

Report on the vital and sanitary statistics of the Borough of Lambeth during the year 1905.

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REPORT
ON THE
VITAL AND SANITARY
STATISTICS
OF THE
BOROUGH OF LAMBETH
DURING THE YEAR
1905

*[With an Account of the work done by the Sanitary Inspectors,
and of the Proceedings taken under the Food and Drugs,
Factory and Workshops, and Public Health, Acts].*

BY

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MEDICAL OFFICER OF HEALTH.



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1906.

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PUBLIC HEALTH DEPARTMENT,

333, KENNINGTON ROAD, S.E.

February, 1906.

To the Mayor, Aldermen and Councillors of the
Metropolitan Borough of Lambeth.

Mr. Mayor and Gentlemen,

In presenting you with the Annual Report, dealing with the Vital and Sanitary Statistics of the Borough of Lambeth during the year 1905, I have the pleasure of drawing your attention to its most satisfactory nature. The mortality rates are well below the averages, and the morbidity—or sickness—rates have been also low during the year. The Borough is benefitting from the strict sanitary control which you, and your predecessors on the old Vestry of Lambeth, have exercised in the past. You are to be congratulated in being able to record that the Borough of Lambeth is one of the healthiest in the County of London, and takes a favourable position when compared with any of the large provincial towns of similar size. An outbreak of diphtheria and pseudo-diphtheria at the Norwood Parochial Schools is one of the features of the present Report, as shewing the difficulties in dealing with mild, unrecognised, cases of diphtheria amongst the inmates of a School, and the precision and exactness in diagnosis that are to be obtained by means of bacteriological examinations.

Without belittling in any way the rest of the work that has been accomplished during 1905, I would draw attention to the following matters in connection with which the Borough Council, as the Sanitary Authority, is to be specially congratulated:—

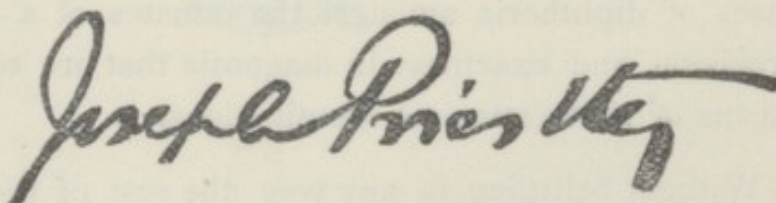
1. The completion of the Milk Depôt at 66, York Road, Westminster Bridge Road (near Waterloo Station)—its construction and fitting up being second to none.
2. The increase of the Sanitary Staff by the appointment of one extra male and one extra female Inspector.

3. The altering, enlarging and improving of the Mortuary and Coroners' Court in the High Street, which have long been totally inadequate and quite unsuited, sanitariously and otherwise, to the present needs of Lambeth;
4. The special work carried out in the Bacteriological Laboratory in connection with the outbreak of diphtheria and pseudo-diphtheria at the Norwood Parochial Schools;
5. The very small number of cases (only 8) in which summonses have had to be taken out on account of non-compliance with notices served under the Public Health Acts, *e.g.*, 0.06 per cent. of the total notices served.

The good work done (as tabulated in this Report) is the outcome of the way in which the Staff, as a whole, has carried out its duties, and the support that has, at all times, been given to the Medical Officer of Health by the Members of the Borough Council (more especially the Public Health Committee). To the Town Clerk and my other colleagues (the chief officers of the Borough Council) my own personal thanks are due for advice and help at all times readily given.

I am, Mr. Mayor and Gentlemen,

Your Obedient Servant,

A handwritten signature in dark ink, reading "Joseph Priestley". The signature is written in a cursive style with a large, prominent initial 'J' and a long, sweeping underline.

Medical Officer of Health.

I. VITAL STATISTICS.

The Borough of Lambeth contains 4079·6 statute acres, exclusive of 82·1 tidal water, 0·8 inland water, and 31·1 fore-shore, with an *estimated* total population of 313,045 persons to the middle of 1905, consisting of 148,169 males and 164,876 females, or an excess of 16,707 females.

The total estimated increase (1904-1905) of the population is 2,686, but the "natural increment," *i.e.*, the excess of births over deaths (uncorrected) is 3,939, so that an exodus of 1,253 in excess of those who came into the Borough during 1905 must be assumed.

The estimated Populations of the Borough of Lambeth to the middle of 1905 may be tabulated as follow:—

ESTIMATED POPULATIONS.

(Estimated, Middle 1905.)

I. Wards.

Wards.	Males.	Females.	Total.
Marsh ... ..	] Cannot be sub-divided with sufficient accuracy on account of the <i>New</i> Borough Wards differing from the <i>Old</i> Parish Wards.	] Cannot be sub-divided with sufficient accuracy on account of the <i>New</i> Borough Wards differing from the <i>Old</i> Parish Wards.	26590
Bishop's			31755
Prince's			48975
Vauxhall			32384
Stockwell			33418
Brixton			45179
Herne Hill			32883
Tulse Hill			29326
Norwood			32535
Borough of Lambeth ...	148169	164876	313045

II. *Registration Sub-Districts.*

Sub-Districts.	Males.	Females.	Total.
Waterloo	13552	13038	26590
Lambeth Church (1st) ...	9108	9286	18394
Lambeth Church (2nd) ...	19927	20044	39971
Kennington (1st) ...	27161	27430	54591
Kennington (2nd) ...	20378	24194	44572
Brixton	41300	48243	89543
Norwood	16743	22641	39384
Borough of Lambeth ...	148169	164876	313045

III. *Age-Periods.*

Age-Periods.	Males.	Females.	Total.
0—1	3789	3786	7575
1—5	13065	12981	26046
Total under 5 	16854	16767	33621
5—20	43126	45057	88183
20—40	51756	58812	110568
40—60	27377	30781	58158
60—80	8553	12370	20923
80 upwards	503	1089	1592
Total over 5 	131315	148109	279424

IV. *Parliamentary Divisions (Old).*

<i>Old</i> Parliamentary Divisions.	Males.	Females.	Total.
North	29244	29213	58457
Kennington	40134	40373	80507
Brixton	35920	41864	77784
Norwood	41757	51694	93451
Parliamentary Area of Lambeth	147055	163144	310199

N.B.—The Parliamentary Divisions have not been altered by the London Government Act, 1899, nor by the Proceedings that fixed the Boundaries of the Metropolitan Boroughs, so that the above figures do not agree with those for the Borough as a whole, but are comparable with those of the old Parish of Lambeth given in previous Reports.

V. *Parliamentary Divisions (Adjusted).*

<i>*Adjusted</i> Parliamentary Divisions.	New Wards.	Total.
North	{ Marsh Bishop's }	58345
Kennington	{ Prince's Vauxhall }	81359
Brixton	{ Stockwell Brixton }	78597
Norwood	{ Herne Hill... .. Tulse Hill Norwood }	94744
<i>*Adjusted</i> Parliamentary Area of Lambeth ...	—	313045

* N.B.—By the adjustment of the old Parliamentary Divisions so as to be co-terminous with the new wards.

1905—Groups of Metropolitan Boroughs (corrected rates).

		Enumerated Population, 1891 (Census).	Enumerated Population, 1901 (Census).	Estimated Population, 1905 (middle of year).	Birth-Rate.	Death-Rate.	Zymotic Death- Rate.	Deaths under 1 year to 1000 Births.
London ...	...	4228317	4536541	4684794	27·1	15·1	1·7	129
South Group	...	1524472	1749956	1852523	27·7	14·5	1·6	123
West Group	...	770022	826985	854367	22·3	14·0	1·5	132
North Group	...	1013707	1056070	1078079	24·8	14·3	1·4	121
Central Group	...	214464	187791	177113	30·0	18·3	1·6	118
East Group	...	705652	715739	722712	33·9	18·1	2·6	149

N.B.—This table has been again added for purposes of comparison with previous Lambeth Reports, but is unsatisfactory on account of the differences between the boundaries of the *old* Sanitary Districts, and the *new* Cities and Boroughs, of the Metropolis.

HOUSES.

At the time of the Census, 1901, there were within the Borough of Lambeth 41,511 inhabited houses and 1825 uninhabited (881 in occupation and 944 not in occupation), whilst 137 were in process of building. At the time of the 1891 Census, the inhabited houses numbered 38,899.

The estimated number of inhabited houses to the middle of 1905 is 42,765, which, with an estimated population (to the middle of 1905) of 313,045 gives an average of 7·3 persons per inhabited house.

RATEABLE VALUE.

The rateable value of the Borough for the year ending March 31st, 1905, was £1,918,182, and a 1d. rate per £1 is estimated to produce £7,628 *net* for the year ending March 31st, 1905, in both cases inclusive of Government property.

STATISTICS FOR LONDON AS A WHOLE.

The Registrar-General returns the estimated population of London for the middle of the year 1905 as 4,684,794 consisting of 2,211,402 males, and 2,473,392 females, and states that there were registered during the year 39,631 marriages, 126,620 births (64,177 males and 62,443 females), and 73,002 deaths (37,738 males and 35,264 females). There were registered, 7,980 deaths from the seven chief zymotic diseases. The excess of registered births over deaths, *i.e.*, the natural increment, is 53,618, and the estimated increase of population from the middle of 1904 to the middle of 1905 is 35,844.

TABLE A.

Giving the number of Births and the Birth-Rates in each Registration Sub-District of the Borough of Lambeth during 1905 (arranged Quarterly).

Registration Sub-Districts.	No. of Births.				Total for the Year 1905.	Rate per 1000 Inhabitants.
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.		
Waterloo Road 1st ...	124	110	109	106	449	52.1*
„ 2nd...	225	235	226	249	935	
Lambeth Church 1st ...	158	125	125	124	532	28.9
„ 2nd ...	393	344	354	372	1463	36.7†
Kennington 1st ...	455	419	439	392	1705	31.2
„ 2nd ...	236	221	245	236	938	21.04
Brixton ...	547	491	499	478	2015	22.5
Norwood ...	203	218	194	183	798	20.3
Borough of Lambeth ...	2341	2163	2191	2140	8835	28.2

* Including Lying-In Hospital (378 cases, of which 167 belong to Lambeth)—corrected rate (*i.e.*, excluding non-Lambethian births), = 44.1.

† Including Workhouse (172 cases, of which 147 belong to Lambeth)—corrected rate (*i.e.*, excluding non-Lambethian births), = 35.9.

Inner Districts, 39.8; Outer Districts, 23.9 per 1000—uncorrected (whole Borough=28.2).

Inner Districts, 36.9; Outer Districts, 23.9 per 1000—corrected (whole Borough=27.5).

TABLE B.

Shewing the Estimated Populations, Numbers of Inhabited Houses, Marriages, Births, and Corrected Deaths in the Borough of Lambeth during 1905, and in the Parish of Lambeth for ten years (1891-1900).

Year.	Estimated Population.	Estimated No. of Inhabited Houses.	Marriages.	Registered Births.	Corrected Number of Deaths.			Deaths from 7 Chief Zymotic Diseases.	Deaths in Public Institutions.
					Total Ages.	Under 1 Year.	Under 5 Years.		
New Boro ¹									
1905	313045	42765	2525	8835	4646	1014	1455	431	1807
1891	276162	38634	2140	9097	5886	1387	2251	692	1438
1892	280032	38950	2107	9226	5457	1250	2091	705	1578
1893	283956	39265	2233	9222	5219	1325	1925	748	1741
1894	287935	39580	2224	9232	4837	1223	1936	680	1484
1895	291970	39895	2220	9341	5559	1420	2187	732	1511
1896	296061	40210	2445	9592	5098	1313	2045	708	1588
1897	300048	40525	2445	9388	5251	1425	2096	734	1546
1898	304073	40840	2589	9256	5430	1426	2089	726	1543
1899	308108	41155	2523	9433	5886	1488	2198	782	1680
1900	312152	41470	2454	9167	5430	1328	1884	497	1576
Average									
1891-1900	294049.7	40052.4	2338	9295.4	5405.3	1358.5	2070.2	700.4	1568.5

NOTE.—(a) Enumerated Population for old Parish at Census 1896 was 295,033, and the enumerated number of inhabited houses at Census 1891 was 38,556. (b) Enumerated population for the new Borough at Census 1901, was 301,895, and the enumerated number of inhabited houses at the same Census, 41,511.

TABLE C.

Shewing the number of persons per house, the Marriage-, Birth-, and Death-Rates (corrected), and proportion of Deaths in Public Institutions, in the Borough of Lambeth for the Year 1905, and in the old Parish of Lambeth for ten years (1891-1900).

The Year	Estimated No. of Persons per house.	Marriage-Rate per 1000 Population.	Birth-Rate per 1000 Population.	Corrected Death-Rate per 1000 Population.	Corrected Deaths of Children under 1 year, per 1000 Births.	Corrected Deaths of Children under 1 year, per 1000 Deaths.	Corrected Deaths of Children under 5 years, per 1000 Deaths.	Corrected Zymotic Death- Rate, per 1000 Population.	Deaths in Public Institutions per 1000 total uncorrected deaths.
New Boro' { 1905	7.3	16.3	28.2	14.8	114.8	218.3	313.2	1.4	369.1
Old Parish. {	1891	15.5	32.9	21.3	152.5	235.6	382.4	2.5	236.6
	1892	15.0	32.9	19.5	135.5	229.1	383.2	2.5	272.4
	1893	15.7	32.5	18.4	143.7	253.9	368.8	2.6	305.9
	1894	15.4	32.1	16.8	132.5	252.8	400.3	2.4	284.7
	1895	15.2	31.9	19.0	152.0	255.4	393.4	2.5	257.9
	1896	16.5	32.4	17.2	136.9	257.6	401.1	2.4	295.7
	1897	16.3	31.3	17.5	151.8	271.4	400.1	2.4	281.8
	1898	17.0	30.4	17.9	154.1	262.6	384.7	2.4	277.1
	1899	16.3	30.6	19.1	157.7	252.8	373.4	2.5	277.1
	1900	15.7	29.4	17.4	144.9	244.6	346.9	1.6	282.5
Average 1891-1900.	7.3	15.9	31.6	18.4	146.1	251.3	382.9	2.4	276.7

NOTE.—(a) Enumerated number of Inhabited Houses for the old Parish at Census 1891 was 38,556. (b) Enumerated number of Inhabited Houses for the new Borough at Census 1901 was 41,511.

THE BIRTH-RATE.

The total number of Births registered in the Borough of Lambeth during the year 1905 was 8835. Of the total 8835 births, 4,532 were males, and 4303, females, showing an excess of 229 males.

Of the total 8835 births registered in the Borough of Lambeth, 378 took place in the Lying-In Hospital (York Road), and of these, 167 belong to the Borough; whilst 172 took place in the Workhouse (Brook Street), and of these, 147 belong to the Borough. Thus, there are 236 births belonging to other districts, but these may be assumed to counteract in number the births (amongst Lambethians) that have taken place *outside* the Borough, together with any *unregistered* births. The Lying-In Hospital and the Workhouse tend to abnormally increase the birth-rates in Waterloo Road and Lambeth Church Second Districts, and the necessary corrections are, consequently, made in a footnote to Table A (*see* p. 11).

The birth-rate for Lambeth is 28·2 per 1000 inhabitants (30·6 for males, and 26·9 for females; whilst in the various Registration Sub-Districts the birth-rates work out as shown in Table A, from which it will be seen that the uncorrected birth-rate in the Inner Districts is 39·8, and that in the Outer Districts 23·9, per 1000—the corrected birth-rates being respectively 27·5 for the whole borough, 36·9 for the Inner, and 23·9 for the Outer, Districts.

Tables B and C show, for comparison, the number of births, and the birth-rates for 10 years (1891-1900) in the old Parish of Lambeth.

The birth-rate for Lambeth (Parish and Borough) has been recently slowly, but steadily, declining. This decline is not peculiar to Lambeth, nor even to England, but is to be found

in nearly all civilised countries, and is greater in reality than would appear on the surface ; for it must be remembered that *pari passu* with this declining birth-rate is a declining death-rate.

Returns of all Births (with addresses of mothers) that occur in Lambeth are now obtained from the District Registrars, and this information will be of great use in connection with the Borough Council's endeavours to lessen the high mortality amongst infants (under 1 year of age), by distributing amongst the mothers pamphlets dealing with the proper management and feeding of infants.

The Council during 1905 approved the principle of transferring to the Borough Councils the registration of births and deaths.

THE MARRIAGE-RATE.

The number of Marriages registered in the Borough of Lambeth during the year 1905 was 2525 as compared with 2480 during 1904, and a yearly average of 2338 in the old Parish of Lambeth for the 10 years 1891-1900.

The marriage-rate for Lambeth Borough during 1905 is, therefore, 16·3 per 1000 inhabitants, as compared with 16·9 for London.

Tables B and C show the number of marriages and the marriage-rates for the last ten years in the old Parish of Lambeth, and it will again be noticed that the marriage-rate has been gradually, but persistently, falling during that period (as also during the previous decennium). Marriage statistics are of little value from a sanitary stand-point.

THE DEATH-RATE.

The total number of deaths registered in the Borough of Lambeth, during the year 1905, was 4896 as compared with 5160 during 1904, and a yearly average of 5716·7 in the old Parish of Lambeth for the 10 years 1891-1903. Of the total

4896 deaths, 2508 were males and 2388 females, showing an excess of 120 males.

The death-rate for Lambeth is, therefore, 15·6 per 1000 inhabitants (16·9 for males and 14·5 for females), as compared with 15·6 for London (17·1 for males and 14·3 for females). These rates are, however, uncorrected, and, on analysing the 4896 deaths registered in the Borough of Lambeth, it is found that 736 represent deaths occurring within the Borough amongst persons not belonging thereto. These deaths are to be deducted, but, on the other hand, there are 486 deaths registered outside the Borough of persons belonging thereto, and these must be added, giving a corrected number of deaths for Lambeth during 1905, of 4646, and a corrected death-rate of 14·8 per 1000 inhabitants, as compared with 15·1 for London (the total corrected number of London deaths being 70,442).

The outside Institutions, &c., where the 486 Lambethians died during 1905, may be grouped as follows :—

I. *General Hospitals.*

Charing Cross	...	20	Royal Free	...	3
Guy's	...	38	St. Bartholomew's	...	12
Hostel of God	...	3	St. George's	...	9
King's	...	15	University	...	3
London	...	7	Westminster	...	46
Middlesex	...	10			

II. *Special Hospitals.*

Blackheath Cottage	...	1	Fridenheim	...	3
Bolingbroke	...	2	German Hospital	...	4
Brompton	...	4	Gordon	...	1
Cancer	...	5	Grosvenor Hospital	...	1
Central London Sick	...	3	Gt. Ormond Street	...	3
Epileptic Colony,			Heart Hospital, Soho		1
Epsom	...	3	Hospital for Incurables,		
Evelina	...	16	Wandsworth	...	1

II. *Special Hospitals—continued.*

Hospital, Women, St.				N. E. Children's			
Pancras	2			Hospital	2		
Infants' Hospital,				Oxygen Hospital ...	1		
Hampstead	1			Royal Chest, City Road	3		
London Throat	2			St. Elizabeth Home	1		
Maternity, Hackney	1			St. Joseph's Hospice	1		
Mildmay Hospital ...	2			St. Luke's	2		
Mount Vernon,				St. Mary's	2		
Hampstead	3			Temperance Hospital	1		
National Hospital ...	3			Tooting Home	1		
				Victoria Hospital ...	4		

Fever.

Fountain	11	Grove	16
-----------------	----	--------------	----

III. *Infirmaries and Workhouses.*

Bear Yard, Strand	1	Southwark Infirmary	9
Bermondsey Infirmary	1	St. George's Infirmary	1
Camberwell Infirmary	7	St. Pancras Infirmary	2
Islington Infirmary ...	1	Wandsworth Infirmary	1

IV. *Asylums.*

Banstead	24	Gore Farm	5
Bethlehem	1	Hanwell	4
Bethnal House Asylum	3	Horton Asylum,	
Camberwell House ...	2	Epsom	11
Caterham	25	Leavesden	5
Cave Hill	19	Licensed Victuallers'...	1
City of London	1	London County	
Claybury	8	Asylum	13
Colney Hatch	3	Manor	4
Darenth	6	Peckham House	3
Dartford	10	Tooting Bec	22

V. *Unclassifiable Places.*

Brought dead to	Private Houses	...	7
Hospital 2	River Thames	...	5
H.M. Prison, Wands-	L. B. & S. C. Rly.	...	1
worth 1	Streets	...	4

SUMMARY.

I. General Hospitals	...	...	166
II. Special and Fever Hospitals	...	...	107
III. Infirmarys and Workhouses	...	...	23
IV. Asylums	...	...	170
V. Elsewhere (unclassifiable)	...	...	20
			<hr/> 486 <hr/>

Whether the corrected or uncorrected death-rates for the Borough of Lambeth (as a whole) be taken, they are very satisfactory for the year 1905, the fifth year of existence of the newly-formed Borough. Sub-dividing the death-rates amongst the several Registration Sub-Districts, it will be again noted that the Inner Districts, *e.g.*, Waterloo, Lambeth Church 1st and 2nd, have, collectively and individually, suffered more than the Outer Districts, *e.g.*, Kennington 1st and 2nd, Brixton and Norwood. So, too, if the death-rates be sub-divided amongst the 9 new Wards, it will be noted also that the Inner Wards, *e.g.*, Marsh, Bishop's, Prince's, and Vauxhall, have collectively and individually, suffered more than the Outer Wards, *e.g.*, Stockwell, Brixton, Herne Hill, Tulse Hill, and Norwood. The reason for this difference is the fact that the Inner Districts and Wards are more congested than the Outer. The status of the inhabitants and the general conditions (sanitary and otherwise) under which they live, are also matters to bear in mind when dealing with this subject.

Taking the Registration Sub-Districts (Table E), and the new Wards (Table F), into which the Borough is sub-divided, the corrected death-rates for 1905 will be found to vary between the Inner and the Outer Districts as follows :—

1905.	Registration Sub-Districts.		New Wards.	
	Inner.	Outer.	Inner.	Outer.
General Death-rate (corrected) ...	19·4	13·2	17·9	12·3
Zymotic Death-rate (corrected)...	1·9	1·2	1·8	1·05

Of the Registration Sub-Districts, Waterloo has the highest, and Norwood the lowest general death-rates, and Lambeth Church 2nd the highest, and Brixton the lowest, zymotic death-rates; whilst of the New Wards, Bishop's has the highest, and Herne Hill the lowest general death-rates, and Bishop's the highest, and Tulse Hill and Herne Hill the lowest zymotic death-rates.

It is only by sub-dividing the rates up in this way that it is possible to see where the (sanitarily) unsatisfactory parts of the Borough are situated, and where, consequently, most care and attention are still required at the hands of the Borough Council. In this connection, Table F deals with the new Borough Wards during 1904 and 1905, whilst Table E gives a similar comparison between the 1904 and the 1905 statistics for the Registration Sub-Districts of the Borough.

Tables G, H and I shew the uncorrected returns (male and female) arranged as to Registration Sub-Districts, age periods, and quarters respectively, and are given for comparison with similar tables in former Lambeth Reports.

The place that the Borough of Lambeth takes during 1905 in the Registrar-General's corrected Returns amongst the Metropolitan Districts is worthy of note, there being 16 other districts (out of 29) with a less general death-rate, 16 with a less zymotic

death-rate, and 9 with a less infantile mortality-rate. Taking the 10 South Metropolitan Districts, Lewisham has the smallest general death-rate per 1000 of the population, viz.: 11·7, and Bermondsey the highest, viz.: 18·7, as compared with 14·8 for Lambeth, 14·5 for Battersea, and 18·5 for Southwark.

London, as a whole, has a birth-rate of 27·1, corrected death-rate of 15·1, a corrected zymotic (death-) rate of 1·7 per 1000 population, and an infant mortality (corrected) of 129 per 1000 births; and England and Wales a birth-rate of 27·2, a death-rate of 15·2, a zymotic death-rate of 1·52 per 1000 population, and an infantile mortality of 128 per 1000 births; and the 76 great towns of England and Wales a birth-rate of 28·2, a death-rate of 15·7, a zymotic death-rate of 1·88 per 1000 population, and an infantile mortality of 140 per 1000 births.

Age-Periods of Corrected Deaths.

The 4646 corrected deaths during 1905 may be further analysed, and tabulated as follow :—

1014, <i>i.e.</i> , 21·8	per cent.	of the total (corrected) deaths took place under 1 year of age.
441, <i>i.e.</i> , 9·5	„	between 1 and 5 years.
1455, <i>i.e.</i> , 31·3	„	under 5 years.
204, <i>i.e.</i> , 4·4	„	between 5 and 20 years.
542, <i>i.e.</i> , 11·7	„	20 to 40 years.
963, <i>i.e.</i> , 20·7	„	40 to 60 years.
1179, <i>i.e.</i> , 25·4	„	60 to 80 years.
303, <i>i.e.</i> , 6·5	„	80 years and over.
3191, <i>i.e.</i> , 6·9	„	over 5 years.

These results may be compared with those for London given in the Table on p. 21 which shows the estimated mortalities per 1000 persons at each age-period for London during 1905 and the London averages for the 10 years 1881-90.

TABLE

Shewing Mortalities in Lambeth Borough at different Age-Periods during 1905, compared with (1) those for London 1905, and (2) the averages for London, for years 1881-90.

Age-Periods.	LAMBETH.			LONDON.	
	Estimated Populations (middle 1905).	Mortality Rates per 1000 Population, 1905.		Mortality Rates per 1000 Population, 1905. Uncorrected.	Average of Ten Years, 1881-90, per 1000.
		Corrected.	Uncorrected.		
0—5	35621	43·3	48·9	48·5	68·4
5—20	88183	2·3		2·7	4·3
20—40	110568	4·9	6·7	5·2	7·7
40—60	58158	16·6	6·9	17·1	20·2
60—80	20923	56·3		58·4	63·3
80 and upwards	1592	190·3	66·3	192·7	206·3
*Under 1 year	7575	114·8	127·6	131·4	152·0
All Ages	313045	14·8	15·6	15·6	20·5

The Age-periods adopted in previous Lambeth Reports, are used for purposes of comparison, though it is considered more accurate to sub-divide as follows:—1-5, 5-15, 15-25, 25-35, 35-45, 45-55, 55-65, 65-75, 75-85, 85 and over.

*N.B.—The Rates under 1 year are given in terms of 1000 births.

TABLE D.

Shewing the number of Births and Deaths, with Birth- and Borough during 1905. The Deaths are from all causes, and Lambethians who die outside the Borough, by omitting strangers (who die in Public Institutions) into the Districts from which

REGISTRATION SUB-DISTRICTS.	Persons per Acre.	Estimated Population (middle 1903).	Total Births (uncorrected).	Birth-rate per 1000 of the Population.	Total Deaths (corrected).	General corrected Death-rate per 1000 of the Population.
Waterloo Road 1st } " " 2nd }	159.2	26590 {	449 } 935 }	52.1 {	274 } 247 }	21.1 }
Lambeth Church 1st...	113.5	18394	532	28.9	278	16.2
" " 2nd...	214.9	39971	1463	36.7	768	19.7
Kennington 1st ...	111.4	54591	1705	31.2	779	14.2
" 2nd ...	89.5	44572	938	21.04	629	14.5
Brixton ...	62.7	89543	2015	22.5	1104	12.5
Norwood ...	39.03	39384	798	20.3	412	10.9
District not stated ...	...	...	...	...	155	...
Borough of Lambeth	79.4	313045	8835	28.2	4646	14.8

N.B.—In the 155 cases where the District is not stated, the deaths were sub-divided equally in the eight Districts. statute acres (exclusive of 82.1 tidal water, 0.8 inland

* Excluding all the Lying-In Hospital births,

† Excluding all the Workhouse births,

TABLE D.

Death-rates in each of the Registration Sub-Districts of the from the chief zymotic diseases, and are corrected by adding who die within the Borough, and by re-distributing persons they have been removed during illness.

Small Pox.	Measles.	Total Deaths (corrected) from							Total Zymotic Deaths.	Zymotic Death-rate per 1000 of the Population (corrected).	Zymotic Death-rate per 1000 of the Total Deaths.	Diarrhoea Death-rate per 10000 of the Population.	Infantile Mortality per 1000 Births (uncorrected).
		Scarlet Fever.	Diphtheria and Membranous Croup.	Whooping Cough.	Typhus.	Typhoid or Enteric.	Continued Fever.	Diarrhoea.					
{ ...	9	...	1	3	...	...	...	7	20	1.7	72.01	4.6	120.3
{ ...	7	3	2	3	...	2	...	5	22		86.8		86.6
...	4	...	2	7	...	1	...	14	28	1.6	97.9	7.7	212.4
...	10	4	13	12	...	...	...	46	85	2.2	109.4	11.5	141.5
...	12	3	6	11	...	1	...	48	81	1.5	102.7	8.8	108.5
...	13	6	6	15	...	3	...	12	55	1.3	86.6	2.7	206.8
...	17	12	5	21	...	3	...	33	91	1.03	82.01	3.7	105.2
...	17	3	2	6	...	...	...	12	40	1.04	95.3	3.08	101.5
...	7	...	...	1	...	...	...	1	9	...	...	...	...
...	96	31	37	79	...	10	...	178	431	1.4	92.8	5.7	127.6

death-rates have been calculated on the assumption that these Census 1901 Return gives the area of Lambeth as 4079.6 water, and 31.1 foreshore).

the corrected birth-rate = 37.8 per 1000.

the corrected birth-rate = 32.3 per 1000.

TABLE E.
BOROUGH OF LAMBETH.
COMPARISON BETWEEN STATISTICS FOR 1904 AND 1905.
REGISTRATION SUB-DISTRICTS.

	Death-Rates (corrected) per 1000 population.				Birth-Rates (uncorrected) per 1000 population.		Infantile Mortality (uncorrected) per 1000 births.	
	General.		Zymotic.		1904.	1905.	1904.	1905.
	1904.	1905.	1904.	1905.				
INNER DISTRICTS—	20·7	19·4	3·2	1·9	40·1	39·8	170·4	134·7
*Waterloo	21·9	21·1	3·1	1·7	49·1	52·1	123·9	97·6
Lambeth Church 1st ...	19·02	16·2	3·4	1·6	30·9	28·9	289·9	212·4
†Lambeth Church 2nd ...	20·3	19·7	3·03	2·2	38·2	36·7	165·9	141·5
OUTER DISTRICTS—	13·8	13·2	1·5	1·2	25·8	23·9	132·2	123·1
Kennington 1st	15·8	14·2	1·9	1·5	33·8	31·2	124·9	108·5
Kennington 2nd	15·4	14·5	1·6	1·3	22·9	21·04	168·2	206·8
Brixton	13·1	12·5	1·3	1·03	22·8	22·5	133·8	105·2
Norwood	10·9	10·9	1·3	1·04	20·6	20·3	104·3	101·5
Lambeth	15·7	14·8	1·9	1·4	29·2	28·2	146·6	127·6

* Excluding the 378 Lying-In Hospital Births, the birth-rate is 37·8, and the infantile mortality rate 134·2, for 1905.

† Excluding the 172 Workhouse Births, the birth-rate is 32·3, and the infantile mortality rate 160·4, for 1905.

TABLE F.
BOROUGH OF LAMBETH.
COMPARISON BETWEEN STATISTICS FOR 1904 AND 1905.

NEW WARDS.

New Wards.	Death-Rates (corrected) per 1000 population.				Zymotic Incidence per 1000 population.		Total Number of Deaths (corrected).		Total Notified Cases. Zymotic 1905.
	General.		Zymotic.				General.	Zymotic.	
	1904.	1905.	1904.	1905.	1904.	1905.	1905.	1905.	
INNER—	18.9	17.9	2.8	1.8	4.7	6.5	2513	249	909
Marsh	21.4	21.7	3.4	1.8	5.5	6.6	576	47	175
Bishop's	23.6	24.4	3.2	2.1	5.1	7.8	774	67	247
Prince's	15.2	14.2	2.3	1.5	4.5	6.4	696	74	315
Vauxhall	17.7	14.4	2.3	1.9	3.9	5.3	467	61	172
OUTER—	13.2	12.3	1.3	1.05	4.3	5.4	2133	182	944
Stockwell	13.8	12.9	1.5	0.7	7.6	5.7	433	23	190
Brixton	14.7	14.5	1.5	1.5	3.9	5.8	653	66	260
Herne Hill	14.5	10.2	1.2	0.8	3.7	4.2	336	26	139
Tulse Hill	9.9	11.2	0.8	1.1	3.3	4.2	327	31	123
Norwood	11.7	11.8	1.3	1.1	2.7	7.1	384	36	232
Borough of Lambeth	15.7	14.8	1.9	1.4	4.5	5.9	4646	431	1853

TABLE G.

Shewing the uncorrected Mortality (Male and Female) in the different Registration Sub-Districts of the Borough of Lambeth (arranged Quarterly) during the year 1905.

	1st Quarter.			2nd Quarter.			3rd Quarter.			4th Quarter.			Total No. of Deaths in each District.
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
Waterloo Road 1st ...	21	22	43	23	13	36	21	17	40	23	21	48	167
„ 2nd ...	14	24	38	20	21	41	31	16	45	29	24	49	173
Lambeth Church 1st ...	114	88	202	97	94	191	124	88	212	143	64	207	812
„ 2nd ...	146	143	289	155	102	257	182	132	314	169	171	340	1200
Kennington 1st ...	66	85	151	58	72	130	66	77	143	75	74	149	573
„ 2nd ...	76	80	156	64	67	131	91	79	170	74	77	151	608
Brixton ...	116	153	269	93	121	214	120	118	238	127	132	259	980
Norwood ...	35	74	109	37	36	73	50	51	101	48	52	100	383
TOTALS ...	588	669	1257	547	526	1073	685	578	1263	688	615	1303	4896

TABLE H.

Shewing the uncorrected Mortality (*i.e.*, including that of Strangers) at different Ages in each Registration Sub-District of the Borough of Lambeth during the year 1905.

SUB-DISTRICT.	Under 1 year.			1 to 5 years.			5 to 60 years.			60 yrs. & upwards.			TOTAL.
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
Waterloo Road 1st ...	31	22	53	16	12	28	30	23	53	11	16	27	167
„ 2nd ...	44	38	82	13	3	16	26	25	51	11	19	30	173
Lambeth Church 1st ...	59	54	113	46	52	98	291	184	475	82	44	126	812
„ 2nd ...	119	88	207	43	43	86	254	193	447	236	224	460	1200
Kennington 1st ...	93	92	185	30	30	60	75	78	153	67	108	175	573
„ 2nd ...	106	88	194	44	33	77	95	94	189	61	88	149	608
Brixton ...	118	93	211	64	57	121	146	160	306	128	214	342	980
Norwood ...	47	34	81	15	16	31	44	50	94	64	113	177	383
TOTALS ...	616	509	1127	271	246	517	961	807	1766	660	826	1486	4896

TABLE I.

Shewing the uncorrected Deaths (*i.e.*, Parishioners and Strangers) that have been registered in the Borough of Lambeth at various Age-Periods in each quarter during the yerr 1905.

	1st Quarter.			2nd Quarter.			3rd Quarter.			4th Quarter.			Total.
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
Under 1 year... ..	121	120	241	112	113	225	235	174	409	149	103	252	1127
Between 1 and 5 years ...	59	56	115	52	54	106	62	57	119	98	79	177	517
Between 5 and 60 years ...	240	237	477	212	185	397	231	180	411	277	204	481	1766
60 years and upwards ...	168	256	424	171	174	345	157	167	324	164	229	393	1486
TOTALS	588	669	1257	547	526	1073	685	578	1263	688	615	1303	4896

INFANTILE MORTALITY, 1905.

Of the 4646 corrected deaths, 1014 were infants under one year of age. The total number of births is 8835, and of these 211 occurred at the Lying-In Hospital, and belong to districts outside Lambeth Borough, and 25 occurred at the Workhouse, and belong also to districts outside Lambeth Borough. In this way, the corrected number of births for Lambeth Borough is 8599. The corrected infantile mortality (*i.e.*, rate of corrected deaths under one year per 1000 corrected births) is, therefore, 117·9. In calculating this infantile mortality, it must be remembered that, whilst we subtract the births that belong to outside districts, we do not add the births of infants of Lambethian mothers who may happen to be residing outside the Borough at the time of such births. Taking the uncorrected births and the corrected deaths under 1 year, the infantile mortality rate is 114·8.

Taking the uncorrected number of births (8835), and the uncorrected number of deaths under 1 year of age (1127), the uncorrected infantile mortality is 127·6, as compared with 146·6 during 1904, and an average of 150·5 for the old Parish of Lambeth during 10 years (1891-1900). The chief causes of these deaths were debility, atrophy and inanition, whooping cough, bronchitis and other diseases of the respiratory organs, diarrhoea, premature births, and convulsions (*vide* p. 92 and Table V. in the Appendix pp. 8-9). Table J gives the infantile mortality in different towns in England and Wales, and in the London Districts.

In the Registration Sub-Districts of Lambeth, the uncorrected infantile mortality varies from 212·4 per 1000 births in Lambeth Church 1st to 86·6 in Waterloo Road 2nd (the rates of 86·6 in Waterloo Road 2nd and 141·5 in Lambeth Church 2nd being due to the fact that these Sub-Districts contain the General Lying-In Hospital and the Workhouse respectively), thus :—

	Total No. of Births.	Total Deaths under 1 year (uncorrected).	Infantile Morality per 1,000 births (uncorrected).
Waterloo Road 1st ...	449	54	120·3
" " 2nd* ...	935	81	86·6*
Lambeth Church 1st ...	532	113	212·4
" " 2nd† ...	1463	207	141·5†
Kennington 1st ...	1705	185	108·5
" 2nd ...	938	194	206·8
Brixton ...	2015	212	105·2
Norwood ...	798	81	101·5
Lambeth ...	8835	1127	127·6

N.B.—Waterloo Road 1st and 2nd have been amalgamated by the Registrar-General, and now form one District called Waterloo.

*Excluding all the Lying-In Hospital births, the corrected rate is 145·4.

†Excluding all the Workhouse births, the corrected rate is 160·4.

The Infantile Mortality (like the deaths under 1 year of age) is regarded as a sensitive index of the Sanitary state of a District, and, judged by this index, Lambeth Borough takes a most satisfactory position amongst Sanitary Districts. Taking the Registrar-General's *old* 33 Large Towns of England and Wales, the uncorrected infantile mortalities vary from a *minimum* 95 in Croydon, to a *maximum* 174 in Norwich, Lambeth and London being 127 and 131 respectively. Lambeth ranks seventh *lowest* in such list, 27 Towns having higher infantile mortality rates. Taking the uncorrected births and the corrected deaths, the rate for Lambeth is 114, and of the 29 Metropolitan Sanitary Districts, 6 have lesser infantile mortality rates than Lambeth Borough; and of the 10 South Metropolitan Districts, 2 only have lesser infantile mortality rates, viz. :—Lewisham and Woolwich with 92 and 102 per 1,000 births respectively. The 2 highest rates amongst the South Metropolitan Districts are registered in Bermondsey and Southwark, viz., 148 in each.

TABLE J.

Shewing the uncorrected Infantile Mortalities in the Registrar-General's *old* 33 Large Towns of England and Wales (including London), and in Lambeth Borough, during 1905, with averages for ten years (1895-1904).

England and Wales— (33 Large Towns.)			Deaths under one year per 1000 Births.	Average Ten Years, 1895—1904.
Croydon	...	...	95	137
Brighton	...	...	101	150
Cardiff	...	...	118	154
Huddersfield	...	...	119	142
Bristol	...	...	122	140
Birkenhead	...	...	127	171
Halifax	...	...	131	142
London	...	...	131	155
Swansea	...	...	131	165
Portsmouth	...	...	133	158
Newcastle-on-Tyne	...	...	135	172
Plymouth	...	...	135	170
Wolverhampton	...	...	137	180
Gateshead	...	...	138	175
Sunderland	...	...	142	171
Bradford	...	...	144	165
Blackburn	...	...	146	193
Salford	...	...	148	200
Leicester	...	...	148	181
Oldham	...	...	150	174
Derby	...	...	151	154
Leeds	...	...	151	176
Hull	...	...	152	175
Liverpool	...	...	153	186
West Ham	...	...	153	169
Preston	...	...	154	218
Birmingham	...	...	154	188
Nottingham	...	...	155	184
Manchester	...	...	157	187
Bolton	...	...	167	171
Sheffield	...	...	167	185
Burnley	...	...	173	215
Norwich	...	...	174	178
London Districts—				
Central	...	...	118	
North	...	...	121	
South	...	...	123	
West	...	...	132	
East	...	...	149	
Lambeth	...	...	114·8	

N.B.—The rates for London Districts (including Lambeth) are corrected as regards the deaths under 1 year of age. The uncorrected rate for Lambeth is 127·6.

CLASS 1.—ZYMOTIC DISEASES.

PRINCIPAL ZYMOTIC DISEASES.

The principal Zymotic diseases are seven in number, viz. smallpox, measles, scarlet fever, diphtheria (including membranous croup), whooping cough, "fevers" (including typhus, typhoid or enteric, and simple or continued), and diarrhœa; and the zymotic death-rate is made up from the total deaths from these diseases. As a test of the sanitary condition of a Community, the zymotic death-rate is of approximate value, and the statistics for the Borough of Lambeth are very satisfactory for 1905, being 41·7 per cent. *below* the average (1891-1900).

In the Borough of Lambeth, during 1905, there were registered, 501 deaths from the seven zymotic diseases, and of these 105 were strangers belonging to other districts, and 369 parishioners who died within the Borough. 35 parishioners, however, died without the Borough. Subtracting the strangers, and adding on the parishioners who died without the Borough, there is a *corrected* total of 431, giving a zymotic corrected death-rate of 1·4 per 1000 inhabitants, the corrected rate for London being 1·7, varying in the different Metropolitan Districts, as shown on page 9. The zymotic death-rates (corrected) for the different Registration Sub-Districts of the Borough of Lambeth vary also, as shown in Table D and E (1), which in addition gives the death-rates and birth-rates for comparison. Lambeth Church 2nd shows the highest, and Brixton the lowest, zymotic death-rates respectively. The corrected zymotic death-rate for the Inner Districts is 1·9, and for the Outer, 1·2—a difference explainable, as before, from the crowding and absence of proper means of home isolation and nursing in the former, as compared with the latter, districts. Crowded districts naturally suffer more in this respect than those more sparsely populated.

Similar conclusions are obtainable by comparing the zymotic death-rates and zymotic incidences for the different new Wards of the Borough, as shewn in Table E (2), from which it is seen that, of the 9 new Wards into which the Borough is now divided, Bishop's, shows the highest, and Herne Hill the lowest, zymotic death rates; and Bishop's the highest, and Tulse Hill and Herne Hill the lowest, zymotic incidences respectively.*

During the year 1905, under the Notification Clauses of the Public Health (London) Act, 1891, 1853 cases of Infectious Diseases have been reported, and of this number 1278, *i.e.*, 68.9 per cent. were removed to the Hospitals of the Asylums Board, or to other Hospitals, and 575, *i.e.*, 31.1 per cent., remained under treatment at their homes. It is still satisfactory to note the large percentage of cases removed to Hospital, showing the growing favour with which the Isolation Hospitals are being looked upon, and pointing to the fact that it is coming to be more and more realised that infectious diseases cannot be properly isolated in the homes of the people. The percentage removed during 1905 is well above the average. Thus, since the introduction of the Public Health (London) Act, 1891, the percentages of notified infectious cases (excluding chicken-pox) removed from Lambeth are as follow:—

1891—36.6,	1895—30.4,	1899—61.2,	1903—64.2
1892—33.7,	1896—43.0,	1900—64.5,	1904—69.8
1893—23.0,	1897—49.0,	1901—66.1,	1905—68.9
1894—33.9,	1898—55.9,	1902—70.3,	

Examining the removals more in detail (*e.g.*, nature of disease), it is seen that during 1905 in the Borough of Lambeth, the following are the percentages:—

Scarlet Fever	...	80.1	Typhoid	...	70.1
Diphtheria	} 80.2	{	Continued	...	100.0
Membranous			Puerperal	...	25.0
Croup			Erysipelas	...	12.9

* The large incidence (zymotic) rate in Norwood Ward is due to the outbreak of Diphtheria at the Norwood Parochial Schools.

No case of genuine Smallpox was notified during 1905 within the Borough.

Taking the total number of notified cases of infectious diseases during 1905, it will be noticed that the zymotic incidence throughout the Borough of Lambeth is 34·7 per cent. *less* than the average 1891-1900 for the old Parish of Lambeth.

There is again a marked decrease in the number of Diphtheria certificates received during 1905, *i.e.*, 38·6 per cent. below the average of the statistics of the Parish of Lambeth for 10 years (1891-1900), and a decrease of 7·2 per cent. from the average received in the Borough during 1901-4.* The 439 Diphtheria cases occurred in 343 infected houses, and in only 10·8 per cent. of these were the drains, on testing, found defective.

The Scarlet Fever notifications were 23·01 per cent. *below* the average of the Parish of Lambeth statistics for the 10 years 1891-1900. The 1,025 cases occurred in 870 infected houses, and in 13·0 per cent. of these, the drains were, on testing, found defective.

The Enteric Fever (or Typhoid) notifications received were 59·4 per cent. *below* the average for 10 years (Parish of Lambeth), and represent 72 infected houses, of which 12·5 per cent. of the drains were found, on testing, to be defective.

No cases of plague, nor of *suspected* plague, nor of cholera have been notified during 1905, within the Borough.

In the case of each of the 1,594 infected houses, an inspection was made, and the drains and the sanitary fittings tested with chemical, with the following results as tabulated :—

- (a.) 187 (*i.e.*, 11·7 per cent.) were found to have defective drains.
- (b.) 862 (*i.e.*, 54·1 per cent.) were found to have defective traps, fittings, or appliances.

* Excluding the 64 notified cases in connection with the Norwood Parochial Schools (*vide* Special Report, Appendix p. 102).

(c). 545 (*i.e.*, 34·2 per cent.) gave no results with the tests.

It will be noted that only 11·7 per cent. of the total infected houses showed, with the test, defective drains, no results being obtained from the tests in the other cases; and 54·1 per cent. showed defective traps, fittings and appliances.

Drains and sanitary fittings are tested, as a routine, in all infected houses, though it does not follow that, when defects are found, such defects are the causes of the diseases under investigation. They *may* indirectly be so.

The test used is the chemical test (Kingzett's), and, when a result is obtained, the drain (tested) is defective, but, when no result is obtained, it would be unsafe to state that, therefore, the drain (tested) was sound. A negative result proves nothing with the chemical (or smoke) test. The hydraulic (water) and pneumatic (air) tests are the only reliable tests, but too severe for the routine testing of drains of old buildings. The pneumatic (air) test is comparatively new, and most delicate, but is not much used in London at the present day.

Bearing this explanation in mind, the statistics are still useful as showing that, year by year, the number of defects found decreases. Taking the statistics for the Parish of Lambeth during 10 years (1891-1900), and those for the Borough of Lambeth during 5 years (1901-5), it will be noticed that the percentage of houses showing defective drains has decreased from 22·3 in 1891 to 11·7 in 1905. Table L gives full particulars, with the averages for the 10 years worked out, for the old Parish of Lambeth, and comparing these with those for 1905 for the Borough of Lambeth, it will be seen that the latter show a *decrease* of 40 per cent. *below* the average for the old Parish in respect of defective drains.

Sub-divided according to the different notifiable diseases, the results show as follow :—

Disease.	No. of Infected Houses.	Numbers shewing Defects as to			Percentage shewing Total Defects.	Percentage giving no Defects.
		Drains.	Traps, Fittings and Appliances.	Total.		
Smallpox ...	—	—	—	—	—	—
Cholera ...	—	—	—	—	—	—
Diphtheria ...	343	37	201	238	69·4	30·6
Membranous Croup	10	2	3	5	50·0	50·0
Erysipelas ...	285	25	114	139	48·8	51·2
Scarlet Fever ...	870	113	512	625	73·4	26·6
{ Typhus ...	—	—	—	—	—	—
{ Typhoid ...	72	9	29	38	52·8	47·2
{ Continued or Relapsing ...	2	—	—	—	—	—
Puerperal ...	12	1	3	4	33·3	66·7
TOTALS ...	1594	187	862	1049	65·8	34·2

TABLE K.

Shewing the number of Certificates for the Notifiable Zymotic Diseases received in the Borough of Lambeth during 1905, and in the old Parish of Lambeth for the ten years 1891-1900.

Disease.	PARISH OF LAMBETH.										Annual Average of 10 years 1891-1900 (Parish.)	Borough of Lambeth. Notifications received during 1905.
	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900		
Smallpox ...	3	22	99	26	51	16	2	0	1	—	22.0	—
Cholera...	4	26	23	10	16	6	18	7	3	2	11.5	—
Diphtheria ...	330	504	789	521	614	652	704	813	1080	844	715.1	439
Membranous Croup ...	29	47	49	26	23	27	17	16	22	6	26.2	11
Erysipelas ...	258	420	587	315	355	352	325	294	330	234	347.0	287
Scarlet Fever ...	858	1832	2275	1198	1389	1550	1375	1009	1006	821	1331.3	1025
{ Typhus ...	1	3	3	2	0	1	0	0	1	—	1.1	—
{ Typhoid or Enteric ...	149	117	160	268	201	162	185	163	219	272	189.6	77
{ Continued or Relapsing ...	33	34	58	48	20	16	11	13	7	17	25.7	2
Puerperal ...	11	20	27	19	16	19	26	14	24	13	18.9	12
*Plague ...	—	—	—	—	—	—	—	—	—	—	—	—
Totals ...	1676	3025	4070	2433	2685	2801	2663	2329	2693	2209	2658.4	1853
Average per 1000 of population	6.1	10.9	14.5	8.6	9.4	9.5	8.9	7.7	8.7	7.1	9.04	5.9

The Health Department has also heard of, and dealt with, the following non-notifiable infectious diseases:—Chicken-pox, 733; Measles, 1970; Whooping Cough, 440; Consumption, 598; Cancer, 16; other diseases (*e.g.* Mumps, Ringworm, Influenza, Pneumonia, etc.), 156.

* Plague was made notifiable on September 19th, 1900.

TABLE L.

Giving number of infected houses, with percentages of (1) General Defects, and (2) Defective Drains, throughout the Borough during 1905, and throughout the old Parish during ten years (1891-1900).

	1891	1892	1893	1894	1895	1896
Number of infected Houses ...	1417	2430	3179	2012	2111	2417
Number of Houses with defects found	903 =63·7%	1474 =60·7%	1641 =51·6%	1089 =54·1%	993 =47·04%	1177 =48·7%
Number of Houses with defective drains found ...	316 =22·3%	720 =24·7%	658 =20·6%	464 =23·06%	392 =18·6%	423 =17·5%
Number of Houses with no defects found	514 =36·3%	956 =39·3%	1538 =48·4%	923 =45·9%	1118 =52·96%	1240 =51·3%

N.B.—Only 12·1 per cent. of the houses in 1904 showed, with the test, defective drains, no results being obtained in the other cases.

TABLE I—*continued.*

Giving number of infected houses, with percentages of (1) General Defects, and (2) Defective Drains, throughout the Borough during 1905, and throughout the old Parish during ten years (1891-1900).

	1897	1898	1899	1900	Average for ten years 1891-1900.	1905
Number of Infected Houses ...	2374	2094	2435	1992	2246·1	1594
Number of Houses with defects found	1210 =50·9%	1044 =49·9%	1163 =47·5%	886 =44·5%	1158·0 =51·6	1049 =65·8%
Number of Houses with de- fective drains found ...	390 =16·4%	351 =16·9%	384 =15·8%	285 =14·3%	438·3 =19·5	187 =11·7%
Number of Houses with no defects found	1164 =49·1%	1050 =50·1%	1272 =52·5%	1106 =55·5%	1088·1 =48·4	545 =34·2%

N.B.—Only 11·7 per cent. of the houses in 1905 showed, with the test, defective drains, no results being obtained in the other cases.

TABLE M.

Shewing corrected zymotic seasonal variations (deaths) in the Borough of Lambeth in the different Registration Sub-Districts during 1905.

Registration Sub-District.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year 1905.	Zymotic Death-rate per 1000 inhabitants.
Waterloo Road 1st	1	4	13	2	20	1·7
" " 2nd	1	4	9	8	22	
Lambeth Church 1st	3	6	14	5	28	1·6
" " 2nd	6	2	55	22	85	2·2
Kennington 1st... ..	10	5	44	22	81	1·5
" 2nd	8	13	17	17	55	1·3
Brixton	14	16	40	21	91	1·03
Norwood	2	1	14	23	40	1·04
District not stated	—	—	2	7	9	—
Borough of Lambeth... ..	45	51	208	127	431	1·4

N.B.—In the case of the 9 zymotic deaths occurring in Districts which are not stated, they have been distributed equally amongst the 8 sub-districts before working out percentages.
Inner Districts 1·9; Outer Districts 1·2 per 1,000 inhabitants.

TABLE N.

Shewing the total cases notified under the Compulsory Notification Clauses of the Public Health (London) Act, 1891, in the Borough of Lambeth during 1905 (arranged Quarterly).

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total for 1905.
Smallpox	—	—	—	—	—
Scarlet Fever	161	271	257	336	1025
Diphtheria	55	126	132	126	439
Membranous Croup	1	—	—	10	11
{ Typhus	—	—	—	—	—
{ Typhoid	11	10	28	28	77
{ Continued Fever	—	—	—	2	2
Erysipelas	52	75	72	88	287
Puerperal	2	1	4	5	12
Cholera	—	—	—	—	—
Plague	—	—	—	—	—
TOTALS	282	483	493	595	1853

TABLE O.

Deaths from zymotic diseases (Strangers deducted) 1905.

For the 4 weeks ending.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	1	4	3	4	6	5	5	13	26	29	96
Scarlet Fever	6	2	2	—	2	2	5	—	3	3	—	6	31
Diphtheria	—	3	1	1	3	2	3	4	3	6	7	4	37
Membranous Croup	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	3	10	5	12	14	5	7	3	4	4	5	7	79
{ Typhus	—	—	—	—	—	—	—	—	—	—	—	—	—
{ Enteric	—	1	—	—	—	2	—	2	4	—	1	—	10
{ Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa*	5	1	1	1	—	3	28	97	34	4	1	3	178
Total of Seven Chief Zymotic Diseases ...	14	17	10	18	22	18	49	111	53	30	40	49	431
Erysipelas	—	2	2	1	2	1	1	1	2	1	—	2	15
Puerperal Fever	—	1	—	1	1	—	—	1	—	—	—	2	6

* Including the two cases registered as Cholera Nostras.

The seasonal mortality (corrected) from the different important zymotic diseases during 1905 is well shown by arranging the deaths quarterly, thus :—

1905.	Smallpox	Measles.	Whooping Cough.	Scarlet Fever.	Diphtheria.	Membranous Croup.	FEVER.			Diarrhœa.	Erysipelas.	Puerperal Fever.	Cholera.*	Influenza.	TOTAL.
							Typhus.	Typhoid.	Continued.						
1st Qr.	—	1	18	10	5	—	—	1	—	10	4	1	—	28	78
2nd Qr.	—	7	29	4	5	—	—	2	—	4	4	2	—	8	65
3rd Qr.	—	13	16	8	11	—	—	6	—	152	4	1	2	1	214
4th Qr.	—	75	16	9	16	—	—	1	—	10	3	2	—	13	145
TOTALS.	—	96	79	31	37	—	—	10	—	176	15	6	2	50	502

* The two Cholera Cases were, in all probability, Epidemic Diarrhœa.

Taking the zymotic diseases collectively, it is noticed that the 3rd quarter shewed the highest mortality, and the 2nd quarter the lowest. Scarlet Fever and Influenza reached their maxima in the 1st quarter; Whooping Cough in the 2nd; Cholera, Diarrhœa and Typhoid in the 3rd; and Measles and Diphtheria in the 4th. Erysipelas reached its maximum in the 1st, 2nd and 3rd quarters, and Puerperal Fever in the 2nd and 4th quarters, respectively.

Table M shews the zymotic seasonal variations in the different Registration Sub-districts, while Table O gives the monthly mortalities from the zymotic diseases.

Table P gives the deaths registered in the Borough of Lambeth from the seven principal zymotic diseases during 1905, and for ten years (1891-1900) in the old Lambeth Parish. For comparison, the deaths registered in London for the same period are also given.

TABLE P.

Shewing the number of Deaths (corrected) from the 7 principal
in the ten years 1891—1900, and in the new

Disease.	1891	1892	1893	1894	1895
Smallpox	0	1	5	1	2
Diphtheria (and Membranous Croup)	78	127	172	138	103
Scarlet Fever	46	76	69	64	53
Fever {	Typhus	1	0	1	0
		28	22	36	46
		7	2	4	0
Measles	128	187	113	182	151
Whooping Cough	239	135	151	110	132
Diarrhœa	165	155	197	139	263
Borough of Lambeth ...	692	705	748	680	732
County of London ...	9675	11983	13223	11544	11467

TABLE P.

zymotic diseases in the old Parish of Lambeth and in London,
Borough of Lambeth and in London during 1905.

