[Report of the Medical Officer of Health for Wandsworth District, The Board of Works (Clapham, Putney, Streatham, Tooting & Wandsworth)].

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THE

Board of Works for the Wandsworth District.

SANITARY DEPARTMENT.

REPORT

ON THE

SANITARY CONDITION

OF THE SEVERAL PARISHES COMPRISED IN THE

Wandsworth District,

DURING THE YEAR 1885.

BY THE

MEDICAL OFFICERS OF HEALTH

AND THE ANALYST.

London:
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1886.

To the Board of Works for the Wandsworth District.

GENTLEMEN,

We have the honour to present our Report for the year 1885 on the vital statistics and sanitary condition of the Wandsworth District.

In this, the 30th Annual Report presented to your Board, we have followed the general arrangement of matter adopted in previous years. It is hoped, however, that the additional matter which will be found in the following pages will enhance the value and interest of the report. These additional matters are, in particular, Dr. Muter's Analytical Report, the returns of patients in the Asylums Board Hospitals, the returns of Deaths in outlying Institutions, and the Death-rate at various age-groups in the census year.

We have to congratulate you on a lower rate of mortality than in any of the ten preceding years, and to assure you that no efforts will be lacking on the part of the officers of the Sanitary Department to ensure a continuance of this low mortality, especially from those diseases which are known to be most amenable to sanitary precautions.

We have the honour to remain,

Gentlemen,

Your obedient Servants,

The Associated Medical Officers
of the Wandsworth District.

MAY 24TH, 1886.

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REPORT,

ON THE

HEALTH AND SANITARY CONDITION OF THE ENTIRE DISTRICT,

1885.

VITAL STATISTICS.

Population. The number of persons living in this District at the middle of the year 1885, assuming the rate of increase of the population to be the same as during the decade 1871—81, was 248,410, being an increase of 9,413 on the previous year's population.

Births. The total births registered during the year numbered 8,606,—4,365 of males and 4,241 of females. The number of births and the birth-rates in the several sub-districts are compared in the following table:—

TABLE A.

Sub-Districts.	BIRTHS. Males.	Females.	Total.	RATES. Birth-rate.	Rate of Natural Increase.
Battersea { East ..	1301	1195	2496	37·4	21·2
Battersea { West ..	1288	1270	2558	39·8	20·2
Clapham	511	519	1030	25·2	12·7
Putney	169	153	322	21·7	10·4
Streatham	525	553	1078	35·9	22·1
Wandsworth	571	551	1122	37·3	18·5
Whole District ..	4365	4241	8606	34·6	17·9

Birth-rate.

Rate of Natural Increase.

The *birth-rate*, calculated from the total births registered and the foregoing estimated population, was 34·60 per 1,000 persons living. The rate of *natural increase*, represented by the excess of births over deaths, was 17·9 per 1,000.

Deaths.

The total deaths registered during the year numbered 4,192,—2,068 of males and 2,124 of females. The number of deaths and the death-rates of the several sub-districts are compared in the following table:—

TABLE B.

Sub-Districts.	DEATHS. Males.	Females.	Total.	Death-rate.
Battersea { East	545	526	1071	16·0
Battersea { West	666	729	1395	17·5
Clapham	237	271	508	12·4
Putney	93	74	167	11·2
Streatham	197	226	423	14·0
Wandsworth	330	298	628	17·0
Whole District ..	2068	2124	4192	16·8

Death-rate. The *death-rate* was 16·87 per 1,000 persons, a lower rate than in any of the ten preceding years.

The birth-rates, death-rates, and rates of natural increase of the past and ten previous years are shewn in the following table:—

TABLE C.

Birth-rates, Death-rates, and rates of Natural Increase in the entire district during the ten years 1875—84, *compared with those of the year* 1885.

Years.	Births.	Birth-rate per 1000.	Deaths.	Death-rate per 1000.	Natural Increase.	Rate of Natural Increase per 1000.
1875	5529	37·30	3096	20·87	2433	16·40
1876	5999	39·04	3154	20·00	2845	18·51
1877	6159	38.60	2991	18·70	3168	20·00
1878	6508	39·40	3275	19·80	3233	19·80
1879	6833	39·70	3526	20·50	3307	19·23
1880	7038	34·20	3593	17·50	3445	16·80
1881	7582	35·68	3647	17·16	3935	18·51
1882	7889	35·69	3851	17·42	4038	18·26
1883	8079	35·14	4083	17·79	3996	17·39
1884	8979	37 57	4266	17·85	4713	19·77
Mean of Ten Years 1875—84	7059	36·53	3548	18·75	3041	18·46
1885	8606	34·60	4192	16·87	4414	17·9

It will be seen from this table that the death-rate is 1·88 per 1,000 less than the decennial average. It is also 3·63 per 1,000 less than the rate for the 28 great towns, and 2·83 per 1,000 less than that for the whole of the Metropolis.

The following shews at a glance the great diminution in the mortality of this District since the year 1851, notwithstanding the fact that the density of population has been, especially during the last few years, rapidly increasing.

DEATH-RATES IN DISTRICT PER 1,000 OF THE POPULATION.

During 10 years,	1851—60	..	..	20·40
,, ,,	1861—70	..	..	19·34
,, ,,	1871—80	..	..	18·06
During the year	1881 ..	..	..	17·16
,, ,,	1882 ..	..	..	17·42
,, ,,	1883 ..	..	..	17·79
,, ,,	1884 ..	..	..	17·85
,, ,,	1885 ..	..	..	16·87

Deaths in Outlying Institutions.

The deaths already enumerated do not include those of inhabitants of this District who have died in the various hospitals and other institutions without the District. Doubtless the lower mortality caused by the occurrence of these deaths apart from the population to which they rightly belong is to some extent counterbalanced by the death of temporary immigrants into the Wandsworth District from the country, and by the deaths occurring in the

public institutions of West Battersea and Wandsworth. But a true estimate of the mortality of the Wandsworth District should include the deaths of its inhabitants which occur in external institutions, as shewn in the following table:—

TABLE D.

Deaths in Outlying Institutions.

CAUSES OF DEATH.	Number in Entire District.	East Battersea.	West Battersea.	Clapham.	Putney.	Streatham.	Wandsworth.	Union Infirmary.	General and Special Hospitals.	Asylums Board Hospitals.
Small Pox	31	15	6	4	1	2	3	..	..	31
Scarlet Fever ..	2	..	1	..	1	..	..	..	..	2
Diphtheria	10	7	..	2	1	..	..	..	10	..
Enteric Fever ..	8	3	2	2	..	..	1	..	3	3
Whooping Cough ..	1	..	..	..	..	..	1	1	..	..
Measles	..	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases	9	6	..	2	..	..	1	4	4	1
Tubercular Diseases .	64	27	10	9	5	2	11	23	40	1
Cancer	31	13	2	5	2	4	5	11	20	..
Rheumatism	2	1	..	..	..	..	1	..	2	..
Respiratory Diseases	63	22	9	6	4	3	19	30	33	..
Circulatory Diseases .	55	18	10	14	4	3	6	27	26	2
Nervous Diseases ..	65	18	7	15	6	8	11	41	22	2
Other Diseases ..	107	35	18	17	5	15	17	43	60	4
Violence	21	14	3	1	..	1	2	..	21	..
	469	179	68	77	29	38	78	180	241	48

It will be seen that 469 deaths occurred in outlying institutions, of which 180 were in the Union Infirmary, 241 in the general and special Hospitals of the Metropolis,

and 48 in the Asylums Board Hospitals. The addition of these 469 deaths to the 4,192 within the District raises the death-rate to 18·7 per 1,000, as compared with 19·6 in the previous year.

It is interesting to note in what proportion to its population each sub-district made use of these outlying institutions for its sick, so far as this can be inferred from the number of deaths.

Use of Outlying Institutions by each Sub-district.

In East Battersea, 2·68 per 1,000 of the population died in outlying institutions; in West Battersea, 2·23 per 1,000 (in this instance the 76 deaths of inhabitants of West Battersea which occurred in the Union Infirmary within its borders have been included, in order to make the rate comparable with that of the other sub-districts); in Clapham, 1·88 per 1,000; in Putney, 2·01 per 1,000; in Streatham, 1·25 per 1,000; and in Wandsworth, 2·47 per 1,000.

The following table is well worthy of study as bringing out some further details in connection with the mortality of the Wandsworth District. It gives the death-rate of the several sub-districts, inclusive and exclusive of the deaths in outlying institutions, shewing also the amount and density of population, and the proportional number of the industrial classes which each sub-district possesses: —

TABLE E.

SUB-DISTRICTS.	Population in the middle of 1885.	Percentage of Total Population.	Density of Population—Number of Persons to an Acre.	Relative Number per cent. of Industrial and other Classes.		Death-rate per 1,000, including deaths in Public Institutions in Sub-district.	Death-rate per 1,000, excluding deaths in Public Institutions, within and without the Sub-district.	Death-rate per 1,000, including deaths in Outlying Institutions, excluding deaths in Public Institutions within the Sub-district.
				Industrial Classes.	Other Classes.			
East Battersea ..	66,654	26·83	55·9	86·1	13·9	16·0	16·0	18·7
West Battersea ..	64,317	25·89		86.3	13·7	21·6	17·5	19·8*
Clapham	40,832	16·43	33·1	45·9	54·1	12·4	12·4	14·3
Putney	14,830	5·97	6·8	55·7	44·3	11·2	11·2	13·2
Streatham ..	30,280	12·18	8·7	48·22	51·78	14·0	14·0	15·2
Wandsworth ..	31,497	12·70	12·7	67·2	32·8	19·9	17·0	18·8

* In estimating this rate, the deaths in Union Infirmary which belonged to West Battersea (76 in number) are included, in order that the rate may be comparable with that of the other sub-districts.

