

Report on the vital and sanitary statistics of the Parish of Lambeth during the year 1899.

Contributors

Lambeth (London, England). Parish. Vestry.
Priestley, Joseph.

Publication/Creation

London : Merser, [1900]

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Report



ON THE

Vital and Sanitary

Statistics

OF THE

Parish of Lambeth,

DURING THE YEAR

1899

(With an Account of the work done by the Inspectors, and
of the Proceedings taken under the Food and Drugs,
Margarine, and Public Health Acts),

BY

JOSEPH PRIESTLEY, B.A., M.D., D.P.H.

Medical Officer of Health.



Printed by order of the Vestry
BY
MERSER & SONS,
Printing Contractors,
270, KENNINGTON ROAD, LONDON, S.E.

Public Health Department,
333, Kennington Road,
London, S.E.

February, 1900.

To the Chairman and Members of the Vestry of the Parish
of Lambeth.

Gentlemen,

I again have the honour of presenting to you a favourable Report dealing with the Vital and Sanitary Statistics of the Parish of Lambeth during the year 1899, and in doing so I may be allowed to express my appreciation of the way in which you have supported me in all matters relating to the Public Health. That good and satisfactory work has been accomplished must be admitted by everyone who will take the trouble to read the Report, and without focussing attention unduly, to the detriment of the other work, I feel it my duty to draw special attention to the following :—

1. The provision of a Bacteriological Laboratory at Wanless Road, which is for the sole use of Medical Men practising in Lambeth Parish, and which is now in full working order ;
2. The methods adopted in Lambeth for dealing with the Housing of the Working Classes, so as to prevent as far as possible displacement of tenants ;
3. The conclusions arrived at in connection with the important question of Sewer Ventilation ;
4. The gratuitous distribution of Antitoxin (diphtheria) amongst medical men practising in Lambeth Parish.

It is often stated that a Sanitary Authority and its Public Health Department rarely get credit for work done, but it will be admitted that this Report reflects sufficient honour on all concerned, not only upon the Vestry as the Sanitary Authority for supporting their Officers readily and willingly, but also upon the Inspectors and others who have at all times been ready to do their duty fearlessly and ungrudgingly. Under such circumstances, my own position as Medical Officer of Health is an enviable one.

I am, Gentlemen,

Your obedient Servant,

JOSEPH PRIESTLEY, B.A., M.D., D.P.H.,
Medical Officer of Health.

I.—VITAL STATISTICS.

All the *estimated* populations are calculated upon the *enumerated* populations of the Censuses of 1891 and 1896, and made up to the middle of the year 1899.

The Parish of Lambeth contains 4,059 statute acres, inclusive of 79 tidal water and 39 foreshore, with an *estimated* population of 308,108 persons to the middle of the year 1899, consisting of 145,531 males and 162,577 females, or an excess of 17,046 females.

The total estimated increase of the population is 4,035, but the "natural increment," *i.e.*, the excess of births over deaths, is 3,547, so that an entry of 488 in excess of those who went out of the Parish during the year must be assumed.

POPULATIONS.

CENSAL (ENUMERATED).			ESTIMATED (From Censuses 1891 and 1896.)
Sub-districts.	1891.	1896.	1899. Middle of Year.
Waterloo Road First	14031	14186	14296
Waterloo Road Second	14644	14210	13936
Lambeth Church First	18075	18770	19234
Lambeth Church Second	39097	40994	42252
Kennington First ...	50586	52486	53753
Kennington Second ...	39708	43244	45570
Brixton	73405	81825	87350
Norwood	25657	29318	31717
	275203	295033	308108

The Lambeth estimated population to the middle of 1899, may be sub-divided as follows:—

A. As to Registration Sub-districts.

Registration Sub-districts.	Males.	Females.	Total.
Waterloo Road First	7199	7097	14296
Waterloo Road Second	7137	6799	13936
Lambeth Church First	9700	9534	19234
Lambeth Church Second	21108	21144	42252
Kennington First	26358	27395	53753
Kennington Second	21074	24496	45570
Brixton	39110	48240	87350
Norwood	13845	17872	31717
Parish of Lambeth... ..	145531	162577	308108

B. As to Parliamentary Divisions and New Wards.

Parliamentary Divisions and New Wards.		Males.	Females.	Total.
Marsh	} North Division ...	31051	30900	61951
Bishop's				
Prince's	} Kennington Division ...	40211	41270	81481
Vauxhall				
Stockwell	} Brixton Division ...	39204	46560	85764
Brixton				
Tulse Hill	} Norwood Division ...	35065	43847	78912
Norwood				
Parish of Lambeth		145531	162577	308108

N.B.—The 1896 Census takes no account of the Parliamentary and New Wards boundaries, so the distribution of the estimated population among the four Parliamentary Divisions, and the eight New Wards has been obtained from the Censuses 1881 and 1891.

C. As to Age-Periods.

Age-Periods.	Males.	Females.	Total.
0—1	3993	3975	7968
1—5	14376	14127	28503
Total under 5	18369	18102	36471
5—20	45307	48039	93346
20—40	48865	55061	103926
40—60	24749	28622	53371
60—80	7796	11761	19557
80 and upwards	445	992	1437
Total over 5	127162	144475	271637

The estimated number of inhabited houses to the middle of the year 1899 is 41,155, and the rateable value of the Parish on October 14th, 1899, was £1,737,298, an increase of £25,018 on the previous year, as the following Table shews:—

Year.		Rateable Value.
1899	...	1,737,298
1889	...	1,491,851
1890	...	1,498,535
1891	...	1,526,176
1892	...	1,540,047
1893	...	1,551,023
1894	...	1,562,868
1895	...	1,575,253
1896	...	1,680,283
1897	...	1,692,816
1898	...	1,712,289

Yearly average for 10 years, 1889-1899, £1,583,114.

The Registrar-General returns the estimated population of London for the middle of the year 1899 as 4,546,752, consisting of 2,154,265 males and 2,392,487 females, and states that there were registered during the year 41,853 marriages, 133,120 births (68,034 males and 65,086 females), and 89,689 deaths (46,184 males and 43,505 females). There were registered, too, 11,228 deaths from the seven chief zymotic diseases. The excess of registered births over deaths, *i.e.*, the natural increment, is 43,431 and the estimated increase of population is 42,182.

* These rateable values are the figures as settled by the Assessment Committee in the last Supplementary Valuation List, and do not include, therefore, any new properties that may come into existence after such list is settled.

1899.—Sanitary Areas of the Metropolis.

	Enumerated Population, 1891 (Census).	Enumerated Population, 1896 (Census).	Estimated Population, 1899 (middle of year).	Birth-Rate.	Death-Rate.	Zymotic Death- Rate.	Deaths under 1 year to 1000 Births
London	4211743	4411710	4546752	30·2	19·3	2·5	166
South Districts	1524472	1642796	1723800	30·4	18·8	2·6	164
West Districts	728418	766203	792739	24·9	18·0	1·9	173
North Districts	993884	1040694	1070782	27·2	17·8	2·2	154
Central Districts	259855	245683	236897	27·4	23·0	2·2	168
East Districts	705114	716334	722534	36·1	22·9	3·2	179

Table **A.** giving the number of Births and the Birth-Rates in each Registration Sub-District of Lambeth during 1899 (arranged quarterly).

Registration Sub-Districts.	No. of Births.				Total for the Year 1899.	Rate per 1000 Inhabitants.
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.		
Waterloo Road 1st ...	136	119	107	104	466	32·6
" 2nd ..	232	214	239	247	932	66·9*
Lambeth Church 1st ..	159	165	133	170	627	32·6
" 2nd ...	386	413	356	362	1517	35·9†
Kennington 1st ...	492	485	455	439	1871	34·8
" 2nd ...	283	277	288	241	1089	23·9
Brixton	557	549	537	536	2179	24·9
Norwood	200	180	188	184	752	23·7
Lambeth	2445	2402	2303	2283	9433	30·6

* Including Lying-In Hospital (514 cases, of which 341 belong to Lambeth).

† Including Workhouse (183 cases, of which 156 belong to Lambeth).

Table B, shewing the Estimated Populations, Numbers of Inhabited Houses, Marriages, Births, and Corrected Deaths for the year 1899, and Ten Years preceding, in Lambeth Parish.

The 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.		
1899	308103	41155	2523	9433	5886	1488	2198	782	1680
1889	271312	38004	1997	8906	5057	1259	2071	727	1460
1890	273529	38319	2060	9017	5842	1369	2228	696	1320
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

NOTE.—(a) Enumerated Population at Census 1896 was 295,033. (b) Actual number of inhabited houses at Census 1891 was 38,556.

THE BIRTH-RATE.

The number of Births registered in Lambeth during the year 1899 was 9433, as compared with 9256 for the year 1898. Of the total 9433 births, 4849 were males, and 4584 females, showing an excess of 265 males.

The birth-rate for Lambeth is, therefore, 30·6 per 1,000 inhabitants (33·3 for males, and 28·2 for females), as compared with 29·4 for London (31·6 for males and 27·2 for females); whilst in the various Registration Sub-Districts the birth-rates work out as shown in Table A. Tables B and C shew the number of births, and the birth-rates for the last 10 years in Lambeth.

It must again be pointed out that the death-rate and birth-rate must be taken together, as the death-rate *per se* gives no reliable information as to the relative healthiness or otherwise of a particular district. For this reason, in considering the statistics of the various Registration Sub-Districts of Lambeth, the birth-rates and death-rates are given side by side, and any deductions drawn must be on the understanding of the importance of this inter-relationship.

In the Inner Wards (where the birth-rates are high) is this to be again especially noted, as the high birth-rates there help the high death-rates, owing to the great numbers of deaths amongst infants and children between 1 and 5 years of age. Density of population in the Inner Wards leads to this high infantile mortality, and a persistently high birth-rate, instead of leading to a lower, causes a higher, death-rate, and points to the unsatisfactory and less healthy conditions under which the inhabitants in the Inner Wards of Lambeth exist, as compared with those in the Outer Wards. It must be remembered, too, that the Lying-In Hospital and the Workhouse tend to abnormally increase the birth-rates in Waterloo Second and Lambeth Church Second Districts, the necessary corrections being given in a footnote (*see* p. 10).

Table C, shewing the number of persons per house, the Marriage-, Birth-, and Death-Rates, and proportion of Deaths in Public Institutions, for the Year 1899 and ten years preceding.

The Year.	Estimated No. of Persons per house.	Marriage-Rate per 1,000 Population.	Birth-Rate per 1,000 Population.	Death-Rate per 1,000 Population.	Deaths of Children under 1 year, per 1000 Births.	Deaths of Children under 1 year, per 1000 Deaths.	Deaths of Children under 5 years, per 1000 Deaths.	Zymotic Death-Rate, per 1000 Population.	Deaths in Public Institutions per 1000 total uncorrected deaths
1899	7.4	16.3	30.6	19.1	157.7	252.8	373.4	2.5	277.1
1889		14.7	32.8	18.6	141.4	248.9	409.5	2.7	284.5
1890		15.1	32.9	21.4	151.8	234.3	381.4	2.5	222.1
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	344.7	2.4	277.1	

NOTE.—(a) Enumerated number of Inhabited Houses at Census 1891 was 38,555. (b) Enumerated number of Inhabited Houses at Census 1881 was 35,404.

THE MARRIAGE-RATE.

The number of marriages registered in Lambeth during the year 1899 was 2523, as compared with 2589 for the year 1898.

The marriage-rate for Lambeth is, therefore, 16·3 per 1,000 inhabitants, as compared with 18·4 for London.

Tables B and C shew the number of marriages and the marriage-rates for the last ten years in 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.

THE DEATH-RATE.

The total number of deaths registered in Lambeth during the year 1899 was 6,064, as compared with 5,567 for the year 1898. Of the total 6,064 deaths, 3,066 were males and 2,998 females, showing an excess of 68 males.

The death-rate for Lambeth is, therefore, 19·7 per 1,000 inhabitants (21·1 for males and 18·4 for females), as compared with 19·8 for London (21·5 for males, and 18·2 for females). These rates are, however, uncorrected, and on analysing the 6,064 deaths registered in Lambeth Parish, it is found that 663 represent deaths occurring within the Parish amongst persons not belonging thereto. These are to be deducted, but, on the other hand, there are 485 deaths registered outside the Parish of persons belonging thereto, and these must be added, giving a corrected number of deaths for Lambeth during 1899 of 5,886, and a corrected death-rate of 19·1 per 1,000 inhabitants, as compared with 19·3 for London (the total corrected number of London deaths being 87,530).

The Institutions, &c., where 485 Lambethians died during 1899 may be grouped as follows:—

I. <i>General Hospitals</i>		Grove 24
Charing Cross 17		South-Eastern 9
French 3		Western 10
Guy's 27		Park Fever Hospital ... 3
Hostel of God 8	III. <i>Infirmaries and Work-</i>	
King's 7	<i>houses</i>	St. Olave's Infirmary ... 1
London 3		St. Pancras Workhouse ... 1
Middlesex 7		St. Saviour's Infirmary ... 3
Royal Free 2		Westminster Workhouse. 1
St. Bartholomew's ... 12	IV. <i>Asylums</i>	
St. George's 8	Banstead... .. 16	
University 8	Bethnal Green 1	
Westminster 46	Camberwell House ... 4	
II. <i>Special Hospitals</i>	Caterham 16	
Belgrave 12	Cave Hill 33	
Brompton 20	Colney Hatch 4	
Cancer 3	Darent 3	
Central London Sick ... 1	Dartford 4	
Cheyne House 1	Grove Hill 4	
Cottage Hospital 1	Hand-in-Hand 1	
Evelina 27	Hanwell 7	
Friedenheim 3	H. M. Prison, Wands-	
German 1	worth 3	
Gt. Ormond Street ... 7	H. M. Prison, Wormwood	
Home for Women 1	Scrubbs 1	
Homœopathic 2	Ilford 18	
Home for Sick Children.. 2	Leavesden 5	
Mildmay House 1	Licensed Victuallers ... 1	
National... .. 6	Peckham House 5	
North London 1	V. <i>Unclassifiable Places</i>	
Nursing Home, Clapham 1	L. & S. W. Railway ... 3	
Queen Charlotte 1	River Thames 6	
Royal Chest 4	Private Addresses 9	
St. Luke's 2	Streets 2	
St. Mary's 1	Brought dead to Hospital 1	
St. Peter's House 2	Salvation Army Homes,	
Throat 2	Hackney 3	
Victoria 2		
West London 2		
<i>Fever</i>		
Fountain 29	Total 485	

SUMMARY.

I. General Hospitals	...	...	148
II. Special and Fever Hospitals	...	...	181
III. Infirmaries and Workhouses	...	...	6
IV. Asylums	...	...	126
V. Elsewhere (Unclassifiable)	...	...	24
			485

Whether we take the corrected or uncorrected death-rates for Lambeth (as a whole), they are again satisfactory for the year 1899, whilst on examining the death-rates more closely, *e.g.*, as to age-periods, and special diseases, we still find cause for even greater satisfaction and congratulation. If, however, we sub-divide the death-rate into the several Registration Sub-Districts, we find that the Inner District, *e.g.*, Waterloo 1st and 2nd, Lambeth Church 1st and 2nd, have again suffered more than the Outer Districts, *e.g.*, Kennington 1st and 2nd, Brixton and Norwood.

The corrected death-rate for the four Inner Districts is 24·7 and for the four Outer, 17·2 per 1000, with corresponding average birth-rates of 39·5 and 26·9 per 1000 respectively (remembering the fact that the Lying-in-Hospital and Workhouse are in the Inner Districts).* The Zymotic death-rate is, for the Inner Districts, 3·8, and for the Outer Districts, 2·03 per 1000, and the Zymotic incidence (cases notified), 10·6 and 7·9 per 1000 of the population respectively. The Inner Wards have a larger comparative mortality amongst children under five years of age, and amongst infants one year of age (per 1000 births), and a corresponding smaller mortality in persons over 60 years of age.

*There were 514 births in the Lying-in-Hospital, and 183 in the Workhouse, during 1899 (Vide footnote p. 10).

COMPARISON BETWEEN STATISTICS FOR 1898 AND 1899.

	Death-Rates.				Birth-Rates.		Infantile Mortality. (uncorrected)	
	General. 1899	General. 1898	Zymotic. 1899	Zymotic. 1898	1899	1898	1899	1898
INNER WARDS—								
Waterloo 1st	24.9	25.3	3.5	3.5	32.6	35.6	225.3	185.0
*Waterloo 2nd	27.0	25.4	2.9	2.2	66.9	62.3	90.1	113.4
Lambeth Church 1st	22.7	22.9	3.2	3.3	35.7	30.4	240.8	301.2
†Lambeth Church 2nd	24.8	20.4	4.4	2.9	35.9	38.5	207.6	164.3
OUTER WARDS—								
Kennington 1st	20.2	18.5	2.7	1.1	34.8	35.4	165.2	137.2
Kennington 2nd	17.8	16.2	2.1	0.8	23.9	22.5	141.4	139.7
Brixton	15.4	14.9	1.9	0.4	24.9	25.0	135.8	155.9
Norwood	13.5	14.0	1.3	0.2	23.7	20.7	150.3	124.8
Lambeth	19.1	17.9	2.5	2.4	30.6	30.4	161.9	156.3

* Excluding the 514 Lying-In Hospital Births, the birth-rate is 29.9, and the infantile mortality rate 200.9.

† Excluding the 183 Workhouse Births, the birth-rate is 31.6, and the infantile mortality rate 236.1.

Norwood and Brixton have the lowest general death-rates, and Waterloo Road 1st and 2nd, the highest; whilst the lowest Zymotic rates are in Norwood, Brixton, Kennington 1st, and the highest in Lambeth Church 2nd, Waterloo Road 1st, and Lambeth Church 1st.

Compared with last year the death-rate is higher, not only in Lambeth but in London as a whole—a difference chiefly accounted for by the increase in the numbers of deaths from (1) infantile Diarrhœa and other diseases of the gastro-intestinal tract (due to excessive summer heat), and (2) Influenza (directly or indirectly).

Allowing for the general increase over the whole of London, the Lambeth statistics are *pro rata* satisfactory, and the slight improvement noticed during 1898 as compared with the previous year in connection with the separate mortality rates for the Inner and Outer Districts, has been again maintained during 1899 (*vide* Table on page 17). In other words, the Inner Districts do not suffer so severely as hitherto, though there is still a greater difference between the Inner and Outer Districts in regard to their mortality returns than is satisfactory. No efforts must be spared to lessen the difference, though it is practically impossible to obliterate it, considering the different status of the inhabitants; and the different conditions under which they live, *e.g.*, area or house density. Given good sanitary conditions for the crowded Inner Districts, the difference will be reduced to a *minimum*, and a Sanitary Authority be doing all it can reasonably be expected to do.

The 5,886 corrected deaths may be further analysed, and tabulated according to age-periods, as follows:—

1488	<i>i.e.</i>	25·28	per cent.	of the total deaths took place	under 1 year of age.
710	<i>i.e.</i>	12·06	„	„	between 1 and 5 years.
2198	<i>i.e.</i>	37·34	„	„	under 5 years.
304	<i>i.e.</i>	5·17	„	„	between 5 and 20 years.
691	<i>i.e.</i>	11·74	„	„	20 and 40 years.
1103	<i>i.e.</i>	18·74	„	„	40 and 60 years.
1263	<i>i.e.</i>	21·46	„	„	60 and 80 years.
327	<i>i.e.</i>	5·55	„	„	80 years and over.
3688	<i>i.e.</i>	62·66	„	„	over 5 years.

These results must be compared with those for London given in Table F, which shows the estimated mortalities per 1000 persons at each age-period for London during 1899, and the London averages for the 10 years 1881-90.

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

The place that Lambeth takes amongst the Metropolitan Sanitary Districts is worthy of note, there being 18 other Districts (out of 43) with a less death-rate, 24 with a less Zymotic death-rate, and 16 with a less infantile mortality, *i.e.*, deaths of infants under 1 year of age per 1000 births. Taking the 15 South Districts, the Lambeth statistics shew up even better, especially on comparing neighbouring Districts—Camberwell and Wandsworth alone having slightly lower death-rates.

London, as a whole, has a birth-rate of 29·4, corrected death-rate of 19·3, and Zymotic (death) rate of 2·46, per 1,000 population, and an infantile mortality rate of 166, per 1000 births.

TABLE D.

Shewing the number of Births and Deaths, with Birth- and 1898. The Deaths are from all causes, and from the chief outside the Parish, by omitting strangers who die within the other Districts from which they have been removed during illness.

DISTRICTS,	Persons per Acre.	Estimated Population (middle 1899).	Total Births.	Birth-rate per 1000 of the Population.	Total Deaths (corrected).	General Death-rate per 1000 of the Population.
Waterloo Road 1st ...	213.3	14296	466	32.6	335	24.9
„ „ 2nd...	139.4	13936	932	66.9	354	27.0
Lambeth Church 1st...	118.7	19234	627	32.6	414	22.7
„ „ 2nd...	226.6	42252	1517	35.9	1026	24.8
Kennington 1st ...	109.7	53753	1871	34.8	1064	20.2
„ 2nd ...	91.5	45570	1089	23.9	759	17.8
Brixton ...	61.1	87350	2179	24.9	1319	15.4
Norwood ...	31.4	31717	752	23.7	406	13.5
District not stated ...	...	...	...	...	179	...
Lambeth ...	78.2	308108	9433	30.6	5886	19.1

N.B.—In the 179 cases where the District is not stated, the were sub-divided equally in the eight Districts. Census 1891, of tidal water

TABLE D.

Death-rates in each of the Registration Sub-Districts of the Parish during Zymotic Diseases, and are corrected by adding Lambethians who die Parish, and by re-distributing persons who die in Public Institutions in Details for London (with corrected deaths) are added for comparison.

Small Pos.	Total Deaths from								Total Zymotic Deaths.	Zymotic Death-rate per 1000 of the Population.	Zymotic Death-rate per 1000 of the Total Deaths.	Diarrhea Death-rate per 1000 of the Population.	Infantile Mortality per 1000 Births uncorrected.
	Measles.	Scarlet Fever.	Diphtheria and Membranous Croup.	Whooping Cough.	Typhus.	Typhoid or Enteric.	Continued Fever.	Diarrhea.					
...	14	1	6	9	...	3	...	16	49	3.5	133.5	1.1	225.3
...	10	...	9	8	...	4	...	10	41	2.9	110.3	0.8	90.1
...	9	2	16	8	...	5	...	22	62	3.2	143.2	1.2	240.8
...	35	5	30	43	...	8	...	64	185	4.4	176.9	1.5	207.6
...	37	2	20	27	...	10	...	50	146	2.7	134.9	0.9	165.2
...	16	2	29	10	...	7	...	29	93	2.1	115.2	0.6	141.4
...	41	7	44	20	...	11	...	39	162	1.9	121.1	0.5	135.8
...	7	6	5	5	...	2	...	15	40	1.3	94.6	0.5	150.3
...	...	...	...	...	...	...	...	4	4	...	...	...	...
...	169	25	159	130	...	50	...	249	782	2.5	132.9	0.8	161.6

death-rate has been calculated on the assumption that these deaths Return gives the area of Lambeth as 3,941 statute acres (exclusive and foreshore).

TABLE E.

Giving Death-rates, Zymotic Death-rates, and Zymotic Incidence-rates in the Parliamentary and New Wards, Division of Lambeth, during 1899.

PARLIAMENTARY DIVISIONS.	NEW WARDS.	TOTAL DEATHS.	DEATH-RATE PER 1,000	ZYMOTIC DISEASES.		ZYMOTIC INCIDENCE.	
				TOTAL DEATHS.	DEATH-RATE PER 1,000 POPULATION	TOTAL ZYMOTIC CASES	INCIDENCE PER 1,000 OF THE POPULATION
North Division ...	{ Marsh ... Bishop's ...	{ 689 } { 967 }	26.7	{ 90 } { 121 }	3.4	{ 257 } { 403 }	10.6
Kennington Division	{ Prince's ... Vauxhall ...	{ 849 } { 851 }		20.9		{ 150 } { 114 }		3.2	{ 406 } { 286 }	8.5
Brixton Division ...	{ Stockwell ... Brixton ...	{ 474 } { 741 }	14.2	{ 82 } { 89 }	1.9	{ 332 } { 309 }	7.5
Norwood Division ...	{ Tulse Hill ... Norwood ...	{ 909 } { 406 }	16.7	{ 96 } { 40 }	1.7	{ 544 } { 156 }	8.9
Lambeth ...	...	5886	19.1	782	2.5	2693	8.7

N.B.—The above Rates are estimated from the Censuses 1881 and 1891—the 1896 Census taking no account of the Parliamentary and New Wards boundaries.

TABLE F.

Showing Mortalities in Lambeth at different Age-Periods compared with (1) those for London 1899, and (2) the averages for London, for years 1881-90.

AGE PERIODS.	LAMBETH.			LONDON.	
	Estimated Populations (middle 1899).	Mortality Rates per 1000 Population, 1899.		Mortality Rates per 1000 Population, 1899, Uncorrected.	Average of Ten Years 1881-90. per 1000.
		Corrected.	Uncorrected.		
0-5	26471	60.3	61.6	61.1	68.4
5-20	93346	3.3		3.4	4.3
20-40... ..	103926	6.6	8.7	7.2	7.7
40-60... ..	53371	20.7		22.4	20.2
60-80... ..	19557	64.6		68.5	63.3
80 and upwards	1437	227.6	77.9	243.5	206.2
*Under 1 year	9433	157.7	161.9	167.4	152.0
All Ages	308108	19.1	19.7	19.8	20.5

I have used the Age-periods adopted in previous Lambeth Reports, 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 G.

Shewing the Uncorrected Mortality (Male and Female) in the different Districts, and a comparison of the number of Deaths in each Quarter during the year 1899.

SUB-DISTRICTS.	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	31	42	73	26	22	48	31	52	83	48	42	90	294
„ 2nd	37	27	64	25	23	48	33	36	69	34	31	65	246
Lambeth Church 1st	114	96	210	122	86	208	149	104	253	135	90	225	896
„ 2nd	182	198	380	177	149	326	237	180	417	202	170	372	1495
Kennington 1st	121	138	259	80	78	158	108	121	229	110	106	216	862
„ 2nd	73	84	157	69	65	134	89	80	169	71	98	169	629
Brixton	163	206	369	114	143	257	158	172	330	142	169	311	1267
Norwood	45	47	92	29	30	59	52	50	102	59	63	122	375
TOTALS	766	838	1604	642	596	1238	857	795	1652	801	769	1570	6064

TABLE H.

Shewing the Uncorrected Mortality (*i.e.*, including that of Strangers) at different Ages in each District of the Parish, 1899.

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	58	47	105	23	32	55	37	57	94	17	23	40	294
„ 2nd	43	41	84	19	14	33	44	40	84	23	22	45	246
Lambeth Church 1st	85	66	151	61	59	120	307	193	500	67	58	125	896
„ 2nd	184	131	315	71	73	144	313	222	535	230	271	501	1495
Kennington 1st	172	137	309	49	55	104	102	124	226	96	127	223	862
„ 2nd	84	70	154	31	30	61	56	98	154	91	129	220	629
Brixton	172	124	296	85	90	175	208	232	440	112	244	356	1267
Norwood	67	46	113	13	15	28	56	51	107	48	79	127	375
TOTALS	865	662	1527	352	368	720	1163	1017	2180	684	953	1637	6064

TABLE I.

Shewing the Uncorrected Deaths (*i.e.*, Parishioners and Strangers) at various Age-periods in each Quarter, 1899.

	1st QUARTER.			2nd QUARTER.			3rd QUARTER.			4th QUARTER.			TOTAL.
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
Under 1 year	170	138	308	157	114	271	331	292	623	107	118	325	1527
Between 1 and 5 years	86	93	179	88	96	184	96	116	212	82	63	145	720
Between 5 and 60 years... ..	315	293	608	260	200	460	285	246	531	303	278	581	2180
60 years and upwards	195	314	509	135	188	323	145	141	286	209	310	519	1637
TOTALS	766	838	1604	640	593	1238	357	795	1652	801	769	1570	6064

INFANTILE MORTALITY, 1899.

Of the 5886 deaths, 1488 were infants under one year of age, giving a proportion of 157·7 (corrected) per 1,000 births, the uncorrected rate being 161·9—an increase over last year. The chief causes of these deaths were debility, atrophy and inanition, bronchitis and other diseases of the respiratory organs, diarrhœa and enteritis, premature birth, whooping cough, suffocation and convulsions. 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 240·8 per 1,000 births in Lambeth Church 1st to 135·8 in Brixton (the rate of 90·1 in Waterloo Road 2nd and 207·6 in Lambeth Church 2nd being explainable by 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 Mortality per 1,000 births (uncorrected)
Waterloo Road 1st ...	466	105	225·3
" " 2nd ...	932	84	90·1*
Lambeth Church 1st ...	627	151	240·8
" " 2nd ...	1517	315	207·6†
Kennington 1st ...	1871	309	165·2
" 2nd ..	1089	154	141·4
Brixton ...	2179	296	135·8
Norwood ...	752	113	150·3
Lambeth ...	9433	1527	161·9

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

* Excluding the Lying-in-Hospital births, the corrected rate becomes 200·9.

† Excluding the Workhouse births, the corrected rate becomes 236·1.

TABLE J.

Shewing the Infantile Mortalities in the Registrar-General's 33 Large Towns of England and Wales (including London), and in Lambeth Parish, during 1899.

	Deaths under one year per 1000 Births.	Average Ten Years, 1889—98.
England and Wales... (33 Large Towns.)	181	170
Huddersfield	152	158
Croydon	154	133
Lambeth	157.7	153
Bristol	158	148
Halifax	159	159
Derby	162	155
London	166	157
Swansea	166	163
Leeds	171	179
Brighton	173	151
Hull ...	175	177
Sunderland	175	176
Gateshead	177	172
Norwich	179	178
Bolton	181	179
Bradford	181	174
Cardiff	184	162
Wolverhampton	184	191
Birkenhead	186	169
Blackburn	189	202
Birmingham	191	184
Newcastle	193	172
Sheffield	194	183
Leicester	195	198
Plymouth	196	169
West Ham	197	157
Portsmouth	197	152
Liverpool	198	191
Oldham	198	181
Manchester	206	187
Salford	209	200
Nottingham	210	176
Preston	255	237
Burnley	269	208
*London Districts—		
North	154	
South	164	
East	179	
West	173	
Central	168	

* The figures are corrected for the London Districts (including Lambeth).

CLASS I.—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 Lambeth are satisfactory.

In Lambeth during 1899 there were registered 796 deaths from the seven zymotic diseases, and of these 110 were strangers belonging to other parishes, and 686 parishioners who died within the Parish. 96 parishioners, however, died without the Parish. Subtracting the strangers and adding on the parishioners who died without the Parish, there is a *corrected* total of 782, giving a zymotic corrected death-rate of 2·5 per 1,000 inhabitants, the corrected rate for London being 2·5, varying in the various Metropolitan Districts, as shown on page 9. The zymotic death-rates (corrected) for the different Registration Sub-Districts of Lambeth vary also, as shown in Table D, which in addition gives the death-rates and birth-rates for comparison. Lambeth Church 2nd, Waterloo 1st and Lambeth Church 1st shew the highest, and Brixton, Norwood, and Kennington 2nd the lowest, zymotic death-rates. The zymotic death-rate (average) for the whole of the Inner Districts is 3·8, and for the Outer, 2·03—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.

During the year 1899 under the Notification Clauses of the Public Health (London) Act, 1891, 2693 cases of Infectious Diseases have been reported, and of this number 1649, *i.e.* 61·2% were removed to the Hospitals of the

Asylums Board, or to other Hospitals, and 1046, *i.e.* 38·8 % remained under treatment at their own homes. These percentages are more satisfactory than during the last eight years, *i.e.*, since the introduction of the Notification Act and the tabulation of cases removed to Hospital. In 1891, 36·6 % of the total Zymotic cases notified were removed; in 1892, 33·7%; in 1893, 23%; in 1894, 33·9%; in 1895, 30·4%; in 1896, 43%; in 1897, 49 %; in 1898, 55·97; whilst in 1899, the numbers removed form 61·2 % of the total cases. During 1899, 16·7 % puerperal fever, 6·4 % erysipelas, 72·4 % scarlet fever, 59·8 % typhoid, 70·5 % diphtheria, 14·3 % continued fever and 9·1 % membranous croup, were removed to Hospital respectively.

Table L gives the averages of Notification Certificates received in Lambeth since 1890, and it will be seen that during 1899 the total number is practically the average—the greatest number of Notifications being received in 1893—though the incidence per 1000 of the population during 1898 is *·4 below* the average incidence for the nine years 1890-98 (*i.e.*, since the introduction of the Compulsory Notification Act).

The three cholera cases were probably cholera nostras (English cholera), or infantile diarrhœa.

The diphtheria increase is again a serious one—a total of 1081 notifications being received during the year 1899, *i.e.*, 45·9 % above the average for the last nine years. The cases occurred in 964 infected houses, and in only 15·1 % of these were the drains, on testing, found defective. For fuller details as to this increase in diphtheria, *vide* pp. 51-52.

The enteric fever (or typhoid) notifications were also above the average, and represent only 209 infected houses, of which 14·4 % of the drains were shewn, on testing, to be defective. The notifications received during 1899 were 219, as compared with 163 during 1898. This increase in the amount of typhoid in Lambeth during 1898 is explained on pp. 56-56 (*vide* also Appendix).

