Report upon the public health and sanitary condition of the Parish of St. Mary, Battersea during the year1899.

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The Vestry of the Parish of St. Mary, Battersea.

REPORT

UPON THE

PUBLIC HEALTH & SANITARY CONDITION

OF

The Parish of St. Mary, Battersea,

DURING THE YEAR 1899,

BY

W. H. KEMPSTER, M.D.,

MEDICAL OFFICER OF HEALTH.

Treasurer of the Incorporated Society of Medical Officers of Health and Vice-President of the Metropolitan Branch.

Fellow and Member of Council of the Royal Institute of Public Health.

Fellow of the Obstetrical Society.



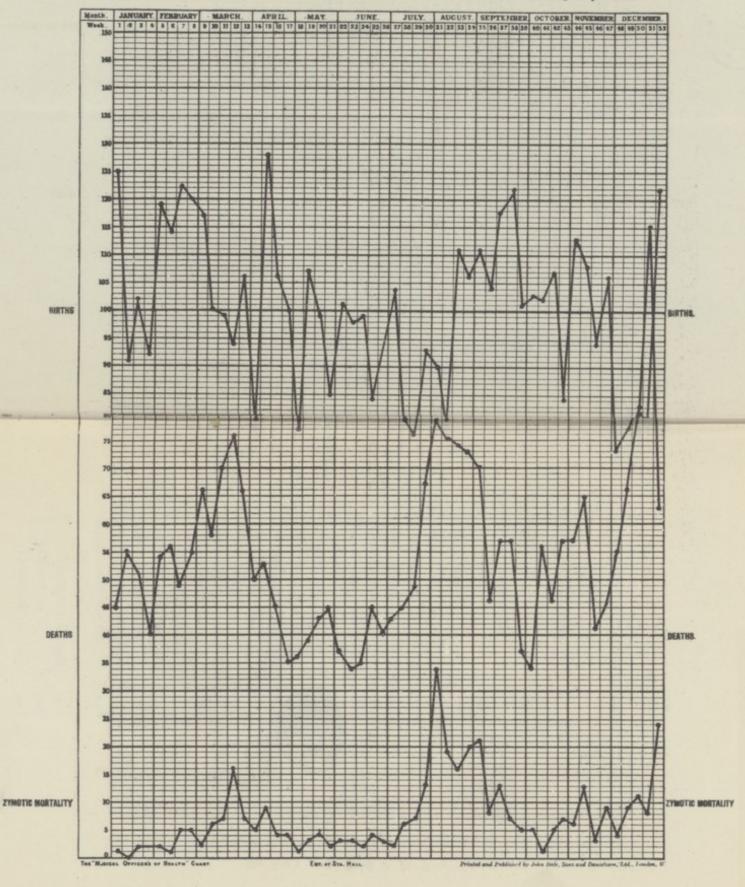
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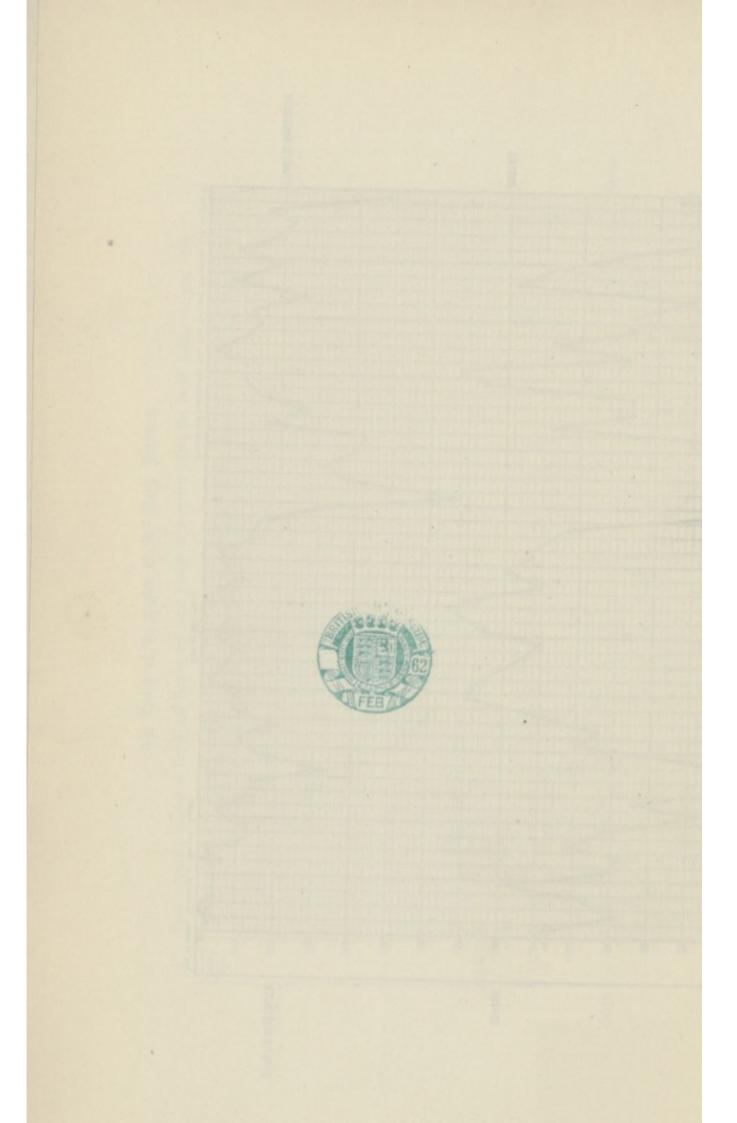




The Vestry of the Farish of St. Mary, Battersea.

Chart indicating number of Births and Deaths registered weekly as occurring within the Parish during the year 1809





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A List of the Officers and Staff of the Public Bealth Department during the year 1899.

OFFICERS.

Medical Officer of Health.

Public Analyst.

W. H. KEMPSTER, M.D. C. E. CASSAL, F.I.C.

Chief Sanitary Inspector.

ISAAC YOUNG.

Sanitary Inspectors.

No.	I	District	 	JOHN HERRIN.
,,	2	,,	 	ALFRED CHUTER.
	3	,,	 	JAMES LAWRENCE.
"	4	,,	 	ARTHUR EDWARD PURNELL.
,,	5	"	 	JOHN THOMAS BAXTER.
	6	, ,,	 	HORACE MARRABLE.
,,	7	,,	 	ARTHUR ODELL.
-	8	,,	 	HUBERT HARRY MAY.
			Cleri	ks.
Offi	ce	Clerk	 	DANIEL ELWYN RICHARDS.
		(FRANK ELIOT WARD.
Tun	ior	Clerks	 	ISAIAH GEORGE BRIGHTING.
3		(BERTRAND WILLIAM SEARS.

STAFF.

Disinfectors and Drain Testers.

H. HAYLLAR. S. TERRY. I. SMITH. A. NASON. G. WHEABLE. I. BRADSHAW. G. SEWELL. J. HOLLOWAY.

> Mortuary Keeper. W. SAXBY.

To the Vestry of the Parish of St. Mary, Battersea.

GENTLEMEN,

I have the honor to present my Twenty-Ninth Annual Report.

POPULATION.

The population of the Parish, being the most important basis of statistics, is the first matter for consideration, and is necessarily arrived at by a process of estimation. The official figures are based upon the assumption that the average annual increase in the population during the most recent intercensal period, is maintained during the succeeding years. This process, however, in view of the amount of building operations being continuously carried out, and the changes which are ever taking place in a district, cannot be regarded as in anywise reliable, being a difficulty remediable only by more frequent census enumerations. These have been generally carried out at decennial periods with the exception of that of the year 1896, which took place for the purposes of the Equalization of Rates Act. The next census will be taken in April, 1901, and there is every possibility that thereafter it will be at quinquennial intervals. In view of these circumstances, whereby any correction if necessary may be made in the Report for the year 1900, I propose to continue for the purposes of this Report to allow the figures indicating the average annual increase from the years 1891 to 1896, to represent the estimated annual increase in the population of the Parish of Battersea during 1899. The census of 1891 showed the population then to be 150,458 and that of 1896 to be 165,115, representing an increase during the five years of 14,657, or an average annual increase of 2,931 per annum. The estimated population for 1898 was 171,709, it therefore follows, that if to this be added the estimated annual increase of 2,931, the estimated mean population of the Parish for the year 1899 is 174,640.

BIRTHS AND BIRTH RATE.

During the year, five thousand one hundred and seventy-nine births were registered; of these two thousand six hundred and eighty-nine were males and two thousand four hundred and ninety females, producing a birth-rate for the year equal to 29.6 per 1,000 of the population, that for the Metropolis within the same being equal to 29.4 per 1,000, the births registered in London

TABLE I.

	Birth Rate.
Battersea	29.6
London	29*4

numbering one hundred and thirty-three thousand one hundred and twenty. I have again to point out the close approximation between the local and the metropolitan birth-rates, of which, however, Battersea shows the better figures. This similarity is obviously due to the fact that Battersea is rapidly acquiring the characteristics of a town district in place of its former suburban nature.

DEATHS AND DEATH RATES.

The deaths registered in Battersea during the year, numbered two thousand eight hundred and fifty-eight. Of these one thousand four hundred and thirty-nine were of males and one thousand four hundred and nineteen of females, there being a remarkably equal distribution of the mortality amongst the sexes. The death-rate of those actually registered in the Parish, inclusive of non-parishioners, i.e., the un-corrected death-rate, was equal to 16.3 per 1,000, compared with 19.8 in the whole Metropolis, where the deaths registered numbered eighty-nine thousand six hundred and eighty-nine.

TABLE II.

	Incorrected Death Rate. per 1,000 of population.	Corrected Death Rate. per 1,000 of population
Battersea	16.3	16.6
London	19.8	19.3

The deaths of two thousand eight hundred and fifty-eight persons (including non-parishioners) registered in the Parish during the year, are here distributed according to the several localities:—

TABLE III.

LOCALITY.	Deaths of Parishioners.	DEATHS OF NON-PARISHIONERS.	Totals.
East Battersea	1,076	13	1,089
West Battersea (excluding institutions)	1,163	9	1,172
Wandsworth and Clapham Union Infirmary	306	268	574
Bolingbroke Hospital	12	II	23
Totals	2,557	301	2,858

Corrected The corrected death-rate is obtained by the Death-Rate. exclusion of deaths of non-parishioners occurring within the Parish, and the inclusion of those of parishioners taking place in other parts of the Metropolis.

The deaths of non-parishioners within the Parish numbered 301, the total being made up as indicated in the preceding table. Of parishioners occurring in other parts of the Metropolis, the deaths numbered 348 as follows:—

In Union Workhouses and Infirmaries		19
General and Special Hospitals		168
Metropolitan Asylums Board Fever	Hos-	
pitals		. 90
County and other Lunatic Asylums		51
Elsewhere		20
		348

Of the latter deaths further details will be found upon reference to Table VII. The corrected total of deaths of parishioners during the year is therefore two thousand nine hundred and five, producing a corrected death rate of 16.6. It will thus be observed that even after correction the death-rate for Battersea, for the year 1899, is 2.7 per thousand lower than that of the Metropolis, which according to the Annual Report of the Registrar-General, had a corrected death-rate of 19.3 per thousand. The recorded death-rate for England and Wales was 18.3 per thousand during the year under report.

The following tables will be of interest as indicating the death-rates, &c., of the various London Sanitary Areas, and also those of each of the thirty-three principal towns during the year. The deaths from zymotic disease in the larger South London parishes are not really greater in relative numbers as appears at first sight as they contain a larger proportional population of children and young persons of susceptible age than the parishes in other parts of the Metropolis.

TABLE IV.—Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Distribution of Deaths occurring in Public Institutions, during the Year 1899.

							array cr											
	pulation 1899.		55		ual Ra ,000 Liv		from Zymotic ses.	ox.	'Si	Fever.	ria.	Cough.	9	Fever.	Unde-	ea.	· S	f Children sur of age to Births.
SANITARY AREAS.	Estimated Populatic middle of 1899.	Births	Deaths.	Births,	Deaths.	Principal Zymotic Diseases.	Deaths f Principal Z Disease	Small-pox	Measles	Scarlet F	Diphtheria.	Whooping	Typhus.	Enteric F	Simple and Unde- fined Fever.	Diarrhoea	Phthisis.	Deaths of C under 1 year 1,000 Bir
LONDON Paddington Kensington Hammersmith Fulham Chelsea St. George's, Hanover Sq. Westminster St. James, Westminster St. James, Westminster St. Pancras Islington St. Pancras Islington St. Westminster St. Pancras Islington St. Martin-in-the-Fields St. Martin-in-the-Fields St. Martin-in-the-Fields St. Luke London City Shoreditch Bethnal Green Whitechapel St. George-in-the-East Limehouse Mile End Old Town Poplar St. Saviour, Southwark St. George, Southwark Newington St. Olave, Southwark Newington St. Olave, Southwark Bermondsey Rotherhithe Lambeth Battersea Wandsworth Camberwell Greenwich Lee Lewisham Woolwich Plumstead	4.546,752 128,794 172,899 108,785 130,720 96,721 80,876 52,117 21,827 140,139 80,252 244,548 348,085 35,187 222,571 37,196 12,142 23,016 29,621 66,068 40,868 27,986 121,071 128,938 81,391 13,161 170,606 24,207 60,536 124,166 11,098 85,835 1174,996 209,655 264,817 182,131 40,219 91,027 41,542 41,542 64,031	133,120 2,941 3,590 3,061 4,574 2,381 1,134 1,115 4,6621 9,658 799 6,453 1,132 148 472 721 2,050 1,811 416 4,132 4,753 3,000 2,068 1,933 4,250 5,918 694 2,128 4,178 3,61 3,063 1,126 9,433 5,179 5,542 7,444 5,682 976 2,597	87,530 2,065 3,054 2,055 2,507 1,893 1,142 1,1599 2,596 926 4,948 6,299 446 3,753 189 521 737 1,492 1,1590 2,857 2,936 1,714 1,312 2,936 1,714 1,312 2,406 3,762 6,07 1,673 2,962 2,653 2,662 3,762 2,663 2,	25'4 22'9 20'8 28'2 35'1 24'7 21'5 20'1 27'8 22'8 22'1 30'5 12'2 20'6 24'4 31'1 44'4 14'9 34'2 37.0 37'0 37'7 33'0 37'7 33'5 33'7 33'5 35'6 35'7 35'6 35'7 35'6 35'7 35'7 35'7 35'7 35'7 35'7 35'7 35'7	19'3 16'1 17'7 19'0 19'2 19'6 14'2 22'3 17'9 18'6 11'6 20'3 18'1 12'7 24'9 22'6 22'7 24'9 22'8 21'1 25'1 25'1 25'1 25'1 25'1 25'1 16'2 16'3 17'4 18'8 15'1 16'3 17'4 18'8	2'46 1'55 1'53 2'11 3'23 2'13 1'09 1 64 1'12 1'70 1'16 2'30 1'33 2'22 1'40 1'07 1'30 2'23 3'04 3'03 1'36 2'12 3'44 3'78 2'72 3'44 3'78 2'72 3'44 3'78 2'72 3'44 3'78 2'72 2'12 2'14 1'37 2'12 1'45 1'57 2'12 2'14 1'37 2	11,147 198 263 230 423 205 88 85 244 236 93 653 798 47 495 52 13 38 405 173 166 200 123 38 405 173 166 221 307 582 85 244 495 173 166 221 307 582 85 85 85 85 85 85 85 85 85 85 85 85 85	3	2,141 6 24 22 68 18 17 17 17 3 24 22 164 100 116 5 5 11 36 6 26 4 99 98 58 58 58 58 58 58 58 58 58 58 58 58 58 5	398 5 10 13 33 8 7 5 11 5 6 25 34 36 1 13 9 2 3 11 5 10 2 6 13 2 10 11 25 14 9 19 17 4 6 4 6	1,946 29 43 25 59 26 10 36 15 11 126 6 89 5 1 7 6 28 10 7 65 59 27 10 10 10 10 10 10 10 10 10 10	1,717 43 61 46 54 71 14 5 6 6 34 11 142 170 4 4 4 8 1 7 13 30 4 4 7 1 7 1 4 7 1 7 1 7 1 4 7 1 7 1 7 1	"IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	758 9 24 23 25 18 9 9 3 26 4 42 48 5 35 4 1 7 23 26 22 25 38 15 9 22 26 38 15 26 36 26 37 26 37 26 37 26 37 26 37 37 37 37 37 37 37 37 37 37 37 37 37	101,101,101,101,101,101,101,101,101,101	4,181 1,06 1,01 1,01 1,03 1,03 1,03 1,03 1,03 1,03	8,275 148 231 187 238 173 110 172 46 277 67 489 552 31 32 116 22 91 153 303 194 121 25 364 83 213 364 83 213 364 83 213 364 83 213 364 83 213 214 215 216 217 217 218 218 218 218 218 218 218 218	166 151 180 183 189 164 129 207 142 124 129 178 160 103 153 112 203 189 226 193 144 204 174 147 200 216 158 176 203 205 176 170 187 187 187 187 187 188 162 153 158 163 163

Deaths which cannot be absolutely apportioned to any particular parish are distributed pro rata among the various Metropolitan Districts, hence the slight difference between the rates given by Medical Officers, i.e., in this table 16.7 is given as the death-rate for Battersea, it will be found that I have estimated it as 16.6, which latter is absolutely correct if these added cases of which no knowledge can be obtained be deleted.

TABLE V.

Recorded and Corrected Death-rates per 1,000 Living in England and Wales and also in 33 Great Towns in 1899.

		Recorded Death- rate.	Corrected Death- rate.‡			Recorded Death- rate.	Corrected Death- rate.‡
Faland & Wa	1	-0	-0-	Y		0	
England & Wa		18.3	18.3	London		19.8	21.0
England & Wa less the 33 tov		17.3	17.0	Plymouth		21.7	21.1
33 Towns		20.5	21.8	Bradford		18.4	21.1
Croydon		15.0	156	Leeds		19.1	21.2
Norwich		17.3	16.2	Blackburn		19.1	21'4
Cardiff		15'4	17.2	Nottingham		20.0	21'4
West Ham		16.7	18.0	Newcastle		20.6	22.3
Derby		16.9	18.6	Sunderland		21.4	22.5
Huddersfield		16.2	18.8	Bolton		19.9	22.5
Bristol		18.2	18.9	Burnley		19.6	22.5
Brighton		18.9	10.1	Wolverhampt	on	21.8	22.8
Leicester		17.7	19'2	Birmingham		20.8	23.0
Swansea		18.1	19.8	Oldham		20'5	23'4
Portsmouth		19.7	20'I	Sheffield		22°I	24.6
Gateshead		18.8	20'1	Preston		22.8	25'1
Hull		193	20.2	Salford		23.8	26.7
Halifax		18.2	20.3	Manchester		24.6	27.8
Birkenhead		19.2	21.0	Liverpool		26 4	28.9

The corrected death-rate here is the Recorded Death-Rate multiplied by the Factor as calculated by the Registrar-General.

Zymotic Sickness and mortality from zymotic diseases has occurred during Mortality. the year, the total zymotic deaths numbering only 377 compared with 517 during the preceding year, and the number of cases of notifiable infectious diseases reduced from 1887 cases during the year 1898 to 1,702 cases during the year under report, including a reduction of 185 in Diphtheria cases. The subject of Zymotic Sickness and Mortality is dealt with in much fuller detail in pages 34 to 38 and 42 to 62 of this report.

Table VI. officially known as "Table A," is compiled in all sanitary districts under the express direction of the Local Government Board, for the purpose of securing uniformity of tabulation in all parts of the country, of the important particulars contained therein. It is at the same time expressly stated that the Medical Officer of Health of any district is at liberty, in addition, to continue to use any other form of tabulation which, in his opinion, illustrates more fully the sanitary condition of the district for which he acts. For purposes of comparison with the vital statistics of the past forty-three years, since the year 1856, other tables which have been employed in this parish are also given herewith.

In Table VI. will be found particulars of mortality in the various Registrar's districts and public institutions which are also treated as separate districts. They comprise the Registrar's districts of East and West Battersea, the Wandsworth and Clapham Union Infirmary and Bolingbroke Hospital.

The broad grouping of ages is under and above five years of age, so as to clearly define the mortality of each of these periods of life, more especially the infantile ages under five, as the greatest waste of life has occurred in the past at the early years, and although great improvement has taken place in this respect during the last few years, still much remains to be done in this direction. A marked reduction has however been affected during

the year under report, for instance, during the preceding year the mortality amongst infants under five years of age from zymotic diseases numbered 400, whereas during the year 1899 the mortality in the same class numbered only 281. Again in the mortality at these ages from all diseases, a great saving of life has taken place, the total for 1898 being 1,222 and that for the year 1899 only 1,139. The table also gives particulars of deaths at other ages.

DEATHS IN PUBLIC INSTITUTIONS.

During the year, three hundred and forty-eight Battersea parishioners died in public institutions and other places outside the parish but within the Metropolis, in addition to three hundred and six dying in the Wandsworth and Clapham Union Infirmary and twelve in the Bolingbroke Hospital, details of which are given in Tables XIV. and XVI. respectively; making a total of six hundred and sixty-six deaths of parishioners in public institutions. During the preceding year, six hundred and fortyone similarly occurred. The following table gives details of such of the deaths as occurred outside the parish, indicating age, sex, and cause of death and the particular class of institution where the deaths occurred, those in general and special hospitals being represented by the largest number. In County and other Lunatic Asylums, fifty-one deaths occurred, corresponding exactly with the number dying in similar institutions in the preceding year.

TABLE VI.

Table A of Deaths during the Year 1899 in the Metropolitan Sanitary District of Battersea, classified according to Diseases, Ages and Localities.