The density of the population in Battersea has increased during last year twice as much as that in any of the other sub-districts, and it is gratifying to find that there has been no corresponding increase of its mortality.

Mortality and its Causes.

Zymotic Diseases.

Zymotic diseases caused 15·2 per cent. of the total deaths in the district as compared with 19·1 per cent. in the previous year. The zymotic death-rate was 2·56 per thousand of the population; the largest proportion of the deaths from zymotic diseases resulting from the seven chief epidemic diseases enumerated in the following table.

TABLE F.

	Whole District.	East Battersea.	West Battersea.	Clapham.	Putney.	Streatham.	Wandsworth.
Small-pox ..	5	1	1	..	..	..	3
Measles	140	49	63	3	4	2	19
Scarlet Fever ..	11	3	5	..	..	..	3
Diphtheria ..	28	8	2	4	3	5	6
Enteric Fever ..	40	8	9	8	5	6	4
Whooping-cough	178	47	74	25	1	7	24
Epidemic Diarrhœa ..	193	63	63	16	4	12	35
Other Zymotic Diseases ..	42	14	17	5	1	2	3
Total Deaths from Zymotic Diseases	637	193	234	61	18	34	97
Zymotic Death-rate	2·56	2·8	3·6	1·4	1·2	1·1	3·0
Death-rate from all Diseases ..	16·8	16·0	17·5*	12·4	11·2	14·0	17·0*

* Excluding deaths in Public Institutions.

If to the 637 deaths from zymotic diseases be added the 61 deaths from the same diseases in Out-lying Institutions of inhabitants of this district, the zymotic death-rate becomes 2·8 per thousand of population.

Table D (page 9) shews that 31 deaths of inhabitants of this district from Small-pox occurred in the Asylums Board Hospitals, while only 5 occurred at their own homes. Epidemic Diarrhœa was the most fatal zymotic disease, Whooping-cough and Measles coming next in fatality; Enteric Fever caused 40 deaths within the district and 10 without; Diphtheria 28 within and 10 without; while Scarlet Fever only caused 13 deaths altogether. The local incidence of the mortality from the seven chief epidemic diseases can be best understood by a comparative study of Tables D and F.

Asylums Board Hospitals.

The above figures only give the *mortality* from the various epidemic diseases. The weekly returns now sent by the Asylums Board to each Metropolitan Medical Officer of Health enable us to give in the following table the number of patients admitted into these hospitals from the various sub-districts of the Wandsworth District, as well as from the rest of the Metropolis, and the proportion in each case to the population. These returns date from 23rd January, 1885, to the end of the year.

TABLE G.

Number of cases of Infectious Diseases admitted into the Metropolitan Asylums Board Hospitals from 23rd January to 31st December, 1885.

	Small-pox.	Proportion to Population.	Scarlet Fever.	Proportion to Population.	Enteric Fever.	Proportion to Population.	Typhus Fever	Proportion to Population.
Battersea ..	153	..	17	..	7	..	1	..
Clapham ..	21	..	18	..	1	..	0	..
Putney ..	4	..	0	..	1	..	0	..
Streatham ..	20	..	5	..	0	..	0	..
Wandsworth..	25	..	16	..	3	..	0	..
Entire Wandsworth District	223	1 in 1109	56	1 in 4435	12	1 in 20700	1	1 in 248410
Rest of Metropolis	4837	1 in 792	1046	1 in 3666	136	1 in 28128	42	1 in 91321
Whole Metropolis..	5060	..	1102	..	148	..	43	..

Vaccination.

The delays in vaccination and in making out returns render it necessary as in previous years to give the Vaccination returns for a year previous to that dealt with in the other statistics of this Report. The following table gives a concise view of the work in Vaccination, carried out during the year 1884.

TABLE H.

SUB-DISTRICTS.	Number of Births Returned from 1st January to 31st December, 1884.	Successfully Vaccinated.	Insusceptible of Vaccination.	Had Small-pox.	Dead Unvaccinated.	Postponed by Medical Certificate.	Removed to Districts Vaccination Officer of which has been duly apprised.	Removed to places unknown, or which cannot be reached; and cases not having been found.
East Battersea	2597	2083	8	..	273	27	2	204
West Battersea	2604	2171	1	..	209	27	4	192
Clapham ..	1108	922	3	1	114	24	5	39
Putney ..	364	310	1	..	33	3	1	14
Streatham ..	1129	903	5	..	94	20	18	87
Wandsworth	1063	939	3	..	67	3	..	50
Totals ..	8865	7328	21	1	790	104	30	586

Out of 8,865 children, 7,328 were successfully vaccinated, and the remainder were accounted for by death, insusceptibility to vaccination or postponement on account of illness; except 582, *i.e.* 6·6 per cent. In the previous year 7·5 per cent. were unaccounted for.

The great prevalence of Small-pox in the Metropolis during the last year is doubtless ascribable to the accumulation of this large percentage of unprotected persons; and to the fact that we have no compulsory notification of cases, followed by isolation of patients and quarantine of those who have been exposed to infection,—which has served hitherto, as in Leicester, to shelter from infection persons unprotected by vaccination.

Non-Zymotic Diseases.

In Table I. in the Appendix, the number of deaths from the various constitutional and local diseases are given, and in Table II. these are compared with the corresponding deaths of the ten previous years.

Deaths at different ages.

The deaths of children under 5 years of age amounted to 46·4 per cent. of the total deaths, as compared with 49·2 per cent. in the previous year.

At the other extreme of life, *i.e.* at 60 years of age and upwards, 21·2 per cent. of the total deaths occurred, as compared with 19·2 per cent. in the previous year.

In the following table the number of deaths at various group-ages is given, and compared with the corresponding number in the ten preceding years.

TABLE I.

YEARS.	AGE.							
	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	All under 20 years.	From 20 to 40 years.	From 40 to 60 years.	From 60 to 80 years.	80 years & upwards.
1874	177	452	107	1838	361	462	419	116
1875	886	467	132	1660	399	422	502	113
1876	910	524	99	1638	398	468	540	110
1877	840	466	109	1517	387	458	525	104
1878	983	600	100	1780	338	483	532	142
1879	948	682	102	1878	368	487	658	135
1880	1136	600	140	2021	374	500	560	138
1881	1043	627	132	1938	410	548	599	152
1882	1082	752	143	2087	428	557	634	145
1883	1189	696	134	2145	484	593	670	191
1884	1367	736	95	2341	484	623	661	157
1885	**1268**	**660**	**94**	**2153**	**467**	**683**	**740**	**150**

The preceding statements however do not evade the fallacy contained in the fact that the number of people living at different groups of ages may increase or diminish, in which case the death-rate would similarly oscillate. Thus an increase in the relative number of children under 5 years would increase the entire death-rate, as children of this age have a higher mortality than older persons. Similarly the presence in any sub-district of an excess of persons between 15 and 35 (ages of low mortality), as for instance where there is a large number of domestic servants,—would lower its apparent death-rate.

Death-rates at different ages.

This fallacy is escaped in the following table. It unfortunately refers to the year 1881, the absence of annual census returns preventing the application of the method to the deaths of the present year. The table is however inserted as an example of an important method, and as a datum for comparison when the results of the 1891 census are known.

TABLE J.

Shewing Census Population of 1881 at different groups of ages: male and female death-rates, and death-rates at different groups of ages: the different parts of the Wandsworth District being compared throughout.

SUB-DISTRICTS.	ALL AGES.						No. of persons under 5 years.	Death-rate under 5 years.	No. of persons aged 5 to 10 years.	Death-rate 5 to 10 years.	Persons 10 to 20 years.	Death-rate 10 to 20 years	Persons 20 to 40 years.	Death-rate 20 to 40 years.	Persons 40 to 60 years.	Death-rate 40 to 60 years.	Persons 60 to 80 years.	Death-rate 60 to 80 years.	Persons 80 years old and upwards.	Death-rate over 80 years.
	No. of Persons.	General Death-rate per 1,000 of Population.	No. of Males.	Male Death-rate.	No. of Females.	Female Death-rate.														
Battersea ..	107262	20·1	52665	20·08	54597	19·51	17283	63·0	14763	5·01	21194	3·44	32960	6·88	16378	18·6	4228	72·4	255	270·5
Clapham ..	36380	13·7	15935	13·18	20445	14·13	4407	45·6	3801	7·10	7586	3·42	12020	4·07	6138	11·2	2259	43·3	169	171·6
Putney ..	13235	12·6	5406	17·01	7829	9·58	1470	46·9	1289	6·20	2680	1·86	4878	5·33	2088	7·66	768	41·6	62	177·7
Streatham ..	25553	12·2	10825	13·85	14728	11·06	3206	36·4	2631	3·04	5102	2·74	8879	4·95	4103	10·4	1529	43·1	103	203·8
Wandsworth	28004	18·1	13328	19·05	14676	17·23	3527	54·1	3045	4·92	5697	3·51	9049	7·07	4899	23·0	1684	48·6	103	213·5

* The death-rates are in all cases per 1,000 of the people living at the special age-group under consideration.

Infantile Mortality.

The true mortality among children under one year of age can only correctly be stated in terms of the number living at that age, obtained from the birth returns. The death-rate of infants under one year per 1,000 births was as follows in the various sub-districts.

In East Battersea	154	deaths under 1 yr.	per 1,000 births
,, West ,,	175	,,	,,
,, Clapham	120	,,	,,
,, Putney	133	,,	,,
,, Streatham	110	,,	,,
,, Wandsworth	132	,,	,,

Social Position of Deceased.

In the following table the relative proportion per cent of the mortality borne by the several classes of the inhabitants during the years 1878-84 is compared with that of the past year.

TABLE K.