TABLE K.

Shewing the total cases notified under the Notification Clauses of the Public Health (London) Act in Lambeth during 1899 (arranged Quarterly).

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total for 1899
Small Pox	—	1	—	—	1
Scarlet Fever	220	183	201	402	1006
Diphtheria	257	192	249	382	1080
Membranous Croup	10	2	6	4	22
{ Typhus	1	—	—	—	1
{ Typhoid	37	21	48	113	219
{ Continued Fever	1	1	2	3	7
Erysipelas	80	80	70	100	330
Puerperal	5	4	4	11	24
Cholera	—	—	3	—	3
	611	484	583	1015	2693

TABLE L.

Shewing the number of Certificates for the Notifiable Zymotic Diseases received in Lambeth since the introduction of the Notification Act, *i.e.*, in the nine years, 1890-98, and in the year 1899.

Disease.	1890	1891	1892	1893	1894	1895	1896	1897	1898	Annual average of 9 years 1890-'98	Notifications received during '99 Lambeth.
Small-Pox	15	3	22	99	23	51	16	2	0	26.0	1
Cholera	7	4	26	23	10	16	6	18	7	13.0	3
Diphtheria	330	330	504	779	521	614	652	704	813	584.1	1080
Membranous Croup	46	29	47	49	26	23	27	17	16	31.1	22
Erysipelas	248	258	420	587	315	355	352	325	294	350.4	330
Scarlet Fever	1126	858	1832	2275	1198	1389	1550	1375	1009	1401.3	1006
{ Typhus	0	1	3	3	2	0	1	0	0	1.1	1
{ Typhoid or Enteric	150	149	117	160	268	201	162	185	163	172.8	219
{ Continued or Relapsing	41	33	34	53	48	20	16	11	13	30.4	7
Puerperal... ..	13	11	10	27	19	16	19	26	14	18.3	24
Totals	1976	1676	3025	4070	2433	2685	2801	2663	2329	2628.6	2693
Average per 1000 of population	7.2	6.1	10.9	14.5	8.6	9.4	9.5	8.9	7.7	9.1	8.7

In the case of each infected house, an inspection was made, and the drains and sanitary fittings tested, with the results that of the 2435 infected houses:—

- (a) 384 (*i.e.*, 15·8 %) were found to have defective drains.
 (b) 1163 (*i.e.*, 47·8%) were found to have defective drains, **or** defective traps, fittings and appliances.
 (c) 1272 (*i.e.*, 52·2%) gave no results with the tests.
 (d) 779 (*i.e.*, 31·9%) were found to have defective traps, fittings and appliances, but *not* defective drains.

Sub-divided according to the different notifiable diseases, the results are as follows:—

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	1	...	...	...	...	...
Cholera*	3	...	...	...	...	...
Diphtheria	964	146	331	477	49·5	50·5
Membranous Croup	19	...	4	4	21·1	78·9
Erysipelas	319	39	120	159	49·8	50·2
Scarlet Fever	888	162	248	410	46·2	53·8
{ Typhus	1	1	1	2	100·0	0·0
{ Typhoid	209	30	66	102	48·8	51·2
{ Continued or Relapsing	7	3	1	4	57·1	42·9
Puerperal	24	3	8	10	41·7	58·3
TOTALS	2435	384	779	1163	47·8	52·2

*These were in all probability cases of Diarrhœa or Cholera Nostras.

It will be noted that only 15·8% of the total infected houses shewed, with the test, defective drains, no results being obtained from the test in the other cases, and 31·9% defective traps, fittings and appliances.

Table M gives the average percentages for the last 8 years (*i.e.*, practically from the introduction of the Notification Act), and it will be noted with satisfaction, in regard to infected houses in Lambeth, that the year 1899 is 4·8% *below* the average in respect of defective drains, and 0·6% *below* the average in respect of defective traps, fittings, drains and appliances. These percentages are becoming less and less as time goes on, for each year sees many drains reconstructed, partly or wholly (*vide* pp. 76-78).

TABLE M.

Giving number of infected houses with percentages of (1) General Defects, and (2) Defective Drains, during 1899 and the Seven preceding years.

	1892	1893	1894	1895	1896	1897	1898	Average for last 8 years 1892 - 99	1899
Number of Infected Houses	2430	3179	2012	2111	2417	2374	2094	2374	2436
Number of Houses with defects found	1474 =60·7%	1641 =51·6%	1089 =54·1%	993 =47·04%	1177 =48·7%	1210 =50·9%	1044 =49·9%	1232 =52·9%	1156 =47·5%
Number of Houses with defective drains found ...	720 =24·7%	658 =20·6%	464 =23·06%	392 =18·6%	423 =17·5%	390 =16·4%	351 =16·9%	464 =20·6%	384 || 15·%
Number of Houses with no defects found	956 =39·3%	1538 =48·4%	923 =45·9%	1118 =52·96%	1240 =51·3%	1164 =49·1%	1050 =50·1%	1141 =47·1%	1280 =52·5%

N.B.—Only 15·8 per cent. of the houses showed with the test defective drains, no results being obtained in the other cases.

The seasonal mortality from the different zymotic diseases is well shown by arranging the deaths quarterly, thus :—

1899.	Smallpox.	Measles.	Whooping Cough.	Scarlet Fever.	Diphtheria.	Membranous Croup.	FEVER.			Diarrhœa.	Erysipelas.	Puerperal Fever.	Cholera.	Influenza.	TOTAL.
							Typhus.	Typhoid.	Continued.						
1st Qr.	...	4	49	11	36	3	...	11	...	2	4	3	...	71	194
2nd Qr.	...	73	43	4	31	1	...	7	...	3	2	1	...	36	201
3rd Qr.	...	67	24	5	40	1	...	9	...	230	2	2	24	6	410
4th Qr.	...	25	14	5	46	1	...	23	...	14	9	6	1	38	182
TOTALS	...	169	130	25	153	6	...	50	...	249	17	12	25	151	987

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

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

Table O gives the deaths from the seven principal zymotic diseases during 1899, and for the ten previous years, not only in Lambeth Parish, but also (for comparison) in London.

TABLE N.

Showing Zymotic seasonal variations (deaths) in Lambeth in the different Registration Sub-districts during 1899.

Registration Sub-Districts.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year 1899.	Zymotic Death-rate per 1000 inhabitants.
Waterloo Road 1st	7	5	23	14	49	3.5
Waterloo Road 2nd	5	7	21	8	41	2.9
Lambeth Church 1st	10	5	37	10	62	3.2
Lambeth Church 2nd	26	41	100	18	185	4.4
Kennington 1st	22	34	69	21	146	2.7
Kennington 2nd	13	24	41	15	93	2.1
Brixton	26	41	64	31	162	1.9
Norwood	7	5	18	10	40	1.3
District not stated ... ..	...	...	3	1	4	...
Lambeth	116	162	376	128	782	2.5

N.B.—In the case of the four zymotic deaths occurring in Districts which are not stated, they have been distributed equally amongst the eight sub-districts before working out percentages.

TABLE O.
Deaths from Zymotic Diseases (Strangers deducted).

For the 4 weeks ending	January.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	TOTAL.
Smallpox ... ..	...	...	...	...	..	...	...	...	...	...	...	...	...
Measles ... ..	...	2	1	7	20	38	36	24	15	3	8	15	169
Scarlet Fever	2	4	3	1	2	2	1	2	2	1	3	2	25
Diphtheria	6	10	12	18	10	14	17	8	16	20	11	11	153
Membranous Croup	2	1	...	...	...	1	...	...	1	...	...	1	6
Whooping Cough	6	18	22	21	10	13	10	8	5	6	2	9	130
{ Typhus ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Enteric Fever	6	1	4	1	2	1	4	2	5	6	8	10	50
{ Continued Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa ... ..	...	1	1	1	...	...	34	123	77	8	2	2	249
	22	37	43	49	44	69	102	167	121	44	34	50	782
<u>Chief Zymotic Diseases ...</u>													
Erysipelas	2	1	1	...	...	1	1	1	...	3	4	3	17
Puerperal Fever	2	1	...	1	...	1	1	...	1	2	1	2	12
E. Cholera and Choleraic Diarrhœa... ..	...	...	...	1	...	...	7	13	3	1	...	...	25

TABLE P.

Shewing the number of Deaths from the principal Zymotic

Disease.	1889	1890	1891	1892	1893	
Smallpox	0	0	0	1	5	
Diphtheria (and Membranous Croup)	155	74	78	127	172	
Scarlet Fever	73	57	46	76	69	
Fever. {	Typhus	1	0	1	0	1
	Typhoid or Enteric	31	31	28	22	36
	Simple Continued	5	3	7	2	4
Measles	157	183	128	187	113	
Whooping Cough	137	194	239	135	151	
Diarrhoea	168	154	165	155	197	
{ Lambeth	727	696	692	705	748	
{ London	9709	12270	9675	11983	13223	

TABLE P.

Diseases in the ten years 1889—93, and in the year 1899.

1894	1895	1896	1897	1898	Total Deaths in 1899.	Proportion of Deaths to 1,000 total Deaths 1899.	Annual Average of ten years 1889—98.	Proportion of Deaths to 1000 total Deaths in 10 years.
1	2	2	—	—	—	—	1.1	0.2
138	103	140	145	115	159	21.2	124.7	23.2
64	53	63	42	39	25	5.5	57.3	11.7
0	0	1	—	—	—	—	0.4	0.08
46	26	24	26	35	50	6.4	30.5	5.7
0	2	1	—	—	—	—	2.4	0.5
182	151	185	139	133	169	24.5	155.8	28.9
110	132	140	144	159	130	29.3	154.1	29.1
139	263	152	238	254	249	46.8	188.5	32.9
680	752	708	734	726	782	133.7	714.8	132.4
11544	11467	14009	11525	12482	11147	152.2	11788.7	137.4

SMALLPOX.

Only one case of Smallpox has been notified during the year, and this, in all probability, was a case of Chicken-Pox. The usual precautions were, however, taken, and no further trouble resulted.

In London during the year 1899, 29 cases of Smallpox were notified, and 3 deaths registered, giving a case mortality (uncorrected) of 10·4%. Tables Q and R give the vaccination statistics for the year 1898, and the first half of 1899—these for the second half of 1899 not being ready in time for this Report. It will be noticed that during 1898, only 7·9% (as compared with 25·3% for 1897) of the children born are unaccounted for as regards vaccination, and 57·1% were successfully vaccinated; whilst during the first half of 1899, 8·1% are unaccounted for, and 57·9% have been successfully vaccinated.

The "conscientious objectors" are not proving formidable in Lambeth—only 138 for the year 1898 and 61 for the first half of 1899, and the Vaccination Act of 1898 may be said to be working satisfactorily—the much-dreaded clause proving practically less harmful than was to be anticipated. This Clause (the conscientious objector's) is sufficient to prevent persons being compelled to have their children vaccinated, but failing their taking advantage of such Clause, vaccination is practically as compulsory as ever. Undoubtedly the use of glycerinated calf-lymph is causing the anti-vaccination movement to totter—the confidence of the outside public in such lymph growing, in view of the experiments of bacteriologists, which go to prove that glycerine, as an adjunct, has the power of purifying the lymph, and freeing it from all extraneous micro-organisms, even the tubercle bacilli, should such be present. Domiciliary vaccination is proving successful, and assisting in making the operation much more acceptable to the people.

TABLE Q.—VACCINATION RETURNS, 1898.

Registration Sub-Districts.	No. of Births.	Successfully Vaccinated.	Insusceptible to Vaccination.	Dead Unvaccinated.	Conscientious Objectors.	Postponed on Medical Certificate.	Removed to other Parishes	Gone and not found.	Ill or not otherwise accounted for.
Waterloo Road	1380	757	2	180	8	10	232*	189*	2
Lambeth Church 1st	583	326	—	86	7	7	10	145	2
Lambeth Church 2nd	1613	959	3	203	22	15	67†	327†	17
Kennington 1st	1892	1106	8	236	30	33	170‡	289‡	20
Kennington 2nd	1011	652	3	102	22	—	18	124	90
Brixton	2152	1078	15	249	40	—	31	220	519
Norwood	644	421	6	50	9	—	17	53	88
Lambeth	9275	5299	37	1106	138	65	545	1347	738

* Hospital Cases (250) included. † Workhouse Cases (30) included. ‡ Maternity Cases (172) included.

TABLE R.—VACCINATION RETURNS FOR THE FIRST HALF-YEAR, 1899.

Registration Sub-districts.	No. of Births.	Successfully Vaccinated.	Insusceptible to Vaccination.	Dead Unvaccinated.	Conscientious Objectors.	Postponed on Medical Certificate.	Removed to other Parishes.	Gone and not found.	Ill or not otherwise accounted for.
Waterloo Road	686	394	...	70	3	19	112*	83*	5
Lambeth Church 1st	324	197	...	39	1	11	6	64	6
Lambeth Church 2nd	799	471	1	101	9	38	18†	135†	26
Kennington 1st	976	588	5	129	15	45	85‡	95‡	14
Kennington 2nd	565	383	8	37	13	8	17	56	43
Brixton	1099	541	13	106	16	2	37	128	256
Norwood	377	224	3	28	4	2	13	64	39
Lambeth	4826	2798	30	510	61	125	238	625	389

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

* Hospital cases (165) included. † Workhouse cases (24) included. ‡ Maternity cases (110) included.

SCARLET FEVER.

During 1899, 25 deaths were registered from Scarlet Fever, as compared with 30 during 1898, and an annual average of 57·3 for the last 10 years (1889-98). 1,006 cases were notified, as compared with an annual average of 1401·3 for the 9 years 1890-98; and of these 1,006 patients, 728 were treated in hospital, and 278 at their own homes. The case mortality is, therefore, 2·5%, varying in different Registration Sub-districts (an average of 2·3 for the Inner as compared with 2·6 for the Outer), and from 2·9 to 2·3 according as the cases were treated at home or in hospital respectively.

The age and sex incidence and mortality for scarlet fever cases notified in Lambeth during 1899 are as follows:—

Ages.	Number of Cases Notified.			Deaths.			Death rate* per 100.
	M.	F.	Total.	M.	F.	Total.	
Under 1 year ...	8	2	10	1	—	1	7·7
1 to 2 ...	18	13	31	—	2	2	5·9
2 to 3 ...	41	21	62	1	1	2	3·1
3 to 4 ...	33	48	81	2	2	4	4·8
4 to 5 ...	51	46	97	2	1	3	3·0
5 to 6 ...	53	45	98	3	—	3	2·9
6 to 7 ...	37	43	80	1	—	1	1·2
7 to 8 ...	34	34	68	1	1	2	2·8
8 to 9 ...	32	39	71	—	1	1	1·4
9 to 10 ...	27	32	59	—	1	1	1·6
Over 10 years... Age not stated*	142	174	316	3	2	5	1·6
	12	21	33	—	—	—	—
Total ...	488	518	1006	14	11	25	2·5

*In 33 cases the ages are not given, but in calculating percentages, these cases have been equally distributed amongst the different age-periods.

In London during 1899 there were registered 398 deaths out of a total of cases 18,112 of scarlet fever notified, giving a case mortality of 2·2 % (uncorrected).

As far as could be traced no scarlatinal milk outbreak occurred during 1899, and no school had to be closed on account of an outbreak of scarlet fever amongst the scholars. It is satisfactory to record that 72·4 % of the cases were removed to the hospital—86·1 % from the Inner, and 67·1 % from the Outer, Districts. The number of deaths (25) is very small, giving a death-rate per cases notified of only 2·5 %.

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	40	2	38	...	1	1	2·5	2·8
Waterloo Road 2nd	32	7	25	...	...	...	0·0	2·3
Lambeth Church 1st	99	26	73	...	2	2	2·02	5·2
Lambeth Church 2nd	109	4	105	...	5	5	4·6	2·6
Kennington 1st	160	27	133	2	...	2	1·25	2·9
Kennington 2nd	168	71	97	2	...	2	1·2	3·7
Brixton	290	91	199	...	7	7	2·4	3·3
Norwood	108	50	58	4	2	6	5·5	3·4
Lambeth	1006	278	728	8	17	25	2·5	3·3

MEASLES AND WHOOPING COUGH.

During 1899, 169 and 130 deaths were registered from Measles and Whooping Cough respectively, as compared with 133 and 159 during 1898, and annual averages of 155·8 and 154·1 for the last ten years (1889-98).

In London, during 1899, there were registered 2,142 and 1,720 total deaths from Measles and Whooping Cough, giving corresponding death-rates (uncorrected) of 4·7 and 3·8 per 10,000 of the population living, respectively.

Waterloo Road First suffered most, and Norwood least, from Measles; whilst Lambeth Church Second suffered most, and Norwood least, from Whooping Cough.

Measles was epidemic in Lambeth during the second, third and fourth quarters, reaching a maximum during the second quarter.

In the Annual Report for 1898 it was pointed out that the Vestry decided to distribute from house-to-house a leaflet pointing out the after-effects of Measles, if not properly attended to, and also the general dangerous and infectious nature of the disease. Posters (large and small) were also posted throughout the Parish, and every means taken to educate the public as to the serious nature of Measles and the urgent necessity for taking precautions to prevent its spread. The result has been that the amount of disinfection in connection with Measles-infected houses and clothes has been very considerably increased during 1899 (773 cases as compared with 129 during 1898).

The question as to the advisability of including Measles amongst the dangerous and infectious diseases for the purposes set forth in certain sections of the Public Health (London) Act, 1891, without compulsory notification, still

remains unsettled by the Vestry, and I take this opportunity of again suggesting that the London County Council should be urged to do so forthwith by the Vestry.* As to the good that will accrue from so doing, there can, I think, be no two opinions, when it is remembered that Measles is a dangerous infectious disease in so far as it causes such a large number of deaths (chiefly amongst young children), though not yet so included under the Act. The whole subject is an important one from the point of view of Sanitary Administration; and it may be added that what applies to Measles, applies, too, to Whooping Cough.

The importance of school- or class- closure as a preventative against the spreading of a Measles epidemic has been well shewn during the year 1899 in the following cases:—

Lollard Street Board School, Infants' Department.—Average number on roll 370, and of these 43·8 % were absent on account of Measles. The Infants' Department was closed from July 15th to August 28th, by order of the Medical Officer of Health, rooms disinfected and cleansed, and drains tested.

Result of closure was the diminution of the epidemic.

St. John's, Warham Street, Infants' Department.—Average number on roll 320, and of these 29·1 % were absent on account of Measles. The Infants' Department was closed from July 19th to August 28th, by order of the Medical Officer of Health, rooms disinfected and cleansed, and drains tested.

Result of closure was the dying-out of the epidemic.

* Whilst this Report is passing through the Press, the Vestry at their meeting held on March 1st, 1900, decided that Measles should be included in the term "dangerous infectious diseases," and that the London County Council should be asked to take the necessary steps.

St. Mary-the-Less, Prince's Road, Infants' Department.—Average number on roll 260, and of these 19·3 % were absent on account of Measles. The Infants' Department was closed from July 20th to August 28th, by order of the Medical Officer of Health, rooms disinfected and cleansed, and drains tested.

Result of closure was the diminution of the epidemic.

St. Saviour's, Salamanca, Infants' Department.—Average number on roll 182, and of these 23·4 % were absent on account of Measles. The Infants' Department was closed from July 20th to August 28th, by order of the Medical Officer of Health, rooms disinfected and cleansed, and drains tested.

Result of closure was the diminution of the epidemic.

In the above cases, disinfection was carried out, the drains tested, and the school-rooms cleansed.

Outbreaks of Measles were investigated, but no action taken as to closing, in connection with the following schools:—

Springfield Road School (Board),	Infants...	6·7%	absentees
" " " "	Girls ...	3·2%	"
* Stockwell "	Infants...	19·3%	"
" " " "	Girls ...	8·4%	"
* Santley Street	Infants...	26·9%	"
Kennington Road	Infants...	4·3%	"
Vauxhall Street	Infants...	11·7%	"

* These were declining epidemics, as shewn by the fact that in the case of Stockwell Road School there were 30⁰/₀ absent during week ending May 23rd, and only 19·3⁰/₀ during week ending May 30th; whilst at Santley Street School 62·1⁰/₀ were absent during week ending May 26th, and 26·9 during week ending June 2nd. It is not advisable to close in the case of a declining epidemic.

Christ Church Schools (Church) Boys & Girls	5% absentees	
Salter's Hill School (Board), Infants ..	9.7%	„
St. John the Apostle (Church) Junior mixed	5.7%	„
St. Mary's, Priace's Road „ Girls ...	10.7%	„
Sancroft Street School („) Boys ...	10%	„
St. Saviour's, Salamanca (Church) Girls ...	13.9%	„
Stockwell Road School (Board) Boys ...	11.4%	„
Santley Street „ „ Girls ...	3.5%	„
„ „ „ „ Boys ...	7.7%	„

Two of the above schools (infants' departments) were disinfected, whilst in many cases the houses of the absentees were visited, and necessary disinfection carried out, increasing the work of the disinfecting staff considerably.

In no single case was a school or class closed on account of Whooping Cough, though this disease was, undoubtedly, epidemic in Lambeth during 1899, and many children must have been absent from school in consequence of suffering from this disease themselves, or living in houses wherein other children were so suffering. Disinfection was carried out during the year in 58 cases, a satisfactory statement to be able to make considering that hitherto in Lambeth practically no such action has been taken.

Much yet remains to be done, as Whooping Cough (like Measles) is an infectious disease, which causes much damage—130 deaths from this disease being registered in Lambeth during 1899, as compared with an annual average during the last ten years, 1889-98, of 154. Even when death does not occur, the amount of ill-health left as a result of Whooping Cough is considerable, calling for every effort on behalf of a Sanitary Authority to prevent the extension of the disease. Whooping Cough (like Measles) is a disease that is apt to spread by means of schools.

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 ...	9	14	6.3	9.8
Waterloo Road 2nd ...	8	10	5.8	7.2
Lambeth Church 1st ..	8	9	4.2	4.7
Lambeth Church 2nd ...	43	35	10.2	8.3
Kennington 1st	27	37	5.0	6.9
Kennington 2nd	10	16	2.2	3.5
Brixton	20	41	2.3	4.7
Norwood	5	7	1.6	2.2
District not stated*	...	...	...	...
Lambeth	130	169	4.2	5.3

Of the 169 deaths registered from Measles, 43 were in infants under 1 year of age, 118 in children between 1 and 5, making a total of 161 in children under 5 years of age—78 males and 83 females.

Of the 130 deaths registered from Whooping Cough, 59 were in infants under 1 year of age, 69 in children between 1 and 5, making a total of 128 in children under 5 years of age—51 males and 77 females. Both diseases are distinctly diseases of childhood.

DIPHThERIA.

During 1899, 153 deaths were registered in Lambeth from Diphtheria, as compared with 108 during 1898, and an annual average of 124·7 for the last ten years (1889 to 1898).

1081 cases were notified during 1899, as compared with 813 in 1898, and an annual average of 584·1 for the nine years, 1890 to 1898.

Of the 1081 cases notified, 761 were removed to hospital and 320 were treated at their homes. The case mortality per cent. for the year is, therefore, 14·2, varying from 14·2 to 14·1, according as the cases were treated at hospital or at home respectively, a difference, in all probability, to be explained, as usual, by the greater severity of the cases sent to hospital, especially when it is remembered that the antitoxin treatment in hospital is beginning to have a favourable effect, by lowering the Diphtheria death-rate amongst the patients treated there.

The case mortality rate, as a whole, for Lambeth is low, pointing in part to the mildness of the majority of the cases, more especially in Lambeth Church 1st and Norwood, where the case mortality was 10·4 % and 9·4 % respectively. In many instances outbreaks of mild throat trouble were again noted, showing that in all probability, many cases of unsuspected Diphtheria were the means of spreading the disease. In the 216 cases that were submitted to bacteriological examination, true diphtheria bacilli were found in 46·8 %.

The age and sex incidence and mortality from Diphtheria cases notified in Lambeth during 1899 are as follow : —

Ages.	Number of cases Notified.			Deaths.			Death-Rate per 100.
	M.	F.	Total.	M.	F.	Total	
Under 1 year ...	8	4	12	4	5	9	56·3
1 to 5 ...	181	166	347	45	38	83	23·6
5 to 10 ...	179	224	403	25	21	46	11·3
10 to 20 ...	62	108	170	6	4	10	5·8
20 to 40 ...	38	64	102	2	1	3	2·8
40 to 60 ...	4	11	15	...	1	1	5·3
60 and over ...	1	3	4	...	1	1	14·3
Age not stated*	14	13	27	...	...	...	—
Total ...	487	593	1080	82	71	153	14·2

* In making percentages, these cases have been distributed equally amongst the different age periods.

The Diphtheria statistics for Lambeth are as follow :—

Quinquennial Period.	Population.	Number of Deaths.	Death-Rate per million living.
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	304073	108	355
1899	308108	153	496

The increase in London, generally, has also been marked during the same quinquennia, but a satisfactory and complete explanation for the increase remains yet to

be given. The large numbers of cases to be isolated, in London, have at times baffled the officials of the Asylums Board Hospitals, and rendered it necessary to refuse removal except in the very worst and most urgent cases, with the result that many cases have had to be treated at home.

The beneficial effect of the antitoxin treatment in Hospital is beginning to be felt, as shewn by the lessened death rate, or case mortality, in Hospital-treated patients; whilst those Experts who are best able to form an opinion, speak in decided terms as to the value of the antitoxic serum as a prophylactic, or preventative—a most important conclusion to have come to. The Vestry is to be congratulated upon having decided to supply, free of charge, antitoxin to all the medical practitioners attending patients in Lambeth Parish—a decision come to at the Meeting of the Vestry, held on August 3rd, 1899. The antitoxin is made up in glass bottles, each containing 1,500 units (Behring) and being wrapped round with full directions as to use, etc. Up to the end of the year (*i.e.*, during a period of 4 months). 69 bottles have been gratuitously distributed in Lambeth, with the following results:—

No. of vials given out,	...	69
No. of cases treated with antitoxin,		53
Results	{	
	{ Successful,	52
	{ Unsuccessful,	1

There was one serious outbreak of Diphtheria in connection with a school in Ferndale Road, necessitating closure, and the thorough overhauling of the sanitary arrangements, and drains. Full details of this outbreak are to be found on pp. 127-128.

DIPHTHERIA.

Registration Sub-Districts.	No. of Cases Notified.	Cases treated at Home.	Cases removed to Hospital	No. of Deaths.		Total.	Case Mortality per 100.	Rate of Persons Notified per 1000 Inhabitants.
				At Home.	In Hospital.			
Waterloo Road 1st	43	4	39	—	6	6	13·9	3·01
Waterloo Road 2nd	75	5	70	2	7	9	12·0	5·4
Lambeth Church 1st	154	17	137	—	16	16	10·4	8·01
Lambeth Church 2nd	161	51	110	13	15	28	17·4	3·8
Kennington 1st	124	28	96	8	11	19	15·3	2·3
Kennington 2nd	201	76	125	8	19	27	13·4	4·4
Brixton... ..	270	107	163	11	32	43	15·	3·1
Norwood ...	53	32	21	3	2	5	9·4	1·7
Lambeth ...	1081	320	761	45	108	153	14·2	3·5

During 1899, in Lambeth, 22 cases were notified from Membranous Croup, and 6 deaths were registered, giving a case mortality of 27·3, as compared with 16 cases notified, and 7 deaths registered during 1898. Two of the 22 Lambeth cases were removed to Hospital.

In London, during 1899, there were registered 1,963 deaths out of a total of 13,701 cases of Diphtheria and Membranous Croup notified, giving a mortality of 14·3%* (uncorrected).

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

TYPHOID FEVER.

During 1899, 50 deaths were registered in Lambeth from Typhoid (or Enteric) Fever, as compared with 35 during 1898, and an annual average of 30·5 for the last ten years (1889 to 1898).

219 cases were notified during 1899, as compared with 163 during 1898, and an annual average of 172·8 for the nine years, 1890 to 1898.

Of the 219 cases notified, 131 were removed to hospital, and 88 were treated at home.

The case mortality for the year is, therefore, 22·8, varying from 26·7 to 17·1, according as the cases were treated at hospital or at home respectively. The age and sex incidence and mortality for Typhoid cases notified in Lambeth during the year are as follows:—

Ages.	Number of cases Notified.			Deaths.			Death-rate per 100.
	M.	F.	Total.	M.	F.	Total.	
Under 1 year ...	1	1	2	—	1	1	30·3
1 to 5 ...	8	5	13	2	—	2	13·9
5 to 10 ...	13	9	22	—	2	2	8·6
10 to 20 ...	42	15	57	7	7	14	24·0
20 to 40 ...	55	39	94	14	8	22	23·1
40 to 60 ...	11	11	22	4	5	9	38·6
60 and over ...	—	—	—	—	—	—	—
Age not stated* ...	6	3	9	—	—	—	—
Total ...	136	83	219	27	23	50	22·8

* When the age is not stated, in calculating percentages, these cases are divided equally amongst the different age-periods.

In London during 1899 there were registered 800 deaths out of a total of 4,460 cases of Typhoid notified, giving an uncorrected case mortality of 17·9 %.

Registration Sub-Districts.	Total No. of Cases notified.	Cases treated at Home.	Cases removed to Hospital.	Case Mortality per 100.	No. of Deaths.			Rate of persons Notified per 10,000 Inhabitants.
					At Home.	In Hospital	Total.	
Waterloo Rd. 1st	9	2	7	33·3	—	3	3	6·3
Waterloo „ 2nd	11	4	7	36·4	2	2	4	7·9
Lambeth Ch. 1st	21	5	16	23·8	—	5	5	10·9
Lambeth Ch. 2nd	32	2	30	25·0	1	7	8	7·6
Kennington 1st	50	21	29	20·0	3	7	10	9·3
Kennington 2nd	33	15	18	21·2	2	5	7	7·2
Brixton... ..	53	33	20	20·8	6	5	11	6·1
Norwood	10	6	4	20·0	1	1	2	3·2
Lambeth	219	88	131	22·8	15	35	50	7·1

The case mortality was slightly higher in the Inner than the Outer Districts, viz., 27·4% as compared with 20·6%.

It is satisfactory to note that 59·8% of the cases were removed to hospital.

The increase in the number of Typhoid notifications for the year 1898 is explained by three localised epidemics or outbreaks (over 20 cases in all) that occurred towards the latter end of the year, and which were specially reported upon to the Vestry (*see* Appendix). Personal contact, as a factor in the spread of Typhoid, is not

sufficiently admitted, and the three special outbreaks investigated in connection with Lambeth—fortunately, small outbreaks, on account of the severe and prompt measures taken—will rank as important evidence in shewing that the disease is apt to spread from person to person oftener than is generally supposed—the fæces and urine of patients being sources of infection, well-proved by bacteriological methods. The natural corollary to the above statement is the importance of strict isolation of all cases (preferably in hospital), whilst the absolute necessity of diagnosing the disease as early as possible, must come to be more and more realised. Bacteriological examination of the blood of suspected persons is a ready means at hand for assisting medical practitioners in their diagnosis of doubtful Typhoid cases, and such examination (offered gratuitously in Lambeth) is much appreciated, and coming to be more and more used (81 blood samples having been examined during the last year). 25 cases were introduced into Lambeth from outside, and in 6 cases there appears to have been a causal relationship between the attacks and the previous ingestion (within the incubation period) of infected shellfish, in three cases oysters, in two cases mussels, and in one case cockles, being the suspected medium. 35 cases were due to personal contact, other likely sources being excluded.

CONTINUED AND TYPHUS FEVERS.

During 1899, 7 cases were notified in Lambeth; but no deaths were registered, from Continued Fever, as compared with 69 cases notified and 1 death registered (*i.e.*, 1.5% uncorrected case mortality) in London.

One case of Typhus was notified in Lambeth, but in all probability this was a case of Typhoid fever. 14 cases were notified in London, and 3 deaths registered, from Typhus during 1899, giving a case mortality of 21.4% (uncorrected).*

*One case of Relapsing Fever was notified in London during 1899.

PUERPERAL FEVER.

During 1899 in Lambeth 12 deaths were registered from Puerperal Fever (a disease of child-bed), as compared with 4 during 1898, and an annual average of 12·6 during the last 10 years (1889—98).

24 cases were notified, as compared with 14 during 1898, and an annual average of 18·3 for the 9 years 1890-98. The case mortality for 1899 is 50 %.

In London, during 1899, there were registered 209 deaths out of a total of 329 cases notified, giving a case mortality of 62·9% (uncorrected).

Registration Sub-Districts.	Number of Cases Notified.	Number of Deaths.	Case Mortality per 100.
Waterloo Road 1st	2	1	50·0
Waterloo Road 2nd	1	0	0·0
Lambeth Church 1st	4	2	50·0
Lambeth Church 2nd	4	2	50·0
Kennington 1st	3	2	66·6
Kennington 2nd	4	1	25·0
Brixton	5	3	50·0
Norwood	1	1	100·0
Lambeth	24	12	50·0

ERYSIPELAS.

During 1899, in Lambeth 17 deaths were registered from Erysipelas, as compared with 12 for 1898, and an annual average of 17·5 during the last 10 years (1889—1898).

330 cases were notified, giving a case mortality of 5·2‰.

In London, during 1899, there were registered 213 deaths out of a total of 5,615 cases notified, giving a case mortality of 3·8‰ (uncorrected).