	1	MORTA		ROM AI			M	ORT	ALITY 3	FRO 4	om s	ивјо:	INED	CAU 8	SES,	10	11	12	ING	DEAT	15	OF C	HILE 17	REN 18	UND	ER 5	YE. 21	ARS.		
Names of Localities adopted for the pur-									9	,	F.	ous,		FI	EVER	s.						pu		-	S.					
separate localities.	Atall	Under 1 year.		and under 15	and under 25	and under 65	65 and up- wards		Small Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric Fever.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa and Dysentery.	Rheumati Fever.	Phthisis.	Bronchiti Pneumonia,	Disc	Influenza	Injuries.	All Other Diseases.	Total.
East Battersea	1089	421	149	45	32	295	147	Under 5			4	1							1	57	24	66		10	123	3	3	13	265	570
, , , , , , , , , , , , , , , , , , ,	1009	444	-49	45	3-	-90	***/	5 upwards	***		2	***	***	2		***	1	***	2	8	1	3	_ 3	81	114	65	13	27	197	519
West Battersea excludingPublicInsts.)	1172	379	129	46	49	335	234	Under 5			7	3		 6			5		 3	28	26 	46	8	5	96	76	23		273 276	508
Wandsworth & Clap nam Union Infirmary,	574	38	22	2	22	302	188	Under 5			I						 I		I 8	6		2 4	2	2	67		3	1	41	51.
Bolingbroke Hospital	23		1	4	I	14	3	Under 5 5 upwards																				10	12	2:
								Under 5 5 upwards																						
Totals	2858	838	301	97	104	946	572	Under 5 5 upwards			12	4		1 9			7		3		-75	114		17	225 315	6	5		579 696	
	Tı	E SUB	JOINED	NUMB	ERS H	AVE AL	SO TO	BE TAKEN	_		_	_		GING	OF	THE	ABO	VE R	ECO	RDS	of A	IORT	ALIT	Υ.						
eaths occurring outside belonging thereto.	348	24	55	45	30	160	34	Under 5 5 upwards		3	13			29					1	4				39	9	31	4	.,,,,,,	23	
eaths occurring within e District of Persons not belonging thereto.	301	27	18	5	10	140	101	Under 5			1									4		4		1	8			5	22	45

TABLE VII.

DEATHS OF BATTERSEA PARISHIONERS OCCURRING OUTSIDE THE DISTRICTS IN PUBLIC INSTITUTIONS AND ELSEWHERE WITHIN THE METROPOLIS.

Parishioners			EX.			£	AGE.			INS	TITUT	TIONS	, cc.	
IN OUTLYING PUBLIC INSTITUTIONS. DISEASE.	TOTALS.	Male:	Females.	Under 1 year.		All under 5.	5 to 15 years.	25 to 65 years.	65 and upwards.	Union Workhouses,	General and Special Hospitals.	Asylums Board Hospitals.	County and other Lunatic Asylums.	Elsewhere.
Small Pox Scarlatina Diphtheria Membranous Croup Typhus Fever Enteric Continued Fever Relapsing Puerperal Cholera Erysipelas Measles Whooping Cough Diarrhœa Other Zymotics Rheumatic Fever Ague Phthisis and other Tubercular Diseases Respiratory Circulatory Nervous Cancer Violence All Other Diseases	29 1 4 4 95 1 49 27 31 46 17	10 14 19 1 1 1 3 49 26 21 15 29 8 25 30	4 28 10 3 1 46 1 23 6 16 17 9 2 25	I	337 4 3 3 8 8 2 2 1		17 8 1	 18 18 3 21 25 8 16 32 15 20 23	2 1 1 4 4 5 4 2 1 14 	3 1. 2 3 1	3 4 1 1 1 36 20 19 14 15 17 37	14 39 25 4 82 3 2 3		

In the foregoing Table VII., it will be observed that twenty deaths are recorded as having occurred "elsewhere." This number is composed largely of deaths from heart disease and violence, including bodies of parishioners recovered from the Thames outside the Battersea Reach. The places where death occurred are here set out:—

Male Balham Hill. Larkhall Rise, Clapham. Putney Heath. On way to St. Bartholomew's Hospital. Goldhawk Road, Hammersmith. SS. "Penelope," River Thames. Female Franklin Road, Chelsea. Male Paddington Station. Female King's Road, Chelsea. Male Beaumont Street, Marylebone. Spa Road, Bermondsey. River Thames. On way to St. George's Hospital. Female Portland Place, Clapham. . . . Nine Elms Goods Yard, Lambeth. Maie On way to Guy's Hospital. Charing Cross District Railway.

The particulars of deaths of non-parishioners dying within the parish will be found in Tables VI., XV. and XVI.

Tables VIII. and IX., give the number of Births and Deaths registered weekly in East and West Battersea respectively, and include the deaths of all persons within the parish and in public institutions, whether parishioners or not. They shew

the incidence of births and deaths at the various periods of the year, being grouped in quarters for that purpose, with additional particulars as to causes of death to be found in Table X.

TABLE VIII.

BIRTHS AND DEATHS IN EAST BATTERSEA DURING THE FIFTY-TWO WEEKS OF 1899.

		BIRTHS.		DEATHS.			
Week ending:— 7th January 14th 21st 28th 4th February 11th 18th 25th 4th March 11th 18th	Males. 34 34 28 29 32 20 30 30 26 25 23 31 25	Females. 24 15 17 22 30 28 26 26 30 31 20 18 18	TOTAL. 58 49 45 51 62 48 56 56 56 43 49 43	Males. 8 15 8 6 7 7 11 8 14 10 14 18 16	Females. 5 5 11 5 10 12 12 12 11 13 16 11	TOTAL 13 20 19 11 17 19 16 20 26 21 27 34 27	
ıst Quarter	367	305	672	142	128	270	

8th April	15	15	30	14	9	23
15th	28	36	64	14	9	23
22nd ,,	30	27	57	7	4	II
29th ,,	22	17	39	9	IO	19
6th May	16	17	33	5	9	14
13th .,	24	26	50	5	9	14
20th ,,	23	27	50	9	10	19
27th ,,	23	19	42	4	8	12
3rd June	29	26	55	7	8	15
10th ,,	22	18	40	7	8	15
17th ,,	31	18	49	1 7	8	15
24th ,,	22	17	39	7	5	12
ıst July	28	21 .	49	5	6	II
2nd Quarter	313	284	597	100	103	203

BIRTHS AND DEATHS IN EAST BATTERSEA, 1899—continued.

Week ending:-		BIRTHS.		DEATHS.			
	Males.	Females.	TOTAL.	Males.	Females.	TOTAL	
8th July	23	26	49	II	7	18	
15th ,,	18	18	36	13	IO	23	
22nd ,,	13	14	27	7	12	19	
29th ,,	24	21	45	17	12	29	
5th August	22	17	39	26	21	47	
12th ,,	17	15 28	32	16	II	27	
19th	21	100000000000000000000000000000000000000	49	17	10	27	
26th ,,	31	24	55	14	16	30	
2nd September	32	27	59	16	7	23	
9th ,,	23 28	23	46	4	8	12	
16th ,,		24	52	10	16	26	
23rd ,,	29	23	52	8	5	13	
30th ,,	18	23	41	7	4	II	
3rd Quarter	. 299	283	582	166	139	305	

7th October	19	26	45	6	4	10
14th ,,	32	20	52	8	II	19
zist "	24	27	51	6	10	16
28th ,,	19	18	37	II	16	27
4th November	23	29	52	9	IO	19
rith "	30	24	54	15	14	29
r8th ,,	19	23	42	12	4	16
25th ,,	22	29	51	10	7	17
2nd December	17	12	29	II	IO	21
9th "	18	26	44	II	13	24
16th ,,	22	15	37	20	17	37
23rd ,,	33	20	53	9	18	27
30th "	15	II	26	23	26	49
4th Quarter .	293	280	573	151	160	311
WHOLE YEAR .	1,272	1,152	2,424	559	530	1,089

TABLE IX.

BIRTHS AND DEATHS IN WEST BATTERSEA DURING THE
FIFTY-TWO WEEKS OF 1899.

Week ending:-		BIRTHS.		DEATHS.			
	Males.	Females.	TOTAL.	Males.	Females.	TOTAL	
7th January	38	29	67	18	14	32	
14th .,	24	18	42	9	26	35	
21st ,,	30	27	57	12	20	32	
28th	26	16	42	13	16	29	
4th February	-32	25	57	21	16	37	
11th	34	32	66	22	15	37	
18th ,,	37	30	67	17	16	33	
25th ,,	38	26	64	18	17	- 35	
4th March	34	27	61	25	15	40	
rith "	- 12	32	44	14	23	37	
18th ,,	24	32	56	24	19	43	
25th ,,	17	28 4	45	21	21	42	
ıst April	36	27	63	20	19	39	
1st Quarter	382	349	731	234	237	471	

2nd Quarter	339	318	657	174	160	334
ist July	24	18	42	19	10	29
24th ,,	23	22	45	15	18	33
17th .,	22	28	50	II	9 18	20
ioth "	30	28	43 46 58	10	9	19
3rd June	28	18	46	10	12	22
27th ,,	22	21	43	II	22	33
20th ,,	19	30	49	16	8	24
13th	25	32	44 57	II	14	25 24 33 22
6th May	33 28	16		12	10	22
29th ,,	33	25 28	49 61	9	7	30 34 16
22nd	24	25	49	25	9 7	34
15th	23 38	26	64	16	14	30
8th April	23	26	49	9	18	27

BIRTHS AND DEATHS IN WEST BATTERSEA, 1899—continued.

Week ending:-		BIRTHS		DEATHS.				
	Males.	Females.	TOTAL.	Males.	Females.	TOTAL		
8th July	32	23	55	14	II	25		
15th ,,	25	18	43	7	15	22		
22nd ,,	26	23	49	17	13	30		
29th ,,	26	22	48	16	22	38		
5th August	24	27	51	16	16	32		
12th ,,	20	27	47	27	21	48		
19th ,,	36	26	62	18	29	47		
26th ,,	30	21	51	21	22	43		
2nd September	27	25	52	18	29	47		
9th "	27	31	58	16	18	34		
16th ,,	27	39	66	14	17	31		
23rd ,,	35	35	70	26	18			
30th ,,	30	. 30	60	12	14	44 26		
3rd Quarter	365	347	712	222	245	467		

7th October	28	30	58	14	IO	24
14th ,,	28	22	50	21	16	37
zist "	23	33	56	14	16	30
28th ,,	24	23	47	18	12	30
4th November	33	28	61	16	22	38
rith "	26	28	54	24	12	36
18th ,,	24	28	52	12	13	25
25th ,,	29	26	55	14	.15	29
2nd December	24	20	44	17	17	34
9th ,,	15	18	. 33	21	21	42
16th .,	22	24	46	14	31	45
23rd ,,	34	28	62	27	27	54
30th ,,	21	16	37	38	35	73
4th Quarter	331	324	655	250	247	497
WHOLE YEAR	1,417	1,338	2,755	880	889	1,769

TABLE X.

SUMMARY OF BIRTHS AND DEATHS FOR THE SEVERAL QUARTERS WITH TOTALS FOR THE YEAR.

					Dea	ths			ver								ns Non-
BATTERS 1899.	EA.		Births	Deaths	Under 1 Year	Above 60 Years	Small Pox	Measles	Scarlet Fever	Diphtheria	Whooping	Fever	Diarrhœa	Cholera	Violence	Inquests	Public Institutions (including Non-
ıst Quarter	EW		672 731		87 96					4 5	5 7		2 3		12	38 34	178
and Quarter	EW		597 657	203 334	77 67	35 94		2 8	***	3	10		 I		11	27 24	120
3rd Quarter	EW		582 712		175 170			7 9		I	5 2	2 4	62 44	4 2	10	26 37	149
th Quarter	EW		 573 655	311 497	82 84			56 17		1 5	5 6	3	1 4		7 12	30 34	150
Whole Year	EW	:::}	2424 2755					65 38		7 14	25 27	2 8	65 52	4 2	40 56	121	597
Тот	ALS	3	5179	2858	838	745		103		21	52	10	117	6	96	250	597

The Births and Deaths registered during the four quarters of the year in the whole Parish are here set out:—

		Births.	Deaths.
1st quarter	 	1,403	741
2nd ,,	 	1,254	537
3rd ,,	 	1,294	772
4th ,,	 	1,228	808
	Totals	5,179	2,858

It will be observed that with the exception of the first quarter, the births were very equally distributed, and the figures will also be found in each of the four quarters to very closely correspond with those of the preceding year. In regard to deaths, the second and fourth quarters were each respectively below and above the average of the year.

Table XI. is very valuable as containing a reliable sanitary history of Battersea since 1856, the year in which modern sanitation first came into existence under the provisions of the Metropolis Local Management Act of 1855, and by which sanitary authorities, in the form of Vestries and District Boards, the latter consisting of small parishes grouped together, were first constituted for London as a whole.

This Parish at that time consisted of a congeries of small villages, between which extended market gardens; the inhabitants and dependents of some few dozens of large houses, the residences chiefly of merchants, with the workers at the market gardens constituting the principal population. It will be observed that the population was then but 15,069, and at the census year of 1861 had but reached the number of 19,582. The birth-rate was then higher than now. The death-rate, however, although the population was very sparse, was much higher than at present. It has been laid down as an axiom that mortality increases in direct proportion to the density of population, and it is the aim of modern sanitation to limit or prevent such increase. That the same Parish, of course with the same superficial area, should, with a ten-fold population, have a reduced instead of an augmented death-rate, shews that the authority having charge of the sanitation, which includes the health condition and duration of lives of the inhabitants, has performed its public duties in an exemplary manner. It will be seen that the year 1899 compares very favourably with the forty-four years included in the Table having the lowest mortality rate with five exceptions.

Tables XII., XIII., XIV., XV., and XVI. contain particulars of mortality respectively of East Battersea, West Battersea, Wandsworth and Clapham Union Infirmary and Bolingbroke Hospital, particulars as to parishioners and non-parishioners being given in regard to the two latter institutions. These tables being the basis upon which all other mortality tables are founded are continued for purposes of comparison, having been used since the year 1856.

TABLE XI.

Comparative Statistics of Births, Mortality, &c.

Year.	Mean Population for Year.	Births.	Birth Rate.	Deaths.	Death Rate.	Zymotic Deaths.	Natural Increase
1856	15,069	536	36.2	320	21.5	45	216
1857	15,970	582	36.0	343	21.4	46	239
1858	16,872	562	33.3	380	22.5	100	182
1859	17.774	685	38.5	394	22.I	96	292
1860	18,676	680	36.4	399	21.3	62	281
1861	19,582	750	38.3	505	25.7	II2	245
1862	23,108	784	33.9	491	21'2	106	293
1863	26,635	1.042	39.1	522	19.5	86	520
1864	30,161	1,140	37.7	669	22.I	129	471
1865	33,688	1,357	40.5	785	23'3	177	572
1866	37,145	1,386	37'3	1,002	26.9	244	384
1867	40,741	1,734	42.5	870	51.3	122	864
1868	44,267	1,975	44.6	1,046	23.6	194	929
1869	47,749	2,096	43.8	1,121	23.4	247	975
1870	51.320	2,170	42.2	1,375	26.7	404	795
1871	54,847		40.4	1,472	26.8	463	748
1872	60,244	2,349	38.9	1,202	19.9	220	1,147
1873	65,614	2,659	40.2	1,307	19'9	205	1,352
1874	70,984	2,865	40.3	1 387	19.5	238	1,478
1875	76.354	3,080	40.3	I 724	22.2	307	1,356
1876	81.704	3,455	42.2	1,745	21.3	340	1,710
1877	87,094	3,481	39.9	1,725	19.8	280	1.756
1878	92,464	3.748	40.2	1,803	19.4	322	1,945
1879	97,834	4,001	408	1,980	20.2	355	2,021
1880	103,204	4,095	39.6	2,040	19.7	383	2,055
1881	108,342	4,452	41.8	2 033	18 7	381	2,419
1882	112,661	4,504	39.9	2,214	19.6	353	2,190
1883	116,980	4,711	40.2	2,344	20.0	369	2.367
1884	121,299	5,275	43'4	2,569	2I.I	568	2,706
1885	125,618	4,654	37.0	2.566	20'4	432	2,088
1886	129,937	5,140	39.5	2,477	10.0	398	2,663
1887	134,256	5,186	38.6	2,451	18.3	502	2,735
1888	138,565	5,061	36.5	2,187	15.7	363	2.874
1889	142,884	5,161	36.1	2,240	15.6	366	2,921
1890	147,203	5,105	34.6	2,854	19.3	543	2,251
1891	151,190	5,237	34.6	2.619	17.3	398	2,618
1892	154,121	4,990	32.3	2,692	17'4	473	2,298
1893	157,052	5,225	33.2	2,801	17.8	564	2,424
1894	159,984	5,024	31.4	2,404	15.4	468	2,620
1895	162,915	5,264	32.3	2,901	17.8	491	2,363
1896	165,847	5.358	32.3	2.941	17.7	608	2.419
1897	168,778	5,266	31.5	2,620	15.2	391	2,646
1898	171,709	5,157	30.0	2,762	16.0	517	2,395
1899	174,640	5,179	29.6	2,858	16.3	377	2,321

The years marked thus ... were census years.

TABLE XII.

STATISTICS OF MORTALITY.

-			_	-	_		_			_				-	
1	EAST BATTERSEA.	Class	Si	ex.				AGE.				Soc	IAL F	osi	TION
	Population (Census) 1896, 71,730. timated mean population for 1899, 74,709.	Total Deaths from each Cl	Males,	Females.	Under 1 year.	I to 5 years.	All under 5 years.	5 to 15 years.	15 to 25 years.	25 to 65 years.	65 years and upwards.	Nobility and Gentry.	Professional Class, Mer- chants, Bankers, &c.	Middle and Trading Class.	Industrial and Labouring Classes.
I. Zymotic.	Small-pox Measles Scarlet Fever Typhus Fever Enteric Fever Puerperal Fever Membranous Croup Whooping Cough Erysipelas Diarrhœa, Dysentery & Cholera Influenza Other Zymotic Diseases	65 2 1 6 6 1 25 3 69 16	35 8 	25 11 12 16 2 34 8	12	3 1 12 4	 4 1 24 1 66	2 1		2 I 7	: : : : : : : : : : : : : : : : : : :			2 1 2	63 1 6 1 24 3 67 15
	Total of Zymotic Diseases	188	98	90	91	65	156	12	1	13	6	***	***	7	181
II. Constitutional.	Gout and Rheumatism Cancer & other Tumours Other Constitutional Diseases Phthisis and other Tubercular Diseases	3 38 1	1 13 72	2 25 1 52	 1 27		 1 41	6		1 29 58	9			5	3 33 1 113
P III Local.	Nervous Circulatory Respiratory Digestive Urinary Generative Locomotory Integumentary	71 68 237 85 20 5 1	29 27 132 43 13 1	42 41 105 42 7 5	17 1 80 48 	14 2 43 8 	31 3 123 56 	7 4 6 2 1	 6 1	28 42 64 24 15 5	5 17 38 2 5 	 1	1 1	4 8 12 2 6 	66 60 223 82 -14 5 1
IV.Develop- mental.	Premature Birth, Low Vitality, and Congenital Defects Old Age	146 62	86	60 40	145		146	***			61			5	140
V.	Violence	40	22	18	11	2	13	5	3	15	4		I	3	36
VI.	All other Diseases				***				***			***			
	TOTALS	1089	559	530	421	149	570	45	32	295	147	2	6	66	1015

TABLE XIII.

STATISTICS OF MORTALITY.

WEST BATTERSEA.	class	SE	x.				Age.				Soc	IAL I	Post	TION
Population (Census) 1896, 93,385. Estimated mean population (excluding institutions) for 1899, 98,474.	Total Deaths from each cl of Disease, &c.	Males.	Females.	Under r year,	r to 5 years.	All under 5 years.	5 to 15 years.	15 to 25 years.	25 to 65 years.	65 years and upwards.	Nobility and Gentry.	Professional Class, Mer- chants, Bankers, &c.	Middle and Trading Class.	Industrial and Labouring Classes.
Small-pox	32 7 5 9 4 27 4 48 25 1	18 4 6 2 5 1 24 8 68	3 5 3 2 22 3 24 17 1	 12 1 1 13 41 2 1	 16 6 2 13 1 5 	28 1 7 3 26 1 46 2 1	 4 1 1 1 		 3 5 1 1 2 14 	2 8	1	3	2 1 3 3 4 1 8 4	30 6 4 6 4 23 3 40 17 1
Gout	2 8 40 4		4	4		4	5	1	1 2 29 			 I	4	2 6 34 4 101
Nervous Circulatory Respiratory Digestive Urinary Generative Locomotory Integumentary	134 79 230 83 20 4 3	40 35 111 44	44	52 54	11 16 1 44 4 1 2	43 3 96 58	9 3 6 11 1 1 	10 7 4 1	76 38 45 74 13 14 2 	# 19 15 42 7 4 1	 2 1 2	3 2 1 2	96 18 3 3 1	92
Premature Birth, Low Vitality, and Congenital Defects	142					142	***	***			8	2	8	
V. Violence VI. All other Diseases	36	23			6	17	1	2	12	4			2	
TOTALS	1172		_	379	_		_	-	-		_			1011

TABLE XIV.
STATISTICS OF MORTALITY.

Г		Class of	Sı	ex.				Age.				Soc	IAL F	Posi	rion
W	Vandsworth and Clapham Union Infirmary. [Parishioners,] 1899.	Total Deaths from each Cl	Males.	Females.	Under 1 year.	I to 5 years.	All under 5 years.	5 to 15 years.	15 to 25 years.	25 to 65 years.	65 years and upwards.	Nobility and Gentry.	Professional Class, Mer- chants, Bankers, &c.	Middle and Trading Class.	Industrial and Labouring Classes.
I. Zymotic.	Small-pox Measles Scarlet Fever Typhus Fever Enteric Fever Puerperal Fever Diphtheria Membranous Croup Whooping Cough Erysipelas Diarrhœa, Dysentery & Cholera Influenza Other Zymotic Diseases	5 3 1	2	: a : : : : : : : : : : : : : : : : : :		3	2 1		···	3 2	 1				2 5 3 1
II. Constitutional.	Gout	118 18	 7 1	 1 11 	 I		1 2	 I	4	15	3				 18 18
III. Local.	Nervous Circulatory Respiratory Digestive Urinary Generative Locomotory Integumentary	34 61 38 13 15 2 1	21 31 17 9 10 1	13 30 21 4 5 1	10	 1 2 	 1 12 1		2 2 1 1 1 	21 39 26 13 2	11 20 10 1				34 61 38 13 15 2 1
IV.Develop- mental.	Premature Birth, Low Vitality and Congenital Defects	5	2	3	5		5				37				5
VI.	Violence	2	1	1 2					***	2	22	***	***		2
	TOTALS	306		152	18	7	25	1	12	179	89				306

TABLE XV.

