the whole of the increase was occasioned by a larger expenditure on the “Maintenance Account,” due to the augmented number of boys under training. The charge made upon the several Parishes and Unions for the maintenance and clothing of the boys during the half-years ended at Lady-day and Michaelmas, 1893, respectively, was at the rate of 10d. and 11½d. per head per day, as against 10¾d. and 11d. for the corresponding periods of 1892.

The total daily cost of the maintenance and clothing, &c., of the boys

(exclusive of the repayment, with interest, of the amount raised on loan) is shown in the following statement, viz. :—

HEADS OF EXPENDITURE.	Half-year ended Lady-day, 1893.	Half-year ended Michaelmas, 1893.
	s. d.	s. d.
Provisions, Necessaries, and Clothing	0 10	0 11 ⁹ / ₂
Warming, Cleansing, Lighting, and Water	0 1 ² / ₂	0 1 ⁴ / ₂
Officers' Salaries, Rations, and Uniforms	0 6 ¹ / ₂	0 6 ⁸ / ₂
Furniture and Repairs, Rates and Taxes, and Sundries	0 4 ¹ / ₂	0 3 ⁹ / ₂
Total Daily Cost per Boy ...	1 10³/₂	1 10¹/₂

In addition to the above, a sum of £946 6s. 7d. was expended in providing outfits for boys going to sea, including their travelling expenses, the daily cost being 2¹/₄d. per boy, as against 2³/₄d. in the year 1892.

The most satisfactory feature of the work of the year has been the steady increase in the number of admissions. The Ship is certified to accommodate 600 boys at one time, but on the 27th October that number was, for the first time for several years, not only reached but exceeded by two.

Since that date the number has slightly declined, but it is earnestly hoped that it will be long ere it falls so low as it did at the end of the year 1891, when there were no fewer than 113 vacancies. All the more satisfaction is felt at the increased number of admissions when it is remembered that, although the total expense in connection with the Ship has been greater during the past twelve months, the total cost per head has been appreciably reduced, a fact which the Committee would earnestly commend to the notice of the Boards of Guardians and Managers of District Schools as indicating the desirability, as well as the expediency, of keeping the Ship fully supplied with boys.

The remarks upon this matter which were expressed in the Committee's last Annual Report have evidently borne fruit, and the Committee would take this opportunity of expressing their thanks to all who have been instrumental in sending more boys to the Ship. At the same time they sincerely hope that the efforts made by the Guardians and others to keep the Ship well filled will not be relaxed, especially as little expectation that Country Union Boards will send many boys to the Ship can be entertained, in view of the fact that only ten agreements have been entered into during the past two years, and that only 17 boys were on board on the 31st December last.

The Annual Inspection was held on Saturday, the 1st July, and passed off in a very satisfactory manner. Everyone present seemed thoroughly pleased with the arrangements of the Ship and the manner in which it was conducted, and remarks were frequently heard expressive of regret that Members of the Boards of Guardians and Managers of District Schools could not be invited to be present at these inspections to witness the achievements effected by the boys whom they had sent to the Ship.

The prizes on the occasion were distributed by Mr. R. Strong, who was Chairman of the Committee for upwards of six years, and whose severance from the Committee in March last was much regretted by his colleagues.

The area of the boys' playground adjoining the Infirmary was in May still further curtailed by the resumption of possession by the freeholder, Mr. Theobald, of the remaining frontages of the field under the terms of the renewed lease.

The rent of the premises is now £78, instead of £105, and the assessment has been reduced from £80 (rateable) to £65.

The reduction in the size of the field having rendered it inadequate for the purposes of a playground for the many boys maintained on the "Exmouth," efforts were made by the Committee to obtain a larger field at a convenient distance from the Ship. These efforts resulted in the Managers in November, accepting the offer of Messrs. Seabrooke & Sons, Ltd., to let their wharf field for the purpose, at a rental of £1 per month. (Board Minutes, vol. xxxii., p. 587.)

Independent testimony as to the good management of the Ship is contained in two of the entries in the Visitors' Book by Rear-Admiral Fitzroy and Mr. W. Holgate, H.M. Inspector of Poor Law Schools, respectively:—

(i.) REAR-ADMIRAL FITZROY—

"I had the pleasure of visiting the 'Exmouth' on the 19th April, 1893, and was surprised at the admirable order, discipline, and comfort displayed. The boys were healthy, well-fed, active, and had very good faces; the drills well performed and with interest. I spent, thanks to Captain Bouchier, a most interesting forenoon."