1896	1897	1898	1899	1900	Annual Average of ten years 1891—1900 (old Parish).	Proportion of Deaths to 1000 Total Deaths (corrected) in 10 years.	Total Deaths in 1905.	Proportion of Deaths to 1000 Total Deaths (corrected) 1905.
2	—	—	—	—	1.1	0.2	—	—
140	145	115	159	103	127.6	23.6	37	7.9
63	42	30	25	20	53.6	9.9	31	6.7
1	—	—	—	—	0.4	0.07	—	—
24	26	35	50	54	32.8	6.1	10	2.2
1	—	—	—	1	2.2	0.4	—	—
185	139	133	169	69	144.4	26.7	96	20.7
140	144	159	130	97	144.4	26.7	79	17.0
152	238	254	249	153	188.4	34.8	178	38.3
708	734	726	782	497	694.9	128.6	431	92.8
14009	11525	12482	11147	10136	11575.3	130.8	7894	112.1

SMALLPOX.

During 1905 no single case of genuine Smallpox was notified, nor was a single death from Smallpox registered, within the Borough. One doubtful case (male, 67 years) was removed to hospital from the Lambeth Infirmary, but the patient proved to be suffering from Erythema, and was, consequently, re-vaccinated and returned to the Infirmary. Four other doubtful cases were reported to the Medical Officer of Health, who visited the patients and found them suffering from Porriginous Eczema (1) and Chickenpox (3).

31 "contacts" were watched for 16 days within the Borough during 1905, in connection with Smallpox cases that had occurred on board vessels arriving from abroad, as follows :—

Name of Vessel.	No. of "Contacts."	Name of Vessel.	No. of "Contacts."
Assaye (March) ...	4	Fingal (May) ...	3
Soudan (March) ...	4	Commonwealth	
Macedonia (March) ...	2	(September) ...	1
Plassy (April) ...	4	Vesta (September) ...	2
Sicilia (April) ...	2	Viola (September) ...	1
Malvina (May) ...	2	Balgownie (October) ...	1
Kenilworth Castle		Ophelia (October) ...	1
(May) ...	3	Galeka (October) ...	1
		Total ...	31

In no single instance did Smallpox develop amongst these "contacts."

In London 74 cases of Smallpox were notified, and 10 deaths (uncorrected) were registered from the same disease, giving a case-mortality (uncorrected) of 13·5 per cent.

VACCINATION.

The Vaccination Returns of the Local Government Board for the Borough of Lambeth are to be found in Tables Q and R dealing with the whole year 1904, and the first half of 1905, respectively.*

The total number of conscientious objectors who have obtained certificates during 1905, irrespective of the dates of birth of the children to which they relate, is 120, whilst the total number of certificates of successful primary vaccinations at all ages received during 1904 and 1905 are 7643 and 7275 respectively.

EXPENSES OF VACCINATION.

The subjoined details have been issued during 1905, by the Lambeth Guardians :—

* The yearly returns are not made up by the Local Government Board until August of the following year, so that only the Returns for the first half of the year 1905 can be given in this Report.

A.—PARISH OF LAMBETH.—BOARD OF GUARDIANS.

COST OF VACCINATION, FEES AND EXPENSES FOR 10 YEARS.

Year ending Lady-day	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
Public Vaccinators...	206	199	203	158	1809	1703	2365	4679	1635	1705
Vaccination Officers	236	238	248	242	577	408	432	437	430	434
Registrar of Births and Deaths (Two-pence each Birth)	128	128	128	127	129	125	124	120	123	124
Rent of Vaccination Stations (under the old Act)	105	106	110	110	31	—	—	—	—	—
Other Expenses (Stationery, Prosecutions)	91	89	107	97	66	37	98	123	55	218
£	766	760	796	716	2612	2273	3019	5359	2243	2491
No. of persons successfully Vaccinated ...	2851	2671	2710	3288	4185	4562	27306	7674	5551	5920
Average cost per case ...	s. d. 5 4	s. d. 5 8	s. d. 5 10	s. d. 4 4	s. d. 12 5	s. d. 9 11	s. d. 2 2	s. d. 13 11	s. d. 8 1	s. d. 8 4

B (1).—PARISH OF LAMBETH.—BOARD OF GUARDIANS.

Summary of Persons successfully Vaccinated during the 12 years ended Lady-day, 1905.

Year ending Lady-day	Waterloo.	Lambeth Church.	Kennington.	Brixton.	Norwood.	Infirmary.	Schools.	Gross Totals.
1894	583	862	1019	570	190	—	33	3257
1895	499	746	864	589	157	—	—	2855
1896	549	800	791	553	127	—	31	2851
1897	409	711	738	529	140	82	62	2671
1898	484	753	750	514	123	86	—	2710
1899	479	656	1143	439	218	270	83	3288
1900	552	867	1686	668	305	104	3	4185
1901	610	853	1662	908	415	47	67	4562
1902	4704	4083	9430	5149	2428	1115	397	27306
1903	936	1627	2480	1572	533	447	79	7674
1904	615	1037	1784	1213	475	249	178	5551
1905	865	1139	1872	1235	481	100	228	5920
	11285	14134	24219	13939	5592	2500	1161	72830

B (2).—PARISH OF LAMBETH.—BOARD OF GUARDIANS.

Summary showing Ages of Persons successfully Vaccinated during 12 years ended Lady-day 1905.

District.	Primary.		Re-vaccination.			Total.
	Under 1.	Over 1.	Under 10.	Over 10 under 12.	Over 12.	
Waterloo	6577	583	2	505	3618	11285
Lambeth Church	9469	1094	9	697	2865	14134
Kennington	14321	1732	6	1135	7025	24219
Brixton	8212	1477	3	419	3828	13939
Norwood	2684	539	10	154	2205	5592
Infirmery	825	270	5	2	1398	2500
Norwood Schools	—	497	2	281	381	1161
	42088	6192	37	3193	21320	72830

From the above it appears that the *average* cost per case vaccinated in Lambeth for 3 years before, and since the coming into force of the 1898 Act, is as 5/7 to 9/3.

This increased cost is not, apparently, due to the domiciliary visits, in that the public vaccinators in a crowded district like Lambeth can perform as many vaccinations in one day under the new conditions as they could under the old conditions of stational vaccination.

Under the old Vaccination Acts the Public Vaccinators received fees of 1s. 6d. for each successful case of Vaccination. There were two Vaccination Officers; the salary of one was £120 per annum, and the other received 10d. for each successful case of Vaccination, which produced about £120 per annum.

The new Vaccination Act, 1898, came into operation on 1st January, 1899. Under this Act both Public Vaccinators and Vaccination Officers are paid for each birth registered in their District in addition to payment for successful Vaccinations. The amounts per case in Lambeth Parish are :—

		For each Birth.	For each successful Vaccination.
3 Public Vaccinators ...	...	1s.	5s.†
1 " " ...	...	1s. 8d.*	5s.†
2 Vaccination Officers	...	3d.	9d.
2 " " ...	...	3d.	1s.

It will be noticed that there are now four Vaccination Officers in Lambeth.

* On account of the large area and difficult District at Norwood.

† A few cases vaccinated at the Surgery at cost of 2/6 per case.

TABLE Q.

VACCINATION RETURNS (LAMBETH BOROUGH), 1904.

Registration Sub-Districts.							No. of Births.	Successfully Vaccinated.	Insusceptible to Vaccination.	Dead Unvaccinated.	Conscientious Objectors.	Removed to other Parishes
Waterloo	...	...	...	...	...	...	1331	940	1	148	2	237
Lambeth Church 1st	...	...	...	...	...	...	575	416	1	57	3	95
Lambeth Church 2nd	...	...	...	...	...	...	1529	1033	3	155	4	327
Kennington 1st	...	...	...	...	...	...	1840	1317	—	206	18	295†
Kennington 2nd	...	...	...	...	...	...	1018	792	1	75	12	134
Brixton	2026	1501	5	198	42	253
Norwood	798	648	4	44	19	36
Lambeth	9117	6647	15	883	100	1377

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* Hospital Cases (497) included. † Workhouse (172) cases included. ‡ Maternity cases (119) included.

TABLE R.

VACCINATION RETURNS (LAMBETH BOROUGH) FOR THE FIRST HALF-YEAR, 1905.

Registration Sub-Districts.							No. of Births.	Successfully Vaccinated.	Insusceptible to Vaccination.	Dead Unvaccinated.	Conscientious Objectors.	Removed to other Parishes.
Waterloo	...	...	...	...	...	...	692	493	1	47	8	133
Lambeth Church 1st	...	...	...	...	...	...	281	200	1	24	0	43
Lambeth Church 2nd...	...	...	...	...	...	...	734	516	2	60	5	138
Kennington 1st	...	...	...	...	...	...	871	639	1	66	11	147*
Kennington 2nd	...	...	...	...	...	...	457	363	3	25	4	58
Brixton	1034	753	3	87	21	136
Norwood	415	340	2	30	14	14
Lambeth	4484	3304	13	339	63	669

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The Yearly Returns are not made up for the Local Government Board until the August in the following year.

*Hospital cases (264) included. †Workhouse cases (77) included. ‡Maternity cases (60) included,

VACCINATION AS A PREVENTIVE OF SMALL-POX.

During 1905, a letter (dated October 4th), was received from the Hackney Borough Council, transmitting the following resolutions passed by the Council :—

- 1.—That in the opinion of this Council the time has now arrived for the Government to institute a thorough enquiry into the general question of vaccination as a preventive of small-pox, having regard to the advance of medical science, and the public rejection of vaccination by so many medical men, since the last Report of the Royal Commission on the subject.
- 2.—That a copy of this resolution be sent to the Prime Minister, the President of the Local Government Board, the President of the Board of Education, the Parliamentary Secretary to the Board of Education, the Right Hon. Sir H. Campbell-Bannerman, M.P., the London County Council, the Corporation of the City of London, the Metropolitan Asylums Board, and the Metropolitan Borough Councils and Boards of Guardians.

In the letter it was suggested that the enquiry should embrace :—

- 1.—The supply of pure lymph and the danger to the public of vaccinated calves being sold for food.
- 2.—The administration of the various vaccination Acts with special regard to the cost to the ratepayers.
- 3.—The hardships inflicted upon poor conscientious objectors by the action of some justices of the peace and stipendiary magistrates.
- 4.—The closing of Government Departments and other works to conscientious objectors, or the children of conscientious objectors.
- 5.—The refusal of the Metropolitan Asylums Board during the winter, 1904-5 to employ unemployed workmen unless they submitted to vaccination or re-vaccination.

The Lambeth Council took no action in regard to the letter, but approved of the following resolutions submitted by the Salford Corporation in a letter dated October 15th, 1905, and ordered copies of the same to be forwarded to the Prime Minister, the President of the Local Government Board, and to the Health Authorities of all the large towns :—

- (a) It is desirable that the practice of vaccination should be controlled by the Public Health Authority, as the consequences of any failure have to be borne by them.
- (b) The cost of vaccination under the present Act has been made unnecessarily heavy, and in any further legislation it should be respectfully urged that the scale of remuneration should be modified, and in the case of large towns that a Medical Vaccination Officer should be appointed at a fixed salary, who should devote the whole of his time to the duties of vaccination.

A special report dealing with the subject-matter of the Hackney Borough Council's and Salford Corporation's letters will be found on page 87 of the Appendix to this report.

VACCINATED VEAL.

During 1905, official objection has been raised by the Borough Councils and others to the use, as food for human consumption, of vaccinated veal, *i.e.* the carcasses of calves vaccinated for lymph at the Local Government Board Vaccine Station ; and suggesting that all such carcasses should be destroyed—the charge upon the Exchequer for the destruction being estimated at £4000 per annum. There is no scientific evidence to show that the carcasses of animals used for the production of lymph are thereby rendered unfit for food—the carcasses being, moreover, thoroughly examined by a veterinary surgeon before being allowed to be sold for food.

The Lambeth Council, however, on September 14th, 1905, condemned the Local Government Board “for permitting the sale of the carcasses of animals for human food, which are known to have had a disease communicated to them for the purpose of procuring vaccine lymph.”

CHICKEN-POX.

Chicken-pox was not compulsorily notifiable during 1905, but through the Head Teachers of the various schools 712 cases were brought to the notice of the Council, and the necessary disinfection was carried out in connection therewith. One school (Barston College) was disinfected on account of an outbreak of chicken-pox amongst the pupils. No single death was registered as having occurred within the Borough of Lambeth from chicken-pox during 1905.

SCARLET FEVER.

During 1905, in the Borough of Lambeth, 1,025 cases of Scarlet Fever were notified, and 31 deaths registered, giving a case-mortality of 3·02 per cent.—2·4 for the Inner, and 3·8 for the Outer Districts. In 1904, there were 660 cases notified and 16 deaths registered, *i.e.*, a case-mortality of 2·4 per cent.—4·9 for the Inner, and 1·5 for the Outer Districts. The annual averages for 10 years (1891-1900) in the old Parish of Lambeth are (1) notified cases 1,331·3, and (2) deaths 53·6. The increase in the numbers of cases notified and deaths registered during 1905 is due to an outbreak of the disease that occurred at the end of the year in connection with the Norwood L.C.C. and Parochial Schools.

Of the 1,025 persons notified in the Borough of Lambeth during 1905, 821* (*i.e.*, 80·1 per cent.) were removed to Hospital, and of these, 25 died (*i.e.*, 3·05 per cent.), whereas 204 (*i.e.*, 19·9 per cent.) were treated at home, and of these, 6 died (*i.e.*, 2·9 per cent.). This difference in case-mortality as between Hospital and home-treated patients is to be explained by the greater severity (as a rule) of the cases sent to Hospital.

* Of the 1,025 cases of Scarlet Fever removed to Hospital, 55 proved at Hospital not to be suffering from that disease.

The attack-rate and death-rate of Scarlet Fever per 1,000 of the population have been steadily decreasing during the last few years in Lambeth Parish, and are below the average during 1905 in the Borough—a satisfactory condition of things, which seems to point to the value of isolation (following notification) as the chief preventive measure in this disease.

The age and sex incidence and mortality for the 1,025 Scarlet Fever cases notified in Lambeth Borough during 1905 are as follow:—

Age.	Number of Cases Notified.			Deaths.			Death Rate per 100.
	M.	F.	Total.	M.	F.	Total.	
Under 1 year ...	6	4	10	—	—	—	—
1 to 2 ...	12	18	30	2	2	4	13·3
2 to 3 ...	25	38	63	2	4	6	9·5
3 to 4 ...	46	30	76	2	3	5	6·6
4 to 5 ...	56	48	104	—	1	1	0·9
5 to 6 ...	64	65	129	—	2	2	1·6
6 to 7 ...	29	63	92	2	1	3	3·3
7 to 8 ...	46	46	92	—	—	—	—
8 to 9 ...	28	26	54	2	1	3	5·6
9 to 10 ...	33	28	61	1	2	3	4·9
Over 10 years ...	141	173	314	2	2	4	1·3
Total ...	486	539	1025	13	18	31	3·02

It will be noted that, of the total 1,025 persons reported as suffering from Scarlet Fever during 1905 within the Borough of Lambeth, 283 (*i.e.*, 27·6 per cent.) were under five years of age, and 711 (*i.e.*, 69·4 per cent.) under 10 years of age: whilst the mortality was greatest amongst those between 1 and 2 years of age. Of the 314 persons over 10 years of age, 4 (*i.e.*, 1·3 per cent.) died.

The distribution of the cases of, and the mortality from, Scarlet Fever amongst the different Registration Sub-Districts of the Borough of Lambeth during 1905 is seen from the following:—

Registration Sub-Districts.	Total No. of cases Notified.	Cases treated at Home.	Cases removed to Hospital.	No. of Deaths.			Case Mortality per 100.	Rate of Persons Notified per 1000 Inhabitants.
				At Home.	In Hospital.	Total.		
Waterloo Road 1st ...	47	—	47	—	—	—	—	} 3·6
Waterloo Road 2nd	50	—	50	—	3	3	6·0	
Lambeth Church 1st	101	2	99	—	—	—	—	5·5
Lambeth Church 2nd	89	14	75	—	4	4	4·5	2·2
Kennington 1st ...	159	9	150	1	3	4	2·5	2·9
Kennington 2nd ...	195	67	128	3	3	6	3·1	4·4
Brixton ...	260	77	183	2	9	11	4·2	2·9
Norwood ...	124	35	89	—	3	3	2·4	3·1
Borough of Lambeth	1025	204	821	6	25	31	3·02	3·3

Rate of Persons notified per 1,000 inhabitants—3·4 Inner Districts, and 3·2 Outer Districts.

Of the 821 cases removed to Hospital, 33·01 per cent. were from the Inner, and 66·99 per cent. from the Outer, Districts.

In London, during 1905, there were registered 549 deaths out of a total of 19,467 cases of Scarlet Fever notified, giving a case-mortality of 2·8 per cent. (uncorrected).

As far as could be traced, no Scarlatinal Milk outbreak occurred in the Borough of Lambeth during 1905, but three schools (Lyham Road and Salter's Hill L.C.C. Schools and the Norwood Parochial Schools) had to be dealt with specially on account of outbreaks of Scarlet Fever amongst the inmates. The disease first broke out in Norwood at the L.C.C. Schools, and was

introduced from these into the Norwood Parochial Schools during the last quarter of 1905, to be re-introduced from the latter into the former afterwards. The 3 schools were disinfected.

MEASLES AND WHOOPING COUGH.

These two non-notifiable infectious diseases cause more deaths than all the notifiable infectious diseases together. In the Borough of Lambeth, during 1905, 96 and 79 deaths were registered from Measles and Whooping Cough, giving death-rates per 10,000 of the population of 3·07 and 2·5 respectively. In London, during 1905, there were registered 1,715 and 1,507 total deaths from Measles and Whooping Cough, giving corresponding death-rates of 3·7 and 3·2 per 10,000 of the population respectively.

Taking the Lambeth Registration Sub-Districts it will be seen that Waterloo suffered most, and Brixton least, from Measles ; whilst Lambeth Church First suffered most, and Norwood least, from Whooping Cough (*vide* pages 63, 98-99).

The Inner Districts suffered (deaths per 10,000 of the population) more than the Outer Districts, thus :—

	Inner.	Outer.
Whooping Cough	3·0	2·3
Measles	3·9	2·7

Comparing the Borough statistics for 1905 with those for the old Parish for 10 years (1891-1900), it will be seen that there has been a saving during 1905 of 48 deaths from Measles over the average for that decennium, and a saving of 65 deaths from Whooping Cough over the average during the same period.

MEASLES.

With regard to Measles, extra precautions are taken in connection with disinfection of Measles-infected houses, exclusion of children (both infected children and also children from infected

houses) from schools, the closing of classes or whole schools on account of outbreaks of Measles, the distributing of leaflets and posters, and the educating of parents to regard Measles as a serious or dangerous infectious disease, and not as a trivial complaint of childhood.

Measles is not compulsorily notifiable, but, through L.C.C. Schools, 2,771 cases (during 1905) were reported to the Borough Council. Measles being chiefly a "School" Disease, this voluntary system of notification is most desirable, and will, it is hoped, be, in the future, extended (*vide* Appendix, pp. 100-101).

Of the 96 deaths from Measles in Lambeth Borough during 1905, 90 (*i.e.*, 93·8 per cent.) occurred amongst children under 5 years of age, shewing that Measles is a disease of young children, and especially fatal to such. 19 of the deaths (*i.e.*, 19·8 per cent.) occurred amongst infants under 1 year of age.

During 1905 in the Borough of Lambeth disinfection has been carried out in connection with 1,970 Measles-infected houses as compared with 1,294, 1,346, 364, 728, and 941 during 1904, 1903, 1902, 1901 and 1900 respectively.

Measles is spread chiefly through Schools, especially Infants' Departments, and during 1905 special precautions have been taken in respect thereto, as follows:—

St. Luke's Schools, Elder Road (Infants' Department).—The Infants' Department was closed for 21 days on March 7th, 1905, on account of an outbreak of Measles amongst the scholars (rising epidemic)—21 per cent. of the infants being absent, suffering from the disease. Usual disinfection was carried out. Result of closure was a decline in the number of cases.

Gipsy Road School, (Infants' Department).—The Infants' Department was closed for 14 days on October 11th, 1905, on account of an outbreak of Measles (rising epidemic), 24 per

cont. of the scholars being absent suffering from the disease. The usual disinfection was carried out. Result of closure was a decline in the number of cases.

Archbishop Sumner's School, Reedworth Street (Infants' Department).—The Infants' Department was closed for 14 days on November 20th, 1905, on account of an outbreak of Measles amongst the scholars (rising epidemic), 10 per cent. of the infants being absent suffering from the disease. The usual disinfection was carried out. Result of closure was a decline in the number of cases.

St. Jude's School, Railton Road (Infants' Department).—The Infants' Department was closed for 19 days on November 15th, 1905, on account of an outbreak of Measles amongst the scholars (rising epidemic), 32 per cent. of the infants being absent, suffering from the disease. Usual disinfection was carried out. Result of closure was a decline in the number of cases.

Lyham Road School (Infants' Department).—The Infants' Department was closed for 14 days on November 13th, 1905, on account of an outbreak of Measles (rising epidemic), 36 per cent. of the scholars being absent suffering from the disease. Usual disinfection was carried out. Result of closure was a decline in the number of cases.

Stockwell Practising School, Stockwell Road (Infants' Department).—Classes II. and I. were closed for 2 and 4 weeks on November 27th and December 5th, 1905, respectively on account of an outbreak of Measles amongst the scholars (rising epidemic). In Class I. 22 per cent., and in Class II. 69 per cent. of the infants were absent suffering from the disease. The two classrooms communicated. Usual disinfection was carried out. Result of closure was a decline in the number of cases, both in Class I. and II.

Special investigations were also undertaken in connection with the following Schools on account of Measles outbreaks, but none

of them were closed, it being found that the numbers of scholars affected were too small or that the epidemics were declining ;—

1. Walnut Tree Walk School (Infants' Department) ;
2. Wesleyan School, Lambeth Road (Infants' Department and Mixed School) ;
3. Effra Parade School (Infants' Department) ;
4. Salter's Hill School (Infants', Boys', and Girls' departments) ;
5. Stockwell Road School (Infants' Department) ;
6. Stockwell Practising School, Stockwell Road (Junior Girls' Department) ;
7. Jessop Road School (Infants' Department).

WHOOPING COUGH.

Whooping Cough is also a serious disease, especially to young children. Of the 79 deaths registered in Lambeth Borough during 1905 from this disease, 77 (*i.e.*, 97·5 per cent.) occurred in children under 5 years of age, and 40 of the deaths (*i.e.*, 50·6 per cent.) occurred amongst infants under 1 year of age. It is, therefore, a disease of childhood, and its prevention ought to be systematically attempted, chiefly in the way of disinfection of Whooping Cough infected houses, exclusion from school of children (both infected and from infected houses), and the educating of parents up to the dangerous nature of the disease and the importance of careful nursing of the patients when suffering from this complaint. Unfortunately, Whooping Cough, like Measles, is, at present, regarded as a harmless complaint of childhood, and the ignorance displayed, and the apathy shown, in regard to these diseases are well known to all who visit amongst the poorer classes.

During 1905, in the Borough of Lambeth, disinfection has been carried out in connection with 440 Whooping Cough-infected

houses, as compared with 380, 325, 110, 72 and 126 during 1904, 1903, 1902, 1901, and 1900 respectively; and leaflets (dealing with the dangers and treatment of this disease) left at all known Whooping Cough infected houses.*

No School nor Class was closed during 1905 on account of Whooping Cough. Details of the incidences of Measles and Whooping Cough in the different Registration Sub-Districts of Lambeth Borough during 1905 are as follow:—

Registration Sub-Districts.	Number of Deaths from Whooping Cough.	Number of Deaths from Measles.	Whooping Cough Deaths per 10,000 Inhabitants.	Measles. Deaths per 10,000 Inhabitants.
Waterloo Road 1st ...	3	9	} 2·4	} 6·7
Waterloo Road 2nd ...	3	7		
Lambeth Church 1st ...	7	4	3·9	2·6
Lambeth Church 2nd ...	12	10	3·03	2·7
Kennington 1st ...	11	12	2·04	2·4
Kennington 2nd ...	15	13	3·4	3·1
Brixton	21	17	2·4	1·9
Norwood ...	6	17	1·6	4·5
District not stated† ...	1	7	—	—
Borough of Lambeth ...	79	96	2·5	3·07

In connection with outbreaks of infectious diseases, such as Measles and Whooping Cough, amongst infants, the Council approved on November 10th, 1905, of all children under 5 years of age being excluded from the Public Elementary Schools (*vide* Report in Appendix, p. 83).

* Whooping Cough is not a compulsorily-notifiable disease, but 412 cases were voluntarily notified during 1905 by L.C.C. School Teachers (*vide* Appendix, p. 100).

† Where the District is not stated, the deaths (or death) are divided equally amongst the other Districts before calculating percentages.

CHOLERA AND PLAGUE.

In Lambeth Borough, during 1905, no case of Plague, suspected or otherwise, was notified; but 3 "contacts" or "suspects" were watched in connection with Plague abroad.

2 deaths from Cholera were registered during 1905 as having occurred within the Borough of Lambeth, but these were, probably, deaths from Epidemic Diarrhœa (both in infants under 1 year of age); and have, consequently, been included amongst the Diarrhœa deaths (*vide* pp. 76-79). No case of Cholera was notified within the Borough during 1905, but "contacts" or "suspects" were watched in connection with Asiatic Cholera abroad.

No case of Plague, and no case of Cholera, were notified in London during 1905.

Arrangements were made during 1905 by the Metropolitan Asylums Board for the reception and treatment of patients suffering from Cholera or suspected Cholera, and by the London County Council for the bacteriological examination of materials suspected of being Cholera-infected, and for the reception of Cholera "contacts."

DIPHTHERIA.

During 1905, 37 deaths were registered in the Borough of Lambeth from Diphtheria, and a total of 439 cases notified, giving a case-mortality of 8·4 per cent. Of the 439 cases notified, 359* (*i.e.*, 81·8 per cent.) were removed to Hospital, and 24 died, giving a case-mortality of 6·7 per cent. amongst the patients treated in Hospital; whilst 80 (*i.e.*, 18·2 per cent.) were treated

* Of the 359 cases of Diphtheria removed to Hospital, 31 proved at Hospital not to be suffering from that disease.

at home, and 13 died, giving a case-mortality of 16·3 per cent. amongst the patients treated at home.

The case-mortality rate for the whole of the Borough of Lambeth during 1905 is low, pointing to (1) the mildness of the majority of cases notified, and (2) the great value of antitoxin in the treatment of Diphtheria, especially in the very early stages of the disease.*

The sudden decrease in the number of Diphtheria cases throughout the new Borough of Lambeth during 1905 is again remarkable, as it was during 1904, 1903, 1902 and 1901, and will be seen, on comparison with the yearly mortality average of the 10 years (1891-1900) for the old Parish of Lambeth. This yearly average is 128, so that during 1905 there has been a decrease in the mortality-rate, in comparison, of 7·8 per cent. So, too, if the number of notifications received during 1905 in the Borough of Lambeth be compared with the yearly average of the 10 years (1891-1900) for the old Parish of Lambeth, *i.e.*, since the Notification Clauses of the Public Health (London) Act, 1891, came into force, a similar (larger) decrease will be noticed, *viz.*, a decrease of 38·6 per cent. The yearly average of notifications for the old Parish is 715, and the number received for the Borough for 1905 is 439. Fortunately the comparison can be extended further, and made for many years past, as the statistics for Diphtheria have been worked out in connection with the old Parish, and are shown on the following page (66), as far as mortality is concerned.

Even allowing for the slight fallacy that may arise from comparing statistics of the old Parish with those of the new Borough of Lambeth, the extraordinary sudden decrease in the mortality from Diphtheria is most remarkable, and, when taken in conjunction with the equally extraordinary and equally sudden

* 74 Bottles of antitoxin have been gratuitously distributed in Lambeth Borough during 1905 as compared with 69 during 1904.

decrease in the number of notifications of the same disease received, points to a sudden decline in the prevalence of Diphtheria throughout the Borough of Lambeth during 1905, as well as during 1904, 1903, 1902 and 1901; and that, too, although Diphtheria has been rising slowly but surely in epidemic proportions for the previous 20 years ending 1900 (*vide* Report in Appendix, p. 47). The statistics for London, as a whole, are no less remarkable.

Quinquennial Period.		Population (estimated).	Number of Deaths.	Death-Rate per million living.
Old Parish of Lambeth.	1863—1867	902119	148	164
	1868—1872	1021165	96	94
	1873—1877	1132106	184	163
	1878—1882	1245913	255	205
	1883—1887	1313211	365	278
	1888—1892	1367734	537	393
	1893—1897	1443857	683	483
	1898—1900	924333	362	392
Boro'	1901	302533	47	155
	1902	305102	49	160
	1903	307711	28	91
	1904	310359	33	106
	1905	313045	37	118

The age and sex incidence and mortality from Diphtheria cases notified in the Borough of Lambeth during 1905 are as follow :—

DIPHTHERIA.

Ages.	No. of Cases Notified.			Deaths.			Death Rate per 100.
	M.	F.	Total.	M.	F.	Total.	
Under 1 year ...	4	8	12	2	4	6	50·0
1 to 5 ...	75	72	147	10	10	20	13·6
5 to 10 ...	59	79	138	6	4	10	7·2
10 to 20 ...	35	47	82	1	—	1	1·2
20 to 40 .	22	23	48	—	—	—	—
40 to 60 ...	2	9	11	—	—	—	—
60 and over ...	—	1	1	—	—	—	—
Total ...	197	242	439	19	18	37	8·4

During 1905, one school had to be closed on account of Diphtheria, viz., the Infants' Department of St. Mark's School, Kennington Oval. The outbreak began about September 12th, 1905, the first case being notified on that date, and subsequent cases as follows :—Sept. 19th, 2; Sept. 23rd, 1; Sept. 25th, 1; Sept. 26th, 2; Sept. 28th, 2; Sept. 29th, 1; Sept. 30th, 3; Oct. 2nd, 1; Oct 8th, 1; Oct. 9th, 1; making a total of 16 school cases in all (with 2 deaths). The total number of scholars on the roll was 168, and the average attendance 127, so that from 10 to 13 per cent. of the scholars were affected.

The Infants' Department was closed for 14 days, and the usual precautionary measures were taken, viz. isolation, disinfection, medical inspection (with bacteriological examination) of contacts, &c.

It is a significant fact that within 100 yards of the School certain works had been carried out during September by the London County Council in connection with the main sewer in

Harleyford Road (the fixing of a ventilating shaft), and that, during the progress of these works, sewer gas was escaping from the open sewer into the street, off and on for a period of two to three weeks. Enquiry showed that all the notified children (with one exception) had to pass the sewer opening, going to and from school.

An outbreak of mild Diphtheria and Pseudo-Diphtheria took place during 1905 (May to September) at the Lambeth Parochial Schools, situated in Elder Road, West Norwood—a total of 64 cases of genuine Klebs-Loeffler Diphtheria. This outbreak is dealt with in the form of a special report (*vide* Appendix, p. 102). The majority of the cases were mild and of the nasal type, giving rise to difficulties in diagnosis, but the stringent precautionary measures taken prevented the extension of the disease.

The distribution of the disease in the different Registration Sub-Districts of the Borough of Lambeth, together with the numbers of deaths amongst both hospital-, and home-treated patients, etc., during 1905, are as follows:—

Registration Sub-Districts.	Total No. of Cases Notified.	Cases treated at Home.	Cases removed to Hospital.	No. of Deaths.			Case Mortality per 100.	Rate of Persons Notified per 1000 Inhabitants.
				At Home.	In Hospital.	Total.		
Waterloo Rd. 1st	15	1	14	—	1	1	6·7	} 1·2
Waterloo Rd. 2nd	16	—	16	1	1	2	12·5	
Lambeth Ch. 1st	42	1	41	—	2	2	4·8	2·3
Lambeth Ch. 2nd	85	28	57	1	11	12	14·1	2·1
Kennington 1st	83	4	79	3	4	7	8·4	1·5
Kennington 2nd	54	23	31	3	2	5	9·3	1·2
Brixton ...	61	8	53	3	3	6	9·8	0·7
Norwood ...	83	15	68	2	—	2	2·4	2·2
Borough of Lambeth	439	80	359	13	24	37	8·4	1·4

Rate of persons notified per 1,000 inhabitants—1·9 Inner Districts, and 1·2 Outer Districts.

1644 swabs from suspected diphtheria throats were examined at the Laboratory during 1905, and, of these, 111, *i.e.*, 6·8 per cent., shewed the presence of the true Klebs-Löffler (diphtheria) bacilli.

No genuine "return" cases have been found during 1905 connected with the intimations of discharged Lambeth patients received from the Metropolitan Asylums Board.

The value of antitoxin* as a remedy for Diphtheria is now acknowledged, more especially when used in the early stages of the diseases, *e.g.*, first or second days. During 1905, 74 vials have been distributed gratuitously in Lambeth Borough by the Council.

MEMBRANOUS CROUP.

During 1905, in the Borough of Lambeth, 11 cases were notified from Membranous Croup, but no death was registered, as compared with a yearly average of 26 cases notified and 8 deaths registered throughout the old Parish of Lambeth during 10 years (1891-1900). 2 cases were removed to Hospital.

In London, during 1905, there were registered 553 deaths, out of a total of 6,365 cases of Diphtheria and 124 of Membranous Croup notified, giving a case-mortality of 8·5 per cent.† (uncorrected).

* Antitoxin first gratuitously distributed in Lambeth by the late Vestry on August 3rd, 1899.

† In London Statistics, Diphtheria and Membranous Croup are now grouped together by the Registrar-General.

TYPHOID FEVER.

During 1905, 10 deaths were registered in the Borough of Lambeth from Typhoid (Enteric) Fever, and a total of 77 cases notified, giving a case-mortality of 13 per cent. Of the 77 cases notified, 54* (*i.e.*, 70·1 per cent.) were removed to Hospital, and 6 died, giving a case-mortality of 11·1 per cent. amongst the patients treated in Hospital; whilst 23 (*i.e.*, 29·9 per cent.) were treated at home, and 4 died, giving a case-mortality of 17·4 per cent. amongst the patients treated at home.

The case-mortality rate for the whole of the Borough of Lambeth during 1905 is low, pointing to the mildness of the majority of cases, and the probability that several of the cases diagnosed were not genuine cases of Typhoid Fever, due to the Eberth-Gaffky bacillus, but cases of paratyphoid.

If a comparison be made between the number of cases of Typhoid notified, and the number of deaths from Typhoid registered, in the Borough of Lambeth during 1905, and the yearly averages for 10 years (1891-1900) in the old Parish of Lambeth, it will be noted that there is a marked decrease. The yearly average of cases notified in the Parish is 189·6, and the yearly average of deaths registered is 32·8, as compared with 77 and 10 respectively as the numbers of notified cases and deaths in the Borough of Lambeth during 1905.

The age and sex incidence and mortality for Typhoid cases notified in Lambeth Borough during 1905 are as follow :—

* Of the 54 cases of Typhoid Fever removed to Hospital, 18 proved at Hospital not to be suffering from that disease.

Ages.		Number of Cases Notified.			Deaths.			Death-rate per 100.
		M.	F.	Total.	M.	F.	Total.	
Under 1 year	...	—	—	—	—	—	—	—
1 to 5	...	—	1	1	—	—	—	—
5 to 10	..	7	9	16	1	—	1	6·3
10 to 20	...	14	4	18	—	—	—	—
20 to 40	...	17	13	30	6	—	6	20·0
40 to 60	...	5	6	11	2	1	3	27·3
60 and over	...	1	—	1	—	—	—	—
Total	...	44	33	77	9	1	10	12·9

It will be noted that there were no cases notified and no deaths registered in infants under 1 year of age ; no deaths registered amongst children between 1 and 5 years of age ; whilst the greatest numbers of both cases and deaths occurred amongst adults between 20 and 60 years of age, and the mortality-rate was greatest also amongst persons at the same age periods.

Sub-dividing the Typhoid cases and deaths amongst the various Registration Sub-Districts, it will again be seen that the case-mortality is lower in the Inner than in the Outer Districts, viz., 7·9 per cent., as compared with 17·9 per cent. The reason for this is not clear, as the contrary generally is the case, the case-mortality from infectious diseases being greater in the Inner, more congested, and less sanitary Districts. The incidence of the disease in the Inner and Outer Districts respectively during 1905 is as 2·7 to 1.

Details as to the incidence of the disease during 1905 upon the different Registration Sub-districts of the Borough of Lambeth are as follow :—

Registration Sub-Districts.	Total No. of Cases notified.	Cases treated at Home.	Cases removed to Hospital.	No. of Deaths.			Case Mortality per 100.	Rate of persons Notified per 10,000 Inhabitants.
				At Home.	In Hospital.	Total.		
Waterloo Road 1st	12	1	11	—	—	—	—	} 6·8
Waterloo Road 2nd	6	3	3	—	1	1	16·7	
Lambeth Church 1st	7	1	6	—	1	1	14·3	3·8
Lambeth Church 2nd	13	5	8	—	1	1	7·7	3·3
Kennington 1st ...	12	4	8	—	1	1	8·3	2·2
Kennington 2nd ...	10	5	5	3	—	3	30·0	2·2
Brixton ...	15	2	13	1	2	3	20·0	1·7
Norwood ...	2	2	—	—	—	—	—	0·5
Borough of Lambeth	77	23	54	4	6	10	13·0	2·4

Rate of Persons notified per 1,000 inhabitants:—4·5 Inner Districts, and 1·7 Outer Districts.

Of the 72 Typhoid-infected houses 38 (*i.e.*, 52·8 per cent.) showed, on inspection, defective drains, traps, fittings or appliances. In 9 (*i.e.*, 12·5 per cent.) the drains themselves were found to be defective. 15 cases were traced to sources outside the Borough, and 9 were secondary cases, *i.e.*, derived from previous cases in the Borough. No case could be traced definitely and conclusively to infected water, milk, oysters or other shell-fish, ice-creams, watercress, or other well-known channels through which Typhoid has been, again and again, stated to spread. There was a history in 28 cases (35·1 per cent.) of shell-fish having been eaten by the patients notified 1 to 3 weeks previous to the disease developing; but in this connection the number of persons who eat shell-fish, and do not get Typhoid, must be remembered.

33 samples of blood were examined at the Bacteriological Laboratory during 1905 (see p. 169) for the Widal Reaction of

Typhoid, and in 6 cases (*i.e.*, 18.2 per cent.) such reaction was obtained.

In so far as Typhoid Fever is regarded as a sanitary index of a district, the statistics for Lambeth Borough during 1905 are, in that respect, of a most satisfactory character.

In London during 1905 there were registered 243 deaths (uncorrected) out of a total of 1,549 cases of Typhoid notified, giving an uncorrected case-mortality of 15.7 per cent.

CONTINUED AND TYPHUS FEVERS.

During 1905, 2 cases of Continued Fever were notified in the Borough of Lambeth, but no deaths were registered, as compared with yearly averages for 10 years (1891-1900) in the Parish of Lambeth of 25.7 and 2.2 respectively. The 2 cases were removed to Hospital, but were declared by the authorities there "*not* to be suffering from continued fever, nor from any other notifiable disease."

In London, 14 cases were notified and 3 deaths registered from Continued Fever during 1905, giving a case-mortality of 21.4 per cent. (uncorrected).

No case of Typhus was notified during 1905 in Lambeth Borough, but 9 cases were notified in London (no deaths).

PUERPERAL FEVER.

During 1905, in the Borough of Lambeth, 6 deaths were registered from Puerperal Fever (a disease of child-bed), and 12 cases notified, giving a case-mortality of 50 per cent. 3 of the patients were removed to Hospital.

The annual averages for 10 years (1891-1900) in the Parish of Lambeth are (1) notified cases, 18.9; and (2) deaths, 11.5; whilst, in the Borough of Lambeth during 1904, 13 cases were notified, and 6 deaths registered.

Puerperal Fever is a preventable disease, and is caused through want of care on the part of the nurse, or the medical practitioner, attending upon a lying-in woman. 8,835 births were registered in the Borough of Lambeth during 1905, and in only 12 cases was Puerperal Fever notified—a most satisfactory fact to be able to report. In each case enquiries were made, and the Midwives (when in attendance) were visited at their homes, their rooms (or houses) and clothes disinfected, and their other cases (being attended at the time) followed up and watched for periods varying from 2 to 3 weeks each. Four Midwives were cautioned, but in no instance was it found necessary to take legal action against any Midwife.

In London, during 1905, there were registered 183 deaths out of a total of 291 cases of Puerperal Fever notified, giving a case-mortality of 62·9 per cent. (uncorrected).

ERYSIPELAS.

During 1905, in the Borough of Lambeth, 287 cases of Erysipelas were notified, and 15 deaths registered, giving a case-mortality of 5·2 per cent. Of the 287 cases, 37 were removed to Hospital. The yearly averages for the 10 years (1891-1900) in the Parish of Lambeth are (1) notified cases, 347; and (2) deaths, 17·5.

During 1904, 251 cases were notified, and 14 deaths registered from Erysipelas, within the Borough of Lambeth.

In London, during 1905, there were registered 226 deaths out of a total of 4,987 cases of Erysipelas notified, giving a case-mortality of 4·5 per cent. (uncorrected).

The advantages from the notification of Erysipelas are few, and the majority of cases notified as Erysipelas are not such as were contemplated by the framers of the Notification Act.

The details as to the incidence of the two diseases, Puerperal Fever and Erysipelas, in the different Registration Sub-districts of Lambeth Borough during 1905 are as follow :—

Registration Sub-Districts.	PUERPERAL FEVER.			ERYSIPELAS.		
	Number of Cases Notified.	Number of Deaths.	Case Mortality per 100.	Number of Cases Notified.	Number of Deaths.	Case Mortality per 100.
Waterloo Road 1st	—	—	—	19	—	—
Waterloo Road 2nd	1	—	—	9	—	—
Lambeth Church 1st... ..	—	—	—	32	1	3·1
Lambeth Church 2nd	1	—	—	60	3	5·0
Kennington 1st	2	2	100·0	43	1	2·3
Kennington 2nd	3	1	33·3	39	4	10·3
Brixton	4	2	50·0	58	4	6·9
Norwood	1	1	100·0	27	2	7·4
Borough of Lambeth	12	6	50·0	287	15	5·1

DIARRHŒA.

During the year 1905 there were registered in the Borough of Lambeth 178 deaths from Diarrhœa,* as compared with 269 during 1904 (*vide* p. 86, deaths from Enteritis).

Taking the statistics of the old Parish of Lambeth for 10 years (1891-1900), it will be seen that the annual average is 188·4, so that the figures for 1905 for the Borough are 5·5 per cent. less.

Of these 178 deaths, 172 (*i.e.*, 96·1 per cent.) were in children under 5 years, and 142 (*i.e.*, 79·8 per cent.) in infants under 1 year of age. July, August and September were the most fatal months (*see* Table S). In this connection, it is again interesting to note that the mean monthly air temperature registered at the Brixton Meteorological Office was, in June, 60·8 deg.; in July, 67·0 deg.; in August, 61·7 deg.; in September, 56·8 deg.; and in October, 45·8 deg.; whilst the 4-ft. earth thermometer registered 56 deg. F. on June 15th, rising to a maximum 64·0 deg. F. on several days from July 24th to July 29th, and sinking to 56 deg. F. again on October 3rd. 56 deg. F. is the so-called "critical" earth temperature for Diarrhœa, *i.e.*, the temperature at which the germs of this particular disease begin to multiply, and prove themselves dangerous.† Hence its importance statistically, in connection with this disease, which, though it kills chiefly young children, attacks persons of all ages—a fact not generally recognised.

* Including 2 deaths registered from Cholera-Nostras.

† The 4ft. earth temperatures were taken in Regent's Park, and thanks are due to Mr. Wm. Marriott, of the Royal Meteorological Society 70, Victoria Street, S.W., for the information in connection therewith.

Age mortalities from Diarrhœa were as follow :—

Age.	Total Deaths.			Percentage of Total Deaths from Diarrhœa.
	M.	F.	Total.	
Under 1 year	80	62	142	79·8
1 to 5	21	9	30	16·9
5 to 20	—	—	—	—
20 to 40	—	—	—	—
40 to 60	1	—	1	0·6
Over 60	3	2	5	2·8
Total	105	73	178	100·0

In London there were registered, during 1905, 3,410 deaths from Diarrhœa, giving an uncorrected rate of 7·3 per 10,000 living, and one of 4·7 per cent. of total deaths.

The details as to the Diarrhœa incidence (mortality) during 1905 upon the different Registration Sub-Districts of Lambeth Borough are as follow :—

BOROUGH OF LAMBETH.					Number of Deaths.	Diarrhœa Death-rate per 10,000 Population.		
Registration Sub-Districts.								
Inner.	{	Waterloo Road 1st	7	}	4·6	
		Waterloo Road 2nd	...	...	5	
		Lambeth Church 1st	...	...	14	
		Lambeth Church 2nd	...	...	46	
Outer.	{	Kennington 1st	48		8·8	
		Kennington 2nd	...	...	12	
		Brixton	...	...	33	
		Norwood	...	...	12	
District not stated		1	—		
Borough of Lambeth					178	1·4

In the Inner Registration Sub-districts, the Diarrhœa death-rate per 10,000 inhabitants was 7·4 as compared with 4·6 for the Outer Districts *i.e.*, 1·6 to 1—a condition of things which is generally found to obtain, and which is readily understood when the crowded state of the Inner Districts is remembered, though the improvement in the latter Districts is noteworthy.

It will be noted that the 4-ft. earth temperature had a very low register during 1905, and, as a natural consequence, the Diarrhœa deaths were very few in number, exceptionally so.

Under the heading of Diarrhœa have been classed the 2 deaths of Cholera-Nostras registered, as there is no reason to regard them otherwise than as deaths from "Summer Diarrhœa"; and also the 87 deaths registered from "Enteritis," which represent a decrease that is *pro ratâ* with the increase in the number of "Diarrhœa" deaths, and is due to more exact nomenclature. The yearly average number of deaths from Enteritis in the old Parish of Lambeth for the 10 years 1891-1900 is 101·8. During recent years there has been a marked improvement in the diagnosis of deaths from diarrhœal diseases, so that, to obtain comparable figures, attention should be paid not only to diarrhœa deaths certified, but also to all deaths arising from diseases of an enteritic nature, *i.e.*, those in which the intestines are, more or less, congested.

Comparison must be made with the corrected infantile mortality rate for the Borough, which is 114·8 per 1,000 births (*vide* p. 29).

The female Inspector has visited every house wherein a death has taken place from Diarrhœa, with the result that valuable statistics are being tabulated in connection therewith, and from these statistics (when in sufficient numbers) important deductions may be able, hereafter, to be drawn.

TABLE S.
Shewing the Diarrhoea Mortality in Lambeth Borough in each month during the year 1905.

Registration Sub-Districts.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Waterloo Road 1st	1	—	—	—	—	—	1	2	2	1	—	—	7
Waterloo Road 2nd	—	—	—	—	—	—	—	3	1	—	—	1	5
Lambeth Church 1st	—	1	—	—	—	1	4	6	2	—	—	—	14
Lambeth Church 2nd	1	—	—	—	—	—	12	29	4	—	—	—	46
Kennington 1st ...	2	1	1	—	—	1	9	26	4	2	—	2	48
Kennington 2nd ...	1	—	—	—	—	—	—	7	4	—	—	—	12
Brixton ...	1	1	—	1	—	1	4	10	12	1	2	—	33
Norwood ...	—	—	—	—	—	—	—	9	2	1	—	—	12
District not stated	—	—	—	—	—	—	—	1	—	—	—	—	1
Total ...	6	3	1	1	—	3	30	93	31	5	2	3	178

N.B.—Including 2 cases registered from Cholera-Nostras in August (1) and September (1) in Lambeth Church 2nd and Brixton Sub-districts respectively.

TUBERCULOSIS.

During 1905, 416 deaths were registered in Lambeth Borough as due to phthisis (tuberculosis of the lungs), 90 as due to tabes mesenterica and tubercular meningitis, and 77 as due to other forms of tuberculosis, making a total of 583 deaths from tuberculosis (all forms)—*i.e.*, 12·5 per cent. of the total deaths (corrected) registered from all causes. The total deaths within the Borough during 1904, 1903, 1902 and 1901 from all forms of tuberculosis were 621, 639, 701 and 695 respectively. Subdividing the tuberculosis deaths during 1905 amongst the different Registration Sub-Districts, it is found that the rates (per 1,000 living) vary as follows:—

Registration Sub-Districts.	Deaths from			Total Deaths Tuberculosis.	Rate per 1,000 living.
	Phthisis.	Tabes. Mes. and Tub. Men.	Other forms Tuberculosis.		
Waterloo 1st ...	24	7	5	36	} 2·7
" 2nd ...	28	2	4	34	
Lambeth Church 1st ...	34	4	2	40	2·3
" " 2nd ...	78	26	16	120	3·1
Kennington 1st ...	59	8	18	85	1·6
" 2nd ...	56	15	9	80	1·8
Brixton ...	91	23	19	133	1·5
Norwood ...	30	5	4	39	1·04
District not stated...	16	—	—	16	—
Borough of Lambeth ...	416	90	77	583	1·9

{ Inner Districts—2·3 per 1,000 living.

{ Outer Districts—1·5 per 1,000 living.

N.B.—In the case of the 16 deaths occurring in Districts which are not stated, they have been distributed equally amongst the eight Sub-Districts before working out rates per 1,000.

In addition to the usual precautionary measures taken in connection with registered deaths from tuberculosis (disinfection, distribution of leaflets, etc.), the voluntary notification of consumption (with tuberculous expectoration) has also been in vogue during 1905 (having been commenced by the Borough Council on June 1st, 1902)—293 cases having been notified in 1905 as compared with 306 during 1904, 339 during 1903, and 315 during the seven months from June 1st to December 31st, 1902. In each notified case, enquiries have been made, disinfection carried out as required, and leaflets distributed. Much valuable information is in this way being collected, and there is every reason to believe that much good is accruing also from the measures taken in preventing not only the spread of the disease but also its development in susceptible persons. Meanwhile, it may be noted that the tuberculosis rate per 1,000 living during 1905 is 1·9 as compared with 2 during 1904.

181 samples of sputum were examined bacteriologically during 1905, and in 19·9 per cent. tubercle bacilli were found (*vide* p. 169).

The distribution of the disease in Lambeth Borough, judging by the voluntary notifications received during 1902-5, will be seen from an examination of Tables I. and II. following, dealing with (*a*) Wards and (*b*) Registration Sub-Districts:—

I.—CONSUMPTION NOTIFICATIONS, 1902-5.

(Arranged in Wards so as to shew the varying incidences).

Wards.	1902	1903	1904	1905	Total 1902-5	Incidence Rate per 1000 population 1902-5
Marsh ...	62	45	50	48	205	1·9
Bishop's ...	64	101	76	91	332	2·6
Prince's ...	52	72	66	61	251	1·3
Vauxhall ...	34	45	35	26	140	1·1
Total Inner Wards	212	263	227	226	928	1·7
Stockwell ...	16	17	15	14	62	0·5
Brixton ...	33	25	25	20	103	0·6
Herne Hill ...	21	16	27	14	78	0·6
Tulse Hill ...	20	6	4	11	41	0·4
Norwood ...	13	12	8	8	41	0·3
Total Outer Wards	103	76	79	67	325	0·5
Boro' of Lambeth	315	339	306	293	1253	1·01

II.—CONSUMPTION NOTIFICATIONS, 1902-5.

(Arranged in Registration Sub-Districts so as to shew the varying incidences).

Sub-Districts.	1902	1903	1904	1905	Total 1902-5	Incidence Rate per 1000 Population 1902-5
Waterloo Road 1st...	32	23	19	22	96	1.9
Waterloo Road 2nd	29	23	31	26	109	
Lambeth Church 1st	39	52	58	28	177	2.4
Lambeth Church 2nd	68	101	68	102	339	2.1
Total Inner Districts	168	199	176	178	721	2.1
Kennington 1st ...	44	63	52	47	206	0.9
Kennington 2nd ...	36	30	33	15	114	0.7
Brixton ...	55	36	37	45	173	0.5
Norwood ...	12	11	8	8	39	0.3
Total Outer Districts	147	140	130	115	532	0.6
Borough of Lambeth	315	339	306	293	1253	1.01

It will be seen from the voluntary notifications received that the disease appears to have a greater incidence on the Inner than on the Outer Districts (whether Registration Sub-Districts or Wards). This result was to be expected, bearing in mind the more crowded conditions (persons in houses or houses over area) that exist in the Inner as compared with the Outer Districts and the different status of the inhabitants—the patients notified being chiefly of the artisan and working class. It must be remembered, however, that the notification of consumption is voluntary, and that only a percentage of the cases are heard of.

PREVENTION OF SPITTING IN ITS RELATION TO THE SPREAD
OF CONSUMPTION.

During 1905 the Council decided to endeavour, as far as possible, to prevent, or at least minimise, indiscriminate spitting—a dangerous and objectionable habit. This decision was based upon a Report presented by the Medical Officer of Health dealing with Consumption of the Lungs as an infectious disease and its chief method of spreading from person to person in the form of dried tubercular expectoration as dust (*vide* Appendix, p. 72). The Council expressed the opinion that spitting is a dangerous as well as a filthy and disgusting habit, and should be, as far as possible, suppressed—by legislation, if necessary; and that any crusade against spitting is a distinct advance in preventive measures against the spread of Consumption. With a view to giving practical expression to their opinion, in so far as Lambeth Borough is concerned, the Council resolved:—

1. That a circular letter be addressed to all licensed victuallers, occupiers of all factories and workshops, restaurant keepers, public companies (such as railway, tramway and omnibus companies), &c., within the Borough, pointing out the actual danger, from the point of view of the spread of Consumption, of indiscriminate spitting, which is also a filthy and disgusting habit; and suggesting the advisability of “warning cards or notices” being put up in the different Lambeth premises under their control (*e.g.*, public bars, workrooms and places, restaurants, railway stations, tramcars and omnibuses, &c.).

2. That “warning cards or notices” against the dangerous, filthy and disgusting habit of indiscriminate spitting be fixed by the Borough Council in conspicuous and prominent positions under its control, *e.g.*, public libraries, public baths, public conveniences, public lamps (refuge lamps and electric arc lamps), &c., within the Borough.

3. That the Council instruct its officers to act, and take proceedings, as may be found necessary, in connection with the Bye-law against spitting, which was made by the London County Council on July 10th, 1903.

EPIDEMIC INFLUENZA.

During 1905, 50 deaths were registered from Influenza in the Borough of Lambeth, as compared with 36 during 1904, and an average of 107·5 for ten years (1891-1900) in the old Parish of Lambeth. Of the 50 deaths, 28 were registered during the first, 8 during the second, 1 during the third, and 13 during the fourth quarter, of the year.

In London, there were registered 689 deaths (uncorrected), from Influenza during 1905.

Reviewing the past ten years' history of the old Parish of Lambeth in relation to Epidemic Influenza, it will be seen that the disease has been practically epidemic since 1891, rising to the maximum in 1892, 1895, 1899, and 1900. The yearly average for ten years (1891-1900) in the old Parish of Lambeth is 107·5, so that the 1905 statistics for the new Borough of Lambeth show a sub-epidemic state.

Table shewing the number of deaths from Epidemic Influenza in Lambeth Borough, and London, during 1905, and during ten years (1891-1900) in Lambeth Parish and London.

	Old Parish of Lambeth.										Average for 10 years. (1891-1900)	Borough of Lambeth. 1905
	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900		
Lambeth ...	131	142	85	44	148	51	45	126	151	152	107·5	50
London ... (including Lambeth).	2336	2264	1526	750	2156	496	671	1233	1817	1950	1524·9	689

N.B.—The term "Influenza" is too indefinite in medical practice to permit of any satisfactory deductions being drawn from the above statistics.

The 34 deaths from venereal affections (Syphilis, etc.) are the only other point calling for note in the class of Zymotic Diseases.

Classes II. and III.—Parasitic and Dietetic Diseases.

26 deaths were registered in these classes from chronic Alcoholism and 1 from Delirium Tremens.

Class IV.—Constitutional Diseases.

Of the total 995 deaths under this class, 320 were due to Cancer, 416 to Phthisis, and 167 to Tubercular Meningitis and other forms of Tuberculosis.

Class V.—Developmental Diseases.

The total number of deaths in this class was 323, consisting of 152 from Premature Birth, 118 from Old Age, and 53 from Atelectasis and Congenital Malformations.

Class VI.—Local Diseases.

1. Diseases of the Nervous System caused 408 deaths, including 52 from Convulsions, 165 from Apoplexy, and 15 from Epilepsy.
2. 587 deaths were due to diseases of the Circulatory System.
3. The diseases of the Respiratory Organs caused 858 deaths (394 from Bronchitis, and 196 from Pneumonia).
4. Diseases of the Digestive Organs caused 295 deaths, of which 87 were due to Enteritis, 35 to Peritonitis, 79 to diseases of the Liver and 11 to Dentition.
5. Diseases of the Urinary System caused 197 deaths.
6. Diseases of the Reproductive System, Integumentary System, Locomotive System, Lymphatics, Organs of Special Senses, etc., caused together 68 deaths.