Social Status.	1878	1879	1880	1881	1882	1883	1884	1885
Nobility & Gentry	1·62	3·30	3·40	2·71	3·43	2·48	4·41	2·76
Professional Class	5·08	5·90	5·50	5·12	4.44	5·66	6·25	4·67
Middle Class ..	18·10	17·40	16·90	19·00	20·85	19·59	25·66	19·10
Industrial Class	75·20	73·40	74·20	73·17	71·28	72·27	63·68	73·47
	100·0	100·0	100·0	100·00	100·00	100·00	100·00	100·00

Inquests. Deaths by Violence.

The inquests held during the year were 174, or 4 less than in the previous year, and formed 4·2 per cent of the total deaths.

The whole of the deaths which formed the subject of a Coroner's inquiry in the several sub-districts are classified according to the verdicts in the following table.

TABLE L.

Verdicts.	Sub-Districts.						
	Total.	Battersea		Clapham	Putney	Streatham	Wandsworth
		East	West				
Deaths from Natural Causes: ..	78	14	30	9	4	3	18
Deaths from Violence:	..	..	..	..	..	..	..
Accidental:							
Drowning ..	9	3	2	..	1	..	3
Suffocation ..	28	16	6	1	..	1	4
Railway Injuries	8	2	2	..	..	3	1
Scalds and Burns	4	1	3	..	..	..	..
Poisoning ..	4	1	1	..	..	2	..
Concussion, Fracture, &c.	5	5	..	..	..	..	..
Injuries from Fall	7	..	3	4	..	..	..
Other Injuries ..	7	1	3	..	..	..	3
Suicidal:							
Poisoning ..	2	1	1	..	..	..	..
Hanging	4	1	..	1	2	..	..
Shooting	2	..	..	..	1	1	.
Drowning ..	3	..	1	..	..	1	1
Cut-Throat ..	3	..	..	1	..	..	2
Homicidal:							
Cut-Throat ..	1	..	..	1	..	..	..
Fractured Skull from being knocked down	1	..	..	..	..	1	..
Manslaughter ..	1	..	..	..	..	..	1
Execution ..	1	..	..	..	..	..	1
Open Verdicts:							
Fonnd Drowned ..	4	..	2	2	..	..	..
Found Dead ..	2	..	1	..	..	..	1
	174	45	55	19	8	12	35

A reference to the table shows that of the total number 78 were due to natural causes and 96 to violence. Of the latter 72 were accidental, 14 were suicidal, 4 homicidal, and in 6 open verdicts were returned.

Uncertified Deaths.

The number of deaths in which the cause was not certified by medical testimony, but in which the Coroner did not deem an inquest necessary, was 58; as compared with 72 in 1884 and 48 in 1883.

Of the 58, 19 occurred in East Battersea; 17 in West Battersea, 14 in Streatham, 8 in Wandsworth, and none in Putney or Clapham.

Sickness & Mortality among Parochial Poor.

The nature, amount, and fatality of the sickness that occurred among the parochial poor in the several sub-districts are set forth in Table III. (Appendix, page 114), which forms a valuable index of the sickness occurring in the District generally. The total number of cases coming under treatment was 3218, as compared with 2637 in the previous year. The proportion of deaths to cases under treatment was only 3·7 per cent, being 1·3 less than in 1884.

Meteorology of the Year.

A reference to Table V. in Appendix will shew the general characters of the climate during 1885. The rainfall was somewhat below the average, as was likewise the mean temperature. In the following table the number of weekly deaths from Diarrhœa in the whole Metropolis are compared with the mean weekly temperature and rainfall, during the weeks in which Diarrhœa was most prevalent, in order to bring out the relationship between the prevalence of this disease, and a high mean temperature and deficient rainfall,

TABLE M.

Week of the Year.	Deaths from Diarrhœa in whole Metropolis.	Mean Temperature of Air in Degrees Fahrenheit.	Fall of Rain in inches.
20th	16	48·4	0·74
21st	20	56·0	0·46
22nd	11	62·6	0·27
23rd	23	58·5	0·90
24th	24	58·7	0·39
25th	44	58·3	0·11
26th	51	60·5	0·00
27th	110	65·0	0·02
28th	209	61·2	0·49
29th	284	64·5	0·01
30th	348	65·2	0·01
31st	309	59·4	0·46
32nd	222	58·2	0·14
33rd	163	57·6	0·61
34th	121	57·2	0·40
35th	83	56·3	1·93
36th	62	57·7	0·86
37th	40	52·7	0·18
38th	49	49·6	0·52
39th	42	47·6	1·09
40th	35	45·4	0·44

The relationship between a high atmospheric temperature and Diarrhœa is probably through the rapid production of fermentative and putrefactive changes. In hot weather, the food of hand-fed children rapidly decomposes and the feeding-bottles are sour. Milk is particularly prone to decomposition under the same conditions, and should therefore always be scalded. Water is liable (when it contains the least trace of impurities) to take on similar changes, and should therefore be always boiled before use. A defective rainfall may act through the defective flushing of sewers and

house drains which results; and through the dusty condition of the streets, the dust carrying with it a considerable portion of organic matter.

Water Supply.

This district being entirely supplied from the Thames, suffers from the disadvantages of river-water as a source of drinking-water. One of the chief of these is its extremes of temperature (varying from 37°·0 to 70°·5 Fahr. during the year, as compared with a variation between 53°·6 and 58°·1 Fahr. in the deep-well water distributed by the Kent Company). The deep-well water remains refreshing and palatable in the summer, while in winter it diminishes the risk of frozen pipes, in both of which respects it is very superior to river-water. Deep-well water again has been subjected to natural filtration through deep strata, the efficiency of which cannot be equalled by artificial filtration. Little complaint need, however, be made of the Company's water, if it were always drunk in as comparatively pure condition as contained in the mains.

A Constant Supply required.

While in the cistern, which usually supplies the closet with flushing-water and the inmates of the house with drinking-water, it is open to frequent contaminations, owing to the absence or defective condition of lids; or to accidental emptying of the cistern and then absorption of foul gases from the closet-pan; or to the connection of the overflow-pipe with some part of the drainage system (still not an uncommon condition); or to other causes. The tepid condition of the water induced by exposure to a hot sun in a shallow cistern, gives rise to putrefactive changes, which are active in the production of Summer Diarrhœa. A constant supply of water, which would

abolish the cistern except for flushing water-closets, is one of the most urgent sanitary reforms in the immediate future, and we beg to call your earnest and continued attention to it.

Sanitary Operations of the Year

A study of Table IV. in the Appendix will give a clearer understanding of the detailed sanitary work carried out in each sub-district than any verbal description. The attention paid to defects of house-drainage is steadily increasing, and there can be no doubt that the action taken by the Board through its officers, is having an influential educative effect on builders, plumbers, and others concerned in house-construction and drainage. Abundant powers exist for the enforcement of all items detailed in Table IV., though it is highly satisfactory that in so few instances it has been necessary to appeal to the slow and cumbrous machinery of the law.

LOCAL SUMMARIES.

BATTERSEA.

The official mean population for the whole Parish for the year 1885 was 130,971.

The births registered during the year were 5,054, and the birth-rate was 38·58 per thousand. The birth-rate for London was 32·6 per thousand.

The deaths recorded were 2,466, which would give a resulting death-rate of 18·08 per thousand, but if the deaths of 124 non-parishioners in the Union Infirmary are deducted, the death-rate would be equal to 17·88 per thousand, the Metropolitan mortality for the year being 19·7 per thousand.

EAST BATTERSEA.

An essential preliminary in a report relating to the sanitary condition of the sub-district is to estimate the population upon which the various rates are to be calculated. During the latter years of the last decade, 1871—81, this was a matter of some difficulty to determine, as the *official* population employed by the Registrar General was much smaller than the *estimated* population deduced from the number of births, thus unduly over estimating both the birth and death rates. The census proved the almost absolute correctness of the *estimated* population. It is however not probable that descrepancies so great can again occur, and it may be readily demonstrated that the numbers now arrived at by both the methods give almost identical results.

The population of the sub-district by the *official* method of computation for the year 1885 was 66,654, being 2,948 more than that of the preceding year, a not excessive estimate of increase, the natural increase by the surplus of births over deaths being 1,415, as is shewn in Table I., the latter being equal to a rate of 21·2 per thousand.

TABLE I.

Birth and Death Rates.

YEARS.	Births.	Birth-rate.	Deaths from all Causes.	Death-rate.	Natural Increase.
1876 ..	1,968	42·0	893	19·0	1,075
1877 ..	1,972	42·0	905	19·25	1,067
1878 ..	2,185	42·0	895	17·8	1,290
1879 ..	2,344	42·0	978	17·5	1,366
1880 ..	2,257	41·57	1,030	18 9	1,127
1881 ..	2,349	41 1	966	16·8	1,383
1882 ..	2,352	39·13	992	16·48	1,360
1883 ..	2,383	39·22	1,003	16·5	1,380
1884 ..	2,621	41·14	1,184	18·5	1,437
1885 ..	2,496	37·4	1,071	16·0	1,425

N.B.—The birth and death rates for 1876—9 are based upon the estimated mean population, the correctness of which was proved by the census of 1881.

This table will be found useful as contrasting the birth and death rates for the last ten years.

For the years 1876-7-8-9 the *estimated* (not the *official*) rates have been given, which former the census returns shewed to have been almost absolutely correct. The birth-rate for those years was estimated at 42 per thousand. The *official* birth-rate for those years was 53·8; 51·4; 58·0, and 56·0 per thousand, obviously excessive and incorrect. The rates which time has proved to be the correct ones are therefore given.

For similar reasons the actual natural increase of population by excess of births over deaths is here shewn instead of the rate of increase per thousand.