(ii.) MR. WYNDHAM HOLGATE, H.M.'S INSPECTOR OF POOR LAW SCHOOLS—

"June 14th, 1893.

"Inspected the seamanship classes, the gymnastics, gun, carbine, and bayonet drill; heard the band; saw the whole ship's company march, and go through dumb-bell exercise; and also saw squads at cutlass and fancy musical drill.

"Everything is well done, and tends to interest and improve the intelligence of the lads on board."

The appointment in the early part of the year of a Dental Surgeon has, it is believed, been fully justified by the improvements effected in the condition of the teeth of the boys. Instances have occurred of boys being admitted to the Royal Navy and into the Army who, if they had not had their teeth attended to, would have been rejected from those services. The Quarterly Reports submitted by the Dental Surgeon, Mr. E. Keen, have been of a satisfactory nature.

As the appointment was limited to one year, the question of continuing the arrangement will shortly have to be considered.

Necessary dental appliances have been purchased at a cost of £42 5s. 3d.

A further improvement in the stable building at the Infirmary has been effected by making the upper part suitable for isolating cases of infectious disease that may arise. The improvement, which comprises a ward with 16 beds and accommodation for a nurse, is one of importance, fully justifying the outlay occasioned in making it.

The question of the expediency of enlarging the lavatory and w.c. accommodation in the Infirmary was before the Committee at the end of the year.

In consequence of failing powers, Mr. Frank Webley resigned his position of Chief Officer, after 15½ years' service, and he has been granted a superannuation allowance of £50 per annum. The vacancy was filled by the promotion of the Chief Seaman Instructor, Mr. P. Miller.

On the unanimous recommendation of the Committee the Managers in November increased the salary of Mr. Thompson, the Paymaster and Storekeeper, from £150 to £180 per annum, with a prospective increase to £200.

The death, on the 7th January, of Mr. J. Carr removed from the Committee an esteemed colleague, who during the several years he served as a Manager and a Member of the "Exmouth" and other Committees rendered valuable assistance, and his presence has been greatly missed.

The vacancy thus caused was filled by the re-appointment of Admiral Adeane, and the further vacancy caused by the subsequent retirement from the Committee of Mr. Strong was filled by the appointment of Mr. Beurle. Two other vacancies have recently been occasioned by the resignation of Dr. Dalton and the Rev. R. H. Hadden, who have ceased to be Managers.

The loss of the valuable services of these gentlemen is much regretted by the Committee. Their places still remain vacant.

The Committee thankfully acknowledge the repeated generosity of the following gentlemen in presenting prizes for six of the boys:—

Sir E. H. Galsworthy, J.P., D.L.	Mr. R. Strong, J.P.
Mr. J. M. Goodell.	„ Taylor.
„ W. G. Guerrier.	„ W. H. Walkley.

The gifts consisted of five silver watches and a silver medal, and were distributed on the occasion of the Annual Inspection.

The subsequent gift by Mr. Henry Halsey of six silver watches must also be noticed. This was the eighth gift of a similar nature which Mr. Halsey has made in commemoration of his daughter's birthday, and his generosity evokes the warmest thanks of the Managers.

In conclusion, the Committee would again record their sincere appreciation of the praiseworthy manner in which the Captain-Superintendent and the Officers continue to carry out their various duties. It is their efforts which have made the work of the ship successful, and to them must the chief credit be given.

(Signed) JAMES BROWN,
Chairman.

P.S.—According to the Mercantile Navy List, published by the Registrar-General of Seamen, the number of boys entered into the Royal Navy from the “Exmouth” during 1893 was 102, whilst the aggregate number of similar entries from all the other Training Ships in the United Kingdom was 93.

TRAINING SHIP "EXMOUTH."

ANNUAL REPORT OF THE CAPTAIN-SUPERINTENDENT FOR
THE YEAR 1893.

1st January, 1894.

GENTLEMEN,

I beg to submit my Eighteenth Annual Report. The following table shows the number of admissions and discharges during 1893 as well as during the previous 17 years. A considerable increase in the number of entries into the Royal Navy will be noticed; this is a very satisfactory achievement.

I regret to have to record three deaths during the year.