Registration Sub-Districts.	Number of Cases Notified.	Number of Deaths.	Case Mortality per 100.
Waterloo Road 1st	25	0	0·0
Waterloo Road 2nd	18	2	11·1
Lambeth Church 1st	35	2	5·7
Lambeth Church 2nd	70	3	4·3
Kennington 1st	46	5	10·9
Kennington 2nd	44	3	6·9
Brixton	76	1	1·3
Norwood	16	1	6·3
Lambeth	330	17	5·2

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.

DIARRHŒA.

During the year 1899 there were registered in Lambeth 249 deaths from Diarrhœa, as compared with 254 during 1898, and an average of 188·3 for the last 10 years. Of these 249 deaths, 228 (*i.e.*, 91·6 per cent.), were in children under five years, and 198 (*i.e.*, 79·5 per cent.) in infants under one year of age. August and September were the most fatal months (*see* Table S), though the disease was prevalent also during July and October. In this connection, it is again interesting to note that the mean monthly air temperature was in June, 60·7°; July, 65·7°; August, 65·7°; September, 57·7°; and October, 49·1°; whilst the 4-ft. earth thermometer registered 56° F. on June 13th, rising to a maximum 65° F. on August 13th, and sinking to 56° F. again on October 9th. 56° 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.*

Age mortalities from Diarrhœa were as follows:—

Age	Total Deaths.			Percentage of Total Deaths from Diarrhœa
	M.	F.	Total.	
Under 1 year	90	108	198	79·5
1 to 5	19	11	30	12·1
5 to 20	—	3	3	1·2
20 to 40	1	—	1	0·4
40 to 60	1	2	3	1·2
Over 60	6	8	14	5·6
Total	117	132	249	100·0

* The 4-ft. earth temperatures were taken in Regent's Park, and I beg to acknowledge my indebtedness to Mr. Wm. Marriott, of the Royal Meteorological Society, for the information in connection therewith.

In London there were registered during 1899, 4,196 deaths from Diarrhœa, giving an uncorrected rate of 9·2 per 10,000 living, and 4·7% of total deaths.

Registration Sub-Districts.	Number of Deaths.	Diarrhœa Death-rate per 10,000 Inhabitants.
Waterloo Road 1st... ..	16	11·5
Waterloo Road 2nd	10	7·5
Lambeth Church 1st	22	11·2
Lambeth Church 2nd	64	15·3
Kennington 1st	50	9·4
Kennington 2nd	29	6·5
Brixton	39	4·5
Norwood	15	4·9
District not stated	4	—
Lambeth	249	8·1

In the Inner Wards the average Diarrhœa death-rate per 10,000 inhabitants was 12·7 as compared with 6·2 for the Outer Wards, *i.e.*, 2 to 1. The Inner Wards during 1899 have suffered *less pro ratâ* from Diarrhœa than during last year.

Under the heading of Diarrhœa may be classed the 3 cases of cholera* notified, together with the 25 deaths registered, in Lambeth during the year, as there is no reason to regard any one case as "Asiatic Cholera"; and also the 166 deaths registered from "Enteritis." Diarrhœa and other diseases of the gastro-intestinal tract (including Typhoid Fever) have increased the death-rate both in Lambeth and in London generally.

*15 cases of Cholera were notified in London.

TABLE S.

Shewing the Diarrhœa Mortality in Lambeth in each month during the year 1899.

Sub-Districts,	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Waterloo 1st	5	4	6	1	...	...	16
Waterloo 2nd	2	3	5	...	...	...	10
Lambeth 1st	4	11	7	...	...	...	22
Lambeth 2nd	11	31	20	1	...	1	64
Kennington 1st	1	...	...	...	4	28	13	4	...	...	50
Kennington 2nd	1	...	...	3	17	7	1	...	...	29
Brixton	1	...	...	...	...	4	19	14	1	...	...	39
Norwood	10	5	...	...	...	15
District not stated	1	2	1	...	...	...	4
Total	1	1	1	...	...	34	125	78	8	...	1	249

INFLUENZA.

During 1899, 151 deaths were registered from Influenza in Lambeth, as compared with 126 during 1898, and an average of 81·9 for the last ten years. Of these 151 deaths, 71 were registered during the first, 36 during the second, 6 during the third, and 38 during the fourth quarter of the year.

In London there were registered 1817 deaths (uncorrected) from Influenza during 1899.

Reviewing the past history of Lambeth in relation to Epidemic Influenza, it will be seen that the disease has been practically epidemic since 1890, rising to a maximum in 1892, 1895, and 1899. The disease during 1899 was almost double the average for the last 10 years.

Table shewing the number of deaths from Epidemic Influenza during the last 10 years in Lambeth and London.

	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	Average for 10 years (1889-98.)	1899
Lambeth ...	0	47	131	142	85	44	148	51	45	126	81·9	151
London ... (including Lambeth).	5	652	2336	2264	1526	750	2156	496	671	1283	1213·9	1817

The 37 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.

38 deaths were registered in Lambeth in these classes from Alcoholism and Delirium Tremens.

Class IV.—Constitutional Diseases.

Of the total 1082 deaths under this class 261 were due to Cancer, 525 to Phthisis, and 205 to Tubercular Meningitis and other forms of Tuberculosis.

Class V.—Developmental Diseases.

The total number of deaths in this class was 396, consisting of 184 from Premature Birth, 166 from Old Age, and 46 from Atelectasis and Congenital Malformations.

Class VI.—Local Diseases.

1. Diseases of the Nervous System caused 504 deaths, including 59 from Convulsions, 237 from Apoplexy, and 19 from Epilepsy.
2. 451 deaths were due to diseases of the Circulatory System.
3. The diseases of the Respiratory Organs caused 1172 deaths (661 from Bronchitis, and 235 from Pneumonia).
4. Diseases of the Digestive Organs caused 520 deaths, of which 185 were due to Enteritis and Peritonitis, 138 to diseases of the Liver, and 45 to Dentition.
5. Diseases of the Urinary System caused 187 deaths.

6. Diseases of the Reproductive System, Integumentary System, Locomotive System, Lymphatics, Organs of Special Senses, etc., caused together 85 deaths.

Class VII.—Deaths from Violence.

182 deaths in all, including 151 from Accidents, 15 from Burns and Scalds, 14 from Drowning, 40 from Suffocation in bed (33 being infants under 1 year), 24 from Suicide, 6 from Homicide, and 1 from Execution.

Class VIII.—Other Causes.

231 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 or groups of diseases (also sub-divided as to Districts) are given in terms of the total deaths in Tables T and W ; 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.

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

TABLE T.

Shewing Classification of Causes of Deaths in Lambeth during 1899, compared with 1898.

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

CLASS OF DISEASE.	LAMBETH PARISH.			
	1898.		1899.	
	No. of Deaths (corrected).	Percentage of Total Deaths.	No. of Deaths (corrected).	Percentage of Total Deaths.
I.—Zymotic Diseases ...	908	16·7	1033	17·6
Seven Principal ...	726	13·4	782	13·3
Influenza ...	126	2·3	151	2·6
II.—Parasitic ...	1	0·02	2	0·03
III.—Dietetic ...	43	0·8	41	0·7
IV.—Constitutional ...	1043	19·2	1082	18·4
Cancer ...	270	4·9	261	4·4
Phthisis ...	490	9·0	525	8·1
Tubercular Diseases, excluding Phthisis	184	3·4	205	
Rheumatism (Acute and Chronic) and Gout ...	34	0·6	41	0·7
V.—Developmental ...	389	7·2	396	6·7
Old Age ...	180	3·3	166	2·8
VI.—Local Diseases ..	2569	47·3	2919	49·6
Circulatory System ...	402	7·4	451	7·7
Bronchitis ...	551	10·2	661	11·2
Pneumonia and Broncho-Pneumonia ...	305	5·6	372	6·3
Pleurisy and Pleuro-Pneumonia ...	25	0·5	34	0·6
Respiratory System, excluding Phthisis	975	17·9	1172	19·9
VII.—Violence ...	219	4·0	182	3·1
Suicide ...	33	0·6	24	0·4
VIII.—Other Causes...	258	4·8	231	3·9

• 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 1000 births.

	LAMBETH PARISH.			
	1898		1899	
	Total Deaths under One Year (Corrected).	Percentage to 1000 Bir. hs	Total Deaths under One Year (Corrected).	Percentage to 1000 Births.
From all causes	1426	154.1	1488	157.7
Diarrhœa	209	22.6	198	20.9
Convulsions	60	6.5	49	5.2
Respiratory Diseases	212	22.9	229	24.3
Premature Births	154	16.6	184	19.5
Tubercular Diseases (including Phthisis)	81	8.5	98	10.4
Measles	27	2.9	43	4.6
Whooping Cough	71	7.7	59	6.3
Suffocation in Bed	53	5.9	33	3.5
Enteritis	103	11.1	114	12.1
Dentition	24	2.6	30	3.2

TABLE U.

Shewing Classification of certain Causes of Deaths (uncorrected in Lambeth, compared with London, during 1897 and 1898.

A.—Deaths at all Ages.

	LAMBETH.		LONDON.	
	Percentage of total Deaths (uncorrected).		Percentage of total Deaths (uncorrected).	
	1899.	1898.	1899.	1898.
I. PRINCIPAL ZYMOTICS ...	12·9	13·4	12·5	14·9
Influenza	2·5	2·4	2·0	1·5
Measles	2·8	2·4	2·4	3·7
Whooping Cough ...	2·1	2·8	1·9	2·6
Diarrhœa and Dysentery ...	4·1	4·5	4·7	5·2
II. RHEUMATIC FEVER AND HEART RHEUMATISM	0·3	0·4	0·4	0·4
III. DISEASES OF CIRCULATORY SYSTEM.	7·6	7·2	8·6	8·1
IV. BRONCHITIS, PNEUMONIA, and Pleurisy	17·8	15·9	18·0	16·1
Phthisis	8·2	8·5	9·5	9·5
V. INJURIES	3·8	4·6	4·2	4·2
B.—Deaths under 1 Year of Age (per 1000 Births).				
I. ALL CAUSES	161·9	156·3	167	167

TABLE V.

Local Government Board Table A.]

TABLE OF DEATHS during the Year 1899, in the Lambeth

NAMES OF LOCALITIES adopted for the purpose of these Statistics, public institutions being shewn as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.						MORTALITY			
	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
								Smallpox.	Scarlatina.	Diphtheria.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Royal Infirmary (Women and Children) ...	77	35	22	6	4	10	...	Under 5	...	...
Remainder of Waterloo Road First ...	217	70	33	9	7	67	31	Under 5	...	...
General Lying-in-Hospital, York Road ...	20	17	...	...	1	2	...	Under 5	...	...
Remainder of Waterloo Road Second ...	226	67	33	5	5	82	34	Under 5	...	1
St. Thomas's Hospital ...	578	38	76	59	51	318	33	Under 5	...	19
Remainder of Lambeth Church First ...	318	113	44	11	12	91	47	Under 5	...	1
Lambeth Workhouse ...	43	10	...	...	...	10	23	Under 5	...	...
Lambeth Infirmary ...	756	24	12	1	26	392	301	Under 5	...	...
Remainder of Lambeth Church Second ...	696	281	132	16	21	165	81	Under 5	...	11
Clapham Maternity ...	12	11	...	...	...	1	...	Under 5	...	...
St. Peter's House ...	32	...	...	...	...	4	28	Under 5	...	...
Remainder of Kennington First ...	818	238	104	25	20	210	152	Under 5	...	2
Kennington Second ...	629	154	61	9	20	209	176	Under 5	...	5

TABLE V.

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

FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																					
Ment' r nous Group.	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Total.	
	FEVERS						Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phtthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All other Diseases.			
Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Smallpox.	Scarlatina.													Diphtheria.		
...	...	1	...	...	...	...	...	...	1	...	4	...	4	2	...	...	...	...	45	57
...	...	...	...	...	...	...	...	...	...	13	5	15	...	1	24	...	...	5	40	103
...	...	...	...	...	...	1	...	...	1	1	1	...	16	36	12	...	...	5	38	114
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	16	17
...	...	1	...	...	...	...	...	...	8	8	9	...	...	14	2	...	...	5	52	100
...	...	2	...	...	...	...	...	...	1	...	...	...	2	34	9	4	7	46	126	...
...	...	...	...	...	...	...	...	2	1	...	2	...	1	0	3	...	25	51	114	...
...	...	13	...	...	...	2	...	5	1	1	...	1	22	42	45	2	64	262	464	...
...	...	...	...	...	...	...	1	...	2	1	...	1	17	38	23	2	50	55	161	...
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	9	10
...	...	...	...	...	...	...	...	...	...	...	1	...	1	21	4	...	...	...	6	33
...	...	...	...	...	...	...	...	...	1	...	5	...	3	9	...	...	...	...	18	36
...	2	...	...	...	...	...	10	...	35	41	60	...	2	78	1	...	7	166	413	...
...	1	...	...	...	...	1	...	1	...	...	...	...	54	71	40	8	6	98	283	...
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	10	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	8	...	...	...	...
...	1	...	...	...	...	...	7	...	34	28	43	...	...	72	1	2	8	204	402	...
...	...	3	...	...	...	2	1	2	1	...	7	1	38	91	52	29	17	166	416	...
...	1	...	...	...	...	...	2	...	16	10	25	...	3	37	3	1	7	104	215	...
...	1	2	...	...	...	1	...	2	...	...	2	3	52	76	61	16	2	194	414	...

TABLE V—continued.

Local Government Board Table A—continued.

TABLE of DEATHS during the Year 1899, in the Lambeth

NAMES OF LOCALITIES adopted for the purpose of these Statistics, public institutions being shewn as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY			
	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.	(i)	1	2	3
									Smallpox.	Scarlatina.	Diphtheria.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)				
South Western Hospital	149	8	59	44	13	21	4	Under 5	17	44	
								5 upwds.	11	34	
Remainder of Brixton	1118	288	116	32	46	335	201	Under 5	...	1	
								5 upwds.	...	11	
Lambeth Old Workhouse Schools	7	2	3	2	...	...	...	Under 5	...	...
								5 upwds.	...	...
British Home for Incurables	6	...	...	...	1	2	3	Under 5	...	...
								5 upwds.	...	...
Remainder of Norwood	362	111	25	16	7	95	104	Under 5	...	2	
								5 upwds.	4	1	
TOTALS	6064	1527	720	235	237	2027	1318	Under 5	...	86	
								5 upwds.	...	61	

The subjoined numbers have also to be taken into

Deaths occurring outside the district among persons belonging thereto	485	37	82	45	38	211	42	Under 5	4	37
								5 upwds.	4	19
Deaths occurring within the district among persons not belonging thereto	663	76	92	66	55	299	75	Under 5	12	31
								5 upwds.	7	19

TABLE V—continued.

District, classified according to DISEASES, AGES and LOCALITIES.

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

M. mbraneous Croup.	Typhus.	Etiotic or Typhoid.	Continued.	Relapsing.	Puerper. I.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diphtheria and Dysentery.	Rheumat. c Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All other Diseases.	TOTAL.	
																			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
...	3	1	2	1	67
...	...	2	1	1	1	1	...	7	82
1	...	1	...	...	...	4	...	38	18	32	1	5	50	3	11	6	233	404
...	...	1	...	...	3	...	1	3	...	7	7	77	124	74	51	12	338	714
...	1	...	...	...	...	...	...	...	4	5	
...	2	2	
...	1	...	...	5	6	
...	6	5	14	...	...	16	...	1	2	90	136	
...	...	1	...	...	1	...	1	1	...	...	4	22	27	31	12	8	113	226
5	...	3	...	...	...	24	2	164	121	230	1	20	347	13	15	290	1127	2247
1	...	56	...	...	13	1	19	9	2	22	17	475	730	447	136	16	1652	3817

account in judging of the above records of mortality.

...	...	1	...	...	...	...	...	7	5	...	4	18	1	...	2	40	119
...	...	19	...	...	...	...	...	...	...	...	57	20	49	2	27	169	366
...	...	1	...	...	...	...	...	3	...	7	...	3	11	2	...	14	84
...	...	28	...	...	1	...	4	1	...	1	1	28	37	57	2	62	247

TABLE W.

Table of Population, Births, and of New Cases of Infectious
of Health, during the year 1899, in the Metropolitan
to Diseases

Local Government Board Table B.]

Registration Sub-Districts.	Population at all Ages.		Registered Births.	New Cases of Sickness in each the knowledge of the Medical						
	Census 1896.	Esti- mated to middle of 1899.		1	2	3	4	5	6	7
(a)	(b)	(c)	(d)							
WATERLOO ROAD 1st	14186	14296	466	...	40	43	...	9	...	1
WATERLOO ROAD 2nd	14210	13936	932	...	32	75	...	11	...	...
LAMBETH CHURCH 1st	18770	10234	627	...	99	154	...	21	...	...
LAMBETH CHURCH 2nd	40994	42252	1517	...	109	161	4	32	...	1
KENNINGTON 1st ...	57486	53753	1871	1	160	124	4	50	...	1
KENNINGTON 2nd ...	43244	45570	1089	...	168	201	11	33	...	...
BRIXTON	81825	87350	2179	...	250	270	3	53	1	4
NORWOD	29318	31717	753	...	108	53	...	10	...	...
Totals	295,033	308,108	9433	1	1006	1081	22	219	1	7

TABLE W.

Sickness, coming to the knowledge of the Medical Officer
Sanitary District of Lambeth, classified according
and 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	1	2	3	4	5	6	7	8	9	10	11
	Relapsing, Puerperal, English Cholera, Erysipelas, Smallpox, Scarlatina, Diphtheria, Membranous Croup, Typhus, Enteric or Typhoid, Continued, Relapsing, Puerperal, Cholera, Erysipelas.	Fevers.													
...	2	...	25	...	38	39	...	...	7	...	...	...	...	...	3
...	1	...	18	...	25	70	...	...	7	...	...	...	...	...	4
...	4	1	35	...	73	137	...	...	16	...	...	...	...	...	3
...	4	1	70	...	105	110	1	...	30	1	...	2	...	...	3
...	3	...	46	1	133	96	...	...	29	...	...	...	...	...	3
...	4	1	44	...	57	125	1	...	18	...	...	1	...	...	3
...	6	...	76	...	199	163	...	1	20	...	...	1	...	...	2
...	...	...	16	...	58	21	...	...	4	...	...	...	...	...	...
...	24	3	320	1	728	761	2	1	131	1	...	4	...	...	21

LAMBETH PARISH.

—

SUMMARY OF VITAL AND MORTAL
STATISTICS, &c., FOR 1899.

Area of Parish—3,941 statute acres (exclusive of tidal water 79, and foreshore 39, statute acres respectively), divided into 8 Registration Sub-Districts, 4 Parliamentary Divisions and 8 New Wards. The Parliamentary Divisions and New Wards are co-extensive.

Population (estimated middle of 1899—308,108 (males, 145,531; females, 162,577).

Density—78·2 persons per acre.

Inhabited Houses—38,556 at Census, 1891.

Rateable Value—£1,737,298.

Marriages—2,523, being 16·3 per 1,000.

Births—9,433, being 30·6 per 1,000.

Deaths (corrected)—5,886, being 19·1 per 1,000.

Infantile Mortality—1,488 under 1 year, or 157·7 per 1,000 births.

Zymotic—Death-Rate, 2·5 per 1,000.

Increase of Population 4,035; but the natural increase or increment (*i.e.*, excess of Births over Deaths) was 3,547.

II.—SANITARY WORK.

Return showing the Number of Nuisances removed or abated in the Parish of Lambeth, from the 1st January to the 31st December, 1899.

Number of Notices 10583*

NOTIFIABLE INFECTIOUS DISEASE.

(Public Health, London, Act.)

No. of Infected Houses (Notices served)	...	...	...	...	2435
Smallpox	...	...	...	...	1
Scarlet Fever	...	...	...	...	888
Typhoid	...	...	...	...	209
Typhus	...	...	...	...	1
Continued Fever	...	...	...	...	7
Diphtheria	...	...	...	...	964
Membranous Croup	...	...	...	...	19
Puerperal Fever	...	...	...	...	24
Erysipelas	...	...	...	...	319
English Cholera	...	...	...	...	3
					<hr/>
					Total
					...
					...
					2435
					<hr/> <hr/>

* Excluding 42 Notices under the Housing of the Working Classes Act, 1890 (*vide* p. 100).

PARTICULARS OF SANITARY WORK

Carried out in Lambeth Parish during 1899, and for 22 years previously.

Year.	Total Number of Notice-(excluding those under Housing of the Working Classes Act).	Sanitary Works, Structural and Permanent.	Sanitary Work not Structural.
1899	10583	10042	2273
1898	10439	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

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

Notices served (Preliminary and Statutory) 8 48

WORKS STRUCTURAL :—

Drainage defective	...	...	...	1574
Intercepting Traps with Fresh Air Inlets required	...	...	...	643
Ventilating Pipes required	...	...	...	801
Indoor Sinks connected with the Drain	...	...	...	472
Rain Water Stack Pipes connected with the Drain	...	...	...	468
Bath Waste connected with the Drain	...	...	...	51
Traps Defective, or of Obsolete Pattern	...	...	...	1006
Closet Pan and Connections Defective	...	...	...	849
Water Supply to Closet Defective	...	...	...	601
Closet Dilapidated	...	...	...	421
Draw-Off from Main for Drinking Purposes required	...	...	...	621
Dust Bins Defective	...	...	...	763
Premises Dilapidated	...	...	...	105
Ventilation under Floors required	...	...	...	184
Roofs Dilapidated	...	...	...	176
Soil Pipes Defective	...	...	...	89
Paving Defective	...	...	...	1009
Damp and Unwholesome Houses	...	...	...	64
Dung Receptacles required	...	...	...	145

WORKS NOT STRUCTURAL —

Cisterns Dirty	...	...	...	76
Manure Accumulations	...	...	...	94
Underground Rooms occupied	...	...	...	71
Animals Improperly Kept	...	...	...	56
Stopped Drains	...	...	...	158
Overcrowding	...	...	...	148
Foul Urinals	...	...	...	17
Through Ventilation provided	...	...	...	7
Refuse Accumulations	...	...	...	76
No Water Supply or Defective Water Supply	...	...	...	521
Dirty Premises	...	...	...	1049

12315

B. Infectious Diseases Notification.

Notices served 2435

Nature of Work.—To disinfect infected rooms (with stripping off of wall papers and general cleansing as may be necessary), bedding, clothes, etc.

C. Housing of the Working Classes Act, 1890.

Notices served 42

Nature of Work.—To put premises into proper order and condition, or to close and demolish them.

SUMMARY OF WORK DONE BY THE SANITARY
INSPECTORS DURING THE YEAR 1899.

Inspections	...	...	...	8797
Re-inspections	...	...	...	58280
Infectious Houses visited	...	...	...	2435
Complaints entered in complaint book	...	...	...	4137
Cases of Infectious Disease notified	...	...	...	2693
<i>a.</i> Cases under treatment at home	...	...	...	1043
<i>b.</i> Cases removed to Hospital	...	...	...	1650
Cases of Non-Notifiable Diseases dealt with	...	...	...	1339
Houses disinfected	...	...	...	2406
Rooms disinfected	...	...	...	3132
Bedding, etc., disinfected	...	...	...	27923
Bedding, etc., destroyed	...	...	...	326
Dust Yards, Manure Depots and Brickfields, inspections of	...	...	...	344
Drains tested (with chemical, water, or both)	...	...	...	9571
Sanitary Works completed	...	...	...	5910
Plans of Drainage received and approved	...	...	...	413
New Buildings, the drains of which have been completed	...	...	...	206
Premises, the drains of which have been totally or partly reconstructed	...	...	...	399
Articles procured for the Analyst—	...	...	...	648
(<i>a.</i>) Food and Drugs	...	...	...	600
(<i>b.</i>) Water	...	...	...	48
Summonses and Orders issued	...	...	...	87
New Workshops inspected and registered	...	...	...	87
Special Smoke Observations and enquiries	...	...	...	464
Cowhouses inspected	...	...	...	26
Slaughter-houses inspected	...	...	...	42
Notices served—	...	...	...	10625
Sanitary Work (Preliminary and Statutory)	...	...	...	8148
Infectious Diseases (Public Health Act, 1891)	...	...	...	2435
Housing of Working Classes Act	...	...	...	42
Sanitary Nuisances abated	...	...	...	12315
(<i>a.</i>) Structural	...	...	...	2273
(<i>b.</i>) Non-structural	...	...	...	10042
Persons received in Shelter at Wharf	...	...	...	19
Convictions obtained—	...	...	...	77
Public Health Act	...	...	...	28
Food and Drugs and Margarine Acts	...	...	...	49

INSPECTORIAL STAFF.

Much good work has been done by the Inspectors during the year, and the noticeable change in the condition of the Inner Wards calls for comment. House-to-house inspections, and a careful and constant supervision (more especially of the courts and small cottage property in the Inner Wards) are giving very satisfactory results. Further, the work that is being carried out in connection with the drainages of new and old buildings, is giving equal satisfactory results, bye-laws and regulations being rigorously enforced, and in the case of old buildings, old and defective drainages gradually being replaced by new and improved. The supervision by the Inspectors of the drainages of new, as well as of old, buildings, increases considerably their duties, but the results accomplished are most satisfactory, whilst the difficulties hitherto experienced from dual control are gone.

In connection with drain testings, the small (comparative) percentage (15·8) of houses in which the test gives a result is noteworthy. It must be remembered, however, that the smell or chemical test (as applied) is not *wholly* satisfactory. When a result is obtained, the drains may definitely be stated to be defective; but when no result is obtained, it would be misleading to assume that, therefore, the drains are perfect.

The water test is the only trustworthy one, but it is somewhat severe, more especially for old drainages, and on that account, is not used indiscriminately except in the case of the drains of new houses.

During 1899, 413 plans (representing 712 houses) have been received and approved, and the work as shewn on plan, carried out under the personal supervision of the

Inspectors, and water-tested. 8148 Preliminary and Statutory Notices have been served by the Inspectors during the year under the Public Health (London) Act, 1891, and the Metropolis Local Management Acts, and 2273 in connection with infected houses (for disinfection, stripping of wall papers, and general cleansing), whilst 42 have been served under Part II. of the Housing of the Working Classes Act, 1890. These last notices were served by the Vestry Clerk as required by the Act. Of the total 10,625 Notices served, only 25 (*i.e.*, 0·2%) led to summonses before a Magistrate, a highly satisfactory statement, shewing that practically the whole of the work is carried out without having to resort to extreme measures. It may be added that owners generally do what is necessary upon receipt of the preliminary, or intimation, notices, and do not wait even for the Statutory Notices which are issued by the Sanitary Committee, who are empowered by the Vestry to act as the Sanitary Authority in connection with the carrying out of the Public Health Acts.

Many cases of combined drainages have received attention during 1899, the majority being carried out by the owners. The Vestry, by reason of the liability incurred in the present state of the law has, in a *comparatively* few cases, had to carry out the necessary work, and thus private properties have been improved at the cost of the general rate, a condition of affairs that is unfortunate, and one that was clearly never contemplated by the Legislature, when the Metropolis Management Acts were drafted. Until the law is altered, this liability must be met by the Vestry; and the more inspections carried out by the Inspectors, the more combined drainages (more or less defective) will have to be dealt with. Fresh legislation is much needed, but until such is passed, the Vestry cannot con-

scientifically hold their hands by examining and testing as few drains as possible, but must accept their responsibility. In this connection, there is a growing feeling that in regard to new buildings, each house should be required to have a separate drain so as to avoid any future difficulty. This feeling, on behalf of a Sanitary Authority, is readily understood, but it must also be remembered that, in certain conditions, a combined system of drainage is the best sanitarily, as by such means no drains are allowed to pass under buildings—a sanitary *desideratum*. As regards Lambeth, both the Surveyor and the Medical Officer reported in favour of combined drainage under certain conditions (*i.e.*, drains *outside*), and their opinions were endorsed by a majority of the Vestry, the Clerk pointing out the legal conditions under which such combined drainages could be carried out without any future trouble necessarily arising for the Vestry. The majority of Metropolitan Districts allow, and approve of, combined drainage under certain conditions.

The special work in connection with disinfection, smoke abatement, houses let in lodgings, and the carrying out of the Food and Drugs and Margarine Acts, is dealt with on pp. 82-99.

Several important seizures of unsound food were made by the Inspectors during the year as follow :—

1. 74 sheep's plucks, 376 kidneys, and 7 pieces of pork were seized on a stall in the roadway outside 66, Lower Marsh, and 33 sheep's plucks under the same stall, condemned by the Magistrate as being unfit for the food of man, and ordered to be destroyed; the Vendor did not appear to the Summons, and a warrant was issued for his arrest.

2. 23 tins of lobster, which was unfit for human food, were seized at 119, Flaxman Road, condemned by the Magistrate, and ordered to be destroyed; the Vendor being fined £10 and 4s. costs, or in default one month's imprisonment.
3. 114 pieces of pork and 16 pieces of beef were seized on a stall outside 66, Lower Marsh, condemned, and ordered to be destroyed; the Vendor being fined £20 and 2s. costs, or in default two months' imprisonment.

The market thoroughfares have been under bi-weekly inspection by the Inspectors, such duties being included by the Vestry (by special resolution) in the routine work of the Inspectorial Staff. These inspections are made on Saturday nights (9 to 12), and Sunday mornings (9 to 12), and are proving of value.

DISINFECTING DEPARTMENT.

A large amount of important work has been carried out during the year in connection with disinfection, as the accompanying statistics shew. The increase in the work of this Department is due to the more systematic disinfection which is now being carried out in regard to tuberculosis-, measles- and whooping cough-infected premises. Much good must accrue from following up the cases of tuberculosis, measles and whooping cough, as doubtlessly will be seen in the mortality statistics in years to come.

The two disinfecting machines have been at work during the year, the Equifex machine at Wanless Road giving the most satisfaction as regards efficiency of disinfection. Indeed, the old machine (Neville's patent, of small high-pressure tubes) is year by year becoming less and less satisfactory, and will have to be replaced soon by a more

modern one on the high-pressure *saturated* steam principle—£500 having already been placed in the Estimates for this purpose.

The disinfecting staff has given every satisfaction during the year, both collectively and individually. Mr. Norris (the Superintendent) is now provided with rooms at Arlington Lodge, Wanless Road, having charge of, and being responsible for, the plant of the Equifex machine, etc., the newly-fitted Refuge, and the Bacteriological Laboratory, the apparatus of which requires constant supervision.

During 1899, 3 Certificates were received in respect of rooms, 3 of bedding and clothing, and 178 of both rooms and bedding, making a total of 184, as compared with 162 last year. The fewer of these Certificates received the better, as it is more satisfactory for *all* disinfection work to be carried out by the Vestry's own appointed officers.

Medical Certificates accepted in lieu of disinfection being carried out by the Vestry :—

Nature of Certificates.	1st Q.	2nd Q.	3rd Q.	4th Q.	Total.
For Rooms only ...	—	—	—	3	3
For Bedding only ...	—	—	—	3	3
For Rooms and Bedding ...	45	34	47	52	178
	45	34	47	58	184

In addition to the 2693 cases of notifiable infectious diseases (*see* page 32), each one of which has been attended

to by the disinfecting staff, there have also been during the year the following non-notifiable diseases, etc., dealt with, the large amount of work that has been carried out in connection with consumption, measles and whooping cough, being specially noteworthy and gratifying.

In each case, after disinfection, a Certificate is left at the house, and during the year 1899, 2,689 such Certificates have been given out.

	1st Q.	2nd Q.	3rd Q.	4th Q.	Total.
{ Measles	39	394	174	166	773
{ Whooping Cough ...	—	8	34	16	58
{ Chicken-pox	4	10	5	2	21
{ Cancer	5	3	4	1	13
{ Consumption	118	112	123	121	474
{ Infected Cabs	6	5	7	3	21
{ Dirty Premises, etc.	7	1	5	4	17
{ Schools*	—	1	4	2	7
	185	541	368	332	1426

The work in connection with tuberculosis-infected premises is new, being due to the action taken by the Vestry in connection with a Special Report presented by the Medical Officer on December 8th, 1898.

The seven schools have been disinfected during the year 1899, in connection with outbreaks of Measles. (*See also pp. 46-48.*)

* Two Board Schools, four Church Schools, and one Private School.

*Particulars as to Disinfection carried out in Lambeth
Parish during 1899.*

Total No. of rooms disinfected by Vestry...	3132
Cases in which bedding has been disinfected at home	81
" " " at Chamber	2998
" " " destroyed	44
Replaced by the Vestry (cases)* ...	3
Premises disinfected and disinfectants supplied	9146
No. of Cleansing Notices served in con- nection with infected houses ...	2433
Certificates of Medical Practitioners re- ceived in lieu of disinfection by the Vestry	184

Articles of Bedding, etc., disinfected.

Beds	2081
Bolsters	2086
Pillows	3632
Mattresses	1782
Palliasses	224
Chair Cushions	1650
Clothing	8014
Blankets	3818
Rugs	377
Counterpanes and Eiderdown Quilts ...	2356
Carpets	246
Extras (not mentioned in above) ...	1657
	27,923

* 3 palliasses, 3 flock beds, 5 flock pillows, and 2 flock bolsters.

Articles of Bedding destroyed.