Class VII.—Deaths from Violence.

171 deaths in all, including 146 from Accidents, 11 from Burns and Scalds, 11 from Drowning, 24 from Suffocation in bed (19 being infants under 1 year) and 25 from Suicide.

Class VIII.—Other Causes.

160 deaths were registered in this class, consisting of deaths from Dropsy, Tumours, Hæmorrhages, or other ill-defined or non-specified causes.

Different rates of mortality from different diseases and groups of diseases are given in terms of the total deaths (corrected and uncorrected) in Tables T and U; whilst Table T gives also the deaths from the chief Infantile Diseases, expressed in terms of the Infantile population (or number of Births). Allowing for the slight differences between corrected and uncorrected death returns, it will be noted that, in regard to both infantile and other diseases, Lambeth again compares favourably with London (*vide* Table U).

Deaths amongst infants under 1 year are a sensitive index (amongst others) of the sanitary state of a Community, and in this respect the Lambeth Borough statistics, as a whole, are satisfactory. The Table on p. 21 is important, too, in this connection, as comparing the Lambeth Borough statistics with those for London as a whole, taken in different age-periods.

PHYSICAL DETERIORATION AND ALCOHOLISM.

The Council during 1905 decided to placard, throughout the Borough, posters dealing with the dangers of alcoholism in

relation to Physical Deterioration. This decision was arrived at in connection with the Report of the Inter-Departmental Committee on Physical Deterioration, in which, amongst other factors, alcoholism is specially dealt with as causing such physical deterioration. The poster was drawn up by the Medical Officer of Health, and issued* as follows:—

BOROUGH OF LAMBETH.

PHYSICAL DETERIORATION AND ALCOHOLISM.

The report of the Committee, presented to Parliament by command of His Majesty, shews that—

The abuse of Alcoholic Stimulants is a most potent and deadly agent of physical deterioration, and leads to degenerative changes in most, if not in all, of the organs of the body, ending in Mental and Physical Disease, and finally in death.

Alcoholic persons are specially liable to Syphilis and Tuberculosis, and also to all forms of inflammatory disorders; whilst, as a rule, they suffer much longer, and more severely, from the effects of any malady than the temperate do.

Evidence was placed before the Committee, shewing that in Abstinence is to be sought the source of Muscular Vigour and Dexterity.

*The Licensed Victuallers' Central Protection Society of London, Limited, in a letter dated December 11th, 1905, have given notice that objection will be raised before the Auditor against the expenditure connected with the the issuing of posters dealing with physical deterioration and the abuse of alcohol.

The Lunacy figures shew a large, and, in some cases, an increasing number of admissions into Asylums of both sexes, which are due to drink, and an increase of General Paralysis amongst lunacy patients due to the same cause.

The following facts recognised by the Medical Profession are published in order to carry out the Recommendation of the Committee, and to bring home to men and women the fatal effects of Alcoholism on physical efficiency :—

1. Alcoholism is a chronic poisoning, resulting from the habitual use in excess, or abuse, of alcohol (whether in the form of spirits, wine or beer), even though such habitual use, or abuse, does not produce drunkenness.
2. Spirits (taken in excess) rapidly produce a state of alcoholism, but even the milder alcoholic drinks, such as beer, light wines, etc., will, under similar conditions produce, with equal certainty, the same results after a time : it is merely a difference of dose.
3. For healthy adults, alcohol, in any form, presents no advantages ; whilst for healthy children it is decidedly injurious, and should in no case be given, except by order of a Medical Practitioner.
4. It is a mistake to say that alcohol is necessary, even for those doing hard mental or bodily work, as the stimulation (or artificial strength) which it produces, soon gives place to nervous depression and weakness ; hard work can usually be done better without alcohol.
5. Alcohol (taken in excess) is a narcotic, dulling the nerves like laudanum or other forms of opium ; and its first

effect is to weaken self control and to excite the passions, ending afterwards in muscular weakness and insensibility.

6. The habit of drinking to excess leads to the ruin of families, the neglect of social duties, immorality, disgust for work, degradation, misery, poverty, theft, suicide, crime and death.
7. Alcohol (taken in excess) produces the most various and fatal diseases, including paralysis and even insanity; diseases of the stomach and liver, heart and blood vessels, kidneys and other organs; and dropsy. It also paves the way to consumption, as shewn by the fact that the habitual frequenters of public houses furnish a large proportion of the victims of this disease. It complicates and aggravates all acute diseases; whilst typhoid fever, pneumonia, erysipelas and accidents are especially fatal to persons weakened by alcoholic excess, and in whom the resistance to disease is thereby lessened.
8. The sins of alcoholic parents are often visited upon the children in the form of paralysis, epilepsy, idiocy, or other brain troubles, by which such children are permanently disabled, if not killed outright.
9. In short, alcoholism is the most terrible enemy to personal health, to family happiness, and to national prosperity, and even to the future of the race.

By Order of the Council,

J. PRIESTLEY, B.A., M.D., D.P.H.,²

Medical Officer of Health.

TOWN HALL, LAMBETH,

September, 1905.

TABLE T.

Shewing Classification of Causes of deaths in the Borough of Lambeth during 1904 and 1905.

A.—Total Deaths from all causes and at all ages with percentages of deaths to total deaths (corrected).

CLASS OF DISEASE.	BOROUGH 1905.		BOROUGH 1904.	
	No. of Deaths (correct- ed).	Percent- age of Total Deaths.	No. of Deaths (correct- ed).	Percent- age of Total Deaths.
I.—Zymotic Diseases ...	546	11·8	716	14·7
Seven Principal ...	421	9·3	603	12·4
Influenza ...	50	1·1	36	0·7
II.—Parasitic ...	3	0·06	6	0·1
III.—Dietetic ...	35	0·8	43	0·9
IV.—Constitutional ...	995	2·1	1039	21·3
Cancer ...	320	6·9	309	6·3
Phthisis ...	416	8·9	447	9·2
Tubercular Diseases, ex- cluding Phthisis ...	167	3·6	174	3·6
Rheumatism (Acute and Chronic) and Gout ...	27	0·6	46	0·9
V.—Developmental ...	323	6·9	361	7·4
Old Age ...	118	2·5	135	2·8
VI.—Local Diseases ...	2413	51·9	2357	48·4
Circulatory System ...	587	12·6	536	10·9
Bronchitis ...	394	8·5	423	8·7
Pneumonia and Broncho- Pneumonia ...	341	7·3	302	6·2
Pleurisy and Pleuro-Pneu- monia ...	55	11·8	39	0·8
Respiratory System, ex- cluding Phthisis... ..	858	18·5	395	8·1
VII.—Violence ...	171	3·7	173	3·5
Suicide ...	25	0·5	26	0·5
VIII.—Other Causes ...	160	3·4	185	3·8

TABLE T (Continued).

B.—Deaths (corrected) of Infants under One Year of age from the chief infantile diseases, and from all causes, expressed in terms of 1,000 births.

	BOROUGH 1905.		BOROUGH 1904.	
	Total Deaths under One Year (Corrected).	Proportion to 1000 Births.	Total Deaths under One Year (Corrected).	Proportion to 1000 Births.
From all causes	1014	114·8	1248	137·8
Diarrhœa	142	16·1	222	24·5
Convulsions	46	5·2	36	3·9
Respiratory Diseases	167	18·9	206	22·7
Premature Births	152	17·2	172	18·9
Tubercular Diseases (including Phthisis) ...	51	5·8	71	7·8
Measles	19	2·2	46	5·1
Whooping Cough	40	4·5	45	4·9
Suffocation in Bed	19	2·2	22	2·4
Enteritis	45	5·1	40	4·4
Dentition	9	1·02	11	1·2

TABLE U.

Shewing Classification of certain Causes of Deaths (uncorrected)
in the Borough of Lambeth, compared with London,
during 1904 and 1905.

A—Deaths at all Ages.

	LAMBETH.		LONDON.	
	Percentage of total Deaths (uncorrected)		Percentage of total Deaths (uncorrected)	
	1905.	1904.	1905.	1904.
I. PRINCIPAL ZYMOTICS ...	10·3	13·1	10·9	12·9
Influenza ...	1·02	0·7	0·9	0·9
Measles ...	2·1	3·3	2·3	2·9
Whooping Cough ...	1·7	2·1	2·1	1·9
Diarrhœa and Dysentery ...	3·8	5·4	4·7	6·2
II. RHEUMATIC FEVER AND HEART RHEUMATISM	0·3	0·4	0·3	0·3
III. DISEASES OF CIRCULATORY SYSTEM ...	12·1	10·9	12·8	12·3
IV. BRONCHITIS, Pneumonia and Pleurisy ...	16·01	15·1	18·2	17·01
Phthisis ...	7·8	8·0	9·3	10·04
V. INJURIES ...	4·2	3·7	4·2	3·1
B.—Deaths under 1 Year of Age (per 1000 Births).				
ALL CAUSES ...	127·6	146·6	131·4	146·2

TABLE OF **DEATHS** during the year 1905 in the Borough of

NAMES OF LOCALITIES adopted for the purpose of these Statistics, public in- stitutions being shewn as separate localities.	MORTALITY FROM CAUSES, AT SUBJOINED AGES.							MORTALITY FROM							
	At all ages.	Under 1 year,	1 and under	5 and under	15.	15 and under	25	25 and under	65.	65 and upwards,	Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	Puerperal.
		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)						
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)							
Royal Infirmary (Women and Children) ... }	15	5	2	3	...	5	...	Under 5 5 upwds.	...	...	...	...	...	...	...
Remainder of Waterloo Road First ... }	152	49	27	3	1	51	21	Under 5 5 upwds.	...	...	...	...	...	...	...
General Lying-in Hos- pital, York Road ... }	38	37	...	...	...	1	...	Under 5 5 upwds.	...	...	...	...	...	...	...
Remainder of Waterloo Road Second ... }	135	44	15	5	3	45	23	Under 5 5 upwds.	...	...	...	1	...	...	...
St. Thomas's Hospital ... }	621	57	78	71	59	305	51	Under 5 5 upwds.	...	...	...	9	...	...	...
Remainder of Lambeth Church First ... }	191	53	19	10	5	75	26	Under 5 5 upwds.	...	...	...	2	...	...	1
Lambeth Workhouse ... }	119	6	...	...	1	23	89	Under 5 5 upwds.	...	...	...	...	...	...	...
Lambeth Infirmary ... }	672	55	30	4	22	349	212	Under 5 5 upwds.	...	...	...	...	...	...	...
Remainder of Lambeth Church Second ... }	409	146	56	10	11	120	66	Under 5 5 upwds.	...	...	...	1	...	...	...
Clapham Maternity ... }	33	32	...	...	...	1	...	Under 5 5 upwds.	...	...	...	...	...	...	...
St. Peter's House ... }	32	...	...	...	...	4	28	Under 5 5 upwds.	...	...	...	...	...	...	...
Remainder of Kenning- ton First ... }	508	153	60	9	15	160	111	Under 5 5 upwds.	...	...	...	1	...	...	1

Lambeth, classified according to DISEASES, AGES, and LOCALITIES.

SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																			
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
FEVERS.				Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Pneumonia.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Influenza.	Injuries.	Ague.	All other Diseases.	TOTAL.		
Relapsing.	Continued.	Enteric or Typhoid.	Typhus.																
...	1	2	...	...	...	...	...	...	...	4	7		
...	8	8		
...	8	3	6	...	...	26	...	...	4	...	29	76	
...	1	...	...	3	9	20	14	...	5	...	24	76	
...	1	...	...	...	2	...	...	...	...	34	37	
...	1	1	
...	4	1	3	...	...	16	...	...	2	...	33	59	
...	2	...	...	...	11	14	18	...	10	...	20	76	
...	1	4	1	11	...	3	22	1	...	17	...	66	135
...	...	3	...	...	...	3	...	...	...	...	4	28	71	...	50	1	323	486
...	3	7	8	...	...	16	...	...	3	...	38	75	
...	2	3	18	10	19	...	24	...	40	116	
...	1	...	70	...	1	...	5	6	
...	1	9	70	1	1	...	31	113	
...	1	17	5	12	...	5	10	...	...	1	...	34	85	
...	3	...	...	...	...	...	142	100	90	1	14	...	237	587	
...	1	1	6	10	32	...	1	54	...	...	3	...	98	202	
...	1	...	1	...	...	...	27	54	33	1	5	...	85	207	
...	1	...	...	...	...	5	...	...	...	26	32	
...	1	1	
...	
...	9	1	...	...	...	21	32	
...	
...	1	9	11	41	...	...	...	42	1	1	5	...	101	213	
...	1	2	...	25	67	52	4	9	...	131	295	

TABLE V.—continued.

Local Government Board Old Table A continued.]

TABLE of DEATHS during the year 1905 in the Borough of

NAMES OF LOCALITIES adopted for the purpose of these Statistics, public in- stitutions being shewn as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							(i)	MORTALITY FROM				
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		1	2	3	4	5
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)						
{Belgrave Hospital ...}	152	102	40	10	...	...	...	{Under 5 5 upwds.	...	...	3	...	...
{Kennington Second ...}	456	92	37	12	12	187	116	{Under 5 5 upwds.	...	1	...	...	...
{South Western Hospital ...}	115	11	59	25	8	12	...	{Under 5 5 upwds.	...	37	26	...	...
{Remainder of Brixton ...}	865	201	63	23	28	271	277	{Under 5 5 upwds.	...	1	3	...	...
{Lambeth Workhouse Schools ...}	2	...	2	...	...	...	...	{Under 5 5 upwds.	...	...	...	...	...
{British Home of Incur- ables ...}	8	...	...	...	...	3	5	{Under 5 5 upwds.	...	...	...	...	...
{Remainder of Norwood ...}	373	81	29	10	10	94	149	{Under 5 5 upwds.	...	...	2	...	...
TOTALS ...	4896	1127	517	197	175	1706	1174	{Under 5 5 upwds.	...	39	45	...	...

The subjoined numbers have also to be taken into

Deaths occurring outside the district among per- sons belonging thereto	486	37	35	29	34	260	91	{Under 5 5 upwds.	...	7	4	...	...
Deaths occurring within the district among persons not belonging thereto	736	150	111	73	58	259	85	{Under 5 5 upwds.	...	30	23	...	...

TABLN V.—continued.

Lambeth, classified according to DISEASES, AGES, and LOCALITIES.

SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
FEVERS.																	
Relapsing.	Continued.	Enteric or Typhoid.	Typhus.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Influenza.	Injuries.	Ague.	All other Diseases.	TOTAL.
...	1	23	...	1	18	...	...	3	...	93	142
...	1	...	...	...	...	...	7	10
...	10	15	8	...	1	14	...	1	9	...	70	129
...	...	3	...	...	3	1	...	...	3	39	66	42	5	6	...	150	327
...	...	6	...	...	...	5	...	...	...	1	...	...	...	...	...	2	70
...	1	5	...	...	...	...	5	45
...	1	2	13	20	22	...	1	30	2	4	7	...	158	264
...	...	1	...	...	12	12	...	...	2	69	74	112	20	19	...	298	601
...	2	2
...
...	1	...	...	7	8
...	1	16	4	11	...	...	18	...	1	...	...	57	110
...	1	1	...	24	55	63	...	8	6	...	104	263
...	2	7	95	79	181	...	12	273	4	7	55	...	845	1644
...	...	13	...	...	13	6	2	4	13	371	511	590	49	149	1	1496	3252

account in judging of the above records of mortality.

...	...	...	...	...	...	3	...	5	...	2	14	1	...	...	...	36	72
...	...	3	...	...	...	...	...	2	1	40	40	53	1	28	...	233	414
...	...	...	...	...	1	8	2	16	...	2	25	1	...	13	...	140	261
...	...	6	...	...	4	...	...	...	...	7	23	60	1	48	1	304	475

TABLE W.

Table of Population, Births, and of New Cases of Infectious of Health, during the year 1905, in the Metropolitan Diseases and

Local Government Board Old Table B.]

Registration Sub-Districts.	Population at all Age.		Registered Births.	New Cases of Sickness in each the knowledge of the Medical						
	Census 1901.	Estimated to middle of 1905.		1	2	3	4	5	6	7
				Smallpox.	Scarlatina.	Diphtheria, Membranous Croup.	Typhus.	Typhoid or Enteric.	Continued.	
(a)	(b)	(c)	(d)							
WATERLOO, ROAD 1st	27440	26590	449	—	47	15	—	—	12	—
WATERLOO ROAD 2nd			935	—	50	16	—	—	6	—
LAMBETH CHURCH 1st	18423	18394	532	—	101	42	3	—	7	—
LAMBETH CHURCH 2nd	39818	39971	1463	—	89	85	1	—	13	2
KENNINGTON 1st ...	53198	54591	1705	—	159	83	3	—	12	—
KENNINGTON 2nd ...	42896	44572	938	—	195	54	3	—	10	—
BRIXTON	84232	89513	2015	—	260	61	1	—	15	—
NORWOOD	35888	39384	798	—	124	83	—	—	2	—
Totals ...	301,895	313,045	8835	—	1025	439	11	—	77	2

TABLE W.

Sickness, coming to the knowledge of the Medical Officer Borough of Lambeth, classified according to Localities.

Locality, coming to Officer of Health.					Number of such Cases removed from their Homes in the several Localities for Treatment in Isolation Hospital.													
8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
Fevers.		Cholera.	Erysipelas.	Chickenpox.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.					Cholera.	Erysipelas.	Chickenpox.		
Relapsing.	Puerperal.								Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.						
—	—	—	19	—	—	47	14	—	—	11	—	—	—	—	4	—		
—	1	—	9	—	—	10	16	—	—	3	—	—	—	—	2	—		
—	—	—	32	—	—	99	41	—	—	6	—	—	—	—	6	—		
—	1	—	60	—	—	75	57	1	—	8	2	—	—	—	6	—		
—	2	—	43	—	—	150	79	1	—	8	—	—	1	—	8	—		
—	3	—	39	—	—	128	31	—	—	5	—	—	—	—	1	—		
—	4	—	58	—	—	133	53	—	—	13	—	—	2	—	6	—		
—	1	—	27	—	—	89	68	—	—	—	—	—	—	—	4	—		
—	12	—	287	—	—	821	359	2	—	54	2	—	3	—	37	—		

BOROUGH OF LAMBETH.

**SUMMARY OF VITAL AND MORTAL
STATISTICS, &c., FOR 1905.**

Area of Borough—4080·4 statute acres (exclusive of tidal water 82·1, and foreshore 31·1 statute acres respectively) divided into 7 Registration Sub-Districts, 4 Parliamentary Divisions, and 9 new Wards. The Parliamentary Divisions and New Wards are not co-extensive.

Population—estimated middle of 1905—313,045 (males 148,169, females, 164,876).

Density—76·7 persons per acre (exclusive of tidal water and fore-shore).

Inhabited Houses—41,511 at Census, 1901.

Rateable Value—£1,918,182 for year ending March 31st, 1905.

Marriages—2,525, being 16·3 per 1,000.

Births—8,835, being 28·2 per 1,000.

Deaths (corrected)—4,646, being 14·8 per 1,000.

Infantile Mortality—1,014 deaths (corrected) under 1 year, being 114·8 per 1,000 births.

Zymotic—Death-Rate, 1·4 per 1,000 (total deaths, 431).

Estimated increase of Population 2,686, but the natural increase or increment (*i.e.*, excess of Births over Deaths) is 3,939 (uncorrected).

II. SANITARY WORK.

Return showing the number of Nuisances removed or abated in the Borough of Lambeth, from the 1st January to the 31st December, 1905.

Number of Notices ... 13,053*

NOTIFIABLE INFECTIOUS DISEASES.

(Public Health, London, Act.)

No. of Infected Houses	...	...	...	...	...	1594
Smallpox	...	...	...	...	...	—
Scarlet Fever	...	...	...	...	...	870
Typhoid	...	...	...	...	...	72
Typhus	...	...	...	...	...	—
Continued Fever	...	...	...	...	...	2
Diphtheria	...	...	...	...	...	343
Membranous Croup...	...	...	...	...	...	10
Puerperal Fever	...	...	...	...	...	12
Erysipelas	...	...	...	...	...	285
English Cholera	...	...	...	...	...	—

* Exclusive of 2 notices served under the Housing of the Working Classes Acts.

PARTICULARS OF SANITARY WORK

Carried out in Lambeth Borough during 1905, and for 24 years (1877-1900) in Lambeth Parish (for comparison).

Year.		Total Number of Notices (excluding those under Housing of the Working Classes Act).	Sanitary Works, Structural and Permanent.	Sanitary Works, not Structural.
Borough of Lambeth.	1905	13053	9447	2838
	1900	10065	10291	2303
Old Parish of Lambeth.	1899	10583	10042	2273
	1898	10469	9905	2224
	1897	11088	9058	1884
	1896	7475	6702	982
	1895	7645	8581	1104
	1894	6975	7672	1911
	1893	8769	9207	2046
	1892	7173	6931	2190
	1891	5557	7232	3173
	1890	5588	5053	3251
	1889	6854	4192	2662
	1888	4891	2969	1922
	1887	4565	2430	2135
	1886	4504	2433	2071
	1885	3567	1459	2108
	1884	3727	1621	2106
	1883	3000	1294	1766
	1882	3239	1267	1972
	1881	3730	1293	2437
	1880	3259	1106	2153
	1879	3075	960	2115
	1878	3310	1169	2211
	1877	3563	1299	2264
Average for 24 years, 1877-1900		5944.6	4798.6	2135.1

N.B.—The increase in the numbers since 1896 is due to the increased Inspectorial Staff.

A. Public Health (London) Act and Metropolis Local Management Acts.

Notices (Preliminary and Statutory) ... 11436

WORKS STRUCTURAL:—

Drainage defective	...	...	...	...	1149
Intercepting Traps with Fresh Air Inlets required	...				227
Ventilating Pipes required	...	...	...	...	274
Indoor Sinks connected with the Drain...	...	...	...		501
Rain Water Stack Pipes connected with the Drain	...				706
Bath Waste connected with the Drain	...	...	...		71
Traps Defective, or of Obsolete Pattern	...	...	...		698
Closet Pan and Connections Defective	...	...	...		976
Water Supply to Closet Defective	...	...	...		801
Closet Dilapidated	...	...	...	...	562
Draw-off from Main for Drinking Purposes required	...				78
Dust Bins Defective	...	...	...	...	896
Premises Dilapidated	...	...	...	...	201
Ventilation under Floors required	...	...	...		37
Roofs Dilapidated	...	...	...	...	301
Soil Pipes Defective	...	...	...	...	56
Paving Defective	...	...	...	...	1118
Damp and Unwholesome Houses	...	...	...		74
Dung Receptacles required	...	...	...	...	18

WORKS NOT STRUCTURAL:—

Cisterns Dirty	...	...	...	...	96
Manure Accumulations	...	...	...	...	74
Underground Rooms occupied	...	...	...	...	14
Animals Improperly Kept	...	...	...	...	17
Stopped Drains	...	...	...	...	315
Overcrowding	...	...	...	...	57
Foul Urinals	...	...	...	...	28
Through Ventilation not provided	...	...	...		—
Refuse Accumulations	...	...	...	...	68

No Water Supply or Defective Water Supply ...	...	148
Dirty Premises ...	...	2021
		<hr/>
		12,285
		<hr/>

B. Infectious Diseases Notification.

Notices served (infected houses)	1594
--------------------------------------	-----	------

SUMMARY OF WORK DONE BY THE SANITARY INSPECTORS DURING 1905.

Inspections ...	...	9478
Re-inspections ...	...	59491
Infectious Houses visited ...	...	1594
Complaints attended to ...	...	6650
Cases of Infectious Disease notified ...	...	1853
(a) Cases under treatment at Home ...	...	601
(b) Cases removed to Hospital ...	...	1254
Cases of Non-Notifiable Diseases dealt with ...	...	3927
Houses disinfected ...	...	1593
Rooms disinfected ...	...	4636
Bedding, etc., disinfected ...	...	*51552
Bedding, etc., destroyed ...	...	519
Dust Yards, Manure Depots and Brickfields, inspections of ...	...	312
Drains tested (with chemical, water, or both) ...	...	9699
Sanitary Works completed ...	...	5864
Plans of drainage reconstructions received and approved		467
Premises the Drains of which have been totally or partly reconstructed ...	...	667
Articles procured for the Analyst—		
(a) Food and Drugs ...	...	1200
(b) Water ...	...	1
Special Smoke observations and enquiries ...	...	600
New Work-shops inspected and registered ...	...	91
Bakehouses inspected (including 87 underground) ...	...	214

* Including 26,231 articles of bedding, etc., from Norwood schools.

Cowhouses inspected	...	...	...	...	17
Slaughter-houses inspected	...	...	...	...	30
Restaurants (new) inspected and registered	...	...	...	...	1
Outworkers' Rooms visited	...	...	...	...	*303

Notices—

Sanitary Work (Preliminary and Statutory)	...	...	...	...	†11436
Infectious Diseases (Public Health Act, 1891)	...	...	...	...	1594
Housing of Working Classes Act	...	...	...	...	2
Metropolis Local Management Acts	...	...	...	...	23

Sanitary nuisances abated—

(a) Structural	...	...	...	...	9447
(b) Non-structural	...	...	...	...	2838
Persons received at the Shelters	...	...	...	...	—
Summonses issued	...	...	...	...	‡49

Convictions obtained—

Public Health Act	...	...	...	...	1
Food and Drugs Acts	...	...	...	...	30

MALE INSPECTORIAL STAFF.

On September 28th, 1905, the Council decided to appoint 2 extra Sanitary Inspectors—1 male and 1 female—at commencing annual salaries of £120 (with uniform) and £100 (without uniform), rising by £10 yearly increments to £180 and £150 (dependent upon efficiency) respectively (*vide* Special Report in

* Including 158 premises, wherein no Out-workers were found employed at the time of visit.

† Public Health Act—Preliminary 7,446, Statutory 3,990.

‡ 49 summonses were issued, and of these 9 were withdrawn. The work was completed before the hearing of the summonses in 8 cases under the Public Health Act, and in 1 case under the Food and Drugs Acts, Somerset House did not support the Borough Analyst's certificate. 9 summonses under the Food and Drugs Acts were dismissed for the following reasons:—legal technicality (1), warranty proved (4), Somerset House appeals (3) and Doubt as to identity of churn (1).

Appendix, p. 77)*. This decision of the Council arose in answer to a letter from the London County Council, dated March 8th, 1905, stating that "the staff of Inspectors in Lambeth is not adequate for the needs of the district, and urging the desirableness of increasing the number of Inspectors, so as to provide for the efficient enforcement of the Bye-laws relating to Houses Let in Lodgings, and for the proper execution of the duty placed upon the Borough Council by section 1 of the Public Health (London) Act, 1891 (*i.e.*, House to House Inspection)."

The appointments were approved by the Local Government Board in October, 1905.

A new Inspectorial District has been made by the Council and is in the Tulse Hill Ward, a triangular area bounded by Brixton Hill, Lyham Road and Acre Lane, and containing (estimated at Census 1901) an area of 170 acres, with 1,531 inhabited houses and 9,191 population. This new District has been given to Inspector Wallis, whose old District (Bishop's Ward) has been transferred to Inspector J. S. Clements, as and from Jan. 1st, 1906. The new district being small in area, Inspector Wallis has been appointed to carry out systematic house to house inspections in Bishop's Ward, where such inspections are much needed. House to house inspections in the other Districts are to be carried out periodically by the different District Inspectors concerned.

In connection with the appointment of one extra female Inspector, the Borough has been divided by the Council into two parts, separated by Clapham and Kennington Park Roads—the northern portion (inner wards) to be under the supervision of Miss Pearson, and the southern portion (outer wards) under that of Miss Gamble. The duties of the female Inspectors include the supervision of factories, workshops and workplaces; houses in which births (or deaths of infants under one year of

* Mr. John Stephen Clements (Inspector at Shoreditch) and Miss Lucy Marion Heath Pearson (Inspector at Leeds) were appointed by the Council on November 23rd, 1905, and their appointments confirmed by the Local Government Board on December 15th, 1905, their duties to commence on January 1st, 1906.

age) have taken place ; milk depôt work ; female sanitary conveniences (public or private) ; schools ; etc., etc.

A room has been taken and fitted up at 331, Kennington Road, for the use of the two female Inspectors, and is connected by metaphones with the Public Health Department at 333, Kennington Road. This temporary arrangement has become necessary pending the building of the new Municipal Buildings at Brixton.

The Staff, individually and collectively, has worked well during 1905, as shewn by the results of inspections, re-inspections, etc., tabulated throughout the Report. It is again satisfactory to note that during 1905 in but very few cases (0·06 per cent. of the total notices served) has it been found necessary to resort to legal proceedings before the Magistrate in connection with sanitary work carried out under the Public Health and Metropolis Management Acts—8 summonses in all.

UNSOOUND FOOD.

No legal seizures of unsound food have been made during 1905 by the Inspectors.

The Council, during 1905, decided to ask the Local Government Board to take the necessary steps to amend the law with regard to unsound food, so as to enable action to be taken as required against the original vendor. At present, if a person in the country sells to a butcher in town, carcasses of diseased animals, and the butcher, acting in a straightforward manner, and before he tries to sell the meat, requests the Sanitary Authority to examine it, and such meat is condemned, the Sanitary Authority cannot successfully institute legal proceedings against the original vendor of the meat, because at the time of its surrender to the Sanitary Authority, the meat is not "exposed for sale, or deposited in any place for the purpose of sale or of

preparation for sale." The same applies if the meat be seized in transit.

Again, after delivery to the consignee has actually taken place, it is sometimes ascertained that the latter is a cats'-meat purveyor, who is used by the original vendor as a medium for the distribution of the meat for human consumption. Here, again, it is impossible to obtain a conviction against the original vendor, under existing conditions.

COMBINED DRAINAGE.

Many combined drainages have been reconstructed by the Council during 1905, amounting to £487 11s. (estimated) as the direct result of inspections carried out by the Inspectors in the course of their daily routine duties. The law, as it at present stands, throws the responsibility of repairing certain combined drainages (*viz.*, where previous sanction has not been obtained from the Sanitary Authority) upon the general body of rate-payers. Against this *unavoidable* expense may be credited the large number of combined drainages that are relaid by private owners as the result of voluntary work or of the service by Inspectors of Notices.

HOUSE TO HOUSE INSPECTIONS.

A house to house inspection of a district is a duty laid upon Sanitary Authorities by section 1 of the Public Health (London) Act, 1891 and section 30 of the Housing of the Working Classes Act, 1890. The duty is an important one, but such work can only be carried out with a sufficiently large sanitary staff. Within the Borough, during 1905, a total of 1,914 house to house inspections have been made, dealing with the following streets (whole or part) :—

Marsh Ward.—Bazon Street, Cosham Place, Duke Street, Eaton Street, James's Place, Lower Marsh, Mitre Street, Murphy Street, Stamford Street, St. Andrew's Place, Vine Street, Waterloo Road, Webber Street.

Bishop's Ward.—Abbey Place, Brook Street, Crow Place, Ethelred Street, Richmond Street, Wake Street, Waxwell Terrace.

Princes Ward.—Ashmole Place, Bowling Green Street, Bolney Street, Church Street, Dale Street, Grove Cottages, Granby Buildings (including 25, Salamanca Street, 40—44, Broad Street, and 2—16, Vauxhall Walk), Kibworth Street, Sancroft Street (including Pegwell and Sewell's Cottages), Trigon Mansions.

Vauxhall Ward.—Albert Avenue, Alfred Court, Alfred Cottages, Beech Street, Belmore Street, Brooklands Road, Brookland Street, Conroy Street, Dorset Road, Ely Place, Field's Place, Gladstone Place, Fountain Street, Hemans Street, Hook's Cottages, Layham Cottages, Madrid Place, Milton Place, New Road, Richmond Place, Victoria Mansions.

Stockwell Ward.—Bedford Court, Broomsgrove Road, Clarence Cottages, Fenwick Place, Tandridge Place.

Brixton Ward.—Ann's Place, Baker Street, Crewdson Road, Ingleton Street, Langton Road (flats), Peckford Place, Robsart Street, Smith Street, Vassall Road (flats), Warham Street.

Tulse Hill Ward.—Bartley Street, Brandon Road, Strathleven Road.

Herne Hill Ward.—Clarewood Mews (Coldharbour Lane), Hamilton Road, Sussex Grove.

Norwood Ward.—Beadman Street, Change Alley, Chapel Place, Denmark Place, Durban Road, East Place, East Street, Gloster Street, Knights' Hill Square, Langmead Square, Orchard Cottages (Rommany Road), St. Cloud's Road, St. Gothard's Road, Victoria Place, Weaver's Cottages.

A total of 1,914 houses have been inspected, and in 194 (*i.e.*, 10·1 per cent.) a result was obtained from the chemical test applied to the drains. A total of 2,578 nuisances were found to exist in 1,362 houses (*i.e.*, in 71·2 per cent. of the total houses inspected), but many were of a trifling nature, and in no sense dangerous to the health of the inmates.

Summary.

Number of houses inspected	1,914
Number of houses in which a result was obtained from test (chemical) applied to drains	194
Number of houses in which nuisances were found to exist	1,363

*Nature of Nuisances found and dealt with under the
Public Health (London) Act, 1891.*

Dirty walls and ceilings of rooms	582
Defective roofs or rain water pipes	176
Defective yard paving	328
Defective flushing apparatus in water closets ...	149
Water closet pan foul	98
Gully or drains stopped	56
Drinking water tap defective, making walls damp ...	36
Floors defective	48
No dust-bins (or dust-bins defective or dilapidated)	53
Damp Premises	174
Overcrowding	12
Defective Water Closets	223
Defective Drains	209
Defective or deficient Vent Pipes or Soil Pipes ...	99
Defective Sink Wastes (or not undertrapped) ...	145
Defective Manhole Covers	8
Animals Improperly Kept	8
Cisterns Uncovered or Dirty	43
Improper Water Supply	32

Forecourts insufficiently paved or unpaved	35
Water Closets insufficiently lighted and ventilated ...	21
Smoke Nuisance (flue)... ..	1
Want of proper dung receptacle	3
Want of ventilation under floors	39
	<hr/>
	2,578
	<hr/>

ROUTINE WORK OF INSPECTORS.

During 1905, 667 houses have been re-drained throughout, or in part; and 467 plans (representing the 667 houses) have been received in connection therewith. The drainage work is carried out under the personal supervision of the Inspectors, being in every case water-tested.

9699 tests (hydraulic, smoke or chemical) have been made by the Sanitary Inspectors during 1905.

47 Water Certificates (representing 184 houses separate or in blocks) have been issued during 1905 in accordance with Section 48 of the Public Health (London) Act, 1891; and in this connection, it is to be noted that a Water Certificate is not granted until all the drainage work is completed satisfactorily also.

In addition to drain-testing and supervision, other duties fall to a Sanitary Inspector, and, as fairly representing the work carried out, the numbers of (1) notices served, and (2) inspections and re-inspections made, are a fair criterion. In Lambeth Borough, during 1905, 11,436 notices have been served under the Public Health Act (7,446 preliminary and 3,990 statutory), and 23 under the Metropolis Management Acts, making a total of 11,459, dealing with 9,441 structural, and 2,838 non-structural, defects. 6,650 complaints were attended to during 1905.

The numbers of inspections and re-inspections carried out during 1905 by the Male Inspectors were 9,478 and 59,491

respectively, and to these must be added the summary of work carried out by the Female Inspector and Smoke Inspector (*vide* pages 120-124 and 140-144).

Eight summonses were taken out, and 7 were withdrawn—the owners having, meanwhile, done the works necessary to comply with the notices as originally served. In one case the owner was fined £2 (with 4s. costs) in connection with defective W.C. fittings at 41, Elliott Road.

INSPECTION OF MARKET THOROUGHFARES.

The Market Thoroughfares have been, during 1905, under bi-weekly special inspection by the Inspectors (2 being on duty at a time)—Saturday nights (9 to 12) and Sunday mornings (9 to 12). The Market Thoroughfares are Atlantic Road, Wandsworth Road, New Cut, Lower Marsh and Lambeth Walk. No unsound food has been seized by the Inspectors.

OTHER INSPECTIONS.

The work in connection with disinfection, smoke abatement, factories and workshops, bakehouses, restaurants and dining (coffee) rooms, and the carrying out of the Food and Drugs Acts, is dealt with under special headings in this Report (*vide post*).

WATER SUPPLY TO TENEMENT HOUSES.

The London County Council, during 1905, addressed a circular letter to the Metropolitan Borough and City Councils, drawing attention to a recent decision given by a Woolwich Magistrate to the effect that the supply of water from a tap in the yard was not a proper and sufficient supply within the meaning of section 48 of the Public Health (London) Act, 1891, for a certain three-

storied tenement house in Woolwich; and asking such Councils to take steps to secure the provision of a proper and sufficient supply of water for the tenants of every floor of a tenement house. The Woolwich decision holds good only for the particular house mentioned, and, consequently, the Lambeth Council decided to continue to deal with cases as they crop up, treating each on its individual merits, and not to deal indiscriminately with all tenement houses throughout the Borough that have not a water supply for the top (and each) floor (*vide* Report in Appendix p. 41).

HAIR DRESSERS' AND BARBERS' SHOPS.

During 1905 the Council instructed the Medical Officer of Health to inspect and certify Hair Dressers' and Barbers' Shops as might be required, previous to such being registered (voluntarily) by the Incorporated Guild of Hair Dressers, Wig Makers and Perfumers, but in no single instance has a certificate been applied for.

VENTILATION OF SEWERS AND INTER-CEPTING TRAPS.

The question of the abolition of interceptors to house drains was considered by the Council during 1905, and it was decided that such an abolition was undesirable, having regard to the present condition of drains and sewers. A special report by the Medical Officer will be found in the Appendix to this Report (*vide* p. 35).

WORKSHOPS.*

During 1905, 86† new Workshops have been added to the Register,‡ consisting of the following :—

Name of Trade or Business.	No. of Workshops.
Dressmakers	32
Laundries	6
Milliners	10
Waistcoat Makers	1
Babies' Dresses	2
Watch Maker	1
Children's Costumes	1
Blouses	11
Ladies' Tailor	2
Tie Maker	1
Perfumer (Toilet Soap)	1
Mantles... ..	2
Tailor	3
Ticket Writer	1
Corn Dealer	1
Theatrical Costumier	1
Printers... ..	1
Underclothing	1
Embroidery	1
Shirts	1
Belts	3
Wig Makers	2
Furrier	1
	86

* The new Factory and Workshop Act, 1901, came into force on January 1st, 1902, and entails much extra work, *e.g.*, outworkers, etc.

† Excluding 6 factories, viz.:—1 bottles, 1 clothing, 1 shell articles, 2 sauces, etc., 1 soap powder.

‡ The Register contains (up to the end of 1905) a total of 1,225 workshops with 2,078 workrooms.

Full particulars concerning these 86 Workshops have been entered up in the Register, and it is found that there are connected therewith 120 workrooms, in which were working at the time of inspection 402 persons—18 males and 384 females (*females alone* being employed in 73 workshops). There were found being employed—

	M.	F.	Total.
Children	—	—	—
Young Persons	—	96	96
Adults	18	288	306
	18	384	402

Notices as to the “protected persons” (*i.e.*, children, young persons, and women) employed were sent on to the Factory Inspectors, from time to time, as required (*i.e.*, where no Abstract under the Act was found to have been posted up in a workplace).

16 Notices of occupation of 28 workshops have been received during 1905 by the Borough Council from the Factory Inspectors, as compared with 28 during 1904, 62 during 1903, 25 during 1902 and 32 during 1901, and 3, 32, 60, 31, and 29 received by the late Vestry during the five years 1886-1890 respectively.

9 written Notices have been received during 1905 by the Borough Council from the Factory Inspectors with reference to contraventions of the Public Health Acts in connection with Factories and Workshops, and all such nuisances have been abated, and due notice sent to the Factory Inspectors within one month as to action taken in each case. The number of notices received in 1904, 1903, 1902 and 1901, were 10, 9, 5 and 17, as compared with 16, 8, 27, 25 and 66 received by the late Vestry during the five years 1886-1890 respectively.

In connection with the 86 new workshops inspected during 1905, the following insanitary conditions were met with at the time of the inspections:—

1. *As to Ventilation and Warming and Lighting.*

In 2 out of the 86 workshops (*i.e.*, 2·3 per cent.), the

ventilation was found to be unsatisfactory, and, with one exception, all the workrooms, at the time of inspection, were found to be reasonably warmed by open fireplaces, open or closed stoves, gas jets, steam pipes, etc., and sufficiently lighted.

2. *As to Cleanliness.*

In 15 workshops (*i.e.*, 17·4 per cent.) the workrooms were found to be dirty, and to require cleansing.

3. *As to Sanitary Appliances.*

In 22 (*i.e.*, 25·6 per cent.), the sanitary fittings and appliances were found to be bad. The w.c.'s were outside in 30·6 per cent., inside in 32·9 per cent., and outside and inside in 36·5 per cent. In no single case was separate closet accommodation for the sexes found to be wanting.

The soil pipes were found to be unventilated, or insufficiently ventilated, in 10 cases (*i.e.*, 11·6 per cent.), a condition of things which may, or may not, be a nuisance; but in no case was there found to be direct communication between w.c.'s and workrooms.

4. *As to Dampness.*

In 4 workshops (*i.e.*, 4·6 per cent.), the workrooms were found to be damp.

5. *As to Overcrowding.*

The cubic capacities of the different workrooms were, naturally, found to vary considerably, and in 14 workrooms (*i.e.*, 11·7 per cent.) over-crowding was found to exist.

In addition to inspecting the above workshops wherein females were employed, the special work done by the Female Inspector is dealt with on pages

The inspections made during 1905 in connection with the 6 factories were made with a view to seeing if the requirements of the Acts as to w.c. accommodation for the employees had been complied with. This is the only duty in regard to factories that falls to the Sanitary Inspector.

WORKSHOPS REGISTERED DURING 1905.

Number of Rooms and Persons employed.

New Wards and Inspectors in charge thereof.				No. of Workshops.	No. of Workrooms.	Children.		Young Persons.		Adults.		TOTALS.		
						M.	F.	M.	F.	M.	F.	M.	F.	Total.
Marsh	...	{	Scorrer ...	5	5	—	—	—	—	2	16	2	16	18
			Wallis ...	7	8	—	—	—	5	1	8	1	13	14
Bishop's	...	{	Hooper ...	2	3	—	—	—	—	—	3	—	3	3
Prince's	...		Howes ...	5	7	—	—	—	7	2	31	2	38	40
			Jones ...	1	4	—	—	—	—	1	4	1	4	5
Vauxhall	...	{	Jackson ...	—	—	—	—	—	—	—	—	—	—	—
Stockwell	...		Baxter ...	13	15	—	—	—	3	8	27	8	30	38
Brixton	...	{	Gavin ...	28	40	—	—	—	45	1	85	1	130	131
			Bott ...	14	19	—	—	—	14	1	60	1	74	75
Tulse Hill	...		Smith ...	3	4	—	—	—	2	—	12	—	14	14
Norwood	...		Barfoot ...	8	15	—	—	—	20	2	42	2	62	64
Total				86	120	—	—	—	96	18	288	18	384	402

N.B.—With 1 exception, the Inspections were made in connection with the above 86 Workshops by the Female Inspector.

WORKSHOPS.—Details as to Sanitary

Details as to Sanitary Conditions and Defects found.	Old Parish Districts, and the				
	Marsh.		Bishop's and Prince's.		
	Scorer.	Wallis.	Hooper.	Jones.	Howes.
Ventilation { satisfactory ...	5	6	2	1	5
{ not ...	—	1	—	—	—
Cleanliness { satisfactory ...	4	6	1	1	5
{ not ...	1	1	1	—	—
Workrooms { damp ...	—	1	—	—	—
{ not ...	5	6	2	1	5
Workrooms { warm ...	5	7	2	1	5
{ not ...	—	—	—	—	—
State of sanitary fittings, &c. { good ...	3	5	1	1	5
{ bad ...	2	2	1	—	—
Soil pipe { ventilated ...	4	6	1	1	4
{ not ventilated ...	—	—	—	—	—
{ no soil pipe ...	1	1	1	—	1
Position of W.C. { outside ...	1	7	1	—	2
{ inside ...	4	—	—	—	3
{ outside and inside ...	—	—	1	1	—
{ No W.C. ...	—	—	—	—	—
Separate W.C. accommodation { Yes ...	3	2	1	1	1
{ No ...	2	5	1	—	4
Communication (direct) between W.C.'s & rooms { Yes ...	—	—	—	—	—
{ No ...	5	7	2	1	5

N.B.—The Wards of the old Parish of Lambeth are retained so that this Table may be comparable with those in previous Reports (1897-1901).

* In none of these cases was separate W.C. accommodation

Conditions and Defects found during 1905.

Inspectors in charge thereof.						TOTALS.
Vauxhall & Stockwell.		Brixton.		Tulse Hill, Norw'd.		
Jackson.	Baxter.	Gavin.	Bott.	Smith.	Barfoot.	
—	13	28	14	3	7	84
—	—	—	—	—	1	2
—	11	22	11	2	8	71
—	2	6	3	1	—	15
—	—	3	—	—	—	4
—	13	25	14	3	8	82
—	13	27	14	3	8	85
—	—	1	—	—	—	1
—	7	23	9	3	7	64
—	6	5	5	—	1	22
—	11	25	14	3	7	76
—	—	—	—	—	—	—
—	2	3	—	—	1	10
—	3	6	2	1	3	26
—	1	13	6	—	1	28
—	9	8	6	2	4	31
—	—	1	—	—	—	1
—	8	11	10	2	3	42
—	5	17	4	1	5	*44
—	—	—	—	—	—	—
—	13	28	14	3	8	86

Table may be comparable with those in previous Reports (1897-1901), by the Female Sanitary Inspector.

required—persons of one sex only being employed.

FEMALE SANITARY INSPECTOR.

1905 is another year's record of good work carried out by the Female Sanitary Inspector (Miss Gamble*) in connection with (a) Factories, Workshops (Work-places†), Shops, Out-Workers' Homes, Laundries, etc., wherein women and girls are employed, and (b) Underground Conveniences (belonging to the Council) and other Ladies' Sanitary Conveniences (Railway Stations, Hospitals, etc.)

The year's work, 1905, may be tabulated as follows :—

Summary of work carried out by Female Sanitary Inspector during the year 1905, and during the preceding three years 1902-4 (for comparison).

Workshops† visited and inspected—	1905	1904	1903	1902
(a) Dressmakers	103	80	157	142
(b) Milliners	21	14	12	20
(c) Laundries	17	37	72	70
(d) Tailors	22	7	22	14
(e) Upholsterers	1	—	—	1
(f) Dyers	1	2	2	1
(g) Others	59	23	48	32
Workrooms inspected	330	495	669	325
Workshops† re-inspected	81	98	163	333
Workrooms re-inspected	90	113	214	305
Restaurants re-inspected	—	—	87	118
Workshops†: workrooms therein measured	314	265	450	318
Workshops† removed from Register ...	32	9	19	29
Workshops† reported to H.M. Inspector ...	63	31	19	48
Workshops† reported by H.M. Inspector...	22	13	46	102
Workshops† newly discovered and registered	†92	69	152	3
§ Premises visited but no female hands found to be employed (including Out-workers)	259	135	231	80

* Miss Gamble was elected on October 3rd, 1901, and on December, 1905, the Council elected another female inspector (Miss Lucy M. H. Pearson), her duties to commence on January 1st, 1906.

† Workshops include Workplaces.

‡ Including 6 factories.

§ Houses where the business plate, or the local directory, or advertisements in newspapers, or other sources of information implied a probability that female workers would be employed, but at which none were found at the time of visit.

Female Conveniences visited & inspected—	1905	1904	1903	1902
Public (visits paid)	577	597	343	276
Private (visits paid)	—	—	5	35
Schools visited—				
Public	18	13	20	10
Private... ..	1	2	—	1
Special places visited and inspected—				
(a) Restaurants and Hotels, etc. ...	1	—	22	220
(b) Private Houses	224	322	218	199
(c) Out-workers	303	277	107	—
(d) Others	—	—	3	5
Written Intimations and Statutory Notices served	194	200	198	262
No. of Workshops,† etc., in which no defects were found on inspection ...	507	508	371	382
No. of Workshops† in which defects were found on inspection	245	254	292	322
<i>Particulars of defects found.</i>				
Workrooms—				
Overcrowded	14	11	16	4
Damp	9	10	13	7
Dirty	135	184	217	208
Ill-ventilated	2	1	5	7
Otherwise	3	—	—	3
Defects—				
Yards	11	12	19	29
Floors	4	11	18	19
Roofs	5	6	13	7
Windows	—	1	—	4
Ceilings	6	9	23	17
Rain Water Pipes	4	5	9	13
Premises generally	—	4	5	9
Sanitary Appliances : Waterclosets—				
Dirty	83	64	83	86
Ill-lighted	1	—	—	1
Unventilated	7	1	16	5
Choked	5	3	3	15
Defective	44	28	51	44
Defective Flushing Tanks and Water Supply	39	35	43	91
No separate suitable accommodation for the sexes	7	1	8	—
Drainage—				
Defective, unventilated, etc.	2	6	7	9

† Excluding the 259 premises wherein no female hands were found to be employed.

					1905	1904	1903	1902
Dustbins—								
Wanting	...	...	...	...	25	34	49	72
Defective	...	...	...	...	23	21	33	34
Lavatories—								
Defective or dirty	...	...	...	...	12	—	2	8
Miscellaneous defects (not included above)—								
Animals improperly kept	...	...	...	...	—	1	1	3
Accumulations in yards	...	...	...	...	9	7	2	20
Sink wastes defective...	...	...	...	...	—	—	—	8
Otherwise	...	...	...	...	—	—	1	—
Nuisance referred to M. O. H. for attention by Male Inspectors (defective drains, w.c.'s, etc.)					48	59	86	68

The Female Public Conveniences are under constant supervision by the Female Inspector, 577 visits having been paid thereto during 1905.

Miss Gamble has again during 1905 been engaged in visiting 224 houses wherein deaths from infantile (summer) diarrhœa have been reported as having occurred, with a view to helping to further elucidate the predisposing causes of this disease; and in inspecting schools (19), and the homes of the scholars, in connection with outbreaks of disease (more especially measles).

It will be noted, in connection with the inspections and re-inspections of workshops and workplaces (where women are employed), that the principle defects found are dirty workrooms, dirty sanitary appliances, defective flushing tanks to closets, defective closets, and defective dustbins. Overcrowding was only found in 14 cases—in each instance being slight.

OUT-WORKERS.

The work commenced by the Female Inspector in 1903, and continued during 1904, connected with the visiting and inspecting of out-workers' premises and homes (situated within the Borough of Lambeth), has been further continued during 1905.

This is a special duty devolving upon the Borough Council under Sections 107-110 of the Factory and Workshop Act, 1901, under which an Order (known as the Home-work Order, 1901), has been made by the Home Secretary (*vide* Annual Report, 1903, pp. 118-122).

During 1903-5 a total of 386* out-workers' premises have been inspected (145 during 1905), connected with the following trades and businesses :

	1903.	1904.	1905.	1903-5.
Mantles	6	12	20	38
Blouses and Skirts	10	14	24	48
Ties and Belts and Braces ...	24	19	14	57
Baby Clothing	6	4	4	14
Children's Underclothing and Costumes	5	10	9	24
Women's Underclothing ...	5	2	7	14
Tailors	10	15	8	33
Upholsterers	1	—	1	2
Embroidery	9	3	9	21
Dressing Gowns	2	5	3	10
Shirts	13	7	7	27
Aprons	1	—	2	3
Waistcoats	4	3	4	11
Jerseys	2	—	1	3
Hosiery	1	—	—	1
Widows' Caps	1	—	—	1
Men's Caps	1	1	1	3
Vamp Beader	1	—	1	2
Wigs	2	—	—	2
Incandescent Mantles ...	1	—	—	1
Boots and Shoes	1	4	2	7
Umbrellas	1	—	—	1
Dresses	—	9	7	16

*The total numbers of premises visited 1903-05 were 289, 277 and 303 respectively, but in 483 cases no out-workers were found to be employed at the time of the inspector's visit.

			1903.	1904.	1905.	1903-5.
Millinery	...	...	—	2	5	7
Collars	...	...	—	5	3	8
Sacks	...	...	—	1	—	1
Paper Bags	...	...	—	2	2	4
Boxes	...	...	—	4	2	6
Mattresses	...	...	—	1	—	1
Lace ...	...	...	—	2	1	3
Pinafores	...	...	—	1	—	1
Sheets	...	...	—	4	—	4
Smocking	...	...	—	2	1	3
Needlework	...	...	—	1	1	2
Carpets	...	...	—	1	1	2
Dyers and Cleaners	...	...	—	—	1	1
Buttonhole Making	...	...	—	—	1	1
Straw Hats	...	...	—	—	1	1
Bottle Covering	...	...	—	—	1	1
Fur-pulling	...	...	—	—	1	1
Totals	...	...	107	134	144	386

The Wards in which the houses (wherein these 386 out-workers were found to be working during 1903-5) are situated, are as follows :—

			1903.	1904.	1905.	1903-5.
Marsh	...	...	12	14	8	34
Bishop's	...	...	10	16	29	55
Prince's	...	...	38	13	18	69
Vauxhall	...	...	12	4	5	21
Stockwell	...	...	18	9	19	46
Brixton	...	...	17	37	42	96
Herne Hill	...	...	—	26	12	38
Tulse Hill	...	...	—	10	8	18
Norwood	...	...	—	5	4	9
Totals	...	...	107	134	145	386

HOME WORK ORDER, 1905.

A new Home Work Order was made on August 15th, 1905, by the Secretary of State for the Home Department (the Right Hon. A. Akers-Douglas), in pursuance of the powers conferred upon him by Sections 107, 108 and 110 of the Factory and Workshop Act, 1901. The Order 1905 is as follows :—

1. Section 107 (relating to list of out-workers) and Section 108 (relating to employment in unwholesome premises) shall apply to the following classes of work :—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel and any work incidental thereto; the making, ornamenting, mending, and finishing of lace and of lace curtains and nets; cabinet and furniture making and upholstery work; the making of electro-plate; the making of files; fur-pulling; *the making of iron and steel cables and chains; the making of iron and steel anchors and grapnels; the making of cart gear, including swivels, rings, loops, gear buckles, mullin bits, hooks, and attachments of all kinds; the making of locks, latches and keys; the making of covers for, and the covering, finishing, altering or repairing of, umbrellas, sunshades, parasols, and articles of a similar character, and any work incidental thereto; the making of paper bags and paper boxes; brushmaking; and the making of stuffed toys.*

2. Section 110 (relating to the prohibition of home work in places where there is infectious disease) shall apply to the following classes of work :—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel and any work incidental thereto (as in the said section specified);

the making, ornamenting, mending, and finishing of lace and of lace curtains and nets; upholstery work; fur-pulling; *the making of covers for, and the covering, finishing, altering or repairing of, umbrellas, sunshades, parasols, and articles of a similar character, and any work incidental thereto; the making of paper bags and paper boxes; brushmaking; and the making of stuffed toys.*

3. The lists of out-workers required to be kept by Section 107 and the copies thereof shall be kept and made in the form and manner and with the particulars shown in the Schedule hereto.

4. This Order may be referred to as the Home Work Order of the 15th August, 1905.

5. The Home Work Orders of the 11th December, 1901, and of the 14th July, 1902, are hereby revoked.

A. AKERS-DOUGLAS,

*One of His Majesty's Principal
Secretaries of State.*

Home Office, Whitehall.

15th August, 1905.

N.B.—*Italics* represent additions to the Home Work Orders, 1901 and 1902.

The lists of out-workers must be kept in the form and with the particulars specified in the Schedule of the Order, in the factory or workshop or place from which the work is given out, and must be open to inspection by H.M. Inspectors and the Officers of the Local Authority (Lambeth Borough Council for Lambeth Borough); and a copy of the lists, signed and dated and corrected up to date, must be forwarded to the Local Authority of the District on or before the 1st day of February and the 1st day of August in each year.

DISINFECTING DEPARTMENT.

During 1905 good work has been done in connection with the Disinfecting Department—4,636 infected rooms and 51,552 infected articles (bedding, etc.) having been disinfected, as compared with 4,455 and 26,357 respectively during 1904. A total number of 1853 notifiable infectious diseases have been reported during the year 1905, but a large amount of disinfection has also been carried out in connection with cases of Measles (1,970), Whooping Cough (440), Tuberculosis (598), Chickenpox (733), Verminous Houses (14), Cancer (16), and Other Diseases (156). Full details are to be found on page 130.

Of the compulsorily notifiable diseases, 1853 have been dealt with, whilst 11 Schools (9 public and 2 private) have been disinfected in connection with outbreaks of infectious disease, viz., Measles 8, Scarlet Fever 2 and Chickenpox 1.

Particulars as to disinfection carried out in the Borough of Lambeth during 1905.

Total No. of rooms disinfected by Council	...	4636
Cases in which bedding has been disinfected at home...	...	1
Do. do. do. at Chamber	...	3583
Do. do. do. destroyed	...	47
Bedding replaced by the Council	...	—
Premises disinfected and disinfectants supplied	...	13212
Infected cabs disinfected...	...	1
No. of Cleansing Notices served in connection with infected houses	...	3107
Certificates of Medical Practitioners received in lieu of disinfection by the Council	...	58
Certificates of disinfection left with occupiers of disinfected premises	...	3212

Articles of bedding, etc., disinfected.