BOYS ADMITTED AND DISCHARGED.																			
	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Total.
Boys admitted ...	194	194	188	210	289	226	340	358	326	267	374	241	301	329	290	223	322	299	5,271
Boys discharged to Royal Navy ...	1	6	1	8	72	85	155	141	95	128	114	95	87	104	108	89	83	102	1,474
„ discharged to Mercantile Marine, of whom 40 were enrolled in the Royal Naval Reserve ...	53	19	126	115	105	107	109	96	106	91	107	93	141	171	134	75	69	90	1,807
„ discharged to Army as Musicians ...	9	11	9	31	17	27	46	74	61	43	55	36	18	56	48	42	66	28	677
„ discharged to situations, 3 of whom subsequently went to sea ...	1	...	2	...	3	...	...	...	2	...	...	...	...	...	...	1	...	...	9
„ discharged to their respective Unions, for various reasons, by order of the Boards of Guardians of the Unions and Parishes ...	21	23	47	30	61	43	27	33	52	39	49	44	45	44	36	18	51	34	697
„ died ...	...	...	2	1	...	4	1	...	2	2	5	1	2	1	1	...	1	3	26
Boys discharged ...	85	59	187	185	258	266	338	344	318	303	330	269	293	376	327	225	270	257	4,690
Total number of boys discharged ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,690
Remaining under training 31st December, 1893 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	581
Total ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5,271

The number of boys discharged during the last 14 years averages 298·12 per year.

The following table shows the number of boys admitted from each of the Metropolitan Unions and Parishes and Country Unions during the year 1893, also during the whole time the ship has been established, viz. :—

Year ending 31st December, 1893.	NAMES OF UNIONS AND PARISHES.	From 31st March, 1876, to 31st Dec., 1893.
7	City of London	98
22	Fulham	142
10	Greenwich	309
1	Hackney	132
14	Holborn	139
17	Lewisham	475
6	Mile End	135
16	Poplar	308
5	St. George's-in-the-East	85
14	St. George's Union	196
...	St. Giles, Bloomsbury	28
13	St. Giles, Camberwell	271
2	St. John, Hampstead	23
...	St. Leonard, Shoreditch	130
5	St. Luke, Chelsea	124
5	St. Mary, Islington	180
2	St. Mary, Kensington	136
22	St. Mary, Lambeth	288
13	St. Marylebone	430
9	St. Mary, Paddington	110
8	St. Matthew, Bethnal Green	124
10	St. Olave's	224
23	St. Pancras	276
28	St. Saviour's	267
2	Stepney	80
...	Strand	16
8	Wandsworth and Clapham	121
1	Westminster	36
2	Whitechapel	119
18	Woolwich	235
1	Bromley	2
...	Bedford	2
2	Strood	5
5	Medway	5
1	Kingston	1
1	St Albans	1
2	Martley	2
2	Worcester	2
1	Brentford	1
1	Richmond	1
Country Unions		
Total, 299		
	Chichester	1
	Croydon	2
	Dorking	1
	Ecclesall	1
	Epping	1
	Eton	1
	Horsham	3
	Tonbridge	1
	Wilton	1
	Total	5,271

Admissions from Country Unions commenced only in the latter part of 1892.

These boys were in the Establishment when the Metropolitan Asylums Board took it over from the Managers of the Forest Gate District Schools

Of the 3,281 boys discharged to sea service from the 31st March, 1876, to 31st December, 1893—

1,474 entered the Royal Navy.

911 went into ships in the Baltic and coasting trade and other short voyages, such as the Mediterranean, &c.

286 went into ships trading to North and South America.

101 went into ships in the West India Trade.

92 went into ships going to the East Indies, China, and Japan.

308 went into ships trading to the Australian Colonies.

109 went into ships trading to the Cape, Africa, and Mauritius.

Total 3,281

The positions the above 3,281 boys occupied on board the ships in which they first went to sea are as follows, viz. :—

1,474 entered the Royal Navy as boys.

364 shipped as ordinary seamen in the Mercantile Marine.

1,202 shipped as deck and cabin boys do.

108 shipped as apprentices do.

133 shipped as assistant cooks and stewards do.

Total 3,281

SHIPPING ESTABLISHMENT AT LIMEHOUSE.

The following table shows the number of boys shipped each year from the Home at Limehouse to the Mercantile Marine. This does not include boys who are assisted to get ships for a second, third, and sometimes a fourth voyage :—

YEAR.	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	TOTAL.
No. shipped	63	107	78	81	95	93	104	91	87	92	118	148	124	75	69	90	1,615

The Shipping Home is also a place of call for old boys to look up old chums, and get general news of merchant ships.

ARMY.