Births. The births registered during 52 weeks comprised in the year 1885 were 2496. The males registered were 1,301 in number, and the females 1,195. The consequent birth-rate would be 37·4 per thousand per annum, the lowest birth-rate yet recorded for East Battersea and shewing an approximation to the rate for the Metropolis at large, which was 32·6, the lowest recorded with one exception. It may be anticipated that in a few years the birth-rate in the sub-district will be identical with that for London as a whole, it having fallen 5 per thousand per annum during the last five years.

Mortality. During 1885 the deaths of 1,071 persons were registered. Of these 545 were males and 526 were females. Upon the official mean population of 66,654 the death rate was 16 per thousand during the year. This is the lowest rate of mortality which it has been my province to record and contrasts favourably with the Metropolitan mortality of 19.7 per thousand.

TABLE II.

Statistics of Mortality.

EAST BATTEREA.

Population (Census) 1881 54,675

Official Population in middle of 1885, 66,654

CAUSES OF DEATH.	Total Deaths from each class of Disease, &c., in the Sub-district.	Sex.		Age.								Social Position.			
		Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Nobility and Gentry.	Professional Class, Merchants, Bankers, &c.	Middle and Trading Class, Shopmen, Clerks, &c.	Industrial and Laboring Classes.
I. Zymotic. Small-pox	1	..	1	..	..	..	1	..	..	..	..	..	..	..	1
Measles	49	23	26	4	39	6	..	..	..	..	..	..	..	3	46
Scarlet Fever	3	3	..	..	3	..	..	..	..	..	..	..	..	1	2
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	9	6	3	..	3	..	4	2	..	..	..	..	..	3	6
Puerperal Fever	8	..	8	..	..	..	1	7	..	..	..	..	..	1	7
Diphtheria	8	2	6	1	6	1	..	..	..	..	..	..	1	1	6
Whooping Cough	47	26	21	20	24	2	1	..	..	..	..	..	1	2	44
Erysipelas	5	4	1	1	..	..	..	..	2	2	..	..	..	1	4
Diarrhœa, Dysentery, and Cholera	63	33	30	54	4	..	2	1	1	1	..	..	1	7	55
Other Zymotic Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals of Zymotic Class	193	97	96	80	79	9	9	10	3	3	..	..	3	19	171
II. Constitutional. Gout and Rheumatism	11	4	7	..	..	..	1	3	1	6	..	..	1	3	7
Cancer & other Tumours	18	6	12	..	..	..	..	2	7	8	1	1	1	1	15
Other Constitutional Diseases	7	7	..	7	..	..	..	..	..	..	..	..	..	..	7
Tubercular Phthisis	91	33	58	3	..	5	13	30	38	2	..	..	3	11	77
Tubercular Tabes Mesa	62	38	24	53	7	..	1	..	1	..	..	..	1	3	58
Tubercular Hydrocephalus	27	12	15	10	15	2	..	..	..	..	..	..	2	1	24
Tubercular Scrofula	1	..	1	..	1	..	..	..	..	..	..	..	..	..	1
III. Local. Nervous	104	57	47	32	22	6	7	4	16	12	5	1	2	17	84
Circulatory	51	24	27	1	..	1	5	3	19	20	2	2	2	10	37
Respiratory	303	167	136	90	87	5	3	15	49	51	3	..	2	30	271
Digestive	36	17	19	6	4	1	1	1	14	8	1	..	2	6	28
Urinary	16	4	12	1	..	..	..	..	5	9	1	..	..	5	11
Generative	7	1	6	..	..	..	..	3	4	..	..	..	..	1	6
Locomotory	3	1	2	1	1	1	..	..	..	..	..	..	..	..	3
Integumentary	1	..	1	1	..	..	..	..	..	..	..	..	..	1	..
IV. Developmental. Premature Birth, Low Vitality & Congenital Defects.	82	46	36	81	1	..	..	..	..	..	..	..	2	8	72
Old Age	22	7	15	..	..	..	..	..	2	11	9	1	1	2	18
V. Violence	32	20	12	19	2	1	1	3	3	3	..	..	..	4	28
VI. Illdefined and Not Specified — Illdefined	4	4	..	..	..	..	..	..	3	1	..	..	..	..	4
VI. Illdefined and Not Specified — Not Specified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS	1071	545	526	385	219	31	41	74	165	134	22	5	22	122	922

If to the deaths registered as occuring in the sub-district, one hundred and seventy-nine other deaths in outlying institutions, of persons said to belong to the sub-district, be added, the total of 1,250 deaths will give an apparent death-rate of 18·75 per thousand. But this method makes no allowance for the numerous persons who die in the sub-district belonging to other places and who attend the Metropolitan Hospitals as out-patients, more especially the Brompton Hospital for Consumption, the Cancer Hospital and the Victoria Hospital for Children; being sent up from various places, and temporarily residing in the sub-district as a convenient and inexpensive locality.

Outlying Institutions.

Reference to Table III. will shew that one hundred and seventy-nine persons died in Hospital, Workhouse Infirmary, Asylum Board Hospital or Lunatic Asylum, who were registered as being inhabitants of East Battersea. In many cases the only title they possessed to be included amongst our parishioners being that they were members of families residing here, they themselves being employed elsewhere as domestic servants or employés.

TABLE III.

Deaths in Outlying Institutions.

EAST BATTERSEA.		Sex.		Age.			Institutions.			
Disease.	Total.	Male.	Female.	Under 1.	1 to 60.	60 and upwards.	Union Infirmary	General & Special Hospitals.	Asylums Board Hospitals.	County and other Lunatic Asylums
Small-pox	15	5	10	1	14	..	..	..	15	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Typhus Fever	..	..	..	..	..	..	..	..	..	..
Enteric Fever	3	1	2	..	3	..	..	1	2	..
Diphtheria	7	4	3	1	6	..	..	7	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases ..	6	3	3	2	4	..	3	2	1	..
Tubercular Diseases	27	14	13	1	25	1	11	15	..	1
Cancer	13	7	6	..	7	6	6	6	..	1
Rheumatism	1	..	1	..	1	..	..	1	..	..
Respiratory Diseases	22	14	8	..	11	11	11	11	..	..
Circulatory Diseases	18	12	6	..	16	2	6	12	..	..
Nervous Diseases	18	11	7	..	13	5	9	4	..	5
Other Diseases	35	18	17	2	21	12	10	25	..	..
Violence	14	9	5	..	12	2	..	14	..	..
Totals ..	179	98	81	7	133	39	56	98	18	7

It will be seen that the following was the mortality in the several institutions, viz :—

General and Special Hospitals	98
Wandsworth & Clapham Union Infirmary..	56
Metropolitan Asylums Board Hospitals for Small-pox and Fever	18
County and other Lunatic Asylums ..	7
TOTAL ..	179

Ages at Death.

Under one year 385 infants died, being 35·9 of the total mortality. Between one and five years 219 deaths were recorded, equal to 20·4 per cent. Together 604 deaths occurred under five years of age, being 56.4 per cent. of the 1,071 deaths registered. This was distinctly an improvement upon the infantile mortality of the preceding years when it was 65·4 per cent. of the total deaths.

Twenty-two persons were stated to have died from old age, the number at 80 years and over being also 22.

Zymotic Diseases.

Table IV. illustrates the incidence of the infectious diseases for the last ten years. It must not be forgotten that the population of the sub-district has doubled during that period.

TABLE IV.

Zymotic Mortality in the East Battersea Sub-district.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Small-pox	7	28	5	1	1	17	..	..	3	1
Measles	20	47	6	47	22	60	33	95	92	49
Scarlet Fever	34	18	19	44	63	20	36	17	17	3
Typhus Fever ..	6	17	12	13	15	17	14	14	2	1
Enteric Fever ..									23	8
Diphtheria	3	1	4	6	2	3	7	6	7	8
Whooping Cough	53	26	63	39	43	37	56	53	60	47
Epidemic Diarrhœa	60	47	71	43	78	45	37	51	93	63
Other Zymotic Diseases ..	23	22	20	25	13	18	11	19	20	13
Total Deaths from Zymotic Diseases	206	206	194	218	237	217	194	185	317	193
Zymotic Death-rate	4·4	4·3	3·7	3·9	4·3	3·7	3·2	3·0	4·9	·8
Death-rate from all Diseases ..	19·0	19·2	17·3	17·5	18·9	16·8	16·4	16·5	18·5	15·0

It will be observed that the number of deaths from these diseases has been unusually low during the year under report. In fact the greatly diminished death-rate is largely due to this circumstance.

Small-pox caused but one death in the sub-district, that of an unvaccinated girl of 15 years of age. The girl took the disease from her mother and no medical attendance was provided for either and the outbreak of disease concealed from the sanitary authorities, until an attempt to register the girl's death without a medical certificate informed them of its existance. The father, the legally responsible person, contracted the disease and was removed to the Small-pox Hospital where he also died. About the same time two unvacciuated children of another family were brought from an infected house in Lambeth. These children were removed to the Small-pox Hospital, where they both died. There was a third child in this family which had been vaccinated and which was sleeping with the others, but was not attacked by the disease. A more convincing proof of the efficacy of vaccination could not be adduced. In the hospitals of the Metropolitan Asylums Board 15 deaths of inhabitants of the sub-district occurred. There was a severe outbreak of this disease during several months of the year, amongst the parish poor 103 cases were recorded. Isolation by immediate removal of those attacked, re-vaccination of the inmates of the house, and disinfection of the rooms, clothing and bedding, and in many instances the destruction of the latter, effectually suppressed the epidemic.

Measles.—This disease has also been widely prevalent during the year, and although fatal in but relatively few cases as compared with the number attacked, and then by intercurrent maladies such as Bronchitis or Pneumonia, which are frequently the result of exposure or careless

nursing, is most difficult to suppress; as the infectious stage occupies a considerable proportion of the 14 days' incubation which is found to exist in this disease, and this before any rash appears upon the skin. The large number of 49 deaths was recorded and represents an enormously greater number of children attacked.