Beds	...	...	...	...	27
Bolsters	...	...	...	...	4
Pillows	...	...	...	...	36
Mattresses	...	...	...	...	17
Palliasses	...	...	...	...	44
Chair Cushions	...	...	...	...	19
Clothing	...	...	...	...	37
Sundries	...	...	...	...	142
					326
				Total	326

The Refuge provided at the Wharf has been used four times during the year—9 adults, and 10 children under 10 years of age, being accommodated during the disinfection of their scarlet fever- and diphtheria-infected houses respectively.

The new additional Refuge at Arlington Lodge, Wanless Road, has been completed* and furnished during the year, and is now ready for use when required. There appears, however, to be in Lambeth, as elsewhere, a prejudice against the use of such Refuges by those inhabitants who ought to make the greatest use of them. The Public Health (London) Act, 1891, makes it compulsory upon all Metropolitan Sanitary Authorities to provide such Refuges.

* The total cost of the alterations in connection with Arlington Lodge (including drainage work), was £541 12s. 6d., whilst the Vestry voted sums of (not to exceed) £30 and £50 for furnishing the refuge rooms and the bacteriological laboratory respectively.

DISINFECTION STATISTICS.

For eight years prior, and nine years subsequent, to the passing of the Notification of Infectious Diseases Act; and for the year 1899.

		1882	1883	1884	1885	1886	1887	1888	1889	Yearly average for 8 years preceding the Notification Act	1890	1891	1892	1893	1894	1895	1896	1897	1898	Yearly average for 9 years succeeding the Notification Act	1899
No. of Cases in which Bedding etc., has been disinfected.	At Home ...	332	258	278	10	62	52	7	144	143.6	179	246	593	343	177	251	368	217	132	278.4	81
	At Chamber	85	56	162	56	236	722	902	951	460.4	1391	1570	1546	3042	2286	2462	2447	2126	2424	2254.9	2398
No. of Cases in which Bedding etc., has been destroyed.	...	37	23	62	5	8	57	48	79	45.7	185	275	314	224	119	67	49	39	27	144.3	44
No. of articles of Bedding, etc., disinfected.	...	1526	1437	1895	2275	916	3078	3121	3778	2253.2	3013	6747	909	11513	8022	13516	20349	21487	21597	12905.9	27923
No. of articles of Bedding, etc., destroyed.	...	63	101	114	144	59	92	61	267	113.0	333	47	605	674	544	186	178	162	126	363.9	326
Premises Disin- fected and Dis- infectants Supplied.	...	727	680	657	727	736	1276	1255	1277	916.9	1722	1816	3157	5896	5742	7146	7210	8715	8441	5538.3	9146

PARTICULARS AS TO REFUGE OR SHELTER AT THE WHARF.

District or Ward.	Address.	Nature of Disease.	Date of Admission.	Date of Discharge.	Adults.		Children under 10 years.
					M.	F.	
1896.							
Marsh ...	25, Royal Street	Scarlet Fever	Nov. 12	Nov. 12	1	2	1
Princes'	20, Anderson's Walk	" "	Nov. 21	Nov. 21	1	1	1
1897.							
Marsh ...	6, P Block, Peabody Buildings ...	" "	April 1	Apr. 1	1	3	3
Marsh ..	42, Royal Street	" "	June 25	June 25	1	1	...
Prince's	2, Abernethy Cottages, Little Clayton Street	" "	Nov. 3	Nov. 3	1	2	2
1898.							
Prince's	8A, Surrey Lodge	Erysipelas ...	Dec. 29	Dec. 29	...	2	5
1899.							
Prince's	16, St. Olave's House	Scarlet Fever	Jan. 7	Jan. 7	1	2	1
"	40, Stangate Street	Diphtheria ..	Jan. 17	Jan. 17	1	1	2
"	24, Cornwall Place	Scarlet Fever	July 3	July 3	...	1	3
"	58, Oakley Street	Diphtheria ..	Sept. 26	Sept. 26	1	2	4

N.B.—Refuge or Shelter at the Wharf first used November 12th, 1896.

ANALYSIS OF FOOD AND DRUGS, WATER, Etc.

During the year 1899, 600 samples have been purchased and submitted to the Public Analyst for analysis. Taking the average of the last ten years (1889-98), the annual number of samples taken is 441, of which 69 (*i.e.*, 15·7 %) were found, on analysis, to be adulterated. The annual number of summonses issued is 48, with 48 convictions (together with 17 cautions), and £94 13s. 6d. in penalties, and £31 11s. 3d. in costs, during the same decennium.

Of the 600 samples taken during 1899, 65 (*i.e.*, 10·8 %) were reported by the Analyst to be adulterated; 52 summonses were issued, with the result that 49 convictions were obtained, together with £76 10s. 0d. in penalties, and £29 12s. 6d. in costs; and in 6 cases the vendors were cautioned. Full details are to be found on pp. 90-92.

The Inspector (Mr. W. J. Perrin), who has charge of this department, is to be congratulated, his samples being purchased by deputy, as a rule. The new Food and Drugs Act gives greater powers to the Inspectors, and alters the procedure in one or two instances, as will be seen by reference to pp. 93-94.

The results of the monthly examinations of the Water supplied to the Parish of Lambeth by the Southwark and Vauxhall and the Lambeth Companies were satisfactory during 1899.

ANALYSIS OF FOOD AND DRUGS
SALE OF FOOD AND DRUGS ACTS.

Samples procured, together with the results of Analyses,
during the year 1899.

Samples.	Number Procured.	Number Adulterated.
Milk	202	22
Butter	235	34
Coffee	72	5
Mustard	16	—
Pepper	15	—
Brandy	3	1
Rum... ..	1	—
Whisky	10	2
Sugar, Demerara	6	1
Ginger Ale	2	—
Soda	1	—
Grey Powder	1	—
Lard... ..	14	—
Cream of Tartar	2	—
Margarine (not labelled)	1	—
Oatmeal	5	—
Ground Rice	4	—
Linseed	4	—
Eucal. Oil	3	—
White Precipitate	1	—
Milk of Sulphur	2	—
Totals	600	65

TABLE

Shewing percentage of different adulterated Samples during 1899 and in the previous ten years:

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.	Aerated Waters.	Drugs.
1899	10.9	14.5	6.9	—	—	0.0	2.7	0.0	21.4	33.3	—	0.0	20.0	—	—	0.0	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	—	—	0.0	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	—	—	—	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
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	—	—	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
1890	19.3	12.1	23.3	0.0	0.0	—	5.0	0.0	57.1	100.0	66.7	—	50.0	0.0	—	—	—
1889	28.1	22.2	12.9	—	—	0.0	3.9	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.

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.		
							£	s.	d.	£	s.	d.
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
1890	300	40	13.3	30	28	10	39	1	0	19	6	0
1889	300	47	15.6	29	29	18	46	0	6	18	2	6
Average of 10 years 1889-98	441.4	69.5	15.7	48.1	48.0	17.3	94	13	6	31	11	3

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

The new Sale of Food and Drugs Act, 1899, came into operation on January 1st, 1900, and is an important measure, amending and enlarging the scopes of the Food and Drugs Acts of 1875 and 1879, and the Margarine Act, 1887; the controlling and supervisory powers of the Local Government Board being considerably increased, and similar powers given to the Board of Agriculture in respect of milk, cream, butter, cheese, margarine, &c., when these goods are of home production. In the case of imported goods such as mentioned above, the Commissioners of Customs take the necessary samples, as directed by the Treasury.

The term "food" is made to include any article which ordinarily enters into or is used in the composition or preparation of human food, amongst which are to be reckoned flavouring matter and condiments.

The Margarine Act is extended to Margarine-cheese, which means any substance, whether compound or otherwise, which is prepared in imitation of cheese, and which contains fat not derived from milk; and to cheese, which means the substance known as cheese, containing no fat derived otherwise than from milk. Wholesale dealers in Margarine (as well as manufactories) require to be registered. Slight alterations as to the procuring of samples (in transit, course of delivery, or otherwise) are made, as also in connection with the labelling of margarine, or margarine-cheese, which labelling must now be on the package itself.

Any vehicle or receptacle from which milk (or cream) is sold, must have conspicuously inscribed thereon the name and address of the person so selling in any public place; while notice must be given (by means of a clearly visible label) whether condensed milk on sale in tins or other

receptacles, is separated or skimmed, *i.e.*, machine-skimmed or not.

All mixtures must be clearly labelled, and the labels must not be obscured by other matter printed thereon; whilst tinned articles need not be sold to an Inspector except in unopened tins. All articles of food (in addition to milk) may be sampled in course of delivery, but only upon the request or with the consent of the purchasers or consignees.

Increases of penalties are allowed on second or any subsequent convictions, *viz.*, maximum penalties of £50 and £100 respectively.

There are several slight alterations as to prosecutions, *e.g.*, time limit of 28 days for proceedings; minimum limit of 14 days for summons to be returnable; name of prosecutor and particulars as to offences alleged, to be given, together with a copy of the analyst's certificate.

Finally, important provisions as to warranties are introduced; whilst the appointment of a Public Analyst and the due carrying out of the Sale of Food and Drugs and Margarine Acts, become compulsory upon all Sanitary Authorities.

SMOKE ABATEMENT.

The Smoke Inspector (Mr. W. J. Perrin*) has been energetic during the year—464 special observations and enquiries having been made. There being no coal strike, the Vestry felt justified in taking stringent measures to minimise, as far as possible, the smoke nuisance in Lam-

* Inspector Perrin is also Food and Drugs Inspector, and in addition has charge of a small sanitary area.

beth; and in this particular work they have been well supported by the Magistrates, who have inflicted exemplary fines in two cases, as follow: Charing Cross & Strand Electrical Supply Co., £45; Messrs. Clowes & Sons, £70; with £4 10s. and 14/0 in costs respectively. The Electricity Supply Co. (South London), Bengeworth Road, were fined £2, with £1 costs; and Messrs. Clowes, on a former conviction, £5 and 2s. costs.

Speaking generally, a decided improvement has taken place in connection with nuisances from smoke in Lambeth Parish, and the improvement is likely to continue, as Firms are beginning to realise that they will no longer be allowed, as hitherto, to pollute the atmosphere with dense volumes of black smoke, which are a nuisance and injurious and dangerous to health.

The following Firms have been under special observation by the Inspector during the year:—

- Charing Cross and Strand Electricity Supply Company,
85, Commercial Road
- Messrs. Causton & Co., Clapham Road
- Messrs. Clowes & Sons, Duke Street
- City & Waterloo Railway Generating Station, Launcelot Street
- Messrs. Walkers, Parker & Co., Belvedere Road
- Messrs. Seth Taylor, Commercial Road
- Nelson's Wharf, Commercial Road
- Messrs. Meredith, Belvedere Road
- Messrs. Rendell, Little Duke Street
- London County Council, Works Department, Belvedere Road
- Messrs. Cooper, 82, New Cut
- Messrs. McGaw, York Road
- India Store Depot, Belvedere Road
- Messrs. Jonas Smith & Co., Belvedere Road
- Phœnix Wharf, Commercial Road
- New London Brewery, Durham Street

Licensed Victuallers' Schools, Upper Kennington Lane
 Beulah Laundry, South Lambeth Road
 Sunnybank Laundry, South Lambeth Road
 Messrs. Doulton & Co., Albert Embankment
 Messrs. Stiff & Sons, Albert Embankment
 Thames Mining Machinery Co., Commercial Road
 Messrs. Maudslay, Sons and Field, Westminster Bridge Road
 Arlington Laundry, Cambria Road
 Lambeth Water Company Works, Brixton Hill
 Messrs. Barrett, Wandsworth Road, Vauxhall
 Electric Light Works, Electric Avenue
 Mr. Slocombe (Baker), Akerman Road
 Messrs. F. & H. Higgs, Loughborough Junction
 Mr. Lock (Baker), Loughborough Junction
 Messrs. Mumford, Albert Embankment
 Messrs. Nightingale, Albert Embankment
 Messrs. Webb & Son, Albert Embankment
 Messrs. Higgs & Hill, Vauxhall Gardens
 Marble Laundry, Clapham Road
 Stockwell Brewery, Stockwell Park Crescent
 Bon Marché, Brixton
 Metropolitan Gas Company, Works, Vauxhall
 Messrs. Francis & Son, Brixton
 Bonanza, Lyham Road
 Messrs. Riley, Norwood Road
 Messrs. Oppenheimer & Co., Handforth Road
 South London Electricity Supply Co., Bengeworth Road
 Victoria Date Co., Belvedere Road
 Messrs. Gulliver & Co., Commercial Road
 Lambeth Baths and Wash-houses, Kennington Road
 Army and Navy Stores, Lambeth Palace Road
 Messrs. Baker & Co., Lambeth Palace Road
 Vauxhall Iron Works, Wandsworth Road
 Messrs. J. W. Clarke, Brixton Road
 Mr. Cookson's Destructor, Tinworth Street
 Mr. Clarkson's Destructor, Tinworth Street

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.

Special fortnightly reports were presented to the Sanitary Committee (who reported to the Vestry) throughout the year.

The London County Council has drawn the Vestry's attention to smoke nuisances observed by their own officers on 34 different occasions, as follow :

Sir Joseph Causton, Clapham Road
 Messrs. Doulton & Co., Albert Embankment (5 occasions)
 Messrs. Stiff & Sons, Albert Embankment (6 occasions)
 Mr. Schmidt, 78, Brixton Road (Baker)
 Messrs. Rogers & Cook, Beulah Laundry, South Lambeth Road, (4 occasions)
 Sunnybank Laundry, South Lambeth Road (3 occasions)
 Messrs. Williamson, 201, Lyham Road (Bakery), (2 occasions)
 Messrs. Higgs & Hill, Crown Works, Vauxhall Park
 Messrs. Waltham Bros., Stockwell Road
 Waterloo and City Railway Co., Generating Station, Launcelot Street (2 occasions)
 Messrs. Oppenheimer, Son & Co., 51 Handforth Road
 113, Oakley Street (private chimney)
 Messrs. Barrett & Co., Bond Street, Vauxhall
 Mr. Welch, 81, New Cut (Baker)
 Mr. J. Petry, 22, Tracey Street (Baker)
 Electric Lighting Station, Electric Avenue (2 occasions)
 South London Electric Lighting Destructor, Bengeworth Road.

With one or two exceptions, the whole of the above were already under observation at the time of the receipts of the

Council's communications, and no further action had, consequently, to be taken in connection therewith.

The Potteries (of Messrs. Doulton and Stiff) have been under constant observation during the year, but no nuisance has been found to justify the Vestry in taking action before a Magistrate. The Firms take more than reasonable precautions to minimise, as far as possible, any nuisance that may arise in connection with the legitimate carrying out of their important businesses, and there is no sufficient ground for supposing that the fumes issuing from the kilns are a source of danger to the health of the inhabitants in the neighbourhood, or even cause the crumbling away of the brick- and stone- work of several large buildings in the vicinity to a greater extent than, or even as much as, the ordinary smoke from chimneys of factories and dwelling-houses.

REFUSE AND MANURE DEPÔTS.

A great improvement has been noticed during the year in the condition of the various refuse and manure depôts. During the summer months, daily inspections were made in connection with the Herne Hill and Nine Elms sidings (used for manure traffic, and specially brought before the notice of the Vestry on several occasions during the year 1898), with the result that there have been practically no complaints during the year 1899. The dust yards in the Parish have been under frequent inspection during the year, as also the dust destructors belonging to the City, Clerkenwell, Mr. Cookson and Mr. Clarkson (the two last-mentioned being private contractors). With regard to the dust destructor belonging to the Clerkenwell Vestry, and situated at the Phoenix Wharf, Commercial Road, the nuisance became so great during the summer that special action had to be taken, with the result that the following improvements were carried out by the Clerkenwell Vestry:—

1. Provision of an extra flue (communicating with main flue) above each furnace door to prevent escape of noxious fumes whilst the furnaces are being fed ;
2. Chimney increased in height ;
3. Galvanized iron screen erected, at north side of destructor, to minimise escape of fumes.

HOUSES LET IN LODGINGS.

By the Vestry's Bye-laws as to houses let in lodgings or occupied by more than one family, each house has to be brought before the Vestry for consideration before registration—an arrangement that is found to work well, and to be a great improvement upon the usual method of fixing a rent limit and only registering those houses that are let at a rent at or below such limit. The following houses have been selected by the Vestry during 1899 :—

- 1 to 12, *Victoria Place, Broadwall*.—12 houses, containing 46 rooms, in which were housed 97 persons, of whom 60 were over 10 year of age, and at rents varying from 2/- to 4/- per room per week respectively.
- 1 to 8, *Coad Place, Fitzalan Street*.—8 houses, containing 32 rooms, in which were housed 65 persons, of whom 42 are over 10 years of age, and at rents of 2/6.
- 1 to 14, *Milton Place, Belmont Street, Wandsworth Road*.—14 houses, containing 56 rooms, in which were housed 132 persons, of whom 73 are over 10 years of age, and at rents fro 1/- to 8/6 per room per week.

The Vestry have, therefore, during the year 1899, selected for registration a total of 34 houses, containing 134 rooms, in which are housed 294 persons, of whom 175 are over 10 years of age. During 1898, there were selected 258 houses, containing 1513 rooms, with 2495 persons ; and during 1897, 93 houses, containing 566 rooms, with 992 persons. A total of 385 houses, containing 2,213 rooms, have been registered in Lambeth Parish, up to the end of 1899.

HOUSING OF THE WORKING CLASSES ACT, 1890.

42 houses have been represented to the Vestry by the Medical Officer of Health under Part II. of the Housing of the Working Classes Act, during the year 1899, as being unfit for human habitation, on account of the premises being dirty, damp, dilapidated, insufficiently provided with water, or w.c. accommodation, generally worn out, &c. Details are as follows:—

Date of representation of M.O.H. to, and of Resolution of, Vestry	Address of Premises.	No of Houses.	Date of service of Notices.	Result.	Remarks.
1899. March 2 ...	1-12, Auckland Place, West Norwood	12	1899 Mar. 2	Rendered fit	Dirty, damp, dilapidated, generally worn out and insufficiently provided with water and w.c. accommodation
April 27 ...	12-21, Portland Cottages, He-mans Street, Wandsworth Road	10	July 6	Work in hand	Dirty, dilapidated and generally worn out.
April 27 ..	4-24, Pascal Street, Wandsworth Road	11	July 6	Rendered fit	
April 27 ...	37-53, Pascal Street, Wandsworth Road	9	July 6	Work in hand	

In connection with the Housing of the Working Classes Act, the Vestry has adopted during 1899 an important principle, laid down in a Special Report presented by the Medical Officer of Health, on "Insanitary Areas and the Housing of the Working Classes."* This principle is that, as far as the Lambeth experience goes, condemnation under Part I. is unnecessary, better results being obtained from systematic house-to-house inspections of houses with the carrying out of Notices, served (as may be found necessary) under Part II. of the Housing Act, or under the Public Health Act. It cannot be denied but that in Lambeth Parish, more especially in the Inner Wards, a marked improvement is noticeable in connection with the small houses (courts, etc.) The work is slow, but sure, and more than repays (financially and otherwise) the trouble and extra work involved. Further, there is the additional advantage that there is practically no displacement of tenants, a most important consideration. Displacements (wholesale) lead to great trouble for a Sanitary Authority, the displaced tenants move into neighbouring houses, which they consequently crowd and overcrowd, and so a Sanitary Authority may create, by means of one Act of Parliament (the Housing Act), serious nuisances, which it then becomes the duty of the same, or a neighbouring Sanitary Authority, to abate by powers invested in them under another Act (the Public Health Act). The neighbouring houses become rookeries, and so the difficulty is not overcome, but simply transferred from one district, or part of a district, to another, and from one house to another.

Action under Part I. is costly and dilatory, leading to Inspectorial neglect, with the result that dilapidated and

* *Vide* Appendix.

insanitary houses become more and more dilapidated and insanitary. Not so with the method adopted in Lambeth, where displacement is reduced to a *minimum*, and the conditions of the houses are improving. Displacements under condemnation or closing schemes (large or small) are not the only ones, for unfortunately there are what may be described as *unavoidable displacements* connected with railway extensions, improvement schemes, increase of business premises (factories, workshops, etc.) In these latter cases, all that a Sanitary Authority can do is to insist upon a *pro rata* amount of suitable accommodation (in the neighbourhood) being provided *before any displacement of persons is allowed to take place*, and that the displaced tenants should have the first refusal of the new rooms which are to be let at (or about) the same rents as the old ones—conditions that are being rigorously enforced, in all cases, by the Vestry of Lambeth.

The Vestry has not yet taken any further action in respect of the Open Space (partly cleared) in Lambeth Walk.

CUSTOMS AND INLAND REVENUE ACTS.

During 1899, Certificates (carrying exemption from or abatement of Inhabited House Duty) have been applied for in connection with 207 tenements, and of these 53 have been granted *unconditionally*, 85 have been granted *conditionally*, whilst in 69 the Certificates have been refused.

A.—Certificates granted unconditionally :—

		Houses or Blocks.	Tenements.
Ethelred Street, 15 and 15A	2	12	
Somerleyton Road, 57 and 59	2	4	
Lower Kennington Lane (Longreign House)	1	7	
Auckland Terrace, 15—24	10	30	

B.—Certificates granted conditionally :—

Connaught Mansions, 1—35	2	35
Dorset Road, South Lambeth, 15—25 ...	6	18
Comrie Road, Strathleven Road, 18—24	4	8
" " 26—48	12	24

C.—Certificates refused :—

Ratray Road, 60—66	4	11
Comrie Road, 29—53	13	26
Thorparch Road, 45—55	6	12
Cowthorpe Road, 2—12	6	12
" " 5—11	4	8
Totals	72	207

SLAUGHTER-HOUSES.

There were, at the end of 1898, 44 registered slaughter-houses, but during the year three (172, Lambeth Walk, 53, South Island Place, and 369, Wandsworth Road), have been closed, and one (74, Stockwell Road) the licence of which was refused last year, has been re-opened, leaving 42 which came up for registration before the London County Council, who granted the necessary licences in all the cases.

LIST OF REGISTERED SLAUGHTER-HOUSES IN LAMBETH.

Marsh Ward	...	...	113, Lower Marsh.
”	...	...	106, ”
”	...	...	124, ”
”	...	...	99, ”
Bishop’s Ward	...	...	38, Walnut Tree Walk (rear of)
”	...	...	151, Lambeth Walk.
”	...	...	7, ”
”	...	...	165, ”
Prince’s Ward	...	...	406, Kennington Road.
”	...	...	60, Kennington Park Road.
”	...	...	171, Lower Kennington Lane.
”	...	...	158, Newington Butts.
”	...	...	4, Clapham Road.
”	...	...	36, ”
Vauxhall Ward	...	...	302, Clapham Road.
”	...	...	152, ”
”	...	...	18, Paradise Road (rear of).
”	...	...	1, Lansdowne Road.
Stockwell Ward	...	...	97, Stockwell Road.
”	...	...	74, ”
”	...	...	27, Bedford Road.

Brixton Ward	...	...	58, Coldharbour Lane.
"	...	...	Near Railway Hotel Brewery (Electric Lane).
"	...	...	12, Vassall Road.
"	...	...	263, Brixton Road.
"	...	...	136, Wyndham Road.
"	...	...	10, Foxley Road.
"	...	...	Industry Terrace (yard leading to).
Tulse Hill Ward	...	...	45, New Park Road.
"	...	...	16, " (rear of).
"	...	...	12, Lower Tulse Hill.
"	...	...	309, Coldharbour Lane.
"	...	...	207, "
"	...	...	77, Dulwich Road.
Norwood Ward	...	...	120, High Street.
"	...	...	121, " (rear of).
"	...	...	66, Knight's Hill Road.
"	...	...	125, Hamilton Road.
"	...	...	32, Chapel Road.
"	...	...	116, High Street.
"	...	...	107, Hamilton Road (east side of).
"	...	...	Ernest Street and High Street (rear of).

The above 42 Slaughter-houses have been inspected during the year, and defects (when found) remedied—the test being applied in each case to the drains. The necessity for frequent inspection of these Slaughter-houses is shewn by the following list of defects that were found:—

Dirty and Uncovered Cistern...	...	...	1
Defective Drains	...	...	2
Dirty Premises	...	...	7
Broken Manhole Cover	...	...	1
Defective Door	...	...	1
Defective Roof	...	...	1
Defective Gutters	...	...	1

Defective Gully	...	...	...	1
Uncemented Walls	...	...	...	1
Defective Walls	...	...	...	1
Pen used as Stable	..	...	...	1
Defective Paving	...	...	...	4
Defective w.c.	...	...	...	2
Pigs kept so as to be a nuisance in Stable	...	...	...	1

In 28 of the Slaughter-houses no sanitary defects were discovered, whilst the general condition of the premises in all was found to be satisfactory. In only two cases was a result obtained from the drain test.

All the Slaughter-houses are retail, with the exception of two (which are both retail and wholesale), and the estimated weekly number of animals killed in Lambeth private Slaughter-houses are (roughly) as follow :—

Cattle	53	} Total 889
Sheep	...	...	768
Pigs	...	...	68
Calves occasionally.				

COWHOUSES.

There were in 1898, 27 registered Cowhouses in Lambeth Parish, and of these one (26, Somers Road) has since become empty.

During 1899, 26 applications have been received for renewal of licenses, but only 24 were granted by the London County Council, as follows—the 2 licenses in connection with 324, Camberwell New Road and 40, Gipsy Road, being refused by the Council, the Vestry objecting in each case on account of defective paving, which the licensees refused to make good :—

LIST OF REGISTERED COWHOUSES IN LAMBETH.

Ward.		No. of Sheds.	No. of Cows kept.
Marsh	... 6, Coral Street, Lower Marsh ...	1	10
Bishop's	... Cambria Cottage, Tracey Street	1	13
"	... 71, Ethelred Street ...	1	7
"	... 24, Distin Street ...	2	9
Prince's	... 30, Upper Kennington Lane ...	1	7
Vauxhall	... 38, Hartington Road ...	1	22
"	... 9, Dawlish Street ...	1	12
Stockwell	... 8, Moat Place ...	1	7
"	... 34, Ingleton Street ...	1	5
Brixton	... Vassall Mews ...	1	8
"	... 1, Elliot Road ...	2	9
Tulse Hill	... 7, Mill Lane, Brixton ...	1	2
"	... 67, Coldharbour Lane ...	1	7
"	... 1, Lutheran Place, Upper Tulse Hill	2	34
"	... 56, Railton Road ...	1	5
"	... 329, Coldharbour Lane ...	1	8
Norwood	... 156, Hamilton Road ...	3	26
"	... 76 and 78, Gipsy Hill ...	3	27
"	... 67, Rosendale Road ...	1	10
"	... 93, Clive Road ...	1	4
"	... 196, Norwood Road ...	1	20
"	... Elder Road, West Norwood ...	3	35
"	... Railway Arch, East Street ...	1	13
"	... 1, Change Alley, West Norwood	1	11
		33	311

The above 24 Cowhouses have been inspected carefully during the year, and the following sanitary defects discovered, and since remedied:—

Defective Paving	...	2
Dirty Premises	...	6
Defective w.C.	...	1
Dirty w.C. Pan	...	1
Rain-water Pipe Defective	...	1
Defective Gully	...	1
Defective Roof	...	1
Defective Cover to Cistern	...	1
Defective Ventilating Pipe	...	1

In 14 of the 24 Cowhouses sanitary defects were discovered, whilst the general condition of the premises in all the Cowsheds was found to be satisfactory. It will be noted that, though the drains were tested in each case, in no instance was there a result obtained.

WORKSHOPS.

87 Workshops have been added to the Register during the year 1899, consisting of the following :—

Nature of Trade or Business.	No. of Workshops.	Nature of Trade or Business.	No. of Workshops.
Dressmaking	... 27	Brought forward	... 67
Tailors and Clothiers	... 5	Bedding Manufacturer...	1
Laundries	... 17	Cardboard Box Maker	... 1
Boot Maker	... 1	Cycle Manufacturers and	
Builder	... 1	Repairers	... 4
Brush Maker	... 1	Incubator Maker	... 1
Tie Makers	... 3	Stone Mason	... 1
Waistcoat Maker	... 1	Copying Apparatus Maker	1
Shoemaking or Mending	2	Upholsterer	... 1
Perfume Manufacturer	... 1	Confectioner	... 1
Fancy Goods Manufac- turer	... 1	File Cutter	... 1
Furniture Restorer	... 1	Baby Cap Maker	... 1
Advertisement Painter	... 1	Stay Maker	... 1
Art Needleworkers	... 3	Underclothiers	... 2
Wheelwright	... 1	Turner in Wood	... 1
Surgical Box Maker	... 1	Blacksmith	... 1
		Sundry other Trades	... 2
Carried forward	... 67	Total	... <u>87</u>

The total number of known Workshops within the Parish of Lambeth is 721, all of which have been inspected, and the different workrooms measured up and plans drawn in connection therewith, showing cubic capacity (width, height and length) and general shape. A card (as required) has been hung up in each separate workroom, stating the exact number of persons to be employed therein at any one time in (*a*) ordinary work and (*b*) overtime.

All the Workshops (with full particulars) have been entered up in the Register which the Vestry now possesses.

In connection with the 87 new Workshops (inspected and registered during 1899), it is found that there are 133 rooms, in which were working, at the time of inspection, 391 persons, 92 males and 299 females (*females alone* being employed in 53 Workshops). Further, no children were found employed, but there were 64 young persons, *i.e.*, between 14 and 18 years of age (12 males and 52 females), and the rest were adults (80 males and 247 females); whilst of the so-called "protected persons" (*i.e.*, children, young persons and women), the Medical Officer of Health has given written notice to the Factory Inspectors as required by Section 27 of the Public Health (London) Act, 1891, and Section 3 of the Factory and Workshops Act, 1891, from time to time, as he became aware of such being employed.

The Vestry of Lambeth, as the Sanitary Authority, has received 32 notices of occupation of Workshops from the Factory Inspectors during 1899, as compared with 60, 31 and 29 respectively in the previous 3 years.

8 written notices have been received from the Factory Inspectors with reference to contraventions of the Public Health Acts in connection with Factories or Workshops

(*vide* Section 4 Factories and Workshops Act, 1878), 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. During the three previous years, 27, 25 and 66 written notices respectively have been received.

In connection with the 87 new Workshops, the following insanitary conditions were met with at the time of the inspections :—

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

In 3 out of 87 Workshops (*i.e.*, 3·4 %) was the ventilation unsatisfactory, though in all cases the workrooms, at the time of inspection, were found to be reasonably warmed by open fireplaces, open or closed stoves, gas jets, etc.

2. *As to Cleanliness.*

In 27 Workshops (*i.e.*, 31·03 %), the workrooms were dirty and required cleansing.

3. *As to Drainage and Sanitary Appliances.*

The drains were in each case tested with chemical, and in 16 (*i.e.*, 18·4 %) were shown to be defective, requiring partial or total reconstruction; whilst in 20 (*i.e.*, 22·9 %) the sanitary fittings and appliances were bad. The w.c.s were outside in 43·7 %, inside in 26·4 %, outside and inside in 25·3 %; whilst in 4 cases (*i.e.*, 4·6 %) there were no w.c.s provided at all. Separate closet accommodation for the sexes was wanting in 6 cases (*i.e.*, 6·9 %).

The soil pipes were found to be unventilated, or insufficiently ventilated, in 11 cases (*i.e.*, 12·6 %), a condition of things which may, or may not, be a nuis-

ance; and in 2 cases (*i.e.*, 2·3 %) there was found to be direct communication between w.c.s and workrooms.

4. *As to Dampness.*

In 1 workshop (*i.e.*, 1·2 %) a workroom was found on inspection to be damp, and to such an extent as to call for attention by the Inspector.

5. *As to Overcrowding.*

The cubic capacities of the different workrooms were found to vary considerably, and in 4 of the 133 workrooms (*i.e.* 3·01 %) overcrowding was found to exist, though the overcrowding was limited to 1, 2 or 3 persons in excess per workroom, as will be seen on reference to the accompanying Table III.

During the year the Vestry decided by resolution to take no further action in regard to appointing a Female Sanitary Inspector—a decision to be regretted, as Lambeth Parish contains 721 Workshops, in which are employed 3,157 persons, and of these 2,472 (*i.e.*, 78·3 %) are women and girls (44·6 per cent. of the Workshops employing *only* female labour).*

These statistics help to make out a strong case for the appointment of a Female Inspector, who would also be of great use in (1) constantly supervising the female underground conveniences in the Parish—a supervision that cannot be efficiently done, for obvious reasons, by a male Inspector; (2) inspecting shops where girls and women

* The question had been adjourned for six months by the Vestry at their Meeting held on April 28th, 1898.

only are employed ; (3) visiting infants' and girls' schools and colleges in connection with outbreaks of infectious disease ; (4) working among the poor, especially in the Inner Wards of the Parish, and assisting in the educating of mothers as to the feeding and caring of infants, and as to domestic sanitation generally.

The Vestry will doubtless see its way to reconsider the question at some future time.

I.—WORKSHOPS:—Number of Rooms and Persons employed.