The boys discharged to the Army since the 25th March, 1876, joined the undermentioned Regiments as band boys, viz. :—

3 to the Dragoon Guards.	1 to the 19th Hussars.
1 „ 3rd Hussars.	9 „ 20th Hussars.
1 „ 4th Hussars.	2 „ 21st Hussars.
1 „ 11th Hussars.	2 „ 5th Lancers.
1 „ 13th Hussars	15 „ Royal Artillery

1 to the Royal Horse Artillery.	8 to the East Kent Regiment.
1 ,, Royal Engineers.	7 ,, Northumberland Fusiliers.
8 ,, Grenadier Guards.	3 ,, King's Liverpool Regiment.
4 ,, Coldstream Guards.	14 ,, Royal Warwickshire Regiment.
1 ,, Scots Guards.	16 ,, Royal Fusiliers, "City of London."
1 ,, Royal Marine Light Infantry.	3 ,, Lincolnshire Regiment.
8 ,, Yorkshire Regiment.	2 ,, Devonshire Regiment.
3 ,, Lancaster Fusiliers.	20 ,, Suffolk Regiment.
19 ,, Royal Scots Fusiliers.	19 ,, Somersetshire Light Infantry.
8 ,, Cheshire Regiment.	3 ,, West Yorkshire Regiment.
12 ,, South Wales Borderers.	12 ,, East Yorkshire Regiment.
5 ,, Scottish Rifles.	7 ,, Leicestershire Regiment.
7 ,, Royal Inniskilling Fusiliers.	8 ,, Shropshire Light Infantry
2 ,, Gloucester Regiment.	8 ,, Middlesex Regiment.
9 ,, Worcestershire Regiment.	20 ,, King's Royal Rifles.
5 ,, East Lancashire Regiment.	2 ,, Wiltshire Regiment.
6 ,, Duke of Cornwall's Light Infantry	29 ,, Manchester Regiment.
5 ,, King's Own Scottish Borderers.	16 ,, York and Lancaster Regiment.
18 ,, Royal Sussex Regiment.	11 ,, Durham Light Infantry.
8 ,, Dorsetshire Regiment.	5 ,, Highland Light Infantry.
5 ,, South Lancashire Regiment.	2 ,, Seaforth Highlanders.
22 ,, Welsh Regiment.	12 ,, Gordon Highlanders.
3 ,, Royal Highlanders.	10 ,, Royal Irish Rifles.
10 ,, Oxfordshire Light Infantry.	5 ,, Royal Irish Fusiliers.
28 ,, Essex Regiment.	28 ,, Connaught Rangers.
4 ,, Leinster Regiment.	19 ,, Argyll and Sutherland Highlanders.
1 ,, Army Hospital Corps.	16 ,, Rifle Brigade.
21 ,, Derbyshire Regiment.	26 ,, Royal Dublin Fusiliers.
5 ,, Loyal North Lancashire Regiment.	9 ,, South Staffordshire Regiment
10 ,, Northamptonshire Regiment.	1 ,, North Staffordshire Regiment.
4 ,, Berkshire Regiment.	6 ,, Border Regiment.
9 ,, Yorkshire Light Infantry.	
36 ,, Royal Scots, "Lothian Regiment."	677 Total.
5 ,, Royal West Surrey Regiment.	

SEAMANSHIP.

Very good progress has been made in this important branch of instruction.

In drilling aloft, bending, loosing, and making sail; reefing, furling, and sending up and down top-gallant masts and yards, the boys have shown themselves very efficient.

Every facility has been given the boys of all classes to practice boat-pulling, in which they are very good. Boat-sailing at all times when weather would permit has been taken advantage of, and proves a very attractive instruction.

Every opportunity has been given the boys composed of Riggers' Class, or, boys fit for sea, to make good all defects in the riggings and sails,

rattling down, repairing rattlings, reeving running gear and boat-falls, replacing and stropping blocks, in lieu of others found defective. The Sail-maker has directed the boys' attention with success to this department. The old canvas and roping has been used up for other purposes, while 420 yards of new canvas and 40 fathoms of new rope have been utilised in repairing the different sails of the Ship and Brigantine.

Signalling has again occupied an important part in our instructions, and has proved very useful and interesting. Several of the boys who have left and joined the Royal Navy state that they are greatly benefited by the signal instruction received while here.

Instead of the usual evening instructions during the winter months, the boys have had an extra half-hour in the afternoon to take the place thereof, during which time the boys go through a thorough examination in the different subjects they are taught.

The number of promotions from one class to another will be seen below:—

From 5th Class to 4th Class	...	...	...	...	315
„ 4th „ 3rd	„	„	...	...	279
„ 3rd „ 2nd	„	„	...	...	160
„ 2nd „ 1st	„	„	...	...	179
„ 1st „ Riggers (fit for sea)	„	„	...	...	135
					<hr/>
					1,068
					<hr/>

BRIGANTINE.