STATISTICS OF MORTALITY.

	Class of	SE	x.				AGE.				Soc	IAL P	osii	rion
Wandsworth and Clapham Union Infirmary. —— [Non-Parishioners,] 1899.	Total Deaths from each C Disease, &c.	Males.	Females.	Under 1 year.	I to 5 years.	All under 5 years.	5 to 15 years.	15 to 25 years.	25 to 65 years.	65 years and upwards.	Nobility and Gentry.	Professional Class, Mer- chants, Bankers, &c.	1 Trac	Industrial and Labouring Classes.
Small-pox	4 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 2 2	 	1	3	1			3 1	1				4 3 2
Total of Zymotic Diseases Gout	16 1 10 7 46	5 4	3 3 3 13	2 7	5	7 7			7 1 1 9 	2 1				16 1 10 7 46
Nervous Circulatory Respiratory Digestive Urinary Generative Locomotory Integumentary	32 44 35 8 11 1	18 24 4 9	18 26 11 4 2 1	5	1 4 1 1 1	5 6	 	2 I 2 I 	17 24 16 8 	12 18 12 2 3 				32 44 35 8 11 1
Premature Birth, Low Vitality, and Congenital Defects	4	3	22	4		4				39				4
V. Violence VI. All other Diseases	7 2	4	3		1	1		1	1	4	***			7
Totals	268		115	20	15	35	1	10	123	99				268

In addition to those enumerated in the foregoing mortality statistics, twenty-three deaths occurred during the year at Bolingbroke Hospital, being those of twelve parishioners and eleven non-parishioners, particulars as to cause of death, &c., are set out in the following table:—

TABLE XVI.

STATISTICS OF MORTALITY.

Bolingbroke Hospital.	Parish	IONERS.	Non- Parishioners.			
	Age.	Sex.	Age.	Sex.		
Cancer	47 67	Female Male	42	Female		
Diseases of the Digestive System	48 81 58 62	Male Female Female Female	43	Male		
Diseases of the Urinary System	26 61	Female Male	28 73	Male Male		
Violence	8 9 12 58 21 6 9 12	Male Male Male Female	60 5 ⁵ / ₁₂ 41 7 ¹ / ₁₂ 60 4 54	Male Male Male Male Male Female Male		

Ages at Death. Of the two thousand eight hundred and fifty-eight deaths recorded, eight hundred and thirty-eight were under one year of age, three hundred and one over one and under five years of age, ninety-seven between five and fifteen years, one hundred and four between fifteen and twenty-five, nine hundred and forty-six between twenty-five and sixty-five, and five hundred and seventy-two were sixty-five years of age and upwards.

INFANTILE MORTALITY.

Of the eight hundred and thirty-eight deaths under one year of age, two hundred and ninety-seven were due to premature birth, low vitality, or congenital defects, one hundred and seventeen to digestive diseases, one hundred and thirty-three to respiratory diseases, one hundred and four to diarrhæa, forty-two to tubercular diseases, and one hundred and forty-five to other causes. The mortality at this period of life was equal to one hundred and sixty-one per one thousand of the births registered during the year. The following gives the infantile mortality rates of Battersea for the past ten years:—

TABLE XVII.
INFANTILE MORTALITY.

YEAR.	Number of Deaths of Infants under I year of age.	RATE PER 1,000 BIRTH REGISTERED.				
1890	855	167				
1891	736	140				
1892	791 842 718	158				
1893	842	161				
1894	718	142				
1895	907	172				
1896	937	174				
1897	845 840	160				
1898	840	162				
1899	838	161				
Decennial Averages	831	160				

The table indicates that the infantile mortality for 1899 closely approximates to the average of the past ten years, whereas London shewed an increase of ten per 1,000 upon its average, the infantile rate being 167 per 1,000, and that for the thirty-three great towns 181 per 1,000, the latter being 20 per 1,000 higher than the rate for this Parish.

At five years of age and under, one thousand one hundred and thirty-nine deaths were recorded, of which, three hundred and one were above one year of age. Compared with the mortality at these ages during the preceding years, this is a subject for satisfactory comment.

TABLE XVIII.

Year.	No. of Deaths of Infants under 5 years of age.
1895	1,332
1896	1,432
1897	1,202
1898	1,222
1899	1,139

At the other extreme of life, 472 parishioners died in Battersea, at the age of sixty-five years and upwards, and 34 in outlying institutions, representing a total of 506 parishioners dying at these advanced ages, shewing a marked improvement in longevity, the average for the four preceding years being only 417.

Causes of Death.

Of the two thousand eight hundred and fifty-eight deaths, two thousand four hundred and eighty-one were due to diseases other than those included in the zymotic class, as follows:—368 tubercular, 241 brain and nerve, 252 circulatory, 540 respiratory, 194 digestive 75 urinary, 12 generative, 6 locomotory, 297 from premature birth and low vitality, 259 from age, 96 from violence and 146 from other constitutional diseases (including cancer and syphilis) and all other diseases. The following table compares the non-zymotic mortality of the past ten years.

TABLE XIX.

Comparative Table of all non-zymotic causes of Deaths during the past 10 years.

	1890	1891	1892	1893	1894	1895	1896	1897	1898	189
Tubercular, including					-					
Phthisis	320	285	237	355	304	353	374	355	376	368
Of Brain, Nerves, &c.	261	195		213	211	334		241	181	241
Of the Heart, &c	148	141	183		173	213	182	189	164	252
Of the Respiratory Or-				-	, ,				1	
gans, excluding Phthisis	618	572	635	653	471	623	531	439	383	540
Of Digestive Organs	118	122	II2		197		154	202	168	194
Of Urinary Organs	34	49	72	60	57	56	88	69	75	70
Of Organs of Generation	15		15	14		7.	22	14	16	12
Of Joints, Bones, &c.	4	7	2	3	6		5	6	2	6
Premature Birth, Low		1	1 1 1 1 1 1							7
Vitality, Malforma-		1999	1							
tion, &c	206	238	256	295	273	332	298	286	288	297
Other Constitutional					, -	-				
Diseases (including				1111						
Cancer, Syphilis, &c.)	1									
and all other Diseases	70	91	245	153	134	148	150	160	153	146
Age	71			103		-	-	150	100 100	259
Violence	77	60		102					122	96
TOTAL	1942	1850	2219	2237	2026	2410	2339	2229	2245	248

Tubercular Diseases. It will be seen that a slight reduction in mortality within the Parish has taken place in regard to tubercular diseases. As however the subject is very fully dealt with in a later stage of the report (pages 62 to 78), further comment here is unnecessary.

Deaths from Brain diseases, although higher than the preceding year, are exactly equal to those of the year 1897 and do not vary much from the average of the past ten

years. From diseases of the heart, a marked increase is shewn, likewise in diseases of the respiratory system. In both, however, and particularly in the former, the mortality is principally amongst those in advanced years and may be attributed to senility, wherefrom a lower mortality was recorded during the year. The other diseases compare with the averages for past years. From diseases of the digestive system, however, a too high mortality prevails, and is undoubtedly due in a measure to ignorance as to the proper feeding of infants. Deaths from violence shew a diminished number, namely ninety-six, compared with one hundred and twenty-two during the preceding year.

ZYMOTIC MORTALITY.

In no year during the past decennium has the mortality in the Parish from zymotic diseases been so low as during the year 1899, three hundred and seventy-seven deaths only being recorded, compared with five hundred and seventeen during the preceding year. The zymotic death-rate was equal to 2.1 per 1,000 of the population. The following table compares the zymotic mortality of the past ten years.

TABLE XX.

Comparative Table of Zymotic Mortality during the past 10 years.

	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Small Pox										
Measles	159	37	90	90	151	99	185	76	119	103
Scarlet Fever	IO	IO	15	17	5	IO	5	7	6	***
Diphtheria	27	35	28	90	67	60	50	52	45	21
Enteric, &c., Fevers	21	19	8	14	13	15	II	8	8	10
Whooping Cough	146	104	100	115	77	52	137	82	71	52
Epidemic Diarrhœa	121	104	99	120	93	151	169	141	154	123
Other Zymotic Diseases Total Deaths from	59	89		118	62	104	45	25	114	68
Zymotic Diseases	543	398	473	564	468	491	602	391	517	377
Zymotic Death Rate	3.6			3.5		2.9	3.6			2.1
Death-rates from all										
Diseases	19'3	17.3	17.4	17.8	15'4	17.8	17.7	15.5	160	16.3

MEASLES.

It will be seen that there is a reduced mortality compared with the year 1898, but the fact cannot be overlooked that for 103 deaths to occur from a preventable disease is a subject requiring urgent attention.

It is found that mortality from this disease is not generally due to measles per se but to sequelæ of the disease arising from lack of care and attention in the convalescent stage of the illnessmeasles being generally regarded lightly and as a necessary child's ailment. With proper isolation, care and attention the prevalence of measles is not only preventable but the disease should not be fatal. The difficulties arising in connection with measles are that in the early stages it is hardly recognisable but is nevertheless highly infectious and thus school-attendance becomes a fertile source of contagion. During the year, two schools have been voluntarily closed in consequence of its excessive prevalence amongst the scholars, namely, Holden Street Board School and St. Mark's School, Battersea Rise. In the former case the whole of the infected class rooms, etc., were submitted to disinfection by the staff of this Department, and in the latter case by the school authorities.

From time to time efforts have been made by this Vestry, supported by other sanitary authorities, to include Measles amongst the notifiable infectious diseases under Section 55 of the Public Health (London) Act, 1891, and again last May, in connection with the Bill being promoted by the London County Council for the amendment of the Public Health (London) Act, 1891, the subject was urged by the Vestry, upon the recommendation of the Health Committee.

In the absence of notification, it is practically impossible to cope with the disease except by the periodical distribution of handbills containing precautions, nor is it possible to ascertain the extent or locality of the disease except by its mortality. From the latter it would appear that the disease was most prevalent in the last quarter of the year, seventy-three deaths occurring within that period, mostly in the eastern division of the Parish.

WHOOPING COUGH.

From this disease, which is frequently associated with or follows measles, a considerable reduction in the mortality took place during the year, fifty-two deaths being recorded, being the lowest number during the decennium, with the exception of the year 1895, when it was exactly the same; in view, however, of the greater population, this year actually produces the best record.

DIARRHŒA.

Under this head are included Epidemic Diarrhœa, English Cholera and Choleraic Diarrhœa. From these diseases the mortality was likewise considerably lower than that of the past years; one hundred and twenty-three deaths being recorded, those during the past five years being as follows:—

		DEATHS.
1895	 	151
1896	 	169
1897	 	141
1898	 	154
1899	 	123

As usual most of the deaths were amongst infants, one hundred and fourteen being those of persons under five years of age. The disease is generally prevalent in the summer season, when milk, etc., is subject to rapid decomposition, one hundred and twelve deaths occurring in the third quarter of the year, sixty-six in East and forty-six in West Battersea. In consequence of the high mortality during July, I was instructed by the Health Committee to re-issue the handbills directing the attention of parents and

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others having care of young children, to the great advisability of boiling all water and milk used for feeding such children and to the care to be taken as to the sound condition of every article of food for children, anything not fresh being withheld, and fruit especially if in the slightest degree decomposed; and further directing attention to the great value of cleanliness of person and dwellings, with frequent flushing of house drains, for which purpose disinfectants in case of illness are supplied free of charge on application to the Public Health Department.

It is hoped that much good is done and many lives saved by this means.

INFLUENZA.

From this disease, which is doubtless one to be included amongst the zymotics, forty-four deaths were recorded in the Parish during the year, although it is highly probable that the mortality is much greater, being represented by deaths from respiratory and other diseases following Influenza. It is clearly a malady in which strict isolation should be observed, although it has not yet been clearly proved as to the extent of the period of quarantine. In consequence of its undue prevalence in the latter part of the year, the usual handbill of precautions to be adopted against Influenza was re-issued, advising the public of the extremely infectious character of the disease, and pointing out that to those exposing themselves whilst in an infectious condition the spread and maintenance of the disease is chiefly due, the breath of those so affected being probably the principal medium of infection, and further that the early symptoms of Influenza are chiefly chills and shivering accompanied by great muscular weakness and prostration, often amounting to inability to stand or move, with pains in the spine or other parts of the body; and urging that persons thus affected should at once go to bed and there remain until convalescence is established, in order to avoid the danger of Pneumonia or Bronchitis which are the chief

complications to be feared as likely to lead to fatal results. The sick are also advised to resort early to medical aid in every case, for the determination of the real nature of the disease and to avoid the more serious complications previously referred to.

Influenza was very prevalent throughout London during the year, the deaths recorded numbering one thousand eight hundred and seventeen. The disease first became epidemic in England in the winter of 1889-90; it recurred in epidemic form in the spring of 1891 and was maintained up to June of that year; a third epidemic took place in the winter of 1891-92 and after a minor recrudescence in the spring of 1893, a fifth prevalence on a wide scale took place in the winter of 1893-94. Several more or less severe epidemics have since prevailed, but not since 1895 until this year was the mortality so high in the Metropolis, the deaths exceeding the decennial average by five hundred and forty-five; this epidemic moreover appears to have been the forerunner of an unusually severe outbreak of Typhoid Fever throughout the Metropolis, similarly affecting this Parish.

NOTIFIABLE ZYMOTIC DISEASES.

With the exception of Enteric Fever, the mortality returns are highly satisfactory concerning notifiable zymotic diseases. The subject is, however, dealt with in detail under "notifications" on pages 42 to 62 of this report.

CORONER'S INQUESTS.

During the year 1899, two hundred and ninety-nine deaths occurred either of a sudden or violent character, and it was necessary to refer the same to the Coroner before interment could be permitted. In forty-nine instances he did not deem further enquiry necessary, and they are therefore recorded in the Registrar's Returns as "submitted to Coroner." In the remain-

				00
ing two hundred and fifty cases in following verdicts:—	quests were	held	with	the
T N 1.0				
From Natural Causes	•••			154
From Violent Causes:—				
Accidental—				
Suffocation in bed with pare	ents		17	
Falls			24	
Burns			3	
Scalds			3	
Suffocation			4	
Poisoning			3	
Injury to foot			I	
Run over			7	
Injury to face				
Injury by machinery			I	
		•••	I	
Drowning			4	
Choking			I	
Other injuries		***	I	
Suicide—				70
Shot			5	
Poisoning				
D .			3	
Knocked down by train			4	
Knocked down by train			1	13
Homicide—				-5
Strangulation			I	
Injuries to head			I	
		_		2
Open Verdicts—				
Found drowned			4	
Alcoholic poisoning, &c.			5	
Scalds			I	
Found dead on railway			I	
		-	_	II
	(T)		-	
	10	TAL .	*.*	250

Seventeen deaths of infants occurred whilst in bed with parents; the necessity of infants being provided with a separate cot has been the frequent subject of caution by Coroners. The following gives the dates and days upon the mornings of which deaths were discovered, and is of interest, it being popularly regarded that those discovered on Sunday mornings are associated with the intoxicated state of the parent or parents on the Saturday night:—

6th ,, Frid 23rd ,, Mon 28th ,, Satu 29th ,, Sun 8th February Wee	dnesday. day. urday. day. day. day.	10th 13th 18th 18th 5th 10th 19th	June ,,, August Decemb	per	Monday. Wednesday. Saturday. Sunday. Sunday. Saturday. Thursday. Tuesday. Thursday.
19th ,, Sun	*	21st	"		Thursday.
They are here of		ording to	the day	sof	the week:
Sunda	w'		***	4	
Monda	ay			2	
Tuesd	ay			I	
Wedn	esday			4	
Thurs				2	
Friday				I	
Satur				3	
				17	

SICKNESS AND MORTALITY AMONGST THE PARISH POOR.

Except in the case of notifiable infectious diseases, little opportunity is afforded of judging as to the relative proportion between sickness and mortality. For the purposes of the Poor Law, however, registers are kept by the Medical Officers of all cases of "out-door" medical relief, and also of the mortality amongst such cases; a summary prepared from those registers is therefore of some value. It does not of course follow that all the cases attended to, represent serious sickness; on the contrary, many are of a comparatively trivial nature, and are included under the heading of "all other diseases." The return shews a

mortality of 2.1 per cent. of the cases of sickness under care, representing those dying at their homes; a large number of the more serious cases however, were admitted to the Wandsworth and Clapham Union Infirmary, the mortality amongst whom is not shewn here, but is included, amongst others, in Table XIV. and XV., in an earlier part of this report.

TABLE XXI.

Sickness and Mortality amongst the Parish Poor during the year 1899.

ZYMOTIC OR EPIDEMIC DISEASES.												3		
Bat terse.	A .	Small-rox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Enteric & other Fevers.	Erysipelas.	Puerperal Fever or Metria.	Diarrhœa, Dysentery, or Cholera.	Influenza.	Other Zymotic Diseases.	Total.	GRAND TOTALS OF CASES AND DEATHS FROM ALL DISEASES.
Cases			73	6	16	8	5	26	4	128	159	5	430	DEATHS
DEATHS			6			1				6	I		14	SES AND
			0	THI	ER I	DISE	EASI	ES.						CAS
Batterse	Diseases of the Tuber-	cular Class.	Of Brain, Nerves, &c.	Of Heart.	Of Respiratory Organs.	Of Digestive Organs.	Of Kidneys.	Premature Birth, Low Vitality, Malformation, &c.	Age.	Violence.	All other Diseases.	T. Walter	LOTAL.	GRAND TOTALS OF
Cases	1	36	233	125	882	187	15	5	277	121	2171	41	52	4582
DEATHS	1	0	6	2	19	3	2	7	15		20		84	98

TABLE XXII.

Weekly Summaries of Notifications Received During the Year 1899 (excluding duplicates).

				CA	ses of I	NFECTIOU	s Diseas	E NOTIF	ED.		
Монти	WEEK OF YEAR.	Small-Pox.	Cholera.	Diphtheria.	Erysipelas.	Scarlet Fever.	Typhus.	Enteric.	Continued and Relapsing.	Puerperal.	Totals
January	1 2 3 4			20 10 24 28	6 5 5 	20 14 11 8		3 3 3 3			50 32 43 39
February	5 6 7 8			21 31 20 15	3 2 5 4	8 14 13 11		2 3 2			34 50 38 32
March	9 10 11 12 13			20 10 9 12 13	3 2 1 2 2	14 16 9 10 9		1 2 2 1		 I I	38 31 19 26 26
April	14 15 16 17			4 5 5 10	3 6 3 4	13 10 12 8		 I I			21 21 21 23
May	18 19 20 21			15 18 19 7	4 5 6 2	20 16 12 5		 I I		····	39 40 38 16

June		22	***		10	2	24	***				36
,		23			21	4	13				1	39
		24	***		6	1	13		I			21
		25			II	4	II	***				26
		26	***		12	4	16					32
	-	-								1000	-	
July	***	27	***		7	4	22	***	***	***	***	33
,		28	***	***	22	5	12	***	***	***	***	39
		29	***	***	12	I	17	***	3	***	I	34
		30	***	***	10	5	II		***	***		26
August		31		***	10	4	20		2		***	36
		32	***		6	3	9		2		I	21
		33		***	9	4	8		5			26
		34	***	***	10	2	4		6			22
September		35				-	-		-			
o-promoor.	***	36	***	***	4	6	5 8	***	3		***	14
	- 11	-	***	***	6				2	***	***	20
		37 38	***	***		4	12	***	4	- **	***	26
				***	10	2	13	***	4		***	29
		39		***	8	5	16	***	2	***	***	31
October	***	40			8	2	26	***	9		I	46
		41		***	5	8	28	***	3	***	2	46
		42	***		II	8	15		12		***	46
		43	****		7	2	24	***	9		***	42
November		44			9	4	23		12		-	48
		45	***		10	IO	20	***	8	***	***	48
		46	0.00		12	2		***	6	***	***	1000
		47		***	12	8	25	***		***	***	45
		4/	***		12	0	19	***	7		I	47
December	***	48			8	8	16		6			38
		49	***	***	9	2	8		4	***	I	24
		50	***	***	5	4	17	***	10	***	I	37
		51	***	***	8	6	9	***	3	****		26
		52		***	8	5	4	***	4			21
Whole Year		***			606	204	721		157	***	14	1,702

INFECTIOUS DISEASE NOTIFICATION.

During the year, one thousand seven hundred and sixty-four notifications were received; of these, sixty-two were duplicates, arising from the fact that more than one medical man was called in to attend some of the cases. The actual number of cases of infectious disease notified was therefore, one thousand seven hundred and two, being one hundred and twenty-three cases less than during the preceding year. The notifications included six hundred and six of Diphtheria, two hundred and four of Erysipelas, seven hundred and twenty-one of Scarlet Fever, one hundred and fifty-seven of Enteric, and fourteen of Puerperal Fever. Table XXII. gives summaries of the notifications received during each week of the year.

All Notifiable Diseases in any week of the year was fifty, this occurring on two occasions, namely, in the first and sixth weeks of the year; whereas, during the thirty-fifth week, being the first week in September, only fourteen cases were notified, this being the lowest record of the year. As curiosities of statistics, might be mentioned the receipt of twenty-one notifications during each of three successive weeks (the first, second, and third weeks of April), and similarly forty-six notifications during each of the first three weeks of October. Further details will be found in the Table of weekly summaries of notifications.

Twelve hundred of the cases were removed to hospital, representing a large proportion of the cases notified, and which, in view of the excellent treatment received by the patients, and the satisfactory results of hospital isolation is annually increasing. The cases removed to hospital included five hundred and sixty-nine of Scarlet Fever, four hundred and forty-nine of Diphtheria, one hundred and twenty-four of Enteric, four of Puerperal Fever, and fifty-four of Erysipelas.

The two latter diseases are not received into the Metropolitan Asylums Board Hospitals, and are therefore treated at the Union Infirmary or at General Hospitals.