Whooping-Cough was prevalent, and fatal in 47 cases, frequently in combination with, or following Measles.

Scarlet Fever was conspicuous by its absence, but one fatal case being registered. There are, however, indications of an approaching epidemic.

Diarrhœa was fatal in 63 cases, about the usual proportion, and in nearly every case in hand-fed children, clearly indicating the source of the malady.

Fevers.—Typhus is credited with one death during the year. Sporadic cases of this disease undoubtedly crop up from time to time, although some authorities consider them all to be really abnormal cases of Typhoid or Enteric Fever. The latter disease caused death in five instances, very much fewer than in the year 1884, and shewing in conjunction with the small number of deaths from other diseases of the same class, the very excellent sanitation of the sub-district. Three other cases of Typhoid died in hospital.

Diphtheria.—This disease like the last mentioned depends upon the sanitary condition of a district, more especially of its sewers and water supply. But 8 deaths were registered during the year, 7 others however took place in the various hospitals.

Other Zymotic Diseases.

These include 8 cases from Puerpural Fever and 5 from Erysipelas, together 13, and are below the average in number.

Other Diseases of the Non-Zymotic Class.

Reference to Table V. will shew the incidence of these diseases during 1885 and the preceding nine years. It will be seen that they do not differ much in numbers from year to year, slowly rising with the increase of population, but not keeping pace with such increase, the population having doubled in the period, and these diseases only having increased some 20 per cent.

Diseases of the Respiratory Organs as usual head the list with respect to numbers. These do not include Consumption which is grouped with Tubercular diseases. The former diseases included 303 deaths and the latter 181, together 484, or 45 per cent of the total mortality.

Diseases of the nervous system including Brain disease caused 104 deaths, of the Circulatory including Heart disease 51, and from Premature Birth and Low Vitality 82 deaths. All these were below the average, the increased population being taken into account.

TABLE V.

Comparative Table of Deaths from Non-Zymotic Diseases for ten years, 1876-85.

Diseases.	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Tubercular	20[illegible]	193	116	167	248	173	192	175	213	181
Nervous System, Brain, &c. ..	67	32	110	97	110	128	112	119	128	104
Circulatory (Heart, &c.) ..	36	38	52	38	28	53	47	44	53	51
Respiratory	189	203	217	271	190	188	258	248	241	303
Digestive	35	32	33	32	41	39	23	42	22	36
Urinary	16	9	9	11	18	12	20	16	15	16
Generative, including Penturition	1	1	3	2	4	7	3	9	4	7
Locomotory, Bones, &c. ..	4	..	..	3	1	..	2	..	4	3
Integumentary	..	..	1	..	5	1	1	..	..	1
Premature Birth	66	67	45	55	69	67	63	74	116	82
Uncertain Seat (Cancer, Syphilis, Dropsy, &c.	14	23	18	21	12	27	15	22	25	36
Old Age	13	13	9	20	22	14	18	21	19	22
Violence	32	26	25	26	33	24	30	24	18	32
Not Specified	9	9	13	17	12	11	14	24	9	4
Totals	687	699	701	760	793	649	798	818	867	878

Deaths not Certified.

Nineteen such cases occurred in 1885. Of these eleven were submitted to the Coroner, who deemed an inquest unnecessary, all being from natural causes and the circumstances not being of a nature to justify a formal enquiry.

In the eight cases in which the most objectionable course was taken of registering the death without either a medical certificate or the Coroner's authority the following are the details:—

Age 11 months	..	Diarrhœa Convulsions	attended by an unregistered practitioner.
,, 8 days	..	Convulsions	.. ,,
,, 4 months	..	Consumption	.. ,,
,, 4 hours	..	Convulsions	attended by a midwife.
,, 6 days	..	,,	.. ,,
,, 30 hours	..	,,	.. ,,
,, (not stated)	..	Premature Birth	.. ,,
,, 15 years	..	Small-pox	no medical attendant.

In the last case, a concealed case of Small-pox proved fatal, no medical man being called in. The case is the subject of comment elsewhere.

Inquests.

In addition to eleven cases of uncertified death in which an informal inquiry by the Coroner took place, forty-five inquests have been held during the year. In all investigation in fifty-six cases of death have been made by him.

The particulars of the cases in which inquests have been held may be summarised as follows:—

From Natural causes			14
From Accidental causes—			
Asphyxia (15 infants)	16		
Concussion, Fracture, &c.	5		
Drowned	3		
Killed on Railway	2		
Erysipelas from wound, Scald or Burn, Overdose of Jalap, each 1	3	—	29
Homicidal—			
Suicide from Prussic Acid, Hanging, each 1			2
			45

an increase of eight inquests on the preceding year.

Of the asphyxiated infants death took place in ten instances between Friday night and Monday morning, another on Christmas eve, two on Tuesday and the other two on Thursday. In one of the latter cases the Coroner did not hold an inquest.

Social Position. The deaths registered during 1885 shewed the following relative proportions occurring in the several classes.

	No.	Per cent.
Nobility and Gentry	5 =	·47
Professional Class	22 =	2·05
Middle and Trading Classes	122 =	11·39
Industrial Labouring Classes	922 =	86·09
TOTALS	1,071	100·00

The most noticable feature in the table is the diminution in the numbers of the upper classes which has been going on for some years, and the steady increase in the professional and trading classes. The proportions do not vary much however from year to year.

Vaccination. The register of public vaccinations shews that the Public Vaccinator performed the following successful operations during 1885 at the appointed station.

Primary Vaccinations	1593
Re-vaccinations	285
Total	1878

The total number of births registered was 2,496, so that 63 per cent. of the children born in the sub-district were vaccinated as above. It is but right to state that during the various several epidemics of small-pox which have occurred in the sub-district, and in which every case has been investigated, not one of the persons attacked has been vaccinated at the public vaccination station.

Sanitary Operations.

In order to define the area of work of the Assistant Sanitary Inspectors a revision of the boundaries of the Wards in East Battersea has been made for such purpose.

Ward No. 1, in which 3,200 houses were situated, has been made to include the Beaufoy Estate containing 800 houses, bringing up the total to 4,000 houses, and has been assigned to Assistant Inspector Freeman.

Ward No. 2 contains in East Battersea 5,300 houses, (1,000 houses in No. 2 Ward being in West Battersea, from the Latchmere Road to Falcon Road), and the 800 houses in the Beaufoy Estate having been attached to No. 1 Ward, the remaining 4,500 houses have been assigned to Assistant Inspector Poole.

The work of these officers is fairly equalised, and they have given me great satisfaction by the manner in which they carry ont their important but sometimes very disagreeable duties.

During 1885 the large number of 8,111 houses and premises were inspected with the result that 617 notices were served, including more than twice that number of defects. These were all properly attended to and the necessary works completed, with the exception of 188 cases in which it was necessary to serve second notices.

But three cases had to be taken before the Magistrate, in each of which compulsory orders were obtained, and the works executed.

The number of houses disinfected after infectious diseases was 257, the largest number yet disinfected in any year. Increasing experience of the efficacy of sulphurous acid gas fumigation but confirms the high estimation in which the method is held, for cheapness, safety and efficiency. It will be observed that no case of infectious disease recurred after such disinfection. In the summary of sanitary operations to be found in the appendix the detailed statement will shew that very many defects have been remedied by the execution of the necessary works, entailing as a rule in each case repeated inspections.

Defective house drains required cleansing and repairing in 596 instances, in addition to which 550 new or relaid drains were carried out. Syphon traps were laid to drains in 107 instances. These constitute altogether valuable improvements to the house drainage of the sub-district, which has been much improved during the last few years, but few of the grosser defecfs being now found. It is however a matter of primary importance that the ventilation and treatment of the gases generated in the main sewers should receive earnest attention, as any back pressure of gas readily forces the weak water seals of the domestic drains to the injury of the health of the inhabitants.

In fact the time has arrived when a more systematic and scientific method of ventilating the main sewers must be devised and adopted than the present weak expedient of surface ventilators, which are offensive

when in operation and readily blocked up by road debris. Some form of upcast shaft to carry the gaseous contents of the sewers far above the house level should be devised and put in operation, and if practicable such gases should be so treated by heating, washing, disinfection or some analogous process as to become inoffensive and not dangerous either from their own toxic constituents or as carriers of disease germs.

The question of the removal of house refuse has been so constantly before the Local and Sanitary Committees and the Board during the year, that it is unnecessary for me to refer to the subject except to say, that the necessity for the more frequent removal of such refuse was the subject of much unanimity of opinion, which will doubtless have the result of effecting great changes in that direction.

The Board has during the year made regulations applicable to tents and vans used for human habitation, with valuable results. A report of the Chief Inspector of Nuisances dated November 2nd, 1885, upon the result of an inspection of such habitations, shewed overcrowding of the worst kind. Thus in one instance a man and several children were found to sleep in a van with but 84 cubic feet of air per adult, and half that amount for the children. One cistern of 57 gallons capacity served for 23 persons, many of different families. The vans were cleanly but ill ventilated, but the tents were dirty, damp and crowded to excess. The regulations will, when in force, remedy these defects.

Bakehouses. These have all been properly inspected twice at least during the year and the necessary cleansing and lime-whiting duly attended to. The whole of the

bakehouses in East Battersea are in a cleanly and sanitary condition and in accordance with the Board's Regulations.

Cow-houses. These are diminishing in number year by year. The few left in the sub-district are in accordance with the regulations.

Slaughter-houses. All were in such a condition that their re-licensing was not opposed. It is to be desired that a public slaughter-house under the control of the Board may be before long established and private slaughter-houses connected with dwellings be abolished.

Cholera, which in obedience to the laws of the progression which it has hitherto observed when occurring in this country should have been with us during 1885, failed to put in an appearance. The fatal cases of diarrhœa which usually proceed cholera were but 63 compared with 93 in the year 1884. It is therefore to be hoped that we have escaped an epidemic, which we are well prepared to meet should it appear. The disease appears still to linger in the hotter and dirtier towns of Southern Europe.