As in former years, the Brigantine commenced her annual cruising in the beginning of May, and finished at the close of September.

Early in May the vessel was sent to Portland and Devonport with boys for H.M. ships “Boscawen,” “Impregnable,” and “Lion.”

While at Devonport the Brigantine and her crew of boys were inspected by the Inspecting Captain of Boys' Training Ships, with the result that many of them were recommended to the Admiralty for entry, although under the standard for physique.

During the trip 28 boys were entered on board the ships above named, and an impression made upon the Naval Authorities which has been of considerable advantage in facilitating the entry of the other boys as special entries under the standard.

The sailing vessel continues to be very popular with the boys, whose intelligence and physical powers are greatly developed in the cruising and other duties they have to perform.

It is worthy of note that since it has become customary to send the Brigantine to the western ports, more of our boys are entered under the standard than at any previous time.

GUNNERY.

Out of the large number of boys discharged during the year 1893, 198 were drawn from the following classes:—

Leading Gunners...	...	...	...	...	...	113
1st Class	„	...	...	...	...	61
2nd	„	„	...	...	...	18
3rd	„	„	...	...	...	6
						<hr/>
				Total	...	198
						<hr/>

They all had a good knowledge of rifle, cutlass, and gun drill. The leading gunners, in addition to the above drills, have been taught field gun drill, which they go through to the satisfaction of all who see them.

GYMNASTICS.

The following figures will show the proficiency at the 1st January, 1893, and the numbers trained, discharged, and remaining on the 31st December, 1893:—

	January 1st, 1893.	December 31st, 1893.
In Special Gymnastic Class	... 34	... 42
„ 1st	„ „ ... 100	... 126
„ 2nd	„ „ ... 119	... 124
„ 3rd	„ „ ... 216	... 225
„ 4th	„ „ ... 70	... 64
Total	... 539	... 581
	<hr/>	<hr/>

Certificates issued during the year 1893:—

From 4th Class to 3rd Class	...	...	...	...	303
„ 3rd	„	2nd	„	...	271
„ 2nd	„	1st	„	...	269
„ 1st	„	Special	„	...	211
					<hr/>
				Total	... 1,054
					<hr/>

The following table shows the result of the Gymnastic Competition, which took place on the 17th June, 1893:—

No. on Ship's Books.	NAME.	No. on Watch Bill.	UNION OR PARISH.	No. of marks obtained.	PRIZES.	DESTINATION.
4407	G. Sayers	227	Poplar	89	1st Prize, Silver Watch and Chain ...	Still on board
4323	W. Eldon	458	Greenwich	86	2nd Prize, 15s. ...	Royal Navy.
4233	J. Adams	221	Lambeth	74	3rd ,, 10s. ...	Royal Navy.
4522	W. Alder	230	Paddington	71	4th ,, 7s. 6d. ...	Still on board
4312	G. Watkins	463	St. Saviour's	68	5th ,, 5s. ...	Still on board
4825	C. Lilley	27	Poplar	67	6th ,, 2s. 6d. ...	Still on board
4603	J. Banks	94	Mile End	65	... ..	Still on board
4335	J. Lewis	366	St. Saviour's	63	... ..	M. Marine.
4646	J. Maultwood ..	247	Greenwich ..	63	... ..	Still on board
4248	J. Way	428	City of London	60	... ..	M. Marine.
4527	H. Berkley	402	Fulham... ..	60	... ..	Still on board
4246	A. Streeton	290	St. Olave's	55	... ..	M. Marine.
4413	A. Mullingar	372	St. George's... ..	55	... ..	Still on board
4333	H. Martin	437	St. Pancras	55	... ..	Friend.
4091	W. Pearmine	514	St. Olave's	53	... ..	Still on board
4740	A. Rossitor	358	St. Marylebone	52	... ..	Still on board
4959	C. Chitty	282	St. Saviour's	52	... ..	Still on board
4413	H. Harrison	48	Poplar	52	... ..	Deceased.
4422	W. Kinder	359	Camberwell ..	51	... ..	M. Marine.
4826	S. Atkins	82	Poplar	51	... ..	Still on board
4876	H. Smith	481	... ..	48	... ..	Still on board
4540	J. Parker	229	Holborn	47	... ..	Still on board
4491	R. Dunn	548	City of London	44	... ..	Still on board
4604	A. Grant	84	Mile End	42	... ..	M. Marine.