Beds	...	2021
Bolsters	...	1555
Pillows	...	4880
Mattresses	...	1293
Pallia-ses	...	155
Chair Cushions	...	635
Clothing	...	16727

Blankets ...	...	...	...	...	...	6102
Rugs and Mats ...	...	...	...	...	...	89
Counterpanes and Eiderdown Quilts ...	...	...	...	...	...	3316
Carpets ...	...	...	...	...	...	92
*Extras (Sheets, &c., <i>i.e.</i> articles not mentioned in above)						
	...	...	...	...	...	14689
Total ...						51552†
<i>Articles of bedding, &c., destroyed.</i>						
Beds ...	...	...	...	...	...	24
Bolsters ...	...	...	...	...	...	7
Pillows ...	...	...	...	...	...	9
Mattresses...	...	...	...	...	...	13
Palliasses ...	...	...	...	...	...	75
Chair Cushions ...	...	...	...	...	...	21
Clothing ...	...	...	...	...	...	63
Sundries ...	...	...	...	...	...	307
Total ...						519

Practically *all* the disinfection was carried out by the Councils officers — only 58 certificates being received from Medical Practitioners during 1905, as compared with 113 during 1904. Particulars as to the 58 certificates (received during 1905) are as follow:—

Medical Certificates† accepted in lieu of Disinfection being carried out by the Borough Council.

Nature of Certificate.	1st Q.	2nd Q.	3rd Q.	4th Q.	Total.
For Rooms only ...	1	2	1	—	4
For Bedding only ...	1	—	—	—	1
For Rooms and Bedding ...	10	8	18	17	53
	12	10	19	17	58

* Including 3690 Sheets.

† Including 26231 Articles from the Norwood Parochial Schools, viz:— beds, 388; bolsters, 201; pillows, 675; mattresses, 446; clothing, 11118; blankets, 2374; sheets, 2371; quilts, 1296; and extras (laundry goods), 7362.

‡ Including 14 from Chicken-pox.

REFUGES.

There are 2 Refuges in the Borough, one at Wanless Road, and the other at the Wharf (Belvedere Road). Neither Refuge has been used during 1905.

DISINFECTING STATION.

From January 1st, 1903, the whole of the disinfecting work has been carried out at Wanless Road, where, since January 1st, 1904, the horses and vans have also been kept, instead of at the Wharf as hitherto—stabling, etc., having been erected for that purpose. From an administrative point of view this new departure is a great improvement. There are 2 Equifex Machines in use, and these have given satisfaction during the year, no single genuine complaint having been received as to damaged goods, etc. The Staff has, collectively and individually, given satisfaction during 1905.

During 1905, an application was received from the Lambeth Guardians asking if arrangements could be made for the disinfecting work required in connection with the Norwood Schools and Schools Infirmary, to be undertaken at the Disinfecting Station belonging to the Council situated in Wanless Road, Herne Hill. The application was, however, refused by the Council, on the ground that administratively (1) such an arrangement would be impracticable as well as fraught with danger to the inmates of the Schools, and (2) an efficient disinfecting machine is an absolute necessity at the Norwood Schools. Once the principle were admitted of the Borough Council doing this disinfecting work for the Guardians, it is probable that many applications would be received from other large public Institutions throughout the Borough, asking for a similar concession.

Some urgent private work was done during 1905 for the India Office, in connection with a smallpox infected troopship "Sicilia"—bedding, clothing, etc., being disinfected and afterward washed and laundried. The charge made was £17 6s. 7d., which was paid into the Council's account.

NON-NOTIFIABLE INFECTIOUS DISEASES, ETC., 1899—1905.

	1st Q.	2nd Q.	3rd Q.	4th Q.	Total. 1905.	1904.	1903.	1902.	1901.	1900.	1899.	Yearly average 6 years (1899-1904).
Measles ...	150	324	166	1330	1970	1294	1346	364	728	941	773	907·6
Whooping Cough	63	220	85	72	440	380	325	110	72	126	58	178·5
Chicken-pox ...	228	203	88	214	733	305	356	1625	78	88	21	412·1
Consumption* ...	149	140	182	127	598	659	269	488	483	524	474	499·5
Cancer ...	4	5	1	6	16	20	13	34	15	23	13	19·6
	594	892	522	1749	3750	2658	2309	2621	1376	1702	1339	2000·8

* Consumption *voluntarily* notifiable throughout the Borough since June 1st, 1902.

N.B.—156 other diseases (not classified) *i.e.*, Mumps, Ringworm, Influenza, Scabies, Pneumonia, Glanders, Diseases not stated, etc., and 14 Verminous Houses, were also dealt with during 1905.

DISINFECTION STATISTICS.

For eight years prior, and fifteen years subsequent, to the passing of the Notification of Infectious Diseases Act; and for the year 1905.

		1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	Yearly average for 8 years pre- ceding the Not- ification Act.	1905.
No. of Cases in which Bedding, etc., has been disinfected.	At Home	332	258	278	10	62	52	7	144	142.8	1
	At Chamber	85	56	162	509	236	722	902	951	452.8	3583
No. of Cases in which Bedding, etc., has been destroyed.	...	37	23	62	52	8	57	48	79	45.7	47
No. of Articles of Bedding, etc., disinfected.	...	1526	1437	1895	2275	916	3078	3121	3778	2153.2	51552
No. of Articles of Bedding, etc., destroyed.	...	63	104	114	144	59	92	61	267	113.0	519
Premises Disinfected and Disinfectants Supplied.	...	727	680	677	727	736	1276	1255	1277	916.8	13212
Infectious diseases dealt with.	Notifiable†	—	—	—	—	—	—	—	—	—	1853
	Non-notifiable†	—	—	—	—	—	—	—	—	—	3927

† *vide* footnote on page 130.

DISINFECTION STATISTICS—*Continued.*

	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	Yearly average for 15 yrs. succeeding the Notification Act.	1905
No. of cases in which Bedding, etc., has been disinfected.																	
At Home ...	179	246	593	343	177	251	368	217	132	81	62	37	20	19	6	182.1	1
At Chamber ...	1391	1570	2540	3042	2206	2472	2447	2126	2124	2998	2450	3040	3702	3253	3107	2584.5	3583
No. of cases in which Bedding, etc., has been destroyed.	185	275	314	224	119	6	49	39	27	44	59	75	134	62	53	111	47
No. of Articles of Bedding, etc., disinfected.	3013	6747	9909	11513	8022	13516	20349	21487	21597	27923	27528	27265	41029*	26957	26359	19547.6	51552
No. of Articles of Bedding, etc., destroyed.	333	467	605	674	544	186	178	162	126	326	1783	959	1006*	587	479	561	519
Premises disinfected and disinfectants supplied	1722	1816	3157	5896	5742	7146	7210	8715	8441	9146	9124	9522	12607	10984	12367	7567	13212
Infectious Diseases dealt with																	
Notifiable† ...	—	1676	3025	4070	2433	2685	2801	2663	2329	2693	2209	2025	4273	1587	1938	2600.5	1853
Non-Notifiable† ...	—	—	—	—	—	—	20	87	144	1339	1702	1376	1394	2269	2638	1183.4	3927

* Including 26145 and 355 Smallpox articles disinfected and destroyed respectively in 1902.

† The Notification Clauses of the Public Health (London) Act, 1891, came into force on January 1st, 1892, and previous to 1896 practically no attention was paid to disinfection in connection with the non-notifiable infectious diseases.

N.B.—The Statistics for 1901-5 refer to the Borough Council; those for all previous years, to the late Vestry.

ANALYSIS OF FOOD AND DRUGS, WATER, &c.

1.—Food and Drugs.

During the year 1905, 1,200 samples have been purchased through the Food and Drugs Inspector (Mr. Perrin) within the Borough of Lambeth, and submitted to the Public Analyst for analysis. Of the 1,200 samples, 57 (*i.e.*, 4·8 per cent.) were reported by the Analyst to be adulterated, varying quarterly as follows:—1st quarter, 5·6 per cent.; 2nd, 4·2 per cent.; 3rd, 2·6 per cent.; and 4th, 5·3 per cent.; and 41 summonses were issued, with the result that 30 convictions were obtained, together with £47 0s. 0d. in penalties, and £19 0s. 8d. in costs. In 10 cases the vendors were cautioned. Full details are to be found on pp. 136-138, and in the Appendix (pp. 27-33).

Taking the average of 10 years (1891-1900), the annual number of samples taken in the old Parish of Lambeth is 501, of which 74 (*i.e.*, 14·8 per cent.) were found, on analysis, to be adulterated; whilst the annual average number of summonses issued is 53, with 52 convictions and £104 5s. 5d. in penalties, and £35 0s. 3d. in costs. In 16 cases (average), the vendors were cautioned. In the Borough, 710, 704, 1,010 and 1,200 samples were taken during 1901, 1902, 1903 and 1904 respectively.

During 1905, 6 samples were submitted to the Public Analyst by private purchasers, *viz.*: vinegar 1, and butters 5. The 5 samples of butter were all declared by the Analyst to be adulterated, *viz.*, 94, 97, 97, 99 and 100 per cent. of margarine respectively. The sample of vinegar was declared to be genuine.

One sample of milk, suspected to contain preservatives, was submitted privately, and proved, on analysis, to be free from both formalin and boracic acid.

Particulars of the 1,200 articles submitted by the Food and Drugs Inspector during 1005 are as follows :—

(a) MILK.

716 samples were taken, and of these 49 (*i.e.*, 6·8 per cent.) were declared by the Analyst to be adulterated. 10 of the samples were purchased as “separated” milks (2 adulterated), whilst 1 was purchased as “skimmed” milk (adulterated). The 49 adulterations found were as follows :—

(1) Added water (21), varying from a *minimum* 3 to a *maximum* 28 per cent.

(2) Deficient in cream (26), varying from a *minimum* 4 to a *maximum* 46 per cent.

(3) Both added water and deficient in cream (2), 2 per cent. added water and 4 per cent. deficient in cream, and 4 per cent. added water and 5 per cent. deficient in cream. respectively.

Of the 10 separated milks 1 proved to be hand skimmed, with 6 per cent. of added water, and 1 separated milk, with 18 per cent. of added water.

The sample of skimmed milk contained 20 per cent. of added water.

In 33 cases summonses were taken out, and in 23 cases convictions were obtained, with penalties varying from a *minimum* 10s. (with 12s. 6d. cost) to a *maximum* £5 (with 12s. 6d. costs). In the remaining 10 cases the results of the summonses were as follows :—

(a) warrant issued for arrest — the defendant having absconded (1);

(b) summonses dismissed (9)—warranty proved (4); offence not proved (3); doubt as to identity of churn (1); technicality

in summons (the presence of formalin not being mentioned),
(1).

In 15 cases no action was taken for the following reasons :—

(a) bottles burst (2).

(b) amount of adulteration too small (13).

The total fines amounted to £41 10s., with £15 0s. 6d. costs.

(b) BUTTER.

211 samples were taken, and of these 6 (*i.e.*, 2·8 per cent.) were declared by the Analyst to be adulterated—the adulterations consisting of added margarine varying from a *minimum* 10 to a *maximum* 100 per cent.

In 6 instances summonses were taken out, and 5 convictions obtained, with penalties varying from 10s. (with 12s. 6d. costs) to £1 (with 12s. 6d. costs), one summons being withdrawn on account of the Somerset House Analyst not upholding the certificate of the Public Analyst.*

The total fines amounted to £4 10s., with £3 2s. 6d. costs.

(c) COFFEE.

83 samples were taken, and of these 2 (*i.e.*, 2·4 per cent.) were declared by the Analyst to be adulterated with added chicory, viz. : 45 per cent. and 50 per cent. respectively. A conviction was obtained in each case.

The total fines amounted to £1 with £1 5s. costs.

The other samples of Food and Drugs (190 in number) taken by the Inspector were declared by the Analyst to be unadulterated.

The expenses connected with the carrying out of the Food and Drugs Acts in Lambeth Borough during 1905 amounted to £84 2s. 0d.—consisting of £27 5s. 11d. for samples, £25 4s. 0d. for Assistant (Deputy), £4 6s. 6d. for

* Somerset House certified that the sample of butter was "highly suspicious," but that no foreign fat could be found therein.

Witnesses, 6s. 0d. for Collecting Evidence, £26 1s. 1d. for Travelling Expenses, and 18s. 6d. for Sundries. The salary of the Food and Drugs Inspector (£120 rising by £10 annual increases to £200), and the cost of the summonses (£4 18s. 0d.), are not included in the above.

SALE OF FOOD AND DRUGS ACTS.

Samples procured, together with the results of Analyses, during the year 1905.

Samples.						Number Procured.	Number Adulterated
*Milk	...	...	...	...	...	716	49
Butter	...	...	...	...	...	211	6
Cheese	...	...	...	...	...	—	—
Margarine	...	...	...	...	...	2	—
Wheaten Flour	...	...	...	...	...	2	—
Lard	...	...	...	...	...	—	—
Bread	...	...	...	...	...	—	—
Coffee	...	...	...	...	...	83	2
Mustard	...	...	...	...	...	15	—
Pepper	...	...	...	...	...	39	—
Sago	...	...	...	...	...	6	—
†Drugs	...	...	...	...	...	5	—
Tea	...	...	...	...	...	3	—
Ground Rice	...	...	...	...	...	18	—
Oatmeal	...	...	...	...	...	17	—
Olive Oil	...	...	...	...	...	19	—
Arrowroot	...	...	...	...	...	15	—
Baking Powder	...	...	...	...	...	6	—
Pea Flour	...	...	...	...	...	13	—
Vinegar	...	...	...	...	...	18	—
Chocolate Powder	...	...	...	...	...	12	—
Totals						1200	57

* Separated milk 10, skimmed milk 1.

† Cream of tartar 2, milk of sulphur 3.

Particulars as to samples analysed, and proceedings taken, during 1905 (Borough), and during the ten years 1891-1900 (Parish).

Year.	No. of Samples Analysed	No. of Samples adulterated.	Percentage of Samples adulterated.	No. of Summonses issued.	No. of Convictions.	No. of Cautions.	Penalties.	Costs.
Borough Council.							£ s. d.	£ s. d.
1905	1200	57	4·8	41*	30	10	47 0 0	19 8 0
Late Vestry.								
1900	603	73	12·1	57	52	10	104 10 0	42 6 6
1899	600	65	10·8	52	49	6	76 10 0	29 12 6
1898	602	74	12·3	57	54	6	69 0 0	34 9 0
1897	546	41	7·5	7	21	2	48 0 0	24 5 0
1896	549	66	12·02	66	60	2	93 0 0	35 11 6
1895	500	87	17·4	64	62	23	149 15 0	41 18 0
1894	495	107	21·6	81	79	26	199 0 0	45 11 0
1893	498	120	24·09	79	79	41	207 17 0	48 19 0
1892	332	65	19·5	43	43	22	66 8 6	32 9 0
1891	292	48	16·4	25	24	23	28 13 6	15 1 0
Average of 10 years 1891—1900.	501·7	74·6	15·1	53·1	52·5	16·1	104 5 5	35 0 3

Inspector Perrin commenced his duties on February 21st, 1898, *vice* Inspector Wiggs, who did the work from August 1892, to November 1897.

* 9 Summonses were dismissed, and 1 withdrawn, during 1905.

Shewing percentage of different adulterated Samples during 1904 (Borough), and in ten years 1891-1900 (Parish).

Year.	Milk.	Butter.	Coffee.	Bread and Flour.	Cocoa and Chocolate.	Cheese and Lard.	Other Groceries.	Sundries.	Spirits.	Brandy.	Gin.	Rum.	Whisky.	Ale and Porter.	Wines.	Aërated Waters.	Drugs.
Late Vestry.	Boro' Council																
	1905	6.8	2.8	2.4	0.0	0.0	—	0.0	0.0	—	—	—	—	—	—	—	0.0
	1900	14.2	11.0	17.8	—	—	0.0	3.5	0.0	0.0	—	—	0.0	0.0	—	—	0.0
	1899	10.9	14.5	6.9	—	—	0.0	2.7	0.0	21.4	33.3	—	0.0	20.0	—	—	0.0
	1898	13.6	14.5	10.3	—	0.0	0.0	0.0	0.0	11.1	—	0.0	50.0	5.9	—	—	18.8
	1897	10.5	7.3	3.03	0.0	0.0	0.0	2.0	11.1	17.7	—	25.0	18.2	0.0	—	—	14.3
	1896	11.06	17.7	15.1	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0	—	—	0.0	0.9
	1895	21.05	14.7	26.4	—	0.0	0.0	0.0	16.6	16.0	—	12.5	25.0	—	0.0	0.0	12.5
	1894	27.6	22.4	30.0	—	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	—	—	—	0.0
	1893	30.4	35.04	11.1	0.0	18.2	0.0	3.3	0.0	8.7	20.0	0.0	0.0	11.1	—	—	0.0
Late Vestry.	1892	31.3	36.4	18.4	—	66.7	0.0	2.1	0.0	0.0	0.0	0.0	—	0.0	—	—	0.0
	1891	47.8	5.0	3.8	0.0	—	—	2.6	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0

0.0 means that all samples were reported to be genuine and unadulterated. — means that no samples were taken during the year.

SALE OF WHISKEY BILL.

This Bill was introduced into the House of Commons during 1905, its object being to secure to purchasers of whiskey a clear statement whether it is a whiskey made in a pot still from pure malt, or from malt and corn, or is in part a spirit made in a patent still from unmalted grain. The Bill was approved by the Council on April 13th, 1905.

LOW STANDARDS OF QUALITY OF MILK.

It has been suggested that, from a point of view of equity, where the amount of adulteration is small, no action should be taken against the vendor, except under special conditions. It is well known that at times the quality of freshly-drawn milk from the cow varies, and this fact has been officially emphasised during 1905 in the circular letter, dated March 25th, 1905, from the Board of Agriculture and Fisheries. The Board's letter draws attention to accidental causes of deficiency of milk-fat or milk-solids as compared with the limits laid down in the Sale of Milk Regulations, 1901, and suggests that vendors should, in the first instance, be cautioned, the Sanitary Authority refraining from the institution of proceedings, or withdrawing from any proceedings that may have been already instituted. The matter is one that requires careful handling, as farmers and milk vendors should be required to deal with milk of normal quality, of a standard not lower than the Government standard.

MILK SAMPLING ON SUNDAYS.

Special raids were made during 1905 upon Sunday vendors of milk, 40 samples being taken at shops, and 41 in the streets (*i.e.*, on delivery) in the mornings and evenings. Of the 81 samples taken 6 (*i.e.*, 7·4 per cent.) were declared by the Analyst to be adulterated. Judging by these samples it will be noted that the percentage of adulterated samples is not greater on Sundays than other days—at least, as far as Lambeth Borough is concerned. There is a practical difficulty in Sunday sampling

of milk during the hot weather as the samples are not analysed until the following day, and the milk may, in the meantime, undergo decomposition. To minimise this difficulty, and to assist in keeping in good condition reserved samples of perishable articles, the Council have decided to purchase a suitable ice safe.

II. Water.

One sample of well water, taken from Ingram House, was examined during 1905 (August 28th), and found, on examination, to be pure, as shown by the following results:—

	Grains per gallon.
Chlorine	1·7
Free Ammonia	0·0067
Albumenoid Ammonia	0·0028
Nitrates	a trace
Oxygen consumed in 15 minutes	0·002
Oxygen consumed in 4 hours ...	0·008
Total solids	28·7
Permanent hardness	2·1
Total hardness	20·47
Colour—opalescent, pale yellow.	
No trace of metals.	

SMOKE ABATEMENT.

During 1905 there have been made 600 special observations and enquiries in connection with smoke abatement throughout the Borough, as compared with 540, 720, 679 and 620 during 1904, 1903, 1902 and 1901 respectively. This is an important duty, and one that a Sanitary Authority is right in carrying out rigorously.

During 1905, 54 smoke notices have been served, and the nuisances abated. In no case was it found necessary to proceed to summonses.

The following Firms have been under special observation during 1905 by the Borough Council's Smoke Inspector:—

Charing Cross and Strand Electricity Supply Company 85,
Commercial Road.

Messrs. Clowes & Sons, Duke Street.

City and Waterloo Railway Generating Station, Launcelot
Street.

Messrs. Walkers, Parker & Co., Belvedere Road

Messrs. Seth Taylor, Commercial Road.

Messrs. McGaw, York Road, Westminster Bridge.

New London Brewery, Durham Street.

Beulah Laundry, South Lambeth Road.

Sunnybank Laundry, South Lambeth Road.

Messrs. Doulton & Co., Albert Embankment

Messrs. Hammerton & Co., Stockwell Brewery.

Messrs. Stiff & Sons, Albert Embankment.

Arlington Laundry, Wanless Road.

Belvedere Laundry, Acre Lane.

Messrs. Judge, Milverton Road.

254, Brixton Hill (Messrs. Webb).

Washington Laundry, Langton Road.

Electric Light Works, Electric Avenue.

Messrs. Clarke, Brixton.

Messrs. Howell, Belvedere Road.

Jews' Hospital, Knight's Hill Road.

Messrs. Mumford, Albert Embankment.

Messrs. Nightingale, Albert Embankment.

Messrs. Crosse & Blackwell, Belvedere Road.

L.C.C. Works, Belvedere Road.

Messrs. Meredith & Son, Belvedere Road.

Messrs. Barrett, Wandsworth Road.

Messrs. Higgs & Hill, South Lambeth Road.

Messrs. Holloway Bros., Belvedere Road.

Bon Marché, Electrical Works, Nursery Road.

City and South London Electrical Railway, Generating Station, Clapham Road.

Messrs. Hyde, Harold Street.

Lion Brewery Company, Belvedere Road.

Messrs. Fremlin & Co., Dane's Road.

South Metropolitan Gas Company, Works, Vauxhall.

Messrs. Francis & Son, Brixton.

Bonanza Bakery, 213, Lyham Road.

Messrs. Webb & Sons, Albert Embankment.

Messrs. Brotherhood, Belvedere Road.

158, Old South Lambeth Road (Bakery).

The above list will give an idea of the amount of work involved in carrying out the Nuisance Clauses of the Public Health Act, which have reference to the emission of black smoke from a chimney (other than the chimney of a private dwelling-house) in such quantity as to be a nuisance. In addition to this special work carried out by the Borough's Smoke Inspector, the London County Council has, during 1905, written 13 letters to the Borough Council, drawing attention to smoke nuisances observed by their own officers as follow :—

Messrs. Doulton & Co., Albert Embankment.

Messrs. Stiff & Sons, Albert Embankment.

Messrs. Fremlin, Danes Road.

South London Electric Supply Corporation, Limited, Bengeworth Road.

Mr. L. S. Hart (Baker), 63, Stockwell Road.

Bon Marché Electric Works, Brixton (2 occasions).

Norwood Brewery, Chapel Road.

Messrs. Webb & Son, Albert Embankment.

Messrs. Mumford, Albert Embankment (5 occasions).

Sunnybank Laundry, South Lambeth Road.

468, Brixton Road (Bakery).

Messrs. Brotherhood, Belvedere Road (2 occasions).

With one or two exceptions, the whole of these Firms reported by the London County Council were already under observation

by the Borough Council's Officer at the time of the receipt of the complaints; as also were the following Firms, reported to the Borough Council in the 14 communications of the Coal Smoke Abatement Society, whose head offices are at 61, Godolphin Road, Shepherd's Bush, W. :—

Lion Brewery (8 occasions).

Messrs. Mumford, Albert Embankment.

Messrs. Crosse & Blackwell, Belvedere Road.

Messrs. Meredith & Son, Belvedere Road (5 occasions).

Messrs. Howell, Belvedere Road (4 occasions).

Messrs. Stiff & Sons, Albert Embankment).

Messrs. Younghusband, Barnes & Co., Commercial Road.

Shot Tower Wharf, Commercial Road.

Messrs. Seth Taylor, Waterloo Bridge (3 occasions).

Messrs. Doulton, Lambeth (6 occasions).

Charing Cross & Strand Electricity Corporation, Commercial Road (20 occasions).

Messrs. McGaw, York Road.

Messrs. Holloway Bros., Belvedere Road (3 occasions).

Messrs. Brotherhood, Belvedere Road (6 occasions).

The Act lays down that *black* smoke only is a nuisance liable to be dealt with summarily under Section 2 of the Act, and there is, consequently, great difference of opinion (at times) as to what is, and what is not, *black* smoke, amongst observers. This is exemplified in the case of the Bonanza Bakery Chimney (Lyham Road). Complaints were received by the Council, and, as a result, special observations were taken for a total of 52 hours. No *black* smoke was noticed during the whole of that time—it being found that coke only was burnt in the furnace as fuel. Wooden boxes, paper, shavings, straw, etc., were burnt at times, and in this connection the occupiers were cautioned.

Special series of observations have been again taken during 1905 in connection with the firms whose manufactories are situated on the south side of the Thames, along Belvedere and Commercial Roads, but in no single instance was a nuisance

from *black* smoke found with which the Inspector could legally deal—the only infringements of the Act noticed being black smoke issuing for short periods varying from 1—3 minutes, *i.e.*, at times of stoking. No action was taken before the magistrate in regard to several nuisances observed, due to breakdowns of machinery, accidental use of wrong coal, etc.—but in each instance cautionary notices were served.

Smoke nuisances from copper flues (Prince's Road and Upper Tulse Hill) and forges (Harold Street and Halstead Street) have been dealt with during 1905.

As shewing the good to be obtained from the service of notices, attention may be drawn to the Jews' Hospital, Knight's Hill Road, West Norwood, in connection with which a serious nuisance from black smoke was dealt with and abated during 1905. Special daily observations were carried out for a period of 14 days (March 18th to April 1st), between the hours of 8 and 9 a.m., with the result that during that period dense black smoke was noticed to be issuing from the chimney for a total of 84 minutes. Notices were served, and in consequence the quality of coal used was changed for better class, the defective smoke preventor replaced by a new one up to date, improved furnace bars supplied, an electric fan provided to create a forced draught, and a new engineer engaged. Subsequent observations have shewn that the nuisance has been abated.

REFUSE AND MANURE DEPOTS.

The 13 public depôts, situated in Lambeth Borough, have been under constant (daily during the summer months) supervision during 1905.

CONVEYANCE OF THE CARCASSES OF DEAD HORSES ALONG PUBLIC STREETS.

The Bye-law made by the London County Council with reference to the conveyance of the carcasses of dead horses

through and along public streets in the County of London was approved by the Local Government Board on February 21st, 1905. The Bye-law is as follows :—

Any person who shall convey the carcase of a dead horse through or along a public street in the County of London shall use for such purpose a vehicle constructed and closed in such manner that such carcase shall be completely concealed from public view, and the body of such vehicle shall be made of or lined with impervious material so as to prevent any liquid or discharge from the said carcase escaping from such vehicle.

He shall so convey such carcase along the public streets with all reasonable dispatch, and so as to prevent any nuisance arising therefrom.

Any person who shall offend against this Bye-law shall be liable for each breach of such Bye-law to a penalty of forty shillings.

This Bye-law shall not extend to the City of London.

EFFLUVIUM NUISANCES.

(1)—1A PARADISE ROAD, CLAPHAM ROAD.

Attention was drawn during 1905 to a trade process recently established at 1a, Paradise Road, by Mrs. Schonboon, trading under the name of the London Size Company. The trade consists of the making of (a) bookbinders' glue, and (b) builders' size. In both processes, glue is first soaked in tanks, or tubs, and then melted in cylinders, mixed with sugar and alum, &c. The premises, wherein the trade was carried on were found to consist of a stable and an adjoining coach house, and to be in every way unsuitable for the carrying on of such a trade process, being ill-lighted and ill-ventilated. There was one small boiler in use for the production of the steam necessary for the melting of the glue.

The trade process was found to be causing effluvia so as to be a nuisance, or injurious or dangerous to the health of the inhabitants of the district in which the premises are situated. A memorial signed by over 10 inhabitants was received complaining

of the effluvium nuisance, and the Council, in consequence, gave instructions for action to be taken under Section 21 of the Public Health (London) Act, 1891.

The business of a "Glue and Size Manufacturer" has been scheduled as an offensive trade under the Metropolis Local Management Act, but legal difficulties arise when an endeavour is made to bring the trade process at 1a, Paradise Road, Clapham Road, within such a definition.

(2)—MESSRS. DOUBLEDAY'S PREMISES AND THE BELVEDERE LAUNDRY, ACRE LANE.

Complaints were received during 1905 of effluvium nuisances connected with Messrs. Doubleday's premises (provision merchants) and the Belvedere Laundry, affecting the Santley Street L.C.C. School which is situated close by. Special observations were taken, but no nuisance was discovered with which the Council could be advised to deal with any prospect of success.

(3)—SHOT TOWER WHARF DESTRUCTOR BELONGING TO THE WESTMINSTER CITY COUNCIL.

Several complaints have been received during 1905 with regard to the nuisance that at times arises in connection with the chimney shaft of the Shot Tower Wharf, Horsfall Destructor. Further improvements have been effected in the plant as follows:

- (1) Introduction of a fan for the purpose of maintaining an induced draught in connection with the cell fires;
- (2) Provision of stoking holes in the hopper covers over the feed holes of the cells to obviate the necessity of removing the covers during the rakings of the fires;
- (3) Re-erection of galvanised iron sheeting so as to screen off the cells from the Commercial Road.

In addition, careful feeding of the cells is exercised, *e.g.*, sufficient time is allowed to ensure the destruction of previous loads before the cells are again charged—(*vide* Report in Appendix, pp. 91-4).

(4)—SOUTH-EASTERN RAILWAY ARCHES, YORK ROAD.

A complaint was received during 1905 as to an effluvium nuisance connected with an arch in York Road, adjoining the premises of Messrs. Simmonds & Co., Brewers, of 32, York Road. The arch is used by Messrs. Burgess & Co., of the Strand, for the purpose of mixing pickles, &c.,—the trade process involving the mixing together of acid and brine, with the result that, at times, a serious nuisance is caused (the effluvia penetrating through the pervious brick wall of the arch dividing such arch from Messrs. Simmonds & Co.'s premises). The dividing wall has been rendered impervious, and greater care is exercised in manipulating the mixing processes, with the result that no further complaints have been received.

(5)—CLARKSON'S & COOKSON'S YARDS, TINWORTH STREET.

At times, refuse has been found to have been deposited for a longer period than 24 hours, which is the limit specified by Bye-law 8 of the London County Council's Bye-laws made under Section 16 (1) of the Public Health (London) Act, 1891. No action has been taken as, in each instance, a reasonable excuse has been offered, *e.g.*, unavoidable delay, structural alterations to destructors, &c.

HOUSES LET IN LODGINGS.

The 372 registered houses have been visited regularly, but no new house has been registered, during 1905.

The rigid enforcement of the Bye-laws as to Houses Let in Lodgings is unsatisfactory in practice, and the custom in Lambeth Borough is to depend upon dealing with contraventions of the sections of the Public Health (London) Act (*i.e.*, nuisances) as they may arise, rather than with contraventions of such bye-laws. The London County Council holds a different view, and is pressing the Lambeth (and other) Metropolitan Councils to enforce the Bye-laws as to Houses Let in Lodgings.

COMMON LODGING HOUSES.

7 Common Lodging Houses (for men), situated within the Borough of Lambeth, have been licensed by the L.C.C. during 1905, at the Annual Licensing Meeting held June 30th, 1905, as follows :—

Date when registered.				Situation.				Author- ised No. of Lodgers.
27th January, 1905	...	...	10A	Belvedere-crescent	...	...	...	22
18th July, 1900	...	...	108	Lambeth-walk (C.H.) (house in rear).	...	...	...	38
30th October, 1890	...	...	55	Belvedere-road	...	...	...	53
16th October, 1901	...	...	161	Stamford-street	...	...	...	24
21st December, 1883	...	...	90-92	Westminster-bridge-road	...	...	...	171
24th October, 1885	...	..	89 & 91	Wandsworth-road	...	...	...	216
12th February, 1887	...	...	126	Wandsworth-road	...	...	...	149

Under the Common Lodging Houses Acts, 1853-5, the London County Council has control over all the Common Lodging Houses situated within the Metropolis—a duty which the newly-formed City and Borough Councils might, with advantage, have had transferred to them when the London Government Bill, 1899, was brought in. All Common Lodging Houses must be licensed by the London County Council annually (*vide* London County Council General Powers Act, 1902, Part IX., Section 46).

HOUSING OF THE WORKING CLASSES.

It has only been found necessary to condemn 2 houses during 1905, under the Housing of the Working Classes Acts, *e.g.*, 45 and 47, St. Agnes Place, Kennington Park Road—the premises being dirty, damp and dilapidated, with defective drains and yard paving. The 2 notices were served on Dec. 30th, 1905.

The Council decided against using the land belonging to the Borough and situated at the south-eastern end of the Borough Cemetery abutting on Merton Road, Wimbledon, for the purpose of erecting dwellings for the working classes under the provisions of the Housing of the Working Classes Acts. In arriving at this decision the Council was influenced by the fact that the land is situated too far away from the Borough (central congested portions). The Council approved of action being limited to erecting dwellings within the limits of the Borough

The Council also approved of the following resolutions arising out of those passed at the Conference convened by the Workmen's National Housing Council, and held at Essex Hall, on December 3rd, 1904, and gave instructions for a copy to be sent to the London County Council:—

(a) That no room used for human habitation, in any house or premises hereafter to be erected, should contain an air space of less than 1,200 cubic feet.

(b) That the provisions of the Housing of the Working Classes Act, 1903, should be so extended as to compel every person, Company, or Authority, demolishing houses occupied by members of the working classes, to re house such persons so displaced.

(c) That, in view of the bearing which the facilities of transit have on the housing question, the hour up to which cheap return tickets are issued on tramways and railways should be extended to a later hour in the morning, and that such tickets should be available for all classes of persons.

REVENUE ACT, 1903.

During 1905, 458 Certificates under the Revenue Act, 1903, in connection with tenements (or dwellings) so constructed as to afford suitable separate accommodation for such of the families inhabiting the same, have been applied for, and, of these, 267 have been granted *unconditionally*; 179 have been granted *conditionally*, *i.e.*, on condition that certain alterations and improvements are carried out; and 12 have been refused.

Certificates granted unconditionally.

Address.	Blocks or Houses.	Tene- ments.
1—15, Dover House, Cormont Road	... 2	... 15
1—18, Garden Houses, Webber Street	... 3	... 18
1—18, Kenbury Mansions, Kenbury Street, Coldharbour Lane	... 3	... 18
Lennox Buildings, Wandsworth Road	... 1	... 40
Clere Cottages, Wandsworth Road	... 7	... 7
1—84, Mitre Street, New Cut	... 14	... 84
85—166, Mitre Street, New Cut	... 13	... 82
37—39, Wandsworth Road	... 1	... 3
Totals	... 44	267

Certificates granted conditionally.

Albion Villa, Aldebert Terrace	... 1	... 4
1—12, Ashmere House, Acre Lane	... 1	... 12
40, 42, 44, Broad Street, 6—15 (inclusive), Granby Buildings, 25, Salamanca Street and 2, 6, 8, 10, 12, 14, 16, Vauxhall Walk	1	... 63
9, 9a, 11, 11a, Paradise Road...	... 4	... 12
24, Tunstall Road, Brixton	... 1	... 3
47, 49, Vassall Road and 1—16 (inclusive), Langton Road	... 5	... 32
53—105 (inclusive), Victoria Mansions, South Lambeth Road	... 3	... 53
Totals	... 16	179

Certificates refused.

7, 34, 36, 63, Somerleyton Road, Brixton ... 4 ... 12

BAKEHOUSES.

There are 214 Bakehouses (135 above ground and 79* underground) situated within the Borough of Lambeth, and these have been inspected during 1905, and the necessary annual white-washing and cleaning carried out.

OFFENSIVE TRADES.

During 1905, no nuisance has been reported in connection with the 6 Offensive Trades, which exist in the Borough of Lambeth, and which are now under the supervision of the Borough Council:—

1. Fat Melters—Upper Marsh (Messrs. J. C. & J. Field).
2. Tallow Melters—144, Broadwall (Messrs. Harris, Blackman & Sons).
3. Soap Boilers—Upper Marsh (Messrs. J. C. & J. Field).
4. Soap Boilers—144, Broadwall (Messrs. Harris, Blackman & Sons).
5. Tripe Boilers—103, Lambeth Walk (Messrs. Bennett, Son & Co.)
6. Tripe Boilers—115, Lower Marsh (Messrs. Bennett, Son & Co.)

* 72 have been certified as "suitable" for occupation as underground bakehouses.

SLAUGHTER-HOUSES.

There were within the Borough of Lambeth at the end of 1904, 30 registered Slaughter-houses, and at the annual Licensing of the London County Council, held on October 30th and November 30th respectively, the licenses were renewed with the following exceptions:—

124, Lower Marsh—Not in use as slaughter-house for past 9 months ;

38, Walnut Tree Walk (rear of)—Not in use as slaughter-house for past 9 months ;

66, Knight's Hill Road, West Norwood—No application for license made.

LIST OF THE 27 SLAUGHTER-HOUSES LICENSED IN THE BOROUGH OF LAMBETH DURING 1905.

Ward.	Situation of Premises.				Name of Licensee.
Marsh ...	106,	Lower Marsh	...	...	Thomas, Robert Edwin
" ...	99,	" "	"	"	Horton, George Holdstock, Jno. Thos.
Bishop's ...	151,	Lambeth Walk	...	...	Wright, Samuel
" ...	165,	" "	...	...	Wright, Samuel
" ...	172,	" "	...	...	Cotching, Wm.
Prince's ...	406,	Kennington Road...	...	...	Parsons, W. B.
" ...	60,	Kennington Park Road	...	...	Grellier, Frederick
" ...	171,	Lower Kennington Lane	...	...	Clark, Arthur
" ...	4,	Clapham Road	...	...	Holdsworth, Chas.

Ward.	Situation of Premises.			Name of Licensee.
Vauxhall ...	302, Clapham Road	...	...	Holdsworth, Geo.
" ...	152, " "	...	...	Lawrence Bros.
" ...	18, Paradise Road (rear of)	...	...	Smith, Wm. Geo.
" ...	1, Lansdowne Road, Clapham Road			Copeman, Walter George
Stockwell...	97, Stockwell Road	...	...	Rooksby, Walter
" ...	27, Bedford Road, Clapham Rd.			Pooley, John Pied
Brixton ...	Near Railway Hotel Brewery, Electric Lane			Elphick, Edwin
" ...	263, Brixton Road	...	...	Copp, Albert
" ...	10, Foxley Road*	...	...	Malden, Robert Levers
" ...	Industry Terrace (yard leading to), Canterbury Road			Warren, James Edward
Herne Hill	207, Coldharbour Lane		...	Clark, Albert John
"	309, " "		...	Ford, Hy. & Co., Ltd.
"	77, Dulwich Road	...	...	Atkin, Jim Cook
Tulse Hill	45, New Park Road	...	...	Beaumont, Edith Mary (trading as Martin & Beaumont)
"	12, Lower Tulse Hill	...	...	Haydon, Wm.
Norwood ...	120, High Street*†	...	...	Bull, John
" ...	121, " " (rear of)	...	...	Griffiths, Fredk.
" ...	125, Hamilton Road	...	...	Forss, Thomas Lionel

* Small cattle only to be killed.

† Special conditions laid down.

Sanitarily, these 27 Slaughter-houses are in good condition, and the chemical test, which was applied to the drains in each case, failed to give a single result. Constant inspection of the Slaughter-houses within the Borough is now carried out, as the officers of the Borough Council are responsible for the due enforcement of all Bye-laws and Regulations made in pursuance of the Slaughter-houses, etc. (Metropolis) Act 1874 and the Local Government Act 1888—an important duty, which was formerly carried out by the officers of the London County Council. During 1905 minor sanitary defects have been found as follows:—defective flooring and paving, defective dung cage, dirty closet-pan, defective fresh air inlet, &c.

One slaughter-house has changed hands during 1905, viz.:—172, Lambeth Walk, which is now licensed to William Cotching *vice* George Osborn Ward.

COWHOUSES.

There were, within the Borough of Lambeth, at the end of 1904, 17 registered Cowhouses, and at the Annual Licensing of the London County Council, held on October 30th, and November 30th, 1904, respectively, the licenses were renewed with the following exceptions:—

67, Coldharbour Lane—License not applied for.

56, Railton Road—License not applied for.

LIST OF THE 15 COWHOUSES LICENSED IN THE BOROUGH OF LAMBETH DURING 1905.

Ward.	Situation of Premises.	Sheds. Cows kept	
		No. of	No. of
Marsh ...	6, Coral Street, Lower Marsh ...	1	10
Bishop's ...	Cambria Cottage, 36, Tracey Street	1	13
„ ...	24, Distin Street ...	2	9

Prince's	...	30, Upper Kennington Lane	...	1	...	7
Vauxhall	...	38, Hartington Road	...	1	...	22
"	...	9, Dawlish Street	...	1	...	12
Brixton	...	34, Ingleton Street	...	1	...	5
"	...	1, Elliot Road*	...	2	...	9
Tulse Hill	...	196, Norwood Road	...	1	...	20
Norwood	...	156, Hamilton Road, West Nor-				
		wood	...	3	...	26
"	...	76 and 78, Gipsy Hill	...	3	...	27
"	...	67, Rosendale Road	...	1	...	10
"	...	93, Clive Road, West Norwood	...	1	...	4
"	...	Elder Road Dairy, West Norwood		2	...	35
"	...	15, Croxted Road, West Dulwich		1	...	3
				<u>22</u>		<u>212</u>

Sanitarily, these 15 Cowhouses are in good condition, and they have been inspected carefully during 1905, and the drains in each case tested with the chemical test, without a result being obtained in any single instance. A few minor sanitary defects were found during 1905, *e.g.*, defective paving, defective walls and floors, broken manhole cover, defective vent-pipe, defective flushing cistern, &c.

The Borough Council is now responsible for the periodical inspection of the Cowhouses, and the due enforcement of all Bye-laws and Regulations which have been made in connection therewith under the Dairies, Cowsheds, and Milk-shops Orders, 1885-86-99. Such duties were carried out by the London County Council previous to the passing of the London Government Act, 1899. During 1905 no action has been taken in regard to infringement of Bye-laws.

* Subject to the licensed cowsheds only being used for the keeping of cows.

DAIRIES, MILK-SHOPS AND MILK-STORES.

Seven new Milk-shops and Milk-stores have been registered during 1905, and all existing ones (473) have been under inspection, as required.

MILK DEPÔTS (LONDON) BILL.

This Bill was approved by the Council on April 13th, 1905, its object being to legalise the payments out of the General Rates of money in connection with the establishment and maintenance of Milk Depôts by Metropolitan Borough and City Councils. The suggested definition of "Milk Depôt" is an establishment or establishments for the purification, improvement, preservation, sterilisation and sale of milk and cream.

COUNCIL'S MILK DEPÔT.

The Milk Depôt, situated at 66, York Road, Westminster Bridge Road (near Waterloo Station), was completed during 1905, and arrangements are being made to open it to the Public early in the coming year.*

Miss Christabel Hartley was appointed manageress on November 23rd, 1905, at a salary of 25s. per week, with the use of living rooms at the Depôt, and commenced her duties on December 18th, 1905. Miss F. Smith, of 23, Newcombe Road, Battersea, was appointed, on December 21st, 1905, permanent assistant at 18s. per week. Miss Smith has had previous experience in bottle-washing by electrically-driven brushes.

A pamphlet dealing with particulars of the Milk Depôt Scheme has been published by the Council for distribution amongst medical men, hospital and other public institutions, charity and philanthropic organisations, clergymen, and the public generally.

* The Milk Depôt was opened to the Public on February 12th, 1906.

EXPENSES CONNECTED WITH THE ESTABLISHMENT AND FITTING UP
OF THE COUNCIL'S MILK DEPÔT.

The premises situated at 66, York Road, Westminster Bridge Road (near Waterloo Station), were taken on lease by the Council in 1905, and during 1904 have been structurally altered and fitted up for use as a Milk Depôt. The expenses connected with the structural alterations, which proved extensive, were as follows :—

	£	s.	d.
Labour, material, cartage, fixing of a lift, provision of 3 Hayward's lights, the electric wiring, gas and water fittings, &c. (actual expenditure)	317	0	3
Repairs to roof (estimated)	3	0	0
Repairs, painting, &c., to front and back (estimated)... ..	16	0	0
Decorations, &c. (estimated)—	£	s.	d.
Six floors above ground floor...	17	10	0
Staircase	6	0	0
Ground floor, hall, &c.	55	0	0
Passage	4	0	0
Basement	11	10	0
	—	—	—
	94	0	0
Further works (estimated)—			
Paving of yard	13	16	0
Housing of boiler	20	0	0
Furniture	20	0	0
To case lift	10	0	0
To case electric motor	2	0	0
Electric fittings	5	0	0
	—	—	—
	70	16	0
Total	£500	16	3

All this work was necessary before the premises could be used for the purposes of a Milk Depôt, ensuring thorough sanitation, *e.g.*, ventilation and lighting; exclusion of all dust and dirt, dampness, &c. For future reference the structural alterations made may be set out as follows:—

(a). *Basement.*

Existing wooden flooring of basement taken up, the sodden earth removed, and the floors covered with 6in. of concrete—a channel being provided underneath the pasteurising machine, in connection with the floor of the front basement room.

Steps provided, leading from the back basement room to the yard, in place of the previously existing small area.

Walls and ceilings of both basement rooms cleansed, and the walls afterwards rendered in Parian cement, and the ceilings limewashed.

Front area cleansed, covered in with pavement lights, and the walls rendered, as required, in cement, and the two vaults in connection with this front area cleaned out, their walls and roofs rendered in cement, and their floors paved, so that such vaults may be used for storage of milk, etc.

A window opening fitted into the wall between the two basement rooms.

Chimney breasts of the fireplaces in front and back basement rooms cut away, so as to enlarge the space available.

A window opening provided in the wall between the back basement room and the passage, and the existing rickety staircase (lower flight) removed, and the doorway leading thereto boarded up (with the provision of a window in such boarding).

Alterations to drainage, viz. :—

- (a) Re-construction of drainage so as to render it air- and water-tight, as required.
- (b) The rendering of the front manhole, and the providing of the same with a double-seal cover.
- (c) The altering of the position of 3 gullies, as required.
- (d) The provision of a new L.C.C. ventilating shaft in front of the premises, in place of the old existing defective one.
- (e) The provision of a new L.C.C. stack-pipe in front of the premises, in place of the old existing defective one.

(b). *Ground Floor.*

The door on the ground floor (leading into the passage) set back 6ft., and the second door (leading into the front ground floor room from the passage) removed, thereby giving more room at the entrance.

A counter (with desk) provided for the front ground floor room, which is to be used as the shop.

A lift provided, communicating from the downstairs rooms (basement) with the ground floor rooms.

A base provided for the boiler, in the yard.

A new sink and waste-pipe provided for the back ground floor room.

Alterations to drainage, viz. :—

- (a) The provision of a new L.C.C. ventilating shaft at the rear of the premises, in place of the old existing defective one.

- (b) The provision of new guttering and down pipe to the back addition.

Three Hayward's lights were provided to enclose in the area and keep out all dust and dirt, whilst the rooms in which the milk is to be dealt with were fitted up with electric wiring, gas, and water.

It was found necessary to open up the flooring of the ground floor rear room so as to admit of the pasteurising machine being taken into the front basement room, for which purpose also the wall between the front and back basement rooms had to be (temporarily) taken down and the front window of the ground floor removed, whilst the paving of the yard at the rear, the housing of the boiler, the decorating of the basement, ground and other floor rooms and passages of the premises, the furnishing of the *Depôt* were also necessary works.

The result of this work is satisfactory in that the *Depôt* is an object lesson of what premises (used for the manipulating and storage of milk) should be.

Fittings.

The original estimate of £250 for fittings was increased by an additional estimate of £45 7s. 2d. for the purpose of duplicating the washing tanks, cooling tanks and rinsing machines, and providing a larger number of storage and distribution baskets. This additional estimate was passed by the Council on June 8th, 1905.

MILK SUPPLY.

During 1905 the Council had again to petition against the London County Council (General Powers) Bill, 1905, in which powers were sought, *inter alia*, for the London County Council

(1) to have supervisory powers in connection with the carrying out of the Food and Drugs Acts throughout London; (2) to take samples of milk within and without the County, and to inspect dairies and cows, etc.; (3) to have concurrent powers with local Metropolitan Medical Officers of Health to inspect dairies in case of infectious disease outbreaks.

Such supervisory powers under the Food and Drugs Acts are unnecessary for the London County Council, in that they are already possessed by the Local Government Board and the Board of Agriculture and Fisheries. In the same way the powers sought by the London County Council with respect to taking samples and inspecting dairies are unnecessary, in that such powers are already in the hands of the Metropolitan Sanitary Authorities (*vide* Report in Appendix, p. 39).

The opposed clauses of the Bill were withdrawn by the County Council.

OPEN SPACES.

ACQUISITION OF RUSKIN PARK.

The Lambeth Council on March 2nd, 1905, voted the sum of £5,000 towards the cost (£48,000) of acquiring portion of the Sanders' Estate, Denmark Hill, adjoining the railway, upon the site of Dane House and the adjoining houses, as a public park, which will adjoin the new King's College Hospital. The portion is about 24 acres, the whole of which are situated within the Lambeth Borough, and is to be taken over and maintained by the London County Council as a park under the name of "Ruskin Park." From a Public Health point of view the provision of open spaces throughout the County of London is most desirable.

MORTUARIES AND CORONERS' COURTS.

The total number of bodies received at the two Borough Mortuaries (High Street and Wanless Road) during 1905 was 391, as compared with 373 during 1904, and an annual average for the old Parish of Lambeth for 5 years (1896-1900) of 450. Of the 391 bodies, 274 were received at High Street and 117 at Wanless Road.

40 bodies were brought in by the Police (28 to High Street and 12 to Wanless Road), and the rest by undertakers or private persons.

The Coroner's Court sat 50 times at Wanless Road, 117 times at High Street.

Wanless Road Mortuary alone is provided with a separate room for bodies dead from infectious disease, and during 1905 two infectious bodies (diphtheria) were received there.

For comparison, details are given in tabular form of the work carried out by the late Vestry of Lambeth in connection with the Wanless Road and High Street Mortuaries during the five years (1896-1900). Taking the average, it will be seen that the total number of bodies received during 1905 in connection with the new Borough is 59 less than the yearly average (450) received in connection with the old Vestry during the 5 years (1896-1900).

The number of post-mortems conducted for the Borough during 1905 is 209, as compared with 250 during 1904 and with 253, 281, 275, 285 and 267 respectively during the 5 years (1896-1900) for the old Parish, *i.e.*, 63·5 less than the yearly average (272·5) during the same quinquennium. Of the post-mortems, 38 took place at Wanless Road, and 171 at High Street.

Numbers of bodies received at the Lambeth Borough Mortuaries during 1905 and at the Lambeth Parish Mortuaries during the five years (1896-1900).

1905.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total 1905	Total 1900	Total 1899	Total 1898	Total 1897	Total 1896	Yearly Average for 1896- 1900.
<i>High Street—</i>																			
Males ...	18	8	9	14	9	18	20	19	15	18	21	15	184	237	239	222	218	221	227·4
Females ...	8	6	13	9	9	6	6	6	9	5	7	6	90	142	126	143	109	152	134·4
<i>Wanless Road—</i>																			
Males ...	4	5	7	7	1	3	7	4	3	7	5	7	60	58	71	72	41	—	48·4
Females ...	7	2	3	6	3	7	2	6	4	2	5	10	57	62	47	58	32	—	39·8
Totals ...	37	21	32	36	22	34	35	35	31	32	38	38	391	499	483	495	400	373	450

N.B.—The New Wanless Road Mortuary was opened on April 12th, 1897, and is under the superintendence of Mr. Joshua Fazey—High Street Mortuary being under Mr. S. G. Albin. Mr. Pierce is the Deputy Mortuary Keeper.

Ages of bodies received at the Lambeth Borough Mortuaries, 1905, and at the Lambeth Parish Mortuaries during five years (1896-1900).

Registered Ages of Bodies.	1905.		Boro'	Parish.					Yearly Average for 1896-1900.
	High Street.	Wanless Road.	Total 1905.	Total 1900.	Total 1899.	Total 1898.	Total 1897.	Total 1896.	
0-1 ...	55	38	93	133	121	160	101	121	127.2
1-5 ...	12	12	24	47	44	50	39	22	40.4
5-10 ...	14	1	15	12	22	17	9	12	14.4
10-20 ...	7	2	9	17	13	8	18	9	13.0
20-30 ...	18	8	26	31	29	26	26	24	27.2
30-40 ...	22	6	28	43	59	45	35	35	54.2
40-50 ...	53	7	60	80	67	64	48	37	59.2
50-60 ...	44	12	56	61	53	42	59	46	52.2
60-70 ...	26	19	45	50	47	39	30	35	40.2
70-80 ...	15	10	25	16	19	32	20	22	21.8
80-90 ...	4	2	6	6	8	5	9	7	7.0
90-upwards ...	—	—	—	—	1	1	—	3	1.0
Age not stated ...	4	—	4	3	—	6	6	—	3.0
Totals...	274	117	391	499	483	495	400	373	450

Particulars as to cases of Drowning, Accidental Death and Suicide that have occurred in the Borough of Lambeth during 1905, and in the old Parish during five years (1896-1900).

	High Street.			Wanless Road.			Boro'	Parish of Lambeth.					Average 5 years 1896- 1900.
	M.	F.	Total.	M.	F.	Total.	Total 1905.	Total 1900.	Total 1899.	Total 1898.	Total 1897.	Total 1896.	
Suicides...	15	2	17	4	4	8	25	14	13	21	6	13	13.4
Drowning ...	15	2	17	—	1	1	18	6	1	1	13	16	7.4
Poisoning ...	—	—	—	—	1	1	1	3	4	3	4	4	3.6
Hanging ...	—	—	—	1	1	2	—	4	3	9	—	2	3.6
Throat cutting ...	—	—	—	1	1	2	—	3	4	5	1	2	3.0
Jumping off heights and in front of trains ...	—	—	—	1	—	1	2	1	—	—	—	2	0.6
Cutting Arteries ...	—	—	—	—	—	—	—	1	1	—	—	—	0.4
Shooting ...	—	—	—	1	—	1	1	2	1	4	1	3	2.2
Railway Accidents ...	—	—	—	—	—	—	—	4	4	1	1	3	2.6
Accidental Death (sudden) ...	—	—	—	2	1	3	—	6	1	12	—	—	3.8
Street Accidents (run over) ...	—	—	—	2	1	3	2	3	9	7	4	3	5.2
Murder ...	—	—	—	—	—	—	—	1	2	—	2	2	1.4
Burning (scalding) ...	—	—	—	2	4	6	5	1	2	3	1	—	1.4
Falling ...	—	—	—	2	5	7	6	1	1	4	4	—	2.0
Bicycle Accidents ...	—	—	—	—	—	—	—	2	—	1	—	—	0.6
Strangulation and Suffocation ...	—	—	—	1	1	2	2	—	—	2	—	—	0.4
Found Dead ...	—	—	—	2	1	3	—	—	—	—	—	—	—
Bursting Blood Vessel ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Killed ...	—	—	—	—	—	—	1	—	—	—	—	—	—
Manslaughter ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Fits ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Under Chloroform ...	—	—	—	1	—	1	—	—	—	—	—	—	—

N.B.—Two female bodies (dead from diphtheria) were admitted during 1905 into the special room provided for infectious bodies at Wanless Road Mortuary.

HIGH STREET MORTUARY AND CORONER'S COURT.

During 1905 the Council decided to carry out certain sanitary improvements and extensions in connection with the old Mortuary and Coroner's Court, situated in High Street, Lambeth. From time to time the Medical Officer of Health has pointed out that the old buildings were totally inadequate and quite unsuited to present day requirements.

The improvements and extensions suggested are as follows:—

1. *Mortuary.*

New Mortuary to be built, including 14 catacombs for storing shells, viewing chamber, and usual fittings; new store-house, fuel-house, w.c. and urinal, and covered corridors to be built; yard adjoining to be asphalted; and adjoining boundary wall to be rebuilt.

2. *Post Mortem Room.*

Existing Mortuary to be converted into enlarged Post Mortem Room, with usual fittings.

3. *Coroner's Court.*

Existing Court to be re-decorated, re-lighted and re-ventilated, new waiting-room for witnesses, and lavatory for ladies to be built; yard adjoining to be asphalted, and adjoining boundary wall re-built.

These are much needed improvements, and on the strength of such, the rent payable by the London County Council (at present £80 per annum) for the use of the Coroner's Court is to be increased to £105.