Districts, 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 ...	{	Jackson ...	10	13	...	...	1	4	20	5	21	9	30
		Wallis ...	8	9	...	...	1	7	4	19	5	26	31
Bishop's Prince's	{	Hooper ...	9	17	...	...	3	...	17	30	20	30	50
		Howes ...	2	4	...	...	3	...	1	1	4	1	5
Vauxhall Stockwell	{	Jones ...	2	6	...	...	...	...	7	21	7	21	28
		Bowden...	5	5	...	...	...	...	...	13	...	13	13
		Baxter ...	3	4	...	...	...	5	...	8	...	13	13
Brixton ...	{	Perrin ...	4	4	...	..	1	2	1	5	2	7	9
		Gavin ...	10	17	...	...	1	7	2	24	3	31	34
Tulse Hill	...	Bott ...	6	6	...	...	...	5	...	16	...	21	21
Norwood	...	Smith ...	6	7	...	...	...	15	6	7	6	22	28
		Barfoot ...	22	41	...	...	2	7	22	96	24	103	127
			87	133	...	...	12	52	80	245	92	297	389

II.—WORKSHOPS:—Details as to Sanitary

Details as to Sanitary Conditions and Defects found.	Districts, and the				
	Marsh.		Bishop's and Prince's.		
	Jackson.	Wallis.	Hooper.	Jones.	Howes.
Ventilation { satisfactory ...	10	7	9	2	2
{ not ...	...	1	...	...	...
Cleanliness { satisfactory ...	7	8	1	2	2
{ not ...	3	...	8	...	...
Workrooms { damp ...	...	1	...	...	...
{ not ...	10	7	9	2	2
Workrooms { warm ...	10	8	9	2	2
{ not ...	...	...	...	...	...
Result of testing of drains { no result ...	8	8	5	1	2
{ defects found	2	...	4	1	...
State of sanitary fittings, &c. { good ...	8	8	3	1	2
{ bad ...	2	...	6	1	...
Soil pipe { ventilated ...	4	4	1	1	2
{ not ventilated ...	1	...	1	...	...
{ no soil pipe ...	5	4	7	1	...
Position of W.C. { outside ...	4	5	6	...	1
{ inside ...	3	3	2	1	...
{ outside & inside	2	...	...	...	1
{ No W.C. ...	1	...	1	1	...
Separate W.C. accommodation (where required) { Yes ...	9	7	8	1	2
{ No ...	1	1	1	1	...
Communication (direct) between W.C.'s & rooms { Yes ...	...	...	...	...	...
{ No ...	10	8	9	2	2

Conditions and Defects found.

Inspectors in charge thereof.								TOTALS
Vauxhall and Stockwel.			Brixton.		Tulse Hill.	Norwood.		
Bowden.	Baxter.	Perrin.	Gavin.	Bott.	Smith.	Barfoot.		
5	3	4	8	6	6	22	84	
...	...	...	2	...	...	...	3
5	1	4	7	5	6	12	60	
...	2	...	3	1	...	10	27	
...	...	...	...	...	...	...	1
5	3	4	10	6	6	22	86	
5	3	4	10	6	6	22	87	
...	
4	3	4	10	5	4	17	71	
1	...	...	...	1	2	5	16
5	2	4	9	5	6	14	67	
...	1	...	1	1	...	8	20	
5	2	1	6	5	5	8	44	
...	1	3	2	1	...	2	11	
...	...	...	2	...	1	12	32
4	...	1	4	1	1	11	38	
1	...	1	3	1	3	5	23	
...	3	2	2	4	2	6	22	
...	...	...	1	...	...	...	4
5	3	4	9	6	6	21	81	
...	...	...	1	...	...	1	6
...	...	...	...	...	1	1	2
5	3	4	10	6	5	21	85	

III.—WORKSHOPS.—Full details as to overcrowding found.

Nature of Workshop.	No. of Work-rooms; over-crowded.	No. of Employés at time of Inspection.			No. of Employés allowed.	Extent of Overcrowding (in persons).
		Male.	Female.	Total.		
Dressmakers	4	...	18	18	12	6
Underclothiers	1	...	3	3	2	1
Fancy Needleworkers ...	1	...	7	7	4	3
Laundry	1	...	7	7	5	2

35 persons (all females) were found to be working in a state of overcrowding—in a cubic space enough for only 23.

BAKEHOUSES.

The Bakehouses have been inspected during the year, and the necessary annual white-washing and cleansing carried out. One new bakehouse† (rebuilt) has been registered during 1899, and three have been demolished (14, Cornwall Road, 307, Coldharbour Lane, and 85, Walcot Square), whilst twenty-nine have been found temporarily empty and disused.

LIST OF BAKEHOUSES IN LAMBETH.

(* Means that Bakehouse is empty at present.)

MARSH WARD:—

Cornwall road, 64, 73, 78	Oakley street, 26, 70*
Doon street, 22	Roupell street, 62
Duke street, 14	Westminster Bridge road, 120
Lower Marsh, 14, 20, 43, 49, 139	Waterloo road, 59, 102
New Cut, 44, 81	York road, 102

BISHOP'S WARD:—

Broad street, 13	Monckton street, 2
Brook street, 106	North street, 27
China walk, 16	Prince's road, 101, 152
Crozier street, 12*	Saville place, 19
Ethelred street, 107	Stangate street, 32
Hercules road, 4*, 66	Tracey street, 22
Lambeth road, 81	Upper Marsh, 18
Lambeth walk, 17, 71, 82, 115, 121, 125, 148*, 154, 191, 201	Walnut Tree walk, 43
Lollard street, 124	Westminster Bridge road, 189, 219

PRINCE'S WARD:—

Auckland street, 1	Newburn street, 20
Bonnington square, 13	Newington butts, 150
Church street, 10, 25	Prince's road, 19
Clapham road, 24	Stannary street, 39
Cleaver street, 12	Trigon road, 45
Glasshouse street, 60	Tyer's street, 49
Goding street, 1	Upper Kennington lane, 19, 76, 107, 159, 199
Hurley road, 17	Vauxhall street, 36, 85, 115,* 126,
Kennington Park road, 40,* 98,* 202	Vauxhall walk, 18A, 73, 123
Kennington road, 334	White Hart street, 24, 58
Lower Kennington lane, 32, 84,* 122,* 177	Windmill row, 10

VAUXHALL WARD:—

Clapham road, 226,* 264, 324,* 360	South Lambeth road, 28, 108, 158 175,* 184*
Dorset road, 55, 129	Thorparch road, 1
Harrington road, 42, 58, 88,* 129	Wandsworth road, 51,* 181, 227, 230, 259, 283
Larkhall lane, 63, 98	Wilcox road, 29, 44, 3
Lansdowne road, 74	
Portland place south, 20	
Paradise road, 30	

† 32, Stangate Street.

STOCKWELL WARD:—

Acre lane, 120, 144	Holland street, 22
Bedford road, 29	Kepler road, 14
Brixton road, 56, 66A (late 78), 274, 468	Lingham street, 76, 39
Clapham road, 93, 247	Lander road, 80, 99, 147
Dalyell road, 46	Russell street, 17*
Dorrell place, 11	Santley street, 13
Ferndale road, 118, 185,* (late 1, Shepherd's lane)	Stockwell road, 63, 143, 150, 170
	Sydney road, 26
	Tasman road, 52

BRIXTON WARD:—

Akerman road, 45	Holland road, 1*
Atlantic road, 40	Langton road, 30*
Beres'ord street, 271	Lothian road, 100
Brixton road, 37, 231*, 267, 407,* 447*	Loughborough road, 73*, 76
Camberwell New road, 167	Normandy place, 8
Coldharbour lane, 76, 240, 326, 386	St. Mark's road, :
Cumberland place, 6*	Treherne road, 12
Denmark street, 25	Va-sall road, 54, 75
Farmer's road, 127	Warham street (late Thomas street), 44, 81
Frederick terrace, 7	Wyndham road, 140
Garden grove, 9	

TULSE HILL WARD:—

Acre lane, 115	Kemerton road, 7
Atlantic road, 65, 74	Lyham road, 159
Barnwell road, 91	Mi.kwood road, 6, 69
Brixton hill, 72, 154, 232	New Park road, 59
Coldharbour lane, 203, 223, 319,* 439	Probert road, 1
Cornwall road, 32, 76, 146	Railton road, 13,* 45, 64, 78, 111, 205, 311
Denmark hill, 120	Shakespeare road, 84
Dulwich road, 167	Somer's road, 27
Effra parade, 11	Sussex road, 75*
Elm park, 58	Tulse hill, 5, 25, 182
Hinton road, 51	Upper Tulse hill (The Exchar ge), 3
Hurst street, 28	Water lane, 25, 87

NORWOOD WARD:—

Approach road, 6	High street, 34 (rear of), 87, 94, 63*
Barnfield road, 28	Knight's hill, 26, 49, 58, 190
Chapel road, 2*	Norwood road, 90, 202, 222, 427
Eden road, 7	Rommany road, 191
Elder road, 1A	Westow hill, 33
Gipsy hill, 53, 130, 150	Wood street, 5
Gipsy road, 105, 193, 253	Woodland hill, 31*
Hamilton road, 134	

MORTUARIES AND CORONERS' COURTS.

The total number of bodies received at the two Mortuaries (High Street and Wanless Road) during 1899, was 483, as compared with 495 during 1898, 400 during 1897, and 373 during 1896. Of the 483 bodies, 365 were received at High Street and 118 at Wanless Road, shewing the need of this second Mortuary for the Parish.

24 bodies were brought in by the Police (7 to High Street and 17 to Wanless Road), and the rest by undertakers or private persons.

285 Post-mortems were conducted (233 at High Street and 52 at Wanless Road), as compared with 275, 281 and 253 respectively during the 3 preceding years, 1898-6.

The Coroners' Court sat 107 times at Wanless Road, and 113 times at High Street.

The need for the separate infectious room in connection with the new Mortuary at Wanless Road was shown by the fact that during 1899, 3 bodies (1 male and 2 females) dead of diphtheria, and 1 (male) dead of typhoid, were received there.

Sunblinds have been fitted during the year outside all the windows of the Mortuary, and Post-Mortem room, in connection with Wanless Road.

Mr. George Fazey, Junior, has been appointed Deputy Mortuary Keeper, *vice* Mr. George Morris.

**Ages of bodies received at the Lambeth Mortuaries,
896-1899.**

Registered Ages of Bodies.	1899.		Total 1899.	Total 1898.	Total 1897.	Total 1896.
	High Street.	Wanless Road.				
0—1 ...	84	37	121	160	101	121
1—5 ...	35	9	44	50	39	22
5—10 ...	20	2	22	17	9	12
10—20 ...	12	1	13	8	18	9
20—30 ...	25	4	29	26	26	24
30—40 ...	52	7	59	45	35	35
40—50 ...	50	17	67	64	48	37
50—60 ...	38	15	53	42	59	46
60—70 ...	25	22	47	39	30	35
70—80 ...	18	1	19	32	20	22
80—90 ...	5	3	8	5	9	7
90—upwards ..	1	—	1	1	—	3
Age not stated...	—	—	—	6	6	—
Totals ..	365	118	483	495	400	373

Numbers of bodies received at the Lambeth Mortuaries during 1896-1899.

1899.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total 1899.	Total 1898.	Total 1897.	Total 1896.
<i>High Street.</i>																
Males ...	22	13	25	19	18	18	21	20	19	23	20	21	239	222	218	221
Females ..	18	14	3	11	11	6	9	10	12	9	9	14	126	143	109	152
<i>Wanless Road.</i>																
Males ...	9	6	6	3	6	3	9	4	3	5	8	9	71	72	41	—
Females ...	4	2	8	4	3	1	2	3	5	5	4	6	47	58	32	--
Totals...	53	35	42	37	38	28	41	37	39	42	41	50	483	495	400	373

N.B.—Wanless Road Mortuary was opened on April 12th, 1897, and is under the superintendence of Mr. Joshua Fazey—High Street Mortuary being under Mr. Langston.
Mr. Fazey, Junior, is Deputy Mortuary Keeper.

Particulars as to cases of Drowning, accidental death, and Suicide, during 1896-99.

	High Street.			Wanless Road.			Total 1899.		Total 1898.		Total 1897.		Total 1896.	
	M.	F.		M.	F.		M.	F.	M.	F.	M.	F.	M.	F.
Drowning	—	—	—	—	1	1	—	1	1	—	10	3	14	2
Suicides	2	5	7	5	1	6	7	6	7	3	6	1	12	1
Poisoning	—	3	3	—	1	1	—	4	2	1	2	2	3	1
Hanging	—	—	—	3	—	3	3	—	6	3	—	—	2	—
Throat cutting	1	2	3	1	—	1	2	2	3	2	1	—	2	—
Jumping off heights	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Throwing under Train	—	—	—	1	—	1	1	—	—	—	—	—	—	—
Shooting	1	—	1	—	—	—	1	—	4	—	1	—	3	—
Railway Accidents	3	—	3	1	—	1	4	—	1	—	1	—	3	—
Accidental death	—	—	—	1	—	1	1	—	8	4	—	—	—	—
Street Accidents	4	1	5	3	1	4	7	2	6	1	4	—	3	—
Murder	1	1	2	—	—	—	1	1	—	—	1	1	—	2
Burning	1	1	2	—	—	—	1	1	—	3	1	—	—	—
Falling from heights	1	—	1	—	—	—	1	—	4	—	4	—	—	—
Bicycle Accidents	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Strangulation and Suffocation	—	—	—	—	—	—	—	—	1	1	—	—	—	—

3 bodies dead from diphtheria (1 male and 2 females), and 1 dead from typhoid (male), were admitted into the infectious Mortuary at Wanless Road.

INQUESTS.

During the year 1899, 549 cases were submitted to the Coroner, who, in 78 instances, decided that no further inquiries were necessary; but, in the other 471 cases, held inquests with the following results:—

I. NATURAL CAUSES.	...	...	...	217
II. ACCIDENTAL CAUSES	...	...	...	221
Burns and Scalds	...	...	...	31
Drowning	...	...	...	23
Run over	...	...	...	21
Falls, &c.	...	...	...	45
Suffocation	...	...	...	33
Alcoholism	...	...	...	17
Knocked down by Engine	...	...	...	6
Gunshot Wounds or Fractures	...	...	...	9
Rupture	...	...	...	2
Exposure	...	...	...	9
Misadventure	...	...	...	7
Kicked by Horse	...	...	...	2
Self Neglect	...	...	...	5
Blood Poisoning	...	...	...	6
Crushed	...	...	...	3
Executed	...	...	...	1
Shock from Electric Current	...	...	...	1
III. HOMICIDAL CAUSES	...	...	...	33
Suicide	...	...	...	28
Murder	...	...	...	3
Manslaughter	...	...	...	2
IV. OPEN VERDICTS	...	...	...	—
Found Drowned	...	...	...	—
Found Dead	...	...	...	—
				—
	Total	...	...	471

UNDERGROUND CONVENIENCES.

The following is a Statement of the Receipts and Expenditure in respect of the four Underground Conveniences for the year ending 31st December, 1899:—

	RECEIPTS.	EXPENDITURE.								TOTAL.
		Wages.	Gas.	Water.	Rates, Soap, Toilet Papers, Cleaning Materials, Repairs, &c.	Uniforms	First Cost (prop'n.)	Alterations. (prop'n.)		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
VAUXHALL. Men only—3 paying, 1 free closet	184 8 1	176 10 4	13 9 5	29 5 1	16 13 2	4 14 3	49 0 5	—	280 13 4	
HERCULES. Male side—4 paying, 1 free closet ... £292 17 2 Female side—3 paying, 1 free closet ... 204 0 8	495 17 10	309 13 10	35 18 1	47 11 3	26 12 7	8 9 3	119 14 5	—	548	
BRIXTON. Male side—3 paying, 1 free closet ... 266 16 9 Female side—3 paying, 1 free closet ... 203 19 11	470 16 8	303 6 10	33 18 11	94 14 6	36 15 2	8 9 3	151 0 0	12 8 2	646 12 10	
KENNINGTON CROSS. Men only—3 paying, 1 free closet	133 7 11	176 10 4	15 6 9	13 12 9	11 11 0	4 14 3	99 14 8	—	321 9 9	
	1285 10 6	972 1 4	98 13 10	185 4 3	91 11 11	26 7 0	419 9 6	12 8 2	1805 16 0	

During the year 1899 Wm. Lckyer, a permanent attendant at Hercules Road, died, and Wm. Baker (the temporary relief attendant at Brixton) was appointed to fill the vacancy, but to take duty at Vauxhall, *vice* Mr. Holbrook, who was transferred to the Hercules. Fred Cooper (for 12 years a Carman in the Vestry's employ) was appointed temporary relief attendant at Brixton. There is a total of 15 employes connected with the 4 Underground Conveniences.

BACTERIOLOGICAL LABORATORY.

During the past year the Bacteriological Laboratory has been fitted up at Arlington Lodge, Wanless Road, Loughborough, and is proving highly satisfactory, much good work having been done in connection with the examinations of sputa, throat membranes and discharges, and samples of blood, as shown by the subjoined particulars. The Vestry, judging by the results of the first year's experience, are more than justified in having decided to establish in the centre of their district a local laboratory for the sole use of Medical Practitioners practising in Lambeth, and the medical men are to be congratulated in having responded so enthusiastically, and made such good use of the opportunities for bacteriological diagnosis offered to them by the Vestry free of cost.

Tuberculosis.

90 samples of sputa from doubtful Tuberculosis cases have been examined during the year, and in 33 (*i.e.*, 36·7 %) tubercle bacilli have been found. The importance of Tuberculosis cases being diagnosed at as early a date as possible is now acknowledged by all physicians, as, in the early stages, this disease may be cured by proper treatment. In 57 instances (63·3%), no tubercle bacilli were found.

Typhoid Fever.

81 samples of blood from suspected Typhoid cases have been examined during the year, and in 40 (*i.e.*, 49·4 %) the characteristic Widal reaction has been obtained, although in eight of the cases (*i.e.*, 20 %) this reaction was but slightly (or feebly) marked. The reaction depends on the fact that the specific (Eberth-Gaffky) bacilli of Typhoid

fever lose their power of movement, and become collected into clumps (or agglutinated, as it is called), in fluids containing the specific antitoxin of the disease, and this antitoxin is developed in the blood of all patients suffering from typhoid, very shortly after the invasion of the disease. When the reaction is well marked, and only a high dilution of the suspected blood-serum used (*e.g.*, $\frac{1}{50}$ to $\frac{1}{100}$), this diagnostic method is exceedingly useful and most trustworthy. Practical proof has been shown of this in connection with some localised small outbreaks of Typhoid in Lambeth during the year. Doubtful, or suspected cases were heard of by means of house-to-house enquiries, and the diagnosis only settled, in a large proportion of the cases, by this serum test. A ready means of differential diagnosis was much needed, as there were many cases of Influenza in and around the immediate neighbourhoods of the Typhoid outbreaks at the time.

Diphtheria.

216 samples of throat membranes and secretions from doubtful Diphtheria cases have been examined during the year, and in 101 (*i.e.*, 46·8%) the true (Klebs-Loeffler) bacilli have been obtained. In 52 instances (*i.e.*, 51·5%) the Klebs-Lœffler bacilli were obtained in pure cultivation—*i.e.*, without admixture with other bacilli, whereas in the remaining 49 (*i.e.*, 48·5%) the Klebs-Loeffler bacilli were found combined with other well-known bacilli as follows:—

Klebs-Lœffler + Streptococci ...	33 <i>i.e.</i> 67·3%
Klebs-Lœffler + Staphylococci..	5 <i>i.e.</i> 10·2%
Klebs-Lœffler + Streptococci + Staphylococci	8 <i>i.e.</i> 16·3%
Klebs-Lœffler + Micrococci ...	1 <i>i.e.</i> 2·04%
Klebs-Lœffler + Streptococci + Staphylococci + Oïdia ...	1 <i>i.e.</i> 2·04%
Klebs-Lœffler + Pseudo-bacilli (Hoffman) + Streptococci..	1 <i>i.e.</i> 2·04%

In 115 (*i.e.* 53·2%) of the total number of throat samples examined the Klebs-Lœffler bacilli were not isolated, but other bacilli were as follow:—

Streptococci	30 <i>i.e.</i> 26·1%
Pseudo-bacilli	4 <i>i.e.</i> 3·5%
Pseudo-bacilli + others... ..	45 <i>i.e.</i> 39·1%
Staphylococci	11 <i>i.e.</i> 9·6%
Streptococci + Staphylococci ...	10 <i>e.</i> 8·7%
Streptococci + Micrococci ...	3 <i>i.e.</i> 2·6%
Staphylococci + Micrococci ...	1 <i>i.e.</i> 0·9%
Micrococci	5 <i>i.e.</i> 4·3%
Micrococci + Torulæ	2 <i>i.e.</i> 1·7%
Streptococci + Torulæ + Micrococci... ..	1 <i>i.e.</i> 0·9%
Oïdia + Streptococci + Staphylococci	3 <i>i.e.</i> 2·6%

The pseudo-bacilli (Hoffman) were found in pure cultivation in four instances, but in only one case were pseudo-bacilli and true diphtheria (Klebs-Lœffler) bacilli found together. Pseudo-bacilli were found mixed with streptococci (16 samples), with staphylococci (4), with streptococci and staphylococci (19), with streptococci and oïdia (3), with staphylococci and oïdia (1), and with streptococci, staphylococci and oïdia (2).

The pseudo-bacilli (Hoffman) are sometimes regarded as a modified form of the Klebs-Lœffler bacilli, and if this be so, the importance of isolating patients suffering with pseudo-diphtheritic throats becomes apparent. The Lambeth experience is that pseudo-throats are infectious, and in all cases, therefore, the usual precautions have been taken (*viz.*, notification, isolation, disinfection, etc.), but as Medical Officer I have not felt justified in recommending removal to hospital, as I am not yet satisfied that it would

be right to place a pseudo patient in a ward full of acute Klebs-Löffler patients.

An outbreak of sore throats in a school in Lambeth was carefully investigated, and in very many cases pseudo-bacilli were isolated from the throats of the scholars, servants, and teachers; whilst in 3 cases the true Klebs-Löffler bacilli were isolated, pointing apparently to the two kinds of bacilli being related in some way. That the pseudo-throats were infectious and "catching," there was no room for doubt, whilst in one case (not connected with the school) true diphtheritic paralysis apparently supervened, though the true Diphtheria bacilli (Klebs-Löffler) were not at any examination found. In connection with this particular school outbreak, inquiries elicited the fact that throat troubles had been more or less prevalent for many months past, though no case had been sufficiently marked in its clinical symptoms to justify the medical attendant in notifying it as Diphtheria. These throats had been apparently pseudo-throats and either proved finally a suitable nidus for the development of the true bacillus of Diphtheria, or gradually passed into the more serious and virulent Diphtheria attacks due to the Klebs-Löffler (or true Diphtheria) bacilli. A further interesting feature of the outbreak was that on examining the slimy deposits in the waste-pipes of the lavatory basins in the dormitories and in the outlets of the open rectangular trough underneath the basins, a pure culture of the Klebs-Löffler bacillus was obtained—a fact verified in another bacteriological laboratory. The slimy deposits were found to consist of organic and other débris (skin scales, washing from mouths, soap, &c.), and the warm water used for washing daily was continually passing over

them, thereby ensuring a suitable temperature for the growth of the bacillus which was apparently inoculated upon this most suitable medium from the throats of one or more of the scholars. The open troughs were of iron (galvanized) and wood, and their states, on examination, such as to leave no doubt in the minds of those who saw them that they had acted as a source of danger, and had doubtlessly helped to cause, or caused, the ill-defined throat troubles (for months past), and the recent subsequent outbreak of true Diphtheria. These open troughs were condemned and done away with—a course of action advisable for other schools that may be fitted with such appliances. The pseudo- and the true- Diphtheria patients were isolated, and the school closed, pending the remodelling and reconstructing of its sanitary arrangements, which were found defective and old-fashioned.

Isolation of pseudo-throats has been practised in Lambeth with very good results, and the Lambeth example might, with advantage, be followed elsewhere, where this is not already done. It is common knowledge that the large increase in the number of Diphtheria cases appears to be due (in part) to the fact that slight cases of infectious throats are not detected, and consequently allowed to be a source of danger to others. All sanitarians are agreed, therefore, as to the necessity for frequent bacteriological examinations of swabs taken in all cases of doubtful throat complaints. The large number of swabs sent in for examination in Lambeth is cause for congratulation, and it is hoped that the Medical Practitioners will not hesitate to make as much use as possible of the opportunities offered by the Vestry. Bacteriological diagnosis is now a recognised necessity as an aid, especially in cases of suspected Diphtheria or other infectious throat complaints.

Other examinations.

One sample of urine was submitted and examined for tubercle bacilli, which were not found; whilst a scraping from a suspected charbon ulcer of the face did not shew the presence of anthrax bacilli, though many streptococci and oïdia were cultivated.

1899.	SPUTA. Tub. Bac. found.			*BLOODS. Typhoid reaction obtained.			THROAT MEMBRANES AND DISCHARGES. Klebs-Loeffler bac. found.			OTHER EXAMS. † Bacilli found.		
	Yes.	No.	Total.	Yes.	No.	Total.	Yes.	No.	Total.	Yes.	No.	Total.
JAN.	2	1	3	2	—	2	1	—	1	—	—	—
FEB.	1	—	1	2	—	2	—	—	—	—	—	—
MAR.	6	8	14	2	2	4	2	2	4	—	—	—
APRIL	—	7	7	—	3	3	8	7	15	—	—	—
MAY	5	9	14	—	3	3	6	1	7	—	—	—
JUNE	2	8	10	2	4	6	7	10	17	—	—	—
JULY	3	2	5	1	2	3	5	8	13	—	—	—
AUG.	1	2	3	1	2	3	4	5	9	—	—	—
SEPT.	4	2	6	3	10	13	13	8	21	—	—	—
OCT.	4	6	10	6	10	16	25	20	45	—	—	—
NOV.	2	6	8	11	5	16	21	28	49	—	1	1
DEC.	3	6	9	10	—	10	9	26	35	—	1	1
Total	33	57	90	40	41	81	101	115	216	—	2	2

* Slight or feeble reaction in five of the cases.

† One was a case of suspected anthrax, and the other of suspected tuberculous kidney.

SEWER VENTILATION.

The question of Sewer Ventilation is one that has engaged the special attention of the Vestry during 1899, and the following series of recommendations (jointly suggested by the Medical Officer of Health and the Surveyor) were adopted, to be carried out subject to the previous approval of the Vestry:—

1. The freer the ventilation of Sewers, the better, as by such means oxidation and dilution of Sewer gases are effected, and the sewer gases thereby rendered practically harmless.
2. Granted a Sewer in a fairly good condition, and situated in a fairly wide road, surface road ventilation is satisfactory, provided a sufficient number of open ventilating grids are supplied at regular, frequent intervals (the grids being not more than 100 feet apart) *i.e.*, the greater the number of open ventilating grids, the less the nuisances arising from offensive smells.
3. Shafts may also, with advantage, be used, but only (as a rule) in addition to, and not instead of, open road ventilating grids.
4. There should be careful, regular and systematic flushing of Sewers, clearing out of deposits, with relaying of such Sewers as may be, at any time, found to be defective and worn out—a routine practically adopted, at present, by the Vestry.
5. The substitution of glazed pipe Sewers (with improved fall) in place of the small brick barrel Sewers (with little or no fall) which are to be found in great numbers in the lower level districts of Lambeth.
6. The closing of all open ventilating grids in narrow and crowded streets, courts, alleys and passage-ways, and the

substitution therefor of ventilating shafts of sufficient calibre (not less than 6")—one shaft being always taken, if practicable, from the highest point of the Sewer, which, if a stunted or dead end, should be tacked on to a neighbouring Sewer, to allow of free circulation of air.

7. The upward movement of air in shafts is increased by gas, which, when burning, acts as an exhaust; so that no difficulty should be placed in the way of the London County Council in their endeavour to relieve the pressure in the Sewers (over which they have jurisdiction), by erecting ventilating extraction shafts, which are in the form of large lamps placed upon street refuges.

The proper ventilation of sewers is an important matter, and the middle course seems to be the best, *i.e.*, to avoid, on the one hand, the view that no ventilation at the street level is necessary, and, on the other, the view that sewer gas is perfectly innocuous, and can, therefore, be allowed to escape at any and every position in the public thoroughfares, irrespective of the width of such thoroughfares. Properly laid sewers, efficiently flushed, are a *sine quâ non*.

The Clerical work in connection with the Department during 1899 deserves recognition, and will best be realised in the form of the following statement :—

	1899.	1898.	1897.	1895.	
Letters, etc., received (entered in letter book)	9010	8974	8309	7625	
*Letters, etc., sent out (entered in postal book)	26039	25892	24821	25980	
Notices served {	Infectious Diseases	2435	2094	2374	2327
	Public Health Preliminary Acts } Statutory ...	7676	8375	8714	6222
	Housing of Working Classes Act	2427	2004	2018	1985
Cases entered in Inspectors' Report Books	42	44	33	55	
Complaints entered in book	9006	8725	8337	6767	
Copies of Infectious Diseases Notifications—	6079	5620	4915	3768	
(a) Entered in Notification Book	2693	2329	2663	3202	
(b) Sent off to Asylums Board	2693	2329	2663	3202	
Notices of Infectious Diseases sent to Schools	2435	2094	2663	2576	
Workshops (with full particulars) entered up in Register	89	134	245	255	
Cowsheds (with full particulars) entered up in Register	—	—	8	32	
Slaughter-houses (with full particulars) entered up in Register	—	46	—	—	
Bakehouses (with full particulars) entered up in Register	—	1	247	—	
Water Certificates for New Dwellings given out	126	131	215	89	
Disinfection Certificates given out	2689	2094	159	109	
Stamps used	21256	19151	20141	20925	
Reports to Committees (Fortnightly)	20	21	20	20	
Reports to Vestry (Monthly and Quarterly)	17	17	17	17	
Special Reports	13	6	12	6	

There are 3 clerks—a chief (W. R. Lawrence), a second (A. L. Baxter), and a junior (W. J. Lawrence)—two of whom are able to type and shorthand write ; whilst Inspector Emblin assists also in the clerical work, being engaged chiefly indoors.

* 4,999 letters were typed during the year 1899, as compared with 5,052 during 1898, 5,538 during 1897, and 4,350 during 1896 (8 months).

Metropolitan Districts		Registration London	
Year	Rate	Year	Rate
1851	21.5	1851	21.5
1852	21.5	1852	21.5
1853	21.5	1853	21.5
1854	21.5	1854	21.5
1855	21.5	1855	21.5
1856	21.5	1856	21.5
1857	21.5	1857	21.5
1858	21.5	1858	21.5
1859	21.5	1859	21.5
1860	21.5	1860	21.5
1861	21.5	1861	21.5
1862	21.5	1862	21.5
1863	21.5	1863	21.5
1864	21.5	1864	21.5
1865	21.5	1865	21.5
1866	21.5	1866	21.5
1867	21.5	1867	21.5
1868	21.5	1868	21.5
1869	21.5	1869	21.5
1870	21.5	1870	21.5
1871	21.5	1871	21.5
1872	21.5	1872	21.5
1873	21.5	1873	21.5
1874	21.5	1874	21.5
1875	21.5	1875	21.5
1876	21.5	1876	21.5
1877	21.5	1877	21.5
1878	21.5	1878	21.5
1879	21.5	1879	21.5
1880	21.5	1880	21.5
1881	21.5	1881	21.5
1882	21.5	1882	21.5
1883	21.5	1883	21.5
1884	21.5	1884	21.5
1885	21.5	1885	21.5
1886	21.5	1886	21.5
1887	21.5	1887	21.5
1888	21.5	1888	21.5
1889	21.5	1889	21.5
1890	21.5	1890	21.5
1891	21.5	1891	21.5
1892	21.5	1892	21.5
1893	21.5	1893	21.5
1894	21.5	1894	21.5
1895	21.5	1895	21.5
1896	21.5	1896	21.5
1897	21.5	1897	21.5
1898	21.5	1898	21.5
1899	21.5	1899	21.5
1900	21.5	1900	21.5

APPENDIX.

Death-rates (General and Zymotic) for London

METROPOLITAN DISTRICTS.	Death-rate (corrected).	Zymotic Death-rate (corrected).	Infantile Mortality Rate.	Diarrhoea Rate.	Typhoid Fever Rate.	Diphtheria Rate.	Scarlet Fever Rate.	Phthisis Rate.
Registration London ...	19'3	2'46	166	0'92	0'17	0'43	0'09	1'82
WEST.								
Paddington ...	16'1	1'55	151	0'83	0'07	0'23	0'04	1'15
Kensington ...	17'7	1'53	180	0'59	0'14	0'25	0'06	1'34
Hammersmith... ..	19'0	2'11	183	0'93	0'21	0'23	0'12	1'72
Fulham ...	19'2	3'23	189	1'40	0'19	0'45	0'25	1'83
Chelsea ...	19'6	2'13	164	0'66	0'19	0'27	0'08	1'79
St. George's, Hanover Square ...	14'2	1'09	129	0'36	0'11	0'15	0'09	1'36
St. Margaret and St. John, Westminster ...	22'3	1'64	207	0'75	0'17	0'19	0'10	3'31
St. James', Westminster	17'9	1'12	142	0'37	0'14	0'14	0'05	2'11
NORTH.								
St. Marylebone ...	18'6	1'70	124	0'72	0'19	0'26	0'11	1'98
Hampstead ...	11'6	1'16	129	0'44	0'05	0'19	0'07	0'84
St. Pancras ...	20'3	2'69	178	0'95	0'17	0'46	0'10	2'01
Islington ...	18'1	2'30	160	0'74	0'14	0'36	0'10	1'59
Stoke Newington ...	12'7	1'33	103	0'54	0'14	0'17	0'09	0'88
Hackney ...	16'9	2'22	153	0'87	0'16	0'40	0'07	1'50
CENTRAL.								
St. Giles ...	19'9	1'40	112	0'70	0'11	0'13	—	3'13
St. Martin's-in-the-Fields ...	15'6	1'07	203	0'50	0'0	0'08	—	1'82
Strand ...	22'7	1'30	189	0'74	—	0'30	0'04	2'70
Holborn ...	24'9	2'23	226	0'88	0'24	0'20	0'10	3'08
Clerkenwell ...	22'6	3'04	193	1'06	0'35	0'42	0'20	2'32
St. Luke ...	28'4	3'03	149	1'45	0'15	0'25	0'20	2'33
City of London ...	21'5	1'36	144	0'32	0'43	0'25	0'04	2'19



and the Metropolitan Districts during 1899.