The 1st Prize, a Silver Watch and Chain, was the gift of J. Goodall, Esq.

Money Prizes, divided as shown, were allowed by the Training Ship Committee out of the interest on the legacy left to the Ship by the late Captain Brown.

SWIMMING.

The following figures show the number of boys taught to swim during year 1893, and the number that have passed from one class to another:—

Number of boys who could not swim on the 1st January, 1893	22
,, ,, admitted during 1893	299
Total	<u>321</u>

Number of boys remaining on the 31st December, 1893, who could not swim	<u>32</u>
--	-----------

Number actually taught to swim	289
,, passed into 4th Class from 5th	284
,, ,, 3rd ,, 4th	273
,, ,, 2nd ,, 3rd	180
,, ,, 1st ,, 2nd	202
,, ,, Special ,, 1st	130
Total	<u>1,358</u>

The table below shows the number of boys in the Swimming Classes on the 31st December, 1892, and the 31st December, 1893 :—

	1892.	1893.
In the 5th Class	28	36
„ 4th „	89	90
„ 3rd „	193	189
„ 2nd „	64	77
„ 1st „	23	39
„ Special	142	150
Totals	<u>539</u>	<u>581</u>

The following table shows the result of the Swimming Competition which took place in June, 1893 :—

No. on Ship's Books.	NAME.	No. on Watch Bill.	UNION OR PARISH.	Lengths	DISTANCE.	DESTINATION.
4972	H. Matthews	585	Poplar ...	358	7160 yds. = 4 miles and 120 yds	Still on board.
4471	G. Worth ...	533	Islington ...	355	7100 „ = 4 „ „ 60 „	Royal Navy.
4233	J. Adams ...	221	Lambeth ...	336	6720 „ = 3 $\frac{3}{4}$ „ „ 120 „	„
4530	W. Brampton	46	St. George's	320	6400 „ = 3 $\frac{1}{2}$ „ „ 240 „	Still on board.
4541	H. Crane ...	348	Holborn ...	298	5960 „ = 3 $\frac{1}{4}$ „ „ 240 „	„
4735	D. Giles ...	438	St. George's	296	5920 „ = 3 $\frac{1}{4}$ „ „ 200 „	„
4183	G. Huggins	147	Mile End ...	252	5040 „ = 2 $\frac{3}{4}$ „ „ 200 „	Royal Navy.
4561	F. Cannons	343	Lewisham	240	4800 „ = 2 $\frac{1}{2}$ „ „ 400 „	Army.
4605	J. Spooner	161	Mile End ...	232	4640 „ = 2 $\frac{1}{2}$ „ „ 240 „	Still on board.
4204	E. Deering	335	Islington ...	206	4120 „ = 2 $\frac{1}{4}$ „ „ 160 „	M. Marine.
4368	F. Carpenter	332	St. George's	196	3920 „ = 2 „ „ 400 „	„
4982	G. Manson	331	St. Pancras	186	3720 „ = 2 „ „ 200 „	Still on board.
4838	E. West ...	464	St. Olave's	144	2880 „ = 1 $\frac{1}{2}$ „ „ 242 „	„

The Winner of the 1st Prize was in the water 3 hours 33 minutes.

The following is a list of the Prizes allowed for swimming :—

H. Matthews	1st Prize, Silver Watch, allowed by the Ship Committee.	
G. Worth... ..	2nd „ Silver Medal, presented by Mr. Taylor.	
J. Adams... ..	3rd „ 15s. 0d.	} Allowed by the Committee.
W. Brampton	4th „ 10s. 0d.	
H. Crane	5th „ 7s. 6d.	
D. Giles	6th „ 5s. 0d.	
G. Huggins	7th „ 2s. 6d.	

SCHOOL.

The school work has been carried on satisfactorily, notwithstanding the many difficulties which are constantly arising. With reference to these, H.M. Inspector, Wyndham Holgate, Esq., in his last report says :—“The very limited attendance which is possible for the lads, and the many drawbacks which the teachers have to meet with, in the way of gun drill, &c., &c., lead me to think that the only satisfactory way of entirely removing the weak points would be the providing a separate schoolroom away from the Ship.”

During the past year we have lost the services of Messrs. H. T. and E. Jones, Assistant Schoolmasters, their successors being Messrs. Beeby and Bolt. Mr. Walsh obtained his Privy Council Certificate from the Education Department, Mr. Bernays, one of H.M. Inspectors, attending on board to examine Mr. Walsh's class.