The work is to be extended over 2 years (1905-7), by order of the Council (on the suggestion of the Finance Committee), the estimated cost being as follows:—

				£
1. Mortuary ...	...	...	...	736
2. Post Mortem Room		...	...	421
3. Coroner's Court	...	...	...	585
				<hr/>
Total ...	...	...	...	£1742
				<hr/>

It is the duty of the London County Council to provide and maintain proper accommodation for the holding of inquests, *i.e.*, Coroner's Courts, but power is given to the London County Council to make arrangements with a local Metropolitan Sanitary Authority (*e.g.*, City or Borough Council) for the use for the purposes of a Coroner's Court, of any building belonging to that Authority, on such terms as may be agreed on.

There are two Coroner's Courts in Lambeth Borough—one at Wanless Road, belonging to the London County Council, and the other at High Street, Lambeth, belonging to the Borough Council and rented by the London County Council.

Mortuaries have to be provided and fitted up and maintained by the Metropolitan Local Sanitary Authorities.

INQUESTS.

During the year 1905, within the Borough of Lambeth, 377 Lambeth cases were submitted to the Coroner (who, in 41 instances, decided that no further inquiries were necessary, the deaths being due to natural causes). In the remaining 336 cases inquests were held with the following results:—

I. NATURAL CAUSES	178
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II. ACCIDENTAL CAUSES	132
Burns and Scalds	11
Drowning	14
Run over	12
Falls, etc.	42
Suffocation	...	...	...	27
Fracture	...	...	...	13
Misadventure	...	...	...	7
Crushed	...	...	...	2
Blood Poisoning	...	...	...	4
III. HOMICIDAL CAUSES	...	...	...	24
Suicide	...	...	...	24
Murder	...	...	...	—
Manslaughter	...	...	...	—
IV. OPEN VERDICTS	...	...	...	2
Found Drowned	...	...	...	2
Total	...	...	...	336

BACTERIOLOGICAL LABORATORY.

The Bacteriological Laboratory has proved of great service during 1905—a very large number of examinations having been carried out there in connection with an outbreak of diphtheria and pseudo-diphtheria at the Norwood Parochial Schools.

The Laboratory was originally fitted up by the late Vestry in 1899, and since then (up to the end of 1905) 4,883* examinations have been made, viz :—Tuberculosis 1,138, Typhoid Fever 568, Diphtheria 3,133, and Others 44.

*1899—389 ; 1900—703 ; 1901—479 ; 1902—466 ; 1903—525 ; 1904—447 ; 1905—1,874. Total—4,883.

During 1905, a total of 1,874 bacteriological examinations have been carried out, dealing with 181 sputa (suspected consumption), 33 bloods (suspected typhoid fever), 1,644 throat and nose, membranes and discharges (suspected diphtheria) and 16 other materials (*e.g.*, 12 milks, 1 urine and 3 pus).

Details are as follow :—

Tuberculosis—

181 samples of sputa from doubtful tuberculosis cases have been examined, and in 36 (*i.e.*, 19·9 per cent.) tubercle bacilli have been found. In 145 instances (*i.e.*, 80·1 per cent.), no tubercle bacilli were found. In 2 instances the pneumococcus (*Friedländeri*) was found; in 3 lung tissue; and in 3 pus cells.

Consumption (with tuberculous expectorations) was made voluntarily notifiable throughout the Borough on (and after) June 1st, 1902. By means of bacteriological examinations, greater exactitude in diagnosis is secured.

Typhoid Fever—

33 samples of blood from suspected Typhoid Fever cases have been examined, and in 6 (*i.e.*, 18·2 per cent.) the characteristic Widal reaction was obtained, although in 2 of the cases (*i.e.*, 33·3 per cent.) the reaction was but slightly (or feebly) marked. In 27 cases (*i.e.*, 81·8 per cent.) no reaction was obtained. A high dilution of blood-serum is used (1-60 to 1-100).

Diphtheria—

1,644 samples of throat and nose membranes and secretions from doubtful Diphtheria cases have been examined, and in 111 (*i.e.*, 6·8 per cent.) the true (*Klebs-Löffler*) bacilli have been obtained. In 40 instances (*i.e.*, 36·04 per cent.) the *Klebs-Löffler* bacilli were obtained in pure cultivation—*i.e.*, without

admixture with other bacilli, whereas in the remaining 71 (*i.e.*, 63·96 per cent.) the Klebs-Löffler bacilli were found combined with other well-known bacilli as follows :—

Klebs-Löffler bacilli + staphylococci	...	...	...	27
Klebs-Löffler bacilli + streptococci	..	...	...	14
Klebs-Löffler bacilli + staphylococci + streptococci	...	...	...	5
Klebs-Löffler bacilli + pseudo (Hoffmann) bacilli + staphylococci	...	...	...	4
Klebs-Löffler bacilli + streptococci + torulæ	...	...	...	1
Klebs-Löffler bacilli + staphylococci + sarcinæ	...	...	...	1
Klebs-Löffler bacilli + sarcinæ	...	...	...	3
Klebs-Löffler bacilli + streptococci + sarcinæ	...	...	...	3
Klebs-Löffler bacilli + Diplococci	...	...	...	2
Klebs-Löffler bacilli + Vincent's organisms	...	...	...	1
Klebs-Löffler bacilli + pseudo (Hoffmann) bacilli...	...	...	...	1
Klebs-Löffler bacilli + pseudo (Hoffmann) bacilli + staphylococci + sarcinæ	...	...	...	4
Klebs-Löffler bacilli + pseudo (Hoffmann) bacilli + staphylococci + streptococci	...	...	...	2
Klebs-Löffler bacilli + streptococci + staphylococci + sarcinæ	...	...	...	3

In 1,533 (*i.e.*, 93·2 per cent.) of the total number of throat and nose samples examined, the Klebs-Löffler bacilli were not isolated, but other bacilli were found as follow :—

Staphylococci	...	...	...	...	...	536
Streptococci	...	...	..	...	...	63
Staphylococci + streptococci	...	...	...	...	...	484
Staphylococci + sarcinæ	...	...	...	...	...	16
Staphylococci + torulæ	..	...	...	...	...	76
Staphylococci + micrococci	...	...	...	...	...	9
Staphylococci + diplococci	...	...	...	...	...	1
Staphylococci + smegma	...	...	...	...	...	1
Staphylococci + torulæ + sarcinæ	...	...	...	...	...	1

Staphylococci + streptococci + torulæ + micrococci	...	1
Streptococci + torulæ	... ..	9
Streptococci + staphylococci + torulæ	... ..	47
Streptococci + staphylococci + sarcinæ	... ..	48
Streptococci + sarcinæ	... ..	2
Streptococci + micrococci + sarcinæ	... ..	1
Streptococci + staphylococci + micrococci	... ..	6
Pseudo (Hoffmann) bacilli	... ..	32
Pseudo (Hoffmann) bacilli + staphylococci	... ..	103
Pseudo (Hoffmann) bacilli + streptococci	... ..	3
Pseudo (Hoffmann) bacilli + staphylococci + streptococci		59
Pseudo (Hoffmann) bacilli + streptococci + sarcinæ	... ..	13
Pseudo (Hoffmann) bacilli + staphylococci + sarcinæ	... ..	4
Pseudo (Hoffmann) bacilli + staphylococci + Vincent's organisms...	... ..	3
Pseudo (Hoffmann) bacilli + torulæ	... ..	1
Pseudo (Hoffmann) bacilli + streptococci + torulæ	... ..	1
Pseudo (Hoffmann) bacilli + staphylococci + torulæ	... ..	5
Pseudo (Hoffmann) bacilli + staphylococci + micrococci...		4
Torulæ + micrococci...	... ..	2
Diplococci	... ..	1
Smegma	... ..	1

Pseudo bacilli were found in pure cultivation in 32 instances, and mixed with other well-known germs in 182 instances.

Other Examinations.

16 samples of other materials were examined, viz., 12 milks, 1 urine (suspected tubercle), 1 pus (suspected tubercle) and 2 pus (suspected diphtheria).

The 12 milk samples were examined quantitatively for germs with the following results :—

Germs per c.c.			Germs per c.c.		
Sample 1	1,500,000		Sample 7	764,000	
„ 2	1,300,000		„ 8	760,000	
„ 3	1,100,000		„ 9	521,000	
„ 4	960,000		„ 10	94,000	
„ 5	940,000		„ 11	26,000	
„ 6	876,000		„ 12	24,000	

Antitoxin—

The Borough Council has distributed during 1905, free of cost to Medical Practitioners, practising in Lambeth Borough, 74 vials of antitoxin.

1905.		SPUTA. Tub. Bac. found.			*BLOODS. Typhoid reaction obtained.			THROAT AND NOSE MEMBRANES AND DISCHARGES. Klebs-Lœffler bac. found.		
		Yes	No.	Total.	Yes.	No.	Total.	Yes.	No.	Total.
January ...	...	7	11	18	—	—	—	—	12	12
February...	...	2	14	16	—	3	3	1	10	11
March ...	...	3	13	16	1	1	2	—	11	11
April ...	...	4	10	14	1	2	3	—	7	7
May ...	...	6	12	18	1	—	1	10	47	57
June ...	...	2	12	14	—	2	2	62	224	286
July ...	...	2	8	10	1	3	4	24	802	826
August ...	...	3	10	13	—	1	1	5	247	252
September	...	—	11	11	1	3	4	1	31	32
October ...	...	5	20	25	—	3	3	5	59	64
November	...	1	8	9	1	5	6	3	52	55
December	...	1	16	17	—	4	4	—	31	31
TOTALS ...		36	145	181	6	27	33	111	1533	1644

* In 2 samples (*i.e.*, 33·3 per cent.) of suspected Typhoid Fever blood, the reaction was slightly (or feebly) marked.

N.B.—16 other samples were also examined during 1905, viz. :—12 milks, 1 urine (suspected tubercle), 1 pus (suspected tubercle) and 2 pus (suspected diphtheria).

UNDERGROUND CONVENIENCES.

No change has taken place during 1905 in the *personnel* of the Underground Convenience Attendants.

The conveniences have been kept under regular supervision during 1905—the male conveniences by the male Inspectors and the female conveniences by the female Inspector. There have been no complaints.

The surface of the roof over the Hercules Convenience was asphalted during 1905, at a cost of £24 2s. 6d., and a new flushing tank was provided at Vauxhall-cross Convenience in connection with the urinals, at a cost of £8 17s. 6d.

86½ dozen towels (huckaback), specially lettered “Lambeth Borough Council,” were purchased at 6s. per dozen, viz., £25 19s.

During 1905, the Council decided to construct underground conveniences for men and women (1) at the Herne-hill side of Brockwell Park, and (2) on the triangular piece of land forming part of Kennington Park (at rear of the present tramway office at Kennington-gate), with the following accommodation :—

- (1) Herne-hill. *For Males*—5 w.c.s, including 1 free w.c.), 11 urinals, and 2 lavatory basins. *For Females*—6 w.c.s (including 1 free w.c.) and 2 lavatory basins.
- (2) Kennington Park. *For Males*—5 w.c.s (including 1 free w.c.), 12 urinals, and 2 lavatory basins. *For Females*, 5 w.c.s (including 1 free w.c.) and 2 lavatory basins.

The tender of Messrs. George Jennings, Limited, was accepted during 1905 for the construction of the underground convenience to be erected at the junction of Waterloo and York Roads.

LAMBETH ELEMENTARY SCHOOLS.

During 1905, all the Public Elementary Schools situated within the Borough (Provided, 24; Non-Provided, 37) were inspected in regard to the drainage and sanitary fittings, and a full report presented to the Council on June 8th (*vide* Appendix pp. 49-71). The Medical Officer personally inspected each school.

The Council during 1905 approved of the two following resolutions *inter alia* being forwarded to the London County Council and to the Metropolitan City and Borough Councils:—

1. That the present system with regard to the provision of medical certificates of unfitness to attend school presses unduly upon the very poor, and is grossly unfair to the medical profession.
2. That the collection of dust from school premises should not be made while the children are in the playgrounds; that the schoolkeeper should be present whilst the collection is made; and that, if possible, the collection should be made at more frequent intervals than at present.

CLERICAL STAFF.

The Clerical Staff consists of 4 Clerks—1 first class (W. R. Lawrence), 2 second class (Messrs. A. L. Baxter and W. J. Lawrence), and 1 boy (Albert E. Ruel).

The Clerical work in connection with the Department during 1904 deserves recognition, and is again given in the form of a Statement, shewing the work done in the Borough during 1901,

1902, 1903, 1904 and 1905, as compared with the yearly average for the old Parish of Lambeth during 5 years (1896-1900).

	1905.	1904.	1903.	1902.	1901.	Average 5 years (1896- 1900).
	BOROUGH.					PARISH.
Letters, etc., received (entered in letter book) ...	8540	7476	7808	8760	9417	8611.4
Letters, etc., sent out (entered in postal book)...	15830	14427	16555	19504	21703	26096.6
Notices—						
Infectious Diseases ...	1594	1681	1336	2430	1848	2290.2
Public Health Acts (Pre- liminary) ...	7446	6624	8248	12954	7195	7812.0
Public Health Acts (Statu- tory) ...	3990	3463	3432			
Metropolis Managem't Acts	23	10	27			20.0
Housing of the Working Classes Acts ...	2	9	—	14	13	43.6
Cases entered in Inspectors' Report Books ...	9404	8343	8372	8930	7821	8307.0
Complaints entered in book.	6650	6630	6199	4378	5421	5474.0
Copies of Infectious Diseases Notifications—						
(a) Entered in Notification Book ...	1853	2023	1587	4426	2025	2619.2
(b) Sent off to Asylums Board ...	1853	2023	1587	4426	2025	2619.2
Notices of Infectious Diseases sent to Schools...	1359	1492	2117	3410	2425	1953.6
New Workshops (with full particulars) entered up in Register ...	91	82	162	105	69	144.6
New Milkshops (with full particulars) entered up in Register ...	7	5	5	5	458	—
New Cowsheds (with full particulars) entered up in Register ...	—	—	—	—	—	6.6
New Slaughter-houses (with full particulars) entered up in Register ...	—	—	—	—	—	9.2
New Bakehouses (with full particulars) entered up in Register ...	—	—	—	—	—	51.6

	1905.	1904.	1903.	1902.	1901.	Average 5 years (1896- 1900).
	BOROUGH.					PARISH
Water Certificates for new buildings given out ...	184	385	520	420	183	112.2
Disinfection Certificates given out	3212	3707	3036	5186	2710	1010.2
Stamps used... ..	14220	13667	15426	17398	14274	19730.6
Reports to Committee (Fort- nightly)	21	21	20	20	21	20.2
Reports to Vestry or Council (Quarterly)	4	4	4	4	4	4.0
Special Reports	14	13	13	15	12	12.2
Letters Typed	5271	5052	4883	5816	4867	4905.4
Bacteriological Reports ...	1874	447	525	466	479	546.0
Inland Revenue Certificates given out	446	375	715	2723	360	719.5
Summonses and Orders en- tered in Book	44	109	95	50	72	98.6



APPENDIX.

Local Government Board.

Table i.

VITAL STATISTICS OF LAMBETH BOROUGH DURING 1905, AND OF LAMBETH PARISH DURING 10 YEARS (1891—1900).

YEAR.	Population estimated to Middle of each Year.	Births.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.		
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*	
				Number.	Rate per 1000 Births. registered.	Number.	Rate.*						
1	2	3	4	5	6	7	8	9	10	11	12	13	
Parish.	1891	276162	9097	32·9	1433	157·2	6073	21·9	1438	539	351	5886	21·3
	1892	280032	9226	32·9	1303	141·2	5794	20·7	1578	651	314	5457	19·5
	1893	283956	9222	32·5	1415	148·5	6165	21·7	1741	811	338	5219	18·4
	1894	287935	9231	32·1	1264	136·9	5213	18·1	1484	775	399	4837	16·8
	1895	291970	9341	31·9	1470	157·4	5857	20·6	1511	702	404	5559	19·0
	1896	296061	9592	32·4	1371	142·9	5370	18·1	1583	705	433	5098	17·2
	1897	300048	9388	31·3	1459	155·4	5486	18·3	1546	664	429	5251	17·5
	1898	304073	9256	30·4	1447	156·3	5567	18·3	1543	592	455	5430	17·9
	1899	308108	9433	30·6	1527	161·9	6064	19·7	1680	663	485	5886	19·1
	1900	312152	9167	29·4	1350	147·3	5578	17·9	1576	606	458	5430	17·4
Averages for years 1891-1900													
	294049·7	9295·3	31·6	1403·9	151·03	5716·7	19·4	1568·5	670·8	406·6	5405·3	18·4	
Boro' 1905	313045	8835	28·2	1127	127·6	4896	15·6	1807	736	486	4646	14·8	

* Rates in Columns 4, 8 and 13 are calculated per 1000 of estimated population.

NOTE. - The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the Borough of Lambeth. The deaths included in Column 12 are the numbers in Column 7, corrected by the subtraction of the numbers in Column 10 and the addition of the numbers in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" (taken into account for the purpose of these Tables) are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made, will be found on pp. 27, 112-115 of the Report.

Area of Lambeth Borough in acres } 4079·6 Statute Acres.
(exclusive of area covered by water) }

Total population at all ages 301895 }
Number of inhabited houses 41511 } At
Average number of persons per house .. 7·3 } Census
of 1901.

Table ii.

VITAL STATISTICS OF REGISTRATION SUB-DISTRICTS OF LAMBETH BOROUGH
DURING 1905, AND OF LAMBETH PARISH DURING 10 YEARS (1891—1900).

NAMES OF LOCALITIES.			1.—WATERLOO.				2.—LAMBETH CHURCH 1ST.				3.—LAMBETH CHURCH 2ND.			
YEAR.			Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).
			<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
Parish.	1891	...	28657	1431	866	230	18110	605	468	158	39191	1630	987	299
	1892	...	28601	1473	687	179	18249	610	432	160	39571	1639	907	259
	1893	...	28545	1521	688	222	18388	610	448	165	39951	1632	858	272
	1894	...	28489	1505	691	203	18522	624	384	139	40331	1553	789	266
	1895	...	28433	1516	755	212	18666	618	457	189	40711	1629	995	284
	1896	...	28377	1445	642	201	18805	649	364	169	41091	1687	930	262
	1897	...	28333	1397	683	203	18947	597	442	188	41476	1595	934	301
	1898	...	28282	1381	715	193	19090	581	438	175	41864	1613	853	265
	1899	...	28232	1398	733	189	19234	627	436	151	42252	1517	1048	315
	1900	...	28183	1348	678	202	19377	582	423	153	42642	1543	840	266
Averages of Years 1891 to 1900			28413·2	1441·5	713·8	203·4	18739·3	610·3	429·2	164·7	40908·0	1603·8	914·1	278·9
Borough 1905			26590	1384	559	135	18394	532	298	113	39971	1463	788	207

Table ii.—continued.

NAMES OF LOCALITIES.		4.—KENNINGTON 1ST.				5.—KENNINGTON 2ND.				6.—BRIXTON.				7.—NORWOOD.			
YEAR.		Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages (corrected).	Deaths under 1 year (uncorrected).
Parish.	1891...	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.
	1892...	50681	1722	1092	252	40065	1069	802	136	73707	2014	1335	291	25751	626	336	67
	1893...	51002	1733	1008	226	40695	1058	756	123	75431	2051	1305	287	26483	662	362	69
	1894...	51241	1759	953	270	41004	1039	719	127	77812	2002	1182	286	27015	639	371	73
	1895...	51721	1802	871	212	41713	1053	672	107	79507	2037	1050	258	27647	657	380	79
	1896...	52201	1736	969	263	42222	1099	742	169	81267	2093	1259	276	28470	650	382	77
	1897...	52581	1886	902	232	43429	1125	747	157	82267	2139	1174	281	29511	662	339	69
	1898...	52971	1859	952	249	44136	1110	721	132	83946	2131	1135	286	30239	699	384	100
	1899...	53361	1888	989	259	44852	1009	727	141	85647	2143	1274	334	30977	641	434	80
	1900...	53753	1871	1086	309	45570	1089	812	154	87350	2179	1342	296	31717	752	429	113
Averages of Years 1891 to 1900		54146	1856	1018	233	46249	990	732	123	89057	2112	1283	279	32458	736	456	94
Boro', 1905		53365.8	1811.2	984.0	250.5	42997.5	1066.1	743.0	136.9	81599.1	2090.1	1233.9	287.4	29026.8	672.4	387.3	82.1
Boro', 1905		54591	1705	798	185	44572	938	648	194	89543	2015	1123	211	39384	798	431	81

NOTES—(a) Deaths of residents occurring in public institutions beyond the district are included in sub-columns *c* of this table, and those of the non-resident registered in public institutions in the district are excluded. (See note on Table i. as to meaning of terms "resident" and "non-residents.")

(b) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased.

(c) Deaths under 1 year are not corrected, and the gross total of sub-columns *d* agrees with the total of column 5 in Table i.

N.B.—Where the District is not stated, the deaths are sub-divided equally amongst the Registration Sub-Districts.

Table iii.

CASES OF INFECTIOUS DISEASE NOTIFIED WITHIN THE BOROUGH OF LAMBETH
DURING THE YEAR 1905.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.							NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.						
	At all Ages.	At Ages—Years.						Waterloo.	Lambeth Church 1st.	Lambeth Church 2nd.	Kennington 1st.	Kennington 2nd.	Brixton.	Norwood.	Waterloo.	Lambeth Church 1st.	Lambeth Church 2nd.	Kennington 1st.	Kennington 2nd.	Brixton.	Norwood.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.														
Small Pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	439	12	147	197	40	42	1	31	42	85	83	54	61	83	30	41	57	79	31	58	68
Membranous Croup ...	11	2	4	3	1	1	...	...	3	1	3	3	1	...	...	...	1	1	...	...	...
Erysipelas ...	287	15	11	33	30	183	15	28	32	60	43	39	58	27	6	6	6	8	1	6	4
Scarlet Fever ...	1025	10	275	612	85	43	...	97	101	89	159	195	260	124	97	99	75	150	128	183	89
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	7	...	1	29	15	32	...	18	7	13	12	10	15	2	14	6	8	8	15	13	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	2	...	...	...	1	1	...	...	...	2	...	...	...	...	...	...	2	...	...	...	...
Puerperal Fever ...	12	...	...	...	...	12	...	1	...	1	2	3	4	1	...	...	...	1	...	2	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	1853	39	438	874	172	314	16	175	185	251	302	304	399	237	147	152	149	247	165	257	161

NOTES.—(a) The localities adopted for this table are the same as those in Tables ii. and iv.

(b) Patients are removed to the Isolation Hospitals of the Metropolitan Asylums Board, one of which is situated in Brixton Registration Sub-district.

Local Government Board.

Table

CAUSES OF, AND AGES AT, DEATH
Name of District—BOROUGH

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.						
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
1	2	3	4	5	6	7	8
Small-pox	—	—	—	—	—	—	—
Measles	96	19	71	6	—	—	—
Scarlet Fever	31	—	16	13	—	2	—
Whooping Cough	79	40	37	2	—	—	—
Diphtheria and Mem- branous Croup	37	6	29	11	—	—	—
Croup	3	3	—	—	—	—	—
Fever (Typhus	—	—	—	—	—	—	—
Enteric	19	—	—	1	3	6	—
(Other Continued	—	—	—	—	—	—	—
Epidemic Influenza	70	3	4	—	2	23	18
Cholera Nostras	2	2	—	—	—	—	—
Plague	—	—	—	—	—	—	—
Diarrhoea	176	140	30	—	—	1	5
Enteritis	87	45	19	8	7	13	4
Puerperal fever	6	—	—	—	—	6	—
Erysipelas	15	6	—	—	1	7	1
Other Septic diseases	7	3	1	—	—	3	—
Phthisis	416	3	9	11	58	312	23
Other Tubercular diseases	167	43	49	31	9	27	3
Cancer, malignant disease	320	—	—	—	2	201	117
Bronchitis	394	59	32	1	—	106	196
Pneumonia	196	33	29	3	5	97	38
Pleurisy	15	1	2	1	—	5	6
Other diseases of Respiratory Organs	250	71	62	3	4	61	49
Alcoholism	27	—	—	—	—	26	1
Cirrhosis of Liver	69	1	—	—	—	51	8
Veneral diseases	34	26	—	—	—	7	1
Premature birth	152	152	—	—	—	—	—
Diseases and Accidents of parturition	15	—	—	—	3	12	—
Heart diseases	436	3	1	25	19	201	187
Accidents	146	23	14	10	6	63	25
Suicides	25	—	—	—	1	20	4
All other causes	1394	322	63	27	31	457	494
All causes	4646	1014	441	153	151	1707	1180

iv.

(CORRECTED) DURING THE YEAR, 1905.
OF LAMBETH.

DEATHS IN OR BELONGING TO REGISTRATION SUB-DISTRICTS (AT ALL AGES).								TOTAL DEATHS IN PUBLIC INSTITUTIONS IN DISTRICT (UNCORRECTED).
Waterloo.	Lambeth Church First.	Lambeth Church Second.	Kenning- ton First.	Kenning- ton Second.	Brixton.	Norwood.	District not stated.	
9	10	11	12	13	14	15	16	
—	—	—	—	—	—	—	—	—
16	4	10	12	13	17	17	7	26
3	—	4	3	6	12	3	—	50
6	7	12	11	15	21	6	1	8
3	2	13	6	6	5	2	—	53
1	—	1	—	—	1	—	—	—
—	2	1	—	1	3	3	—	9
—	—	1	—	6	9	24	9	2
—	—	1	—	—	1	—	—	—
12	14	45	48	12	32	12	1	50
9	5	15	15	12	25	6	—	—
—	—	—	1	2	2	1	—	1
—	—	3	1	4	5	2	—	9
1	—	2	—	—	2	—	2	—
52	34	78	59	56	91	30	16	158
18	6	42	26	24	42	9	—	—
29	10	36	62	50	89	35	9	—
49	13	83	80	47	70	41	11	—
25	16	30	33	32	33	21	6	208
1	2	2	3	2	2	2	1	—
38	14	45	53	27	43	21	9	—
5	—	4	4	4	8	1	1	—
5	5	5	11	10	17	6	1	—
6	3	9	5	6	3	—	3	—
12	12	21	30	23	37	16	1	—
—	2	2	2	3	4	2	—	—
47	28	52	67	53	123	55	11	257
24	17	15	25	18	34	4	9	87
5	4	4	4	2	4	2	—	—
155	77	233	217	195	369	91	57	889
521	278	768	779	629	1104	412	155	1807

BOROUGH OF LAMBETH.

INFANTILE MORTALITY DURING THE YEAR 1905.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes—																	
Certified ...	159	49	34	31	273	108	70	73	75	62	55	48	37	45	49	40	935
Uncertified ...	25	6	1	1	33	10	3	8	6	4	4	3	1	...	3	4	79
Common Infectious Diseases—																	
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	1	...	...	...	1	...	2	1	4	7	3	19
Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria: Membranous Croup ...	...	...	...	...	...	...	...	...	1	1	...	1	3	...	2	1	9
Whooping Cough ...	...	...	...	1	1	4	1	5	4	2	4	2	3	4	3	7	40
Diarrhoeal Diseases—																	
Diarrhoea, all forms ...	...	...	1	...	1	9	15	13	13	9	6	7	3	5	6	5	92
Enteritis (not Tuberculous) ...	1	...	1	4	6	11	14	12	8	12	7	6	5	6	6	6	99
Gastritis, Gastrointestinal Catarrh ...	...	3	...	1	4	4	4	3	2	1	2	...	1	2	1	...	24
Wasting Diseases—																	
Premature Birth ...	105	16	12	6	139	9	3	...	1	...	...	...	...	...	...	...	152
Congenital Defects ...	13	1	4	...	18	5	2	4	2	3	...	...	...	1	...	...	35
Injury at Birth ...	6	...	...	1	7	...	...	...	...	...	...	...	...	...	...	...	7
Want of Breast-Milk ...	1	1	...	2	4	3	2	3	2	2	...	...	1	...	...	...	17
Atrophy, Debility, Marasmus ...	31	10	7	8	56	19	6	7	15	5	9	2	3	...	4	2	128
Tuberculous Diseases—																	
Tuberculous Meningitis ...	...	...	1	1	2	1	1	3	1	2	1	3	...	...	5	1	20
Tuberculous Peritonitis: Tuberc. Mesenterica ...	...	...	1	...	1	4	...	4	1	3	1	1	1	...	1	...	17
Other Tuberculous Diseases ...	...	...	...	...	...	1	1	1	1	3	2	2	1	...	1	2	15
Erysipelas ...	...	1	1	...	2	2	...	1	...	...	1	...	...	...	...	...	6
Influenza ...	...	...	1	...	1	...	...	...	...	2	...	...	...	...	...	...	3
Syphilis ...	...	1	1	1	3	6	3	3	3	...	2	...	...	1	1	...	22
Rickets ...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	2	...	4
Meningitis (not Tuberculous) ...	...	...	...	...	...	1	2	...	3	...	2	2	...	...	2	3	15
Convulsions ...	11	6	2	1	20	3	2	2	6	3	5	1	2	4	1	2	51
Bronchitis ...	...	3	1	1	5	14	8	4	5	8	4	5	1	4	2	1	61
Laryngitis ...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	2
Pneumonia ...	...	...	...	2	2	4	...	1	3	1	2	3	3	4	5	5	33
Suffocation, overlaying ...	4	1	1	1	7	3	1	4	1	2	...	...	...	...	...	...	18
not overlaying ...	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...	2	5
Other Causes—																	
Congestion of Lungs ...	...	...	...	...	...	...	...	1	3	...	...	...	...	...	1	...	5
Broncho-Pneumonia ...	...	6	...	1	7	8	3	7	5	3	5	8	6	3	2	4	61
Atelectases ...	8	...	1	1	10	...	1	1	...	...	...	...	...	...	...	...	12
Dentition ...	...	...	...	...	...	...	...	...	...	...	3	2	3	1	...	...	9
Empyema ...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Intussusception ...	...	1	...	...	1	...	...	1	...	1	1	1	...	1	...	...	6
Adrenal Haemorrhage ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Appendicitis ...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Intestinal Obstruction ...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	2
Heat Strokes ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Septic Erythema ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Tonsillitis ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Dyspepsia ...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	3
Jaundice ...	2	1	...	...	3	...	...	...	...	...	...	...	...	...	...	...	3
Accident (falling ceiling) ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Retro Pharyngeal Abscess ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Hypertrophy of Pylorus ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Pyloric Stenosis ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Tetanus ...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Thrush ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Icterus ...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2
Hepatic Congestion ...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Orchitis ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Cyanosis ...	1	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2
Cirrhosis of Liver ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
	184	55	35	32	306	118	73	81	81	66	59	51	38	45	52	44	1014

District of Lambeth Borough—Population (estimated to middle of 1905), 313045.

Births in the year, 8835.

Deaths from all Causes at all Ages, 4896.

LAMBETH BOROUGH.—Deaths Registered

NOTE.—The Deaths of Non-Residents occurring in Public Institutions occurring in Public Institutions situated beyond

	SUB-DISTRICTS.					
	Waterloo Road 1st.		Waterloo Road 2nd.		Lambeth Church 1st.	
	M.	F.	M.	F.	M.	F.
I. SPECIFIC FEBRILE, OR ZYMOTIC DISEASES...	15	10	18	7	14	17
II. PARASITIC DISEASES ...	...	...	...	...	...	...
III. DIETETIC DISEASES ...	1	2	...	3	1	...
IV. CONSTITUTIONAL DISEASES ...	31	27	35	15	34	26
V. DEVELOPMENTAL DISEASES ...	4	4	8	6	11	9
VI. LOCAL DISEASES ...	96	57	66	64	65	71
VII. DEATHS FROM VIOLENCE ...	9	5	12	3	14	7
VIII. DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES ...	7	6	7	3	5	4
TOTALS ...	163	111	146	101	144	134

I.—Specific Febrile, or Zymotic Diseases.						
1.—MIASMATIC DISEASES.						
Smallpox { Vaccinated ...	...	...	...	...	...	...
{ Unvaccinated ...	...	...	...	...	...	...
{ No Statement ...	...	...	...	...	...	...
Measles ...	5	4	4	3	1	3
Whooping Cough ...	3	...	1	2	...	7
Scarlet Fever ...	...	...	2	1	...	...
Typhus ...	...	...	...	...	...	...
Simple Continued and Ill-defined Fever ...	...	...	...	...	...	...
Enteric or Typhoid Fever ...	...	...	2	...	1	...
Diphtheria ...	...	1	2	...	1	1
Membranous Croup ...	...	...	...	...	...	...
Influenza ...	...	...	1	...	...	...
Other Miasmatic Diseases ...	1	...	...	...	...	...
2.—DIARRHOEAL DISEASES.						
Cholera, Nostras ...	...	...	...	...	...	...
Cholera, Asiatic ...	...	...	...	...	...	...
Diarrhoea, Dysentery ...	3	4	4	1	9	5
3.—MALARIAL DISEASES.						
Remittent or Relapsing Fever ...	...	...	...	...	...	...
Ague ...	...	...	...	...	...	...
4.—ZOOGENOUS DISEASES.						
Cowpox and effects of Vaccination ...	...	...	...	...	...	...
Other Diseases (e.g., Hydrophobia, Glanders, Splenic Fever) ...	...	...	...	...	...	...
5.—VENEREAL DISEASES.						
Syphilis ...	2	...	2	...	2	1
Gonorrhoea, Stricture of Urethra ...	1	...	...	...	...	...
6.—SEPTIC DISEASES.						
Erysipelas ...	...	...	...	...	...	...
Pyæmia, Septicæmia ...	...	1	...	...	...	...
Puerperal Fever ...	...	...	...	...	...	...

from all Causes during the Year 1905.

situated in the District are excluded, and the Deaths of Residents the limits of the District are included.

SUB-DISTRICTS.															Total.
Lambeth Church 2nd.		Kennington 1st.		Kennington 2nd.		Brixton.		Norwood.		No Address.		All Ages.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
53	47	43	52	37	39	70	58	31	21	11	3	292	254	546	
...	...	...	1	1	...	1	...	...	...	...	...	2	1	3
2	4	2	4	3	1	3	7	1	...	...	...	1	13	35
92	77	85	76	67	72	123	127	39	43	20	6	526	469	995	
26	15	25	26	19	28	40	53	18	20	6	5	157	166	323	
205	205	209	196	155	170	253	289	90	130	50	42	1189	1224	2413	
14	5	20	9	14	6	23	15	1	5	6	5	113	58	171	
12	11	16	15	11	6	22	20	10	3	2	...	92	68	160	
404	364	400	379	307	322	535	569	190	222	95	60	2384	2262	4646	
...	
...	
6	4	6	6	9	4	11	6	12	1	6	1	60	36	96	
2	10	3	8	6	9	6	15	3	3	1	...	25	54	79	
1	3	...	8	2	4	5	7	3	...	...	...	13	18	31
...	
...	...	1	...	3	...	2	1	...	...	...	...	9	1	10
5	8	4	5	4	2	3	2	1	1	...	...	20	17	37
...	
...	1	3	5	4	5	12	12	5	4	...	...	25	25	50
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	...	...	...	1	...	...	...	...	...	1	1	2
32	13	22	26	3	9	24	8	6	6	1	...	104	72	176	
...	
...	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
5	4	3	5	3	3	...	2	...	...	...	2	17	14	31
...	...	...	...	...	...	1	...	...	...	1	...	3	...	3
2	1	...	1	3	1	4	1	1	1	...	...	10	5	15
...	2	...	...	...	...	2	...	...	2	...	2	5	...	7
...	...	...	1	...	2	...	2	...	1	...	...	6	...	6

LAMBETH BOROUGH.—Deaths Registered

NOTE.—The Deaths of Non-Residents occurring in Public Institutions occurring in Public Institutions situated beyond

	SUB-DISTRICTS.					
	Waterloo Road 1st.		Waterloo Road 2nd.		Lambeth Church 1st.	
	M.	F.	M.	F.	M.	F.
3.—DISEASES OF CIRCULATORY SYSTEM.						
Pericarditis ... ..	...	...	...	...	...	2
Acute Endocarditis ... ..	...	...	2	1	1	1
Valvular Diseases of Heart	3	7	4	3	6	6
Other Diseases of Heart	11	3	2	9	6	6
Aneurism ... ..	...	...	1	...	...	...
Embolism, Thrombosis ... ..	...	1	...	1	...	...
Other Diseases of Blood Vessels	7	7	10	2	3	3
4.—DISEASES OF RESPIRATORY SYSTEM.						
Laryngitis	1	...	1	...	...	...
Croup ... ..	...	...	1	...	...	...
Emphysema, Asthma ... ..	...	...	1	...	...	...
Bronchitis	12	14	9	14	5	8
Pneumonia	17	3	4	1	8	8
Pleurisy ... ..	...	1	...	...	1	1
Bronchopneumonia	4	9	6	4	4	7
Pleuropneumonia	6	...	1	1	2	...
Other Diseases of Respiratory System	1	...	2	...	1	...
5.—DISEASES OF DIGESTIVE SYSTEM.						
Dentition ... ..	...	...	...	1	1	...
Sore Throat, Quinsy ... ..	...	1	...	...	...	...
Diseases of Stomach	2	2	...	...	1	2
Enteritis	4	1	3	1	2	3
Obstructive Diseases of Intestine ... ..	...	1	...	1	1	1
Peritonitis ... ..	...	...	1	...	...	1
Ascites ... ..	...	...	...	...	...	...
Cirrhosis of Liver	2	...	3	3	2	...
Jaundice and other Diseases of Liver ... ..	...	...	...	...	...	...
Diseases of the Pancreas ... ..	...	...	...	...	...	...
Other Diseases of Digestive System ... ..	...	...	1	...	...	...
6.—DISEASES OF LYMPHATIC SYSTEM.						
(e.g., of Lymphatics and of Spleen) ... ..	...	...	...	...	...	...
7.—DISEASES OF GLAND-LIKE ORGANS OF UNCERTAIN USE.						
(e.g., Bronchocele, Addison's Disease) ... ..	...	...	...	...	...	...
8.—DISEASES OF URINARY SYSTEM.						
Nephritis	1	...	...	...	...	2
Bright's Disease, Albuminuria	6	2	7	2	6	6
Disease of Bladder or of Prostate	2	...	2	...	1	...
Calculus (Stone) ... ..	...	...	...	...	...	...
Other Diseases of the Urinary System ... ..	...	...	...	...	1	...
9.—DISEASES OF REPRODUCTIVE SYSTEM.						
A. Of Organs of Generation.						
Male Organs ... ..	...	...	...	...	...	...
Female Organs ... ..	...	...	...	1	...	1

from all Causes during the Year 1905.

situated in the District are excluded, and the Deaths of Residents the limits of the District are included.

SUB-DISTRICTS.													Total.	
Lambeth Church 2nd.		Kenning-ton 1st.		Kenning-ton 2nd.		Brixton.		Norwood.		No Address.		All Ages.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.
1	1	...	1	1	...	...	2	...	1	...	...	2	7	9
1	...	...	...	1	1	2	...	...	...	...	...	7	8	10
8	17	13	16	7	14	12	31	11	13	2	4	66	113	179
14	10	11	26	10	19	36	46	9	21	2	2	101	137	238
2	1	6	...	1	...	2	2	2	...	1	...	16	3	19
...	...	1	...	1	...	3	1	...	2	...	...	5	7	10
11	6	16	9	6	4	11	4	2	4	10	7	76	46	122
...	...	...	1	...	...	3	...	1	...	...	...	5	2	7
1	...	...	...	...	...	...	1	...	...	...	...	2	1	3
2	...	1	2	2	...	5	2	1	...	1	...	14	4	18
38	45	39	41	13	34	32	38	16	23	6	5	170	224	394
21	4	19	14	20	12	17	16	15	6	3	3	124	72	196
1	1	2	1	2	...	2	...	2	1	...	...	9	1	15
12	18	20	12	10	5	9	6	1	11	4	3	70	77	145
5	4	2	5	4	1	4	2	...	2	...	1	24	16	40
2	1	3	1	3	2	4	8	1	4	...	...	18	22	40
1	1	2	2	1	1	1	...	...	...	...	...	6	1	11
...	1	...	...	...	...	...	...	...	...	...	...	...	5	2
3	8	4	2	7	3	3	7	2	3	...	...	22	27	49
8	7	7	6	6	18	7	2	4	...	...	...	51	36	87
2	4	3	2	3	2	6	4	2	1	1	1	18	17	35
1	...	...	1	...	2	...	1	1	...	...	...	3	5	8
...
1	4	4	7	4	6	8	9	3	3	1	...	26	34	60
2	1	1	1	2	2	4	7	1	...	...	...	10	1	19
...
3	2	...	3	2	3	2	2	2	...	...	...	12	15	24
2	...	...	...	1	...	...	...	...	...	...	...	2	1	3
...	1	...	1	...	1	...	1	1	...	...	...	1	4	5
4	3	...	2	4	1	1	1	1	1	...	...	12	10	22
15	12	13	6	10	10	20	16	2	5	3	6	82	65	147
1	...	1	...	1	...	4	2	1	...	1	...	14	2	16
...	...	...	2	...	...	...	1	...	...	...	...	3	...	3
...	...	...	2	1	4	...	...	...	1	...	...	8	1	9
...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
...	2	...	1	...	1	...	4	...	1	...	...	...	11	11

	SUB-DISTRICTS.					
	Waterloo Road 1st.		Waterloo Road 2nd.		Lambeth Church 1st.	
	M.	F.	M.	F.	M.	F.
<i>B. Of Parturition.</i>						
Abortion, Miscarriage
Puerperal Convulsions
Placenta Prævia, Flooding	1
Other Accidents of Child Birth	1
10.—DISEASES OF BONES AND JOINTS.						
Caries, Necrosis
Arthritis, Ostitis, Periostitis	1	...
Other Diseases of Bones and Joints	1
11.—DISEASE OF INTEGUMENTARY SYSTEM.						
Carbuncle, Phlegmon	1	...	...	...	...
Other Diseases of Integumentary System
VII.—Deaths from Violence.						
1.—ACCIDENT OR NEGLIGENCE.						
Fractures and Contusions	1	...	4	1	2
Gunshot Wounds
Cut, Stab
Burn, Scald	1	...	...
Poison	1
Drowning...	3	...	3	...	4
Suffocation	2	1	1
Otherwise	4	3	...	5	1
2.—HOMICIDE.						
Manslaughter
Murder
3.—SUICIDE.						
Gunshot Wounds	1	...
Cut, Stab
Poison	2	...	1
Drowning...	2
Hanging	1	...	2	...	...
Otherwise...
4.—EXECUTION.						
Hanging
VIII.—Deaths from Ill-Defined and not Specified Causes.						
Dropsy
Debility, Atrophy, Inanition	7	6	6	2	4
Mortification
Tumour
Abscess	1	...
Hæmorrhage
Sudden Death (cause not ascertained)
Causes not specified, or ill-defined	1	1	...	...

[illegible]

[illegible][illegible]

all Causes during the Year 1905—continued.

situated in the District are excluded, and the Deaths of Residents the limits of the District are included.

[illegible]

all Causes during the Year 1905—*continued.*

situations in the District are excluded, and the Deaths of Residents
the limits of the District are included.

[illegible]

all Causes during the Year 1905—*continued.*

	AGES.									
	Under 1 Year.		1-5		Under 5 Years.		5-10		10-15	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>B. Of Parturition.</i>										
Abortion, Miscarriage
Puerperal Convulsions
Placenta prævia, Flooding
Other Accidents of Child Birth
10.—DISEASES OF BONES AND JOINTS.										
Caries, Necrosis	2	...	...	...
Arthritis, Ostitis, Pericostitis	1	...	1	...	...	...	...	...
Other Diseases of Bones and Joints	1	1
11.—DISEASES OF INTEGUMENTARY SYSTEM.										
Carbuncle, Phlegmon	1	...	1	...	...	...
Other Diseases of Integumentary System	1	...	...	1	...	...	...	...	...
VII.—Deaths from Violence.										
1.—ACCIDENT OR NEGLIGENCE.										
Fractures and Contusions	1	1	1	1	2	1	...
Gunshot Wounds
Cut, Stab
Burn, Scald	2	4	2	4	1	...	1
Poison	2	2	...	2	...	...
Drowning	1	...
Suffocation	5	14	...	7	14	...	...	...	...
Otherwise	5	4	2	7	4	1	...	1	...
2.—HOMICIDE.										
Manslaughter
Murder
3.—SUICIDE.										
Gunshot Wounds
Cut, Stab
Poison
Drowning
Hanging
Otherwise
4.—EXECUTION.										
Hanging
VIII.—Deaths from Ill-Defined and Not Specified Causes.										
Dropsy
Debility, Atrophy, Inanition	8	57	...	2	85	59	...	...	...
Metrifaction
Tumour
Abscess	1	1	...	1	1	1	...	...	...
Hæmorrhage
Sudden Death (cause not ascertained)
Causes not specified, or ill-defined	...	1	...	...	...	1	...	...	...	...

SUMMARY OF TOTAL CORRECTED DEATHS IN LAMBETH BOROUGH DURING 1905.

	No. of Deaths.		Total.		No. of Deaths.		Total.
	M.	F.			M.	F.	
I.—Specific Febrile, or Zymotic Diseases				Brought forward ..	2041	2013	4054
1. Miasmatic Diseases	153	151	304				
2. Diarrhoeal "	105	73	178	VI.—Local Diseases—continued.			
3. Malarial " ... ..	...	...	...	6. Diseases of Lymphatic System	2	1	3
4. Zoogenous "	2	...	2	7. Diseases of Gland-like Organs			
5. Venereal "	20	14	34	of Uncertain Use	1	4	5
6. Septic "	12	16	28	8. Diseases of Urinary System ...	119	78	197
II.—Parasitic Diseases	2	1	3	9. Diseases of Reproductive System	...		
III.—Dietetic Diseases	13	22	35	(a) Diseases of Organs of			
IV.—Constitutional Diseases ..	526	469	995	Generation.	1	11	12
V.—Developmental Diseases ...	157	166	323	(b) Diseases of Parturition ...	...	15	15
VI.—Local Diseases				10. Diseases of Bones and Joints ...	8	9	17
1. Diseases of Nervous System ...	192	216	408	11. Diseases of Integumentary			
2. Diseases of Organs of Special				System.	7	5	12
Sense	2	2	4	VII.—Violence.			
3. Diseases of Circulatory System...	273	314	587	1. Accident or Negligence ...	97	49	146
4. Diseases of Respiratory " ...	426	422	858	2. Homicide ... ..	...	...	...
5. Diseases of Digestive " ...	148	147	295	3. Suicide	16	9	25
Carried forward ...	2041	2013	4054	4. Execution ... ..	...	...	...
				VIII.—Ill-Defined and not Specified Causes.			
					92	68	160
				Total ...	2384	2262	4646

Offences under the Food and Drugs, and Public Health, Acts during 1905.

NATURE OF OFFENCE AND AMOUNTS OF PENALTIES AND COSTS IN EACH CASE.

SALE OF FOOD AND DRUGS ACTS.—SUMMONSES.

OFFENCES.	PENALTY.	COSTS.
On 9th February, 6 summonses were heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk containing added water 6 per cent.	£ s. d. ...	£ s. d. 0 12 6
Re selling Coffee containing 50 per cent. of Chicory	...	0 12 6
Re selling Milk from which the Milk fat had been abstracted to the extent of 31 per cent.	1 0 0	0 12 6
Re selling Milk containing added water 17 per cent.	2 0 0	0 12 6
Re selling Milk containing added water 10 per cent.	2 0 0	0 12 6
Re exposing a parcel of Margarine by retail without having a label attached and marked in capital letters 1½-in. "Margarine."	1 0 0	0 12 6
On 16th March, a summons was heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk containing added water 55 per cent.	5 0 0	0 12 6
On 29th March, a summons was heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk from which the Milk fat had been abstracted to the extent of 12 per cent. The warranty being proved, the magistrate dismissed the summons.	...	...
Three summonses re selling Milk from which the Milk fat had been abstracted to the extent of 10 per cent. The defendant proving that the Milk had not been tampered with, and that there had been no abstraction of cream, the magistrate dismissed the 3 summonses.	...	...
On 11th May a summons was heard before Mr. Francis, at Lambeth Police Court, re selling Milk from which the Milk fat had been abstracted to the extent of 30 per cent.	1 0 0	0 12 6
On 8th June, 3 summonses were heard before Mr. Hopkins, at the Lambeth Police Court, re selling Milk from which the cream had been abstracted to the extent of 16 per cent.	0 10 0	0 12 6
Re selling Milk containing added water to the extent of 5 per cent.	2 0 0	0 12 6
Carried forward	14 10 0	.6 5 0

Sale of Food and Drugs Acts.—Summonses—*continued.*

OFFENCE.	PENALTY.			COSTS.		
	£	s.	d.	£	s.	d.
Brought forward	14	10	0	6	5	0
Re selling Milk containing added water to the extent of 28 per cent. and a trace of formalin. Summons dismissed owing to technicality in same (mentioning on certificate "formalin").	...			...
On 29th June, 2 summonses were heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk from which the Milk fat had been abstracted to the extent of 14 per cent.	1	0	0	0	12	6
Re selling Butter containing margarine (not butter) 95 per cent.	1	0	0	0	12	6
On 19th July, four summonses were heard before Mr. Curtis Bennett, at Lambeth Police Court, re selling Milk containing added water 5 per cent.	2	0	0	0	12	6
Re selling Milk containing added water 5 per cent.	2	0	0	0	12	6
Re selling Milk containing added water 5 per cent.	1	0	0	0	12	6
Re selling Milk containing added water 6 per cent.	1	0	0	0	12	6

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On 20th July, a summons was heard before Mr. Francis, at Lambeth Police Court, re selling Milk from which the Milk Fat had been abstracted to the extent of 12 per cent. The warranty being proved, the Magistrate dismissed the summons.		
On 5th October, four summonses were heard before Mr. Horace Smith, at Lambeth Police Court, re selling Milk from which the Cream had been abstracted to the extent of 16 per cent.	0	10	0	0	12	6
Re exposing a parcel of Margarine for sale by retail without having a label attached, and marked in printed capital letters, not less than 1½ inches square, "Margarine."	0	10	0	0	12	6
Re exposing a parcel of Margarine, &c., as above.	1	0	0	0	12	6
Re exposing a parcel of Margarine, &c., as above.	1	0	0	0	12	6
On 22nd November, a summons was heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk containing added water 8 per cent.	5	0	0	0	12	6
On 7th December, four summonses were heard before Mr. Francis, at Lambeth Police Court, re selling Coffee, containing added Chicory 45 per cent.	1	0	0	0	12	6
Carried Forward	31	10	0	13	15	0

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Sale of Food and Drugs Acts.—Summonses—*continued.*

OFFENCE.	PENALTY.	COSTS.
	£ s. d.	£ s. d.
Brought forward	31 10 0	13 15 0
Re selling Milk from which the Milk Fat had been abstracted to the extent of 22 per cent.	1 0 0	0 12 6
Re selling Milk, containing added water, 17 per cent. Summons dismissed, the identity of the churn being disputed.	...	...
Re selling Milk, containing added water, 5 per cent. The warranty being proved, the Magistrate dismissed the summons.	...	...
On 14th December. a summons was heard before Mr. Francis, at Lambeth Police Court, re selling separated Milk, containing added water, 18 per cent.	1 0 0	0 19 6
On 20th December, summonses were heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk from which the Milk Fat had been abstracted to the extent of 10 per cent. The warranty being proved, the Magistrate dismissed the summons.	...	...
Re selling butter containing Margarine to the extent of 10 per cent. The summons was withdrawn, a certificate from Somerset House being produced stating that, though the sample of butter was highly suspicious of added foreign fat, none such could be found.	...	...
On 3rd January, 1906, two summonses were heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk from which the Milk Fat had been abstracted to the extent of 10 per cent.	0 10 0	0 12 6
Re selling Milk containing added water 9 per cent.	2 0 0	0 12 6
On 10th January, 1906, a summons was heard before Mr. Hopkins, at Lambeth Police Court, re selling Milk, containing added water, 6 per cent. Defendant did not appear and a warrant was issued for his arrest.	...	...
On 31st January, 1906, four summonses were heard before Mr. Baggalley at the Lambeth Police Court, re selling Milk containing added water 2 per cent., and abstraction of Milk Fat 4 per cent.	2 0 0	0 14 6
Re selling Milk containing added water 6 per cent	2 0 0	0 14 6
Re selling Milk containing added water 4 per cent., and abstraction of Milk Fat 5 per cent.	2 0 0	0 14 6
Re selling separated Milk containing added water 20 per cent.	5 0 0	0 12 6
TOTALS	47 0 0	19 8 0

32

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PUBLIC HEALTH AND METROPOLIS LOCAL MANAGEMENT ACTS.—SUMMONSES.

OFFENCE.	PENALTY.	COST.
	£ s. d.	£ s. d.
On 1st March, a summons was heard before Mr. Hopkins against the owner for non-compliance with Notice of the Council to repair the W.C. fittings at No. 41, Elliott Road	2 0 0	0 4 0
TOTAL	2 0 0	0 4 0

N.B.—Seven other Summonses were taken out, but afterwards withdrawn, the work having been carried out to the Council's satisfaction meanwhile.

VENTILATION OF SEWERS AND THE SUGGESTED ABOLITION OF INTERCEPTING TRAPS.

(Special Report presented to the Council on February 2nd, 1905.)

I have carefully considered the letter of the Town Clerk of Lewisham, dated December 2nd, 1904, together with the copy of the Report of the Lewisham Surveyor (Mr. Ernest van Putten), dated November 4th, 1904, and am of opinion that the suggestion made therein for the removal of all intercepting traps, and the repeal of the London County Council Drainage Bye-laws, with reference to the compulsory provision of such traps, is one that is fraught with considerable danger to health, and should, consequently, be opposed at all costs. I agree that some sewers require more ventilation than they at present have, and that this may be accomplished by increasing the number of, and putting closer together, the ventilating outlets and inlets, either in the form of open surface grids, in the middle, and at the level, of the roads (providing the thoroughfares be fairly wide), or by means of shafts or column ventilators of suitable calibre and efficient construction: the former method being, in my opinion and experience, the more satisfactory from a practical point of view; indeed, shaft ventilators alone are useless. The Medical Officer of Health of Lewisham writes to me that he is not in favour of the abolition of intercepting traps, but that he is of opinion that as many houses as possible should assist in ventilating the sewers by some external form of ventilation taken off at a point behind the intercepting trap at the sewer end of the drain.

Sewer-*gas* and sewer-*air* must be distinguished one from the other. The former consists of organic and other gases (the result of putrefactive and decomposing changes in the stagnant contents of the sewers), and the latter of practically atmospheric air (which has gained access into the sewers). Whatever bacteriologists and chemists (*e.g.*, Dr. Andrews and Mr. J. Parry Laws, and others) may say about the harmlessness of sewer air, there can be no difference of opinion as to the deleterious and dangerous properties of

sewer gas—at least, at times, and under certain conditions. In old, badly-laid, ill-kept, defective, unflushed and ill-ventilated sewers—what are known as sewers of deposit, or elongated underground cesspools—these deleterious and dangerous gases are generated in excess, and may prove a danger to health by causing nausea, vomiting, diarrhœa, sore throats, headache, and general malaise and lowering of the vitality, thereby predisposing to various diseases (zymotic and others). The need for ventilation (thorough and efficient) is, therefore, obvious, and, as far as our knowledge and experience at present goes, such ventilation may be best effected by the provision of (a) open ventilating grids at the road levels (such grids being in sufficient numbers) in the middle of fairly wide thoroughfares; and (b) properly constructed shafts of proper dimensions and calibre, for it is needless to state that a shaft of 4 ins. by 3 ins. will not compensate for an open grid 12 ins. by 5 ins. In this way, the sewer gases are diluted and oxidised, and thereby rendered innocuous and inert.

Old sewers being, more or less, filled with such deleterious and dangerous gases, it is self-evident that all house drains should be disconnected, as far as possible, from such sewers by the provision of suitable, efficient, and properly constructed intercepting traps (and man-holes or other equally efficient means of access); otherwise these deleterious and dangerous gases would pass into, or near, the rooms (living and sleeping) of houses through any defect that might be present in the house drain. This view of the matter is the one that has been adopted by the framers of the recently - published (October 30th, 1900) London County Council Drainage Bye-laws, in which the provision of such intercepting traps is made a *sine quâ non* for every building situated within the County of London, and may be taken, therefore, as fairly representative of modern sanitary opinion to-day. It is true that the intercepting trap is not an unmixed blessing—not an ideal sanitary appliance, but what we have to do is to choose between two evils, viz., having sewer gas laid on to the house, or having the efficiency of the house drain somewhat interfered with; and the latter is the lesser evil.

The first principle in house drainage, then, is the intercepting of the drain of the house from the sewer into which it discharges, with the object of preventing the passage of

foul gases from such sewer into the house drain. The fouler the sewer, the more important becomes the necessity for this interception.

Having regard to the present state of many Metropolitan sewers (*e.g.*, elongated underground cesspools, with foul deposits and silt, varying in amount at times from a few inches in depth to almost the whole of the lumen of the sewer being blocked), it is clear that the ventilation of house drains must be kept definite and distinct from that of the sewers, and that any attempt to ventilate sewers by, and through, house drains must result disastrously, and be a danger to health.

There are two important questions involved in the Report of the Borough Engineer of Lewisham which have not by him been kept separate and distinct, as they must at all times be, *viz.* : (1) the need for efficient ventilation of sewers, and (2) the need for efficient ventilation of drains—the former resting with the Sanitary Authority, and the latter with the private owner.