By the courtesy of the Officers of the Metropolitan Asylums Board, the Department receives information as to such cases removed to hospital, which, in the opinion of the Medical Superintendents of the various hospitals are not true cases. Twenty-eight of such cases were brought to my notice during the year, including fourteen reported as Diphtheria, nine as Scarlet Fever, and five as Enteric Fever. In view, however, of the comparatively small number, and the possibility of differences in diagnosis, these cases are not deducted from the totals for the year, but must nevertheless, be taken into consideration in connection therewith.

The total mortality from notifiable diseases was one hundred and forty, including fifty-four parishioners dying either at their homes or in institutions within the Parish, and eighty-six in Metropolitan Hospitals outside the Parish, representing an enormous reduction from that of the previous year, which was equal to one hundred and eighty-seven. The deaths included fourteen from Scarlet Fever, sixty-three from Diphtheria, thirty-nine from Enteric Fever, seven from Puerperal Fever, and seventeen from Erysipelas, and produce a notifiable-zymotic death-rate equal to 0.8 per 1,000 of the population. These details will be found clearly illustrated in Table XXIII.

The chart shewing the prevalence of notifiable infectious disease in each week of the year is exceedingly interesting, particularly if compared with the charts of temperature and rainfall facing pages 106 and 108. It will be observed that the rise and depression of the maximum temperature, particularly in the earlier months of the year, corresponds very closely with the line indicating the total

TABLE XXIII.

PREVALENCE OF NOTIFIABLE

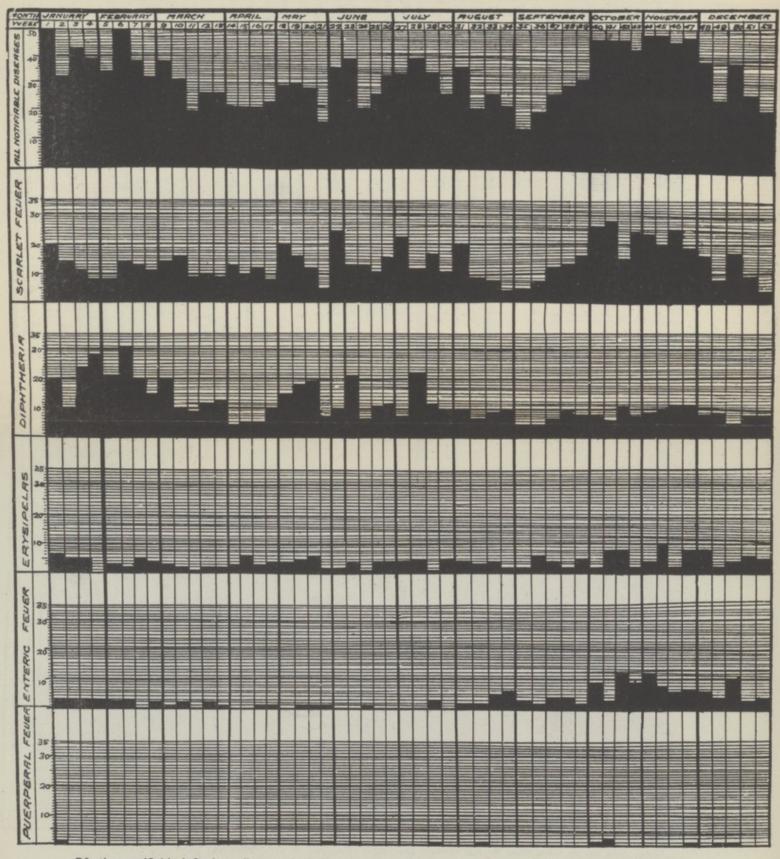
INFECTIOUS DISEASE AND MORTALITY THEREFROM.

	No. of Cases notified.	No. of cases removed to Hospital.	Deaths at home. (Parish- ioners.)	Deaths at Hos- pital.	Total Deaths during Year under Report.	Total Deaths during Preced- ing Year (1898.)
Small Pox						
Scarlet Fever	721	569		14	14	28
Diphtheria and Membranous Croup	606	449	21	42	63	120
Typhus Fever						
Enteric Fever	157	124	10	29	39	15
Relapsing Fever				***		
Puerperal Fever	14	4	7		7	6
Cholera	'					
Erysipelas	204	54	16	1	17	18
TOTALS.	1,702	1,200	54	86	140	187

number of notifications. Again the lines in the months of June, July, and August are almost identical in their variations. Another very marked feature of the chart is that the Diphtheria line for the first nine months of the year, fluctuates in almost exactly the same manner as does the line indicating "all

PARISH OF ST. MARY, BATTERSEA.

Chart indicating the prevalence of notifiable infectious disease during each week of the year 1899.



Of other notifiable infectious diseases including Smallpox, Cholera, and Typhus, Relapsing and Continued Fevers, no cases occurred during the year.



notifiable diseases," and similar remarks apply to Scarlet Fever for practically the whole of the year. For the first two months Diphtheria is seen to clearly predominate; during March and April a reduction is apparent in both Diphtheria and Scarlet Fever; May, June, July and August are then marked by a succession of rises and falls in both diseases. During September, October, November and December, Diphtheria maintains a low record, and Scarlet Fever clearly ascends. The Typhoid line will also be seen to be above the rest of the year during these months.

In accordance with the requirements of the Local Government Board, Table XXIV. officially known as "Table B," is introduced and is intended to indicate the distribution of infectious sickness amongst persons under and above the age of five years and also its prevalence in localities and institutions of known population. In the absence of the latter information it is impossible to arrange this table according to the eight Sanitary Districts, but in the re-arrangement of the Census Sub-areas next year, this difficulty may perhaps be overcome. The Table therefore deals with the Registrar's Sub-Districts of East Battersea, West Battersea (excluding Public Institutions,) the Wandsworth and Clapham Union Infirmary, the latter being credited only with those cases which were actually developed in the institution, the Bolingbroke Hospital, Westminster Union School, Royal Masonic School for Girls, and the Emanuel School, wherein the cases were distributed as follows:-

East Battersea West Battersea (excluding Wandsworth and Claph	Insti		838 852
Infirmary			5
Bolingbroke Hospital			I
Westminster Union School			I
Royal Masonic School			4
			I
	,	Total	T 702

TABLE XXIV.

B of Population, Births, and of New Cases of Infectious Disease coming to the knowledge of the Medical Officer of Health, during the Year 1899 in the Metropolitan Sanitary District of Battersea, Classified according to Diseases, Ages and Localities.

						New	case ng to	the	kno	mess wleds of H	ge of	the	Loc	ality		h	Numl	ber o	he se	vera	ises l loca ion F	litie	s for	from	the tmer	ir
	Popula				1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11
	all a	ges.	15.							FE	VER	8.									FI	EVER	s.			
Names of localities adopted for the purpose of these statistics, Public Institutions being shown as separate localities.	Last Census. 1896.	Esti- mated to middle of 1899.	Registered Births	Aged under 5 or over 5.	Small Pox.	Scarlatina,	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Small Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas,
East Battersea	71,730	74,709	2,424	Under 5 5 upwards		104		6		77					6		90	89	5		1 62					21
West Battersea	91,928	98,474	2,755	Under 5 5 upwards		95	85	6		2			7		7 96		73	64			I 60					25
Wandsworth and Clapham Union Infirmary	708	708		Under 5 5 upwards											5											5
Bolingbroke Hospital	39	39		Under 5 5 upwards																						
Westminster Union Schools	183	183	***	Under 5 5 upwards		1											1									
Masonic School, Battersea Rise	316	316	***	Under 5 5 upwards		100000																				
Emanuel School, Wandsworth Common	211	. 211		Under 5 5 upwards									f													
Totals	165,115	174,640	5,179	Under 5		200	198	12		3	***				13		164	153	5		2					2

INCIDENCE OF INFECTIOUS DISEASE IN SANITARY DISTRICTS.

Failing in the possibility of utilising Table XXIV. to indicate the distribution of infectious cases amongst the eight sanitary districts, Table XXV. has been devised and used for the last few years, but whilst clearly shewing the number of cases in each district, it does not, in the absence of the population figure, give an idea as to whether undue prevalence exists in any particular district and might therefore be misleading as indicating a very unequal distribution of the cases. For instance, No. 2 District has a much larger number of notifications than either of the others, but in view of the more densely populated area of the district the excess is not nearly as great as is at first sight apparent, moreover, notwithstanding its position as regards prevalence of infectious sickness, it actually shews a reduction of seventy-two cases from the previous year. The following places the Sanitary Districts in the order of incidence of infectious disease.

No.	8.	TOF	cases.
2,0.	·-	105	cases.
,,	7.	140	"
"	3.	160	"
"	4.	219	"
"	5.	224	"
,,	6.	252	"
"	I.	259	,,
,,	2.	343	,,
	Total	1,702	,,
		=	

SMALLPOX.

For the first time since the year 1891 the Parish has been absolutely free from smallpox, one doubtful case being brought to notice during the year. Upon investigating the case however I found it to be one of chickenpox.

TABLE XXV.

Particulars of the Prevalence of Notifiable Infectious Diseases in the several Sanitary Districts.

		Cases Notified.						Cases Removed to Hospital.														
Sanitary Districts.	Small Pox	Scarlatina	Diphtheria and Membranous Croup	Typhus Fever	Enteric Fever	Continued Fever	Relapsing Fever	Puerperal Fever	Cholera	Erysipelas	Totals	Small Pox	Scarlatina	Diphtheria and Membranous Croup	Typhus Fever	Enteric Fever	Continued Fever	Relapsing Fever	Puerperal Fever	Cholera	Erysipelas	Totals
					-6		6															
No. I		71	119		33			2		34	259		62	92		25			I		8	188
,, 2		146	132	***	22			2		41	. 343		130	IOI		18			I		II	26
3		46	61		II			2		40	160		32	43		9					8	9:
., 4		89	67		30			4		29	219		80			27			I		- 8	170
., 5		123	62		20			3		16	224		107	41		16			1		5	17
., 6		113	92		23					24			90			10					II	
7		83	34		II			I		II	140		46			49	***	***		***	11	19
8		50	39		7					9	105		22			1		***			1	7
					-					. 9	-03	***		30	***	3	***	***		***	2	5
Whole																						
Parish	***	721	606	***	157	***		14		204	1702	***	569	449		124			4		54	1200

The following shews the number of cases of smallpox notified during each year of the past decennium, those which were subsequently found not to be true cases being excluded:—

-0-		
1890	 	I
1891	 	0
1892	 	2
1893	 	108
1894	 	8
1895	 	20
1896	 	4
1897	 	I
1898	 	I
1899	 	. 0

CHOLERA.

From this disease likewise no cases have occurred of the Asiatic type, which is the genuine form of the disease. Several deaths from English Cholera took place during the year, but this disease belongs to the Diarrhæa class and is not notifiable.

DIPHTHERIA AND MEMBRANOUS CROUP.

This disease which in 1898 contributed so largely to the total number of notifications and for the last two years to the zymotic mortality shewed very great improvements in both directions during 1899, the case reduction being equal to 185 and the mortality being 51 below the average of the two years 1897-8. Six hundred and six cases were notified, sixty-three of which were fatal, twenty-one being at the homes of the patients and forty-two at hospitals, where four hundred and forty-nine of the cases were removed. The mortality amongst the home and hospitals cases is therefore comparatively equal, the hospital treatment shewing the better result however, notwithstanding that it is there that the more serious cases are dealt with. Antitoxin in medical practice is being found of great value in the reduction of mortality from the disease.

The corrected mortality rate from Diphtheria was 0.36 per 1,000 of the population, being with two exceptions the lowest rate in the fifteen South London parishes. The rate for the Metropolis was 0.43 per 1,000.

The year 1890 was the first complete year in which compulsory notification was in operation, and therefore from that period only are statistics available concerning the prevalence of Diphtheria. The following indicates the number of cases of the disease notified during each of the years 1890-9.

37		N Dit	o. of cases ohtheria not	of tified,
Year.			349	
1890	***	***	260	
1891 .	***			
1892			366	
1893			682	
1894			504	
1895			411	
1896			426	
1897			614	
			791	
1898	***	***	606	
1899		***	000	

Several changes having during the last few years been made in the number and area of the Sanitary Districts it is impossible to compare the location of the disease except for the last two years which is here given:—

TABLE XXVI.

			Man and the		of Cases phtheria.		
No. 1 ,, 2 ,, 3 ,, 4 ,, 5 ,, 6 ,, 7 ,, 8	Distr	ict.	1898.	1899.			
No.	T			131	119		
				234	132		
				141	61		
				55	67		
	+		N. A.		62		
	5	***		55 82	92		
			4000 00	42	34		
"	8			51	39		
WI	nole	Paris	h	791	606		

With the exception of Districts No. 4, 5 and 6, which shew a slight increase, a reduction is shewn throughout the Parish, particularly in No. 2 District, the number of cases during 1899 being 102 less than during the previous year. That district in the year 1898 had a most undue proportion of the cases and was the subject of long and anxious enquiry by a Special Health Sub-Committee. As the result of the enquiry a large number of works were ordered to be executed in connection with the ventilation, flushing and re-laying of sewers and the re-construction of street gullies in the district.

These works have practically been completed during the year under report, by the Works Department, and include the provision of automatic flushing chambers to discharge 600 gallons of water, at the stump end of the sewers in Alfred Street, Arthur Street, Austin Road, Blondel Street, Carpenter Street, Chatham Street, Rollo Street, and Warsill Street. With a view to improving the ventilation and circulation of the sewer, the stump ends have also been connected to the sewers of adjacent streets as follows: -Stewarts Lane West with Havelock Terrace. Southolm Street and St. George's Street with Queens Road, Landseer Street with Rollo Street, Longhedge Street with Henley Street, Parkside Street and Orkney Street with Blondel Street, Anerley Street with Orkney Street, and Frere Street with Atherton Street, The whole of sewers in the district south of Battersea Park Road have been provided with inlet and outlet ventilation, the latter by means of 8-inch up-cast shafts at their highest point, and the sewers were ordered to be reconstructed in consequence of their sluggish fall and defective condition, in Alfred Street, Arthur Street, Austin Road, Landseer Street, Palmerston Street and Russell Street. In addition, the whole of the defective brick gullies have been replaced by glazed stoneware traps, or where the gullies were in good condition, the flap traps were replaced by syphon blocks, the remarks concerning the gullies applying to the whole of the Parish, where the work

is rapidly approaching completion. In view of these many sanitary improvements, a still better report may be expected concerning the public health of No. 2 Sanitary District in 1900.

The periods of the year in which the greatest freedom from the disease was noticeable were the first week in April and the first and second weeks in September, the number of notifications of Diphtheria received during each of these weeks being four for the whole Parish. The reverse conditions prevailed in the second week of February, when thirty-one cases were notified, principally from Districts Nos. 4 and 6. This outbreak was the subject of a Special Report by me to the Vestry. As regards No. 6 District, the disease was unusually prevalent after the 14th January, and upon investigation, the cause was traceable to a child who had attended the Infants' Department of Plough Road Board School, from the 9th to the 14th of that month, whilst suffering from an unrecognized attack of Diphtheritic sore throat, which was not discovered until two other members of the family were attacked, when a medical man was called in. Thirty cases of Diphtheria were found to be more or less associated with this source of infection. On the 10th February under an order made by the Vestry the department of the school was closed and continued so for a period of three weeks, the whole of the class rooms, &c. being disinfected by the staff of the Public Health Department. As indicating the benefit of school closure in this instance, the following is of value. During the four weeks preceding the closing of the Infants' Department, thirty-four cases occurred in No. 6 District, being equal to 8.5 cases per week, whereas during the first week after the school closure, a portion of which would be within the incubation period and consequently the full effects of the measure would not be experienced, the number was reduced to six cases for the week, and during the second week one case only, the improvement being subsequently maintained.

In No. 4 District the outbreak was not so great. Several of the cases however were traceable to the same cause affecting No. 6 District, but no common source was attributable to the remainder, although suspicion was attached to attendance at Mantua Street School. The speedy abatement of the outbreak, in both districts however, rendered action in regard to the latter school unnecessary.

TABLE XXVII.

Effect of closure of the Infants' Department of Plough Road Board School.

Period.	No. of Cases of Diphtheria.	Rate per week.
Four weeks preceding closing of Infants' Department	34	8.5
First week after	6	6.0
Second week after	1	1.0

On no occasion during the year has any difficulty been experienced in obtaining accommodation in the hospitals of the Metropolitan Asylumns Board, a circumstance too common in some former years. The Board has arranged that in the event of a recurrence of such a conditions of affairs, medical practitioners shall be supplied gratuitously with anti-toxin serum for the immediate treatment of the case pending the obtaining of a bed in the hospital. The serum would be obtained from the Public Health Department at the Municipal Buildings, the supply being replenished when necessary from the Laboratories of the Royal College of Physicians and Surgeons by arrangement with the Metropolitan Asylums Board.

One complaint was received by this Department concerning alleged undue delay, on the 14th March, in the removal of a case to hospital which afterwards terminated fatally. The matter was

referred to the Metropolitan Asylums Board for enquiry, and it was ascertained that "the ambulance could not be sent at once owing to the fog which then prevailed having caused the time occupied on the earlier journeys (numbering sixteen) to be unavoidably prolonged on account of the slow driving, sometimes at a walking pace with the attendants at the horses heads with fog lamps.—Hence the unfortunate delay." The explanation was submitted to the Health Committee and it was admitted that the delay was due to no negligence.

In Diphtheria as also in Scarlet fever, many cases occurred during the year to which as the source of infection the highest suspicion was attached to patients discharged from the hospitals whilst still in an infectious condition, the following being a fairly typical case. On the 19th September, 1898, a girl aged thirteen years was removed to hospital from No. 11 Orville Road suffering from Scarlet fever. Whilst under hospital treatment she contracted Diphtheria and was eventually discharged from hospital on the 9th February, 1899, and went home to No. 49 Henley Street, the family having removed from Orville Road during the interval. Within a few days other members of the family developed Diphtheria, viz.:—on the 17th February, a sister aged ten years; on the 18th February, another sister aged eight years; on the 26th February, a boy aged eleven years; on the 28th, a girl aged seven years; and on the 3rd March, two further cases, the mother and a boy who was nine years of age. All the cases were removed to hospital including the original, whom it was found necessary to return for further treatment. The drains were tested and no defect found, in fact they did not pass through the house and had been relaid about three years previously. In view of all the facts it is evident that direct personal infection was the cause of the outbreak, the child having been discharged from hospital whilst still in an infectious condition. This case amongst many others, was referred to the Metropolitan Asylums Board for investigation by a specially appointed Medical Officer, but down to the time of writing a report has not been published.

SCARLET FEVER.

During the year under report seven hundred and twenty-one notifications of Scarlet fever were received, compared with eight hundred and nine during the previous year, shewing a reduction of eighty-eight cases. Five hundred and sixty-nine were removed to hospital where fourteen died. Of the cases remaining at home, most of which were of a very mild type, all recovered. The corrected mortality rate was 0.08 per 1,000 of the population, with three exceptions, the lowest in the fifteen South London parishes. The rate for the Metropolis was 0.09 per 1,000.

The distribution of the cases amongst the eight sanitary districts during the past two years is here given.

TABLE XXVIII.

Sanitary District.	Number of Cases of Scarlet Fever.					
	1898.	1899				
No. 1	69	71				
,, 2	123	146				
,, 3	132	46				
,, 4	130	89				
,, 5	74	123				
,, 6	175	113				
,, 7	55	83				
,, 8	51	50				
Whole Parish	809	721				

Notwithstanding the total decrease, several of the districts shew an increase during the year, most notably No. 5, whereas Nos. 3 and 6 shew great reductions in number. The largest number of cases notified in any one week was during the second in October, when twenty-eight cases came to notice, whereas in both the last week of August and that of December, only four notifications were received. The extremes for four-weekly periods were 25 and 92, the former being the last two weeks of August and the first two of September, and the latter, the last week of October, and the first three of November. In consequence of the prevalence of the disease about the latter period I submitted at the request of the Vestry, a special report dealing with the last three weeks of November (ending 2nd December). The report shewed that sixty cases were notified during that period, by far the larger proportion being in Districts Nos. 2 and 5, namely, twenty and twenty-one cases respectively, the remaining districts being comparatively free. Of the twenty cases in No. 2 District, four were traceable to personal infection, but otherwise school attendance, milk supply, or any other common cause could not be discovered as the origin of the outbreak in either that or No. 5. District, where six of the twenty-one cases were attributed to personal infection. It will be remembered that in consequence of the extreme prevalence of measles amongst scholars at Holden Street Board School, the latter was closed, and there is some possibility that the increased amount of scarlet fever during the year is to an extent traceable to, or associated with that outbreak.

Two instances occurred during the year in which patients were exposed in public vehicles by those having charge of them. In the first case a child was taken home in a tram from Westminster Hospital, and in the second case a patient was brought in a cab from Chelsea. In both instances the offenders appeared to have acted in ignorance of the law and they were therefore not proceeded against but duly cautioned. The cab

was disinfected and the driver compensated by the hirer for loss of time during such disinfection.

TYPHUS FEVER.

From this disease, which is one generally associated with filth, over-crowding and poor living, no cases were notified.

ENTERIC FEVER.

This disease shews a great increase during the year, one hundred and fifty-seven cases being notified compared with ninety-four during the preceding year, or an increase of sixty-three cases. One hundred and twenty-four were removed to hospital, where twenty-nine died in addition to ten at home, representing a total mortality of thirty-nine compared with fifteen during 1898.

This increase was common to the whole of the Metropolis, and in the absence of any local common cause being traceable, it must be regarded as being due to some atmospheric or other uncontrollable conditions associated there is good reason to believe with the contemporaneous influenza. As indicating the increase in the Metropolis, one thousand five hundred and thirty-six cases were admitted to the hospitals of the Metropolitan Asylums Board, the highest number admitted in any previous year in this decennium being eight hundred and sixty nine.

The mortality rate for Battersea was 0.21 per thousand, the highest rates in the Metropolis being Bethnal Green, 0.30; Clerkenwell, 0.38; and the City of London, 0.43. The rate for the whole Metropolis was 0.18 per thousand.

The following Table will shew the prevalence of the cases in the Parish throughout the months of the year:—

TABLE XXIX.