Sickness was responsible for the absence of the Head Schoolmaster and of Mr. Hawthorne for some time.

The reading and writing room on the main deck is always well filled, and forms a quiet resort for those studiously inclined. Thanks to the Committee, we have a constant supply of periodicals, especially suitable for the lads.

Singing is taught to all the boys by the teachers of the various classes; special reference is made to this by H.M. Inspector.

The Geographical and Historical Lectures given by the Head Schoolmaster and illustrated by means of lantern slides form a pleasant and instructive sequel to the school-work of the week.

CARPENTERING.

The time must shortly come when a very large repair of the decks, particularly the upper deck, must be undertaken, either by covering the existing one with planks, or replacing it with a new deck.

The seams on the outside of the Ship down to the water's edge, except the stern and quarters, were filled with putty, which will ensure the vessel from leaking so much in heavy rains. But she sprung a very serious leak under water on the 17th April last—so serious, indeed, that in a very short time we had no less than 15 inches of water in the hold. This was of course speedily pumped out by our powerful pumps, and measures were soon taken by means of a diver and diving apparatus to stop this leak, and I am glad to say that it has not troubled us since.

The Ship's boats being constantly in use require very frequent repair, and with the gradually decaying material, &c., of which the Ship, &c., is composed, the repairs are rather more than our staff of carpenters can well keep pace with. A certain number of boys are told off to form a carpenter's crew, who are useful in painting boats and performing very light carpenter's work.

TAILORING.

The following is a list of the work done in the tailor's shop during the year :—

565 Serge Frocks looped and buttoned.	72 Flags made for use of boys for Signalling.
540 Gold Chevrons made.	9 Boxing Gloves repaired.
12 Masthead Pennants made.	30 Haversacks repaired.
75 Flags repaired.	

160 Oilskins repaired.	130 Pairs of Trousers repaired.
140 Sou'westers repaired.	95 Pairs of Trousers altered.
7 Pilot Jackets repaired.	190 Serge Frocks striped.
8 Shoulder Belts made for Quartermaster and Signal Boys.	95 Seamanship Stripes made.
3 Harmonium Covers repaired.	1,200 Eyelet Holes made in Towels.
4,250 Soap Bags made.	36 Straw Hats ribboned.
	1 Boat Cloth made.

HEALTH.

The following is a statement supplied by the Medical Officer, which speaks for itself:—

DISEASES.	No. of Sick admitted into the Infirmary during 1893.	Percentage of Sick.	Deaths.
General Diseases—			
Febrile	20	2·38	
Constitutional	85	10·14	2
Local—			
Diseases of the Respiratory System	18	2·14	1
" Digestive "	104	12·41	
" Nervous "	2	0·23	
" Cutaneous "	16	1·9	
" Eye	30	3·57	
" Ear	10	1·19	
Accidental Injuries	140	16·7	
Total	425	50·66	3

During the year 1893 the number of boys on board the "Exmouth" was 838.

RELIGIOUS INSTRUCTION.

The Chaplain has sent me the following letter as to the spiritual welfare of the boys:—

Training Ship "Exmouth,"
Grays, Essex.
January, 1894.

To Captain Bouchier, R.N.

DEAR SIR,

The time has again arrived when, as Chaplain, I have to write a brief report of our work in the Religious Instruction of the boys during the past year, and I do this with great pleasure, and with renewed thankfulness to Almighty God for the steady improvement and progress which I trust has

taken place in the whole moral and religious tone of the boys. The work done is of the same character as that done in past years, with the exception that the Sunday morning service has been shortened, a change which I have reason to hope is an improvement, and is appreciated by officers and boys alike.

As to the Sunday service itself, I can only say it has been regularly conducted, and it is bright, hearty, and reverent; the boys always seem interested and attentive, and their general conduct is very good, the singing is meritorious, the general tone highly commendable. Indeed, I should say our Sunday service is quite up to the standard of many congregations on shore, where they have the advantages of a permanent and suitable building, and all the accessories of Divine worship.

With respect to the instruction given on Tuesdays and Fridays, this has been regularly and systematically carried out on the lines and in accordance with the syllabus laid down by the Ship Committee, and the boys always seem to pay the closest attention; yet somehow their thoughts and intellect evidently move slowly, as if in their previous early training their thinking powers had not been sufficiently left self-reliant.