(1) *Ventilation of Sewers.*

Practically all sanitarians are agreed that sewers require freely ventilating, though opinions vary as to how this ventilation may best be practically carried out, whether by means of open gratings, at the level of roads (and, if so, how many), or by means of outlet ventilating shafts (and, if so, of what size and calibre). Personally, I have always held the view (which I see no reason to alter to-day) that the alleged danger to health from open ventilating grids at the level, and in the middle, of the roads has not yet been satisfactorily proved, provided such roadways are sufficiently wide, and that, as far as Lambeth Borough is concerned, I have no reason for believing that any such danger to health therefrom exists (statistics pointing rather to the contrary conclusion). I have always advised the closure of open ventilating grids situated in narrow streets and courts, but that advice must not be taken to carry with it a wholesale condemnation of all open grids as sewer ventilators at the level of roads; indeed, for efficiency, they appear to be better than shafts, which, by virtue of their construction, are lessened in practical utility by reason of friction, due to bends in the pipes, etc. It is more a question of multiply-

ing the numbers of open grids, so that the sewer gas may be thoroughly diluted, and thereby rendered innocuous and inert. It is clear that with well-ventilated sewers the efficient interception of house drains (so desirable a provision) becomes practicable by means of traps, though it is well known that pent-up gases may force such traps or pass through their water seals. Consequently, with badly ventilated sewers, the sewer gas will force its way, sooner or later, into the house drains, and so sewer gas will be laid on to the houses. It may be stated, as an axiom, that a sewer intercepting trap is useful according as the ventilation of the sewer, from which it is desired (and desirable) to intercept the drain, is efficient. The flushing of sewers and their proper construction in the first instance are matters not to be forgotten in this connection.

(2) *Ventilation of Drains.*

The remarks made in respect of sewers apply, too, to the drains, the ventilation of which is equally as important—an opinion now held by all sanitarians, as shown by the very strict bye-laws recently framed by the London County Council with regard to the ventilation of all house drains. The object of the ventilation of house drains is to dilute and oxidise, and thereby render innocuous and inert, drain gas—the sewer gas being prevented from gaining access into the house drains by the intercepting traps.

JOSEPH PRIESTLEY,

Medical Officer of Health.

January 9th, 1905.

LONDON COUNTY COUNCIL (GENERAL POWERS) BILL, 1905.

(Special Report presented to the Council on February 2nd, 1905.)

The London County Council (General Powers) Bill, 1905, deserves the serious attention of Metropolitan City and Borough Councils, in that it is proposed in Parts 5, 6, and 7 that the London County Council should usurp some of the existing powers of such Councils. Thus, Part 5 deals with the Sale of Food and Drugs Acts, proposing, in Section 22, that the London County Council should become the supervisory authority for Metropolitan and City Borough Councils in regard to the administration of the Sale of Food and Drugs Acts, 1875-1899, within the County of London—a proposition which is unnecessary in that the Legislature has already laid down, in Sections 2 and 3 of the Sale of Food and Drugs Act, 1899, that the Local Government Board and the Board of Agriculture shall exercise such supervisory powers, and that, further, the Local Government Board may act, in default of Local Sanitary authorities, under that particular Act.

Part 6 deals with Milk. Thus, Section 23 (1) proposes to give powers to the London County Council to take samples of milk within the County of London—a power at present in the hands of the Metropolitan City and Borough Councils, and one that, consequently, is unnecessary for the London County Council to possess as well; whilst Section 23 (2) deals with similar proposed powers for the London County Council under conditions outside the County, but this power, if given at all, should be given to those Sanitary Authorities that at present exercise similar powers *within* the County.

Sections 24 to 33 deal with the inspection by the London County Council of cows with tuberculous udders, and the taking of samples of milk from such; but such powers, if given to the London County Council, should be given concurrently to the Metropolitan City and Borough Councils.

Part 7 deals with Sanitary Provisions, Section 34 proposing to give to the London County Council, with respect

to infected milk, similar powers to those already possessed by the City and Borough Councils under Section 71 of the Public Health (London) Act, 1891—a proposal which is unnecessary, having regard to the present efficient united action amongst Metropolitan Medical Officers of Health. What is wanted for London is for the Local Government Board to have power to make an Order, on the representation of two or more Metropolitan City or Borough Councils, for the prohibition of the sale of infected milk within the County of London.

Section 35 is a useful section, dealing with proposed powers (sample-taking and examination) for Metropolitan City and Borough Councils over milk that is unsound, or unwholesome, or unfit for the food of man; but Sub-Section 5 is unnecessary, dealing with proposed supervisory powers by the London County Council—powers which should be in the hands of the same supervising authority as at present deals with adulterated milk, viz., the Local Government Board.

I recommend that the Lambeth Borough Council oppose the Bill on the points mentioned above.

JOSEPH PRIESTLEY.

January 23rd, 1905.

WATER SUPPLY TO TENEMENT HOUSES.

(Special Report presented to the Council on May 11th, 1905.)

A circular letter, dated 7th February 1905, has been addressed to the Lambeth Borough Council from the London County Council, drawing the Council's attention to the decision of the Magistrate at Woolwich Police Court, on the 16th December, 1904, to the effect that the supply of water from the tap in the yard of a certain three-storied tenement house in Woolwich (1, High Street) was not a proper and sufficient supply, within the meaning of Section 48 of the Public Health (London) Act, 1891, which provides that an occupied house, without a proper and sufficient supply of water shall be a nuisance liable to be dealt with summarily under the Act, and, if it is a dwelling-house, shall be deemed unfit for human habitation.

The London County Council in their letter suggest that the Lambeth Borough Council (and other Metropolitan City and Borough Councils) should take steps to secure the provision of a proper and sufficient supply of water for the tenants of every floor of a tenement house. I cannot as Medical Officer advise that the action suggested by the London County Council should be adopted as a routine in Lambeth Borough, as it is by no means certain that the decision of the Woolwich Magistrate in the particular case mentioned would apply to all tenement houses throughout London. The Woolwich decision holds good only for the particular house in Woolwich in connection with which the decision was given. I am of opinion that the decision given in the Woolwich case was fair and equitable, having regard to all the particular facts—the tap in the yard not being a proper and sufficient supply for all the tenements in that particular three-storied house. The custom in Lambeth Borough hitherto has been to require a water supply to each tenement in the case of new tenement buildings, or of old buildings reconstructed for the purpose of being sub-let in tenements, so as to provide, as far as practicable, a separate water supply with separate sink and waste pipe under the tap (to carry off all drippings and waste to the drain) for each separate family.

I am of opinion, however, that it would be somewhat of a hardship to enforce a separate water supply to each floor

in the case of, say, all two-storied tenement houses throughout the Borough; and under the circumstances I am not prepared to advise the Council to act in the way suggested by the London County Council, but I am of opinion that the Council should continue to deal with cases as they crop up—treating each case on its individual merits. In the case of new tenement buildings, or old buildings, adapted to be used for tenements, a water supply to each tenement or family should be, as far as practicable, insisted upon.

The powers of a Metropolitan Sanitary Authority over the water supply of occupied houses is contained in Section 48, Sub-Section 1, of the Public Health (London) Act, 1891, which reads as follows:—

“An occupied house without a proper and sufficient supply of water shall be a nuisance liable to be dealt with summarily under this Act, and if it is a dwelling-house, shall be deemed to be unfit for human habitation.”

In connection with this Section, it is the duty of a Sanitary Authority to issue a certificate for any house which, after the commencement of the Act, is newly erected, or is pulled down to, or below, the ground floor and rebuilt, before such house is occupied as a dwelling-house (but only as a dwelling-house), stating that it has a proper and sufficient supply of water, either from a Water Company or by some other means. This duty is a new one, and has been carried out throughout the Borough and late Parish of Lambeth since the Public Health (London) Act, 1891, came into force, and, though the provision contained in Section 48 of the Public Health (London) Act, 1891, is new, there was a corresponding duty thrown upon Sanitary Authorities under Section 6 of the Public Health (Water) Act, of 1878.

It is clear that a Sanitary Authority would not be justified in asking an owner to alter the water supply of an occupied house, in connection with which they had already issued a certificate. In an exaggerated case, such as that at Woolwich, action would, of course, be taken, as required, in Lambeth under similar conditions, but it by no means follows that, therefore, the Lambeth Borough Council would be justified in systematically dealing with all occupied tenemented houses throughout the Borough that have not a water supply for the top (and each) floor.

JOSEPH PRIESTLEY.

May 1st, 1905.

PROPOSAL BY THE GUARDIANS THAT THEIR DISINFECTING WORK SHOULD BE DONE BY THE BOROUGH COUNCIL.

(Special Report presented to the Council on 11th May, 1905.)

I have carefully considered the letter, dated April 4th, 1905, addressed to the Lambeth Borough Council, through me, by the Board of Guardians, asking if arrangements can be made for the disinfecting work required in connection with the Norwood Parochial Schools and School's Infirmary to be undertaken at the Lambeth Borough Council's Disinfecting Station, Wanless Road. I am of opinion that the request is a most serious one administratively, and that it requires careful consideration by the Council before acceding thereto.

It will be within the recollection of the Council that a serious outbreak of Measles occurred at the Lambeth Schools, Elder Road, West Norwood, at the end of 1902 and the beginning of 1903—a total number of 68 cases and 11 deaths, and that, in connection therewith, a special investigation into the whole of the circumstances was made, and a serious state of affairs was disclosed, of which full details were furnished by me in a Special Report, which was presented to the Guardians and to the Borough Council. (*Vide Council's Minutes, 1903, pp. 1149-1155.*)

The drainage and sanitary arrangements of the Schools were found to be in an unsatisfactory state, and the drains have since been reconstructed, and the sanitary appliances remodelled and brought up to modern requirements; whilst other important administrative changes have also been made, by which the danger of the spread of infectious disease amongst the inmates of the Schools will be minimised, if not entirely prevented. As the result of my investigations, I offered to the Guardians a series of suggestions, which were adopted by the Board, and amongst such suggestions was one recommending the provision at the Schools of an efficient disinfecting machine, in place of the old hot-air chamber in use at the time of my inspections, a method of disinfection that is now acknowledged to be old-fashioned, out-of-date, inefficient, and, consequently, useless. Though all my other suggestions

have been carried out, the one recommending the provision of an efficient disinfecting machine (a suggestion which was also adopted by the Board) has not yet been given effect to, though it is an important one, having regard to the large number of persons living at the Schools, viz., an average of about 600 children, together with a full staff of servants, attendants, nurses, etc.

The uses for a disinfecting machine in an Institution such as the Lambeth Schools are two in number, viz. (1) Routine, and (2) Special.

With regard to No. (1) Routine use: it is found necessary from time to time to disinfect bedding, clothes, etc., that are not necessarily infected with infectious disease, and I cannot recommend that such disinfecting work should be carried out at a public disinfecting station, where goods infected with scarlet fever, diphtheria, or smallpox, etc., are daily taken, and dealt with, as there must of necessity be more or less danger of such bedding, clothes, etc., being thereby accidentally infected.

With regard to No (2) Special use: the Borough Council must be prepared, at all times, to carry out whatever disinfection may be necessary in connection with outbreaks of infectious disease throughout the Borough, and the Lambeth Guardians in this respect, and under these conditions, are entitled to use the public disinfecting station, as are other public bodies and institutions within the Borough. The Guardians would, however, be well advised if they did not exercise their claims in this direction, as with such a susceptible material as exists at Norwood Schools, there is always the danger (slight though it may be) of infection being introduced from such a public disinfecting station, or there is at least the danger of the suggestion being made that any disease that may occur amongst such susceptible material afterwards has been introduced from a public disinfecting station. It is for this reason that I have not the slightest hesitation in repeating the advice which I have already given the Guardians, viz., that an efficient disinfecting machine is, in my opinion, an absolute necessity at the Norwood Schools, in connection with which there is an Infirmary and an Isolation Block, more especially having regard to the number of inmates. The question of expense is one that ought not to weigh with the Guardians in this

matter, and I feel sure that their own Medical Officer (resident at the Schools) would, in this respect, agree with me. In this connection, it may be mentioned that the Guardians have already provided themselves with an efficient "Equifex" disinfecting machine (the same kind as the Council possesses at Wanless Road) in connection with their Brook Street premises, at my suggestion, which was endorsed by their own Medical Officer, for similar reasons (amongst others) which I am urging now in connection with the Norwood Schools. Therefore, if the Guardians do not provide a separate disinfecting machine at the Norwood Schools, they should, at least, arrange to have such disinfection as may be necessary for the Schools done in their Brook Street machine, rather than that it should be done in the machine belonging to the Borough Council at Wanless Road. It must, however, be definitely understood that I do not recommend such a course, but suggest again that a separate machine should be provided by the Guardians at Norwood Schools.

Again, administratively, there is much against the Guardians' request being acceded to by the Council, as during times of epidemic, or on account of extra work involved in dealing with the routine disinfecting work of the Borough, it would be at times impossible to guarantee that the Guardians' work could be expeditiously carried out. Thus, to show what is meant, I may give actual facts of what has recently occurred, though it may be that such an occasion was exceptional. On January 27th, 1905, I consented to carry out some disinfection for the Norwood Schools, with the result that the following articles, which, moreover, were to be returned before 7 o'clock in the evening, had to be dealt with: Beds 21, Mattresses 26, Pillows 72, Blankets 216, Quilts 72, Sheets 144, Articles of Clothing 70, and Extras 41; making the large total of 662 separate articles to be dealt with in one day for the Guardians.

The result was that the whole of the work of the Council's Disinfecting Department was disorganised, and the routine disinfecting work of the Borough had to be held over until the bedding, clothes, etc., belonging to the Guardians had been dealt with; more especially, as I gave instructions that all articles received from the Guardians were to be kept absolutely distinct, and away, from the ordinary articles that were being dealt with that day in the routine way. An extra van and attendants were required to be engaged so as to

cope with the extra work, and the furnaces had to be lighted at 4 a.m.—the Council's officers working that day many hours overtime. Though, as I have already stated, this may be a somewhat exaggerated case, it is a useful object lesson as showing what may occur, even though only occasionally.

Once the principle is admitted of the Borough Council doing this work for the Guardians, I am afraid that many applications will be received from other large public institutions throughout the Borough, asking for a similar concession.

In conclusion, I may state that the Borough Council is prepared at all times to disinfect for the Guardians, rooms, wards, etc., wherein infectious disease has broken out, and in this connection I find that 568 such rooms, wards, etc., have been disinfected during 1904 by means of (a) spraying with formalin, or perchloride of mercury solution, or (b) fumigating with sulphur. It need not be added that the Borough Council will at all times be glad to assist the Guardians in connection with any special disinfecting work that may be required, as they have done on many previous occasions, *e.g.*, in the event of the Guardians' own machines breaking down, or being overtaxed; an extensive outbreak of infectious disease in any of their buildings, etc.

Having regard to all the facts stated above, I cannot recommend the Council to accede to the request of the Guardians contained in their letter of the 4th April, 1905.

JOSEPH PRIESTLEY.

May 1st, 1905.

DECREASE IN DIPHTHERIA IN LAMBETH BOROUGH.

(*Special Report presented to the Council on 11th May, 1905.*)

I have to draw the attention of the Council to the marked decrease in the morbidity—and mortality—rates from Diphtheria (including Membranous Croup), during the last four years (*i.e.*, since the formation of the Borough). I have worked out, in connection with these two diseases, the statistics (including the total number of notifications received, and the death rates per million living) for the last 34 years as follows:—

Diphtheria and Membranous Croup in Lambeth, 1871—1904.

	Quinquennial Period.	Population (estimated).	No. of Cases Notified.	No. of Deaths Registered.	Death-rate per million Living.
Old Parish.	1871-1875	1,089,336	—	149	137
	1876-1880	1,202,080	—	243	200
	1881-1885	1,292,016	—	283	219
	1886-1890	1,346,658	—	495	368
	1891-1895	1,420,055	2,932	618	435
	1896-1900	1,520,442	4,181	662	435
New Borough.	1901	302,533	524	50	165
	1902	305,102	474	53	174
	1903	307,711	338	29	94
	1904	310,359	328	34	110

Taking the Borough statistics separately, it will be noticed that the death-rate has dropped from 165 in 1901 to 110 in 1904 per million living; whilst, during the same four years, the actual numbers of notifications received have fallen from 524 in 1901 to 328 in 1904. There has, in this way, been an exceptionally sudden decrease in the mortality, and also in the incidence, from Diphtheria and Membranous Croup throughout the Borough of Lambeth during the past four years, 1901-1904, *i.e.*, since the Borough was formed.

In the old Parish of Lambeth, Diphtheria and Membranous Croup prevalence and mortality had been steadily rising for the previous thirty years (1871-1900).

The old Parish of Lambeth became the new Borough in 1900-1, and a comparison can be drawn between the Diphtheria and Membranous Croup statistics for the four years during which the Borough has been in existence (1901-1904) and those for the previous four years of the old Parish (1897-1900). Thus, the notifications have dropped in number from a total of 3,502, received in connection with the old Parish during 1897-1900, to a total of 1,664, received in connection with the new Borough during 1901-1904; whilst the deaths for the same period have fallen from a total of 662, for the old Parish, to a total of 166 for the new Borough. Expressed in rates per million living, the notifications have dropped from 2,860 to 1,358, and the deaths from 426 to 135, *i.e.*, the morbidity (sickness) 52 per cent., and the mortality (death) 68 per cent. respectively.

Even allowing for the comparatively slight differences due to the alterations in the old Parish, to form the new Borough, boundaries, these statistics show an enormous decrease in the incidence of, and mortality from, Diphtheria and Membranous Croup, and the cause of this sudden decrease is somewhat difficult entirely to account for. All will agree that the increased sanitary vigilance displayed by the Sanitary Authority in recent years, and the more prompt notification (both by medical men and school teachers), and subsequent isolation of cases have helped in part to bring about this satisfactory change, though I am of opinion that bacteriological examinations, with consequent more exact diagnoses, and the more general use of anti-toxin in the treatment, of these diseases, together with a cyclical change in their natures, have had the largest share in causing so sudden a decrease.

The facts as they stand are interesting and deserve notice; more especially as in these days there is a tendency to question the value of the methods adopted by sanitary authorities, and the financial outlay connected therewith, in battling with the spread of epidemic disease.

JOSEPH PRIESTLEY.

May 1st, 1905.

SANITARY CONDITION OF LAMBETH PUBLIC ELEMENTARY SCHOOLS.

(Special Report presented to the Council on June 8th, 1905.)

The Council, on December 8th, 1904, instructed the Medical Officer to have an examination made of the drainage of all the Public Elementary Schools in the Borough, and to bring up a report on the subject. The question arose in the first instance as to what method of testing the drains should be adopted, viz., by water, or otherwise. The Borough Council, on February 2nd, 1905 (vide Minutes, 1905, pages 534-537), endorsed the action of the late Vestry in not using the water test indiscriminately (such test being a somewhat severe test, more especially for old drainage), except in the case of new drains during construction or reconstruction.

The test, therefore, applied to the drains of the Schools has been in each case the smoke (or chemical) test—Kinzett's drain-testers being used ; and it must be remembered in this connection that where no result is obtained from such test, it does not necessarily follow that the drains tested are therefore sound, and in good order and condition. On the other hand, a result from the test from the drains or fittings shows a defect or defects to exist in the drainage system under examination.

It is true that the hydraulic (water) test is a more trustworthy one, but it is severe, and its severity has been shown again and again by the fact that such test has made a defect or defects in drains which are otherwise, to all intents and purposes, sound, by bursting the joints, cracking the pipes, etc. Despite this well-known practical fact, the London County Council has tested the drains of the Non-Provided Schools throughout Lambeth Borough (with five exceptions) with water, and it is impossible to say, therefore, that the London County Council's action has not caused some of the defects that are tabulated in this Report. For purposes of comparison, it would have been well, under the circumstances, had the London County Council also tested the

drains of their own Schools (the Provided Schools) with the same severe hydraulic (water) test.

The examination of the drainage that has been carried out comprises the following headings, dealing with drains and sanitary fittings :—

- (1) Closet accommodation, *e.g.*, (a) situation, (b) nature, (c) general sanitary condition.
- (2) Lavatories and sinks, *e.g.*, general sanitary condition.
- (3) Urinals, *e.g.*, (a) material, (b) flushing arrangements, (c) general sanitary condition.
- (4) Drains, *e.g.*, (a) interception from sewer, (b) ventilation, (c) means of access by manholes, (d) result of test.
- (5) Remarks (if any).

Full details of the results of the examinations under the above headings will be found given in the tabulated statements herewith appended, dealing with both the Provided and Non-Provided Schools (Elementary) of Lambeth Borough, in accordance with the instructions of the Council of December 8th, 1904.

The classification adopted is as follow :—

- Class I.—Good.
- Class II.—Fair.
- Class III.—Bad.

Where trough closets have been found to be in use, they have been regarded as sanitarily unsuitable, and a school which in other respects might be entitled to be scheduled under Class I (good), has, consequently, on account of being provided with trough closets, been scheduled under Class II (fair).

In each case the school has been scheduled and classified as a whole, and not separately, as regards its individual departments, *e.g.*, boys, girls, infants, mixed classes, mentally defective children, etc. In this way, much useless detail (as regards the report to the Council) has been avoided, and

the statistics brought within reasonable limits ; whilst the final conclusions drawn are in no way affected thereby. The Provided and Non-Provided Schools have been kept separate and distinct ; and, in comparing results, it should be stated that, years ago, the then Vestry ordered an examination to be made of the drainages of all the Board Schools throughout the district, on account of the magistrate having made an Order against the then London School Board for the reconstruction of the drains of Johanna Street Board School. The result is that their condition (sanitary) to-day is, on the whole, and speaking broadly, better than that of the Non-Provided Schools ; and it is, therefore, perhaps hardly fair to judge of the state of the drainages of the Non-Provided Schools by the present standard of the Provided Schools.

Such a method has, however, been adopted for convenience, and the results obtained may be summarised as follows :—

I.—*Provided Schools.*

Class I.	...	11	<i>i.e.</i> , 45·8 per cent.
Class II.	...	11	„ 45·8 „
Class III.	...	2	„ 8·4 „
		<hr/> 24	

II.—*Non-Provided Schools.*

Class I.	...	6	<i>i.e.</i> , 22·2 per cent.
Class II.	...	9	„ 33·3 „
Class III.	...	12	„ 44·5 „
		<hr/> 27	

INSPECTION BY LONDON COUNTY COUNCIL.

For comparison, I have been carefully through the extensive Reports of the Architect of the London County Council dealing with the Non-Provided Schools throughout London, from which it will be seen that Lambeth Borough takes a good position—the state of the drainage of the Non-Provided Schools being well above the average for London generally.

The tests used by the officers of the London County Council were the Hydraulic (Water) and the Smoke (or Chemical)—the former (as already stated) a most severe test for old drains, and one that few new drains will stand, except when first laid or newly-reconstructed. It is possible that the Hydraulic (Water) test applied by the London County Council officers caused some of the defects afterwards found in the drains by the Borough officials.

The results of the London County Council's tests may be tabulated as follows:—

1. *Hydraulic (Water) Test.*

SATISFACTORY (20).

Marsh Ward.

Roupell Street (St. Andrew's),
Boys.

Stamford Street, 61 (Benevolent
Society of St. Patrick's), Boys'
and Manager's House.

Waterloo Road (St. John's with
All Saints).

Bishop's Ward.

Lambeth Road (St. Mary's), Boys.
Reedworth Street (Archbishop
Sumner, St. Philip's), Infants
(Rain Water Drains).

Prince's Ward.

Anderson's Walk (St. Savionr's,
Salamanca).

Stockwell Ward.

Southesk Street (St. Andrew's).
Stockwell Road (Stockwell Col-
lege), Juoior and Cookery.

" " Girls and Infants.

Brixton Ward.

Bolton Street (St. Mark's), Girls.
Cancell Road (Christchurch), Boys
and Girls.

" " " Infants.
Canterbury Road (St. John's).
Denmark Road (St. Matthew's).
Halstead Street (St. Michael's).

Herne Hill Ward.

Church Road (St. Matthew's).

Tulse Hill Ward.

Brixton Hill (Wesleyan).
Trent Road (Roman Catholic).

Norwood Ward.

Eden Road (Wesleyan).
Elder Road (St. Luke's).

UNSATISFACTORY (18).

Marsh Ward.

Cornwall Road (St. Patrick's).

Roupell Street (St. Andrew's),
Girls.

Stamford Street, 61 (Benevolent
Society of St. Patrick's), Girls.

Bishop's Ward.

Carlisle Street (Holy Trinity).

Lambeth Road (Wesleyan).

" " (St. Mary's), Infants.
High Street (Archbishop Tenison),
Girls.

Prince's Road (St. Mary-the-Less),
Girls.

" " " " Boys.
Reedworth Street (Archbishop
Sumner, St. Philip's), Soil
Drains.

Prince's Ward.

Harleyford Road (St. Ann's).

Kennington Oval (St. Mark's).

Vauxhall Ward.

Devonshire Road (St. Barnabas).

Gaskell Street (St. John Bowyer's).

Stockwell Ward.

Lingham Street (St. Andrew's).

Brixton Ward.

Bolton Street (St. Mark's), Infants.
Camberwell New Road and War-
ham Street (St. John's).

Herne Hill Ward.

Railton Road (St. Jude's).

2. *Smoke (Chemical) Test.*

SATISFACTORY (20).

Marsh Ward.

Cornwall Road (St. Patrick's).
Roupell Street (St. Andrew's),
Boys.

" " " " Girls.
Stamford Street, 61 (Benevolent
Society of St. Patrick's).
Waterloo Road (St. John's with
All Saints).

Bishop's Ward.

Lambeth Road (St. Mary's), Boys.

Stockwell Ward.

Southesk Street (St. Andrew's).
Stockwell Road (Stockwell Col-
lege), Junior and Cookery.
" " Girls and Infants.

Vauxhall Ward.

Devonshire Road (St. Barnabas).

Brixton Ward.

Bolton Street (St. Mark's), Girls.
" " Infants.
Canterbury Road (St. John).
Cancell Road (Christchurch), Boys
and Girls.

" " Infants.
Denmark Road (St. Mathew's).
Halstead Street (St. Michael's).

Herne Hill Ward.

Railton Road (St. Jude's).

Tulse Hill Ward.

Brixton Hill (Wesleyan).
Trent Road (Roman Catholic).

UNSATISFACTORY (16).

Bishop's Ward.

Carlisle Street (Holy Trinity).
High Street (Archbishop Tenison).
Lambeth Road (St. Mary's), Infants.
" " (Wesleyan).
Prince's Road (St. Mary-the-Less).
Reedworth Street (Archbishop
Sumner, St. Philip's).

Prince's Ward.

Anderson's Walk (St. Saviour's,
Salamanca).
Regency Square (St. James').
Kennington Oval (St. Mark's).
Harleyford Road (St. Ann's).

Vauxhall Ward.

Gaskell Street (St. John Bowyer's).

Stockwell Ward.

Lingham Street (St. Andrew's).

Brixton Ward.

Warham Street (St. John's).

Herne Hill Ward.

Church Road (St. Matthew's).

Norwood Ward.

Eden Road (Wesleyan).
Elder Road (St. Luke's).

The London County Council Reports deal only with the drains of Non-Provided Schools.

Taking the whole of the 58 electoral areas throughout London, there are 10* in which *all* the school drains are reported as "not satisfactory." It is noteworthy that not one of the four Lambeth electoral areas is included in this "black" list; indeed, the Lambeth Borough Non-Provided Schools give most satisfactory results, judging by the Reports of the London County Council—their sanitary con-

* Bethnal Green (North East), Bow and Bromley, Fulham, Hoxton, Islington (East), Islington (North), Newington (West), Poplar, Rotherhithe, St. Pancras (East).

ditions (as regards drains) being over 25 per cent. better than the average for London. Thus, it appears that, throughout the whole of London, 406 drainage systems of schools were tested by the London County Council's officers with the Hydraulic (Water) test, as well as with the Smoke (or Chemical) test, with the result that, as regards the Hydraulic (Water) test, 92 are reported satisfactory and 314 unsatisfactory, *i.e.*, 22.7 and 77.3 per cent. respectively. Dealing with the Schools within the Borough of Lambeth separately, the Reports of the London County Council show that 38 drainage systems were tested with water, and of these, 20 are reported as far as such Hydraulic (Water) test is concerned, as satisfactory, and 18 as unsatisfactory, *i.e.*, 52.6 and 47.4 per cent. respectively. In other words, the Lambeth Borough Schools are, as regards water-tightness of drains, over 25 per cent. better than the average throughout London. The Lambeth Borough Non-Provided Schools have come out of the London County Council ordeal surprisingly well, having regard to the severity of the ordeal employed, *viz.*, 52 per cent. of the drains of the Lambeth Non-Provided Schools are found to be satisfactory, *i.e.*, sound to the Water test, as compared with only 22 per cent. for the whole of London.

In the Lambeth Borough the application by the Officers of the London County Council of the Hydraulic (Water) test was refused at Regency Square (St. James'), and Herne Hill Road (St. Saviour's), and the application of any test (Water or Smoke or Chemical) at St. Oswald's Place (St. Peter's), Gye Street (St. Paul's), and Dorset Road (St. Stephen's)—a total of 5 for Lambeth Borough as compared with 26 for the whole of London (7 out of the 26 refusing the Water test, on account of its severity; and 19 any test whatever, on principle).

STRUCTURAL CONDITION OF NON-PROVIDED SCHOOLS.

The London County Council Reports deal also with the structural condition of the Non-Provided Schools, and classify them as (1) suitable, or (2) unsuitable, for Public Elementary Schools. Throughout London, it appears that 25 per cent. are "unsuitable" on account of (a) bad approaches to schoolrooms, (b) want of proper sub-division of rooms, (c) shortness in, or entire absence of, cloakroom accommodation, (d) want of suitable lavatory accommodation, (e) want of

playgrounds, (f) unsuitable sanitary offices, (g) dilapidated premises, (h) danger from fire, etc.

It is only fair to state that the "standard" set, and maintained, in the past by the Education Department has been very low.

Taking Lambeth Borough, the London County Council Reports show as follows:—

1.—Suitable (13, *i.e.*, 33.3 per cent.).

Harleyford Road (St. Anne's), Gaskell Street (St. John Bowyer's), Anderson's Walk (St. Saviour's), 61, Stamford Street (St. Patrick Benevolent), Waterloo Road (St. John's with All Saints), Trent Road (Roman Catholic), Railton Road (St. Jude's), Herne Hill Road (St. Saviour's—Girls and Infants), Vassall Road (Christchurch—Infants), Camberwell New Road and Warham Street (St. John's), Halstead Street (St. Michael's), Stockwell Road (Stockwell College, Practising), and Lambeth Road Boys (St. Mary's).

2.—Suitable, if restored, or if suggested alterations are carried out (15, *i.e.*, 38.5 per cent.).

Cornwall Road (St. Patrick's), Kennington Oval (St. Mark's), Gye Street (St. Paul's), St. Oswald's Place (St. Peter's), Carlisle Street (Holy Trinity), Roupell Street (St. Andrew's), Lambeth Road (St. Mary's—Infants), Prince's Road (St. Mary-the-Less—Boys), Brixton Hill (Wesleyan), Eden Road (Wesleyan), Elder Road (St. Luke's—Infants), Church Road, Brixton (St. Matthew's), Cancell Road, (Christchurch—Boys and Girls), Lingham Street (St. Andrew's), Denmark Road (St. Matthew's).

3.—Suitable (or could be made so), but inconvenient (2, *i.e.*, 5.1 per cent.).

Dorset Road (St. Stephen's), and Canterbury Road (St. John's).

4.—Unsuitable (9, *i.e.*, 23.0 per cent.).

Devonshire Road (St. Barnabas).	Premises inconvenient and dilapidated. Sanitary offices bad. Small yards for playgrounds.
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Regency Square (St. James's).	Inflammable nature of Girls' buildings.
Reedworth Street (St. Philip's).	Premises inconvenient with awkwardly shaped large rooms. Approach to Boys' Department insufficient, and dangerous in case of fire. Girls' and Infants' sanitary offices too close to windows of schoolrooms. Boys' sanitary offices inside building, and opening off the first floor landing. No Playground for Boys.
High Street (Archbishop Tenison).	Inconvenient schoolroom, which cannot be altered unless adjoining ground can be obtained for the building of side classrooms.
Lambeth Road (Wesleyan).	Only one entrance to building, and the approach to 1st floor (Senior Mixed) is by awkward stone steps which would prove dangerous in case of fire. Sanitary offices bad and inconveniently situated. No proper lavatories. No proper playgrounds. Premises in bad structural repair.
Prince's Road (St. Mary-the-Less — Girls and Infants).	Premises in bad structural repair. Sanitary offices bad and dilapidated.
Elder Road (St. Luke's — Girls).	Premises dilapidated, requiring complete re-building.
Herne Hill Road (St. Saviour's—Boys).	Narrow and inconvenient classrooms. Sanitary offices unsatisfactory.
Bolton Street (St. Mark's).	Sanitary offices in bad condition. Dilapidated premises.

Structurally, the results of the London County Council's Architect's reports may be tabulated as follows, as far as the Lambeth Non-provided Schools are concerned :—

(a) Suitable	...	...	...	13, <i>i.e.</i> , 33·3 per cent.
(b) Unsuitable	...	...	...	9, " 23·1 "
(c) Suitable (conditionally)	...	...	...	17, " 43·6 "

The inspection of the Elementary Schools of Lambeth Borough by the Borough Council's officers does not include their structural condition, so that to draw a fair conclusion as to the general condition of the Non-Provided Schools in Lambeth Borough, the Report of the Borough Council's officers as to general sanitary conditions should be read in conjunction with the Reports of the London County Council's Architect dealing with structural conditions.

JOSEPH PRIESTLEY.

May 29th, 1905.

PROVIDED SCHOOLS.

SCHOOL AND WARD.	SANITARY CONVENIENCES.											REMARKS (IF ANY).	Class.
	CLOSET ACCOMMODATION.			Lava- tories and Sinks.	URINALS.			DRAINS.					
	Situation.	Nature.	Condition.	Condition.	Material.	Flushing Arrangements.	Condition.	Interception from Sewer.	Ventilation.	Means of access Manholes.	Result of Test.		
<i>Marsh.</i> Addington Street	Outside	w.c.s and troughs	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s	II.
Johanna Street ...	Outside	w.c.s and troughs	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s; the pumping out periodically of the manhole in the base- ment (receiving surface water from the area and the waste water from the heating apparatus) causes a nuisance.	II.
Waterloo Road ...	Outside	w.c.s and troughs	Good	Good	Asphalt	None	Bad	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s	II.
<i>Bishops.</i> Lollard Street ...	Outside (1 w.c. inside)	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
Walnut Tree Walk	Outside (1 w.c. for caretaker inside)	w.c.s and troughs	Good	Good (ex- cept in a few instan- ces)	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s; few defective enamelled iron tip basins (improperly trapped)	II.

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<i>Princes.</i> Church Street, Clapham Road	Outside	w.c.s and troughs	Bad	Bad	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s; existing troughs are fitted with seats and risers, pre- venting proper cleans- ing; foul and defective enamelled iron tip basins (not undertrapped).	II.
Kennington Road	Outside (3 w.c.s inside)	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
Upper Kenning- ton Lane	Outside (1 w.c. inside)	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
Vauxhall Street ...	Outside	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
<i>Vauxhall.</i> Priory Grove ...	Outside	w.c.s and troughs	Good	Bad	Asphalt	Yes (exc'pt infants boys)	Good	Yes	Yes	Yes	Yes (girls' troughs)	Troughs to be replaced by w.c.s; foul and de- fective enamelled iron tip and plug basins (not under-trapped); Infants' (boys) urinal unflushed.	II.
South Lambeth Road	Outside (3 w.c.s inside and 1 care- taker's w.c. also inside)	w.c.s and troughs	Bad	Good	Slate and asphalt	None	Bad	Yes	Yes	Yes	Yes, broken ventila- ting pipe (boys) & broken manhole cover (junior mixed)	Troughs to be replaced by w.c.s; 3 badly ven- tilated w.c.s (boys' and girls' teachers' and care- taker's); foul wash-out w.c.s (boys' teachers); lavatory basins not under-trapped.	III.
Springfield ...	Outside (1 care- taker's w.c. inside)	w.c.s and troughs	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s.	II.

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PROVIDED SCHOOLS—continued.

SCHOOL AND WARD.	SANITARY CONVENIENCES.											REMARKS ((IF ANY)).	CLASS
	CLOSET ACCOMMODATION.			Lava- tories and Sinks.	URINALS.			DRAINS.					
	Situation.	Nature.	Condition.		Condition.	Material.	Flushing Arrangements.	Condition.	Interception from Sewer.	Ventilation.	Means of access Manholes.			Result of Test.
<i>Stockwell.</i> Santley Street, Ferndale Road	Outside (2 w.c.s inside)	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Defective flushings of w.c.s due to the pulling chains being improperly encased in protective lead tubes.	I.
Stockwell Road ...	Outside (1 w.c. inside)	w.c.s	Good	Good	Cement	Yes	Good	Yes	Yes	Yes	None	...	I.
<i>Brixton.</i> Cormont Road, Myatt's Fields	Outside (1 w.c. inside for teachers, and 1 w.c. in care- taker's house)	w.c.s	Good	Good	Enamel- led Slate	Yes	Good	Yes	Yes	Yes	None	...	I.
Hackford Road ...	Outside (1 w.c. inside and 8 w.c.s on roof)	w.c.s and troughs	Bad	Good	Cement and Slate	None	Bad	Yes	Yes	Yes	Yes; defective ventila- ting pipe & drains of pupil teachers' centre	Troughs to be replaced by w.c.s; ranges of lavatories and slop sinks not under-trapped; defective w.c.s and troughs (pupil teachers' and infants')	III.
<i>Herne Hill.</i>													
Effra Parade ...	Outside (1 w.c. inside)	w.c.s and troughs	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s	II.
Jessop Road ...	Outside	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
Sussex Road ...	Outside (1 w.c. inside for teachers of mentally defective children)	w.c.s and troughs	Good	Good	Asphalt	Yes (stop tap in In- fants only)	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s	II.
<i>Tulse Hill.</i>													
Lyham Road ...	Outside	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
Rosendale Road...	Outside (1 w.c. inside)	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
<i>Norwood.</i>													
Gipsy Road ...	Outside	w.c.s and troughs	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Troughs to be replaced by w.c.s; closet build- ings too near to new school buildings	II.
Salter's Hill ...	Outside	w.c.s and troughs	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	Closet buildings too near to new school building; troughs to be replaced by w.c.s	II.
Woodland Road...	Outside	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.

II. NON-PROVIDED SCHOOLS.

SCHOOL AND WARD.	SANITARY CONVENIENCES.											REMARKS (IF ANY).	CLASS.
	CLOSET ACCOMMODATION.			Lavatories and Sinks.	URINALS.			DRAINS.					
	Situation.	Nature.	Condition.		Condition.	Material.	Flushing Arrangements.	Condition.	Interception from Sewer.	Ventilation.	Means of access Manholes.			Result of Test.
<i>Marsh.</i> Cornwall Road (St. Patrick's)	Outside	w.c.s	Good	Bad	Cement	Yes (stop tap)	Bad	Yes	Yes	Yes	Yes; a broken manhole cover and defective mica valve inlet	Only one lavatory basin (which is broken) provided	II.
Roupell Street (St. Andrew's)	Outside (Upper Girls' trough closets inside)	w.c.s and troughs	Good	Good	Slate	Yes	Good	Yes	Yes	Yes	None	Earthenware basin (unflushed) fixed over gully and used as urinal for infants' boys'. Inside trough closets (upper girls') are insufficiently lighted and ventilated; 3 lavatory basins not undertrapped and 1 improperly trapped; 1 dilapidated brick dust-bin; gully without cover inside cloak room, first floor	III.
Stamford Street 61 (Benevolent Society of St. Patrick's)	Outside	troughs	Good	Good	Slate	None	Bad	Yes	Yes	Yes	None	Two obsolete brick dust-bins in playgrounds; two draw off taps for drinking water in the playground are connected to storage cisterns fixed upon roofs of the closets; lavatories not undertrapped	II.
Waterloo Road (St. John's with All Saints')	Inside (basement)	w.c.s	Good	Good	Slate	Yes	Good	Yes	Yes	Yes	Yes; unstoppered plunging "eye" of interceptor	The Boys' w.c.s are badly lighted	I.
<i>Bishop's.</i> Carlisle Street (Holy Trinity)	Outside	troughs	Good	Good (boys) Bad (girls)	Slate	Yes	Good	Yes	Yes	Yes	Yes, improperly sealed plunging eye cover in infants closets	Foul and defective enamelled iron plug basins (improperly trapped, i.e., discharged by means of a wooden lead-lined trough) in Girls' Department	II.
High Street (Archbishop Tenison, Girls')	Outside	troughs	Bad	Bad	(Girls attend School)	only this		Yes	Yes	Yes	Yes, schoolroom and in Head Mistress' private apartments (and cellar underneath)	No teachers' closets provided; lavatory basins (earthenware) not undertrapped; cracked sink in head mistress's scullery; front areas are drained by soak-aways; and the front rain-water pipes are apparently either soak-aways or connected direct with sewer in High Street	III.
Lambeth Road St. Mary's, Boys')	Outside (1 w.c. inside)	w.c.s	Good	Good	Slate	Yes	Good	Yes	Yes	Yes	None	Cracked cement rendering of several man-holes	I.

NON-PROVIDED SCHOOLS—continued.

SCHOOL AND WARD.	SANITARY CONVENIENCES.											REMARKS (IF ANY).	CLASS.
	CLOSET ACCOMMODATION.			Lava- tories and Sinks.	URINALS.			DRAINS.					
	Situation.	Nature.	Condition.		Condition.	Material.	Flushing Arrangements.	Condition.	Intercep- tion from Sewer.	Ventilation.	Means of access Manholes.			Result of Test.
<i>Bishop's—con.</i> Lambeth Road (St. Mary, Infants)	Outside	w.c.s and troughs	Bad	Good	Slate	None	Bad	No	No	No	None	Lavatory basins not undertrapped; girls' and boys' closet buildings are insufficiently ventilated; brick dust-bin inside one of the closet buildings; trough closets improperly flushed	III.
Lambeth Road Wesleyan)	Outside (2 w.c.s inside)	w.c.s	Good	Bad	Cement and Slate	Yes; (stop tap to outside boys; the in- side boys' being un- flushed)	Ba		Yes	No	Yes, Boys' w.c.s and urinal and in yard adjoining Girls' school-room	Defective paving of yard of outside urinal; obsolete valve closet (girls' teachers) inside; unflushed urinal inside boys' building, and communicating directly with senior mixed school-room; insufficient lavatory basins provided	III
Prince's Road (St. Mary-the-Less)	Outside	troughs	Good	Bad	Cement and Slate	Yes	Good	No	No	No	Yes, inside Girls' school, and in the cloak-rooms of both schls.	Rain-water pipes (girls' school) are apparently connected directly with the drain (insufficient lavatory accommodation	III.
Reedworth Street (Archbishop Sumner, St. Phillip's)	Outside (Boys' trough and urinal inside on 1st floor)	troughs	Bad	Bad	Cement and Slate	None Yes	Bad Bad	Yes	Yes	Yes	Yes; in yard and in Girls' closet	4 Lavatory basins are not undertrapped, and discharge over urinal gully	III.
<i>Prince's.</i> Anderson's Walk (St. Saviour's, Salamanca, Girls and In- fants)	Outside	w.c.s	Good	Good	Asphalt	Yes	Good	Yes	Yes	Yes	None	...	I.
Gye Street (St. Paul's)	Inside (1 infants' w.c. outside)	w.c.s (syphonic ranges inside)	Good	No lava- tories	Slate	None to boys	Bad	Yes	Yes	Yes	None	Defective paving of boys' playground; defective rain-water pipes, causing dampness in certain walls; premises dirty; defective mica inlet; broken air-bricks to ground floor; no lavatory basins fixed	III.
Harleyford Road (St. Ann's)	Outside (1 w.c. inside)	w.c.s	Good	Good	Cement	Yes (stop tap)	Good	Yes	Yes	Yes	None	Lavatory basins not undertrapped; drinking fountain in playground is out of order	I.
Kennington Oval (St. Mark's)	Outside	w.c.s and troughs	Bad (troughs)	Good	Cement	None	Bad	Yes	Yes	Yes	None	Defective ventilating pipe, back front of school-mistress's house; insufficient flushing to trough closets; lavatory basins not under-trapped; want of, and defective, paving in boys' and girls' playgrounds; large brick dustbin adjoining the school	II.

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NON-PROVIDED SCHOOLS--continued.

SCHOOL AND WARD.	SANITARY CONVENIENCES								REMARKS IF ANY.	CLASS.					
	CLOSET ACCOMMODATION.			Lavatories and Sinks.	URINALS.		DRAINS.								
	Situation	Nature	Condition.		Condition.	Material.	Flushing Arrangements.	Condition.			Interception from Sewer.	Ventilation.	Means of access Manholes.	Result of Test.	
<i>Prince's—contd.</i>															
Regency Square (St. James's)	Outside (1 w.c. inside)	w.c.s	Bad	Good	Slate	Yes	Good	?	Yes	Yes	Yes; caretaker's w.c.	Playground insufficiently paved; several defective gutters; defective air bricks to ground floor; sanitary conveniences are dirty & not properly looked after; one inside w.c. (long hopper), is insufficiently flushed; insufficient urinal accommodation (the wall of the w.c. building being used in place of urinal)	III.		
Sancroft Street (St. Mary-the-Less)	Outside	troughs	Good	Bad	Slate	Yes (stop tap)	Bad	No.	No.	No.	None	Dirty walls and ceilings of classrooms; defective paving of playground; uncovered dustbin; defective fittings to lavatory basins	III.		
St. Oswald's Place (St. Peter's)	Outside (3 w.c.s inside and 1 w.c. inside caretaker's house)	w.c.s and troughs	Bad	Bad	Slate	None (except stop-tap in boys)	Bad	No.	Yes	Yes	Yes; inside soil pipe in caretaker's house	Rain-water pipe connected direct to the drain in St. Oswald's Place; premises are dirty generally, as also the sanitary conveniences; defective roof and guttering; defective air bricks on ground floor; brick dustbin near boys' urinal; defective paving near boys' urinal	III.		
<i>Vauxhall.</i> *Devonshire Rd. (St. Barnabas)	Outside (1 w.c. inside for teachers)	w.c.s	Bad	Good	Slate and Cement	None	Bad	Ptly	Ptly	Ptly	Yes; in yard and inside school	3 foul long hopper pans in boys' department; bath waste from school teacher's house discharges on to flat over entrance porch to school in Devonshire Road; unpaved playground	II.		
Dorset Road, (St. Stephen's)	Outside	troughs	Bad	No lavatories	Slate	Yes (but only stop tap for infants)	Good	Yes	Yes	Yes	Yes (boys' school-room)	No lavatory basins provided; rain-water pipes at rear of girls' and infants' schoolrooms not properly disconnected from drain	III.		
Gaskell Street (St. John Bowyer's)	Outside	w.c.s	Good	Good	Cement	Yes (stop-tap)	Good	Yes	Yes	Yes	None	No proper separate teachers' w.c.s provided; no caretaker's house provided at the school; drinking water from cistern which is uncovered	I.		

[*Two separate systems of drainage—one draining into Devonshire Road, and one into Priory Road, sewers. The former is intercepted and ventilated, and appears to be in good order and condition; the latter is neither ventilated nor intercepted, and gave no result with the test.]

NON-PROVIDED SCHOOLS—continued

SCHOOL AND WARD.	SANITARY CONVENIENCES.											REMARKS (IF ANY)	CLASS.	
	CLOSET ACCOMMODATION.			Lava- tories and Sinks.	URINALS.			DRAINS						
	Situation.	Nature.	Condition.		Condition.	Material.	Flushing Arrangements.	Condition.	Interception from Sewer.	Ventilation.	Means of access Manholes.			Result of Test.
<i>Stockwell.</i>														
Lingham Street (St. Andrew's)	Outside (1 w.c. inside for caretaker)	w.c.s and troughs	Bad	No lavra- tories	Cement	Yes (stop- tap)	Good	No	Ptly	Yes	None	Two sinks not under- trapped	II.	
Southesk Street (St. Andrew's)	Outside	troughs	Good	No lavra- tories	Cement	None	Bad	Yes	Yes	Yes	None	One sink not under- trapped	II. 89	
Stockwell Road (Stockwell Practising)	Outside (2 w.c.s inside)	w.c.s and troughs	Good	Good	Slate	None	Good	Yes	Yes	Yes	None	Zinc trough fitted under lavatory basins in in- fants' school	II.	
<i>Brixton.</i>														
Bolton Street (St. Mark's)	Inside (1 w.c. outside)	w.c.s	Good	No lavra- tories	Slate	None	Good	Yes	Yes	Yes	None	No lavatories are pro- vided	I.	
Cancell Road and Vassall Road (Christ Church)	Outside (1 w.c. inside in Master's house)	w.c.s	Good	No lavra- tories except in In- fants' Dept.	Slate	Yes (stop tap)	Good	Yes	Yes	Yes	None	No lavatories are pro- vided in boys' and girls' department	II.	
Canterbury Road St. John's	Outside (1 w.c. inside in Master's house)	w.c.s	Good	No lavra- tories	Slate	Yes	Good	Yes	Yes	Yes	None	Broken w.c. pans and defective doors; no sepa- rate (special) teachers' w.c.s provided; no lava- tories are provided	II.	
Camberwell New Road and War- ham Street (St. John's)	Outside (2 w.c.s inside)	w.c.s and troughs	Bad	Bad	Slate	Yes	Bad	Yes	Yes	Yes	None	One rain-water pipe con- nected directly with the sewer in Warham Street; the closet build- ings are insufficiently lighted and ventilated; the lavatory basins, of enamelled iron, are not properly trapped and are of obsolete pattern; badly-dented lead soil- pipe on external wall of teachers' w.c.; defect- ive lavatory basin (earthenware), on first floor, which discharges into a defective rain- water pipe, and all earthenware lavatory basins are not under- trapped	III.	
Halstead Street (St. Michael's)	Outside	w.c.s	Good	Good	Cement	Yes (stop tap)	Good	Yes	Yes	Yes	None	...	I.	
<i>Herne Hill.</i>														
Church Road, Brixton (St. Matthew's)	Outside (1 w.c. in- side)	w.c.s	Good	Good	Slate	Yes	Good	Yes	Yes	Yes	Yes, broken man- hole covers	Manhole in copper room adjoining the infants' schoolroom; not suffi- cient lavatory accom- modation	II.	

NON-PROVIDED SCHOOLS—continued.

SCHOOL AND WARD.	SANITARY CONVENIENCES.							DRAINS.					REMARKS (IF ANY).	CLASS.
	CLOSET ACCOMMODATION.			Lava- tories and Sinks.	URINALS.									
	Situation.	Nature.	Condition.	Condition.	Material.	Flushing Arrangements.	Condition.	Interception from Sewer.	Ventilation.	Means of access Manholes.	Result of Test.			
<i>Herne Hill—cont.</i> Denmark Road (St. Matthew's)	Outside	troughs	Good	No lava- tories	Slate	Yes (stop tap)	Good	Yes	Yes	Yes	Yes, in the school room and in the w.c.	Closet buildings are badly lighted and ventilated. No lavatories are pro- vided.	II.	
Herne Hill Road (St. Saviour's)	Outside (1 w.c. in- side the Head Mis- tress's house ad- joining the school)	w.c.s	Bad	Bad	Slate	Yes (stop tap)	Bad	Yes	Yes	Yes	Yes, in- fants' w.c.	Fittings of w.c.s are de- fective and the pans badly situated and not sufficiently protected; w.c. accommodation in- sufficient, and no separate w.c. accommo- dation for boys and girls; defective and foul enamelled iron basins (plugs); school premises are dirty throughout	III.	
Railton Road (St. Jude's)	Outside (2 w.c.s inside the adjoining Mission Hall)	w.c.s and troughs	Bad	Good (but insuffi- cient)	Cement	Yes (stop tap)	Good	Yes	Yes	Yes	None	Troughs not properly at- tended to; lavatory basins not under- trapped and insufficient in number; one loose- washing tin also in use as a lavatory basin	III.	
<i>Tulse Hill.</i> Brixton Hill (Wes- leyan)	Outside (2 w.c.s inside for use of teachers, situated on 1st floor of centre hall be- tween chapel and school)	w.c.s and troughs	Good	Good	Slate and Cement	Yes	Good	Yes	Yes	Yes	None	One Lavatory basin, which is undertrapped, discharges into gully of urinal; unventilated in- side soil-pipe (male teachers'); other lava- tory basins are not undertrapped; trough systems are connected so that when one acts there is a tendency for the water of the other to be syphoned out also	II.	
Trent Road (Roman Catholic)	Outside	w.c.s	Good	Good	Slate	Yes	Good	Yes	Yes	Yes	None	...	I.	
<i>Norwood.</i> Eden Road (Wes- leyan)	Outside	w.c and troughs	Bad	No lava- tories	Cement	None	Bad	Yes	Yes	Yes	None	Defective paving in boys' playground; no fixed lavatories are provided	II.	
*Elder Road (St. Luke's)	Outside	w.c and troughs	Bad	Good	Slate	Yes	Good	Yes	Yes	Yes	None	Playground unpaved mostly, and, where paved, defective; dan- gerous and dilapidated girls' school premises; two old basins, used for washing purposes, are in a dilapidated enclo- sure, and not under- trapped (discharging into iron pipe); one long- hopper w.c. (caretaker's)	III.	

[*N.B.—The Girls' School is carried on in the Elder Road Mission Hall, which is provided with 3 w.c.s (2 outside and 1 inside), and a slate urinal (fitted with sparge pipe and stop-cock). No result was obtained from the test. No fixed lavatory basin.]

CONSUMPTION AND SPITTING.

(Special Report presented to the Council on June 8th, 1905.)

CONSUMPTION NOTIFICATIONS, 1903-4.

Registration Sub-Districts.

New Wards.

	No. of Noti- fica- tions.	Incidence rate per 1000 popu- lation at all ages.		No. of Noti- fica- tions.	Incidence rate per 1000 popu- lation.
Waterloo 1st ...	42	1.8	Marsh ...	95	1.8
Waterloo 2nd...	54		Bishop's ...	177	2.8
Lambeth Church 1st...	110	2.9	Prince's ...	138	1.4
Lambeth Church 2nd	169	2.1	Vauxhall ...	80	1.2
Inner Districts ...	375	2.2	Inner Wards ...	490	1.8
Kennington 1st ...	115	1.1	Stockwell ...	32	0.5
Kennington 2nd ...	63	0.7	Brixton ...	50	0.6
Brixton ...	73	0.4	Herne Hill ...	43	0.7
Norwood ...	19	0.2	Tulse Hill ...	10	0.2
Outer Districts ...	270	0.6	Norwood ...	20	0.3
			Outer Wards ...	155	0.5
Borough of Lambeth	645	1.04	Borough of Lambeth	645	1.04

CONSUMPTIVE DEATHS, 1903-4.

Registration Sub-Districts.

	Number of Deaths.	Death Rate per 1000 population at all ages.
Waterloo 1st ...	52	2.1
Waterloo 2nd ...	59	
Lambeth Church 1st	67	1.9
Lambeth Church 2nd	162	2.1
Inner Districts ...	340	2.1
Kennington 1st ...	163	1.5
Kennington 2nd ...	102	1.2
Brixton ...	185	1.1
Norwood ...	70	0.9
Outer Districts ...	520	1.2
District not stated ...	22	—
Borough of Lambeth	882	1.4

N.B.—In the case of the 22 deaths, in connection with which the district is not stated, these have been sub-divided equally amongst the 8 sub-districts before calculating percentages.

It will be noted that the disease appears to be more prevalent in the Inner than in the Outer Districts, or Wards, of the Borough—a state of things that was to be expected, bearing in mind the more crowded conditions (persons in houses, or houses over area) that exist in the former.

The notification of consumption of the lungs (with tuberculous expectoration), or phthisis pulmonalis, is voluntary, and was started in Lambeth Borough on June 1st, 1902. It is found that the notified cases have reference chiefly to the artisan and working classes of the population. It may be added that, connected with the notification of consumption, the Bacteriological Laboratory calls for attention, wherein, during 1903-4, 392 samples of sputum have been examined (the tubercle bacilli being found in 131, *i.e.*, 33·4 per cent.).

Wherever a case is notified, a visit is at once paid to the house, enquiries made, and a pamphlet (or circular) left—the pamphlet (circular) describing, in plain language, the infectious nature of the disease, and the simple domestic preventive measures that may be taken by persons suffering from the disease, so as to prevent, or at least considerably minimise, its spread to others, who may share the same room (or house). Succeeding visits are made at intervals, so that when a house (or room) is vacated by a consumptive patient, the necessary disinfection may be carried out. Whenever a death is registered, disinfection of the infected premises (and contents) is carried out, and a pamphlet (circular) left, as in the case of notification.