In conclusion I have to congratulate the Board upon the satisfactory sanitary report which the condition of the sub-district of East Battersea enables me to make; a condition which raflects much credit upon those having charge of its sanitation, and by whose vigilant supervision and courteous assistance the officers are enabled to perform their duties with satisfaction to themselves and credit to the sanitary authority under whom they act.

Mr. Pilditch, the Surveyor for Battersea, has always readily accorded to me his invaluable aid and great experience, and the past year has enabled me to avail myself freely of both.

Mr. Richards, the Chief Inspector of Nuisances, has performed his duties in a very perfect manner during the year, and I have to thank him for much valuable assistance.

W. H. KEMPSTER, M.D.,

Medical Officer of Heath for East Battersea.

WEST BATTERSEA.

The year under report was marked by a greater number of deaths than its predecessor, consequently the death rate is raised exactly 1·0 per 1,000, but though the deaths have increased by 76 it is gratifying to observe that the increase is in those classes of disease over which we as sanitarians have little or no direct control; indeed, in such diseases of the zymotic class, there is a decrease of 17 as compared with those of the previous year. Doubtless the stability of the low death-rate from this class of disease for some years past indicates that the improved sanitary arrangements are telling upon the general health of the people, and is some recompense to the Board for the great efforts constantly being put forth and the expense incurred.

Those diseases of the preventative class which have been most fatal, are Measles, Whooping-cough, and Diarrhœa —no less than 196 under five years of age being returned out of a total of 234. It would be well if parents would take more care of their children whilst suffering from the former disease, for in every case Lung complication—to which they are at that time particularly susceptible—is given as the cause of death.

Diarrhœa was not nearly so severe as in former years, which may in some measure be accounted for by the low temperature which prevailed during the summer months, it attained its greatest fatality in the month of August, and was almost entirely confined to young children.

Small Pox which had shown signs of becoming epidemic in 1884, but abated towards the end of the year, returned with renewed vigour in the present year. The cases were nearly all in adults, and were with one exception removed to hospital, the exception being the case of a man found dying when visited. The arrangements for removing these patients are as perfect as they well can be, no delay having occurred in a single case. It is no doubt owing to rapid isolation that the disease was confined to narrow limits, in all 44 cases were removed; it was not confined to any particular part of the district, but was general, and in most cases it was difficult to trace its origin, and may be attributed to persons having had the disease, concealing it; their clothes not being submitted to disinfection and wearing them in public, so spreading it broadcast, as the following case will shew: An adult female convalescent from Small Pox paid a visit to her parents at ———; in a fortnight her mother and two sisters died of the disease, there was no Small Pox in the neighbourhood nor had there been, and there is not the least doubt that it was communicated by the visitor. We should have known nothing of it had not the Medical Officer of Health written asking me to ascertain if there had been any Small Pox in the house from which she left. This is another instance in which the compulsory notification of infectious disease would have been of valuable service.

Population. The population estimated on the basis pursued by the Registrar-General for themiddle of the year would be 64,317, this nowever must not be considered as accurate as the birth-rate is again 4·0 per thousand more than that of the census year when the population was exactly known. The rapid development of the Broomwood Estate, West side,

Nightingale Park, &c., would tend to show that our population has grown at a greater rate than that allowed by the Registrar-General.

Mortality. The total number of deaths returned by the Registrar as having taken place in this sub-district was 1395—of which 666 were males and 729 females. In 1884, 1319 were returned, there is therefore an increase of 76 on that year. In addition to the above, 68 took place in public institutions outside the district making a total of 1463 persons who died connected with this division of the parish.

Of the 1395, 269 occurred in Public Institutions, viz:—254 in the Infirmary and 15 in the Bolingbroke Hospital; these are 14 below those of the previous year, when 283 were returned.

Of the deaths which took place in the Infirmary 76 belonged to West Battersea, the remainder to other sections of the district.

Deducting the 269 deaths in Public Institutions 1,126 will be the correct number for this out-door district.*

The number of deaths registered in each quarter of the year was as follows:—

First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
395	311	325	364

Total deaths from all causes including all deaths in the Infirmary in the respective years were:—

1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
856	854	820	908	1002	1010	1195	1222	1341	1319	1395

*Out-door with reference to Infirmary.

The deaths in the Infirmary were 254—males 146, females 108.

The death-rates per 1,000, including Infirmary deaths belonging to this sub-district and out-lying Institutions:—

1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
20·2	19·5	17·1	18·5	20·0	16·8	19·0	18·0	18·6	18·8	19·8

The deaths during the past year not including those occurring in its Institutions, nor those in out-lying Institutions, numbered 1,126; these give a death-rate of 17·5 per 1,000.

Birth-rate.—The number of births registered were 2558, of which 1,288 were males and 1,270 females, being a difference of 18 in favor of the males.

The rate is 39·8 per 1,000, being 4·8 per 1,000 more than that of the census year, at the same time the same increase of population as in the preceeding decennial period has been allowed.

The return for each quarter was as follows:—

First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
694	584	642	638

Natural Increase. The above number of births are 1,303 in excess of the deaths, and constitute the year's natural increase, more than double those of the deaths.

The following table shows the cause of all deaths, classified according to age, sex, and social position, which have taken place in this sub-district during the year:—

TABLE II.

WEST BATTTERSEA Population (Census) 1881 ... ... 52,587 Official Population in middle of 1885 64,317 CAUSES OF DEATH.	Total Deaths from each Class of Disease, &c., in the Sub-District.	Sex.		Age.								Social Position.			
		Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Nobility and Gentry.	Professional Class, Merchants, Bankers, &c.	Middle & Trading Class, Shopmen, Clerks, &c.	Industrial and Labouring Classes.
I. Zymotic. Small-pox	1	1	..	..	..	..	1	..	..	..	..	..	..	..	1
Measles	63	29	34	13	45	4	1	..	..	..	..	..	..	5	58
Scarlet Fever	5	1	4	..	3	1	1	..	..	..	..	..	..	1	4
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	9	3	6	1	1	..	3	4	..	..	..	..	..	3	6
Puerperal Fever	10	..	10	..	..	..	..	10	..	..	..	..	..	..	10
Diphtheria	2	..	2	..	2	..	..	..	..	..	..	..	..	..	2
Whooping Cough	74	34	40	38	35	1	..	..	..	..	..	..	..	3	71
Erysipelas	7	4	3	2	..	..	..	3	1	1	..	..	..	..	7
Diarrhœa, Dysentery, and Cholera	63	33	30	54	2	..	1	..	3	3	..	..	..	8	55
Other Zymotic Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals of Zymotic Class	234	105	129	108	88	6	7	17	4	4	..	..	..	20	214
II. Constitutional. Gout and Rheumatism	9	7	2	..	..	..	1	3	3	2	..	1	..	4	4
Cancer & other Tumours	31	8	23	..	1	..	..	1	18	10	1	..	..	2	29
Other Constitutional Diseases	8	2	6	..	1	..	1	3	1	2	..	..	2	1	5
Tubercular: Phthisis	138	77	61	5	6	..	16	61	49	1	..	3	1	11	123
Tubercular: Tabes Mesa	71	37	34	60	8	..	..	2	..	1	..	..	..	11	60
Tubercular: Hydrocephalus	9	3	6	4	5	..	..	..	..	..	..	..	..	..	9
Tubercular: Scrofula	21	3	18	10	9	1	..	1	..	..	..	1	0	3	17
III. Local. Nervous	178	91	87	58	17	4	4	10	26	53	6	3	1	26	148
Circulatory	108	52	56	6	1	2	2	17	33	42	5	3	2	18	85
Respiratory	327	159	168	112	70	1	1	23	46	69	5	2	1	33	291
Digestive	52	22	30	7	..	..	1	8	17	17	2	2	2	16	32
Urinary	30	21	9	1	1	1	..	3	14	9	1	3	..	4	23
Generative	16	..	16	1	..	..	1	9	2	2	1	..	..	3	13
Locomotory	5	2	3	1	..	..	..	..	1	3	..	..	..	..	5
Integumentary	4	1	3	1	..	1	..	1	1	..	..	..	..	..	4
IV. Developmental. Premature Birth and Low Vitality	55	33	22	55	..	..	..	..	..	..	..	..	..	4	51
Congential Defects	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Old Age	54	19	35	..	..	..	..	..	..	26	28	..	..	6	48
V. Violence	29	16	13	15	2	..	1	3	7	..	1	..	..	..	29
VI. Illdefined and Not Specified: Illdefined	15	8	7	4	..	..	..	4	4	3	0	..	..	2	13
Not Specified	1	..	1	..	..	..	..	..	..	1	..	..	..	..	1
Totals	1395	666	729	448	209	16	35	166	226	245	50	18	9	164	1204

Including all deaths in the Infirmary.

Zymotic Mortality.

The deaths from this class of disease were 234, of which 105 were males and 129 females, and are 17 less than those of the previous year. The greatest fatality was from Whooping-cough, Diarrhœa, and Measles, which collectively gave 200 of the total number. There is compared with last year an increase in Whooping-cough, Measles, and a decrease in Diarrhœa, Typhoid Fever, Child-bed Fever, Scarlet Fever, and Diptheria.

From Fevers other than Scarlet and Measles there were 19 deaths, classified as follows :—

Typhoid or Enteric	9
Puerperal	10
	19

Of the total number 108 were under 1, 88 from 1 to 5 years of age, 13 from 5 to 20, and 25 from 20 upwards. No less than 196 of the total 234 were under 5 years of age.

The following table contrasts all deaths from Zymotic causes during the past 10 years; also the death rate:—

TABLE IV.