Month.	Number of Cases of Enteric Fever.
January	 12
February	 7
March (5 weeks)	 6
April	 2
May	 3
June (5 weeks)	 I
July	 3
August	 15
September (5 weeks)	 15
October	 33
November	 33
December (5 weeks)	 27
WHOLE YEAR	 157

The disease is shewn to be most prevalent in the months of October and November, a circumstance common to that time of the year, but not recently to the same extent. For freedom from the disease the month of June shows the excellent record of one case only in a period of five weeks.

The following Table shews the distribution of the cases in the various Sanitary Districts, and in view of the differences of population, is more equal than may at first sight appear:—

TABLE XXX.

	NITAF		No. of Cases of Enteric Fever.
No.	ı		33
,,	2		22
,,	3		11
,,	4		30
,,	5		20
,,	6		23
,,	7		II
. "	8		7
Wно	LE P	ARISH	157

Every means were adopted to prevent the spread of the disease, removal to hospital being insisted upon in all cases, except thirty-two, where proper isolation was found possible in the patients' homes. After all the cases, the bedding,&c., was disinfected by steam, the rooms fumigated, and the drains flushed, and such other methods adopted as circumstances suggested.

PUERPERAL FEVER.

Fourteen cases of Puerperal Fever were notified during the year, the patients being removed to the Infirmary in four instances. Six deaths were recorded, representing a mortality of 1.1 per thousand accouchements during the year, based upon the number of births registered, with a reasonable allowance for multiple births. In addition to the usual measures adopted in other infectious diseases, the nurses are cautioned against attending any further midwifery cases for a period of at least six weeks, the absence of such precautions being formerly the most common source of infection.

ERYSIPELAS.

Two hundred and four notifications were received concerning Erysipelas, the majority being Traumatic, i.e., due to wounds, &c. Fifty-four cases were removed to hospitals, principally the Union Infirmary. Seventeen deaths were recorded, sixteen occurring at the homes of the patients, and one at hospital. The number of cases represents an increase upon that of the year 1898, and a decrease upon that of 1897. The term Erysipelas covers so many forms and degrees of inflammatory affections, that further discussion on the subject would not be profitable.

TUBERCULAR DISEASES

INCLUDING

PHTHISIS OR CONSUMPTION.

The subject, concerning as it does a disease which it is now generally considered should be included amongst the zymotic diseases, has, during the year under report, excited particular action and interest in all sections of the community in all parts of the country.

Mortality. During the year, three hundred and sixty-eight deaths were recorded in Battersea from Tubercular Diseases, of these, however, forty-six were non-parishioners, dying in the Wandsworth and Clapham Union Infirmary. In addition, forty-nine parishioners died in outlying institutions, &c., producing a corrected total of three hundred and seventy-one parishioners dying from this class of disease. Of these, three hundred were due to phthisis, or general tuberculosis, and seventy-one to tuberculosis of the brain, stomach, joints, &c.

The following Table shews the mortality rates for London, and its Sanitary are s during the year under report:—

TABLE XXXI.

Death-rates from Phthisis in Metropolitan Sanitary Districts during 1899.

	Before Dis- tribution.	After Dis- tribution
REGISTRATION LONDON	1.88	1.82
West-		
Paddington	1.14	1.15
Kensington	0.50	1.34
Hammersmith	TITO	1.72
Fulham	2:02	1.83
Chalcon	21-6	1.79
St. George, Hanover Square	2.10	1.36
St. Margaret & St. John, Westminster		
St James	TITO	3.31
North—	. 110	211
	1.08	1.08
St. Marylebone		
Hampstead		0.84
St. Pancras		2,01
Islington		1.59
Stoke Newington		0.88
Hackney	1.21	1.20
CENTRAL—		
St. Giles		3.13
St. Martin-in-the-Fields	. 1.90	1.82
Strand	. 2.09	2.40
Holborn		3:08
Clerkenwell		2.35
St. Luke	. 2.80	3.23
City of London	2.04	5.19
East—		
Shoreditch	. 2.00	2.10
Bethnal Green	. 2.35	2.36
Whitechapel	2.76	2.39
St. George-in-the-East	2105	2.20
Limehouse	T. 100	2.30
Mile End Old Town	*.6r	1.82
Poplar	2:10	2.14
South-		
St. Saviour	. I'49	3.44
St. George-the Martyr, Southwark		3.23
Newington	T.10	2.62
St. Olave	1.76	2.23
Bermondsey	7101	2.14
Rotherhithe	2.66	1.83
Lambeth	7.6.	1.75
Battarsea	v.6-	1.29
Wandsworth	TIOT	1.51
Cambanuall		
Crosnwich		1.23
		1.24
Lee		1,00
Lewisham (excluding Penge)		1.12
Woolwich		2.46
Plumstead	. I.33	1.46

It will be seen from this table that not only is Battersea below Registration London, but also holds the 13th position amongst the forty-three districts, in freedom from phthisis mortality.

Phthisis was the assigned cause of eight thousand five hundred and ten deaths in Registration London during 1899, shewing an increase upon the corrected annual average which was eight thousand four hundred and fifty-three during the ten years 1889-1898. The phthisis death rate was equal to 1.88 per 1,000 as compared with a rate of 1.77 in each of the two years immediately preceding.

The following Table XXXII. shews a history of phthisis mortality recorded in England and Wales during the forty-five years, 1851 to 1895, shewing an enormous reduction since 1851. In a measure however this may be influenced by improved diagnoses, but after making every allowance, the death rate from phthisis has undoubtedly decreased and this may be regarded as due to improved sanitation.

The figures in the various columns represent the number of deaths per annum per million persons living during the particular periods referred to.

Causes and Preventive Measures. Tuberculosis includes many forms of disease, i.e., Measures. Consumption of the lungs and of the bowels, water on the brain, scrofula, &c. That the disease is due to bacterial origin is now a question beyond dispute, and is more commonly contracted by inhalation of infected particles, principally the particles of dried phlegm expectorated by phthisical patients, without regard to its immediate destruction or disinfection. The disease may also be contracted by the ingestion of tubercular animal matter in the form of meat and milk derived from cows and other animals suffering from Tuberculosis, or of food prepared by persons whilst in an advanced stage of the disease. The necessity of precautions cannot be too strongly impressed as to the disinfection or

TABLE XXXII.

MORTALITY FROM PHTHISIS PER ANNUM IN SEVERAL PERIODS, 1851 TO 1895, PER MILLION LIVING, AT ALL AGES, AND AT GROUPS OF AGES.

Period.	All ages.	Under 5 years.	5 to 10 years.	to to 15 years.	to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.		75 years & up- wards.
1851-60	2679	1305	572	1025	2961	4181	4217	4091	3466	2840	1983	808
1861-70	2475	968	454	825	2651	3928	4243	4026	3340	2656	1603	539
1871-80	2116	767	358	664	2036	3117	3619	3745	3132	2449	1476	492
1881-85	1830	569	312	560	1695	2535	3154	3312	2849	2197	1362	490
1886-90	1635	502	271	488	1420	2144	2691	2985	2656	2150	1363	555
1890-95	1463	444	228	410	1252	1875	2342	2771	2440	1941	1147	440

destruction of phlegm from consumptive patients, the thorough cooking of meat and boiling of milk, the necessity of patients suffering from phthisis occupying separate bedrooms with an ample supply of fresh air, and as to the great value of disinfection of rooms after vacation by such patients.

The disease has been generally regarded as of an hereditary character. It is not however the disease, but the tendency to susceptibility that is hereditary; there is no reason why with proper care those of consumptive parents should necessarily contract the disease. Persons in robust health never develope the disease; there must be a preceding debilitating cause to render the person capable of developing the tubercular organism. Amongst the causes are the following:—(1) Hereditary tendency, before referred to. (2) Overcrowding and general lack of abundant supply of fresh air. (3) Improper or insufficient food. (3) Insufficient clothing. (5) Excessive use of alcohol. (6) Excessive indulgences of an exhaustive nature. (7) Excessive mental labour, &c. These are some of the causes of susceptibility. It therefore follows that the avoidance of these irregularities is important from the preventive point of view.

Royal Commission on Tuberculosis appointed to enquire as to what administrative and their Recommendations.

The meat and milk of tuberculous animals; and what were the considerations which should govern the action of the responsible authorities in condemning for the purpose of food supplies, animals, carcases, or meat exhibiting any stage of tuberculosis. They also found it necessary to take evidence relating (a) to the prevalence of tuberculosis among dairy stock and cattle and certain other animals destined for food in the United Kingdom; (b) to the sanitary conditions under which such animals are kept; (c) to the various practices governing the

inspection of meat and the control of milk offered for sale, the method under which, and the extent to which these are adopted in various districts and to the alteration in the existing laws, or their administration, advocated by the representatives of various interests affected.

During 1898 the Commissioners presented their report and the following is a brief summary of their recommendations.

Slaughter-houses. That upon a local authority providing a public abattoir, power be conferred upon them to declare that after three years no other place be used for slaughtering. That local authorities be empowered to order that all meat slaughtered other than at a public abattoir be taken to a place or places for inspection. That where a public abattoir has been established, inspectors shall inspect all carcases immediately after slaughter and stamp all joints passed as sound.

That it shall not be lawful to offer for sale the meat of any animal which has not been killed in a duly licensed slaughterhouse.

Qualification of Meat Inspectors. That in future no person be permitted to act as a Meat Inspector until he has passed a qualifying examination.

Tuberculosis in animals intended for food. That the Local Government Board be empowered to issue instructions from time to time to meat inspectors, prescribing the degree of tubercular disease which should cause a carcase or part thereof to be seized.

Disease in the udder of cows. That all diseases in the udder shall be made compulsorily notifiable by the owner.

That local authorities be empowered to take samples of milk and that vendors be required to supply sufficient information concerning the source of supply. (This would be for the purpose of bacteriological examination).

Cowsheds, &c. That the Local Government Board be empowered to require local authorities to adopt regulations where that has not been done already.

That in future no cowshed, &c., be allowed within 100 feet of any dwelling-house.

That the conditions attached to cowsheds, &c., shall in future include the following requirements:—

- 1. An impervious floor.
- 2. A sufficient water supply for flushing.
- 3. Proper drainage.
- 4. A depôt for manure at a sufficient distance from the byres.
- 5. A minimum cubic contents of from 600 to 800 feet for each adult beast varying according to the average weight of the animals.
- 6. A minimum floor space of 50 feet to each adult beast.
- 7. Sufficient light and ventilation (that definite dimensions affecting ventilation and lighting are by far the most important.)

That when cows housed in one district supply milk to another district, the local authority of the district in which the cows are housed shall be bound, when required to supply to the local authority of the district in which the milk is sold or consumed full information and veterinary reports regarding the condition of the cows, byres, &c., whence the milk is drawn. If dissatisfied with the reports, the Local Authority may call upon the Local Government Board with a view to an independent inspection and report.

That funds be placed at the disposal of the Board of Agriculture, &c., for the preparation of commercial tuberculin, and that the stockowners be encouraged to test their animals by the offer of a gratuitous supply of tuberculin and the gratuitous services of a veterinary surgeon on certain conditions.

That the Board of Agriculture, &c., circulate amongst agricultural and other societies, instructions as to the proper use of the tuberculin test.

The foregoing briefly deals with preventive measures to be adopted to prevent the spread of the disease by ingestion; the only effectual method of dealing with the question of infection is to have a complete knowledge of the sources of infection and this can alone be done by notification. During the year the subject has been under the serious consideration of the Vestry and with a view to some immediate action being taken to combat the disease, a circular containing the following precautions against Tuberculosis or Consumption was delivered to every house in the Parish endorsed by an urgent request that it might not be destroyed, but placed in such a position as to be readily referred to:—

"The Vestry as the Sanitary Authority for the Parish, and as advised by the Medical Officer of Health, desire to direct attention to the importance of adopting measures to prevent the spread of Tuberculosis, which is also known as consumption of the lungs or bowels and also as water on the Brain, Scrofula, &c.

"The disease is caused by a special germ or microbe which may be taken into the system in many ways. Amongst others it is generally contracted in otherwise healthy persons by inhalation of the dust containing the germ or microbe of the disease derived from the dried expectoration or phlegm of persons suffering from consumption. "All persons suffering from consumption should expectorate either into the fire or a vessel containing disinfectants such as carbolic acid or into rags or paper which should be afterwards burned. They should especially abstain from expectorating phlegm or spitting on the floors of houses or vehicles or in public places.

"The disease may also be contracted by partaking of meat or milk of tubercular animals, especially of the cow; therefore all meat should be properly cooked, and all milk, including condensed milk, boiled before being given to children in every instance. Milk so treated is as nourishing and palatable as new milk and it need only be brought to the boiling point for a minute, prolonged boiling being unnecessary.

"A further mode of contracting the disease is by sleeping in a room which is, or has been, inhabited by a person suffering from consumption. Therefore if possible all persons suffering from this disease should have a separate bedroom, the windows of which should be kept open as long as possible daily.

"After the death or removal of a person suffering from consumption the room should be disinfected, the wall paper stripped and the ceilings whitewashed. Disinfection will be performed in such cases by the Vestry's Staff, free of charge, upon application at the Public Health Department, Municipal Buildings, Town Hall Road, where disinfectants will also be supplied to the poor, without charge, in cases where the same cannot otherwise be obtained."

As the result of this handbill, many applications were made to the Department for disinfection of bedding and premises after fatal cases of the disease.

Compulsory Notification of Phthisis. In the meantime the Health Committee actively considered the question of compulsory notification, and on the 25th January, 1899, the following recommendation was adopted by the Vestry:—

"That the necessary steps be taken with a view to ordering that Section 55 of the Public Health (London) Act, 1891, shall apply in this Parish to cases of phthisis." On the 22nd February the subject was again brought forward for formal approval, but was held over until the 8th March, when the matter was again adjourned for a period of six months, being a subject for consideration at the meeting of the Vestry on the 13th September, when it was resolved that the matter be referred back to the Health Committee for further consideration and report.

I subsequently submitted a detailed report on the subject of the probable causes of tuberculosis, the advantages and difficulties of notification and the action taken by some other authorities in regard to notification. The more important and interesting points of that report I have revised to date as far as possible and incorporated here.

Advantages The advantages of notification are—firstly, that it is Notification from a statistical point of view, the means, and only means of ascertaining the amount of illness from the disease—the information at present at the disposal of the Medical Officer of Health being limited to the extent of the mortality—secondly, of ascertaining whether particular areas are affected, and consequently the effect of local conditions, and the adoption of measures to remedy these conditions; and what is of still greater importance to enable instruction and guidance to be given just where they are needed, and to conduct a thorough system of disinfection and cleansing.

Difficulties of The difficulties of making section 55 of the Public Compulsory Notification. Health (London) Act, 1891, apply to Phthisis are great, inasmuch as a patient, even in the early stages, when most are fully capable of earning their own living, would be prevented from doing so, or even leaving his own house, whereas it is a fully recognised fact that for the cure of consumptives, to practically live in the open air is essential. I, however, here again strongly urge that those suffering from the disease should

be strictly prohibited from engaging in any industry connected with the sale or manufacture of human food.

Another difficulty presents itself having regard to the long duration of the disease, as a rule measured by years, the patient possibly changing his abode on many occasions. The question then arises as to limiting the number of times a case shall be notified, particularly as the cases would in many instances be transferred to other districts; moreover the patient may be frequently changing his medical adviser. The notification of each change of address would, however, be necessary in order that the vacated premises might be disinfected. A still further difficulty is in deciding at what stage a case shall become notifiable. The absence of means of hospital treatment is also a matter which cannot be entirely disregarded.

With a view of benefitting by the experience of other Not fication adopted at local authorities who have taken action in this matter, New York. I have ascertained that in the City of New York, compulsory notification has been made law on condition that an inspector does not visit the house where the case is reported by a private medical practitioner, unless requested to do so by the practitioner. This system would appear to be of value only for statistical purposes but is probably necessitated by the magnitude of the work.

The following figures will be of value as shewing the number of cases notified at New York under the voluntary system.

	Estimated population.	mber of cases of erculosis notified.
1894	 1,809,353	 4,166
1895	 1,879,195	 5,824
1896	 1,934,077	 8,334

In 1897, the compulsory system was adopted so far as regards Pulmonary Tuberculosis. In the Sanitary Code the

disease is described as "an infectious and communicable disease, dangerous to the public health" and is not grouped with the contagious diseases.

Facilities are given to medical men for the early diagnosis of cases by the examination of samples of sputum in the Municipal Laboratory.

System of At Manchester, pending the approval of the Notification adopted at Local Government Board to Phthisis being included Manchester. amongst the diseases notifiable under the Local Act, a voluntary system of notification is in force, medical practitioners receiving the same fees as for other cases.

During the period from the 11th September to the 30th December, 1899, 425 cases were notified and investigated. Of these, 365 were notified by medical men connected with public institutions, and the remaining 60 cases were mostly notified by Visitors of the Ladies' Health Society. Of the cases in question 231 were male patients and 194 females.

The following is the practice adopted for supervising the cases when the patient is nursed at home. If the house is dirty a communication is sent to the owner or agent enquiring whether he has any objection to the house being cleansed and disinfected, at the expense of the Corporation, by stripping and washing with lime solution. This, according to the report of Dr. Niven, the Medical Officer of Health, is invariably agreed to. The Health Visitor or Sanitary Inspector pays a fortnightly visit, enquires whether the necessary measures of precaution are being carried out, and reports if the house is clean and free from dust. If the house is clean, a fortnightly visit is still made, but the tenant cleans the walls down with dough, under the supervision of the Officer, and is requested to do so every two or three months. Visits are paid to ensure that the cleansing is repeated. The

floors, furniture and bedding are again cleansed when death takes place, and the walls of the rooms occupied by the patient are rubbed down with dough.

If the patient has been removed to hospital, the owner or agent is forthwith communicated with if the house be dirty. No objection to cleansing and disinfecting being offered, the walls are stripped and then washed, along with the floors, furniture, &c., with a solution of chlorinated lime, 1½ ounces to the gallon. The tenant also washes the bedding thoroughly.

This work is superintended by the Health Visitors in the central portion of the City and by the Sanitary Inspectors in the outer districts.

A system of Notification adopted at Brighton at Brighton it has been recently decided to pay the same fees to medical practitioners as for compulsorily notifiable infectious diseases.

During the year one hundred cases were notified at Brighton, principally from local public institutions.

Workhouse			1	
County Hospit	al			84
Poor Law Med	lical Offi	cers		04
Dispensary Me	edical Off	ficers)	
Private Medic	al Practi	itioners		16
				100

A Municipal Laboratory is provided for the early diagnosis of infectious disease including phthisis, and forty-seven such tests were made during the year 1899.

The Brighton Authorities have in connection with contracts for the supply of milk to the Borough Sanatorium imposed the following conditions:—

- 1.—That the Contractor shall furnish to the Medical Officer of Health certificates from a qualified veterinary surgeon to the effect that
 - (a) The cows from which the milk supply is obtained have been subjected to and failed to re-act to the tuberculin test.
 - (b) That all re-acting animals have been removed from the byres, and the latter cleansed and disinfected.
 - (c) That all new cows, purchased from time to time during the period of the contract, have been similarly treated.
- 2.—That the Contractor shall not supply milk from any other source than the one defined above, without the special permission of the Medical Officer of Health.

In a report upon the subject of notification, Dr. Newsholme, the Medical Officer of Health, says-"It is evident that the "voluntary information furnished has enabled us to adopt pre-"cautionary measures against the spread of infection at a much "earlier period, and to a much wider extent than would have "been practicable if we had been dependent solely upon death "returns. I have not the slightest doubt that the precautionary "measures thus adopted have been productive of great good." We found almost without exception, a readiness to "accept suggestions as to precautionary measures, and a degree "of education on the subject, which was, to say the least, unexpected. . . . The work done during the past half-"year indicates, in my opinion, the complete practicability of "visits being made to phthisical patients without creating "unnecessary alarm, and I am strongly of opinion that a large "amount of good is being done by these visits."

Action taken at Blackburn. At Blackburn during 1898 the Town Council made application to the Local Government Board for their consent to the order of the Town Council, that for the purposes of the Blackburn Improvement Act, 1882, phthisis be deemed an infectious disease, and the following is a copy of the reply received.

"I am directed by the Local Government Board to advert "to your letter of the 5th instant, asking for their consent to the "order of the Town Council of Blackburn, that for the purposes "of the Blackburn Improvement Act, 1882, phthisis be termed "an Infectious Disease."

"I am to state that the Board have hitherto held the view that phthisis is not a disease to which the principle of com"pulsory notification could with advantage by applied, and in this
"connection I am to remind the Town Council that many
"persons who would be notified to them as suffering from
"phthisis would be individuals in whom the disease is so little
"advanced that not a few of them may be expected to have many
"years of life in prospect during which it will be imperative on
"them to gain a livelihood for themselves, and often also for their
"families. The Board do not find in the Medical Officer of
"Health's report, which accompanied your letter, any grounds
"which would lead them to modify that view, and they therefore
"are not prepared to consent to the addition of phthisis to the
"list of diseases notifiable in the Borough, under the Blackburn
"Improvement Act, 1882."

Inasmuch as the phthisis death-rate at Blackburn closely corresponds with that of Battersea, it could hardly be regarded that we have any stronger claims upon the Local Government Board than Blackburn. It is, moreover, evident that any action taken with this object must be made by a combination of the whole of the Metropolitan Sanitary Authorities.

Action The action taken by the Vestry in favour of the taken at Battersea. compulsory notification of Phthisis has already been referred to on pages 70 and 71, the subject having been eventually referred back to the Health Committee on the 13th September. After a very careful re-consideration of the subject, they submitted the following report, which was approved by the Vestry on the 8th November.

"Your Committee are unable to recommend that any further steps be taken at present in the direction of compulsory notification, but they recommend that the handbill advising the public as to precautions to be taken to prevent the spread of the disease be re-issued throughout the Parish, that the Registrars of Deaths be requested to immediately notify all fatal cases of phthisis to the Medical Officer of Health with a view to disinfection of the premises, and that the Medical Officers of local public institutions be asked to notify all cases admitted into such institutions."

This system in practice has been found to be very effective, copies of the precautions are from time to time posted in prominent positions in the Parish; the registrars immediately notify all deaths from phthisis, and Dr. Lyster, of Bolingbroke Hospital, has most heartily promised to assist the Vestry by notifying any cases coming to his knowledge. Dr. Neal, of the Union Infirmary, however, regrets that, anxious as he is to assist, he does not feel justified in furnishing the required information, in view of the case of Kitson v. Playfair.