METROPOLITAN DISTRICTS.	Death-rate (corrected).	Zymotic Death-rate (corrected).	Infantile Mortality Rate.	Diarrhoea Rate.	Typhoid Fever Rate.	Diphtheria Rate.	Scarlet Fever Rate.	Phthisis Rate.
EAST.								
Shoreditch ...	23'8	3'64	204	1'64	0'21	0'51	0'11	2'10
Bethnal Green ...	22'8	3'1	174	1'21	0'30	0'46	0'07	2'36
Whitechapel ...	21'1	2'12	147	0'57	0'18	0'33	0'02	2'39
St. George-in-the-East	27'1	3'44	200	1'22	0'19	0'2	0'06	2'50
Limehouse ...	25'6	3'78	216	1'21	0'38	0'58	0'02	2'30
Mile End Old Town ...	21'3	2'72	158	0'98	0'23	0'58	0'04	1'82
Poplar ...	22'1	3'41	176	1'45	0'22	0'45	0'0	2'14
SOUTH.								
St. Saviour's ...	25'1	3'51	203	1'41	0'04	0'70	0'08	3'44
St. George-the-Martyr, Southwark ...	27'7	4'53	205	1'69	0'13	1'04	0'10	3'53
Newington ...	24'0	3'67	191	1'00	0'19	0'84	0'10	2'62
St. Olave ...	24'9	2'61	147	0'54	0'18	0'81	0'18	2'53
Bermondsey ...	24'1	3'46	187	0'96	0'21	1'03	0'12	2'14
Rotherhithe ...	21'1	2'80	170	0'78	0'27	0'78	0'27	1'83
Lambeth ...	19'2	2'65	158	0'93	0'16	0'51	0'08	1'75
Battersea ...	16'7	2'22	162	0'66	0'22	0'36	0'08	1'59
Wandsworth ...	15'3	1'89	153	0'84	0'09	0'33	0'04	1'21
Camberwell ...	17'4	2'52	158	0'90	0'12	0'61	0'07	1'53
Greenwich ...	18'8	2'76	167	1'12	0'16	0'40	0'09	1'54
Lee ...	15'1	2'06	141	0'67	0'10	0'35	0'10	1'00
Lewisham (excluding Penge) ...	16'3	2'23	143	1'00	0'12	0'75	0'07	1'15
Woolwich ...	21'2	2'44	163	1'09	0'12	0'51	0'10	2'46
Plumstead ...	14'3	1'35	124	0'80	—	0'25	0'09	1'47

N.B.—These Returns are taken from the Registrar-General's Annual Summary.

Where no Death occurred, — is inserted.

REPORT ON
VENTILATION OF SEWERS.

(Adopted by the Vestry on April 12th, 1899).

The three Reports published by the London County Council, shewing the results of investigations conducted by Mr. J. Parry Laws and Dr. Andrews on the Composition and Bacteriology of Sewer Air and Sewage, throw little, if any, further light on the dangers of sewer air in regard to the subject of sewer ventilation. It would appear from the Reports that sewer air is not quite so deadly as some have hitherto supposed, regarded, that is, from the standpoint of the germs it contains; and that, though it is only circumstantial evidence that points to sewer air and zymotic disease being *causally* related, it may be that its danger in this respect is an *indirect* one, and due to some highly poisonous chemical substance (possibly of an alkaloidal nature) which with the CO₂ (carbonic acid) in excess may produce a profound effect upon the general vitality. No evidence of this latter contention is, at present, forthcoming however, but it would be still unwise to assume that sewer air is harmless because it may contain but few organisms, as shewn by bacteriological experiments.

In Lambeth, considering the large number of open sewer ventilators in the roadways, complaints are comparatively few, and in only rare instances does any illness arise which can be fairly attributed in any degree to offensive emanations arising therefrom. It is presumable, therefore, that oxidation and dilution of sewer gases rapidly render them inert, and as a corollary it follows that the freer the

ventilation of the sewers, the better. The systematic blocking up and closing of road ventilators tends to prevent this free ventilation, and ought, therefore, to be discouraged; nor is there any necessity for the *closing* of an open ventilator until other means have first been tried to abate any nuisance arising from offensive smells in connection therewith—*e.g.*, careful flushing and cleansing of manholes; clearing away of sewer deposits, when found to exist; increasing the number of open ventilators; erection of shafts, but only in addition to, and not in place of, open manhole ventilators, &c.

The necessity for diluting and oxidising sewer air as much as possible is admitted when it is remembered that putrefactive changes, taking place in the contents of sewers, give rise to the evolution of certain organic and other gases which, if allowed to accumulate under pressure, will tend to escape into (or near) houses from the points of least resistance, *viz.*, defective house drains and traps, &c. It is true that the continued inhalation of these gases for any length of time in confined spaces tends to produce fever, anæmia, loss of appetite, depressed vitality, prostration, headache, sore throat, and general loss of health—a condition of things that may be produced by such gases escaping through openings into the sleeping and living rooms of houses, into narrow streets near to houses, courts or alleys; but not necessarily when escaping into a fairly wide thoroughfare (not less than 30 ft.)—the rapid dilution and oxidation making all the difference in this latter case. In sewers which are properly laid, carefully planned, well flushed and ventilated, these putrefactive gases are at a *minimum*; but at a *maximum* in sewers badly laid, defective, unflushed, and ill-ventilated.

The practical conclusions are obvious :—

1. In old, ill-kept, defective sewers—in so-called sewers of deposit, or elongated cesspools, open grids in narrow and crowded streets and courts or alleys must be more or less nuisances, and ought, therefore, to be closed, and suitable (adequate) compensatory ventilation by shafts (or otherwise) provided. In wider thoroughfares, however, the nuisance from open grids must be very much less, and the gases practically rendered harmless by oxidation and dilution as they issue therefrom.
2. In new, properly constructed sewers, with adequate fall, good flushing, and a fairly rapid flow, open grids may be disregarded from the point of view of nuisance, except, perhaps, in very rare instances, when they may prove *temporarily* to be so under certain atmospheric and other conditions, *e.g.*, when inlets act as outlets; when hot water or steam is sent into a sewer, thereby causing increased putrefactive changes with consequent increased evolution of gases; when the open grids are too few in number and the distances between individual ones greater than, say, 50 yards, thereby preventing proper oxidation and dilution of the gases; when waste products from factories, breweries, chemical works, &c., are run into the sewers, and the fumes arising therefrom given off from neighbouring open manholes, &c.

The principle of thoroughly ventilating sewers is good, and granted a fairly wide thoroughfare, and a fairly good sewer, I do not think I should be justified in condemning the method by open manholes on the crowns of the sewers

in the centre of the roads. No open ventilating manholes should, however, I think, be allowed in courts, alleys, or narrow streets, but such manholes should be closed and ventilating pipes of sufficiently large calibre run up adjoining property—one at least from the top end of the sewer, where practicable.

In conclusion, when a grid is complained of, let the inspector be satisfied as to the *bona-fides* of the complaint (for *closed* grids and shafts *unconnected* with sewers have in my experience, been complained of before now), and then let the offending grid be treated on its merits, on lines similar to those which I have laid down, *e.g.*, by flushing, by removal of deposits, by making more openings into the same sewer or by erection of large-sized shafts for compensatory ventilation with or without closure of the manholes, as may be found necessary. I am not aware, speaking generally, that the open grids in Lambeth have proved a danger to the public health. Statistics would seem to point to the contrary.

I append the conclusions arrived at by the Conference of Engineers and Surveyors of the various Metropolitan Vestries and District Boards, and the resumé of the three Reports presented to the London County Council by Mr. J. Parry Laws and Dr. Andrews.

JOSEPH PRIESTLEY,

February 6th, 1899.

Medical Officer of Health.

Resumé of Three Reports on Sewer Air

Acting on the instructions of the Sanitary Committee, I have prepared an abstract of the three following Reports

presented to the Main Drainage Committee of the London County Council :—

- (a.) Sewer Air Investigations, I., by J. Parry Laws, F.I.C. (May, 1892).
- (b.) Sewer Air Investigations, II., by J. Parry Laws, F.I.C. (December, 1893).
- (c.) Investigations on the Micro-organisms of Sewage, by Messrs. J. Parry Laws, F.I.C., and Frederick W. Andrews, M.D. (December, 1894).

(a.) The experiments were made in the King's Scholars' Pond Sewer, which runs from Piccadilly in the north to Buckingham Palace Road in the south, and was constructed 120 years ago.

CONCLUSIONS DRAWN FROM EXPERIMENTS.

1. The micro-organisms in the sewer air are related to the micro-organisms in the air outside, and not to the micro-organisms of the sewage.
2. In the air both within and without the sewer, the forms of micro-organisms present are almost exclusively moulds and micrococci; on the contrary, the micro-organisms of sewage are for the most part bacilli.
3. That for purposes of deodorising, manganate of soda + sulphuric acid, and carbolic acid are more efficient than sulphurous acid or manganate of soda alone, and, setting aside the question of relative cost, the manganate of soda + sulphuric acid is decidedly the best, the disagreeable smell of the sewer air being removed completely thereby.

(N.B.—The sewage was deodorised in each case for 24 hours previous to experiment.)

The principal, if not the only, source of micro-organisms in sewer air, is the air without the sewer and not the sewage, and there is very little ground for supposing that the micro-organisms of sewage, *in the absence of violent splashing*, become disseminated in the sewer air.

5. The sewer air contained 2 to 10 times as much carbonic acid as the neighbouring fresh air (taken at the same time), and no sulphuretted hydrogen gas was found.

(b.) The experiments were made with an air shaft erected at the Pimlico Pumping Station; an experimental sewer (9-in., 80 feet long), laid in the Pump Room at Pimlico Station; and the Fulham Road sewer (400 yds. long), close to the Town Hall, Fulham—a sewer containing a large amount of heavy deposit, and being otherwise in a most filthy condition and unventilated.

CONCLUSIONS DRAWN FROM EXPERIMENTS.

1. Considerable increase in the velocity of the air current does not produce an increase in the number of micro-organisms found in the sewer air.
2. The conclusions obtained by experiment in a large sewer (the King's Scholars' Pond sewer) hold good for a small sewer (the experimental 9" sewer).
3. In an experimental sewer (9"), wherein the sewage was allowed to remain stagnant for several weeks (the pipe being filled to the extent of two-thirds of its sectional area), the sewer air was found to contain very many more micro-organisms (entirely moulds) than the air outside; at least, in two out of the six experiments made, a condition of things difficult of explanation.
4. In a filthy, unventilated sewer (containing deposit), the

number of micro-organisms found in the sewer air was particularly low.

5. Micro-organisms found in sewer air appear to come from the fresh air outside (passing into the sewers by ventilation), and not from the sewage or sewer walls, and are chiefly moulds and micrococci (as found in fresh air) and not bacilli and moulds (as found in sewage), the ratio of micrococci to bacilli being, in the case of sewer air and fresh air, about five to one. Further, the bacillus coli communis and micrococcus ureæ are absent from sewer air, as are also, with very few exceptions, organisms capable of very rapidly liquefying gelatine, though all these organisms are found in immense quantities in sewage.

6. It is impossible to ignore the evidence, though it is only circumstantial, that sewer air in some instances has had some causal relation to zymotic disease—the danger of sewer air causing disease being, perhaps (though at present no evidence is forthcoming), an indirect one, *e.g.*, the sewer air containing some highly poisonous chemical substance, possibly of an alkaloidal nature, which, though present in but minute quantities, may, nevertheless, produce, in conjunction with the large excess of carbonic acid, a profound effect upon the general vitality.

(c.) Results of a detailed examination and cultivation of the various micro-organisms of sewage.

CONCLUSIONS.

1. The study of the sewage bacteria fully confirms the conclusion given in the two previous Reports, *viz.*, that there is no relationship between the organisms of sewer air and sewage.

It is possible that some of the ill-effects which have been erroneously ascribed to sewer air may be due to

subsoil air derived from soil polluted by constant infiltration of excremental matter through a leaky drain—the outer margin of the infiltrated area becoming sufficiently dry to give off micro-organisms to the subsoil air, which then may gain access to dwellings, either through the pressure of the wind on the surface of the ground, or from currents induced by wide differences between the exterior and interior temperatures.

2. Sewage does not form a medium in which much, if any, growth of the typhoid fever bacilli takes place under natural conditions, and the death of these bacilli takes place in a few days, or in, at most, one or two weeks—the interval allowing, however, of the disease being transferred from place to place by sewage. The air of sewers is extremely unlikely to convey typhoid fever.

JOSEPH PRIESTLEY.

London County Council.

VENTILATION OF SEWERS.

REPORT BY ENGINEER AS TO THE RESULT OF A CONFERENCE OF ENGINEERS AND SURVEYORS OF THE SEVERAL VESTRIES AND DISTRICT BOARDS OF THE METROPOLIS.

To the Main Drainage Committee—

In accordance with the instructions of the Committee I issued two circular letters to the Engineers and Surveyors of the various Vestries and District Boards in the County, inviting them to a Conference on the subject of the Ventilation of Sewers, with a view to some uniform system being

adopted, if possible, for dealing with complaints of offensive emanations from gratings connected with both local and main sewers.

In response to the invitation a meeting was held at the County Hall, on Friday, 25th February, at which upwards of forty of the gentlemen invited were present. A list of those who signed the attendance book, together with the names of the districts represented by them, is appended hereto.

The discussion on the subject of the ventilation of sewers occupied a period of over two hours and resulted in the following resolutions being passed, namely—

1. That the closing of sewer ventilators in response to complaints increases the general evil, the diminution of which is to be attained by the multiplication of the ventilators at regular frequent intervals.
2. That in connection with any interceptor hereafter fixed on a main house drain it is advisable to carry up a ventilating pipe from the sewer side of the interceptor, up the front, side, or back of the house, to the satisfaction of the local sanitary authority, and that the outlet drain from the interceptor shall not be flap-trapped in sewer, unless required by the local sanitary authority.
3. That pipe ventilators up buildings, or otherwise where possible, should always be adopted, in addition to surface ventilation.

It will be observed that the general result of the Conference has confirmed the action of the Committee and the Council in recent years, and that the remedy for sewer emanations is to be looked for from the maintenance of

more frequent ventilating openings, both at the street level and by means of pipes carried up houses and other buildings.

I would suggest that, as the meeting was a very representative one, this report be printed, and that copies be sent to each member of the Council and to the Engineers and Surveyors of the District Boards and Vestries in the Metropolis.

ALEX. R. BINNIE,
Chief Engineer.

Spring Gardens, S.W.,
24th March, 1898.

*List of Engineers and Surveyors, together with the
Districts represented—*

Name.	District.
Baker, H.	... Newington.
Blair, W. N.	... St. Pancras.
Botterill, C.	... Fulham.
Burgess, S. E.	... Stoke Newington.
Carline, J. ...	... Lewisham.
Dodd, P. ...	... Wandsworth.
Dunch, T. H.	... Limehouse.
Findlay, R. ...	... Eltham.
Gow, W. C.	... Plumstead.
Heckford, H.	... St. Luke's.
Higgins, T. W. E. ...	... Chelsea.
Killick, P. G.	... Clerkenwell.
Livingstone, G.	... St. George's, Hanover Square.
Lovegrove, J.	... Hackney.
Lowe, C. H.	... Hampstead.
Mair, H. ...	... Hammersmith.

Marten, H. J.	...	Streatham and Tooting.
Mason, C.	... ..	St. Martin-in-the-Fields.
Monson, H.	...	St. James, Westminster.
Norrington, J. P.	...	Lambeth.
Oxtoby, W....	...	Poplar.
Pilditch, J. T.	...	Battersea.
Radford, J. C.	...	Putney.
Ross, D. J. ...	...	City.
Rowland, J.	...	Old Charlton.
Rush-Dixon, J.	...	Shoreditch.
Scorgie, N. ...	...	Rotherhithe.
Slater, F. J.	...	Camberwell.
Southam, A.	...	Clapham.
Sumner, F. ...	...	Bermondsey.
Thomas, H. O.	...	Woolwich.
Thompson, G. W.	...	St. Olave.
Ventris, A. ...	...	Strand.
Waddington, J. P.	...	Whitechapel.
Wallace, G.	...	St. Giles.
Weaver, W....	...	Kensington....
Wheeler, G. R. W.	...	Westminster.
Winter, O. E.	...	St. George-the-Martyr, Southwark.
Woods, H. ...	...	Lee.

REPORT ON
NEW BYE-LAWS (DRAINAGE)

SUGGESTED BY THE LONDON COUNTY COUNCIL.

(Adopted by the Vestry on July 20th, 1899).

The amendments and extensions proposed in the new Bye-laws suggested by the L.C.C. are as follows:—

(1.) Where soil-pipes of *new* Buildings are required, under the present Bye-laws, to be in all cases fixed outside, the proposed new Bye-laws insert the convenient, but elastic words “where practicable,” a modification which applies to old buildings, both in the present Bye-laws and in the proposed new Bye-laws. Inside soil-pipes are, by the proposed new Bye-laws, to be made of drawn lead only, and not of drawn lead or heavy cast iron as allowed in the present Bye-laws; whilst joints are to be properly wiped plumbers’ joints, and the soil-pipes are to be easily accessible.

(2.) In the case of iron soil-pipes being used outside, the proposed Bye-laws give certain thicknesses of iron, as well as weights, which are to be used, the present Bye-laws giving weights only; whilst in addition, the joints in connection with the iron pipes will be required, by the proposed new Bye-laws, to be $2\frac{1}{2}$ -in. deep in sockets, and the actual spaces round the joints to be not less than $\frac{1}{4}$ -in. wide for $3\frac{1}{2}$ -in. and $4\frac{1}{2}$ -in. pipes, and not less than $\frac{3}{8}$ -in. wide for 5-in. and 6-in. pipes. Further, in the event of flanged joints being used, they are to be securely bolted together with some suitable insertion.

(3.) Anti-syphonage pipes (*i.e.*, ventilating pipes taken off the out-goes of W.C. traps) are, by the proposed new Bye-laws, to be made either of drawn lead or of heavy cast iron, of certain weights and thicknesses, and of drawn lead only when such anti-syphonage pipes are inside buildings—conditions not mentioned in the present Bye-laws.

(4.) Full details are given in the proposed new Bye-laws as to proper connections between—

- (a.) Lead soil-pipes and iron or stoneware drains;
- (b.) Stoneware W.C. traps and iron or lead soil-pipes
- (c.) Iron soil-pipes and stoneware drains.

(5.) Both the proposed new Bye-laws and the present Bye-laws prohibit any connections between soil-pipes and (1) rain-water pipes, or (2) the wastes of baths or sinks, other than those provided for the reception of urine and other excremental filth, and also prohibit the use of traps in soil-pipes, or soil-pipes and any drains with which they are connected.

JOSEPH PRIESTLEY,
Medical Officer of Health.

July 10th, 1899.

REPORT ON ANTI-TOXIC TREATMENT OF DIPHTHERIA.

(Adopted by the Vestry on August 3rd, 1899.)

It is now generally admitted, by those best able to form an opinion, that the Anti-toxic treatment of Diphtheria gives the best results of all treatments, as shewn not only by the lowering of the mortality from, but also by the amelioration of the symptoms of, that particular disease. Statistics published by the Metropolitan Asylums Board shew that, if the Anti-toxin is injected in the very earliest stages of the disease, the mortality is reduced considerably, as follows:—

Cases treated on first day, mortality reduced from 22·5 to 4·7 per cent.

Cases treated on second day, mortality reduced from 27 to 12·8 per cent.

Cases treated on third day, mortality reduced from 29·4 to 17·7 per cent.

Cases treated on fourth day, mortality reduced from 31·6 to 22·5 per cent.

Cases treated on fifth day, mortality reduced from 30·8 to 24·6 per cent.

Of all the cases treated, the mortality has been reduced from 29·6 to 20·8 per cent.

The results are more remarkable when examined from the point of view of the patients' ages. Thus:

Under 5 years of age, the mortality has been reduced from 47·4 to 30·2 per cent.

Under 10 years of age, the mortality has been reduced from 37·2 to 24·6 per cent.

Under 15 years of age, the mortality has been reduced from 33·6 to 22·6 per cent.

The last Report of the Metropolitan Asylums Board shews that 80 per cent. of the Diphtheria cases sent to hospital were treated with Anti-toxin, and it is only fair, therefore, that the same means should be adopted whereby all cases might be treated in the same way as early as possible, not only those cases that will eventually be removed to hospital, but also those remaining for treatment at their homes.

The average dose for injection is 1,000 units, and the cost of this is 1s., or slightly less. Taking the Lambeth statistics, the annual average of Notification Certificates received in respect of Diphtheria and Membranous Croup for the eight years 1890-7 is 588; whilst during last year, 1898, the total number of Notification Certificates received was 829, and 65·8 per cent. of these latter cases were removed into hospital. The corresponding annual average of deaths from the two diseases mentioned is 122, with a total of 115 during 1898.

Assuming 600 as a fair average of cases notified yearly, the cost to the Vestry to supply (for the treatment of all the cases) Anti-toxic Serum gratuitously to the Medical Practitioners in Lambeth would be only £30, and I advise, accordingly, the gratuitous distribution to members of the Medical Profession (in Lambeth) of Anti-toxic Serum for the treatment of patients (living in Lambeth) notified as suffering from Diphtheria; whilst I also suggest that means should be adopted for the same Medical Practitioners to be supplied with Serum at a charge of 1s. per 1000 units tube, for use in the treatment of their patients who do not reside in the Parish.

JOSEPH PRIESTLEY,
Medical Officer of Health.

July 24th, 1899.

REPORT ON
LOCAL OUTBREAKS OF TYPHOID FEVER
IN LAMBETH.

(Adopted by the Vestry, November 23rd, 1899).

There has been recently in Lambeth an increase in the number of cases of Typhoid Fever, *i.e.*, over the Autumnal average, and in my investigations I have succeeded in tracing the source and spread of three local epidemics, the histories of which are interesting from an etiological point of view. Typhoid Fever is generally regarded as a water-, or milk-, or (recently) shellfish-borne disease, its spread by actual contact from person to person being considered somewhat rare, so that the subjoined details are noteworthy as shewing that in all probability Typhoid spreads by actual contact oftener than is generally supposed—difficulties in the latter case in collecting the facts and shewing their inter-relationship being considerable. The contagium is the Typhoid bacilli of Eberth, which pass from the patients in large quantities through the bowels and the kidneys, and so may infect other persons, directly by contact, or indirectly through food, thereby rendering extreme cleanliness of person amongst those attending upon the sick, of the greatest importance. The details are as follow:—

GROUP I.—Louisa J. (age 37 years), living at 7, M—
Place, off the Wandsworth Road, was ill with obscure symptoms which were eventually shewn to be those of Typhoid Fever, and the case was, after the disease had run a few weeks of its course, notified, and the usual precautions then taken. It was too late, however, as the disease had already directly spread —

- (1.) To a daughter, Ada J., 10 years of age, living at the same house ;
- (2.) To a friend's two children, Frank and Edith S., aged $4\frac{1}{2}$ years and 11 years, living at 8 M—Place (this house being opposite to No. 7, in the same narrow and confined court), whilst Frank S., at 8, M—Place, gave the disease to his brother Fred (17 years of age), with whom he slept ;
- (3.) To a friend, Ada M., aged 30, living at 5, M—Place, two doors removed from No. 7, and, of course, in the same narrow court.

By means of a house-to-house enquiry, no more cases were found in the Court, and all the patients were removed to hospital, and the houses and their contents thoroughly disinfected, and the walls of the infected rooms, in each case, stripped. The roadway of the court was found to be in an unsatisfactory state, and has been attended to by the Surveyor; whilst the houses (14 in number) have been thoroughly inspected, and since registered by the Vestry under Houses Let in Lodgings. No further case has since occurred in this district—a satisfactory result, as there were at the time several centres of infection in a crowded court, consisting of 14 houses, containing 56 rooms, with 23 families, numbering in all 132 persons, 59 being children under 10 years of age—the conditions of the persons themselves, and their crowded and dirty surroundings, being such as to form a suitable nidus for the rapid growth of Typhoid germs.

The exact source of the first case (Louisa J.) of Group I. could not be traced.

Group II.—Joseph H. (aged 22 years), living at 42, B—Street, sickened with obscure symptoms (which afterwards proved to be due to Typhoid Fever), with the result that the case was not at first notified, and the usual precautions were, therefore, not taken, in the way of isolation, etc., until three or four weeks of the illness had gone, during which time the patient was a source of infection to others, as shewn by the disease spreading directly—

- (1.) To a lodger, Thos. M. (aged 29 years), living in the same house ;
- (2.) To a sister, Annie H. (aged 15 years) living at 4, R—Place, a street close by ;
- (3.) To a friend, John T. (age 20 years), living at 49, B —Street ;
- (4.) To a friend, William T. (aged 30 years), living at 67, B— Street, and he has since given the disease to his daughter, Clara T. (aged 9 years) ;
- (5.) To two other persons living in the same street, Ernest J. (aged 10 years), of 32, B—Street ; and Harriet F. (age 30 years), of 71, B—Street ; but a relationship between these cases and the others could not be definitely traced, though it was rendered highly probable by the histories as to dates of sickening, etc.

Some of the above cases were discovered as the result of a house-to-house enquiry, and all the patients were removed to hospital, and the houses, and their contents, thoroughly disinfected, and the walls of the infected rooms, in each case, stripped. No further case has since occurred in this district.

M— Place is a court opposite to R— Place, which is a short street, leading to B— Street, but no inter-communication could be proved between the cases of Group I. and those of Group II., except perhaps in the local public house, which was (so it is reported) frequented in common, as also a general dealing shop at the corner of M— Place.

The exact source of the first case (Joseph H.) of Group II. could not be traced.

GROUP III.—John L. (age 26 years), living at a house in Lower Kennington Lane, sickened with obscure symptoms about August 12th, and eventually died without the Medical man in attendance recognising the disease as Typhoid Fever, although in all probability it was so, as shewn by subsequent events. During his illness and after death, his clothes, bedding, etc., were removed from time to time to be washed, to 59, W— Street, his mother-in-law's house, and directly infected—

(1.) His mother-in-law, Matilda J. (age 47 years), living at 59, W— Street ;

(2.) A brother-in-law, Harry J. (age 15 years), living at 59, W— Street ;

(3.) A sister-in-law, Sophia J. (age 24 years), living at 59, W— Street ; [and Sophia J. gave the disease to a friend's child, Frank P. (age 4 years), living next door (61, W— Street) ;]

(4.) His wife, Matilda L. (age 26 years), who, after her husband's death, went from the house in Lower Kennington Lane to live with her mother at 59, W— Street.

- (5.) Alfred L. (age 14 years), living at 4, W—— Street, a fellow schoolmate of Harry J. (*See* No. 2 above).

The usual precautions were taken as to isolation, disinfection, etc., and the infected rooms, in each case, were stripped. No further case has occurred in this district, which is too far removed to have any connection with the districts mentioned in Groups I. and II.

The first case (John L.) of Group III. appears to have become infected at New Shoreham, where he had been spending his holiday, the disease manifesting itself three days after his return to Lambeth.

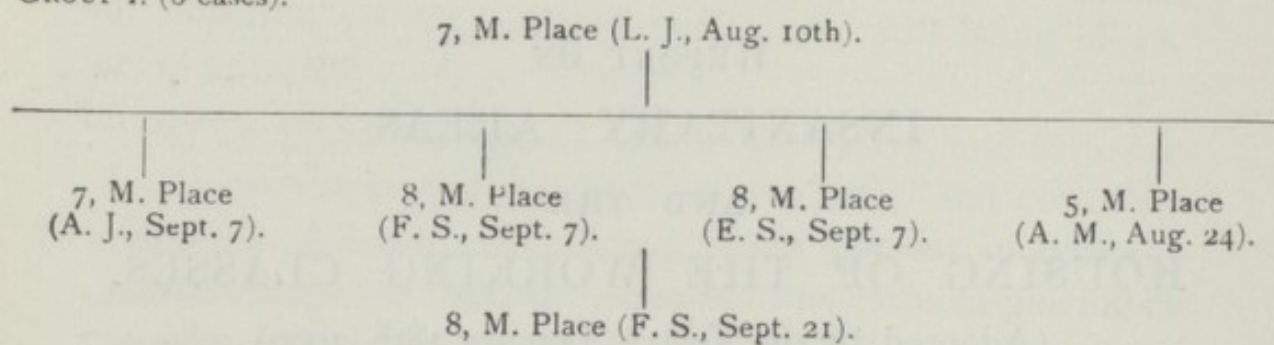
Careful enquiries failed to connect any of the cases of Groups I., II. and III., with infected water or milk, or even with oysters (or other shellfish), and by a process of exclusion I am driven to regard, therefore, the cause of the outbreaks as contact from person to person—(1) directly, or (2) indirectly, through infected clothes, food, etc. Further, the difficulties in diagnosing Typhoid Fever in the early stages of the disease are well known to all medical men of experience, and in some of the cases mentioned above, such difficulties have been the cause of the disease spreading locally. Fortunately, bacteriology has come to our aid with the Widal or Typhoid re-action test, which readily shows itself after the first week of the disease, so that there is less excuse now than formerly for errors in the diagnosis of Typhoid, and as the Vestry has provided free of cost such bacteriological methods for the use of medical men in Lambeth, the Vestry is justified in looking forward to the disappearance of localised Typhoid epidemics, such as I have described, and which are in the first place due to cases being undiagnosed in the early stages, when infection is well-known to exist.

The experience gained recently in connection with the above mentioned epidemics goes to show that the Widal test for Typhoid is invaluable as an aid to diagnosis—several of the cases having been discovered by this means.

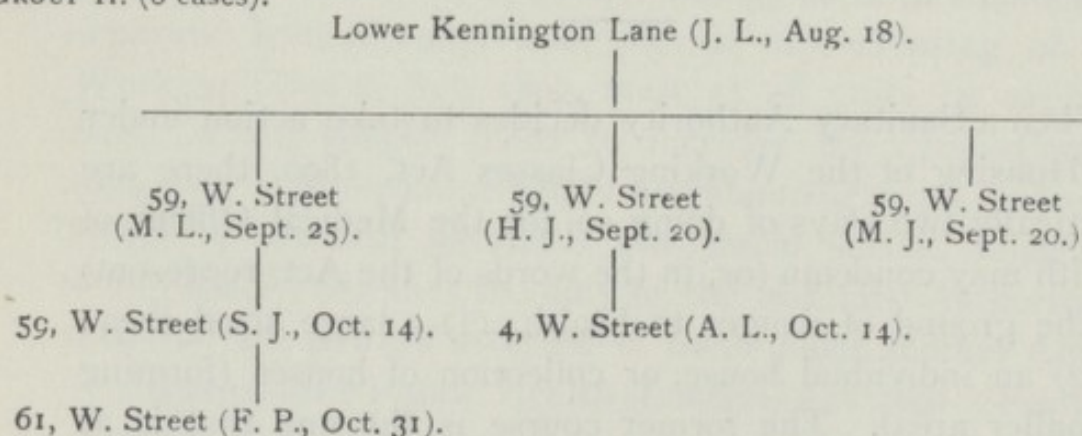
Typhoid is stated to be a disease of adult life (rarely affecting children or old people), but in the outbreaks mentioned above, there have been 15 adults (8 males and 7 females) and 6 children under 12 years of age (3 males and 3 females), making 21 cases in all, and of the adults, 5 died, the children escaping death. The ages of the adults vary from 15 to 47.

Diagrammatically, the inter-relationships of the different cases is well shown, taking into account the approximate dates of sickening, as given in brackets, with the initials of the patients :—

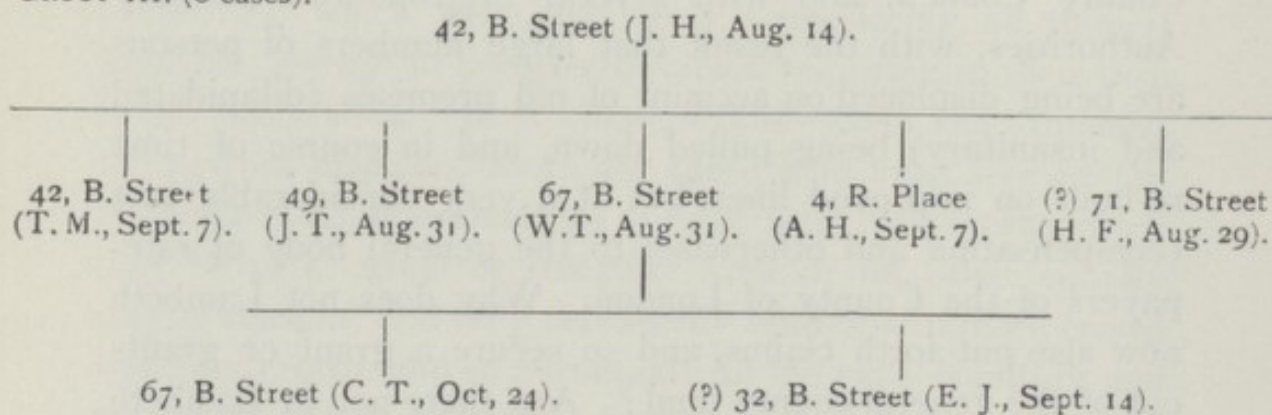
GROUP I. (6 cases).