By these means, the Lambeth inhabitants are becoming better acquainted with the nature of the disease—its infectiousness, and more care is being exercised to prevent its spread. It would appear to be, therefore, an opportune moment to advance a step or two in preventive measures.

As knowledge of the disease increases, the more it becomes evident that the cause of the disease is the tubercle bacillus, and that the commonest, if not sole, channel by which it spreads from person to person is the phlegm, or expectoration, or spit, of the person suffering from the disease. Such phlegm, expectoration, or spit, at times teems with large numbers of the tubercle germs, and, when dried, may be scattered far and wide, as dust, the germs being carried on the particles of such dust. Indiscriminate spit-

ting keeps the stock of germs replenished from time to time, and is the cause of the continued prevalence of the disease.

It is in this way that spitting, or expectorating, explains why public-houses are special disseminators of consumption, servants employed therein suffering out of all proportion to persons engaged in other occupations. Costermongers, too, suffer indirectly in the same way, from frequenting bars of public-houses in the early mornings, either before such places are cleansed from the previous night, or whilst such places are being cleansed. That the bars of public-houses are a source of danger in this respect is a fact that has been definitely proved in Lambeth Borough bacteriologically — the sweepings taken from several public-house bars having shown the presence of active consumption germs in one or two instances.

Intemperance is an important element in connection with the spread of consumption, acting in two ways: (a) directly through the spitting in public-house bars where intemperate men and women congregate, and (b) indirectly through the chronically inflamed membranes which form a suitable soil upon which the tubercle germs catch on and grow. Alcohol is also a predisposer to degenerative changes generally.

Spitting, then, is a dangerous, as well as a filthy and disgusting, habit, and ought to be, as far as possible, suppressed by legislation, if necessary; and any crusade against it is a distinct advance in preventive measures against the spread of consumption.

Warning cards, or notices, against the filthy, disgusting, and dangerous habit of indiscriminate spitting might with advantage be issued by the Borough Council to public companies (*e.g.*, Railways, Tramways, Omnibuses, etc.), Licensed Victuallers, Common Lodging Houses, Factories and Workshops, Restaurant Keepers, etc. The Council's Public Libraries, Public Baths, Public Conveniences, and even Public Lamps offer themselves as suitable places for displaying public notices throughout the Borough, with some such wording as the following:—

SPITTING.

You are earnestly requested to abstain from the Dangerous and Objectionable Habit of Spitting.

It cannot be too much advertised that spitting in public streets and places, in tramcars, omnibuses, railways, and elsewhere, is fraught with danger to health—it being proved conclusively that the spit (or sputum) of a consumptive person may contain a very large number of tubercle bacilli, which are the cause of the disease, and which may produce the same disease in others, to whom they may gain access in the form of dust (dried sputum) off the roads, streets, etc.

Indeed, the need for the preventing of indiscriminate spitting no one will gainsay, and the action that has been already taken, and is being taken, by Sanitary Authorities at home and abroad, prevents any action that Lambeth may take in the same connection being noticeable as too stringent or too advanced.

Compared with other nations, Great Britain is much behindhand. Thus, America, Canada, New South Wales, Germany, Austria, Belgium, Denmark, France, Hungary, etc., may be cited as countries where spitting publicly is legislated against, and prohibited under penalty, more especially in public places, railway stations and carriages, trams and omnibuses, etc.

In Britain, it appears that Liverpool, Glasgow, and Manchester have already framed bye-laws to prohibit spitting in tramcars, and the Glamorgan County Council has gone farther, and obtained a bye-law (1902) preventing spitting in public carriages and public places. On July 10th, 1903, the London County Council, in pursuance of powers under the Municipal Corporations Act, 1888, and the Local Government Act, 1888, made the following bye-law:—

“No person shall spit on the floor, side, or wall of any public carriage, or of any public hall, public waiting room, or place of public entertainment, whether admission thereto be obtained upon payment or not.

“Any person who shall offend against this bye-law shall be liable for each offence to a fine not exceeding forty shillings.”

As to who is to carry out this London County Council bye-law which, of course, applies to Lambeth, as well as to other Metropolitan Boroughs, the Clerk to the London

County Council states that it is competent for any person to take proceedings, and that Societies may, if they think fit, instruct their officers to apply as common informers for summonses under the bye-law. The Lambeth Borough Council might, with advantage, give the necessary instructions to their officers.

In view of the facts stated in this Report, I am of opinion, and recommend, that the Borough Council should take further action to assist in preventing the spread of consumption in the Borough. I acknowledge, at the same time, that much good has been, and will continue to be, the outcome of the Council's action in connection with the continuance of the preventive methods at present in vogue, viz., the voluntary notification of the disease; the disinfection of known infected houses, rooms, and contents; the distribution of pamphlets (circulars) as required; the bacteriological examinations of suspected expectoration, etc. The Council's willingness and readiness at all times to carry out any useful practical suggestions for the prevention of disease, warrant me in expressing the hope that the suggestions given in this Report will receive attention at an early date.

The mortality and morbidity from consumption are, at present, most serious matters, more especially as they affect chiefly the wage-earning classes at the best wage-earning periods of their lives, viz., 15 to 35 years.

The loss to the Borough financially from consumption, therefore, is a most important item.

JOSEPH PRIESTLEY.

May 29th, 1905.

SANITARY INSPECTORIAL STAFF.

(Special Report presented to the Council on September 28th, 1905.)

Ten years ago (on June 27th, 1895) I was appointed Medical Officer of Health for the Parish of Lambeth, with a Sanitary Staff consisting at that time of eight Inspectors, one of whom was Special Food and Drugs and Smoke Inspector, and one chiefly engaged indoors (clerical work, etc.). The Censal 1896 population was 295,033, and the enumerated number of inhabited houses (Census 1891) was 38,556. This gave (roughly) an average of 36,879 persons and 4,819 inhabited houses to each Inspector—proportions which were pointed out by me to be much too large for purposes of efficient sanitary supervision. My first action as Medical Officer was to report upon this insufficiency of the Lambeth Sanitary Inspectorial Staff, with the result that the then Vestry decided, on April 16th, 1896, to make a substantial increase in the existing number of Sanitary Inspectors by appointing four additional ones. This increase was sanctioned by the Local Government Board on June 10th, 1896, and four new Inspectors were duly appointed, and their appointments confirmed by the Board on September 24th, 1896, the Board making a provision that a further Report should be presented after twelve months by the Medical Officer of Health for Lambeth Parish, as to the necessity (if any) for a still further increase in Lambeth Sanitary Inspectorial Staff.

In this way the Sanitary Inspectorial Staff was increased in 1896 to 12 Inspectors ; giving an average of 24,586 persons and 3,213 inhabited houses to each Inspector (taking again the Censal 1896 population, and the Censal 1891 inhabited houses).

At this time (1896) the Sanitary Inspectors were, by order of the then Vestry, made responsible for the supervision (and testing) of the drainage of new buildings, in addition to that of old buildings. This was a large and important increase in their duties, when it is remembered that all new drains require to be tested with water, both in sections and as a whole, and that an average of about twelve visits is

required in connection with each ordinary house (or premises) the drains of which are being constructed, and a much larger number of visits for large buildings, such as the South Western Hospital, Board Schools, Stockwell Orphanage, etc.

Connected with the Local Government Board's proviso in 1896, viz., that another Report should be presented as to the necessity (if any) for a still further increase in the Lambeth Sanitary Inspectorial Staff, I reported to the then Vestry on the 21st of March, 1898, on the causes of the high death rates in 1897 in certain districts of the Parish of Lambeth. In the course of this Report, I recommended the appointment of (1) an extra Male Sanitary Inspector, and (2) a Female Sanitary Inspector. Both of these recommendations were eventually agreed to, the Male Sanitary Inspector being appointed on July 21st, 1898, and the Female Inspector on October 3rd, 1901. In this way the Sanitary Inspectorial Staff was further increased to 14 Inspectors, giving an average of 21,074 persons and 2,754 inhabited houses to each Inspector (taking the 1896 and 1891 Censal Returns as before), or of 21,564 persons and 2,965 inhabited houses to each Inspector (taking the 1901 Censal Returns).

The new Borough Council took the place of the old Vestry, and the old Parish became the new Borough of Lambeth in 1900. New and important duties were thrown upon the new Borough Council's Sanitary Inspectors by the Local Government Act, 1899, in connection with the supervision of Offensive Trades, Knackeries, Slaughterhouses, Cowhouses, Milkshops, and Dairies, such duties having been previously carried out by the Inspectors of the London County Council.

On May 15th, 1902, the Council accepted Inspector Emblin's resignation of his appointment as Sanitary Inspector after 33 years' service, thereby reducing the Lambeth Sanitary Inspectorial Staff to 13 Inspectors, and giving averages of 23,223 persons and 3,193 inhabited houses to each Sanitary Inspector (based on the 1901 Censal Returns), or of 22,695 persons and 2,950 inhabited houses (based on the 1906 Censal Population and the 1891 Censal inhabited houses).

In a Special Report presented to the Public Health Committee on April 18th, 1904, I reminded the Committee of the

fact that Inspector Emblin's appointment had not been filled, and that, consequently, the Borough's Sanitary Inspectorial Staff was still short by one Inspector, and that the London County Council might, at any time, point this fact out to the Borough Council. In that Report, I recommended the appointment of an extra Female Inspector, and the Public Health Committee expressed the opinion that such an extra Female Inspector should be appointed by the Borough Council, and referred the matter to the General Purposes Committee to deal with, and to bring up a recommendation to the Council in due course (vide Minutes, 1904, page 1053). The General Purposes Committee did not appear to consider such an appointment necessary, as they brought up no recommendation to the Council. In this way, Inspector Emblin's vacancy has not yet been filled, and the Inspectorial Staff to-day (1905) remains the same as it was in 1902, when he resigned.

The last Report of the London County Council (June, 1904), dealing with the different Metropolitan (Sanitary) Inspectorial Staffs, gives an average for London of 14,494 persons, and 1,827 inhabited houses to each Sanitary Inspector.

Compared with Metropolitan Districts of about the same size, Lambeth Borough, judged by the London County Council averages, gives results, thus:—

I. Metropolitan Boroughs, with more than 250,000 inhabitants.

		Populations.	Inspectors.	No. of persons per Inspector.
(a) Camberwell	...	259339	14	18524
(b) Stepney	...	298600	18	16589
(c) Islington	...	334991	20	16749
(d) Lambeth	...	301895	13	23223

II. Metropolitan Boroughs, with more than 200,000 inhabitants.

(a) Hackney	...	219272	17	12310
(b) Wandsworth	...	232034	16	14502
(c) St. Pancras	...	235317	16	14707
(d) Camberwell	...	259339	14	18524
(e) Islington	...	334991	20	16749
(f) Stepney	...	298600	18	16589
(g) Lambeth	...	301895	13	23223

To bring Lambeth Borough up to the Islington (or even the London) averages, 7 extra Sanitary Inspectors would be required. Even to attain the Camberwell averages (see above), 3 extra Sanitary Inspectors would be required.

As already pointed out, in my Special Report on "Houses let in Lodgings" (March, 5th, 1903), a large increase in the Sanitary Staff would be required if a systematic house-to-house inspection of the Borough, or a wholesale registration of houses let in lodgings, were to be carried out.

As Medical Officer, I am of opinion that the case would be met, for the present, at least, as follows:—

- (1) By filling up the vacancy caused by Inspector Emblin's resignation.
- (2) By appointing:—
 - (a) One extra male Sanitary Inspector.
 - (b) One extra female Sanitary Inspector.

After careful consideration, and having regard to the attitude of the London County Council, I am of opinion that this is the *minimum* recommendation which can be laid before the Council. One Male Sanitary Inspector might be given a district so as to relieve the two districts, which are, at present, for purposes of efficient sanitary inspection, too large, whilst the other extra Male Sanitary Inspector might be engaged in systematic house-to-house inspections throughout the Borough, and be made responsible for the Registration of, and the carrying out of, the bye-laws connected with, houses let in lodgings; or such other arrangements made as may be thought advisable by the Council.

There is sufficient work in the Borough for at least two Female Sanitary Inspectors, and, should the Council decide to appoint an extra Female Sanitary Inspector, the Borough might, with advantage, be divided into two districts. A large amount of work still remains to be done by a Female Inspector in connection with the existing registration of births, and the visiting of houses in which deaths occur in children under one year of age, in addition to the ordinary duties of Female Sanitary Inspectors, *i.e.*, inspection of workplaces in which females are employed, etc. (vide Special Report of May 2nd, 1904).

The London County Council averages can only be regarded as a rough test of the sanitary administration in a district, and regard must be had to the personnel of the individual staffs, and to the way in which the work of such staffs is organised and supervised, as well as to the styles of houses and the nature of the persons occupying them.

Having regard to the present satisfactory condition of Lambeth Borough, and to the work carried out by the Lambeth sanitary inspectorial staff during recent years, it is clear that a satisfactory amount of work has been effected by what now is, and has always been, according to the London County Council averages, an insufficient number of sanitary inspectors.

It may be added that, should the Council not augment the existing sanitary inspectorial staff, the London County Council may make a representation to the Local Government Board, in accordance with Section 107 (2) of the Public Health (London) Act, 1891, which is as follows:—

Where the Local Government Board, on representation from the London County Council, and after local enquiry, are satisfied that any sanitary authority have failed to appoint a sufficient number of sanitary inspectors, the Board may order the authority to appoint such number of additional sanitary inspectors, and to allow them such remuneration as the Order directs, and the sanitary authority shall comply with the Order.

The following is an extract from the L.C.C. Sanitary Officers Return (1904):—

	No. of Inspe- ctors.	Population, Census 1901.	No. of Inhabited houses, Census 1901.	No. of persons to each Inspector.	No. of In- habited houses to each In- spector.
Battersea	13	168907	23462	12993	1805
Bermondsey	9	130760	15817	14529	1757
Bethnal Green... ..	10	129680	14005	12968	1400
Camberwell	14	259339	36671	18524	2619
Chelsea	4	73842	8641	18460	2160
Deptford	8	110398	15823	13799	1978
Finsbury	10	101463	9280	10146	928
Fulham	7	137289	18534	19613	2648
Greenwich	6	95770	14240	15962	2373
Hackney	17	219272	30634	12310	724
Hammersmith	9	112239	15198	12471	1688
Hampstead	7	81942	11294	11706	1614
Holborn	4	59405	4703	14851	1176
Islington	20	334991	38645	16749	1932
Kensington	13	176628	22131	13587	1702
LAMBETH	13	301895	41511	23223	3193
Lewisham	10	127495	22750	12749	2275
Paddington	12	143976	17684	11998	1474
Poplar	8	168822	22613	21103	2827
St. Marylebone	8	133301	13536	19163	1692
St. Pancras	16	235317	23715	14707	1482
Shoreditch	6	118637	12743	19773	2124
Southwark	16	206180	20878	12886	1159
Stepney... ..	18	298600	31462	16589	1748
Stoke Newington	3	51247	7717	17082	2572
Wandsworth	16	232034	37764	14502	2360
Westminster City	12	183011	18366	15251	1533
Woolwich	10	117178	18086	11717	1808
*City of London	19	26923	3865	1417	203
London	313	4536541	571768	14494	1827

* Including 8 Meat Inspectors.

To sum up, the Lambeth history, during the past ten years, as regards the Sanitary Inspectorial staff, may be tabulated as follows :—

Years.	No. of Inspectors.	No. of Persons per Inspector.	No. of Inhabited houses per Inspector.
1895 ...	8	36879	4819
1896-7 ...	12	24586	3213
1898-1900	13	22695	2950
1901 ...	14	21074	2754
1902-04 ...	13	22695	2950

JOSEPH PRIESLEY.

September 18th, 1905.

ATTENDANCE AT SCHOOL OF CHILDREN UNDER FIVE YEARS OF AGE.

(Special Report presented to the Council on November 10th, 1905.)

Measles, Whooping Cough, and Diphtheria are specially prevalent amongst children under 5 years of age, and, in the course of investigations, I have again and again drawn attention to the danger that, consequently, exists in collecting together in the Infants' Departments of Schools, and under the special conditions that therein exist, children under 5 years of age. I have always held that, having regard to all the facts of the case, and bearing in mind this great danger to health, there was no apparent commensurate good derived from the attendance of children under 5 years of age at school, from a point of view of health, nor even, in the opinion of those best able to judge, of education, or finance. The Compulsory Education Acts have reference only to children of the age of five years and upwards, but the method of giving grants also to children between 3 and 5 years of age—a method adopted by the Education Department—has encouraged the attendance at schools of children of that age-period, with the result that, during the past 20 years, a very large number of children between 3 and 5 years of age have passed through the Infants' Departments of the Public Elementary Schools, and many outbreaks of disease, more especially Measles and Whooping Cough, have resulted therefrom.

The Education Department has recently held a Special Enquiry (extending about a year) into the attendance of children under 5 years of age at Public Elementary Schools, and a Blue-book has been published dealing with the whole subject, and arriving at the same opinion as has been, from time to time, expressed in my Reports. It is probable, therefore, that, in the immediate future, some action will be taken to prevent the wholesale attendance of children under 5 years of age at Public Elementary Schools—a condition of things that is most desirable from a public health point of view, having regard to the amount of infectious disease that occurs amongst children of that age-period. Even recently the Infants' Departments of two schools in the Borough have

had to be closed on account of the prevalence of Measles and Diphtheria respectively amongst the scholars.

It is estimated that about 40,000 children under 5 years of age are at present in attendance at the Public Elementary Schools throughout the administrative County of London, and it is stated that, if the schools are closed against them some other sort of accommodation will have to be found—at least, for some of them — viz., crèches, infants' nurseries, etc. In this connection it must be remembered that the conditions of school life (crowded rooms, mental strain, etc.) are such as would not obtain in a crèche, or infants' nursery, and the vital resistance of the young children is, consequently, greater in the latter case.

I am of opinion that the collecting of children together in crèches, or infants' nurseries, is, from a public health point of view, less dangerous (if, indeed, any danger exists at all therefrom) than collecting them together under the special conditions that obtain in schools—an opinion that is borne out in practice in the cases of such crèches, or infants' nurseries, as already exist in different parts of London and elsewhere.

I must leave the Council to decide as to what action (if any) they advise, having regard to all the facts. My own opinion, as the Council's Medical Adviser, is that much good would accrue, from a public health point of view, were all children under 5 years of age excluded from the Public Elementary and other Schools of the Borough.

JOSEPH PRIESTLEY.

October 30th, 1905

CASES OF MISTAKEN DIAGNOSIS OF INFECTIOUS DISEASES.

(Special Report presented to the Council on November 10th, 1905.)

From the Annual Report, 1904, of the Statistical Committee of the Metropolitan Asylums Board, it appears that 1,993 patients, a percentage on the total admissions of 10.7, were, after admission at the Fever Hospital, found not to be suffering from the diseases mentioned in the notification certificates upon which they were removed to hospital. The total percentage may be sub-divided as follows: Scarlet Fever, 6.7 per cent. ; Diphtheria, 16.1 per cent. ; Enteric (Typhoid) Fever, 25.9 per cent.

The difficulties in correctly diagnosing infectious diseases are, at times, considerable, as is well known to all medical experts. Indeed, it may be stated, that the more experienced the medical experts, the greater the difficulty at times in arriving at a correct diagnosis—at least without careful and prolonged observation of the patients. The ordinary conditions under which the large majority of cases have to be diagnosed are such (*e.g.*, crowded, if not overcrowded, dirty tenements with but little light) as to render a careful and prolonged observation impracticable, and certainly, under the particular circumstances, undesirable. The quicker a patient suffering from infectious disease is removed from a crowded, or overcrowded, centre, the better, as the experience gained in all epidemics shows. The Medical Practitioner called in to a patient must act quickly upon his judgment if the interests of the public health are to be studied ; any delay in acting may have disastrous results as far as spreading of the disease is concerned. The responsibility must legally lie with the Medical Practitioner notifying—he (or she) receiving the fee allowed by law. The question is one that has again and again been before the Local Government Board, whose views may be stated as follows :—

1. It is no part of the duty of the Medical Officer of Health as such to make a personal examination of patients notified.

2. Where, under exceptional circumstances, the Medical Officer of Health deemed it desirable that he should make a personal examination of the patient, that could only be done with the consent of the patient, and with the co-operation of the Medical Practitioner in attendance on the case.

This is professional etiquette, which I have always rigorously followed.

I have always held it to be part of the duty of a Medical Officer of Health to assist the Medical Practitioners practising in his district in diagnosing cases of infectious disease, and I have acted officially upon that opinion. During the Smallpox outbreak of 1902-3, I examined many (the great majority of) patients with, or for, Medical Practitioners, and have acted in a similar way in connection with other diseases. In this connection, the Bacteriological Laboratory has been of great service to Lambeth. To suggest that the Medical Officer of Health should verify, in all cases, the diagnoses of infectious disease is, in my opinion, out of reason, and in every way contrary to the spirit of the Infectious Diseases Notification Acts. To help Medical Practitioners is one thing, to act as their censor is another, and totally different one. It is in the interest neither of the public nor of the profession that this latter course should be adopted.

"Doubtful" cases must be isolated—in fact, the stricter the isolation, the less chance there is of infectious diseases spreading. We are at times inclined to think the Isolation Hospitals are for the treatment, and not for the isolation, of infectious cases. One thing is certain, as far as London is concerned—the want of a proper and complete system of observation wards for all infectious diseases, wherein the doubtful cases may be watched and a correct diagnosis arrived at; indeed, some such system as at present exists in London in the case of Smallpox. The majority of the "wrong diagnoses" are, undoubtedly, *bonâ fide*, and no one with experience in practically dealing with infectious disease will regard the 10 per cent. errors as a large one.

With regard to the Holborn Borough Council's suggested Conference on the subject, there can be no objection to such a Conference taking place. The freer the discussion, the better. The medical profession has nothing to lose by a free and open discussion on the subject. The facts as mentioned above, and the well-known difficulties must, however, be, at all times, borne in mind.

JOSEPH PRIESTLEY.

October 30th, 1905.

SUGGESTED VACCINATION COMMISSION.

(Special Report presented to the Council on December 7th, 1905.)

Acting on the instructions of the Committee, I have considered the letter of the Hackney Borough Council, dated October 4th, 1905, containing copy of certain Resolutions passed by that Council, and I have now to offer, for the consideration of the Lambeth Borough Council, the following remarks:—

Resolution I.—This is the keynote of the letter, and I am unable to advise the Lambeth Borough Council to agree with the opinion expressed in the Resolution. It is not a fact that there has been, or is, “a public rejection of vaccination by so many medical men since the last Report of the Royal Commission (1889-96) on the question.” Indeed, I know of no single case to warrant such a statement. On the contrary, all medical men, who are best competent to express an opinion on the matter, are agreed as to the value of vaccination and re-vaccination as preventives of Smallpox. It is generally agreed that the Conscientious Objectors’ Vaccination Act, the practical outcome of the Report of the last Royal Commission on Vaccination, has been the means of lessening considerably the number of anti-vaccinators, with the satisfactory result that vaccination has become more popular, as shown by the greater numbers of persons who have, during recent years, availed themselves (and their families) of the simple and efficacious preventive measure against such a loathsome disease as Smallpox which vaccination and re-vaccination offer.

Without entering into too great detail, it may be mentioned that, during the last Lambeth outbreak of Smallpox, 1901-2, the statistics, presented at the time to the Council, showed that the incidence rate of Smallpox upon the population was much less amongst the vaccinated than amongst the unvaccinated, whether regard was had to the number of cases of Smallpox notified, or to the number of deaths from Smallpox registered, both children and adults. It was shown that, if vaccination is *no* protection against Smallpox (as claimed by the anti-vaccinators), the vaccinated children under 10 years

of age in Lambeth ought to have added to the epidemic 195 cases (instead of the 11) and 45 deaths (instead of the 1); whilst the adults, 10 years of age and over, in Lambeth ought to have added 480 cases (instead of the 314) and 204 deaths (instead of the 37). The total death-rate from Smallpox per 100 notified cases was 15.8—vaccinated 11.7 and unvaccinated 32.9. Further, of the members of the Lambeth Sanitary Staff (disinfecting men, Inspectors, strippers, sanitary clerks, etc.), not one sickened with Smallpox, all having been previously “protected.” The Metropolitan Asylums Board statistics are even more convincing, thus:—

- (a) 21 persons engaged by Borough Councils and others in disinfecting work have contracted Smallpox during 1901, and not one of these persons had been vaccinated since infancy;
- (b) Not one case of Smallpox has occurred during 1901 amongst the new staff (a very large number of persons) at the Ships and at the Gore Farm Hospital;
- (c) Of 2,198 persons employed at the Smallpox Hospitals between 1884 and 1900 inclusive, 17 persons contracted Smallpox, of whom 13 were not previously vaccinated, and four were workmen who escaped medical observation;
- (d) Of 1,282 persons employed in ambulance work from 1881 to end of 1901, only 4 contracted Smallpox, of whom 1 escaped vaccination when appointed (he died), 1 was unsuccessfully re-vaccinated, and the operation was not repeated (she died), and the other two had been re-vaccinated (both recovered).

Resolution 2.—This Resolution becomes unnecessary, having regard to the fact that the statement as to vaccination in Resolution 1 is not justified—at least, in my opinion.

Suggested Subjects for Enquiry.—With respect to the tabulated suggested subjects for enquiry, mentioned in the letter, the elaborate and expensive procedure of a Royal Commission is unnecessary. Two of the subjects are already engaging the attention of Departmental or other Committees, *e.g.*, (a) the question of the supply of pure lymph, and

the alleged danger to the public of vaccinated calves being sold for food ; (b) the administration of the various Vaccination Acts with special regard to the cost to the ratepayers.

With regard to (c) and (d)—the working of the Conscientious Objectors' Vaccination Act—it must be remembered that, as far as Lambeth is concerned, the conscientious objectors are practically non-existent, an average of 100 certificates only having been granted since the introduction of the new Vaccination Act, 1898. The Lambeth Borough Council, consequently, decided to take no action in connection with the repealing of Section 2 of such Act (vide Minutes, 1902, page 779).

Having regard to the very great preponderance of Governmental employes who believe in the great value of vaccination and re-vaccination as an efficient and trustworthy preventive against Smallpox, it is only fair that this large majority should be protected in the way they wish, and not subjected to an undoubted risk from Smallpox that might arise, were unvaccinated employes accepted.

The Conscientious Objectors' Clause of the Act (Section 2) is as follows :—

“ No parent or other person shall be liable to any penalty under Section 29 or Section 31 of the Vaccination Act of 1867, if, within four months from the birth of the child, he *satisfies* (note the word) two Justices, or a Stipendiary, or Metropolitan Police Magistrate, in Petty Sessions, that he conscientiously believes that vaccination would be prejudicial to the health of the child, and within seven days thereafter delivers to the Vaccination Officer for the district a certificate of such Justices or Magistrate of such conscientious objection.”

It must not be forgotten that the Act lays down that an applicant for an exemption certificate must *satisfy* the Justices or Magistrate that he (the applicant) has a conscientious objection. It was definitely pointed out in the Final Report of the Royal Vaccination Commission (pages 524-527) that the object of the exemption Clauses was for those parents who were honestly opposed to the operation, and not for those who were simply indifferent or neglectful.

Subject (e) requires no comment, as the Smallpox epidemic in 1900-2 was due in part to the fact that the Metropolitan Asylums Board allowed workmen, who had not been previously protected by recent vaccination, to work on the Board's hospitals extension at Dartford, near to the existing Smallpox Hospitals, which were, at that time, occupied by Smallpox patients. Five such unprotected workmen were traced to Lambeth, where they sickened, having contracted Smallpox whilst at work, and thereby caused the disease to spread. On account of action taken by Lambeth (and other districts), this regrettable state of affairs was, fortunately, stopped (vide Minutes, 1902, pages 779-781, 1152).

It is difficult to understand how the Hackney Borough Council are to reconcile their present contention in view of these facts, and having regard to the action taken by the majority of Metropolitan Boroughs in 1902.

JOSEPH PRIESTLEY.

November 13th, 1905.

SHOT TOWER WHARF DESTRUCTOR.

(Special Report presented to the Council on January 18th, 1906.)

The Dust Destructor belonging to the City of Westminster, and situated at Shot Tower Wharf, Commercial Road, was formally opened for work on November 7th, 1900. The Destructor is of the Horsfall type, and was erected by the Horsfall Furnace Syndicate, Ltd., of Leeds and London. It has six back-to-back cells, or furnaces, to treat 12 tons of refuse per cell per day, with a maximum residue of 33 per cent. in weight. The refuse is tipped directly into the cells or furnaces from the carts or vans through cone-shaped hoppers (fitted with covers), which hold several loads of refuse each; and so the refuse does not require to be stored, or handled, in any way previous to burning. The stoking is done from below on a clinkering floor, which is unfortunately situated underneath the ground level. The hot clinker (as it is formed) is removed, at once, away by means of a single overhead railway carried round the furnaces, and furnished with clinker trucks of steel, with a hoist to convey the trucks (when filled) from the clinkering floor to the level of the Wharf, and so by means of another overhead railway to the jetty at the end of the Wharf, where the barges are moored.

The advantages of the Horsfall type of Destructor may be summarised in the words of the Special Report, published in 1898 by Lord Kelvin and Prof. Barr, as the maintenance of high glowing temperatures from energetic combustion, both inside the fires themselves and in the walls of the flues, temperatures which are assisted and increased by the production of forced draughts (on the plenum system) by means of steam jets—the blast air, on its way to the grates, passing through, and being heated in, flue boxes specially built at the sides of the furnaces. There is only a small chimney draught. The products of combustion from each cell discharge into one main flue, and pass through a circular centrifugal dust collector, or catcher, before passing on to the boilers, and thence out into the outside air. The charging holes of the cells are placed at the backs, and the flues for the emission of gaseous products in the fronts, of the fur-

naces, so that any gases given off from the raw material, with which the cells are fed, have to pass over the hottest portions of the fires, and so complete combustion is ensured.

The Shot Tower Destructor is the most recently erected Destructor of the Horsfall Company, and, consequently, in construction and planning, contains all the most recent improvements. As originally designed the Destructor did not work in practice as satisfactorily as was prophesied, and within a few weeks of being opened and worked, caused a serious nuisance to the neighbourhood—unburnt or insufficiently burnt, gases, etc., escaping from the chimney shaft into the air. A memorial (signed by 48 persons) was received by the Lambeth Borough Council, and a summons was, on May 30th, 1901, ordered by the Council to be taken out unless the nuisance (complained of) was abated to the satisfaction of the Council's Medical Officer of Health, who, in connection therewith, made many visits and inspections. The result was that many important alterations and improvements in connection with the Destructor plant were suggested, and carried out, as follows:—

- (1) The hopper covers over the feed-holes, which were previously narrowed, to be fitted into 3 in. water seals (automatically fed with water), so as to prevent the escape of fumes and smoke during, or after, the process of feeding ;
- (2) Instructions to be given for the red-hot clinker to be at once removed to the jetty at the end of the Wharf without being first cooled down by water near the furnace doors—thereby avoiding the formation of " water gas " ;
- (3) Iron or steel barges to be provided instead of wooden barges, so that the hot clinker could be at once tipped without being previously cooled down ;
- (4) The clinkering floor, which is unfortunately below ground, to be better ventilated ;
- (5) The different cells to be more regularly fed, and kept fed, and the fires to be stoked regularly and sys-

tematically (at stated intervals), and, for this purpose, such sufficient and suitable supplementary plant to be provided as necessary ;

- (6) The chimney (90 ft. high and 4 ft. 6 ins. internal diameter) to be raised, if necessary, so as to improve the draught in the main flue ;
- (7) The furnace doors to be made to automatically shut off the forced draughts when such doors are opened for the purpose of clinkering and stoking the fires ;
- (8) The flues underground to be re-modelled and re-built, so as to efficiently dam back the ground water.

In view of these important structural and other alterations, and having regard to the fact that the Destructor was only opened in November, 1900, and had not, consequently, been in continuous uninterrupted working for a lengthened period, the Lambeth Borough Council, on July 25th, 1901, decided to give the City of Westminster Corporation reasonable time in which to get the Destructor into proper order and condition.

A further Report was presented to, and approved by, the Borough Council on February 10th, 1902, stating that there was apparently a great improvement in connection with the working of the Destructor—a satisfactory condition of affairs that was practically maintained during 1902-4—as shown by the absence of complaints.

During 1905, up to date, complaints have again been frequent in respect of the nuisance from the Destructor, and further investigations and enquiries have been carried out, with the result that the present nuisance appears to be due entirely to mismanagement.

Putting aside all sentiment in connection with the erection of Destructors, I am satisfied that the Destructor, as originally planned and constructed (and since improved), at Shot Tower Wharf, need not cause a nuisance in practical working if carefully managed, *e.g.*, by the cells being regularly and systematically fed, and kept fed, day and night—

each cell being charged and clinkered in rotation. The amount of refuse guaranteed to be burnt, viz., 12 tons per cell per day, is, in my opinion, too large an estimate, and the City Corporation of Westminster will have to be satisfied with a smaller amount of work per cell. I have satisfied myself, from personal observations, that endeavours have been made hitherto to overwork the cells, whilst their feeding has been most irregular and spasmodic, due principally to the irregular manner and the insufficient amount in which the refuse is brought to the Wharf.

I have suggested to the City Corporation of Westminster that, in view of the apparent mismanagement of the Destructor by their officials, it might be of advantage to allow the Horsfall Destructor Company to take over the management for a trial period of (say) three months. I am satisfied that care in management is all that is required to abate the nuisance.

It is unfortunate that the clinking floor is underground, and it is equally unfortunate that the land on which the Destructor is built, and in which the flues are buried, is water-logged, making it extremely difficult to dam back the water from the flues and foundations.

Given a properly constructed and equipped plant, a Destructor (if also properly administered) causes no nuisance—even in a populous district. The Shot Tower Destructor should, in my opinion, form no exception to such a sanitary rule.

Previously, the refuse was deposited, sorted, and barged—a condition of affairs causing a serious nuisance from time to time.

The original contract for the Destructor plant was £10,241, and this sum has been largely added to in consequence of the important alterations and additions that have since been carried out.

The Destructor is daily under observation by the Inspector.

JOSEPH PRIESTLEY.

October 16th, 1905.

Home Office.

METROPOLITAN BOROUGH OF LAMBETH, 1905.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES
AND HOMEWORK.

I.—INSPECTION.

Including Inspections made by Sanitary Inspectors.

Premises.	Number of		
	Inspection.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries.)	6	196	...
Workshops (Including Workshop Laundries.)	230		
Workplaces... ..			
Homeworkers' Premises	303		
Total	539	196	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of Pro-secutions
	Found.	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts* :—</i>				
Want of Cleanliness	135	135	...	...
Want of Ventilation	2	2	...	...
Overcrowding	14	14	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	51	51	...	...
Sanitary accommodations {insufficient	1	1	...	...
{unsuitable or defective... ..	197	197	...	...
{not separate for sexes	7	7	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bake-house (S. 101)	...	...	...	...
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)	...	...	...	...
Failure as regard lists of outworkers (S. 107)	...	...	...	...
Giving out work to be done in premises {unwholesome (S. 108)	...	...	...	...
which are {infected (S. 110)	...	...	...	...
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (S. 109)	...	...	...	...
Other offences ... ..	...	...	...	...
Total	407	407	...	...

* Including those specified in Sections 2, 3, 7 and 8, of the Factory Act as remediable under the Public Health Acts.

3. OTHER MATTERS.

Class.		Number.
Matters notified to H.M. Inspectors of Factories :—		
Failure to affix Abstract of the Factory and Workshop Act (S. 133)		63
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)	Notified by H.M. Inspector	22
	Reports (of action taken) sent to H.M. Inspectors	22
Other ... ..		...
Underground Bakehouses (S. 101) :—		
In use during 1904		72
Certificates granted {	in 1904 ... ..	...
	in 1905 ... ..	...
In use at end of 1905		72
		Number of
Homework :—		Lists. Outworkers.
List of Outworkers (S. 107) :—		
Lists received ... ..		... ..
Addresses of outworkers {		
forwarded to other Authorities		... ..
received from other Authorities		... ..
		Wearing Apparel. Other.
Homework in unwholesome or infected premises :—		
Notices prohibiting homework in unwholesome premises (S. 108)		... ..
Cases of infectious disease notified in homeworkers' premises		6
Orders prohibiting homework in infected premises (S. 110)		... ..
Workshops on the Register (S. 131) at the end of 1905 :—		
Bakehouses {	Underground	72
	Above ground	135
Restaurants		243
Other Workshops		1,225
Total number of workshops on Register		1,675

DEATH-RATES (CORRECTED) IN METROPOLITAN BOROUGHES DURING 1905
PER 1,000 PERSONS LIVING.

					ALL CAUSES.	Principal Epidemic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Pyæmia† (Origin uncertain.)	Diarrhoea.	Phthisis.	Deaths under 1 year to 1000 Births registered
COUNTY OF LONDON					15.1	1.70	0.00	0.37	0.12	0.12	0.32	—	0.05	0.00	0.72	1.42	129
WEST.																	
Paddington...	...	...	...	...	13.3	1.39	—	0.42	0.05	0.02	0.34	—	0.03	—	0.53	0.96	123
Kensington...	...	...	...	...	14.0	1.39	—	0.31	0.12	0.05	0.33	—	0.07	—	0.51	1.14	144
Hammersmith	...	...	...	...	13.9	1.70	—	0.24	0.09	0.18	0.48	—	0.04	—	0.67	1.16	135
Fulham	...	...	...	...	15.1	2.71	—	0.54	0.14	0.15	0.53	—	0.06	—	1.29	1.22	145
Chelsea	...	...	...	...	14.8	1.03	—	0.07	0.12	0.07	0.30	—	0.05	—	0.42	1.51	117
City of Westminster	...	...	...	...	13.5	0.81	—	0.22	0.09	0.03	0.16	—	0.02	—	0.29	1.51	114
NORTH.																	
St. Marylebone	...	...	...	...	15.5	1.12	—	0.29	0.12	0.04	0.19	—	0.05	0.01	0.42	1.46	88
Hampstead	...	...	...	...	9.3	0.53	—	0.09	0.07	0.03	0.19	—	0.02	—	0.13	0.83	94
St. Pancras	...	...	...	...	15.8	1.50	—	0.33	0.11	0.11	0.35	—	0.03	—	0.57	1.52	135
Islington	...	...	...	...	14.5	1.47	0.00	0.36	0.11	0.10	0.33	—	0.05	—	0.52	1.26	125
Stoke Newington	...	...	...	...	12.9	1.14	—	0.23	0.06	0.09	0.19	—	—	—	0.57	1.33	122
Hackney	...	...	...	...	14.0	1.98	0.01	0.36	0.08	0.11	0.29	—	0.12	—	1.01	1.15	129
CENTRAL.																	
Holborn	...	...	...	...	17.5	1.12	—	0.20	0.07	0.07	0.30	—	0.07	—	0.41	2.84	92
Finsbury	...	...	...	...	19.0	2.17	—	0.42	0.21	0.12	0.33	—	0.09	—	1.00	2.02	127
City of London	...	...	...	...	17.4	0.57	—	0.04	0.04	0.09	0.09	—	—	—	0.31	1.31	149
EAST.																	
Shoreditch	...	...	...	...	19.7	2.96	0.02	0.54	0.24	0.15	0.76	—	0.03	—	1.22	1.96	167
Bethnal Green	...	...	...	...	18.6	2.27	—	0.36	0.20	0.24	0.42	—	0.06	0.01	0.98	2.04	151
Stepney	...	...	...	...	17.7	2.58	0.00	0.52	0.19	0.20	0.45	—	0.07	0.00	1.15	1.72	141
Poplar	...	...	...	...	17.6	2.65	—	0.47	0.17	0.24	0.47	—	0.06	—	1.24	1.53	153
SOUTH.																	
Southwark	...	...	...	...	18.5	2.39	—	0.74	0.13	0.21	0.38	—	0.05	—	0.88	2.13	148
Bermondsey	...	...	...	...	18.7	2.21	—	0.48	0.13	0.14	0.29	—	0.06	—	1.11	1.79	148
Lambeth	...	...	...	...	14.9	1.50	—	0.31	0.10	0.12	0.26	—	0.03	—	0.68	1.38	115
Battersea	...	...	...	...	14.5	1.99	—	0.71	0.14	0.07	0.29	—	0.03	—	0.75	1.34	131
Wandsworth	...	...	...	...	12.6	1.46	—	0.34	0.11	0.11	0.29	—	0.04	—	0.57	1.02	119
Camberwell	...	...	...	...	13.7	1.30	—	0.30	0.11	0.07	0.25	—	0.03	—	0.54	1.21	124
Deptford	...	...	...	...	14.3	1.19	—	0.14	0.09	0.08	0.17	—	0.05	—	0.66	1.22	122
Greenwich	...	...	...	...	13.4	1.30	—	0.17	0.05	0.16	0.14	—	0.05	—	0.73	1.26	119
Lewisham	...	...	...	...	11.7	0.95	0.03	0.28	0.03	0.06	0.18	—	0.04	—	0.33	0.85	92
Woolwich	...	...	...	...	12.8	1.02	—	0.10	0.08	0.14	0.13	—	0.06	—	0.51	1.52	102

N.B.—0.00 indicates that the deaths were too few to give a rate of 0.005; where no death occurred, — is inserted.

† Originally described as Simple Continued Fever.

The above table is taken from the Registrar General's Annual Summary, and the rates for Lambeth Borough differ slightly from those given in this Report.

CASES OF ILLNESS NOTIFIED FROM BOARD SCHOOLS, &c., TO MEDICAL OFFICER OF HEALTH.

SCHOOLS.	Measles.	Chicken Pox.	Whooping Cough.	Scarlet Fever.	Ringworm.	Mumps.	Diphtheria.	Typhoid.	Eczema.	Blight.	Itch.	Erysipelas.	Influenza.	Ophthalmia.	Croup.	Smallpox.	TOTAL.
Archbishop Tenison's, High Street ...	15	1	10	3	...	1	...	...	...	...	...	...	...	1	...	...	31
Aristotle Road, L.C.C. ...	3	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	5
Beresford Street, L.C.C. ...	6	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
Bolton Street, St. Mark's ...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
Bonneville Road, L.C.C. ...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Cancell Road, Christ Church ...	27	6	...	2	...	...	...	...	...	...	...	...	...	...	...	...	35
Corpus Christie, Brixton Hill ...	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	11
Church Street, L.C.C. ...	13	61	7	1	5	4	1	...	3	...	...	...	...	...	1	...	96
Cormont Road, L.C.C. ...	57	17	...	3	1	1	...	...	...	...	2	...	...	...	...	...	81
Dulwich Hamlet, L.C.C. ...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2
Devonshire Road, St. Barnabas ...	2	2	2	1	...	...	...	...	...	...	...	...	...	...	...	...	7
Effra Parade, L.C.C. ...	161	17	24	2	22	1	...	...	...	...	...	...	...	...	...	...	227
Eden Road, Wesleyan ...	38	2	...	3	2	...	...	...	...	...	...	...	...	...	...	...	45
Elder Road, St. Luke's... ..	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
Faunce Street, L.C.C. ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
George Street, L.C.C. ...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Gipsy Road, L.C.C. ...	273	14	38	9	26	8	47	...	2	...	...	...	...	...	...	...	417
Gye Street, St. Paul's ...	17	16	11	4	13	3	...	...	1	6	...	...	...	...	...	...	77
Hackford Road, L.C.C....	24	36	17	5	12	6	3	...	2	...	...	...	...	...	...	...	105
Holy Trinity, Carlisle Street ...	6	1	28	...	...	1	1	...	...	...	...	...	...	...	...	...	37
Hazelrigge Road, L.C.C. ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Heatherfield Road, L.C.C. ...	6	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	17
Hatfield Street, L.C.C....	50	20	1	1	...	18	...	...	2	...	...	...	...	...	...	...	92
Herne Hill Road, St. Saviour's ...	27	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	30
Halstead Street, St. Michael's...	2	...	1	...	...	4	...	...	...	...	...	...	...	...	...	...	7
Jewish School, Heygate Street ...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	3
Jessop Road, L.C.C. ...	83	18	1	5	20	...	1	...	...	...	...	...	...	...	...	...	128
Johanna Street, L.C.C....	12	7	...	3	2	1	...	...	...	1	...	...	...	1	...	...	27
TOTAL																	
Kennington Road, L.C.C. ...	54	9	13	...	3	...	...	...	...	1	...	...	...	...	...	...	80
Lambeth Wesleyan, Lambeth Road ...	60	3	9	1	...	1	...	...	...	...	...	...	...	3	...	...	76
Lyham Road, L.C.C. ...	251	35	7	2	14	6	...	...	...	2	...	...	...	...	...	...	317
Lollard Street, L.C.C. ...	36	20	2	9	2	2	...	...	2	1	1	...	...	...	...	...	75
Larkhall Lane, L.C.C. ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Lingham Street, St. Andrew's ...	36	26	6	4	12	6	...	...	3	...	...	...	...	1	...	...	9

HISTORY OF A DIPHTHERIA OUTBREAK AT THE LAMBETH PAROCHIAL SCHOOLS, WEST NORWOOD, MAY—JULY, 1905.

(*Special Report by Dr. Joseph Priestley, the Medical Officer of Health.*)

Introductory Remarks.

An outbreak of Diphtheria occurred during May, June and July, 1905, amongst the children at the Lambeth Parochial Schools, situated in Elder Road, West Norwood, and under the control of the Lambeth Guardians. The majority of the cases were of a mild (chiefly nasal) type, which gave rise to difficulties not only in diagnosis but also in the adoption of the usual preventive measures. The slightness, and, in some cases, the apparent absence, of the well-known clinical symptoms of diphtheria rendered it necessary to carry out minute and careful bacteriological examinations, both of "suspects" (*i.e.*, persons presenting doubtful diphtheria symptoms), and of "contacts" (*i.e.*, persons who had been in contact with diphtheria), involving a large amount of time and trouble. These bacteriological examinations were all carried out in the Borough Laboratory (the great value of which has been again proved), and the results were afterwards, in every instance, confirmed by one or two or even (at times) three independent well-known bacteriologists. These confirmatory examinations were thought to be advisable in view of the fact that a number of children were, by order of the Medical Officer of the Schools, sent away to the Metropolitan Asylums Board Hospitals for isolation, although such children appeared to be, at the time, clinically in good health, despite the proved presence in their throats or noses (or both) of the true Klebs-Löffler diphtheria bacilli. These *potential* or *carrier* diphtheria cases caused much anxiety, as the children, though not, apparently, suffering from diphtheria in the ordinary clinical sense, were none the less capable of transferring the disease to others, who might be more susceptible to diphtheria infection, and might, consequently, suffer severely clinically. Their strict isolation, therefore, away from the Schools, was deemed to be absolutely necessary: indeed, had it not been for such strict isolation of all "carrier," as well as other, cases, the outbreak would not have been stamped out so effectively (and so quickly) as it was.

It is acknowledged by all experts that diphtheria, like other infectious diseases, occurs clinically in varying degrees of

severity—from the very slightest (if any) departure from normal health, with no characteristic local lesion, to the well-known typical manifestations and symptoms of the disease in its acute, severest form, with (or without) characteristic local lesion. There is no correspondence between (*a*) severity of clinical symptoms and virulence of infection, or between (*b*) virulence of infection and special morphological type of diphtheria bacilli. Whilst occasionally, very rarely, the true virulent Klebs-Löffler diphtheria bacilli may be found in the throat or nose of a person in normal health, and who has not been in known contact with diphtheria, it is generally agreed that their presence in the throats and noses of children (who are always, more or less, susceptible), when aggregated together—more especially with diphtheria about—calls for strict attention, *e.g.*, in the way of isolation, disinfection, and other preventive measures. Indeed, the infectivity of what are known as “latent” (*i.e.*, symptomless) forms of diphtheria is one of the most troublesome things to deal with, and the safest line of action is to strictly isolate, &c., not only all patients, who show in their throats or noses (or both) “true” or “real” diphtheria bacilli, but also all contact or suspect patients (especially children), who show in their throats or noses (or both) “doubtful” or “suspicious” diphtheria bacilli, during the prevalence of a genuine diphtheria outbreak or epidemic. These latter patients may prove to be sources of infection as well as the former. All “latent” forms of disease are important, and have proved specially so in connection with the outbreak of diphtheria, and pseudo-diphtheria at the Norwood Schools. Clinical diphtheria as it is sometimes seen (*e.g.*, high temperature, swollen throat, discharging nose, the presence of membrane, &c.), can be readily diagnosed by a mere tyro in medicine, but “latent” diphtheria (*e.g.*, with few, if any, clinical symptoms, but with simply the diphtheria bacilli in the throat or nose, or both) can only be diagnosed by bacteriological examination. Between these two types, there are many intermediate gradations.

The clinical symptoms found in the 64 Norwood Schools diphtheria patients varied from the usual severe ones to a slight redness or catarrh of the nose or fauces or both; whilst, in some few cases, there was, apparently, an entire absence of any such clinical symptoms. The true Klebs-Löffler bacilli were found in the throat or nose (or both), on bacteriological examination, of all the 64 notified diphtheria patients, either before or after their removals to hospital.

The patients may be classified as follows :—

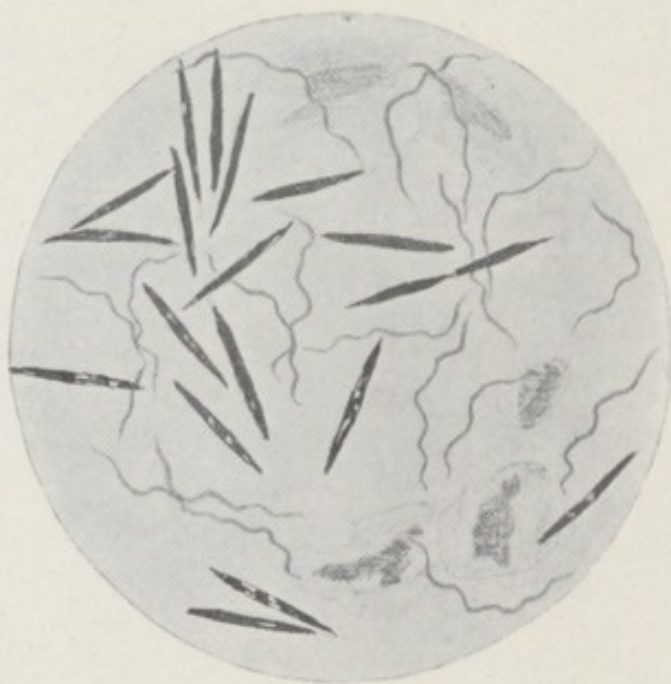
1. Those with clinical diphtheria (more or less severe), with Klebs-Löffler bacilli in their throats or noses (or both);
2. Those with nasal catarrh and faucial redness (or sub-acute tonsillitis), with Klebs-Löffler bacilli in their throats or noses (or both);
3. Those with no clinical symptoms whatever, but showing the presence, on examination, of Klebs-Löffler bacilli in their throats or noses (or both).

The diphtheria bacillus is undoubtedly polymorphic, and variable in virulence according to environment (*e.g.*, state of mucosa).

The different diphtheria bacilli found in connection with the Outbreak may be classified as follows:—

1. True Klebs-Löffler.—Delicate, slender, even rods of varying lengths from 3 to 5 μ (long, short, and medium), and of 1 μ in thickness; non-motile; non-sporing; staining with methylene blue (Löffler), segmentally and polarly, and with Gram's and Neisser's methods, characteristically; with a tendency to arrange themselves in parallel groupings; acid reaction with glucose; virulent to animals (*i.e.*, lethal to guinea pigs with loss of weight); affected by antitoxin.
2. Involved or modified forms of Klebs-Löffler.—Spindle-shaped, and club-shaped rods; staining irregularly (*i.e.*, not distinctly segmentally and polarly) with methylene blue (Löffler), and only occasionally with Gram's and Neisser's methods; slight acid reaction with glucose; non-virulent to animals (*i.e.*, not lethal to guinea pigs but simply causing in them local swelling without loss of weight); unaffected by antitoxin.
3. Hoffmann or pseudo-diphtheria.—Short, even rods, staining evenly with methylene blue (Löffler), and not at all characteristically with Gram's or Neisser's methods; no acid reaction with glucose; non-virulent to animals (*i.e.*, not lethal to guinea pigs but simply causing in them local swelling without loss of weight); unaffected by antitoxin.

These three different classes were found (*a*) in pure cultivation, or (*b*) mixed (in varying proportions), one with the other.



*By kind permission of
Professor Vincent, of Paris.*

The groupings of the Hoffmann pseudo-diphtheria bacilli at times, in some of the cases, seemed to point to a sort of connection or co-relation of such bacilli with the true Klebs-Löffler diphtheria bacilli, antecedently or subsequently.

The outbreak at the Norwood Schools is interesting bacteriologically from another point of view, viz., the presence in the throats and noses of some of the patients of a mixed infection, viz., (a) Vincent's organisms, in addition to (b) Hoffmann's pseudo-diphtheria bacilli, and (c) Klebs-Löffler diphtheria bacilli. By means of the presence in some of the cases of these Vincent's organisms, the source of the outbreak was definitely traced.

Vincent's organisms are (1) fusiform, elongated bacilli, varying in length from 6 to 12 μ , and from 1 to 1.5 μ in breadth, vacuolated, motile or non-motile, not staining with Gram's fluid but staining irregularly with Ziehl's liquid; and (2) fine, long spirilla of varying lengths, sinuous and very motile, staining badly (or not at all) with the usual staining fluids. The fusiform bacilli are readily cultivated in ordinary broth or in human serum, but the spirilla not at all.

The Vincent's organisms found (only the fusiform) were due to a concurrent attack, or outbreak, of either ulcerative stomatitis, or the ulcerative form of Vincent's Angina, which occurred at (and about) the time of the diphtheria outbreak. They are found in both these diseases—of which the former is well known, and the latter has been fully described by Professor H. Vincent in the *Lancet* of May 13th, 1905. From this description it appears that Vincent's angina (angine de Vincent) is a disease allied to diphtheria and other forms of throat troubles, and is, at times, contagious, spreading from person to person, either by direct contact (*e.g.*, kissing) or indirectly (through the use of towels, drinking utensils, spoons, forks, knives, &c.). The disease exists in two forms, *e.g.*, (a) diphtheroid (like diphtheria), or (b) ulcero-membranous (deep ulcerations of the membranes over the tonsils, palate, &c.), and though it may appear at any age, it is specially frequent amongst children from 8 to 10 years, and amongst young adults from 18 to 30 years, of age.

Details of the Outbreak.

The details of the Diphtheria Outbreak at the Lambeth Parochial Schools are set out in full, as it is a unique instance of diphtheria infection being definitely traced from child to child, the individual cases fitting one into another like a Chinese puzzle (*vide* Tables V. and VI. at the end of the Report).

On May 15th, 1905, two swabs, taken from the throats of Emily Grantham and Dorothy Wilson, aged 6 and 4 years respectively, who showed clinical symptoms of diphtheria, were received at the Borough Laboratory from the Lambeth Parochial Schools for bacteriological examination, and both showed, on cultivation, the presence of Klebs-Löffler diphtheria bacilli (that from Dorothy Wilson showing, with smear preparations, Vincent's organisms also). These two patients were, consequently, removed to the Metropolitan Asylums Board Hospital on May 16th. On the following day (May 17th), 5 other patients, also with clinical symptoms of diphtheria, were removed to the Metropolitan Asylums Board Hospital by order of the Guardians' Medical Officer, but in these 5 cases no swabs were taken previous to the patients' removals. Bacteriological examinations were, however, carried out afterwards at the Metropolitan Asylums Board Hospital with the following reported results:--

NAME.	AGE.	RESULT OF EXAMINATION.
David West ...	6 years ...	Klebs-Löffler bacilli.
Florence Cooper ...	5 years ...	Klebs-Löffler bacilli.
Florence Cummings	6 years ...	Klebs-Löffler bacilli (modified) & Vincent's organisms.
Philip Jones ...	6 years ...	Vincent's organisms and ? Klebs-Löffler bacilli.
Kate Hemmings ...	4 years ...	Vincent's organisms and ? Klebs-Löffler bacilli

It is probable that, like Dorothy Wilson, Philip Jones and Kate Hemmings, at the time of their removals to Hospital, had Klebs-Löffler bacilli in their throats as well as Vincent's organisms--the latter being in greater numbers and masking, and crowding out, in consequence, the former. In any case it is clear that, clinically, the 5 patients (removed on May 17th) were suffering from diphtheria, complicated in 3 of the cases with Vincent's angina or ulcerative stomatitis.

On May 18th Walter Button (11 years) was removed to the Metropolitan Asylums Board Hospital on the result of a bacteriological examination, which showed the presence not only of definite Vincent's organisms but also of indefinite (modified or involuted) Klebs-Löffler diphtheria bacilli. At the Hospital, only Vincent's organisms were found on bacteriological examination, but the fact that Walter Button afterwards, whilst in Hospital, developed slight cardiac dilatation (an after-symptom sometimes

found in diphtheria) makes it practically certain that he also was suffering, at the time of his removal to Hospital, from a combined attack of Vincent's Angina or ulcerative stomatitis and diphtheria—a diagnosis that had been arrived at previous to the patient's removal to hospital from bacteriological examination.