In all cases coming to knowledge by the means referred to, disinfection is tendered and is accepted in a very large proportion of the cases.

On the 22nd February the Vestry resolved to urge the Local Government Board to promote legislation in the ensuing session for preventing the sale of milk and cream infected with tubercle baccili, and for the regulation of dairies and the inspection of cows in cases to which the disease may be traced.

At a meeting of the Vestry on the 12th April it was decided, that in view of the danger attending the use of milk derived from tuberculous cows, the Government be requested to take such measures as may be necessary to stamp out tuberculosis from the cattle of this country, and that such administration as may be necessary for the purpose, should be exercised by the Board of Agriculture; also that the Local Government Board be urged to require Local Sanitary Authorities to enforce the Dairies, Cowsheds and Milkshops Order dealing with the cleanliness, ventilation and good ordering of Dairies, Cowsheds and Milkshops.

On the 27th September a similar recommendation of the Health Committee was adopted to memorialise the Board of Agriculture to introduce a Bill into Parliament to give effect to the recommendations of the Royal Commission on Tuberculosis.

Bacterio logical Examination of milk purveyed in the Parish is infected with tubercule baccili, the Health Committee submitted a recommendation to the Vestry on the 11th October, that twenty-five samples of milk be taken and sent to the Jenner Institute of Preventive Medicine for bacteriological examination. This recommendation was adopted "upon condition that no experiments be performed on living animals." At the following meeting of the Vestry a letter was submitted from Dr. A. Macfadyen, Director of the Institute, to the effect that the animal experiment is the only test available for ascertaining the presence of tubercle baccili in milk, and that the Institute could not therefore accept the proposed investigation on the lines laid down by the Vestry.

DISINFECTION.

During the year, disinfection by fumigation was carried out in 1,666 premises, principally by the agency of sulphurous acid gas; after virulent cases a proportion of perchloride of mercury is added to the sulphur in burning, and in other cases where sulphur would be liable to injure metal-work or fabrics, formalin is used. In 7,761 instances disinfectants were gratuitously supplied, either at the houses or upon application at the Disinfectant Stores Town Hall Road. Steam disinfection has been carried out in 351 instances, the articles disinfected weighing 29 tons 17 cwt. 1 qr. 27 lbs. The cost of steam disinfection, carried out by contract, during the year was £513 11s. 1d.

Previously to the year under report it was the rule to disinfect by steam only in cases where bedding was soiled by discharges or where requested by the Medical attendant. It is now the practice to disinfect after all cases of enteric fever, after fatal cases of all notifiable diseases and phthisis, the latter subject to permission, and in all other cases where patients are treated at their homes.

From time to time the subject of carrying out steam disinfection without the intervention of a contractor has been considered, and on the 26th July the Health Committee submitted the following report to the Vestry:—

"Your Committee have had under consideration the question of the provision of a disinfection chamber in the Parish for the purpose of disinfecting bedding and other articles after cases of infectious disease.

"They have carefully enquired into the matter and have come to the conclusion that the time has arrived when the Vestry should carry out the work of disinfection by men directly employed by the Vestry, and they recommend that the necessary steps be taken for the erection of a disinfection chamber for the purpose.

"Your Committee find that the following sites are available and most suitable for the erection of a disinfecting chamber, viz:—

- (1). Land adjoining site for Mortuary, Sheepcote Lane.
- (2). Land at rear of Town Hall Buildings.
 and they recommend that the building be erected on one of such

sites, and that it be referred to your Committee to consider as to details and to submit a scheme as to the cost of carrying out the work."

The report was referred back to the Committee, and at the time of writing a Sub-Committee was considering the details and cost and for that purpose had obtained particulars from the Metropolitan parishes as to the system adopted and the cost of erecting and working such systems.

Of the 35 parishes from whom replies were received, 25 carried out their own steam disinfection and 1 by dry heat, 4 made use of apparatus belonging to adjoining parishes or public institutions, and in 5 instances the work was carried out by a contractor. In one of the latter cases, however, a disinfecting station was then in course of erection. At both Islington and Lambeth two disinfecting machines are used, an arrangement which must be of the greatest value in the event of one being temporarily out of working order, being a system which strongly recommends itself to a Parish like Battersea. Several of the stations visited, immediately adjoined the Mortuary, an arrangement which has been found to be of the greatest convenience and likely to be exceedingly practicable in connection with the new Mortuary about to be erected in Sheepcote Lane.

As shewing the efficiency of disinfection as carried out, no case of infectious disease has been traceable to insufficient disinfection. Where cases have recurred in a house they have been found to be due purely to personal infection. Of the latter many have arisen after the return of cases from hospital in an apparently healthy state, but there is every reason to believe still in an infectious condition. A very clear instance is recorded in connection with cases of Diphtheria, on page 56. Realising the serious nature and extent of such cases the Metropolitan Asylums Board appointed a special Medical Officer in November, 1898, who

for a period of about six months fully investigated all such cases coming under notice. Up to the present a report has not been published on the subject by the Board.

Certificates of Disinfection.

After disinfection it is the practice to forward a certificate to the Head Masters of the Schools attended by children in the house, and also to furnish certificates to employers upon request. During the year 1615 such certificates have been granted.

Disinfection & destruction of Library Books.

During the year, 69 books were returned to the Public Libraries from premises at which infectious disease had existed and were forwarded to the Public Health Department. Of these it was considered necessary to destroy 59, the original cost of these books being refunded to the Library Department. The remaining 10 books being such as to be difficult and in many instances impossible of replacement, were subjected to disinfection and returned.

Destruction of bedding, &c. In cases where the cost of ordinary disinfection would exceed the value of the articles it is the practice to cremate the same at the Dust Destructor and replace the articles with new, and in two instances this has been carried out at a total cost of £3 2s. 6d.

Damage to articles occasionally inavoidably occurs in the process of disinfection; in one such case during the year a claim was made and settled by payment of the sum of £1 is. by the Vestry.

Flushing of House Drains after Infectious Disease. After all cases of Enteric fever and Diphtheria and in other cases when considered necessary, the drains of the houses are flushed with disinfectants by the disinfecting staff, and this was carried out in 928 instances during the year.

Disinfection of Public Vehicles. At the Dust Depôt, Culvert Road, a building is provided for the special purpose of disinfecting cabs and other public vehicles. During the year one cab has been disinfected there, after having been used for conveying a Scarlet fever patient from Sloane Square, Chelsea. The cabman having been compensated by the hirer of the vehicle no proceedings were taken in the matter.

The building in question has also been made use of by the Highways Department for the storage of furniture, &c., of evicted tenants, which had been seized in consequence of causing obstruction in the public highways, &c. Before the articles are returned to their owners the same are invariably disinfected, or if in filthy and worthless condition, are destroyed in the destructor.

MORTUARY.

During the year 1899 two hundred and seventy-four bodies were received at the Parish Mortuary, Church Road. One hundred and fifty-seven were the bodies of males and one hundred and seventeen of females. In two hundred and twenty-one cases post-mortem examinations were held, and Coroner's inquests upon two hundred and sixty of the bodies. The remaining fourteen bodies were deposited for sanitary reasons—nine by reason of insufficient accommodation, at the houses, and five for similar, but more urgent, reasons, being those of persons dying from diphtheria, and these latter were isolated in the infectious chamber.

The days upon which the largest number of bodies were received were on the 7th February and 14th March, viz., five on each occasion and four on each of the following days:—10th March, 27th March and 26th December.

The following Table shews the number of bodies received during the past twelve years:—

TABLE XXXIII.

	Number of bodies received in the Mortuary.	Number of bodies upon which post- mortem examinations were held.	Number of bodies upon which Coroner's inquests were held.
1888	134	106	134
1889	140	118	140
1890	199	148	194
1891	176	139	169
1892	193	163	187
1893	243	200	237
1894	224	197	208
1895	259	210	232
1896	293	242	278
1897	289	246	273
1898	294	238	267
1899	274	221	260

For some years the Mortuary accommodation has been recognised as being somewhat inadequate for the requirements of this ever increasing Parish, but difficulties were experienced in making the necessary improvements, by inability to obtain a faculty, and subsequently the question of site and expense caused further delay. Plans were first submitted shewing an enlargement upon the present site, but failing to obtain the approval of the Ecclesiastical Commissioners, whose permission is necessary for any structural alterations in a church-yard, further plans were submitted for an elaborate arrangement on the land at the

rear of the Town Hall. This scheme, which included amongst other details the division of the sexes in the Mortuary, and the provision of a shelter for persons obliged to temporarily vacate their premises for disinfection, and also residental accommodation for the attendants, was abandoned by the Vestry on the grounds of expense; and eventually a third set of plans was submitted and approved by the Vestry on the 11th October, 1899, for a Mortuary on the ground adjoining the Latchmere Road Baths, at an estimated cost of £4,795, and the approval of the Local Government Board is being awaited in order to at once proceed with the work.

The plans in question provide for the following accommodation:—

GROUND FLOOR-

Post-mortem Room (containing 2 fixed and 1 adjustable operation slabs, sink, lavatory, cupboards, &c.).

Sealed Chamber (containing a water-sealed shell for putrefying bodies recovered from the river, &c.)

Store for Disinfectants.

Infectious Mortuary (containing catacombs to accommodate 8 bodies).

Non-Infectious Mortuary (containing catacombs to accommodate 14 bodies). An arrangement is proposed by which bodies may be viewed through a glass screen, whereby the necessity of the jury, witnesses and others, actually entering the Mortuary room, will be avoided.

Coroner's Private Room (with sanitary office, &c., attached).

Jury's retiring Room and Lavatory, &c., adjoining.

Attendant's Room.

Shell Store.

Coal Store.

FIRST FLOOR-

Coroner's Court.

Witnesses' Waiting Room.

Ladies' Lavatory.

The great improvement of this arrangement compared with that of the existing Mortuary accommodation at Church Road, and the Coroner's Court at Althorpe Grove, will be at once evident; moreover the convenience of the two buildings being incorporated is inestimable. The existing Mortuary, which will probably be retained for emergency purposes, contains the following accommodation:—

Post-Mortem Room (containing one fixed operation slab).

Mortuary (containing 4 slate tables).

Infectious Chamber.

REMOVAL OF OFFENSIVE MATTERS.

Removal of Fish Offal. This subject has during the past year been prominently before the Health Committee and Vestry with a view to its removal being undertaken by the sanitary authority, and for that purpose a scheme was prepared shewing the nett cost after the sale of the offal to be about £164 per annum. At a meeting of the Vestry on 26th April, it was, however, resolved that the matter be adjourned sine die. At present the removal is effected by several manufacturers of guano and other products, who receive varying sums from the fishmongers for such removal.

During the year the London County Council has had under consideration the desirability of legislation to enforce the requirement of a proper receptacle with a covering for same and so arranged that each receptable with its contents can be taken away from the premises without the cover being removed. This arrangement would of course necessitate an empty receptacle being left at the premises each time the collection is made. It was also proposed to make the removal of manure subject to the existing by-laws dealing with fish offal.

Successful prosecutions have taken place during the year in this Parish against two collectors of fish offal for removing this offensive matter in improperly constructed vessels.

CHÂLETS.

The Public Sanitary Conveniences formerly under the control of the Highways Committee are now under the supervision of the Health Committee and are situated as follows:

(1) Lavender Hill, at junction of Falcon Road; (2) Battersea Park Road, at corner of Cabul Road; (3) Victoria Road, in the shrubberies of Battersea Park, by the Victoria Suspension Bridge; (4) Victoria Circus, in the shrubberies of Battersea Park. The last mentioned châlet was opened in March of the year under report, and a fifth is now in course of construction in York Road at the end of Plough Road, and will fulfil a long felt requirement.

The urinals attached to public-houses have been under the constant supervision of the staff and are referred to in the report of the Chief Sanitary Inspector.

FLOODING.

In the autumn of the year under report, serious floodings took place in the Parish, those particularly referred to having occurred on the 6th and 7th September, the more serious having taken place on the former date, when, within the short space of about twenty minutes, $\frac{7}{10}$ of an inch of rainfall was recorded.

The Surveyor submitted a report to the Vestry as to the extent of the flooding and the depth of the sewage and water at such of the premises affected, and I was subsequently requested

to report upon the effects of the sewage flooding on the Public Health. Accordingly investigation was carried out in 833 instances where flooding was reported to have occurred. In some cases it was found that the flooding was due only to surface water, owing to gullies, rainwater pipes and gutters being temporarily stopped by dried leaves, paper, etc., washed down by the rain. In the majority of cases, however, sewage flooding of a serious character was found to have occurred; in many houses rising above the damp courses, and in a considerable number, saturating the wooden floorings, the resulting bad effects being maintained for a long time; the solid constituents of sewage being to a varying extent deposited on the soil beneath the flooring, the smells therefrom being a subject of general complaint.

In most of the premises it was found that they were subject to flooding on all occasions of very heavy storms.

The distribution over the various sanitary districts of the premises where flooding was reported to have occurred, is as follows:—

No. 1	 ***			136
,, 2				38
,, 3	 			56
,, 4	 	***	***	192
" 5	 			81
,, 6	 			233
" 7 8	 			50
,, 8	 			47
				833

As previously mentioned, the whole of the flooding was not found, after enquiry, to be due to back-flooding of the sewers; of the 833 premises visited, it was found in 43 instances that little or no flooding had occurred, and in 93 other cases the flooding was due either to surface water only, or the sewage flooding was confined to yards and areas.

It was exceedingly difficult to prove that this flooding had been the direct cause of any considerable degree of sickness, nevertheless, many cases of sore throat, rheumatism, bronchitis and other affections of the respiratory organs occurred after the date of the floodings, at the premises visited; and although these diseases and ailments were such as might arise from many other causes, yet they had occurred since such flooding. The least that could be said of these conditions was that they were unwholesome, causing great discomfort and danger to health.

The following table shews the number of houses in which sickness was ascertained to have occurred at the flooded premises visited:—

TA	BI	L.E.	XXXIV.	
	200	had had	ZAZAZAI V .	

NATURE O	F Sich	Number of Houses in which Sickness Occurred.	
Bronchitis)	
Pneumonia			
Colds		 }	123
Sore-throats, &c.			
Rheumatism		 	10
Enteric Fever		 	4 (2 in one
Scarlet Fever		 	house)
Diphtheria		 	I
Erysipelas		 	1
Puerperal Fever		 	I
Measles		 	2
			144

My report was confined to the result of investigations made by the Staff of the Department as to sickness immediately following the flooding on the 6th September, and was not intended in any way to deal with the causes of the frequent floodings in the Parish and surrounding districts, nor the remedial measures which should be adopted to avert them in future, as these have been so frequently the subject of report by the Surveyor; it must, however, be obvious to all, that the past, present, and future conversion of open ground, where rainwater can soak away naturally, into houses with roofs and yards draining into sewers, calls for greatly increased means for the carrying away of this additional water.

The Engineer to the London County Council has submitted a report to the Main Drainage Committee, in which he recommends the expenditure of nearly £3,000,000 in additional sewers and pumping machinery. In November last Mr. Pilditch submitted a special report to the Health Committee as to the probable effect of the scheme.

WATER SUPPLY.

In previous reports I have dealt extensively with this very important question. I propose therefore to deal very briefly with the subject here.

The Royal Commission which sat during 1892 and 1893 found that the water as supplied to the consumer in London was suitable in quality for all household purposes, and that the Thames and Lea Valleys might be made to supply more than double the then present population of the Metropolis with 35 gallons per head daily.

In 1897 the Government appointed a Royal Commission to consider the whole subject of the Metropolitan Water Supply, including a reference to inquire and report as to the desirable management of Water Companies.

The Southwark and Vauxhall Water Company has introduced Bills into Parliament for increased powers, as recommended by the Royal Commission of 1892 and 1893, but they have been withdrawn.

A Bill has been presented to Parliament for empowering the London County Council to bring a supply of water from South Wales. This has, at the time of writing, been defeated in the House of Commons.

Water Analyses. Samples of water have been taken monthly from the supplies of the Southwark and Vauxhall and the Lambeth Water Companies, for analyses, and copies of the Analyst's reports furnished to members of the Vestry.

In consequence of the unwholesome condition of samples of water taken from the supplies of the Lambeth and the Southwark and Vauxhall Water Companies in the month of November, it was resolved to complain to the Railway and Canal Commission, who are the Court of reference in cases of this kind, and at the time of writing, the necessary action was being taken in the matter.

The following is an extract from the certificate of Mr. C. E. Cassal, the Analyst:

"The samples were indentical in character and composition, and consisted of water of very inferior quality. The data indicative of the nature and amount of the organic matter present, were much higher than those which are yielded by the Thamesderived waters, when these can be reported as being in fair condition, having regard to the present conditions relating to the source of supply and under existing circumstances. The waters represented by these samples were insufficiently purified for public supply and for drinking purposes.

Well Water. During the year, two shallow wells were found to be in existence. An analysis of the water obtained in both instances shewed the same to be unfit for drinking purposes. In view, however, of the fact that in both cases the houses were in addition supplied with water direct from the Water Company's Mains, the Health Committee was advised by the Solicitor to take no action in the matter at present.

FOOD AND FOOD SUPPLY.

The important subject of food, being the prime necessity of mortal existence, continues to receive the close and careful attention of the Public Health Department.

Sale of With a view to the detection of adulteration Foodand and abstraction, five hundred samples are now yearly Drugs Acts. taken under the Sale of Food and Drugs Acts-Milk being so important an article of food, particularly for infants, receiving the closest attention. A large number of successful prosecutions, details of which will be found in the reports of the Public Analyst and the Chief Sanitary Inspector, have been obtained during the year under these Acts. Considerable difficulty has occurred in connection with the subject of food preservatives, particularly boric acid in milk; several summonses were issued in such cases but were eventually withdrawn. In March, the Vestry passed a resolution urging the Government to insert a clause in the Food and Drugs Bill requiring full disclosure of the presence of preservatives to the purchaser, and that the amount of such preservatives be restricted in accordance with such order as the Court of Reference may make.

Condensed Milk. Public attention has lately been directed to the importance of milk being used in its entirety, more especially in the case of infants brought up wholly or in part by hand, whether the milk is given as derived from the cow or as condensed milk, the abstraction of the most important element,

the fat, being most prejudicial, as tending to practically starve the child. A warning to the public of these dangers of using such impoverished milk was issued during the year in the form of a printed circular, placed in prominent positions in the Parish and otherwise freely circulated, directing the attention of parents or persons having charge of young children to the fact that Milk consists, broadly speaking, of three constituents: firstly, Fat, as in cream or butter; secondly, Cheese, as casein or curds; thirdly, Whey, chiefly water, salts, etc., and that the abstraction of the major part of the fat in separated or skimmed milk takes away the most important constituent as far as nourishment is concerned, and a young child fed wholly or principally on such impoverished milk is under-nourished to the extent which the abstraction of fat has gone. On the other hand, that, if such milk is to give a sufficient proportion of fatty constituents, the child must, if fed on this separated milk, consume a much larger quantity of the impoverished milk, far beyond its power of digestion. That the fat in good new milk should be from 3 to 4 per cent. in weight, but many of the condensed separated milks contain less than I per cent. of fat, and recommending that those having charge of young children should avoid the separated condensed milks, and give the children good new milk, both from a health point of view and as a matter of real economy. If condensed milks are given, those which contain the whole of the constituents of the milk, as the best do, should be used, and further that all condensed milk should be made ready for use as food by the use of boiling water, in order to destroy any disease germs present, and in conclusion to beware when feeding young children, of the numerous condensed skimmed or separated milks which give little or no nourishment, but on the contrary more or less starve the infant.

In connection with the subject of the sale of condensed skimmed or separated milks a deputation waited upon the President of the Board of Agriculture urging that in the then proposed new Act provision should be made for the proper labelling of such. This has now been provided for in the Food and Drugs Act, 1899, which came into operation on the 1st of January, 1900, and requires, that "Every tin or other receptacle containing condensed separated or skimmed milk must bear a label clearly visible to the purchaser, on which the words 'Machine-skimmed Milk' or 'Skimmed Milk' as the case may require, are printed in large and legible type, and if any person, sells or exposes or offers for sale condensed separated or skimmed milk in contravention of this section he shall be liable on summary conviction to a fine not exceeding ten pounds."

Unsound Food. With a view to the encouragement of the sale of wholesome food, a practice has for some time past been adopted that when retail vendors become aware that articles of food purchased of wholesale dealers are unsound and unfit for human consumption, they attend with the same at the Public Health Offices, and if satisfied that no attempt has been made to sell the articles, they are condemned by the Vestry's Officers, and cremated at the Dust Destructor, and a certificate is given in support of any claim upon the wholesale firm who originally sold the same. This no doubt prevents a large amount of unsound food being offered for sale. Twenty certificates have been granted during the year under these circumstances.

The whole of the butchers, fishmongers, fruiterers, and other tradesmen's premises have been kept under close and frequent supervision both on week days and Sundays, and it was found necessary in consequence of their unsound condition to seize the following articles of food and take the same before the magistrate at the South Western Police Court for condemnation:—

- (1). Tins of salmon
- (2). Meat
- (3). Tomatoes
- (4). Apples.

In cases Nos. 2, 3 and 4, proceedings were subsequently instituted and penalties obtained. In case No. 1, in view of the circumstances that it was a first offence and that doubt existed as to guilty knowledge on the part of the offender, he was duly cautioned.

Food Supply. Among the important sources of food supply are bakehouses, cowhouses and slaughterhouses, for bread, milk and meat. The work carried out during the year by the Sanitary Staff in connection therewith is here briefly referred to.

Bakehouses. The half-yearly inspections of the bakehouses in the Parish were duly carried out in the months of March and September. There are at present one hundred and nine bakehouses in the Parish. At the March inspection one hundred and two of these were in use, and the necessary cleansing and lime-washing had been carried out except in twenty-six instances, in which the Health Committee directed statutory notices to be served. In September, one hundred and one were in use, and it was necessary to serve notices in 24 instances. Of the bakehouses then in use, 39 were above ground, 11 semi-basement and 51 below ground. During the heavy storms of the autumn, 10 of these were flooded.