Zymotic Mortality in the West Battersea Sub-district.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Small Pox	3	13	2	2	..	4	1	..	2	1
Measles	35	8	34	43	8	50	30	52	42	63
Scarlet Fever	20	8	4	55	30	25	35	26	14	5
Diphtheria	5	2	4	7	3	9	4	2	11	2
Enteric Fever	19	25	15	27	10	10	14	12	20	9
Whooping-Cough	32	18	36	11	23	31	47	46	46	74
Epidemic Diarrhœa	43	22	41	17	61	53	39	64	82	63
Other Zymotic Diseases ..	11	11	14	12	11	16	24	16	34	17
Total Deaths from Zymotic Diseases..	168	107	150	174	146	198	194	218	251	234
Zymotic Death-rate	4·7	2·8	3·8	4·2	2·9	3·8	3·6	3·6	4·0	3·6
Death-rate from all Diseases ..	19·5	17·1	18·5	20·0	16·8	19·0	18·0	18·6	18·8	19·8

Other causes of Death than Zymotic.

From these classes 1161 deaths were returned being 93 in excess of those of last year. There were 212 from Bronchitis;

Pneumonia, 93; Other Lung Diseases, 32; from Circulatory Disease, 108; Brain and Nerves, 178; Digestive Organs, 52; Premature Birth, Low Vitality, 55; Old Age, 54; Cancer, 31; Violence, 29; &c.

Diseases of the Respiratory Organs, Cancer, Premature Birth, Old Age, shows an increase as compared with last, whilst those of the Digestive Organs and Brain and Nerves a slight decrease.

From the Tubercular Class, 239 were returned, viz:—Phthisis, 138; Tabes Mesenterica, 71; Scrofula, 21; and Hydrocephalus, 9. Of those from Phthisis, 27 were under 20; and 111 from 20 to 60 years of age.

The deaths from Old Age were 54 against 45 of last year, the eldest being—females, 90, 90, and 93 respectively; the opposite extreme we find the duration of life to have been in 58 instances, a few days, 19 a few hours, and in 3 a few minutes.

Of the 1,161 deaths, 561 were those of males and 600 of females.

The following table contrasts all deaths from non-zymotic causes during the past 10 years.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Tuberoular, including Phthisis	149	172	143	163	196	210	198	255	236	239
Of Brain, Nerves, &c, ..	119	148	137	136	117	147	173	168	170	178
Of the Heart, &c.	49	55	53	56	72	94	83	85	95	108
Of the Respiratory Organs, excluding Phthisis	160	124	204	260	215	266	272	318	248	327
Of Digestive Organs	19	37	27	27	47	59	59	68	63	52
Of Urinary Organs	13	14	10	20	15	26	21	32	19	30
Of Organs of Generation ..	8	8	3	9	9	14	14	11	12	16
Of Joints, Bones, &c. ..	4	1	2	2	3	15	12	19	12	5
Of Cancer	23	22	23	14	22	21	25	33	17	31
Premature Birth, Low Vitality, Malformation, &c. ..	30	30	31	36	70	37	78	30	33	55
Of Uncertain Seat and other diseases	37	25	29	17	36	27	27	13	39	29
Age	53	47	58	57	35	31	37	64	45	54
Violence	18	23	28	13	23	40	30	20	39	29
Constitutional .. .	4	7	11	16	4	10	6	7	10	8
TOTALS	686	713	751	828	864	997	1028	1123	1068	1161

The causes of death of persons dying without the district will be found in the table following, they were 68 in number.

TABLE III.

Deaths in Outlying Institutions.

WEST BATTERSEA.		Sex.		Age.			Institutions.		
Disease.	Total.	Male.	Female.	Under 1.	1 to 60.	60 and upwards.	Union Infirmary	General & Special Hospitals.	Asylums Board Hospitals.
Small Pox	6	2	4	..	6	..	..	..	6
Scarlet Fever	1	1	..	..	1	..	..	..	1
Typhus Fever	..	..	..	..	..	..	..	..	..
Enteric Fever	2	1	1	..	2	..	..	1	1
Whooping Cough	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases	..	..	..	..	..	..	..	..	..
Tubercular Diseases	10	5	5	..	10	..	..	9	1
Cancer	2	1	1	..	2	..	..	2	..
Rheumatism	..	..	..	..	..	..	..	..	..
Respiratory Diseases	9	7	2	..	9	..	..	9	..
Circulatory Diseases	10	5	5	..	10	..	..	10	..
Nervous Diseases	7	6	1	..	7	..	..	5	2
Other Diseases	18	5	13	2	16	..	..	14	4
Violence	3	2	1	..	3	..	..	3	..
Totals	68	35	33	2	66	..	..	53	15

Those occurring in Institutions within the district are included in the General Mortality table.

Inquests. Enquiries were held on the bodies of 32 males and 23 females, in all 55, being 4 less than those of the previous year. The verdicts were as follows:—

From Natural Causes	30
,, Accidental	20
Found Drowned	2
,, Dead	1
Suicide	2
	55

Of the Accidental causes 2 were killed on the railway, 3 by falls, 2 whilst bathing, 1 by poison, 3 from burns, 6 suffocated in bed.

The suicides were respectively :—

1 by Poison.
1 ,, Drowning.

In addition to the above inquests, 13 cases of sudden death were submitted to the Coroner who did not deem an enquiry necessary.

Of Infants suffocated in bed with their parents there are 6, and occurred on the following dates :—

Tuesday, 27th January.
Sunday, 8th March.
Sunday, 15th March.
Thursday, 11th June.
Saturday, 25th July.
Wednesday, 30th September.

Deaths not Certified.

Under this head the Registrar-General places 17, at the same time as stated above 13 were submitted to the coroner who issued his order for burial, therefore it cannot be said they were consigned to the grave without some enquiry, the remaining four were those of Infants born prematurely whose period of existence was registered by minutes and hours, and whose mothers had been attended by midwives.

Social Position.

The per-centage of deaths, in relation to social position was as follows :—

Nobility and Gentry ..	18	=	1·28
Professional	9	=	·64
Middle and Trading Class	164	=	11·78
Labouring	1204	=	86·3
	1395		100·00

Disease and Mortality among the Union Poor.

The number of cases which came under treatment was 609—277 being males and 332 females, being nearly 100 in excess of those of last year, indeed there has been a steady increase of parochial cases for the last four years, this increase has been in general diseases and Small Pox, 44 cases of the latter having been removed to hospital. Of the total, 29 died giving a death-rate of 4·7 per cent.

Sanitary Matters.

Reference to the table of Sanitary operations will show the large amount of work carried out during the year, the district is now equally divided and an Inspector appointed to each who systematically visits tne houses in his district. No. 3 contains 5,400, No. 4 about 5,000, making a total of 10,400, of which 8,460 a larger number than ever before dealt with, were inspected, and the results inserted in the books.—1,000 first notices were served to remedy defects, of which 797 were at once complied with, in the remainder second notices had to be served, and the Magistrate appealed to in five only for compulsory orders.

A large number of closets were found without any water supply, a condition of things which has no right to exist for very obvious reasons; to 307 water has now been laid on.

Disinfection has been actively carried out and actual destruction of bedding, &c. where necessary, in all 169 houses were disinfected after infectious disease, and in no instance has a second case occurred after its use; the means used are fumigation by sulphurous acid, and judging from results appear in every way satisfactory, though the prevailing opinion of the

present day is that all textures should be disinfected by heat, every person must admit the destroying power of heat, and if the temperature which will destroy the germs of disease is known, then nothing can be more certain in its action. This matter has been recently investigated by Dr. Parsons, one of the Medical Officers of the Local Government Board, who after very exhaustive experiments arrives at the same conclusion.

The following will show under what conditions some persons will live.—F. W———, who carried on the business of gut cleaning, used an adjoining shed as a stable with two stalls, in one was a horse, and in the other (which was used as a living and sleeping room) his wife and five children; thus 7 persons were residing in the stall of a stable with a horse in the adjoining stall, no ventilation or light with the exception of the door. The cubical contents of the whole being 1,560 feet. Proceedings were taken forthwith.

The following, of which examples constantly occur will shew the necessity of legislation in reference to drains of new houses, —Mr. S., Ousely Road complained of an offensive smell in his house, on inspection being made and the drains opened up, it was found that a branch drain which had been brought into the house from the sewer, but not being needed, was left unstopped, so allowing sewer gas to pass freely into the house.

Complaints were made to the Metropolitan Board of Works of the dilapidated condition of houses in Europa Place, they having acquired them for the purpose of the New Bridge, at once demolished them.

Cow and Slaughter-houses were all inspected and the licenses renewed.

Bake-houses are visited twice yearly and all are in good sanitary and cleanly condition.

Mortuary. In August a register was commenced to be kept of all bodies taken into the Mortuary; since that time 29 have been received. There is also a room set aside for post-mortem examinations which can be used by all medical men in the parish.

Throughout the year the Assistaut Inspectors have worked well, under the supervision of Mr. D. Richards, who is a most active officer, and I am pleased to be able to bear testimony not only to the great interest he takes in his work, but also to his knowledge and the tact displayed in carrying out often-times most disagreeable duties.

J. OAKMAN,

Medical Officer of Health for West Battersea.

CLAPHAM.

It is with much satisfaction that I present the following report of the sanitary condition of this sub-district during the year 1885.

During the period under report, the health of Clapham, as tested by various criteria has been most satisfactory.

(*a*) The death-rate has been lower than at any previous recorded period, and this notwithstanding the fact that the density of the population of Clapham is steadily increasing. The death-rate was in fact lower than that of most of the healthy rural districts.

(*b*) The deaths from Infectious and such like diseases, (classed together under the name *Zymotic*) were much below the average. The zymotic death-rate was lower than it has previously been known to be; and we may reasonably infer that infectious diseases were prevalent only to a small extent. Special stress may be laid on

this low zymotic death-rate, as zymotic diseases are *par excellence* preventible diseases, and those with which therefore sanitarians are particularly concerned.