Acting on the suggestion of Mr. Holgate, on the occasion of his last visit, I have heard with great interest each of the masters give lessons to the different standards in school, and I am pleased to express the opinion that we possess in our present staff of teachers men who aim to develop the intelligence of each boy, to give him an interest in things outside himself, and above all, to instil the love of humanity and the fear of God. If the Committee could see their way to place an additional teacher in the school it would be money well spent.

On All Saints' Day (November 1st) the Lord Bishop of Colchester made his annual visit to the Ship, when 279 boys who had previously been prepared by myself, assisted by the Masters, were presented for the sacred rite of Confirmation (the numbers in 1892 were 194). A few days afterwards the whole of the 279 boys confirmed made their first Communion at All Saints' Church. They were accompanied by a staff of officers and 87 of the boys who had been previously confirmed, making a total of 366 boys who knelt round the Lord's Table, and openly professed their desire to be God's workers to fight God's battles. It was a truly impressive sight and ceremony, and I am sure will never be erased from the memory of all those who took part in it. We cannot but hope and pray that some among them will in the future be found doing their duty in the world more strenuously, more lovingly, and more humbly, because while on board the "Exmouth," they learned in Confirmation and Holy Communion that it is God who called them into His service.

The infirmary has been duly visited, and a kindly, cheering word of encouragement and hope addressed to the boys found there from time to time. Death has carried away three of our number during the year, and we know that each of them are now at rest. The service at the burial of each will be an event long remembered by all those who took part in it, and also by the inhabitants of Grays generally, many of whom have told me since that they had no idea the Burial Service could be rendered so bright, impressive, and hopeful.

In conclusion, may I add for myself my deep gratitude for another year's experience of great kindness from yourself and family, and I cannot express sufficiently my thankfulness by mere words for the constant encouragement, support, and ever-ready help which have been so kindly given by yourself, all the officers, and the Committee.

I am, dear Sir,

Yours very faithfully,

(Signed) FREDERICK HASLOCK,

Chaplain of the Training Ship "Exmouth."

GENERAL REMARKS.

It is with pleasure that I have to report the general good conduct of the boys throughout the year.

On the 19th April, Admiral Robert O'Brien Fitzroy, C.B., Admiral Superintendent of the Naval Reserves, inspected the Ship, and was evidently much pleased with what he saw.

Thanks to the continued interest shown by the members of the Committee in our work on board, we have had on several occasions our full complement of boys under training. Naturally we have been unable to keep up our numbers, as trained "Exmouth" boys are being placed out every week.

Our late Chairman, Mr. R. Strong, J.P., was good enough to attend on board and distribute the Prizes and Certificates to the successful competitors on our Annual Prize Day. The pleasure and satisfaction expressed by the Managers who accompanied him at the general appearance and smartness of the lads were a source of much gratification to me.

The Prize List is appended, marked A.

The winners of School and Band Prizes received them at the hands of your esteemed Chairman, Mr. James Brown, who made most suitable and appropriate remarks to each individual prize-winner, and finally

impressed on all the boys assembled the great desirability of making themselves fully acquainted with all the details of the line of life which they had chosen.

On a subsequent occasion Mr. Brown had a further opportunity of driving home to the boys' minds the lesson of thoroughness in all they did as he distributed the six silver watches generously given by Mr. Halsey to those boys selected by the Officers and myself as being most deserving of such excellent and handsome presents.

On the 1st November, 1893, the Bishop of Colchester came on board, and with the assistance of the Chaplain confirmed 279 boys, who, with many others who had been previously confirmed, attended at All Saints' Church, Grays, on the 3rd November, and received the Holy Sacrament. The Bishop kindly made the following entry in the Visitors' Book:—

“Visited the ‘Exmouth’ for the annual Confirmation; all in good order.”

The boys have, with myself, had reason to thank most heartily all those kind friends who again contributed to our boys' General and Entertainment Fund. I have been enabled not only to engage the services of capable entertainers, but have also found the fund of assistance in encouraging any special effort made by the boys individually. A balance sheet is sent annually to each contributor, showing how this fund has been disposed of.

Many of our old boys visit us on board and renew friendships which have not been forgotten, although years may have elapsed since their previous visit. The list of old boys who have been seen or heard of is appended, marked B.

The work carried on continuously in the training of the boys is shared in by all the Officers, as well as by myself; and I take this opportunity of thanking them for all their earnest endeavours to put into effect and successfully carry out the instructions which I have given them.

In conclusion, I sincerely thank you, Gentlemen, for all your kindness to, consideration of, and confidence in, myself.

I beg to remain, Gentlemen,

Your obedient Servant,

(Signed) W. S. BOURCHIER. X

Captain-Superintendent.