Cow-houses and Slaughter-houses. The importance of the supervision of these premises has already been dealt with under the subject of Tuberculosis, the cow-houses, on account of the tendency to the disease in cattle if kept under insanitary conditions, and the slaughter-houses for the detection of diseased carcases being prepared for human food.

Previous to the meeting of the Licensing Committee of the London County Council, a sub-committee of the Health Committee made an inspection of the licensed slaughter-houses

(9 in number), and the cow-houses (7 in number), and found that with few exceptions, in which they ordered notices to be served, the respective premises were in good and cleanly condition.

In the case of the cow-house situate at No. 42 Linda Street, in view of the facts that no cows had been kept upon the premises for the preceding six months and that the premises were found to be in a very dilapidated condition, it was decided to oppose the renewal of the license, which was successful, the remaining licenses being renewed. There are now nine slaughter-houses and six cow-houses duly licensed in the Parish, which are as follows:—

0-				
SLA	UGH	TER	-HO	USES.

205 St. John's Hill.

163 ,, ,,

351 York Road.

189 ,, ,,

49 ,, ,,

139 Bridge Road West.

345 Battersea Park Road.

235 ,, ,, ,,

96 Falcon Road.

Cow-Houses.

14 Belle Vue Road.

Alderney Dairy, Wiseton

Road.

122 Usk Road.

43 ,, ,,

Hope Dairy, Hope Street.

62 High Street.

Upon the recommendation of the Health Committee, the Vestry, on the 11th October, 1899, decided to address a communication to the London County Council, urging the provision of public abattoirs in substitution for private slaughter-houses.

In regard to cow-houses, the London County Council intimate their intention of requiring that in the granting of new licences, the recommendations of the Royal Commission concerning their construction will be rigidly adhered to.

HOUSES LET IN LODGINGS.

For dealing with the cleanliness and general sanitary condition of this class of property by-laws have been made under the Public Health (London) Act 1891 to apply to any house or part of a house which is let in lodgings or occupied by members of more than one family, except where the rent or charge payable by each lodger, and exclusive of any charge for the use by such lodger of any furniture, is at a rate of seven shillings and sixpence per week or upwards, or where the rent or charge payable by each lodger, and inclusive of any charge for the use by such lodger of any furniture, is at the rate of ten shillings per week or upwards.

Obviously this definition would include most of the houses in the Parish, and having regard to the fact that the by-laws require, *inter alia*, the lime-whiting and cleansing every April of all walls and ceilings, it follows that nearly the whole of the Parish would require to be inspected during that month, which would be absolutely impracticable.

There are however, houses in this Parish to which the bylaws advisedly apply, and the following have been placed upon the register:—

Nos. 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 31, 33, 37, 39, 41, 43, 45 and 47 Orville Road.

Nos. 15, 17, 19, 21, 23 and 25 Green Lane.

Nos. 2, 6, 8 and 10 Wayland Road.

No. 47 Beaufoy Road.

Nos. 29, 31, 35 and 39 Wycliffe Road.

It was proposed to register Nos. 14 to 36 Lombard Dwellings and the necessary preliminary steps were taken in the matter, but acting upon the advice of the Solicitor, that in view of the fact that each tenement was complete in itself, the by-laws could not be applied, no further steps were taken in the matter.

Common Lodging Houses, of which there are several in the Parish, are under the direct control of officers of the London County Council and are subject to the provisions of the Common Lodging Houses Acts, 1851-3.

VACCINATION.

The Vaccination Act, 1898, came into operation on the first day of the year under report.

The most important amendments of the former law concerning vaccination is the extension of the period within which the parents or guardian of a child shall cause the child to be vaccinated, to six months from birth, instead of three months as formerly. Arm-to-arm vaccination and Public Vaccination Stations are practically abolished, it being the duty of the Public Vaccinator to visit the home of the child for the purpose of vaccinating it, and to use glycerinated calf-lymph or such other lymph as may be issued by the Local Government Board. It becomes necessary for the Public Vaccinator, after twenty-four hours' notice, to so visit and offer vaccination if within four months after birth the child has not then been vaccinated.

It is also provided that the Public Vaccinator shall not vaccinate a child if, in his opinion, the condition of the house is such or there is or has been such a recent prevalence of infectious disease in the district that it cannot be safely vaccinated, and in that case shall give a certificate of postponement and forthwith communicate with the Medical Officer of Health for the District.

Several such notices of postponement have been received during the year, and steps taken to remedy the insanitary conditions so prevailing.

Provision is also made for avoiding liability to penalties under Section 29 or 31 of the Act of 1867, if within four months from the birth of the child he satisfies two justices, or a stipendiary

or metropolitan police magistrate, in petty sessions, that he conscientiously believes that vaccination would be prejudicial to the health of the child, and within seven days thereafter delivers to the Vaccination Officer for the district a certificate by such justices or magistrate of such conscientious objection.

It is also provided that a second order shall not be made on any person, directing that a child be vaccinated who has been previously convicted of non-compliance with a similar order relating to the same child, nor shall proceedings be taken against any person who has already been convicted on account of the same child until it has reached the age of four years, and further, that persons committed to prison under the Act shall be treated as first-class misdemeanants.

When there is risk of outbreak of smallpox or under other exceptional circumstances the Local Government Board may require the Guardians of any Poor-law Union to provide vaccination stations for the vaccination of children with glycerinated calf-lymph or other lymph, and to modify the provisions of this Act requiring the Public Vaccinator to visit the home of the child otherwise than on request of the parent.

It is also made the duty of the clerk of any sanitary authority maintaining a hospital for cases of small-pox, which in the case of Battersea would be represented by the Clerk of the Metropolitan Asylums Board, to keep a list of the names, addresses, ages, and conditions as to vaccination of all small-pox patients treated in the hospital, such entries to be made on admission, and at all reasonable times to allow searches to be made therein, and upon demand to give a copy under his hand or under that of his deputy of every entry in the same on payment of a fee of sixpence for each search, and threepence for each copy.

The following table, obtained from the Vaccination Officer, shews that of five thousand one hundred and seventy-six children returned in the Birth List Sheets, two thousand five hundred

and seventy-four were successfully vaccinated, fifty-one were insusceptible of vaccination, and six hundred and thirty-seven died unvaccinated; that in fifty-nine instances the parents or guardians availed themselves of the conscientious clause of the Act of 1898; that seventy-four removed to other districts, the Vaccination Officers of which were duly apprised, and that in four hundred and sixty-eight instances the place of removal was not traced; that vaccination was postponed by medical certificates in three hundred and forty-one cases, and that nine hundred and seventy-two births remained on the 31st January, 1900, neither duly entered in the Vaccination Register, nor accounted in the Report Book.

TABLE XXXV.

Battersea Vaccination Returns, January to December, 1899.

	ed in the Birth	Ja Ja V	of the ntered inuary o, 11, accin Birth vi	y, 190 and ation	the oo, in 13, o Reg t Sh	Cols. of the	31 19 un th	oo,rem nentere	ained d in ccina- gister	ered in Vand 6 of
Registration Sub-District.	Number of Births returned List Sheets—1899.	Col. 10, successfully vaccinated.	Col. ir, Insusceptible of vaccination.	Had Smallpox.	Col. 13, Dead un- vaccinated.	Conscientious Objection Certificates received.	Postponement by Medical Certificate.	Removed to Districts the vaccination officers of which have been apprised.	Removed to places unknown.	Number of those Births ra January, 1900, neither dul cination Register (Col. 3, 4 Return) nor accounted in t
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
East Battersea	2424	1254	29		313	28	161	25	229	385
West Battersea	2752	1320	22		324	31	180	49	239	587
Totals	5176	2574	51		637	59	341	74	468	972

CUSTOMS AND INLAND REVENUE ACTS.

These Acts were undoubtedly framed for the encouragement of the erection of a particular class of property, namely tenement dwellings. The Act of 1890 exempted houses structurally fitted, in the opinion of the Medical Officer of Health, for occupation as separate tenements, at an annual rental not exceeding £20, from the liability to house duty, the Act of 1891 raising the amount to £40 annual rental, for abatement of duty.

Many hundreds of tenements have been inspected and certified since the Act came into force in January, 1891, and many flats are now being built and converted in the Parish in order to obtain exemption or abatement of the house duty. The numbers inspected yearly from 1890, in which two hundred and forty-three were inspected, and after the execution of necessary works re-inspected and certified were for 1891, one hundred and nineteen; for 1892, one hundred and sixty-five; for 1893, two hundred and one; for 1894 and 1895, each ninety-one; during 1896, one hundred and twenty. During 1897 forty-three applications were made and certificates given in twenty-seven cases. In 1898, eighty-two certificates were granted after personal inspection of the premises, including ten, which pending the completion of alterations and improvements required to justify the granting of certificates, were standing over from the previous year,

During the year 1899 sixty-eight fresh applications were received and certificates granted in all cases.

In granting the certificates, the following are briefly the requirements which are noted:—

(1) That it be satisfactorily shewn that the house in question comes within the Sections of the Acts. (2) That a definite mimimum height and superficial area for living and sleeping rooms, as defined by the London Building Act, 1894, exists. (3) That

there is a sufficient and available supply of water on each floor.

(4) That there is at least one water closet properly supplied with water for every twelve occupants (or less) on each floor.

(5) That the drainage of the premises is in accordance with the regulations recognised by the Authority in whose jurisdiction the house is situated. (6) That accommodation for clothes-washing is provided sufficient for the number of persons inhabiting the house.

CLEANSING OF PERSONS ACT, 1897.

Authority to expend money, if they think fit, in affording means of cleansing the persons and clothing of those infested with vermin upon application. At present no general action has been taken in the Metropolis, except at Marylebone, where the Authority established a bath room in the grounds adjoining the disinfection shelter (which by the bye is an establishment not at present possessed by the Parish of Battersea), as an experiment. The results proved conclusively that facilities for cleansing are eagerly taken advantage of, and plans have been adopted by that Vestry for considerably increasing accommodation and providing means for both sexes. The great advantage of the arrangement there, is that whilst the person is undergoing ablution, the verminous clothes are being disinfected.

PUBLIC HEALTH (LONDON) ACT.

During the year the London County Council have had under consideration the question of amendments which it is desirable to make in the Public Health (London) Act, 1891, and asked the Vestry to advise them as to any points on which the Vestry thought an amendment of the Act necessary or desirable.

After careful consideration by the Committee and Officers affected, the following amendments were recommended by the Vestry:—

1. The Sanitary Authority should be empowered, upon an order obtained from a Justice, to enter premises within

their District, and it should not be necessary to first satisfy such Justice that there is reasonable ground to believe a nuisance exists upon the premises. Warrant should be granted by a Justice if it is shewn that application has been made for entry by an officer of the Sanitary Authority, and there has been a failure or refusal to admit such officer. (Sec. 1)

- 2. Verminous or dirty condition of premises should be within the definition of a nuisance. (Sec. 2.)
- 3. Provision should be made for the officers of the Sanitary Authority to serve notices for abatement of nuisances, or contravention of Act, or Bye-laws, without waiting for the sanction of the Sanitary Authority so to do, such notices, if afterwards approved by the Sanitary Authority, to be as valid in any subsequent proceedings as if served under their direction. (Sec. 4.)
- 4. "Overcrowding" should be defined. There should be not less than 400 cubic feet for each adult, and 200 cubic feet for each child under twelve years of age, and Sanitary Inspectors should be authorised to certify cases of overcrowding. (Sec. 4.)
- 5. Power should be given to the Sanitary Authority, as in the Housing of the Working Classes Act, 1890, Sec. 32 (3), to eject tenants from a dwelling house, in respect of which a Petty Sessional Court has made a closing order. (Sec. 5.)
- 6. Power should be given to the Sanitary Authority to make Bye-laws defining what shall be held to render premises in such a state as to be a nuisance or injurious or dangerous to health. (Sec. 16.)
- 7. The Bye-laws made by the London County Council under this section should be made to apply to the removal of horse dung manure. (Sec. 16.)
- 8. The following should be designated offensive businesses:—frying of fish, cleansing scraping and drying of fish

skins, marine stores, and the manufacture of gas for illuminating purposes. (Sec. 19.)

- 9. Section 21 empowers the Medical Officer of Health or any two legally qualified medical practitioners or ten inhabitants of the district to certify to the Sanitary Authority premises to be a nuisance, &c. The words "or other officer specially deputed by the Sanitary Authority to carry out the duty," should be inserted after the words "Medical Officer of Health." (Sec. 21.)
- no. Bye-laws for the regulation of bakehouses should be made by the London County Council, and enforced by the Sanitary Authority; bakehouses should be licensed and registered; no new bakehouse should be opened without the sanction of the Sanitary Authority, under a penalty of £20; and underground bakehouses should be defined. (Sec. 26.)
- make Bye-laws regulating the structure of all premises and conduct of all businesses where food or drink for man is manufactured, prepared, sold or stored. (Sec. 28.)
- this section should be reduced from 48 hours to 24 hours, and power should be given to the Sanitary Authority to dispose of obnoxious matters removed in such a manner as the Authority may deem fit, the expenses of such removal and disposal to be covered by the Sanitary Authority in manner provided by the Act. (Sec. 35.)
- 13. The word "dust-bin" should be substituted for the word "ash-pit" and provision should be made that dust-bins shall be furnished with proper handles and coverings. (Sec. 37.)
- 14. Provision should be made to enable the Justice to order persons selling unsound food to pay reasonable compensation to the purchaser. (Sec. 47.)

- 15. No Water Company should be allowed to withdraw the water supply to any inhabited dwelling house or to cease to supply such dwelling house with water for non-payment of rate or any other cause. (Sec. 49.)
- 16. Measles should be included as an infectious disease notifiable to the Sanitary Authority. (Secs. 55 to 58.)
- 17. Associated Practitioners should only be required to forward one certificate of any particular case of infectious disease. (Sec. 55.)
- 18. Power should be given to the Sanitary Authority to pay for the *voluntary* notification of certain diseases other than those specified in the Act. (Sec. 55.)
- 19. The words "or of any other legally qualified medical practitioner" should be deleted so as to provide that disinfection, &c., of houses or infected articles shall be carried out to the satisfaction of the Medical Officer of Health. (Sec. 60.)
- 20. It should be made clear that the expression "proper lodging or accommodation" in this section means proper lodging or accommodation for treatment and isolation, and that it is intended to secure precautions being taken for the prevention of the spread of notifiable diseases, viz., by the removal to hospital, when necessary, of patients suffering from such diseases. (Sec. 66.)
- 21. The Justice's order should provide for prohibiting the removal of milk from any dairy without the sanction of the Sanitary Authority, who should be empowered to have it destroyed, and to pay compensation for the same. (Sec. 71.)
- 22. Provision should be made to require from a milk seller, under penalty for default, disclosure of the source from which the milk had been obtained. (Sec. 71.)
- 23. The word "separately" should be deleted wherever it occurs in this section. (Sec. 96.)

- 24. The word "drain" should be defined as proposed in the Sewers and Drains Bill which was introduced by the London County Council into Parliament in Session 1896. (Sec. 141.)
- 25. The Metropolitan Asylums Board should be required to forthwith notify the admission to the Board's Hospitals of any patient suffering from an infectious disease to the Medical Officer of Health of the District from which the patient was removed, and also forthwith to notify the discharge of any patient from such hospital to the Medical Officer of Health of the District into which the patient is discharged.
- 26. Dairymen supplying milk within a District from premises beyond such District should notify to the Local Authority of the former all cases of infectious disease among persons employed in such dairies.
- 27. Provision should be made for securing that persons engaged in washing, mangling or ironing clothes, shall, when required, furnish to the Sanitary Authority lists of the owners of clothes washed, mangled or ironed at the laundry or others premises, and that the proprietors of businesses engaging "outworkers" in the manufacture of food or wearing apparel shall furnish the Sanitary Authority of the District in which the outworkers reside with the names and addresses of such outworkers.
- 28. Provision should be made for power to enforce ventilation under the basement floors of houses, and the permanent ventilation of passages and staircases.
- 29. The provisions of the Act should be made to apply to Government and all other buildings.

Many of the foregoing recommendations had already been the subjects of special representations to legislating authorities without any present result. It may be hoped, however, that in view of a revision of the Law of Public Health for London, many of these highly desirable amendments may be effected. The objects of these recommended amendments are in most cases so clearly obvious that further comment is rendered unnecessary.

Notices were served during the year under the various sections of the Public Health (London) Act and bye-laws made thereunder, in 6479 instances, followed by Police Court proceedings where necessary.

INFANT LIFE PROTECTION ACT, 1897.

The Infant Life Protection Act provides for the registration by the London County Council of any premises where more than one infant is kept for hire or reward.

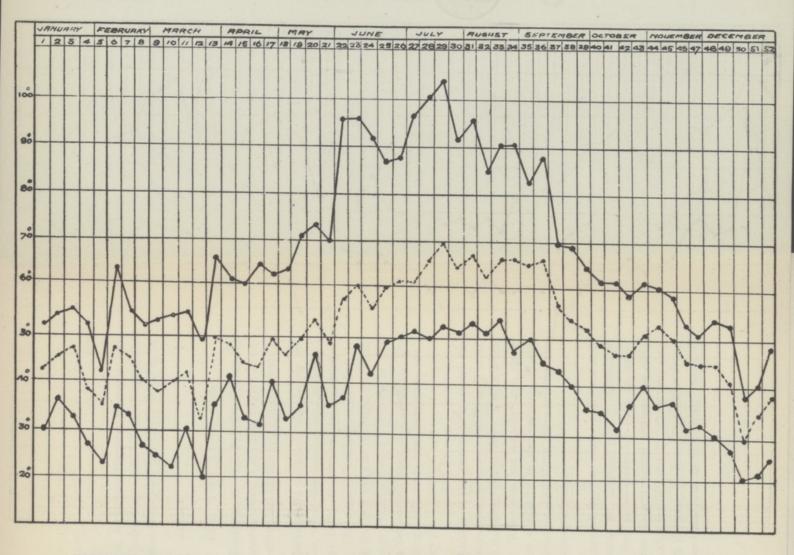
The Council's Inspector under the Act sees that the infants are properly provided for, but as regards sanitary conditions inspection is made by the Vestry's officers. Such visits have from time to time been made and reports furnished to the Chief Officer of the Council, who has requested that the special objects of the visits should not be disclosed, as cases have occurred where landlords have ejected persons notified under this Act on ascertaining that their tenancy may involve the sanitary inspection of the premises.

It is also the practice to notify the Council of any premises which in the course of inspection the Sanitary Inspectors find are liable to the provisions of this Act. The enforcement of the Act is likely to have good results in the reduction of infantile mortality.

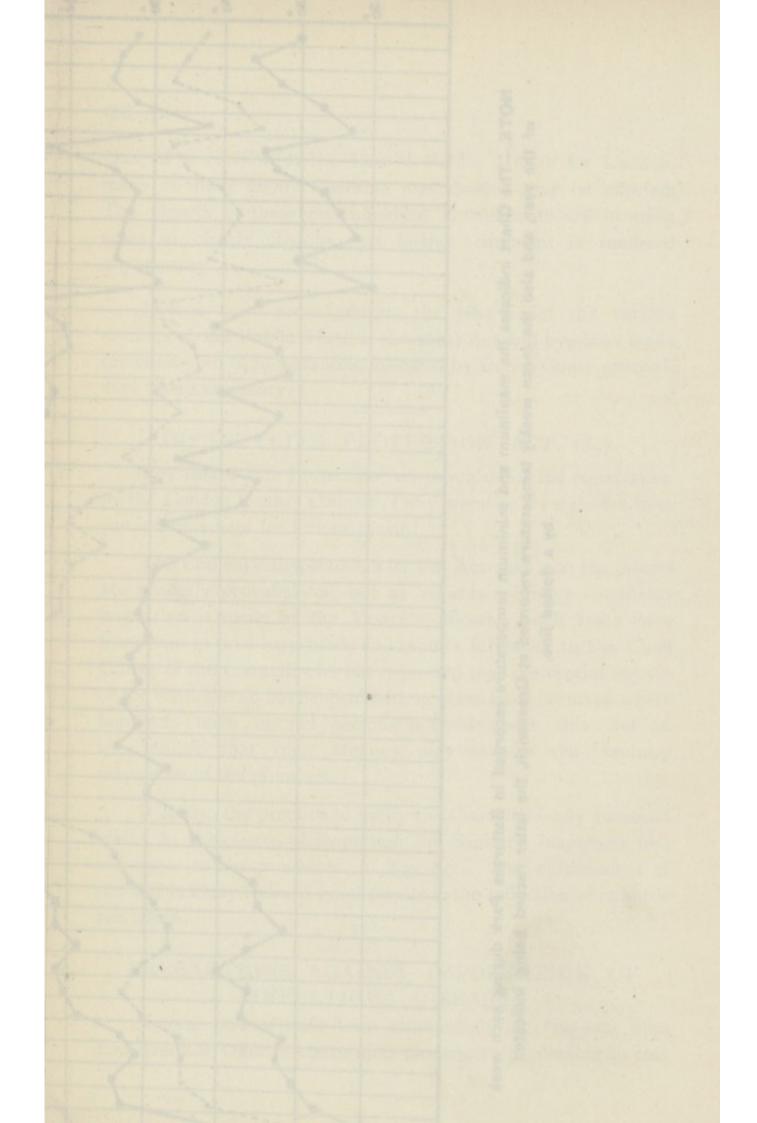
PRECAUTIONS AGAINST IMPORTATION OF INFECTIOUS DISEASE.

Several notices have been received during the year from Port Medical Officers concerning passengers proceeding to this

TEMPERATURE OF THE AIR DURING EACH WEEK OF THE YEAR 1899.



NOTE.—The Chart indicates the maximum and minimum temperature recorded in Battersea Park during each week of the year, and also the mean weekly temperature recorded at Greenwich, the latter record being indicated by a dotted line.



Parish from infected parts, including Oporto, Portugal and Calcutta. Such persons were kept under close observation during the period of quarantine and were ultimately found to be free from infection.

METEOROLOGY FOR THE YEAR 1899.

By the access kindly afforded to the registers of temperature, rainfall, &c. recorded in Battersea Park, I am able to give a few interesting particulars concerning the Meteorology of the year.