GROUP II. (6 cases).



GROUP III. (8 cases).



The incubation period of Typhoid is two or three weeks, but in cases like the above (*i.e.*, direct contact cases), the incubation period appears to be slightly less, viz. : eight days to two weeks.

JOSEPH PRIESTLEY,

Medical Officer of Health.

Nov. 13th, 1899.

REPORT ON
INSANITARY AREAS
AND THE
HOUSING OF THE WORKING CLASSES.

(Adopted by the Vestry, January 18th, 1900).

When a Sanitary Authority decides to take action under the Housing of the Working Classes Act, 1890, there are practically two ways of doing so, for the Medical Officer of Health may condemn (or, in the words of the Act, represent) on the ground of danger to health, (1) a large sized area; or (2) an individual house, or collection of houses (forming a smaller area). The former course is the one that is at present finding undue (in my opinion) favour with the London County Council, and with several Metropolitan Sanitary Authorities, with the result that large numbers of persons are being displaced on account of old premises (dilapidated and insanitary) being pulled down, and in course of time re-built on improved lines, but at a very considerable cost (compensation and otherwise) to the general body of rate-payers of the County of London. Why does not Lambeth now also put forth claims, and so secure a grant or grants out of the general county fund? Are there not in Lambeth insanitary areas that might, with advantage to the general public health of London as a whole, or of Lambeth in particular, be scheduled and dealt with in the same way as are areas (say) in the neighbouring Parish of St. George-the-Martyr? Are there not some black spots in the so-called inner (and congested) districts of the Parish of Lambeth that might, with advantage, be blotted out? Such are the types of questions which are heard, and I, as Medical Officer,

feel that the occasion has now arisen for a definite expression of opinion (approval or otherwise) by the Lambeth Vestry as to the line of action hitherto taken, and still being taken, by their Medical Officer of Health.

As the official medical adviser to the Vestry, and with my local knowledge of the amount of congestion and crowding (whether of houses over areas, or of persons in houses), I have always felt that the necessary wholesale displacing of persons, consequent upon the clearing of a large insanitary area under Part I., or upon the closing of large numbers of separate houses under Part II., of the Housing of the Working Classes Act, 1890, must at all costs be avoided. Such action simply tends to increase the congestion or crowding in other immediately neighbouring parts, and so to create, by means of one Act of Parliament, serious nuisances, which it then becomes the duty of the Sanitary Authority to abate by the powers invested in them under another Act of Parliament—the Public Health (London) Act, 1891. Further, experience shows that where an area (large or small) is cleared on account of its so-called slumminess, neighbouring properties, which were previously (considering all things) passable, are apt to become rookeries, requiring in their turn to be dealt with. It is common knowledge that amongst the persons displaced there are those who must live in the immediate neighbourhood so as to be near their work, which may be of a casual or irregular kind, or for other equally cogent reasons, and they necessarily tend to still more crowd and over-crowd, and so perpetuate all the evils (sanitary and moral) attendant thereon. As houses become scarce, rents increase, and overcrowding consequently results from the sub-letting of rooms. In this way the difficulty is not overcome, but simply transferred from one district to another, or from one house to another, and so the continuity of the vicious circle is ensured. What applies to Lambeth applies to other Districts. This picture of overcrowding is not a fancy

one, as the Registrar-General's statistics taken at the Census, 1891, show that there was at that date in Lambeth a total of 63,454 tenements, of which 10,837 were one roomed and 11,485 two-roomed. Further, of the 10,837 one-roomed tenements, 3,120 had three or more occupants per room, and 543 had over four occupants per room; and of the 11,485 two-roomed tenements 5,828 had five or more occupants per tenement, and 653 over six occupants per tenement, whilst of the total number of tenements with less than five rooms, viz., 40,472, it was found that 7,747 had *more* than an average of two occupants per room. Taking the word "overcrowding" as meaning (roughly) more than two persons per room, it is seen that at the time of the 1891 Census, 28 per cent. of the one-roomed, 50 per cent. of the two-roomed, and 19 per cent. of the total tenements with less than five rooms, were overcrowded; and there is every reason for believing that these numbers have much increased since that time, allowing for steady increase of population year by year, or an almost equally steady decrease of house accommodation, at least in the Inner Districts of Lambeth.

What I have endeavoured to do in Lambeth has been to deal with houses, singly or in the form of courts or streets, and condemn them under Part II. of the Housing of the Working Classes Act as unfit for habitation, such condemnation leading to the houses in question being ordered to be either put into proper order and condition to the satisfaction of the Vestry, or closed, and afterwards demolished, by the owners. Fortunately, the owners, who under this particular Act are generally freeholders, or, at least, leaseholders, who have not less than 21 years' interest, adopt, as a rule, the former alternative, with the result that houses are put into sanitary condition, and the inmates are not permanently disturbed. Surely it is better for the houses in which people live to be made habitable and sanitary than for such houses to be closed and pulled down, and the tenants turned out and

left to look after themselves and get accommodation anywhere? It must be remembered that the Housing of the Working Classes Act need only be put into motion in exceptional cases, *e.g.*, where the houses are unfit for habitation, owing to any, or all, of the following reasons:—(1) Want of proper site; (2) general dilapidation, and want of repair (from age, or otherwise); (3) defective construction of the houses, either as built originally, or as developed since; (4) the existence of serious sanitary nuisances, arising from defective drains, &c.; (5) the fact that short-termed leaseholders or owners are sometimes financially unable, or unwilling, to spend sufficient money on their properties; (6) the close proximity of obstructive buildings. In the larger (by far) majority of cases, it is found sufficient to proceed under the Public Health (London) Act, 1891, which also enables a Local Authority (if necessary) to apply for closing orders in connection with houses unfit for human habitation by reason of the existence therein of ordinary nuisances mentioned in that Act, without having resort to the more stringent Part II. of the Housing of the Working Classes Act, 1890—an important fact to be remembered when the full results obtained are taken into account. Thus, taking the averages since I have been Medical Officer, there have been served *yearly* under the Public Health (London) Act, 6,829 Notices, as compared with 37 Notices only under Part II. of the Housing of the Working Classes 1890 Act—the former dealing with 8,562 structural and 1,548 non-structural defects (total, 10,110), rendering the premises *more or less* unfit for habitation, and the latter with 49 houses, which were generally in such a dirty, damp, dilapidated and insanitary state as to be *quite* unfit for human habitation in their then conditions. Of the total 196 houses condemned under the Housing Act, 43 only have since been demolished, the rest having being either closed temporarily, prior to rebuilding, or at once put into proper order and condition, and so made fit for human habi-

tation; whilst the 27,316 Notices served under the Public Health Acts have all been complied with, and the 40,440 defects made good. In some few instances it has been found impossible to render the houses fit for habitation, owing to their positions or conditions, and in these cases the houses have been closed, and afterwards demolished, *e.g.*, Francis, Fountain and Paved Courts (off the Lambeth Walk), Commercial Buildings, Le Grand Place, Windmill Court, etc.

A strict and constant supervision in the poorer and more congested parts of the Parish, ensuring the houses being kept up to a fair sanitary standard, is proving satisfactory, as far as the houses themselves are concerned, and I may even add, as far as the tenants too are concerned, for experience shows that in sanitary matters, as in other matters, people are dependent upon their surroundings. Where houses are dilapidated and insanitary, the tenants show a tendency to become morally and physically the same, and *vice versa*—indeed, the apathy of tenants is remarkable, rendering frequent inspections of their houses by the Officers of a Sanitary Authority a *sine quâ non*. In connection with these inspections of houses, the powers given under the Public Health (London) Act, 1891, for the Registration of Houses Let in Lodgings, may be found to be of great value and assistance, especially in the case of the worst properties—351 houses having already been registered in Lambeth under the new Bye-laws, which were unfortunately not confirmed by the Local Government Board until May 11th, 1897. The result of constant supervision by house-to-house inspections (such inspections to take place periodically, *i.e.*, once or twice a year, at least) is the gradual levelling up of the old, dilapidated and insanitary properties, more especially in the older and more congested parts of the Parish, without, in fact, any displacement. An important statement like this ought to be accompanied by proofs, and I give, therefore, the following list of courts, etc., in the (1) Inner, and (2) Outer

Wards, as examples of what has been, and is being still, accomplished in Lambeth, without such displacement of tenants as would necessarily have taken place, had area-condemnation been the line of attack :—

I. INNER WARDS.

Addresses.	No. of Houses.
Victoria Place, Broadwall	12
Sidwell Place, Broadwall	12
Prince's Buildings, York Road	20
Cory Square, Commercial Road	24
Cage Place, Commercial Road	28
Cornwall Place, Cornwall Road, S.E.	39
Brad Street, Cornwall Road	12
Salutation Place, Cornwall Road	25
Peers Cooperage, Cornwall Road	5
Hammond Place, Cornwall Road	4
Wootton Place, Wootton Street	18
Bond Place, Bazon Street	32
St. Andrew's Place, Ethelm Street	11
Short, Mitre, Caffyn, Ufford, and Webber Streets	220
Crow, Abbey, Pennell and South Places	24
Waterloo Road	9
Asa Place, Webber Street	7
Cosham Place, Lower Marsh	11
Little Park Place, Hercules Road	9
Lambeth Square, Lower Marsh	50
Frazier, Grindall, Johanna, Murphy, Finck and Tanswell Streets	158
Waxwell Terrace, Boniface Street	21
Cottage Place, Stannary Street	4
Wake, Topaz, and Saunders Streets	104
Fountain Gardens, Lambeth Walk	16
St. Alban's Buildings, China Walk	26
Thrift Place, Topaz Street	5

Addresses.	No. of Houses
Walnut Tree Place, St. Alban's Street	35
Globe Court, Ethelred Street	9
Lollard Street, Kennington Road	130
Norfolk Place, Lambeth Road	12
Portland Cottages, Heman Street	11
Pascall Street, Wandsworth Road	22
Milton Place, Wandsworth Road	14
II. OUTER WARDS.	
Dugdale Street, Camberwell New Road	3
Industry Terrace, Cumberland Place and Cottages, Alder's Cottages	40
Houses, Denmark Street	12
Houses, Cornwall Road, Brixton Hill	7
Victoria Place, West Norwood	10
Change Alley, East Street, and East Place, West Norwood	49
Knight's Hill Square, West Norwood	23
Auckland Place, West Norwood	12
Paxton Yard, Gipsy Hill	14
Benton's Lane, Gipsy Hill	30
Etc., etc., etc.	

Large amounts of money have been spent by the owners to put and keep these houses in proper sanitary condition, and in this way the freeholders, or long leaseholders, are made to improve their own insanitary areas—a more satisfactory arrangement than if such owners were offered a premium for slum property, as is apt to be the case where a Sanitary Authority compulsorily purchases such property with a view to clearing an area under Part I. of the Housing Act. Further, the improved surroundings under which tenants live must have a distinctly educational value, though tenants vary considerably in their ideas as to the standards to be adopted in regard to cleanliness of person or house.

The working classes have their social grades, and it is more especially with the lower ones, including that section of the community that has been aptly called the "submerged tenth," that the necessity for constant and regular supervision is, in my opinion, so urgent, with a view to keeping the conditions under which they live as good, sanitarily, as possible. It is no good to build model dwellings for such people to go into after displacement; all that can be done is to endeavour to keep their present houses in such sanitary conditions as must eventually (at least, it is to be hoped so) re-act upon the tenants themselves, and so raise their sanitary standards. This is an important point to remember. It is easy to talk of the working classes going out into the suburbs to live and giving them facilities for so doing, by cheap railways, trams, etc., but such talk does not bring us one jot nearer solving the question as to proper accommodation for the poorer members of the working classes, who either cannot afford, or do not care, to be disturbed and removed from their present work centres. It may be that some of the (what I will call) better working class will take advantage of such facilities on the ground of health, and in that way relieve somewhat the present congestion, but the good effect is likely to be counter-acted by the tendency of businesses, which are mostly central, to increase and displace from their houses the very people who ought to be catered for in the immediate neighbourhood. The crowding (even overcrowding) that consequently exists, and will exist, must be faced; it certainly cannot be prevented by any power possessed at present by Sanitary Authorities, who must be content, therefore, with minimising the evil results that may arise therefrom, by constant supervision. It is uphill work, but can be carried out, if trouble be only taken and the Inspectors (in sufficient numbers) encouraged to do their duties, and supported in the discharge of the same—a condition of things fortunately obtaining in Lambeth.

The higher grades of the working classes (including the skilled artisans) look after themselves, and are catered for by Artisans' Dwellings and other Companies, many of which have large blocks of models in various parts of Lambeth, and are doing a good work and supplying a much needed want. It is not with such, however, that this present Report deals.

Any one who cares to inspect the districts mentioned above (or other districts in Lambeth), and at the same time will compare them with immediately adjoining districts belonging to some other Authorities, will be satisfied that the methods which have been adopted in Lambeth are giving better results than those obtained from area condemnations, and that, too, without displacement of tenants, and the spending of large sums of money out of the rates.

Assuming that my views are workable (and my experience would seem to prove so) there are still important factors at work in the displacing of the working classes in Lambeth, as elsewhere. Thus, railway companies have proved to be important factors in the Lambeth Inner Districts, from a point of view of lessened house accommodation, and consequent overcrowding - large areas having been, and still being from time to time, voluntarily or compulsorily absorbed, slowly, but none the less surely, in connection with improvement and extension schemes. Then again, the necessary extensions of business premises (factories, workshops, etc.) in the Inner Districts of Lambeth, have led, and are still leading, to the voluntary closing and demolition of houses, followed by the displacement of tenants, together with consequent overcrowding of the houses in the immediate neighbourhoods. Finally, displacements may take place in connection with Metropolitan Improvement schemes (formation of new streets, widenings of approaches to bridges, &c.), but in this respect Lambeth has not been, as yet, much troubled.

In the above-mentioned cases of areas compulsorily cleared,

a Sanitary Authority is powerless and can only insist (and ought to insist), that a *pro ratâ* amount of accommodation be provided before any displacement of persons is allowed to take place, and further, that such accommodation be suitable, as it is clearly necessary that the style of accommodation, as well as the cheapness of the rents, should suit those who have been displaced. Unfortunately, this is not at present the case, as it is quite the exception for displaced tenants to be rehoused in the houses provided, *e.g.*, Russell Gardens (built by the S.E. Railway) in Felix Street, the new buildings having, as a rule, to be let at increased rents, as otherwise they would not give a sufficient monetary return for money expended in site, construction, etc. Displaced tenants have to seek accommodation elsewhere, as a consequence.

What is wanted is a separate self-contained house (whether in form of tenements in blocks, flats, or cottages), and at a small rent of (maximum) 2s. per room, for the ordinary working classes, together with model lodging-houses for the very poor (male and female). Such are the kinds of dwellings that ought to be insisted upon before displacement, and in the same or immediate neighbourhood. It is clear that, with land at its present price, such accommodation can only be provided at a financial loss (more or less), whether the schemes be carried out by private owners (or companies), or by sanitary authorities, in which latter case the loss might be met out of the rates. Part III. of the Housing of the Working Classes Act gives power to the London County Council to erect dwellings or lodging-houses for the working classes, either by building on land (compulsorily or otherwise purchased), or by altering existing buildings.

The above two conditions as to amount and kind of accommodation are very important, and in the future will, it is hoped, be in every case insisted upon. The former condition (as to a *pro ratâ* amount) certainly will be, owing to the firm

action that the Vestry of Lambeth has already taken in connection with the Extension and Improvement Scheme of the L. & S. W. Railway—a most important piece of work.

Having insisted upon such conditions, these displacements due to Railway Extensions, Improvement Schemes, etc., become, unfortunately, necessary evils, and must, therefore, be accepted locally with regret—at least *quá* displacements. The case is a very different one, however, where it is proposed by the L. C. C. (for instance) to clear sites in Lambeth Parish (Salutation Place, Peers Cooperage, &c.) for the purpose of building thereon Artisans' Dwellings, which are for the use of persons displaced by an area condemnation in another Metropolitan district. What would happen in such a case? The tenants of such courts as Salutation Place, &c., would not, when displaced, go into model blocks—they prefer the independence of a self-contained cottage, and, as they must remain in, or near, their present homes, on account of their work, or for other equally cogent reasons, the necessary result would be more overcrowding in the immediate neighbourhoods—a condition to be avoided, if possible.

Before leaving this part of the Report, I may remind the Vestry that the Duchy of Cornwall—the ground landlord of a large portion of the Inner Districts of Lambeth—though outside the pale of the Housing of the Working Classes Act, has assisted me at all times in furthering sanitary reform, an assistance which was first promised in a letter sent by the Council of H.R.H. the Prince of Wales, stating that “they were at all times most desirous of complying with the spirit of any Act of Parliament, contemplating improvements on the score of the public health and in the interests of the working classes.” The value of such a concession to Lambeth cannot be over-estimated, and has been the means of enabling great improvements (without trouble or legal proceedings) to be made, *e.g.*, the closure and clearance of

hopelessly insanitary property, such as Le Grand Place, Queen's Place, Isabella Row, etc., or the rebuilding of unsuitable or worn-out houses, such as those in Courtenay Street, etc.

It will be seen from the above that I am not in favour of a large scheme being taken in hand in Lambeth, but prefer to advise the Vestry to continue the policy that has been adopted during the last few years with (what I think I am justified in stating) very satisfactory results, viz., constantly inspecting the houses occupied by the working classes, and keeping them up to fair sanitary conditions. There is, however, a small area—about a quarter of an acre—situated in the Lambeth Walk, and between that thoroughfare and Topaz Street, which might, with advantage, be taken over as a small open space or playground for children. The area is now practically vacant, the twenty-seven houses which I condemned on December 12th, 1895, having been closed, and since then demolished, and the displaced tenants (only thirty-seven in number) housed elsewhere. I have previously reported on this area (viz., as far back as October 15th, 1896), and the subject has not yet been finally voted upon by the Vestry (*vide* Minutes, November 11th, 1897, and March 10th, 1898), who, I hope, will see their way to carry out my suggestions, either alone, or in conjunction with the London County Council. The acquisition of a few more neighbouring houses (which, however, I am unable to condemn as unfit for habitation) would increase the site, and give an entrance in a main street (Topaz Street), thereby enabling a scheme for the erection of a block of Artisans' Dwellings to be carried out, if such a scheme were preferred. Personally, I am of opinion, however, that the provision of an extra open space (small though it be), or playground for children, in what is a particularly crowded and congested area, would be of more permanent utility. The Vestry has been memorialised by the inhabitants of the district, asking for this site to be taken over as an open space, and in such a case local feeling cannot be disregarded.

JOSEPH PRIESTLEY.

December 11th, 1899.

OFFENCES UNDER THE
FOOD AND DRUGS AND MARGARINE,
AND FOOD AND DRUGS AND PUBLIC
HEALTH ACTS DURING 1899.

—

ADDRESSES OF OFFENDERS WITH NATURE
OF OFFENCE, AND AMOUNT OF PENALTIES
AND COSTS IN EACH CASE.

Summonses—Food and Drugs and Margarine Acts.

Date.	Address.	Offence.	Penalty.			Costs.		
			£	s.	d.	£	s.	d.
Jan. 5th	97, Milkwood Road ...	Selling Coffee containing added Chicory to the extent of 50 per cent. ...	2	0	0	0	12	6
Jan. 5th	91, Milkwood Road ...	Selling Butter containing Margarine (not Butter) 38 per cent. ...	0	10	0	0	12	6
Jan. 5th	194, Coldharbour Lane ...	Selling Butter containing Margarine (not Butter) 72 per cent. ...	1	0	0	0	12	6
Jan. 5th	135, Cornwall Road, S.W. ...	Selling Butter containing Margarine (not Butter) 85 per cent. ...	1	0	0	0	12	6
Jan. 5th	75, Milkwood Road ...	Selling Coffee containing added Chicory 72 per cent. ...	1	0	0	0	12	6
Jan. 19th	29, High Street, W. Norwood	Selling Coffee containing added Chicory 37 per cent. ...	1	0	0	0	12	6
Feb. 2nd	93, High Street, W. Norwood	Selling Milk containing added Water to the extent of 24 per cent. ...	1	0	0	0	12	6
Feb. 7th	30, Upper Kennington Lane	Exposing a parcel of margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	0	10	0	0	12	6
Mar. 23rd	184, Lambeth Walk ...	Exposing a parcel of margarine by retail without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	0	10	0	0	12	6
Mar. 23rd	184, Lambeth Walk ...	Exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	0	10	0	0	12	6
Mar. 29th	36, Cornwall Road, S.E. ...	Exposing a parcel of Margarine by retail without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	1	0	0	0	12	6
Mar. 29th	6, Coral Street, Oakley Street	Exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	1	0	0	0	12	6
Mar. 29th	56, Belvedere Road ...	Selling Milk deficient in Cream to the extent of 27 per cent. ...	2	0	0	0	12	6
April 6th	48, Upper Tulse Hill ...	Selling Milk containing added Water 8 per cent. ...	1	0	0	0	12	6
April 6th	70, Elm Park ...	Selling Butter containing Margarine (not Butter) 62 per cent. ...	2	0	0	0	12	6
April 6th	170, Upper Kennington Lane	Selling Butter containing Margarine (not Butter) 36 per cent. ...	1	0	0	0	12	6
April 6th	57, Auckland Street ...	Selling Butter containing Margarine (not Butter) 85 per cent. ...	1	0	0	0	12	6
April 6th	118, Lower Kennington Lane	Selling Butter containing Margarine (not Butter) 80 per cent. ...	2	0	0	0	12	6
April 13th	57, Bond Street ...	Selling Butter containing Margarine (not Butter) 84 per cent. ...	2	0	0	0	12	6
		Carried forward ...	22	0	0	11	17	6

Date.	Address.	Offence.	Penalty.	Costs.
			£ s. d.	£ s. d.
April 27 th	38, Hartington Road ...	Selling Milk containing added Water to the extent of 9 per cent. ...	2 0 0	0 12 6
April 27 th	31, Dorset Road ...	Selling Butter containing Margarine (not Butter) 16 per cent. ...	2 0 0	0 12 6
April 27 th	71, Hartington Road ...	Selling Butter containing Margarine (not Butter) 50 per cent. ...	5 0 0	0 12 6
May 10 th	Moorcourt Farm, Marnhull, Blandford, Dorset	Selling Milk from which the Cream had been abstracted to the extent of 13 per cent. ...	1 0 0	0 13 6
May 18 th	134, Wyndham Road ...	Selling Butter containing Margarine (not Butter) 70 per cent. ...	5 0 0	0 12 6
June 1 st	23, Chapel Road ...	Selling Butter containing Margarine (not Butter) 90 per cent. ...	3 0 0	0 2 0
June 1 st	55, High Street, W. Norwood	Selling Butter containing Margarine (not Butter) 75 per cent. ...	5 0 0	0 2 0
June 6 th	173, Lambeth Walk ...	Selling Butter containing Margarine (not Butter) 82 per cent. ...	2 0 0	0 12 6
June 6 th	9, Dawlish Street ...	Selling Milk from which the Cream had been abstracted to the extent of 12 per cent., the sample in the meantime having been submitted to Somerset House and returned as genuine. The Summons was dismissed with costs of 7/0 against the Vestry	...	...

June 15 th	73, Larkhall Lane ...	For exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	2 0 0	0 12 6
June 15 th	123, Wandsworth Road ...	For exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	2 0 0	0 12 6
July 13 th	1A, Pulcross Road ...	Selling Butter containing Margarine (not Butter) 90 per cent. ...	0 10 0	0 12 6
Sept. 1 st	170, Upper Kennington Lane	Selling Butter containing Margarine (not Butter) 82 per cent. ...	3 0 0	0 12 6
Sept. 1 st	76, Railton Road ...	Selling Butter containing Margarine (not Butter) 90 per cent. ...	3 0 0	0 12 6
Sept. 1 st	44, Effra Parade ...	Selling Milk containing added Water 10 per cent. ...	1 0 0	0 12 6
Sept. 1 st	44, Effra Parade ...	Selling Butter containing Margarine (not Butter) 65 per cent. ...	2 0 0	0 12 6
Sept. 1 st	85, Lyham Road ...	Selling Butter containing Margarine (not Butter) 84 per cent. ...	2 0 0	0 12 6
Sept. 1 st	75, Sussex Road ...	Selling Milk containing added Water 10 per cent. ...	1 0 0	0 12 6
Nov. 7 th	67, Milkwood Road ...	Exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	0 10 0	0 12 6
		Carried forward ...	64 0 0	22 2 6

Date.	Address.	Offence.	Penalty.	Cos's.
			£ s. d.	£ s. d.
		Brought forward ...	64 0 0	22 2 6
Nov. 7th	89, Hackford Road ...	Selling Butter containing Margarine (not Butter) 83 per cent. ...	0 5 0	0 12 6
Nov. 7th	33, Mayall Road ...	Selling Butter containing Margarine (not Butter) 55 per cent. ...	0 5 0	0 12 6
Nov. 9th	72, Oakley Street ...	Selling Whisky diluted with Water 10·4 degrees below the legal limit of 25 degrees under proof ... (Magistrate dismissed the Summons owing to a small label being upon the bottle, stating it to be a mixture of Water and Whisky.)	...	...
Nov. 23rd	207, Railton Road ...	Selling Coffee containing added Chicory to the extent of 37 per cent ...	1 0 0	0 12 6
Nov. 23rd	149, Prince's Road ...	Exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	...	0 12 6
Dec. 5th	5, Lingham Street ...	Selling Butter containing Margarine (not Butter) 88 per cent. ...	...	0 12 6
Dec. 5th	36, Lingham Street ...	Selling Coffee containing added Chicory, 70 per cent. (Summons dismissed as it was declared on the wrapper to be a mixture of Coffee and Chicory.)	...	...

Dec. 5th	36 Lingham Street ...	Selling Butter containing Margarine (not Butter) 78 per cent. ...	1 0 0	0 12 6
Dec. 5th	55, Old Town, Clapham ...	Selling Milk containing added Water 10 per cent. ...	2 0 0	0 12 6
Dec. 6th	144, Hamilton Road ...	Selling Coffee containing added Chicory 58 per cent. ...	2 0 0	0 12 6
Dec. 15th	90, Cornwall Road, S.W. ...	Selling Coffee containing added Chicory 34 per cent. ...	1 0 0	0 12 6
Dec. 15th	49, Cornwall Road, S.W. ...	Selling Milk containing added Water 11 per cent. ...	1 0 0	0 12 6
Dec. 15th	152, Landor Road ...	Selling Butter containing Margarine (not Butter) 88 per cent. ...	2 0 0	0 12 6
Dec. 15th	152, Landor Road ...	Exposing a parcel of Margarine by retail, without having a label attached and marked in Capital Letters, 1½ ins. "Margarine" ...	2 0 0	0 12 6
		Totals ...	76 10 0	29 12 6

Summonses—Public Health Acts.

Date.	Address.	Offence.	Penalty.	Costs.
1899. Jan. 19th	15, Church Street, Camberwell	Non-compliance with Notice of Vestry to repair the defective roof and put the water closet into proper order and condition at No. 4, Cumberland Place, Brixton... (Order made to do work in 7 days, and owner to pay 4/0 costs.)	£ s. d.	£ s. d. 0 4
Jan. 26th	15, Maiden Lane, Strand, W.C.	That at 85, Commercial Road, on January 3rd, 4th, 5th, 6th, 10th, 13th, 16th, 17th and 18th a chimney, not being the chimney of a private dwelling-house, did send forth black smoke in such a quantity as to be a nuisance (Defendant fined £5 on each Summons, and 10/0 costs on each summons.) The Vestry was represented by Mr. Bodkin.	45 0 0	4 10 0
Feb. 1st	100, Westminster Bridge Road	Nuisance caused by petroleum effluvia from a manufactory at 100, Westminster Bridge Road ... (Summons withdrawn—gas engine having been provided meanwhile—on payment of 2/0 costs.)	... ..	0 2 0
Feb. 9th	Duke Street, Stamford Street	A chimney, not being the chimney of a private dwelling-house, did send forth black smoke so as to be a nuisance (Defendant fined £5 and 2/0 costs.)	5 0 0	0 2 0
Mar. 1st	349, Coldharbour Lane ...	Non-compliance with Notice of Vestry to put into proper repair the house roof and rain-water pipes, also cleanse and repair the dirty walls and ceilings at No. 12, Station Avenue. (Order made to do work in 7 days and pay 4/0 costs.)	... ..	0 4 0
Mar. 2nd	349, Coldharbour Lane ...	Non-compliance with Notice of Vestry to make good defective drains at No. 62, Bonnington Square ... (The drainage of the house having been reconstructed, the Owner was ordered to pay 15/0 costs—13/0 for cost of Vestry opening up the drains for examination, and 2/0 cost of Summons.)	... ..	0 15 0
Mar. 16th	Duke Street, Stamford Street	That at certain premises in Duke Street, on 17th, 20th, 22nd, 25th & 27th February, and 2nd & 3rd of March, a chimney, not being the chimney of a private dwelling-house, did send forth black smoke in such quantity as to be a nuisance (Defendant fined £10 and 2/0 costs on each summons.)	70 0 0	0 14 0
Apr. 10th	349, Coldharbour Lane ...	Non-compliance with Magistrate's Order to repair the roof and rain-water pipes at 12, Station Avenue ... (Defendant fined £2 and 4/0 costs.)	2 0 0	0 4 0
Apr. 28th	4, Commercial Road... ..	Non-compliance with Notice of Vestry to abate a nuisance arising from the filthy condition of the top floor rooms at No. 4, Commercial Road (Summons withdrawn, owing to defendant receiving at the same time sentence of six weeks' imprisonment for cruelty to his children, on a summons issued by the N.S.P.C.C.)	... ..	... ..
Carried forward ...			122 0 0	6 15 0

46

47

M

Date.	Address.	Offence.	Penalty.			Costs.		
			£	s.	d.	£	s.	d.
		Brought forward	122	0	0	6	15	0
June 6th	21, Ethelm Street	For causing to be removed from an arch in Mepham Street, offensive matters, viz., saw dust refuse from fish shop, without using a suitable carriage, contrary to the Bye-laws of the L.C.C. (Defendant fined 10/0 and 2/0 costs.)	0	10	0	0	2	0
June 6th	45, Paris Gardens, Stamford Street	For removing the above offensive matter (Defendant cautioned and to pay 2/0 costs.)	...	...	...	0	2	0
June 15th	2, Newnham Terrace, Hercules Road	Depositing for sale in the roadway opposite No. 66, Lower Marsh, 74 sheep's plucks, 376 kidneys and 7 pieces of pork, which were unsound, unwholesome and unfit for the food of man; also for exposing for sale on same stall 33 sheep's plucks, which were unsound, unwholesome and unfit for the food of man (Defendant having failed to appear before Mr. Slade, the Magistrate granted a warrant for his arrest, upon the sworn information of the Inspector.)	...	...	...	...	...	...
June 29th	12 & 14, Rymer Street	Non-compliance with Notice of Vestry to put drains and W.C. into proper order and condition, to pave yard and wash-house and provide a Metal Dust Bin at Nos. 12 & 14, Rymer Street (The Magistrate made an Order for the work to be done within 7 days, and owner to pay 4/0 costs.)	...	...	...	0	4	0

48

July 13th	1A, Stoney Lane, Houndsditch	Selling on 29th May, certain articles of Food, to wit: 23 tins of lobster, the same being unsound and unfit for the food of man (Defendant fined £10 and 4/0 costs, or in default one month's imprisonment.)	10	0	0	0	4	0
July 27th	17, Billiter Street	For removing stinking bones and fat without using a suitable carriage, contrary to the Bye-laws of the L.C.C. (Defendant fined £2 and 2/0 costs.)	2	0	0	0	2	0
July 27th	16, Orchard Place, Blackwall	Removing as above (Defendant fined £2 and 2/0 costs.)	2	0	0	0	2	0
July 28th	94, Oakley Street	The top floor room at 94, Oakley Street, so overcrowded as to be injurious or dangerous to health. (Order made to abate the overcrowding within 7 days and pay 2s. costs.)	...	...	...	0	2	0
Aug. 4th	155, Clapham Park Road	For fixing in connection with a W.C. at 131, Acre Lane, a trap and ventilating shaft without giving notice to the Sanitary Authority (Defendant fined £1 and 2/0 costs.)	1	0	0	0	2	0
Sept. 13th	87, Rymouth Road	Removing fish offal (1) during prohibited hours; (2) in improperly constructed vans, contrary to the Bye-laws of the L.C.C. (Defendant fined £1 and 4/0 costs.)	1	0	0	0	4	0
Carried forward...			138	10	0	7	19	0