May Hemmings (6 years) was removed to the Metropolitan Asylums Board Hospital on May 20th before the results (which proved to be negative) of the bacteriological examinations were known. These results, together with the after-history of the case, point to the conclusion that May Hemmings was in all probability, if not certainly, not suffering from diphtheria (nor from Vincent's angina nor from ulcerative stomatitis) at the time of her removal to Hospital. The case of May Hemmings is not, therefore, included in the diphtheria statistics given in this Report.

Jane Sutton (13 years) and Francis Clarke (3 years) were removed to the Metropolitan Asylums Board Hospital on May 29th, both patients having shown previously, on bacteriological examination, Klebs-Löffler diphtheria bacilli in their throats. In this way 10 patients suffering from diphtheria were removed to the Metropolitan Asylums Board Hospital during May, 1905.

During June, 1905, 47 patients (46 children and 1 attendant, aged 21 years) were removed to the Metropolitan Asylums Board Hospital as follows:—

DATE.	NUMBER REMOVED.			AGES.
June 6	...	3	...	7, 6, 6.
" 9	...	2	...	6, 5.
" 13	...	3	...	11, 10, 4.
" 15	...	2	...	6, 8
" 16	...	7	...	6, 11, 4, 6, 6, 5, 7.
" 17	...	8	...	7, 6, 8, 4, 13, 6, 4, 6.
" 19	...	2	...	10, 4.
" 20	...	1	...	4.
" 21	...	5	...	4, 10, 6, 3, 8.
" 22	...	5	...	8, 6, 9, 9, 8.
" 23	...	1	...	10.
" 24	...	2	...	5, 21.
" 28	...	1	...	14.
" 30	...	5	...	5, 10, 6, 9, 11.
		<hr/> 47		<hr/> 3 to 21.

During July, 1905, 6 patients were removed to the Metropolitan Asylums Board Hospital as follows:—

DATE.	NUMBER REMOVED.		AGES.
July 1	...	1	3.
" 3	...	1	10.
" 4	...	1	4.
" 10	...	2	7, 13.
" 14	...	1	6.
		<hr/> 6	<hr/> 3 to 13.

Miss Orbell (aged 28 years), a clerk, living out and attending at the School Infirmary daily, was notified by Dr. Adams as suffering from bacteriological diphtheria on June 29th.—Klebs-Löffler bacilli having been found, on examination, in her throat. She was not removed to the Metropolitan Asylums Board Hospital, but was isolated away from the Schools in a private house in Norwood.

Thus, the outbreak at the Lambeth Parochial Schools consisted of a total of 64 patients (viz., 62 children, 1 clerk, and 1 attendant), all of whom were, potentially or actually, suffering from diphtheria, as shewn by bacteriological examination as follows:—59 shewed Klebs-Löffler bacilli, 2 Vincent's organisms and 3 Klebs-Löffler bacilli, and 3 both Klebs-Löffler bacilli and Vincent's organisms, in their throats or noses or both. Of the 64 patients, 52 shewed also clinical symptoms (more or less severe) of diphtheria. 63 of the patients were removed to the Metropolitan Asylums Board Hospitals, and 1 (a clerk) was isolated at a private house, and not a single patient was returned from Hospital, certified as "not suffering from diphtheria." No single death occurred.

The ages of the 62 children notified were as follows:—

AGE.	NUMBER.		AGE.	NUMBER.	
3 years	...	3	9 years	...	3
4 "	...	10	10 "	...	6
5 "	...	5	11 "	...	4
6 "	...	18	12 "	...	—
7 "	...	4	13 "	...	3
8 "	...	5	14 "	...	1
					<hr/>
			Total		62

For full details of these 64 cases see Tables I., V. and VI.

The necessary disinfection was carried out by the Borough Council's Officials at the Schools.

Origin of the Outbreak.

The School Premises consist of (1) a Main Building, and (2) Other Buildings.

The Main Building comprises the Administrative Block, and the 8 Main School Blocks which are known as A, B, C, and D—North and South.

The Other Buildings are as follows:—Receiving Ward, Probation Ward, Infirmary, and Isolation Ward; and are situated away from the Main Building, so as to prevent, with ordinary administrative care, any inter-communication amongst the respective inmates of the different Buildings.

Children are received from any part of Lambeth Borough into the Receiving Ward of the Norwood Schools, and then passed through a Probation Ward on to the Main Building. The Infirmary and Isolation Ward are used, as required, for the treatment and isolation, respectively, of patients from the Main and Other Buildings, which together constitute the Lambeth Parochial (West Norwood) Schools.

Such a planning of the School Buildings is exemplary, and should have prevented an outbreak of infectious disease in the Main Building, with strict administration.

The outbreak began in the Main School Block known as C South—the first two children (*Emily Grantham and Dorothy Wilson), notified on May 16th, as suffering from Diphtheria, occupying beds in the lower dormitory of that particular block. Of the 5 patients notified and removed to the Metropolitan Asylums Board Hospital on the following day (May 17th), 3 also were inmates of the same particular Block—2 (David West and Florence Cooper) occupying beds in the lower dormitory, and 1 (Florence Cummings), a bed in the upper dormitory. The

* Emily Grantham had not been out in the Public Streets for months, and had not been visited since March 23rd, 1905.

other 2 patients (Philip Jones and Kate Hemmings) were inmates of the Receiving Ward and Infirmary respectively ; whilst Walter Button (removed on May 18th) was also an inmate of the Infirmary. It was clear that, during that time, the Infirmary, Receiving Ward, and C South Block were Diphtheria-infected. No further cases of Diphtheria were notified until May 29th, when Francis Clarke and Jane Sutton (from C South and the Infirmary respectively) were removed to the Metropolitan Asylums Board Hospital, making a total of 10 Diphtheria patients removed during May.

In view of the fact that, of these 10 cases, 6 were connected with C South Block, systematic, periodical, both clinical and bacteriological examinations were made of the throats and noses of all the inmates of that particular Block (children and attendants), with the result that 24 more children and 1 attendant were finally "weeded" out therefrom as suffering from Diphtheria (actual or potential) as follows :—June 6th, 2 ; June 9th, 2 ; June 13th, 3 ; June 15th, 2 ; June 16th, 7 ; June 17th, 6 ; June 21st, 1 ; June 24th, 1 ; June 30th, 1 ; total, 25.

At the commencement of the outbreak (May 16th), there were 66 children living and sleeping in C South Block, and of these, 30 (17 from the lower, and 13 from the upper dormitory) were eventually removed to the Metropolitan Asylums Board Hospital, potentially or actually suffering from Diphtheria (complicated in 2 instances with ulcerative Stomatitis or Vincent's Angina), as shewn by the fact that Klebs-Löffler bacilli and Vincent's organisms were found in their noses or throats (or both), on bacteriological examination. 9 other children in C South Block shewed, on examination, Hoffman pseudo-diphtheria bacilli in their throats or noses ; whilst 1 child (Joseph J. Tipper), aged 4 years, occupying a bed in the lower dormitory, shewed in his throat modified ("involved" as it is called) Klebs-Löffler and pseudo-diphtheria bacilli, together with a few doubtful Vincent's organisms, pointing to a recent attack (3 or 4 weeks ago) of Diphtheria, complicated with Ulcerative Stomatitis or Vincent's Angina. (*Vide* Tables II. and III).

How the Disease spread into the Main Buildings.

Joseph J. Tipper was an important clue, and into his history and recent movements strict enquiry was made. It was found that he had never been out to the Board Schools, and that he had not been visited since February 6th, 1905, when his mother

from a house situated in the Borough of Southwark, wherein no Diphtheria was at that time, nor has been since, up to the date of this Report, reported to exist) called to see him. It was found, however, that from April 13th to April 28th, 1905, he had been in the School Infirmary suffering from certified "Stomatitis and Catarrh," having been removed thither from C South Block, whither he returned when convalescent on April 28th, *direct* from the Infirmary. Further enquiries elicited the fact that Joseph J. Tipper, whilst in the Infirmary, occupied a bed in the Lower (Boys') Ward, and that from April 22nd to April 25th a boy named Willie Jarvis (aged 4 years) occupied the adjoining bed. Bacteriological examination of the throat of Willie Jarvis showed modified (involved) Klebs-Löffler and pseudo-diphtheria bacilli, and also a few doubtful Vincent's organisms—all indistinguishable from those found in the throat of Joseph J. Tipper. The throats and noses of other members of the Jarvis family, who were at the time in the Lambeth Schools, were examined bacteriologically on several different occasions, with the following results:—

NAME.	AGE.	RESULT OF EXAMINATION.
Harry Jarvis ...	8 years ...	Modified (involved) diphtheria bacilli and Vincent's organisms.
Alice Jarvis ...	6 years ...	? Modified (involved) diphtheria bacilli.
Rose Jarvis ...	12 years ...	? Modified (involved) diphtheria bacilli.

Further, of the remaining members of the same Jarvis family, the mother, father, and newly-born baby were traced to the Lambeth Workhouse (situated at the opposite end of the Borough, and about 3-4 miles from the Norwood Schools), and their throats and noses on bacteriological examination gave the following results:—

NAME.	AGE.	RESULT OF EXAMINATION.
James Jarvis ...	32 years ...	Negative.
Mary Jarvis ...	38 years ...	Modified (involved) diphtheria bacilli.
Sarah Jarvis ...	4 months ...	Klebs-Löffler bacilli (pure cultivation).

It was clear, therefore, from the bacteriological examinations, that the source of infection of diphtheria and Vincent's Angina or ulcerative stomatitis was the Jarvis family—the mother having,

apparently, had an attack of diphtheria about four weeks previous to the outbreak at the Schools, and having directly infected through contact her 5 children, of whom 4 went to the Lambeth Parochial Schools (giving rise to the outbreak there). The fifth child (baby) and Mrs. Jarvis remained at the Workhouse, causing a small local outbreak in connection with the Infirmary there, Mrs. Jarvis infecting her own baby and 9 other inmates, traced directly or indirectly, as follows (*vide* Table IV.) :—

Edith King, Fanny Bowles, Rose Goulestone, Selina Jessop,
Emily Wells, Charlotte Banbury, Richard Barker,
Thomas Nicholls, Sarah Jarvis, Florence Hall.

At the Workhouse Infirmary, on July 13-14 there was a curious outbreak of "sore-throats," which was attributed, by the Medical Officer there, to the disturbing of earth (soil) near to the Infirmary. The cases of "sore throats" were 26 in number, on those dates, being distributed throughout the Infirmary Wards as follows :—

No.			No.		
WARDS.		OF CASES.	WARDS.		OF CASES.
G	...	2	K	...	4
H	...	—	M	...	3
I (1)	...	5	O	...	4
I (2)	...	8			

8 nurses were also affected, making a total of 34, to be followed by 13 additional cases between July 14th and July 19th.

Wards G, H and I are in one block, and K, M and O in another. Mrs. Jarvis and her child (Sarah) were in I (2). A bacteriological examination of the throat of Mary Jarvis (mother) at first shewed only staphylococci and streptococci, but afterwards modified (involved) Klebs-Löffler bacilli, in cultivation. The explanation of this is that Mary Jarvis had an attack of Diphtheria (combined probably with Vincent's Angina or Ulcerative Stomatitis) about the middle of April, and that, at the time of her entrance to the Infirmary on account of a superadded attack of simple Tonsillitis, the Diphtheria germs, which were left in her throat, took on again virulence, infecting Sarah Jarvis (baby) who died, and the 9 other inmates who were notified as suffering from Diphtheria and who were removed to the Metropolitan Asylums Board Hospitals.

The exact history of the whole Jarvis family was traced, and may be placed on record as showing how important it is to

go into the greatest detail in investigating an outbreak of infectious disease.

The 4 Jarvis children at the Lambeth Parochial Schools (Willie, Harry, Alice and Rose) are known in Workhouse language as "in and out" children, and their recent movements, at the time of and previous to the School outbreak of diphtheria were traced as follows:—

(1) Willie Jarvis entered the Receiving Ward of the Lambeth Schools on March 22nd, 1905; was sent home from there on April 15th (remaining at home until April 22nd); again entered the Receiving Ward on April 22nd, and was sent on the same day, suffering from diagnosed Stomatitis, to the Infirmary, where he remained until April 25th; was again sent home on April 25th, to be re-admitted to the Receiving Ward on the following day (April 26th), where he remained until he was removed to the Isolation Block of the Infirmary on May 30th (modified or involuted diphtheria bacilli and doubtful Vincent's organisms being found in his throat and nose).

(2) Harry Jarvis entered the Receiving Ward of the Lambeth Schools on March 22nd, 1905; was sent home from there on April 15th (remaining at home until April 22nd); again entered the Receiving Ward on April 22nd, and remained there until April 25th; was again sent home on April 25th to be re-admitted to the Receiving Ward on the following day (April 26th), and sent on the same day, suffering from diagnosed Stomatitis, to the Infirmary, where he remained until he was removed to the Isolation Block of the Infirmary on May 30th (modified or involuted diphtheria bacilli and doubtful Vincent's organisms being found in his throat and nose).

(3) Alice Jarvis entered the Receiving Ward of the Lambeth Schools on March 22nd, 1905, and was transferred to the Infirmary on the same day, suffering from diagnosed heart-disease; was sent home from the Infirmary on April 15th, remaining at home until April 22nd; again entered the Receiving Ward on April 22nd, and was sent on the same day to the Infirmary, where she remained until April 25th; was again sent home on April 25th, to be re-admitted into the Receiving Ward on April 26th, where she remained until she was removed to the Isolation Block of the Infirmary on June 16th (doubtful modified or involuted diphtheria bacilli being found in her throat).

(4) Rose Jarvis entered the Receiving Ward of the Lambeth Schools on March 22nd, 1905; was sent home from there on April 15th (remaining at home until April 22nd); again entered the Receiving Ward on April 22nd, and remained there until April 25th; was again sent home on April 25th to be re-admitted into the Receiving Ward on the following day (April 26th), where she remained until she was removed to the Isolation Block of the Infirmary on June 16th (doubtful modified or involuted diphtheria bacilli being found in her throat).

The mother (Mary) was confined at the Workhouse on February 12th, 1905, of a female child (christened Sarah), afterwards returning home, where she last saw her other children (prior to their going to the Lambeth Parochial Schools) on April 25th. The mother (Mary), father (James), and baby (Sarah) re-entered the Workhouse on May 8th, and the baby (Sarah) having developed Whooping Cough was admitted, with her mother, into the Workhouse Infirmary Ward I. (2) on June 5th, the mother being taken ill on June 14th with symptoms of Tonsillitis, and the baby (Sarah) sickening with clinical symptoms of Diphtheria on June 18th, and being removed to the Metropolitan Asylums Board Hospital on June 22nd. The simple tonsillitis of Mary Jarvis (mother) of June 14th was a superadded disease to her previous Diphtheria attack in April, as shown by bacteriological examination (only staphylococci and streptococci being found), the Diphtheria attack recrudescing, however, as shown by the fact that the baby (Sarah) caught the Diphtheria on or about June 14th. Klebs-Löffler bacilli (in pure cultivation) and a few Vincent's organisms (on smear preparations) were found in the throat and nose of Sarah Jarvis, who also had well-marked clinical symptoms of Diphtheria, both the bacteriological and clinical diagnoses being independently confirmed at the Metropolitan Asylums Board Hospital. Sarah Jarvis died on August 4th, 1905, from Diphtheria.

The father (James Jarvis) gave negative results when his throat and nose were examined bacteriologically.

The house from which the Jarvis children were admitted, and re-admitted, into the Lambeth Parochial Schools, and from which the mother and father went into the Workhouse, was 24, Industry Terrace, Brixton, but no case of Diphtheria had been at the time, nor has been since, up to the date of this Report, notified as having occurred there, nor in that particular part of the Borough.

The Jarvis children infected the Norwood Schools Infirmary and Receiving Ward, one of them (Willie) directly infecting, at

the Infirmary (Boys' Lower Ward), Joseph J. Tipper, who occupied a bed next to him from April 22nd to 25th. Joseph J. Tipper transferred the disease into C South Block, whither he was removed suffering from the disease (potentially or actually), in an unrecognised form, and directly or indirectly infected 30 other children and 2 adults, as shown by the dates of sickening of the patients, the positions occupied in the dormitories, and the incubation period of the disease (average 2-12 days). Of the 2 adults infected, 1 was an attendant (Miss Bell), connected with C South Block, and the other a lady clerk (Miss Orbell), connected with the Schools' Infirmary. They both showed, on bacteriological examination, the presence of Klebs-Löffler bacilli in their throats or noses, and the former was removed to the Metropolitan Asylums Board Hospital on June 24th, and the latter isolated at a private house away from the Schools from June 29th to July 26th.

In this way, 32 cases are accounted for (all connected with C South Block, and arising, originally, from Willie Jarvis, at the Schools Infirmary). The Schools Infirmary was also infected (*a*) by 2 other Jarvis children, in addition to Willie, viz., Harry and Alice, and (*b*) probably by other children. In connection with this Infirmary infection, the following cases (admitted for other diseases) also arose :—

Walter Button—same Ward (Lower Boys) as Joseph J. Tipper and Willie Jarvis—admitted to Infirmary on May 5th, with Conjunctivitis and Debility, from B South.

Alice Trebett—same Ward (Upper Girls) as Alice Jarvis—admitted to Infirmary on May 7th, with Seborrhœa, from D North.

Kate Hemmings—Lower Girls' Ward—admitted to Infirmary on February 3rd, with Tonsillitis and Stomatitis, from C South.

Jane Sutton—Lower Girls' Ward—admitted to Infirmary on May 13th, with Conjunctivitis, from C North.

Harry Jarvis occupied a bed at the Infirmary in the Upper Boys' Ward, and in this connection it must be remembered that inter-communication between *all* Infirmary children would take place in the corridors, and in the rooms used in common (viz., dining and recreation rooms and lavatories). The direct spread of the infection from person to person is, therefore, readily understood.

It may be added that the importance of the Jarvis and Tipper cases was so great that bacteriological examinations and re-examinations were again and again made, and several different cultures prepared and tested (physiologically and otherwise), by independent bacteriologists, with the result that there can be little doubt but that the Jarvis family (except the father, and, perhaps, Alice and Rose) *i.e.*, 4 in number, together with Joseph J. Tipper, had all had attacks of mild Diphtheria (potential or actual), more or less recently at the time of the Outbreak. Two separate outbreaks were the result—one at the Lambeth Parochial Schools and the other at the Lambeth Workhouse Infirmary. The disease spread more rapidly at the Schools than at the Infirmary by reason of the fact that children were the chief inmates of the former and adults of the latter—diphtheria being a disease of childhood, and comparatively rare amongst adults.

The Vincent's organisms found were connected, apparently, with a concurrent outbreak of Vincent's Angina or Ulcerative Stomatitis.

Even allowing that the modified (involved) Klebs-Löffler bacilli found in the throats and noses of the Jarvis family were so attenuated as to be incapable, except under certain definite conditions, of infecting others, their clothes alone, not having been disinfected, might have carried the Diphtheria infection. In this connection, it may be mentioned that, at the Lambeth Parochial Schools, there is no efficient disinfecting machine yet provided; notwithstanding the fact that the Guardians decided, by resolution, on May 14th, 1903, to provide such an efficient machine at the Schools, on account of the Measles Outbreak, 1902-3, being, in part, caused by the want of such.

Why the Disease spread into the Main Buildings.

The channel through which the disease spread into the Main Building (C South) was Joseph J. Tipper, who contracted his infection, whilst under treatment for "Stomatitis and Catarrh," in the Schools Infirmary, from Willie Jarvis, who was being treated in the same Ward for Stomatitis, but who was, at the time, also suffering from a mild, unrecognised, infection of Diphtheria, as shewn by bacteriological examination. Willie Jarvis occupied a bed next to Joseph J. Tipper from April 22nd to 25th.

Joseph J. Tipper, with the diphtheria bacilli in his throat (but unrecognised), was, unfortunately, allowed to pass on April 28th directly from the Schools Infirmary back into C South Block

(Main Building), where he remained until May 27th, a danger that will be guarded against in future, as the Guardians have decided that all convalescents from the Infirmary shall now pass through a period of quarantine or probation prior to returning to the Main Building. In this connection, it may be noted that the Medical Officer of the Schools (Dr. Alice Johnson), in a special Report, dated March 14th, 1905, pointed out this danger, and advised how to obviate it. The warning was disregarded, both by the Schools Committee and by the Board of Guardians, who refused, by resolution, to adopt their Medical Officer's advice. Had this not been so, the present outbreak would have been prevented, in that it would not have occurred in the way, and through the channel, it did; and the labour and expenses to the Guardians, and to the Borough Council, entailed in tracing and verifying the origin of the outbreak, would have been avoided. The actual wording of Dr. Alice Johnson's Report was as follows:—

"I find it will be necessary to make a slight alteration in the rules respecting the children who leave the Infirmary for the Schools. It is a source of danger that they should continue as at present, going straight back to the Schools from the Infirmary, where they are in contact with children from the Receiving and Probation Blocks, which nullifies the excellent institution of the Receiving and Probation Blocks. I propose discharging them into the Receiving Ward and thence to the Probation Ward, where they will take their probation before re-entering the Schools." The Schools Committee, after considering this Report, resolved as follows:—"We are unable to recommend the adoption of the proposal of the Medical Officer;" and this resolution of the Schools Committee was adopted by the Board of Guardians on April 12th, 1905.

It is an interesting fact to note, in passing, that Measles gained entrance into the Main Building of the Schools from the Infirmary during the Measles Outbreak 1902-3 (*vide* Annual Health Report, 1903, Appendix, pp. 44, 45, 46) in exactly the same way, viz., by children (convalescent from all diseases) being allowed to return *direct* into the Main Building without passing first through a probation or convalescent ward. At that time it was pointed out to the Guardians by the Medical Officer of Health that the Infirmary had helped to spread the Measles, and that consequently "no intercommunication whatever should be allowed to take place between (a) the Infirmary and the Isolation Hospital, (b) the Main Buildings (children and officials) on the one hand, and the Infirmary (children, patients or officials) on the other hand" (*vide* Medical Officer of Health's Special Report).

The Guardians' late Medical Officer (Dr. Rugg) was well aware of the danger of infection passing from child to child at the Infirmary, for in a letter, dated March 7th, 1903, he stated that, in connection with the Measles outbreak, 1902-3, "the Infirmary (Measles) cases no doubt had infection conveyed to them by children admitted for other ailments, but who developed Measles a few days after admission."

To give an idea of the large number of children passing through the Infirmary, the following return (dealing with a period from March 3rd, 1904, to Feb. 28th, 1905) is interesting:—

	ADMISSIONS.	SENT TO INFIRMARY.
1. Receiving Ward ...	895	132
2. Probation Ward ...	554	46
3. Schools ...	—	513

The average time spent in Infirmary by each patient was, during the same period, 24 days.

Secondary Outbreak in the Receiving Ward of the Schools.

In addition to C South Block, in connection with which the first half of the outbreak may be said to have arisen from the Infirmary, the infection having been introduced by Joseph J. Tipper, there was a secondary outbreak connected with the Receiving Ward of the Schools, the details of which are equally interesting.

A child (Bridget Archer, aged 4 years) was admitted to the Receiving Ward (which at the time was supposed to be in quarantine) on June 16th from the Lambeth Workhouse (3 to 4 miles away), and was found on admission to be suffering from enlarged and inflamed tonsils. A bacteriological examination proved that her throat and nose were teeming with true Klebs-Löffler diphtheria bacilli (in pure cultivation), and she was removed in consequence to the Metropolitan Asylums Board Hospital next day (June 17th), having previously infected *directly* 9 other children who were in the Receiving Ward at the time, and who contracted diphtheria within 7 days from contact with the infection, and were removed to the Metropolitan Asylums Board Hospital as follows:—June 21st, 3; June 22nd, 4; June 23rd, 1; and June 24th, 1. From these 9 centres there arose 7 other cases which may be tabulated as *indirectly* arising from

Bridget Archer. These 7 cases were also removed to the Metropolitan Asylums Board Hospital as follows:—June 28th, 1; June 30th, 4; July 1st, 1; and July 4th, 1. Thus, 16 cases arose from Bridget Archer, out of 40 inmates who were in the Receiving Ward at the time of her admission.

The dates of admission into the Receiving Ward of these 9 children were as follows:—

Daniel Mumford, May 31.	Mildred Bounds, June 5.
Florence Nicholls, June 3.	Ellen Archer, June 6.
Alfred Nicholls, June 3.	George Eslin, June 16.
Alice Bounds, June 5.	Christopher Eslin, June 16.
James Bounds, June 5.	

It will be seen, therefore, that, with the exception of George and Christopher Eslin, who went to Norwood the same day as Bridget Archer, and so may have caught the infection on route or at the Workhouse, the above children contracted the disease at the Receiving Ward.

Bridget Archer was admitted into the Receiving Ward on the certificate of the Workhouse Medical Officer, to the effect that the patient was simply suffering from "enlarged tonsils." No precaution was consequently taken in regard to special isolation, though a bacteriological examination was thought to be advisable, having regard to the state of the patient's throat (inflamed tonsils), with the result already stated. The 4 infected Jarvis children (Willie, Harry, Rose and Alice) had already been mixing with the inmates of the Receiving Ward on and off since March 22nd, apparently without any direct ill effect in the way of true Diphtheria infection, but with the result that a large number of throats and noses became infected, as proved afterwards by bacteriological examination, with the pure or modified Hoffmann's pseudo-bacilli or the modified (involved) Klebs-Löffler bacilli—showing that the Jarvis infection was attenuated. Such an explosive material was ready to fire on application of a match, and this was applied on June 16th—17th (24 hours) in the person of Bridget Archer, whose throat and nose showed a pure cultivation of Klebs-Löffler bacilli. It was found that, for some reason, the Guardians did not close the Receiving Ward against new entries until June 19th, when such a course was, consequently, insisted upon by the Medical Officer of Health.

Bridget Archer, before coming to the Lambeth Parochial Schools had been at Lambeth Workhouse, where she caused,

directly and indirectly, a localised outbreak of Diphtheria—11 cases in all (of which the first, Alfred Eslin, was notified on June 28th), as follows:—Alfred Eslin, Walter Callis, Daisy Tingley, Elsie Callis, Edward Blease, Sarah Green, Charlotte Gatty, Frank Spooner, James Callis, Rose Ludlow, Alice Baker (*vide* Table IV.).

Preventive Measures Taken.

The preventive measures taken may be summed up as follows: (*a*) notification, (*b*) isolation, (*c*) disinfection, (*d*) medical inspection of all "contacts" and "suspects," and (*e*) antitoxin injections. In connection with (*a*) notification and (*d*) medical inspection, bacteriological examinations proved of the greatest importance, and were systematically carried out, thereby enabling all Diphtheria cases (actual or potential) to be "weeded out" and isolated away from the Schools in the Metropolitan Asylums Board Hospital. All Pseudo-diphtheria cases were also isolated in the School's Infirmary and Isolation Block, no child being allowed to return to the Main Building until after three consecutive bacteriological examinations of the throat and nose had given negative results. This principle of three consecutive negative examinations was adopted in connection also with the convalescent patients returned from the Metropolitan Asylums Board Hospital to the Lambeth Parochial Schools.

All cases were strictly isolated (*e.g.*, true diphtherias and doubtfuls). C South Block was placed in quarantine by the Guardians from May 17th to June 19th, to prevent the disease from spreading to other Blocks of the School Buildings, but, as the disease was found to persist during quarantine (dropping cases occurring from time to time), it was finally decided, on the advice of the Medical Officer of Health, to empty the C South Block entirely, and to transfer all the remaining children to the Isolation Block, which is away from the Main School Building. This course was adopted on June 19th by the Guardians, when insisted upon by the Medical Officer of Health, and it is to be regretted that such a course was not adopted by them before—the result being the transference of infection from C. South to children in other Blocks of the Main Building, as follows:—

A North (Ben Oakey), A South (Richard Burrell), B South (Clarence Rouse and Thomas Chorley), B North (William Randell), D North (Violet Franks and Rose Maddocks), C North (Julia Baldwin).

Two cases occurred in the Probation Ward, viz., Alice Noyes and Charles Thompson.

The Infirmary and Receiving Wards were also placed in quarantine, though in the latter case the quarantine was broken from time to time by the admission from the Lambeth Workhouse of Bridget Archer and others up to June 19th, when, on the advice of the Medical Officer of Health, all admissions into the Receiving Ward were absolutely forbidden.

All visiting was stopped, and all passes out for the children were countermanded, whilst even the use of the swimming bath and fountains (in the Grounds) was prevented, the cups of the fountains being actually taken away.

All drains were examined, and found to be in good order and condition.

The milk supplied to the Schools was tested and found to be satisfactory.

Disinfection was carefully carried out by the Borough Council—all infected and suspected clothes being disinfected at the Borough Council's Station—the Guardians, as already stated, having failed to supply an efficient disinfecting machine at the Schools.*

It may be mentioned that 2 to 3 months previous to the outbreak, the Guardians' Medical Officer had removed enlarged tonsils from many of the children, a salutary provision that doubtless prevented the disease from spreading in a severe form.

Bacteriological Examinations.

The Diphtheria Outbreak is noteworthy for the very large number of bacteriological examinations (1332) carried out, and their proved value in connection with the investigation of such outbreak. Without these bacteriological examinations the source of the outbreak would not have been so successfully traced, and its further spread so effectually prevented. The amount of work

A total of 26,231 Articles of Bedding, &c., from the Norwood Schools were disinfected at the Borough Council's Disinfecting Station at Wanless Road, as follows:—Beds 388; Bolsters 201; Pillows 675; Mattresses 446; Clothing 11,118; Blankets 2,374; Sheets 2,371; Quilts 1,296; Extra Articles 7,362; Total, 26,231.

involved in this connection was considerable—the whole of the bacteriological examinations having been made in the Borough Laboratory, and practically confirmed in each case by outside independent bacteriologists. Table VII. gives particulars of the bacteriological examinations, from which it will be seen that many different germs were isolated from the many swabs taken from the noses and throats of the children. A summary of the monthly bacteriological examinations is as follows:—

1905.	Norwood Parochial Schools.	Lambeth Workhouse.	Lambeth Infirmary.	Totals.
May	40	—	—	40
June	161	8	37	206
July	730	134	60	924
August	78	3	28	109
September	9	—	2	11
October	12	—	2	14
November	24	—	4	28
	1054	145	133	1332

Summary.

The one fact that is definitely and incontrovertedly proved, as the result of investigation, is that the Infirmary at the Norwood Schools was the primary cause of the Diphtheria spreading into the Main Building (C South) during the present 1905 outbreak, as it was proved to have, in part, spread the Measles outbreak during 1902-3; and for exactly the same reason, viz., that convalescent children (convalescent from all sorts of illnesses) from the Main Building were allowed to return from the Infirmary *direct* to the Main Building without passing first through a Probation or Convalescent Ward. These Main Building children had been in contact, whilst in the Infirmary, with other children, who had been admitted into the same Infirmary from the Receiving Ward, the Probation Ward, or even practically *direct* from houses in Lambeth Borough; and who might (and did) prove to be sickening for, if not actually suffering (in an unrecognised form) from, infectious disease. Such a danger was

a real one, and it is gratifying to report that the Guardians have now laid down such rules as will prevent such a danger in the future. Other reasons why the disease spread may be tabulated as follows :—

(1) Mildness and type (nasal) of the disease in many of the cases—clinical symptoms, as such, being practically absent (*i.e.*, latent Diphtheria).

(2) Want of sufficient accommodation at the Schools for the isolation of “doubtful” and suspected cases of infectious disease, and their ultimate adequate classifications.

(3) The urgent need that exists at the schools for an efficient disinfecting machine (a fact previously pointed out, at the time of the Measles Outbreak 1902-3, to the Guardians, who decided on May 8th, 1903, that such a machine—an Equifex—should be provided, but who have not yet provided it).

(4) The quarantining of infected children (and also “suspects” and “contacts”) in C South Block in close proximity to the other main buildings with the consequent spread of the disease from children to children and from building to building.

(5) The apparent power of the true Klebs-Löffler Diphtheria bacillus to lose its virulence, to lie dormant for a time, and, afterwards, to regain its virulence under suitable conditions (*e.g.*, state of mucosa, etc).

(6) The fact that the Diphtheria organisms vary greatly from the point of view of virulence and morphology, *e.g.*, long, short and medium bacilli with involution forms and granular, barred, or even stainings, etc.

(7) Timidity in removing to the Metropolitan Asylums Board Hospitals patients who appeared to have no clinical symptoms of Diphtheria, but in whose throats or noses (or both) the Diphtheria bacillus was found.

(8) Doubt in the minds of some of the Guardians as to the value of bacteriological examinations.

(9) The fact that the Medical Officer of Health was not granted an interview with the Guardians until June 19th, 1905, when it was at once decided to do what ought to have been done before, viz.,

to clear C South Block, and to isolate all "doubtful" throat cases, removing to Hospital all patients shewing on bacteriological examination Diphtheria bacilli in their throats or noses.

(10) Failure to keep the Receiving Ward and Infirmary in strict quarantine.

Conclusion.

My thanks are due to Dr. Skerritt at the Workhouse, Dr. Quarry (and his medical assistants) at the Infirmary, and to Dr. Johnson at the Norwood Schools, for the help that they have one and all given me in my official investigations, and in carrying out my suggestions. To Dr. Johnson I am specially indebted, having regard to the very large number of bacteriological examinations that were necessary—the taking of swabs, and the systematic inspecting of the children at the Schools, giving rise to an enormous amount of work. To Dr. Johnson and her Staff is due the praise for giving practical and immediate effect to such suggestions as I found it necessary to make, with the satisfactory results shewn in this Report. Dr. Johnson's position was a most difficult one to fill under all the circumstances; she proved herself a competent officer.

TABLE I.

Showing particulars of all Diphtheria Cases notified, and removed to Metropolitan Asylums Board Hospital from the Norwood Parochial Schools.

NORWOOD PAROCHIAL SCHOOLS.

Name.	Age.	Block or Ward.	Date of Removal to Hospital.	Result of Bacteriological Examination. Nature of Bacilli found.	Date of Return from Hospital.	Length of stay (days) in Hospital.
*Emily Grantham ...	6	C.S.	May 16	Klebs-Löffler	{ June 22 } Aug. 16	85
Dorothy Wilson ...	4	"	" 16	{ Klebs-Löffler Vincent's Organisms }	Aug. 22	98
David West ...	6	"	" 17	Klebs-Löffler	" 11	86
Florence Cooper ...	5	"	" 17	Klebs-Löffler	July 19	63
Florence Cummings	6	C.S. (U.D.)	" 17	{ Klebs-Löffler Vincent's Organisms }	" 13	57
Philip Jones ...	6	R.W.	" 17	Vincent's Organisms	May 29	12
Kate Hemmings ...	4	Infirmary	" 17	Vincent's Organisms	July 22	66
Walter Button ...	11	"	" 18	{ Vincent's Organisms Klebs-Löffler }	Aug. 14	88
Jane Sutton ...	13	"	" 29	Klebs-Löffler	July 13	45
Francis Clarke ...	3	C.S.	" 29	" "	" 3	35
Alice Trebett ...	7	Infirmary	June 6	" "	Aug. 11	67
Marie Burrell ...	6	C.S. (U.D.)	" 6	" "	July 28	53
George Smith ...	6	C.S.	" 6	" "	Sept. 27	114
Lily Rachel ...	6	"	" 9	" "	July 19	40
Walter Power ...	5	"	" 9	" "	" 24	45
Florence Fuller† ...	11	C.S. (U.D.)	" 13	" "	April 3	294
Sydney Eyre ...	4	C.S.	" 13	" "	Oct. 21	130
Maud Smith ...	10	C.S. (U.D.)	" 13	" "	Aug. 4	52
Lily Sedgwick ...	8	"	" 15	" "	Oct. 21	128
Annie Kennedy ...	6	"	" 15	" "	July 12	27
Charles Bartley ...	6	C.S.	" 16	" "	Sept. 6	82
Charles Norris ...	6	"	" 16	" "	Oct. 26	132
Susan Fox ...	11	C.S. (U.D.)	" 16	" "	July 24	38
Gertrude Baker ...	6	"	" 16	" "	Aug. 4	49
Charles Fox ...	4	C.S.	" 16	" "	" 7	52
Fred Cherry ...	5	"	" 16	" "	" 4	49
Lily Smith ...	7	C.S. (U.D.)	" 16	" "	" 4	49
Lily Bouchier ...	7	"	" 17	" "	" 4	48
Arthur Cooper ...	4	C.S.	" 17	" "	July 12	25
Bridget Archer ...	4	{ Lambeth Workhouse & R.W. }	" 17	" "	Aug. 4	48
Violet Ramsdale ...	6	C.S. (U.D.)	" 17	" "	July 28	41
Emily Beaumont ...	13	"	" 17	" "	Dec. 11	177
Daisy Barrett ...	6	"	" 17	" "	July 29	42
Ben Oakey ...	8	Boys A.N.	" 17	" "	" 28	41

Name.	Age.	Block or Ward.	Date of Removal to Hospital.	Result of Bacteriological Examination. Nature of Bacilli found.	Date of Return from Hospital.	Length of stay (days) in Hospital.
Emma Foulger ...	6	C.S.	June 17	Klebs-Lœffler	Aug. 4	49
Richard Burrell ...	10	A.S.	" 19	" "	July 3	14
*Clarence Rouse ...	4	B.S.	" 19	" "	{ July 12 {	45
*Thomas Chorley ...	4	"	" 20	" "	{ Aug. 5 {	43
Doris Bissmore ...	4	C.S.	" 21	" "	" 15	55
Mildred Bounds ...	3	R.W.	" 21	" "	July 28	37
William Randell ...	10	B.N.	" 21	" "	Aug. 7	47
James Bounds ...	8	R.W.	" 21	" "	Oct. 21	122
Daniel Mumford ...	6	"	" 21	" "	Aug. 7	47
Florence Nicholls ...	8	"	" 22	" "	" 11	50
George Eslin ...	9	"	" 22	" "	" 11	50
Ellen Archer ...	6	"	" 22	" "	" 7	46
Violet Franks ...	8	D.N.	" 22	" "	" 5	46
Alice Bounds ...	9	R.W.	" 22	" "	" 7	46
Christopher Eslin ...	10	"	" 23	" "	July 24	31
Alfred Nicholls ...	5	"	" 24	" "	Aug. 7	44
Julia Bell						
(Attendant)	21	C.S.	" 24	" "	" 7	44
Alfred Grubb ...	14	R.W.	" 28	" "	July 29	31
Elizabeth Locke ...	5	C.S.	" 30	" "	Aug. 14	45
Robert Beckett ...	9	R.W.	" 30	" "	July 26	26
Sarah Greenwood ...	10	"	" 30	" "	" 28	28
Rosina Hick ...	11	"	" 30	" "	" 26	26
Frederick Marshall	6	"	" 30	" "	Aug. 11	42
Florence Marshall...	3	"	July 1	" "	" 4	34
Rose Maddocks ...	10	D.N.	" 3	" "	" 14	42
John Mumford ...	4	R.W.	" 4	" "	July 29	25
Julia Baldwin ...	7	C.N.	" 10	" "	Aug 15	36
Alice Noyes ...	13	P.	" 10	" "	July 29	19
Charles Thompson	6	P.	" 14	" "	Aug. 4	21

N.B.—Miss Orbell, aged 28 years, a clerk at the Infirmary, was notified on July 29th, and isolated at a private house in Norwood, away from the Institution.

* Emily Grantham, Clarence Rouse, and Thomas Chorley were returned from Hospital with Diphtheria bacilli in their throats and noses, and were consequently sent back on June 29th, July 14th, and July 14th respectively.

† Sent to Convalescent Home at Eastcliffe direct from Hospital.

TABLE II.

Diagram showing positions of beds as occupied (with the names of the occupants) in the LOWER DORMITORY of C South Block, when Joseph J. Tipper infected directly or indirectly, 17 children, from April 28th to May 27th, 1905.

C. SOUTH-BLOCK

<u>SYDNEY EYRE</u> 9/6/-13/6/	WINDOW		<u>GEORGE DROAGE</u>		<u>EMILY GRANTHAM</u> 10/5/-16/5/	<u>CHARLES BARTLEY</u> 12/6/-16/6/	WINDOW	<u>FLORENCE COOPER</u> 12/5/-17/5/
<u>ETHEL BIRCH</u>		<u>JOSEPH TIPPER</u>	<u>DORIS BISSMORE</u> 18/6/-21/6/-		<u>EMMA FOULGER</u> 12/6/-17/6/	<u>VIOLET NASH</u>		<u>ARTHUR STEVENSON</u>
<u>VICTOR MONCKTON</u>		<u>ELIZABETH LOCKE</u> 27/6/-30/6/	<u>MARY ANN KEEVIL</u>		<u>DAVID WEST</u> 16/5/-17/5/	<u>EDWARD PAVIOR</u>		<u>ARTHUR COOPER</u> 14/6/-17/6/
<div style="display: flex; justify-content: space-between;"> FIRE PLACE [LOWER DORMITORY RESTRICTED TO CHILDREN BETWEEN 3 & 6 YRS OF AGE] DOOR </div>								
<u>MOLLY VINCER</u>		<u>GEORGE SMITH</u> 1/6/-6/6/	<u>FRED CHERRY</u> 13/6/-16/6/		<u>CHARLES FOX</u> 14/6/-16/6/	<u>LILY RACHEL</u> 8/6/-9/6/		<u>CHARLES NORRIS</u> 12/6/-16/6/
<u>TEDDIE BIRD</u>	<u>DOLLY WILSON</u> 14/5/-16/5/-	<u>STANLEY VALE</u>	<u>CHARLES NEWMAN</u>		<u>WALTER POWER</u> 8/6/-9/6/	<u>FRANCIS CLARKE</u> 26/5/-29/5/		<u>NELLIE M^{rs} DONALD</u>
	WINDOW	<u>WILLIE SHEAN</u>			<u>WILL MARSHALL</u>	<u>ROSE BARWOOD</u>	WINDOW	<u>DAISY BATTS</u>

N.B.—Names underlined = diphtheria cases.

Dates=those of sickening (or showing bacilli) and removal to Hospital respectively.

TABLE III.

Diagram showing positions of beds as occupied (with the names of the occupants) in the UPPER DORMITORY of C South Block, when Joseph J. Tipper infected, directly or indirectly, 13 children, from April 28th to May 27th, 1905.

C. SOUTH-BLOCK

FRANCIS ANDERSON	WINDOW	LIZZIE GUNNELL	ALICE WILLIAMS		BELLA KEEFE		WINDOW	JOHN TIPPET
ANNIE FREEMAN		KATE WALKER	ETHEL COX		KATE NORTON	<u>MARIE BURREL</u> 26/5/-3/6/		<u>LILY SMITH</u> 12/6/-16/6/
MAUD BASHAM		<u>LILY BOUCHIER</u> 14/6/-17/6/	MABEL COX		HANNAH TIPPET			<u>VIOLET RAMSDALE</u> 14/6/-17/6/
<div style="display: flex; justify-content: space-between;"> FIRE PLACE [UPPER DORMITORY RESTRICTED TO CHILDREN BETWEEN 6 & 15 YRS OF AGE] DOOR </div>								
<u>MAUD SMITH</u> 12/6/-3/6/		FLORRIE POPE	EDITH PEPPER		<u>SUSAN FOX</u> 12/6/-16/6/	NELLIE GATTY		MINNIE BUTLER
<u>LILLIE SEDGWICK</u> 12/6/-15/6/		<u>ANNIE KENNEDY</u> 12/6/-15/6/			<u>FLORENCE FULLER</u> 10/6/-13/6/	<u>DAISY BARRETT</u> 15/6/-17/6/		<u>FLORENCE CUMMINGS</u> 13/5/-17/5/
		MAY MACH	<u>EMILY BEAUMONT</u> 14/6/-17/6/		FLORRIE HUMPHRIES	GEORGE DOY		<u>GERTRUDE BAKER</u> 12/6/-13/6/
	WINDOW						WINDOW	

N.B.—Names underlined = diphtheria cases.

Dates= those of sickening (or showing bacilli) and removal to Hospital respectively.

TABLE IV.

Showing particulars of all Diphtheria Cases notified and removed to Metropolitan Asylums Board Hospital from (a) Lambeth Workhouse and (b) Lambeth Workhouse Infirmary.

(a) WORKHOUSE.

NAME.	Age.	Date of Admission to Workh'se, 1905.	Date of Removal to Hospital, 1905.	Result of Bacteriological Examination. Nature of Bacilli found.	Date of Return from Hospital, 1905.	Length of stay (days) in Hospital.
Alfred Eslin ...	4	June 15	June 28	Klebs-Löffler	August 1	34
Edward Blease ...	2	April 26	July 3	"	" 18	46
Elsie Callis ...	9	June 19	" 3	"	" 1	29
*Walter Callis ...	11	" 19	" 3	"	Nov. 9	129
Daisy Tingley ...	6	" 26	" 3	"	August 1	29
James Callis ...	12	" 19	" 6	"	" 1	26
Charlotte Gatty ...	2	May 23	" 6	"	" 1	26
Sarah Green ...	1	June 19	" 6	"	" 18	43
Rose Ludlow ...	6	" 20	" 6	"	" 18	43
Alice Baker ...	7	" 28	" 7	"	" 4	28
Frank Spooner ...	1	" 9	" 7	"	" 11	35

(b) WORKHOUSE INFIRMARY.

NAME.	Age.	Date of Admission to Infirmary, 1905.	Date of Removal to Hospital, 1905.	Result of Bacteriological Examination. Nature of Bacilli found.	Date of Return from Hospital, 1905.	Length of stay (days) in Hospital.
Fanny Bowles ...	48	June 6	June 16	Klebs-Löffler	July 1	14
Edith King ...	25	May 12	" 16	"	" 5	19
Charlotte Bambury ...	34	" 23	" 17	"	" 18	31
Selina Jessop ...	65	" 13	" 17	"	" 18	31
Emily Wells ...	25	Oct. 25	" 17	"	" 18	31
Richard Barker ...	33	June 13	" 18	"	August 1	44
Thomas Nichols ...	30	" 3	" 18	"	" 1	44
Sarah Jarvis ...	3 M ^{hs}	" 22	" 22	{ Klebs-Löffler Vincent's Organisms }	{ Died Aug. 4 }	43
Florence Hall ...	14	" 24	" 25	Klebs-Löffler	October 15	112
†Rosa Goulston ...	18	May 30	July 8	"	July 18	10

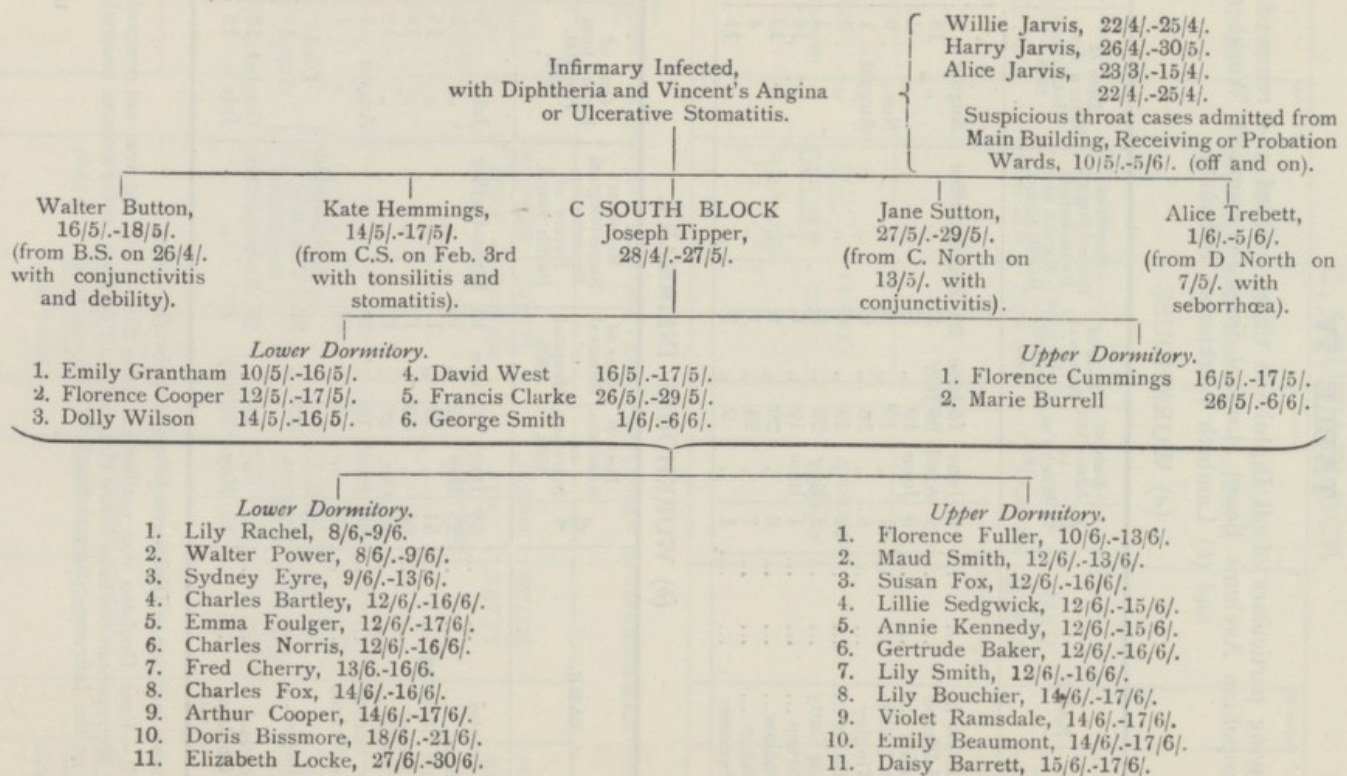
*Double infection of Diphtheria followed by Scarlet Fever.

†N.B.—Rosa Goulston was notified on June 21st, 1905, but was not removed to Metropolitan Asylums Board Hospital until July 8th, being isolated meanwhile at the Infirmary (Special Small Ward).

TABLE V.

C SOUTH BLOCK OUTBREAK.

INCUBATION PERIOD OF DIPHTHERIA = 2 to 12 DAYS.



N.B.—Julia Bell (aged 21 years), an attendant in C South Block, sickened June 21st, and was removed to Hospital on June 24th. Philip Jones was admitted on May 6th into Receiving Ward from Lambeth with enlarged tonsils, which ulcerated on May 17th.

TABLE VI.

RECEIVING WARD OUTBREAK.

INCUBATION PERIOD OF DIPHTHERIA = 2-12 DAYS,

Bridget Archer

(Entered Receiving Ward June 16th from Lambeth Workhouse, and was removed to Hospital June 17th),
16/6/.-17/6/.

Mildred Bounds	Jas. Bounds	Alice Bounds	Daniel Mumford	Florence Nicholls	Alfred Nicholls	Christopher Eslin	Geo. Eslin	Ellen Archer
17/6/.-21/6/.	18/6/.-21/6/.	20/6/.-22/6/.	19/6/.-21/6/.	19/6/.-22/6/.	21/6/.-24/6/.	20/6/.-23/6/.	18/6/.-22/6/.	18/6/.-22/6/.
Alfred Grubb	Robert Beckett	Sarah Greenwood	Rosina Hicks	Frederick Marshall	Florence Marshall	John Mumford		
24/6/.-28/6/.	26/6/.-30/6/.	27/6/.-30/6/.	28/6/.-30/6/.	28/6/.-30/6/.	29/6/.-1/7/.	1/7/.-4/7/.		

N.B.—George and Christopher Eslin may have contracted the infection from Bridget Archer at the Workhouse. They were all three removed to the Receiving Ward from the Workhouse on June 16th.

The dates after the names in Tables V. and VI. are those of sickening (or showing the presence of Diphtheria bacilli in the throats or noses) and removal to Hospital respectively.

TABLE VII.

Showing the results obtained from the 1332 Bacteriological Examinations carried out at the Lambeth Bacteriological Laboratory in connection with the Diphtheria Outbreaks at the Lambeth Workhouse, Infirmary, and Parochial Schools respectively

	Lambeth Parochial Schools.	Lambeth Workhouse.	Lambeth Infirmary.	Totals.	
Klebs-Læffler bacilli (pure cultivation)	12	5	2	19	132
Klebs-Læffler bacilli + staphylococci	18	2	3	23	
Klebs-Læffler bacilli + streptococci	9	2	1	12	
Klebs-Læffler bacilli + staphylococci + streptococci	4	...	1	5	
Klebs-Læffler bacilli + Pseudo (Hoffmann) bacilli + staphylococci ...	3	1	...	4	
Klebs Læffler bacilli + streptococci + torulæ	1	...	...	1	
Staphylococci	374	76	35	485	
Streptococci	27	2	1	30	
Staphylococci + streptococci	371	37	50	458	
Staphylococci + sarcinæ	12	3	4	19	
Staphylococci + torulæ	35	4	4	43	
Staphylococci + micrococci	3	...	2	5	
Staphylococci + diplococci	1	...	...	1	
Staphylococci + smegma... ..	1	...	...	1	
Streptococci + torulæ	3	...	...	3	
Streptococci + micrococci	6	...	3	9	
Streptococci + staphylococci + torulæ	17	...	7	24	
Streptococci + staphylococci + sarcinæ	12	12	...	24	
Pseudo (Hoffmann) bacilli	13	...	5	18	
Pseudo (Hoffmann) bacilli + staphylococci	77	1	7	85	
Pseudo (Hoffmann) bacilli + streptococci	1	...	...	1	
Pseudo (Hoffmann) bacilli + staphylococci + streptococci	47	...	2	49	
Pseudo (Hoffmann) bacilli + staphylococci + micrococci	4	...	...	4	
Pseudo (Hoffmann) bacilli + staphylococci + torulæ	—	...	6	6	
Pseudo (Hoffmann) bacilli + torulæ	1	...	...	1	
Pseudo (Hoffmann) bacilli + streptococci + sarcinæ	2	...	...	2	
	1054	145	133	1332	133

N.B.—Vincent's organisms were found definitely in 7 instances, viz.:—with Klebs-Læffler bacilli 1, with Pseudo (Hoffmann) bacilli 1, with Pseudo (Hoffmann) bacilli and staphylococci 2, with Klebs-Læffler bacilli and staphylococci 1, with doubtful diphtheria bacilli and staphylococci 1, with doubtful diphtheria and streptococci and sarcinæ 1; and doubtfully in 3 instances, viz.:—with streptococci and staphylococci 1, with staphylococci and doubtful diphtheria bacilli 2.

ADDENDUM.

Prevalence of Diphtheria outside the Lambeth Parochial Schools at West Norwood.

At the commencement of, and during, the outbreak of Diphtheria at the Lambeth Parochial Schools, the disease was not prevalent outside the Guardians' Schools. Taking the Norwood Ward, wherein the Schools are situated, the notifications received during the period covered by the outbreak (May to July, 1905), may be tabulated as follows:—

1905.	Norwood Ward.	
	Lambeth Schools.	Rest of Norwood.
April	...	—
May	...	10
June	...	42
July	...	11
August	...	1
	64	5

There was no death registered from Diphtheria either at the Lambeth Schools or in Norwood Ward during April to August (inclusive), 1905.

Full details as to total notifications received, and deaths registered, during 1905, within the Borough of Lambeth are given in Tables VIII. and IX. on pages 135 and 136.

TABLE VIII.

Shewing deaths registered from Diphtheria in the various Wards of the Borough
of Lambeth during 1905.

Wards.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Totals, 1905.
Marsh	1	...	2	...	...	...	...	3
Bishop's	1	...	...	...	2	1	...	4
Prince's	1	...	1	...	2	2	2	1	4	...	13
Vauxhall	...	1	...	...	...	...	...	...	...	...	...	1	2
Stockwell	1	1
Brixton...	...	1	...	1	1	...	...	1	2	...	1	2	9
Herne Hill	1	1	...	2
Tulse Hill	1	1
Norwood—													
Schools	2
Rest of Norwood	...	1	1	
Borough of Lambeth }	...	3	1	1	2	2	2	5	4	6	7	4	37

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TABLE IX.

Shewing notifications of Diphtheria received in the various Wards of the Borough of Lambeth during 1905.

Wards.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals, 1905.
Marsh ...	1	1	1	4	3	5	5	5	3	...	4	1	33
Bishop's ...	1	4	1	6	5	4	11	1	6	4	7	1	51
Prince's ...	4	3	3	...	3	3	8	8	28	24	14	5	103
Vauxhall ...	2	7	2	...	5	7	4	3	5	5	6	6	52
Stockwell ...	...	2	1	2	5	3	5	1	4	3	4	1	31
Brixton ...	6	7	2	3	1	4	2	2	6	3	4	3	43
Herne Hill ...	...	...	1	1	1	6	...	3	3	2	1	2	20
Tulse Hill ...	5	1	2	1	1	1	2	...	1	6	3	1	24
Norwood—													
Schools ...	...	...	...	...	10	42	11	1	...	...	...	...	64
Rest of Norwood	1	1	1	3	1	3	3	5	18
Borough of Lambeth }	20	26	13	17	35	78	49	24	56	50	46	25	439

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PAROCHIAL SCHOOLS, WEST NORWOOD, MAY—JULY, 1905.

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