Temperature. The highest temperature recorded was during the third week in July, when the thermometer registered 104°, the lowest temperature being 20°, which was recorded in the fourth week of March. The greatest variation recorded by the thermometer was during the first week in June, the minimum being 37° and the maximum 96°, representing a variation of 59.° The least variation was in the second week of December, the maximum temperature being 38° and the minimum 21°, representing a variation of 17°.

In the chart of Meteorology of the year will be found the minimum and maximum temperature recorded during each week of the year at Battersea and the mean temperature of each week as recorded at Greenwich. Reference has already been made on page 45 to the apparent similarity in the variation of the lines indicating the temperature and those representing the prevalence of notifiable infectious disease.

Rainfall. The recorded rainfall for the whole year was 22.8 inches, representing an average weekly rainfall of 0.43 inches. During the first three weeks of June no rainfall was recorded, being the longest period during the year wherein there was complete absence of rainfall. The 8th, 9th, 10th, 11th and 12th weeks in the year, however, represented the longest period of drought, less than \(\frac{1}{10}\) of an inch being recorded

during the five weeks. At the other extreme, 2.48 inches were recorded during the second week of November, the total rainfall for that and the two immediately preceding weeks being 5.98 inches, representing more than one fourth of the total rainfall of the year during those three weeks. During that period the rainfall was of a more or less steady and continuous character, and therefore not productive of such evil effects as was produced by the sudden rainfall on the 6th September, when nearly $\frac{7}{10}$ of an inch fell in about twenty minutes, causing serious flooding. Further particulars of the weekly rainfall will be found upon reference to the chart.

SANITARY LEGISLATION, 1899.

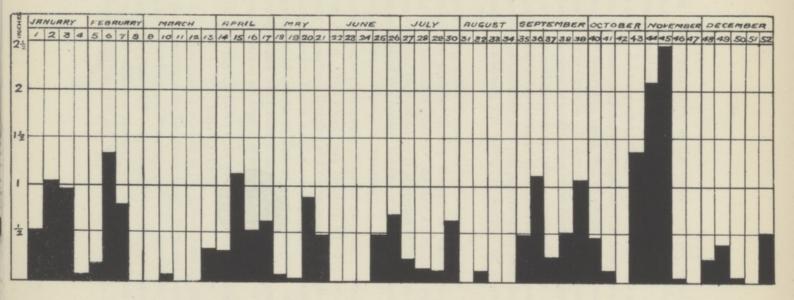
The following were the principal Acts directly concerning Public Health which were passed during the year 1899:—

- (1) Metropolis Water Act, 1899 (62 Vic. c. 7.)
- (2) Sale of Food and Drugs Act, 1899 (62 and 63 Vic. cap. 51.)
- (3) Metropolis Management Acts Amendment (Byelaws) Act, 1899 (62 and 63 Vic. c. 15.)
- (4) Infectious Disease (Notification) Extension Act, 1899 (62 and 63 Vic. c. 8.)

Metropolis Water Act, 1899. This Act enables and requires the Metropolitan Water Companies in cases of emergency to supply each other with water and contains all the necessary provisions for securing the construction of works for this purpose. The Local Government Board is vested with powers of control.

It is provided that whenever in the opinion of the Local Government Board a case of emergency has arisen or is likely to arise it shall be the duty of any Metropolitan Company to supply at reasonable cost such water as may be required for the need of another company, and may be available after

RAINFALL DURING EACH WEEK OF THE YEAR 1899.



NOTE.—The perpendicular columns represent the actual depth of the rainfall registered in Battersea Park during each week of the year 1899.

satisfying the requirements of the district of the supplying company to such an extent and during such period as the Local Government Board may require.

Sale of Food and Drugs Act, 1899. This Act amongst other important provisions imposes penalties for the importation of adulterated or impoverished foods, &c., to which the Act may be applied by Order in Council. It also provides for regulations for determining the amount of adulteration or the degree of impoverishment of milk, &c. which constitute offences under the Act. It is also required that every seller of milk or cream shall have his name inscribed on the vehicle. The powers of the 1879 Act are also enlarged concerning the taking of samples in course of delivery.

Metropolis Management Acts Amendment (Bye-laws) Act, 1899. This Act enables the London County Council to make bye-laws requiring the submittal of plans to Sanitary Authorities relative to the construction, reconstruction or alteration of drainage with a view to preventing the further liability of Sanitary Authorities concerning combined drains alias "sewers."

Infectious Disease (Notification) Extension Act, 1899. This Act makes the Act of 1889, which was formerly an adoptive Act, compulsory throughout England and Wales, and although it does not directly affect this Parish it will materially assist in preventing the importation of infectious disease from those parts of the country where there was formerly no system of notification and consequently little or no control of infectious disease.

MEDICAL EXAMINATION OF OFFICERS AND EMPLOYÉS

As a now necessary precedent to the appointment of officers and for the purposes of the Battersea Vestry Sick and Accident Society, three hundred and thirty-one medical examinations were made during the year. Of these twenty-two were candidates for appointments as officers or servants and three hundred and nine in connection with the Sick and Accident Society.

TABLE XXXVI.

SUMMARY OF SANITARY OPERATIONS OF THE YEAR.

Total Sanitary Operations		73,535
Inspections.		
House-to-house, &c		47,348
Bake-houses		545
Urinals		452
Complaints		3,538
Gipsy vans		86
Notices Served.		
Intimations, &c		3,739
Notices under Sec. 4		1,180
,, ,, 62 and 65		1,560
Dugingge Work		
Drainage Work.		
Drains Tested by Smoke	***	1,425
Drains Laid to New Houses		7,777
Drains Relaid to Old Houses !	***	415
Drains Classed on D 1	***	1,165
Soil-Pipes and Drains Ventilated		592
Sink and Rainwater Pipes Disconnected or Repa	ired	1,208
Water Closets Cleansed, Repaired or Reconstruction	eted	325
Yards Drained and Paved		603
Mews and Stables Drained and Paved		8
Cesspools Abolished		4
W. C. W		
Water Supply.		
Houses Supplied with Water or Fittings Repaire	ed	112
Water Closets Supplied with Water or Supplied	ly Dis-	
connected from Drinking Water Cistern		685
Cisterns Covered, Cleansed or Repaired	C NT	447
Certificates of Water Supply granted in respect of Houses	I New	0
		408
Food.		
Samples taken under the Sale of Food and Drug	gs Acts	500
Seizures effected in respect of Unsound Food:		
Meat 1		
Fruit 2		
2	WHIP THE	4

	777
Food (continued).	. 111
Food Condemned and Certificates granted:	
rish 12	
Meat	
Fruit, &c 6	20
Other Sanitary Defects Remedied or Work Carried out.	
Urinals Altered, Repaired or Water laid on	
Structural Improvements effected in Bake-houses or	58
cleansing, &c., carried out	42
Overcrowding Abated	74
Premises Cleansed or Repaired	1,124
Accumulations of Manure, &c., Removed or Proper Receptacles Provided	
I little be accompanies Dec. 1 1	58
Dust Complaints Received	483
Leaky House Koots and Gutters Repaired	211
Reeping of Animals in Unfit State Discontinued	298
Sanitary Conveniences Provided and other Improve	18
ments effected in Factories and Workshops	5
Occupation of Underground Rooms illegally used for	3
sleeping purposes, Discontinued	6
Smoke Nuisances Reported and attended to	160
Disinfection.	
Premises Disinfected by Fumigation	1,666
Cases after which Steam Disinfection was carried out	351
Trouses Supplied With Disinfectants	7,761
House Drains Flushed with Disinfectants after Infectious Disease	
	928
Infected Bedding and Goods Destroyed and Replaced Infected Library Books Disinfected, or Destroyed and	2
Replaced Distinected, or Destroyed and	
Public Conveyances Disinfected	69
Certificates of Disinfection Granted	I . 6
	1,615
Summary Proceedings. Proceedings Ordered to be taken if	
Proceedings Ordered to be taken if necessary	2,215
Magisterial Orders obtained	142
	100
AY	

Note.—This Table does not include a large number of Sanitary Improvements voluntarily effected by owners, &c., for instance in the case of Bake-houses, cleansing, &c., is shewn to have been carried out in 42 instances, whereas that number represents those cases only in which it was necessary to serve notices, the whole of the Bake-houses in the Parish having been cleansed at least twice during the year, representing more than 200 operations. Similar remarks apply to many other items.

It will be observed that the more detailed statements of work done and reports made by the Chief Sanitary Inspector are not included in this report for the first time, the Health Committee having resolved that they should be issued separately for the future.

Summary of the Sanitary operations of the year will be found in Table XXXVI.

I have to express my approval of the manner in which the whole Staff of the Public Health Department have carried out their duties during the year under report.

My colleagues have rendered every possible help and assistance to me, for which I tender my best thanks.

In conclusion, I beg to thank the members of the Vestry generally, more especially those forming the Health Committee, for their great personal kindness shewn to me, as well as for the great assistance and consideration given during the year, which have alone rendered me able to carry out my duties.

I have the honor to be, gentlemen, Yours obediently,

W. H. KEMPSTER, M.D.,

Medical Officer of Health.



LIST OF STREETS AND PLACES
CONTAINED IN EACH OF THE EIGHT SANITARY
DISTRICTS OF BATTERSEA.

DISTRICT No. 1.

Boundary: —North, River Thames; South, Parish Boundary; East, Parish Boundary: West, L.B. & S.C.Ry. [southward to L. & S.W.Ry.] the latter railway [westward] and Beaufoy Road.

INSPECTOR-Mr. J. HERRIN.

Acre Street
Ægis Grove
Arden Street
Ascalon Street
Battersea Park Road
(From L.C. & D.Ry. bridge to Nine

Elms.)
Belfour Street
Bewick Street
Brandon Street
Brewery Cottages
Broughton Street
Ceylon Street
Cherwell Street
Corunna Place

Corunna Road
Corunna Terrace
Crichton Street
Cringle Street
Currie Street
Dashwood Road
Dickens Street
Emu Road
Etruria Street

Everett Street Foot's Row Froude Street Gambetta Street Gonsalva Road

Haines Street Haward Street Ingelow Road

John Street Kirtling Street Linford Street

Montefiore Street Motley Street Mundella Road New Road

Nine Elms Lane Patmore Street

Ponton Road

Ponton Street

Porson Street Portslade Road

Power Street

Prairie Street Queens Road

(South of L. & S.W.Ry. Sta-

tion.)

Queens Square Robertson Street Ruskin Street

St. Andrews Street St. Phillips Street

Savona Place

Savona Street

Seldon Street Seymour Street

Silverthorne Road

Sleaford Street

Stanley Street Sterndale Road

Sterndale Road Stewarts Road

Stockdale Road

Tennyson Street

Thackeray Street

Thessaly Square

Tidbury Street
Tidemore Street

Trollope Street

Trollope Street

Tweed Street Wadhurst Road

William Street

Woodgate Street

Boundaries:—North, River Thames; South, W.L.E. and L. & S.W. Railways; East, L.B. & S.C. Railway; West, Albert Bridge Road (Southward to Cambridge Road), Cambridge Road, Bridge Road (from Cambridge Road, Southward) and Battersea Park Road (Westward to W.L.E. Railway Bridge).

INSPECTOR-Mr. A. CHUTER.

Abercrombie Street Albert Bridge Road

(East Side and West Side from Cambridge Road to Battersea Park Road)

Alexandra Avenue

Alfred Street Anerley Street

Arthur Street

Atherton Street

Austin Road

Battersea Park

Battersea Park Road

Beechmore Road

Berkley Street

Blondel Street

Brighton Terrace

Brougham Street

Brynmaer Road

Cambridge Road

Carlton Grove

Carpenter Street

Chatham Street

Chesney Street Culvert Road

(From Battersea Park Road to

L. & S.W. Railway).

Cupar Road

Doddington Grove

Forfar Road

Foxmore Street

Frere Street

Gaines' Cottages

Gladstone Street

Gladstone Terrace

Havelock Terrace

Henley Street

Kassala Road

Kennard Street

Kersley Mews

Kersley Street

Kilton Street

Landseer Street

Landseer Terrace Latchmere Road

(From W.L.E. Railway to

Battersea Park Road).

Latchmere Street

Lockington Road

Longhedge Street Lurline Gardens

Macduff Road

Meath Street

Millgrove Street

Orkney Street

Oulton Street

Pagden Street Palmerston Street

Park Grove

Parkside Street

Prince of Wales Road

(From Albert Bridge Road to

Victoria Road) Queens Road

(From Battersea Park Road to

Queens Road Station)

Raywood Street

Rollo Street

Russell Street

St. George's Street

St. James' Grove

Sheepcote Lane

Soudan Road

Southolm Street

Stewarts Lane West

Victoria Circus

Victoria Road

Warriner Gardens

Warriner Mews

Warsill Street

DISTRICT No. 3.

Boundaries:—North, River Thames; South, W. L. E Ry. East, District No. 2; West, River Thames.

INSPECTOR-Mr. J. LAWRENCE.

Albert Bridge Road (West side) (From River Thames to Cambridge Road.) Alfred Place Althorpe Grove Anhalt Road Ashton's Buildings Ashurst Street Balfern Street Banbury Street Battersea Park Road (North side from W.L.E. Railway to Bridge Road.) Bolan Street Bolingbroke Road Bourne's Place Bridge Road Bridge Road West Bullen Street Cambridge Road (North side) Castle Street Church Lane Church Road Colestown Street Cottage Place Crescent Place Edna Street Elcho Street Ethelburga Street Ford's Place Frances Street Freeland Street Goulden Street Granfield Street Green Lane Harley Street Hart Street Henning Street

Henry Street High Street Home Road Howie Street Hyde Lane Inworth Street Juer Street Little Europa Place Miles Cottages Octavia Street Orbel Street Orville Road Park Road Parkham Street Petworth Street Peveril Street Phœnix Wharf Lane Prince of Wales Road (From Albert Road to Bridge Road.) Radstock Street Randall Street Rosenau Crescent Rosenau Road Somerset Street Spencer Street Spicer Street Stanmer Street Surrey Lane Surrey Lane South Trott Street Ursula Street Vicarage Road Watford Villas Wellington Road Winstead Street Worfield Street

Boundaries:—North, W.L.E. Railway; South, York Place, Winstanley Road, and L. & S.W. Railway; East, outer circle of W.L.E. Railway; West, River Thames.

INSPECTOR-MR. A. E. PURNELL.

Afghan Road Andoe Road Barmore Street Battersea Park Road (From High Street to W.L.E. Railway Bridge, odd Nos. 575 to 583, even Nos. 326 to 356). Benfield Street Buckton Street Cabul Road Candahar Road Creek Street Currie Road (odd Nos., 1-23; even Nos. 2-20) Darien Road (odd Nos., 1-23; even Nos., 2-20) Duffield Street Este Road Falcon Grove Falcon Road (From Prince's Head to Railway Bridges, odd Nos. 1 to 135, even Nos. 2 to 134). Falcon Terrace Grant Road (even Nos. 2-38A; odd Nos. 1-21) Gwynne Road Harroway Road Heaver Road High Street (Battersea Station to York Road. odd Nos. 137 and even Nos., 110 upwards.) Holman Road Ingrave Street Kamballa Road Kerrison Road Khyber Road Knox Road (odd Nos. 1-21; even Nos 2-20)

Latchmere Grove Lavender Road Lavender Terrace Lithgow Street Livingstone Road (odd Nos. 1 to 23 and the Board School). Lombard Road Lubeck Street Mantua Street Meyrick Road Musjid Road Natal Road Nepaul Road Newcomen Road (odd Nos. 1-15; even Nos. 2-12) Newman Street Patience Road Pearson Street Rowena Crescent Shillington Street Simpson Street Speke Road (odd Nos. 1-37; even Nos. 2-50) Stainforth Road Thibet Street Totteridge Road Urswicke Road Verona Street Wayford Street Winders Road Winstanley Road (even Nos.) Wye Street Yelverton Road York Road (odd Nos. 1-199; even Nos. 2-112.)

DISTRICT No. 5.

Boundaries: North, District 2; South, Lavender Hill; East, Beaufoy Road and Parish Boundary; West, District 4 and Falcon Road.

INSPECTOR-MR. J. T. BAXTER.

Acanthus Road Amies Street Arliss Road Ashbury Road Basnett Road Beaufoy Road Birley Street Brassey Square Culvert Place Culvert Road (From L. & S.W. Rly., southward) Dorothy Road Eland Road Elsley Road Eversleigh Road Falcon Road (From Railway Bridge to Lavender Gideon Road Glycena Road Grayshott Road Hanbury Road

Holden Street Kathleen Road Kingsley Street Knowsley Road Latchmere Road (From W.L.E. Railway Bridge to Lavender Hill). Lavender Hill (North side) Morrison Street Mossbury Road Pountney Road Poyntz Road Sabine Road Shellwood Road Shirley Grove Theatre Street Tipthorpe Road Town Hall Road Tyneham Road Wickersley Road Wycliffe Road

DISTRICT No. 6.

Boundary; East, Falcon Road, St. John's Road, and Northcote Road; West, River Thames and Parish Boundary.

INSPECTOR-MR. H. MARRABLE.

Abyssinia Road
Aliwal Road
Auckland Road
Battersea Rise
(From Northcote Road westward.)
Belleville Road
(From Northcote Road to Wandsworth Common.)
Benham Street

Bennerley Road
(From Northcote Road to Wandsworth Common.)
Bolingbroke Grove
(From Battersea Rise to Bramfield Road.)
Boutflower Road
Bramfield Road (North side)
(From Northcote Road to Wandsworth Common.)

DISTRICT No. 6-continued.

Britannia Place Brussels Road Cairns Road Canterbury Place Chivalry Road Clapham Junction Cologne Road Comyn Road Currie Road Darien Road (From Plough Road to Winstanley Road.) Eckstein Road Emma Street Field's Place Grant Road (From Plough Road to Winstanley Road.) Harbut Road Hermitage Gardens. Hibbert Street Hope Street John Street Kelmscott Road (From Northcote Road to Wandsworth Common.) Knox Road (From Darien Road to Winstanley Road). Linda Street Livingstone Road (From Plough Road to Winstanley Road.) Lothair Street Louvaine Road Mallinson Road (From Northcote Road to Wandsworth Common.) Maysoule Road Mendip Road Middleton Road Newcomen Road (From Plough Road to Winstanley Road.) Northcote Road (West side-From Battersea Rise to Bramfield Road)

Oberstein Road Park Road Plough Road Plough Terrace Prested Road St. John's Hill St. John's Hill Grove St. John's Road (West side) St. Peter's Place Salcott Road (From Northcote Road to Wandsworth Common.) Sangora Road Severus Road Sewell Road Shelgate Road (From Cemetery to Northcote Road) Speke Road (From Plough Road to Winstanley Road.) Spencer Road Starch Factory Road Stockwood Street Strath Terrace Strathblaine Road Tritton Street Usk Road Vardens Road Wakehurst Road (From Northcote Road to Wandsworth Common.) Wandsworth Common North side Wayland Road Weston Street Wilson Street Windmill Road Winstanley Road (South side) (odd Nos.) York Place York Road

(From junction with Plough Road to Parish Boundary). Boundaries: North, Lavender Hill; South, Bramfield Road, Burland Road and a line eastward across Clapham Common known as "Bishop's Walk"; East, Parish Boundary; West, St. John's Road and Northcote Road.

INSPECTOR-Mr. A. ODELL.

Almeric Road Altenburg Gardens Ashness Road Battersea Rise (From Northcote Road, eastward.) Beauchamp Road Belleville Road (From Webbs Road to Northcote Road.) Bennerley Road (From Leathwaite Road to Northcote Road.) Berber Road Bramfield Road (North side) (From Northcote Road to Webbs Burland Road (North side) Clapham Common North side Clapham Common West side (From Battersea Rise to "Bishop's Walk.") Eccles Road Elspeth Road Fontarabia Road Forthbridge Road Freke Road Garfield Road Gowrie Road Grandison Road (Clapham Common to Burland Road.) Green Lane Hafer Road Hauberk Road Ilminster Gardens Jedburgh Street Kelmscott Road Keildon Road Lavender Gardens Lavender Hill (South Side) Lavender Sweep

Leathwaite Road (From Clapham Common to Burland Road.) Limburg Road Lindore Road Longbeach Road Mallinson Road (From Leathwaite Road to Northcote Road.) Marjorie Grove Marmion Road Marney Road Meteor Street Mysore Road Northcote Road (East side from Battersea Rise to Bramfield Road.) Parma Crescent Rush Hill Road St. John's Road (East side) Salcott Road (From Leathwaite Road to Northcote Road.) Shelgate Road (From Leathwaite Road to Northcote Road.) Sisters Avenue Stormont Road Sugden Road Taybridge Road Thirsk Road Tregarvon Road Wakehurst Road (From Grandison Road to Northcote Road.) Webbs Road (From Battersea Rise Bramfield Road.) Winifred Grove Wix Lane

DISTRICT No. 8.

Boundaries: North, Districts 6 & 7; South, Parish Boundary East, Parish Boundary; West, Parish Boundary.

INSPECTOR-Mr. H. H. MAY.

Althorp Road Amner Road Balham Park Road Ballingdon Road Belle Vue Road Blenkarne Road Bolingbroke Grove (From Bramfield Road to Nightingale Lane) Boundaries Road Bramfield Road (South Side) Broadlands Terrace Brodrick Road Broomwood Gardens Broomwood Road Broxash Road Burland Road Chatham Road Chatto Road Clapham Common (West Side) (From "Bishop's Walk" southward) Culmstock Road Darley Road Dents Road Devereux Road Dulka Road Estcourt Road Gayville Road Gorst Road Granard Road Grandison Road (From Burland Road to Chatto Road) Hillier Road

Honeywell Road Kyrle Road Leathwaite Road (From Bramfield Road to Chatto Road) Mayford Road Montholme Road Morella Road Nightingale Lane (North Side) Northcote Road (From Bramfield Road to Broomwood Road) Nottingham Road Old Park Avenue Ouseley Road Ramsden Road Ravenslea Road Roseneath Road Rusham Road St. James' Road Sarsfeld Road Stonnell's Road Sudbrook Road Thurleigh Road Trinity Road Webbs Road (From Bramfield Road to Broomwood Road) Wexford Road Winsham Street Wiseton Road Wroughton Road