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Date	Address.	Offence.	Penalty.	Costs.
		Brought forward	£ s. d. 138 10 0	£ s. d. 7 19 0
Oct. 4th	2, Neville Street	Owing to a room occupied at No. 2, Neville Street, being so overcrowded as to be a nuisance and dangerous to health (The nuisance continuing, the defendant was fined 20/0 or 7 days)	1 0 0	...
Oct. 26th	Corporation Chambers, Guildford Yard	For failing to maintain in proper condition of repair the receptacle for dung, belonging to the premises 111, Upper Kennington Lane (Defendant fined £2 and 2/0 costs.)	2 0 0	0 2 0
Oct. 26th	Corporation Chambers, Guildford Yard	Failing to provide the premises at 111, Upper Kennington Lane with a dust-bin (Defendant fined £2 and 2/0 costs.)	2 0 0	0 2 0
Oct. 27th	South London Electric Supply Corporation, Bengeworth Road	That at certain premises in Bengeworth Road a chimney, not being the chimney of a private dwelling-house, did send forth black smoke in such quantity as to be a nuisance (Defendant fined £2 and 2/0 costs.)	2 0 0	1 0 0
Nov. 8th	15, Portland Cottages, Heman Street	Exposing for sale certain articles of food, to wit: 48 pieces of pork, 66 pieces of pork, and 16 pieces of beef, deposited for the purpose of sale, which was unsound, unwholesome, and unfit for the food of man (Defendant fined £20 and 2/0 costs.)	20 0 0	0 2 0

50

Nov. 15th	33, Langton Road	For defective drain, stack pipe connected to drain, no draw-off tap from main and iron D trap at 33, Langton Road (Order made to do work in one month and owner to pay 4/0 costs.)	...	0 4 0
Nov. 15th	158, Denmark Hill	For defective roof and guttering, causing dampness at 27, Wiltshire Road (Order made to do work in 14 days and owner to pay 4/0 costs.)	...	0 4 0
Nov. 25th	26, Treherne Road	For so constructing a water-closet and drain as to be a nuisance and injurious to health at 59, Arthur Road (Defendant fined £2 and 2/0 costs.)	2 0 0	0 2 0
Nov. 25th	5, Elliott Road	For so constructing a water-closet and drain as to be a nuisance and injurious to health at 59, Arthur Road (Defendant cautioned and ordered to pay 2,0 costs.)	...	0 2 0
Totals ...			£ 167 10 0	9 17 0

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LAMBETH PARISH.—Deaths Registered

SUB-DISTRICTS ...	Waterloo Road 1st.		Waterloo Road 2nd.		Lambeth Church 1st.		Lambeth Church 2nd.	
	M.	F.	M.	F.	M.	F.	M.	F.
Rheumatism ...	...	...	...	1	...	...	...	1
Gout ...	2	...	...	...	1	...	1	1
Rickets ...	...	...	...	...	...	...	2	...
Cancer, Malignant Disease ...	5	4	1	10	4	11	14	17
Cancerum Oris (Noma) ...	...	...	...	...	...	...	...	...
Tabes Mesenterica ...	...	...	...	2	2	3	10	2
Tuberc-Meningitis, Hydrocephalus	3	3	3	1	5	3	10	9
Phthisis ...	20	25	29	16	19	15	66	40
Scrofula ...	...	...	...	...	1	...	3	1
Other forms of Tuberculosis	...	1	3	3	4	5	7	4
Purpura, Hæmorrhagic Diathesis	...	...	...	...	...	...	...	...
Anæmia, Chlorosis, Leucocythæmia	...	...	...	...	...	...	...	1
Glycosuria, Diabetes Mellitus	...	...	...	...	1	...	...	...
Other Constitutional Diseases	...	1	...	...	...	1	...	2
Premature Birth ...	3	4	10	2	9	6	21	10
Atelectasis ..	1	...	1	2	2	...	6	2
Congenital Malformations ...	...	...	...	...	...	...	4	2
Old Age ...	3	3	1	3	1	2	5	6
Inflammation of Brain or Membranes	3	1	2	2	5	4	5	5
Apoplexy, Softening of Brain,	3	5	7	8	4	8	14	17
Hemiplegia, Brain Paralysis ...	...	...	...	...	...	...	...	...
Insanity, General Paralysis of Insane	...	1	3	...	...	1	16	6
Epilepsy ...	1	...	...	2	...	1	...	1
Convulsions ...	1	3	4	1	2	5	11	5
Laryngismus Stridulus (Spasm of	...	...	...	...	1	...	...	...
Glottis) ...	...	...	...	...	...	...	...	...
Disease of Spinal Cord, Paraplegia,	...	...	...	...	...	...	...	...
Paralysis Agitans ...	1	1	2	...	1	...	2	...
Other Diseases of Nervous System	...	2	...	1	2	...	5	...
Diseases of Ear, Eye, Nose ...	...	...	...	...	...	1	1	1
Pericarditis ...	...	...	...	...	...	...	1	...
Acute Endocarditis ...	...	1	...	...	...	1	4	1
Valvular Diseases of Heart...	4	3	5	3	2	7	7	14
Other Diseases of Heart ...	6	6	9	6	8	9	16	30
Aneurism ...	1	...	...	...	...	...	1	...
Embolism, Thrombosis ...	...	...	...	...	...	...	...	2
Other Diseases of Blood Vessels	2	...	1	...	1	...	1	...
Laryngitis ...	...	1	...	...	1	...	1	...
Croup ...	...	1	1	...	...	...	1	...
Emphysema, Asthma ...	...	3	...	...	1	2	2	1
Bronchitis ...	21	25	25	26	27	26	60	59
Pneumonia ...	10	8	11	...	20	6	16	26
Pleurisy ...	...	1	...	...	...	...	3	...
Bronchopneumonia ...	8	4	5	...	5	4	26	18
Pleuropneumonia ...	1	1	2	...	1	...	2	2
Other Dis. of Respiratory System	2	2	3	1	3	1	3	2
Dentition ...	2	...	3	...	...	5	5	7
Sore Throat, Quinsy ...	...	...	...	...	...	...	2	...
Diseases of Stomach...	1	...	1	...	1	4	3	1
Enteritis ...	3	7	1	6	2	4	7	18

from all Causes during the Year 1899.

Kennington 1st.	Kennington 2d.		Brixton.		Norwood		Ward not started.		All Ages		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
...	2	2	...	...	2	4	2	...	...	6	9	15	
...	1	...	...	...	1	2	...	...	...	6	3	9	
...	3	...	1	1	2	2	...	...	...	9	4	13	
...	16	21	19	29	22	53	10	17	4	4	95	166	251
...	10	4	2	2	5	9	...	...	...	29	22	51	
...	4	5	2	3	13	7	2	3	1	...	43	31	77
...	51	22	43	31	62	4	18	10	12	6	32	205	525
...	2	4	1	...	1	1	...	...	...	8	4	12	
...	7	4	2	3	9	6	3	2	2	...	37	28	65
...	1	...	...	...	1	...	...	...	...	...	...	2	6
...	...	2	...	...	3	...	...	...	...	...	...	6	6
...	...	1	2	3	3	5	1	...	...	...	7	9	16
...	2	2	...	2	...	2	...	...	1	...	2	11	13
...	2	18	7	11	30	17	9	5	...	111	73	184	
...	4	2	1	1	1	...	...	...	...	16	7	23	
...	1	2	2	1	6	2	3	...	...	16	7	23	
...	14	18	14	19	18	38	6	13	1	2	62	104	166
...	9	4	4	1	8	7	...	1	...	36	25	61	
...	16	23	16	20	23	35	7	12	9	10	93	138	237
...	4	3	5	1	6	4	2	1	6	4	42	21	63
...	4	3	...	...	3	...	1	2	1	7	12	19	
...	5	1	4	4	4	5	2	2	...	33	26	59	
...	...	1	...	...	1	...	...	1	...	2	2	4	
...	2	1	3	4	3	2	3	2	...	19	11	30	
...	4	2	3	4	...	6	...	2	...	14	17	31	
...	...	1	...	1	...	...	...	...	...	1	5	6	
...	...	...	...	...	...	...	...	...	...	2	1	3	
...	3	1	...	3	...	1	...	...	...	7	8	15	
...	14	18	12	8	7	14	5	3	...	56	74	130	
...	23	19	23	23	21	39	10	16	7	3	129	148	277
...	...	1	2	...	2	1	...	...	...	6	2	8	
...	1	2	...	...	1	...	...	...	...	...	4	4	
...	1	3	...	2	3	...	...	1	...	9	5	14	
...	...	1	1	...	...	...	1	2	...	5	7	12	
...	1	2	7	...	6	4	3	...	1	1	...	3	6
...	59	67	33	58	49	73	23	12	17	10	305	358	661
...	27	15	21	10	29	22	2	4	3	5	139	96	235
...	4	3	...	1	2	4	...	...	...	1	10	10	20
...	17	11	6	4	13	8	4	3	...	1	84	53	137
...	1	1	...	...	1	1	...	...	...	...	8	6	14
...	5	9	1	7	2	8	1	...	2	1	22	31	53
...	7	3	...	11	5	1	3	3	...	...	25	20	45
...	...	1	1	...	1	1	...	...	...	...	4	2	6
...	4	8	4	3	3	...	...	1	...	1	16	19	35
...	14	19	22	14	20	22	3	3	...	3	72	94	163

LAMBETH PARISH.—Deaths Registered

SUB-DISTRICTS ...	Waterloo Road 1st.		Waterloo Road 2nd.		Lambeth Church 1st.		Lambeth Church 2nd.	
	M.	F.	M.	F.	M.	F.	M.	F.
Obstructive Diseases of Intestine ...	1	...	5	...	2	1	1	3
Peritonitis ...	...	...	...	...	1	1	1	...
Ascites ...	...	...	...	...	...	...	...	2
Cirrhosis of Liver ...	3	4	5	1	2	...	5	7
Jaundice and other Diseases of Liver	2	...	4	3	4	...	4	3
Diseases of the Pancreas ...	...	...	...	...	...	...	...	...
Other Diseases of Digestive System	...	...	2	...	...	...	...	...
Diseases of Lymphatics and of Spleen	1	...	...	...	...	...	...	...
Bronchocele, Addison's Dis.	...	...	...	...	...	...	...	...
Nephritis ...	1	1	6	2	1	1	4	...
Bright's Disease, Albuminuria ...	5	6	4	3	6	6	4	10
Disease of Bladder or of Prostate ...	1	...	...	...	1	1	...	...
Calculus (Stone) ...	...	...	...	...	...	...	...	...
Other Dis. of the Urinary System..	2	2	...	...	...	...	1	2
Male Organs ...	...	...	...	...	...	...	1	...
Female Organs ...	...	...	...	...	...	...	...	1
Abortion, Miscarriage ...	...	...	...	...	...	...	...	1
Puerperal Convulsions ...	...	1	...	...	...	...	...	...
Placenta prævia, Flooding ...	...	...	...	...	...	...	...	...
Other Accidents of Child Birth ...	1	...	...	...	...	...	...	1
Caries, Necrosis ...	1	1	...	...	...	2	1	...
Arthritis, Ostitis, Periostitis	...	...	...	...	...	...	...	1
Other Diseases of Bones and Joints	...	...	...	...	...	...	...	...
Carbuncle, Phlegmon ...	...	...	1	...	...	...	2	...
Other Dis. of Integumentary System	...	...	...	...	...	...	...	...
Fractures and Contusions ...	1	...	3	1	1	2	4	2
Gunshot Wounds ...	...	...	...	...	...	...	...	...
Cut, Stab ...	...	...	...	...	...	...	...	...
Burn, Scald ...	1	1	1	...	...	1	1	1
Poison... ..	...	...	...	...	...	...	...	...
Drowning ...	...	1	1	...	1	...	...	2
Suffocation ...	2	4	1	4	1	1	...	2
Otherwise ...	...	...	2	1	2	...	1	2
Manslaughter ...	2	...	...	...	...	...	...	...
Murder ...	...	...	...	...	...	...	...	...
Gunshot Wounds ...	...	...	...	1	...	...	...	...
Cut, Stab ...	...	...	...	...	...	...	...	...
Poison... ..	...	...	...	...	...	...	...	...
Drowning ...	...	1	1	...	1	...	...	1
Hanging ...	...	1	...	1	...	...	...	1
Otherwise ...	...	...	...	...	1	...	2	...
Dropsey ...	...	...	...	...	1	...	...	...
Debility, Atrophy, Inanition ..	10	4	8	4	12	10	17	7
Mortification ...	...	...	...	...	...	...	...	...
Tumour ...	...	...	1	...	...	...	...	1
Abscess ...	...	...	...	...	...	...	1	...
Hæmorrhage ...	...	...	...	...	...	...	...	...
Sudden Death (cause not ascertained)	...	...	...	...	...	...	...	...
Causes not specified, or ill-defined...	...	...	...	...	...	...	...	...

from all Causes during the year 1899.

Kennington 1st.	Kennington 2nd.		Brixton.		Norwood		Ward not stated.		All Ages		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
4	1	6	4	4	6	3	2	...	1	27	21	48
1	8	...	...	2	7	1	2	...	...	6	11	19
...	...	...	...	...	...	1	...	...	...	1	2	3
2	10	12	7	8	6	1	3	1	2	37	40	77
6	6	6	3	7	9	1	2	2	...	31	30	61
...
7	8	2	2	7	2	11	12	1	2	34	20	60
...	1	...	...	1	2	...	1	...	...	2	4	6
...	1	...	...	...	...	...	...	...	...	...	...	...
2	4	2	1	3	3	...	...	1	2	20	14	34
9	7	6	7	13	15	4	4	5	3	56	61	117
1	...	3	...	8	...	2	...	...	...	16	1	17
...	...	...	...	...	1	...	...	...	...	...	...	1
...	...	1	1	1	1	1	2	...	...	7	11	18
...	...	...	...	...	...	...	...	...	...	1	...	1
...	3	...	1	...	9	...	1	...	1	10	...	16
...	...	...	...	...	2	...	...	...	...	...	3	3
...	1	...	...	1	...	...	...	...	...	...	1	1
...	6	...	2	...	7	...	2	...	...	...	2	2
...	...	1	...	...	...	...	1	...	...	4	...	7
...	...	...	1	...	...	...	...	...	...	1	1	2
...	...	3	...	1	...	...	...	...	...	1	4	5
...	...	1	...	1	1	...	1	...	...	5	1	6
2	3	...	1	1	1	1	2	...	...	5	5	10
7	1	3	1	2	1	1	...	3	3	25	11	36
...
...
2	1	...	2	1	...	...	...	1	...	6	9	15
1	...	...	1	1	...	...	...	...	...	3	1	4
...	...	1	...	1	1	...	...	...	...	10	4	14
2	3	1	1	4	3	2	...	2	...	21	19	40
11	3	5	2	6	2	2	...	2	1	31	11	42
...	1	...	...	...	...	...	...	...	...	2	1	3
...	2	...	...	...	...	...	...	...	...	...	3	3
1	...	...	...	...	...	1	...	...	...	1	...	1
...	...	...	...	...	...	1	...	1	...	3	...	3
1	1	...	...	1	...	...	...	...	...	1	3	4
...	...	...	...	1	...	...	...	...	...	2	4	6
...	...	...	...	3	...	1	...	...	...	7	...	7
...	...	...	1	...	1	...	...	...	3	...	...	3
...	...	...	...	...	...	1	...	...	...	1	1	2
20	14	9	9	34	21	17	13	...	...	127	89	210
...
1	...	1	1	...	1	...	...	...	...	3	...	6
1	...	1	1	1	...	...	...	...	...	4	1	5
...	1	...	...	...	...	...	...	...	...	1	...	1
1	...	1	...	3	1	...	...	...	...	5	2	7

LAMBETH PARISH.—Deaths Registered

	AGES.									
	Under 1 Year.		1-5		Under 5 Years.		5-10		10-15	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Rheumatism ... ..	...	...	...	...	...	...	...	...	...	1
Gout ... ..	...	...	...	...	...	...	...	...	...	...
Rickets ... ..	...	1	9	2	9	3	...	...	...	...
Cancer, Malignant Disease ... ..	...	...	...	...	...	...	...	...	...	...
Cancerum Oris (Noma) ... ..	...	...	...	...	...	...	...	...	...	...
Tabes Mesenterica	19	17	8	2	27	19	...	...	...	...
Tuberc. Meningitis, Hydrocephalus	19	11	19	15	38	26	3	7	1	1
Phthisis	4	1	13	3	17	4	3	5	2	8
Scrofula	5	2	1	1	6	3	...	...	1	1
Other forms of Tuberculosis	14	6	7	9	21	15	2	5	2	1
Purpura, Hæmorrhagic Diathesis	1	...	...	...	1	...	...	...	...	...
Anæmia, Chlorosis, Leucocythæmia ... ..	...	...	...	2	...	2	...	...	...	...
Glycosuria, Diabetes Mellitus	1	...	...	...	1	...	1	1	...	...
Other Constitutional Diseases ... ..	...	...	...	1	...	1	...	...	...	...
Premature Birth	111	73	...	...	111	73	...	...	...	...
Atelectasis	16	7	...	...	16	7	...	...	...	...
Congenital Malformations	12	7	2	...	14	7	...	...	...	...
Old Age ... ..	...	...	...	...	...	...	...	...	...	...
Inflammation of Brain or Membranes	12	11	13	11	25	22	1	1	...	...
Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis	1	4	...	...	1	4	...	1	...	...
Insanity, General Paralysis of Insane ... ..	...	...	...	...	...	...	1	...	...	...
Epilepsy	25	24	6	2	31	26	1	...	...	...
Convulsions ... ..	...	...	...	...	...	...	...	...	...	...
Laryngismus Stridulus (Spasm of Glottis)	1	2	1	...	2	2	...	...	...	...
Disease of Spinal Cord, Paraplegia, Paralysis Agitans	1	...	...	1	1	1	1	...	...	...
Other Diseases of Nervous System	3	3	2	2	5	5	...	1	...	...
Diseases of Ear, Eye, Nose ... ..	...	1	...	2	...	3	...	1	...	1
Pericarditis	1	...	...	...	1	...	...	1	...	...
Acute Endocarditis ... ..	...	...	...	...	...	...	2	2	1	...
Valvular Diseases of Heart... ..	...	1	2	...	2	1	3	4	2	3
Other Diseases of Heart	3	3	1	1	4	4	2	1	...	1
Aneurism ... ..	...	...	...	...	...	...	...	...	...	...
Embolism, Thrombosis ... ..	...	...	...	...	...	...	...	...	...	...
Other Diseases of Blood Vessels ... ..	...	...	...	...	...	...	...	...	...	...
Laryngitis	3	3	1	4	4	7	...	...	...	...
Croup ... ..	...	...	3	3	3	3	...	...	...	...
Emphysema, Asthma ... ..	...	...	...	...	...	...	...	...	...	...
Bronchitis	9	43	16	37	85	80	2	1	1	1
Pneumonia	30	18	20	21	50	34	...	1	1	...
Pleurisy	1	2	3	1	4	3	...	1	...	...
Bronchopneumonia	28	19	32	16	60	35	1	...	...	...
Pleuropneumonia	1	1	1	...	2	1	...	...	...	...
Other Dis. of Respiratory System	8	8	1	1	9	9	...	...	...	...
Dentition	19	11	6	9	25	20	...	...	...	...
Sore Throat, Quinsy	1	...	1	1	2	1	1	1	1	...
Diseases of Stomach... ..	7	1	...	1	7	2	...	1	...	...
Enteritis	59	55	3	13	62	68	1	1	3	...

from all Causes during the Year 1899.

	AGES.																Total.		
	15-20		20-25		25-40		40-60		60-65		65-80		80 and over.		Over 5 Years.			All Ages	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.
...	1	1	...	1	...	3	1	...	2	2	3	...	...	6	9	6	9	15
...	...	...	...	1	...	2	...	...	3	2	...	...	1	6	3	6	3	9
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	9	4	13
...	...	1	1	...	6	15	43	72	15	22	27	49	3	6	95	166	95	166	251
...	1	1	...	...	1	1	1	...	...	...	...	...	...	2	3	29	22	51
...	...	...	...	...	...	1	...	...	...	...	...	...	...	5	8	43	34	77
...	14	18	33	14	120	79	115	67	9	6	7	4	...	303	201	320	205	525	
...	...	...	1	...	...	...	...	...	...	...	...	...	...	2	1	8	4	12
...	3	...	2	4	4	4	3	...	1	1	...	...	16	13	37	28	65	
...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	2	...	2	2
...	...	1	1	...	1	...	1	...	1	...	...	...	4	...	6	...	6	6
...	...	...	1	...	3	3	...	1	4	1	...	6	9	7	9	...	16	16
...	...	...	...	...	2	2	...	3	...	5	...	...	2	10	2	11	...	13
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	111	73	...	184
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16	7	...	23
...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	16	7	...	23
...	...	...	...	...	...	...	...	...	1	26	39	36	64	62	104	62	104	166
...	...	1	1	4	...	3	...	...	2	1	...	...	11	3	36	25	...	61
...	...	...	3	5	34	29	12	15	37	68	12	16	98	134	99	138	...	237
...	...	2	...	10	3	16	6	3	9	7	2	5	42	21	42	21	...	63	
...	...	1	1	...	3	6	1	...	1	4	...	1	7	12	7	12	...	19	
...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	33	26	...	59
...	2	2	...	4	...	4
...	1	1	...	4	...	6	4	1	1	3	3	1	2	18	10	19	11	...	39
...	...	1	1	...	2	4	5	4	...	1	2	...	9	12	14	17	...	31	
...	1	...	...	...	...	3	...	1	...	...	...	...	1	2	1	5	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	7	8	7	8	...	15
...	1	1	2	3	12	12	13	25	3	5	15	15	3	4	54	73	56	74	130
...	2	2	1	2	14	9	41	41	13	21	44	53	8	14	125	144	129	148	277
...	2	...	3	1	1	...	1	...	6	...	4	...	6	2	8
...	...	1	1	...	1	...	2	4	...	4	...	4
...	...	1	1	...	6	...	1	...	4	...	1	...	9	5	9	5	...	14	14
...	1	1	...	5	7	...	12	12
...	3	3	...	6	6
...	...	1	1	...	8	4	3	6	5	4	1	1	19	15	19	15	...	34	34
...	...	1	...	7	9	59	49	25	34	100	137	25	45	220	276	305	356	...	681
...	2	...	3	1	20	10	40	23	6	6	16	16	1	5	89	62	139	95	235
...	6	3	...	1	...	2	6	7	10	10	...	20	20
...	2	1	2	...	2	...	8	2	3	4	5	8	1	3	24	18	84	53	137
...	2	1	1	5	1	...	1	6	5	8	6	...	14	14
...	1	...	2	4	2	5	6	...	2	3	8	1	1	13	22	22	31	...	53
...	25	20	...	45	45
...	1	1	...	1	2	1	1	1	2	2	1	...	2	1	4	2	...	6	6
...	1	1	3	2	2	2	7	1	1	2	2	1	...	9	17	15	19	...	35
...	1	1	1	1	3	...	7	...	2	2	9	1	2	10	26	72	94	...	166

LAMBETH PARISH.—Deaths Registered

	AGES.									
	Under 1 Year.		1-5		Under 5 Years.		5-10		10-15	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Obstructive Diseases of Intestine ...	5	4	2	1	7	5	...	1	...	...
Peritonitis ...	2	...	2	2	2	2	2	2	...	1
Ascites ...	...	...	...	...	...	...	...	...	...	1
Cirrhosis of Liver ...	1	...	...	...	1	1	...	...	...	...
Jaundice and other Diseases of Liver	8	5	2	...	8	7	1	1	...	...
Diseases of the Pancreas ...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Digestive System	22	15	1	1	23	16	1	2	...	...
Diseases of Lymphatics and of Spleen	...	...	...	...	...	...	...	...	...	...
Bronchocele, Addison's Dis.	...	...	...	...	...	...	...	...	...	...
Nephritis ...	...	...	...	...	...	...	...	...	...	...
Bright's Disease, Albuminuria	...	...	1	1	1	1	...	...	...	...
Disease of Bladder or of Prostate	...	...	1	...	1	...	...	...	...	...
Calculus (Stone) ...	...	...	...	...	...	...	...	...	...	...
Other Dis. of the Urinary System..	...	...	...	...	...	...	...	1	...	...
Male Organs ...	...	...	1	...	1	...	...	...	...	...
Female Organs ...	...	...	...	...	...	...	...	...	...	...
Abortion, Miscarriage ...	...	...	...	...	...	...	...	...	...	...
Puerperal Convulsions ...	...	...	...	...	...	...	...	...	...	...
Placenta prævia, Flooding ...	...	...	...	...	...	...	...	...	...	...
Other Accidents of Child Birth	...	...	...	...	...	...	...	...	...	...
Caries, Necrosis ...	...	...	...	...	1	1	...	1	...	1
Arthritis, Ostitis, Periostitis	...	1	...	1	...	...	...	...	...	...
Other Diseases of Bones and Joints	1	1	...	...	2	1	...	...	...	...
Carbuncle, Phlegmon ...	1	1	1	...	2	1	...	...	...	...
Other Dis. of Integumentary System	2	1	1	2	2	...	...	...	...	...
Fractures and Contusions ...	...	...	1	...	1	...	1	...	...	1
Gunshot Wounds ...	...	...	...	...	...	...	...	...	...	...
Cut, Stab ...	...	...	...	...	...	...	...	...	...	...
Burn, Scald ...	1	...	5	3	6	3	...	1	...	1
Poison... ..	...	...	2	...	2	...	...	...	...	...
Drowning ...	...	...	...	1	...	1	1	...	1	...
Suffocation ...	17	16	...	...	17	16	...	1	...	1
Otherwise ...	4	...	3	2	7	2	...	1	...	...
Manslaughter ...	...	...	...	...	...	...	...	...	...	...
Murder ...	...	2	...	...	2	...	...	...	...	...
Gunshot Wounds ...	...	...	...	...	...	...	...	...	...	...
Cut, Stab ...	...	...	...	...	...	...	...	...	...	...
Poison... ..	...	...	...	...	...	...	...	...	...	...
Drowning ...	...	...	...	...	...	...	...	...	...	...
Hanging ...	1	1	...	...	1	1	2	...	...	...
Otherwise ...	...	...	2	...	2	...	2	...	1	...
Hanging (Execution)	...	...	2	...	1	...	...	...	3	...
Dropsy ...	...	...	...	...	...	...	...	...	...	...
Debility, Atrophy, Inanition ...	119	74	7	6	126	79	...	...	...	...
Mortification ...	...	...	...	...	...	...	...	...	...	...
Tumour ...	...	...	...	...	...	...	...	...	...	...
Abscess ...	...	...	2	...	2	...	...	...	...	...
Hæmorrhage ...	...	...	...	...	...	...	...	...	...	...
Sudden Death (cause not ascertained)	...	...	...	...	...	...	...	...	1	...
Causes not specified, or ill-defined...	3	...	1	3	1	...	...	...	...	...

from all Causes during the year 1899.

	AGES														Totals.				
	15-20		20-25		25-40		40-60		60-65		65-80		80 and over.			Over 5 Years.		All Ages	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.
Obstructive Diseases of Intestine ...	2	1	1	...	1	1	2	4	2	3	8	5	4	1	20	16	27	21	48
Peritonitis ...	1	...	1	2	2	...	1	...	...	3	...	...	...	4	11	6	13	19	3
Ascites ...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	2	1	2	3	77
Cirrhosis of Liver ...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	61
Jaundice and other Diseases of Liver	...	...	1	...	6	5	20	24	2	6	7	3	...	1	37	39	37	40	...
Diseases of the Pancreas ...	...	...	...	...	3	3	9	9	4	1	5	9	1	...	23	23	31	30	...
Other Diseases of Digestive System	...	...	...	...	4	1	...	...	...	...	...	...	...	...	...	...	...	...	60
Diseases of Lymphatics and of Spleen	1	...	2	2	1	3	2	2	1	...	1	1	1	11	10	34	26	6	
Bronchocele, Addison's Dis.	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4	2	4	1	...
Nephritis ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1	...
Bright's Disease, Albuminuria	...	...	2	...	2	3	9	5	1	1	5	4	...	19	13	20	14	34	
Disease of Bladder or of Prostate	...	...	...	...	4	11	18	16	7	6	24	22	2	6	55	61	56	61	117
Calculus (Stone) ...	...	...	...	...	...	3	...	3	...	8	1	2	...	16	1	16	1	17	...
Other Dis. of the Urinary System..	...	...	...	...	2	2	5	...	1	4	3	...	...	7	11	7	11	18	...
Male Organs ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...
Female Organs ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Abortion, Miscarriage ...	...	...	1	...	...	...	7	...	1	...	2	...	...	16	...	16	16	16	...
Puerperal Convulsions ...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	3	3	...
Placenta prævia, Flooding ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	...
Other Accidents of Child Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	2	2	...
Caries, Necrosis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	19	...	19	19	19	...
Arthritis, Ostitis, Periostitis	...	...	1	2	...	...	...	...	...	1	...	...	...	4	3	4	3	7	...
Other Diseases of Bones and Joints	...	1	...	...	...	1	...	...	...	...	1	...	...	1	1	1	1	2	...
Carbuncle, Phlegmon ...	1	1	1	...	2	1	...	...	...	...	...	...	...	1	2	1	4	5	...
Other Dis. of Integumentary System	2	1	1	2	2	...	...	...	...	...	1	2	...	3	3	5	5	10	...
Fractures and Contusions ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunshot Wounds ...	2	...	...	6	1	12	2	1	1	2	4	...	2	24	11	25	11	36	...
Cut, Stab ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burn, Scald ...	1	...	5	3	6	3	...	1	...	...	...	...	...	6	6	9	15	...	...
Poison... ..	...	...	2	...	2	...	...	...	...	...	...	...	...	...	6	6	9	15	...
Drowning ...	...	...	...	1	...	1	1	...	1	...	1	...	...	1	1	3	1	4	...
Suffocation ...	17	16	...	...	17	16	...	1	...	...	...	...	...	10	3	10	4	14	...
Otherwise ...	4	...	3	2	7	2	...	1	...	...	...	...	...	4	3	21	19	40	...
Manslaughter ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	42	...
Murder ...	...	2	...	...	2	...	...	...	...	...	...	...	...	2	1	2	1	3	...
Gunshot Wounds ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	3	...
Cut, Stab ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	3	...
Poison... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	3	...
Drowning ...	...	...	...	...	...	1	1	1	1	...	1	...	...	1	2	1	3	4	...
Hanging ...	1	1	...	...	1	1	2	...	...	...	...	...	...	2	4	2	4	6	...
Otherwise ...	...	...	2	...	2	...	2	...	1	...	...	...	...	7	...	7	...	7	...
Hanging (Execution)	...	...	2	...	1	...	...	...	...	...	...	...	...	3	...	3	...	3	...
Dropsy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...
Debility, Atrophy, Inanition ...	119	74	7	6	126	79	...	...	...	...	...	...	...	1	1	1	1	2	...
Mortification ...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	4	127	83	210	...
Tumour ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscess ...	...	...	2	...	2	...	...	1	1	2	1	1	...	3	3	3	3	6	...
Hæmorrhage ...	...	...	...	...	...	...	1	...	1	...	1	...	...	2	1	4	1	5	...
Sudden Death (cause not ascertained)	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1	1	...
Causes not specified, or ill-defined...	3	...	1	3	1	...	...	...	...	...	...	...	...	2	1	5	2	7	...

SUMMARY OF DEATH RETURNS.



	No. of Dea'hs.		Total.		No. of Dea'hs.		Total.	
	M.	F.			M.	F.		
I.—SPECIFIC FEBRILE, OR ZYMOTIC DISEASES.					Brought forward ...			
1. Miasmatic Diseases	320	364	684		2597	2610	5207	
2. Diarrhoeal "	128	146	274	VI.—LOCAL DISEASES—<i>continued.</i>				
3. Malarial "	1	...	1	6. Diseases of Lymphatic System	2	4	6	
4. Zoogenous "	2	1	3	7. Diseases of Gland-like Organs of Uncertain Use	...	1	1	
5. Venereal "	19	18	37	8. Diseases of Urinary System...	9J	88	187	
6. Septic "	13	21	34	9. Diseases of Reproductive System—				
II.—PARASITIC DISEASES					(a) Diseases of Organs of Generation	1	16	17
III.—DIETIC DISEASES					(b) Diseases of Parturition	25	25
IV.—CONSTITUTIONAL DISEASES ...					10. Diseases of Bones and Joints	6	8	14
V.—DEVELOPMENTAL DISEASES ...					11. Diseases of Integumentary System	10	6	16
VI.—LOCAL DISEASES					VII.—VIOLENCE.			
1. Diseases of Nervous System	252	252	504	1. Accident or Negligence ...	96	55	151	
2. Diseases of Organs of Special Sense	1	5	6	2. Homicide	2	4	6	
3. Diseases of Circulatory System	209	242	451	3. Suicide... ..	17	7	24	
4. Diseases of Respiratory " ..	595	577	1172	4. Execution	1	...	1	
5. Diseases of Digestive " ..	253	267	520	VIII.—ILL-DEFINED AND NOT SPECIFIED CAUSES.				
Carried forward ...	2597	2610	5207		140	91	231	
				TOTAL ...				
					2971	2915	5886	

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