In the following pages details are given of the vital statistics and sanitary work of the past year, from which a more complete knowledge of the sanitary condition of Clapham may be obtained.

Population. The first requisite in ascertaining the various rates of mortality and vitality, is an accurate knowledge of the popula'ion. Owing to our being midway between two census enumerations this is impossible; but in the following estimate the plan adopted by the Registrar General is followed. Assuming the rate of increase to be the same as in the decade previous to the last census the population of this sub-district in the middle of 1885 was 40,832.

Births and Birth-rate. The number of births registered was 1,030, of which 511 were males and 519 females. The annual birth-rate was 25·22 per thousand of the estimated population, which (see table I.) was the lowest for ten years. The birth-rate for the whole Metropolis was 32·6 per thousand, the lowest rate on record since 1850.

Deaths and Death-rate. During the year 1885, 508 deaths, 237 of males and 271 of females, were registered in the sub-district. These are equivalent to an annual death-rate of 12·44 per thousand, the lowest hitherto recorded in Clapham. (See table). The death-rate for

the whole of London was, during the same period, 19·7 per thousand inhabitants, and for the twenty-eight great towns of England and Wales in the proportion of 20·5 per thousand inhabitants.

The *natural increase* of the population of Clapham, *i e.*, the excess of births over deaths was 521, giving a rate of 12·7 per thousand.

TABLE I.

Birth and Death-rates.

YEARS.	Births.	Birth-rate.	Deaths from all Causes.	Death-rate.	Rate of Natural Increase.
1876 ..	1,095	34·3	545	17·7	15·8
1877 ..	1,029	32·4	467	14·8	18·5
1878 ..	1,019	34·2	580	18·1	15·9
1879 ..	1,125	34·1	561	17·0	17·0
1880 ..	1,082	29·7	544	14·9	15·1
1881 ..	1,059	28·9	499	13·5	15·3
1882 ..	1,081	28·8	544	14·5	14·3
1883 ..	1,085	28·25	580	15·1	13·1
1884 ..	1,123	28·32	543	13·7	14·6
1885 ..	**1,030**	**25·22**	**508**	**12·44**	**12·7**

Deaths in Out-lying Institutions

The deaths already enumerated do not include those of inhabitants of this sub-district who have died in out-lying institutions, such as the Union Infirmary, the Asylums Board Hospitals for Infectious Diseases, and the General and Special Hospitals of the Metropolis. In the following table, these additional deaths, 77 in number, are arranged so as to shew the causes of death, age and sex of patients, and character of the Institution in which they died.

TABLE II.

Deaths in Outlying Institutions.

DISEASE.	Total.	Sex. Male.	Sex. Female.	Age. Under 1	Age. 1 to 60.	Age. 60 and upwards.	Institutions. Union Infirmary	Institutions. General & Special Hospitals.	Institutions. Asylums Board Hospitals.
Small-pox	4	3	1	..	4	..	..	..	4
Scarlet Fever	..	..	..	..	..	..	..	..	..
Diphtheria	2	2	..	..	2	..	..	2	..
Enteric Fever	2	2	..	..	2	..	..	1	1
Whooping-Cough	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases	2	2	..	..	2	..	..	2	..
Tubercular Diseases	9	7	2	..	9	..	2	7	..
Cancer	5	3	2	..	2	3	3	2	..
Rheumatism	..	..	..	..	..	..	..	..	..
Respiratory Diseases	6	3	3	2	4	..	2	4	..
Circulatory Diseases	14	7	7	..	6	8	9	5	..
Nervous Diseases	15	10	5	..	8	7	8	7	..
Other Diseases	17	4	13	2	5	10	11	6	..
Violence	1	1	..	..	1	..	..	1	..
TOTALS	77	44	33	4	45	28	35	37	5

It will be seen that 35 of the external deaths occurred in the Wandsworth & Clapham Union Infirmary, 37 in the various hospitals, and only 5 in the Asylums Board Hospitals. If these 77 deaths be added to the 508 occurring in Clapham, the death-rate becomes 14·32 per thousand living, as compared with 16·27 in the preceding year. This remarkably low inclusive death-rate bears out the conclusion already stated, of the excellent vital condition of this sub-district during the past year.

Deaths occurring in Clapham.

The following table gives a summary of all the deaths registered as occurring in this sub-district during the past year, classified according to cause, sex, and social position; and a more detailed list of the deaths from zymotic diseases.

TABLE III.

STATISTICS OF MORTALITY.

CLAPHAM. Population (Census) 1881 ... ... 36,380. Official Population in middle of 1885 40,832. Area in Acres, 1233.		Total Deaths from each Class of Disease, &c., in the sub-district.	Sex.		Age.								Social Position.			
CAUSES OF DEATH.			Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Nobility and Gentry.	Professional Class, Merchants, Bankers, &c.	Middle and Trading Class, Shopmen, Clerks, &c.	Industrial and Laboring Classes.
I. Zymotic.	Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles	3	2	1	..	3	..	..	..	..	..	..	..	..	1	2
	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Enteric Fever	8	4	4	..	2	..	2	3	1	..	..	..	3	1	4
	Puerperal Fever	3	..	3	..	..	..	1	2	..	..	..	..	..	2	1
	Diphtheria	4	2	2	..	3	1	..	..	..	..	..	..	..	2	2
	Whooping-Cough	25	9	16	10	15	..	..	..	..	..	..	..	2	9	14
	Erysipelas	2	..	2	..	..	..	1	..	..	1	..	..	..	..	2
	Diarrhœa, Dysentery, and Cholera	16	13	3	11	3	..	..	..	1	1	..	..	1	5	10
	Other Zymotic Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Totals of Zymotic Class	61	30	31	21	26	1	4	5	2	2	..	..	6	20	35
II. Constitutional.	Gout and Rheumatism	3	2	1	..	..	..	..	2	1	..	..	..	..	2	1
	Cancer & other Tumours	16	4	12	..	1	..	..	1	7	7	..	1	2	7	6
	Tubercular Phthisis	48	27	21	1	2	..	7	26	11	1	..	3	6	24	15
	Tubercular Tabes Mesa	7	4	3	3	3	1	..	..	..	..	..	1	..	3	3
	Tubercular Hydrocephalus	10	3	7	4	3	3	..	..	..	..	..	..	..	3	7
	Tubercular Scrofula	3	2	1	1	..	..	1	1	..	..	..	..	1	1	1
	Other Constitutional Diseases	1	..	1	..	1	..	..	..	..	..	..	..	..	..	1
III. Local.	Nervous	80	40	40	15	5	2	2	6	17	28	5	5	11	34	30
	Circulatory	40	13	27	1	..	..	2	7	10	19	1	5	6	15	14
	Respiratory	120	58	62	35	20	4	1	7	21	28	4	5	13	31	71
	Digestive	30	13	17	7	1	..	..	4	7	11	..	2	4	15	9
	Urinary	6	5	1	..	..	..	..	1	3	2	..	..	2	3	1
	Generative	7	..	7	..	..	..	..	4	2	1	..	..	1	2	4
	Locomotory	1	..	1	..	1	..	..	..	..	..	..	..	..	1	..
	Integumentary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV. Developmental.	Premature Birth & Low Vitality	29	18	11	28	1	..	..	..	..	..	..	..	2	7	20
	Congenital Defects	7	6	1	7	..	..	..	..	..	..	..	..	..	6	1
	Old Age	31	9	22	..	..	..	..	..	..	14	17	1	6	12	12
V. Violence		8	3	5	2	..	..	..	1	4	1	..	..	..	6	2
VI. Illdefined and Not Specified	Illdefined	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Not Specified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals		508	237	271	125	64	11	17	65	85	114	27	23	60	192	233

Ages at Death. 42·8 per cent. of the total deaths occurred at various ages below 20 years, 24·5 per cent. being under 1 year, and 12·8 per cent. between 1 and 5. In the preceding year 53 per cent. of the total deaths occurred at ages below 20, 33 per cent. under 1 year, and 14·3 per cent. below 1 and 5 years.

The proportion of deaths under 1 year to total deaths obviously will vary with the birth-rate. The larger the number of children of this age, and the greater the incidence of the causes of infantile mortality. It is therefore desirable to check the previous percentage of deaths under 1 year, by ascertaining the proportion of deaths of infants in the first year of life to registered births during the year, known as the *Infantile death-rate.* In Clapham this was 120 per thousand births, as compared with 160 in the preceding year, and with 148 for the whole Metropolis during 1885. The diminution in infantile mortality was largely due to the smaller mortality from zymotic diseases at this age, 21 as compared with 39 in the previous year.

Senile Mortality. The deaths of persons over 60 years formed 29 per cent. of the total deaths, as compared with 23·6 per cent. in the previous year. 29·4 per cent. of the total deaths occurred between 20 and 60 years of age, as compared with 23·5 per cent. in the previous year.

These statements of the relative percentages of deaths at different groups of ages, can only be regarded as satisfactory so long as it is assumed that the relative proportion of people living at each age remains stationary from year to year. An increase of the relative number at any age, as by migration or an altered birth-rate, would increase the number of persons subject to the causes of death at the age in question, and so would increase the

percentage of deaths at that age as compared with the total deaths. The only way to avoid this fallacy is to ascertain the number dying at each group of ages from the death returns and the number living at each group of ages from the census, and then calculate the true death-rate for each separate group of ages. Unfortunately the number living at different ages can only be known by the decennial census, and in the interval one must be content with approximate calculations. An example of the results obtained from the last census is given in Table J of the Introductory Report at page 17.

Social Position of Deceased.

The relative number of deaths in the several social grades was as follows:—

Nobility and Gentry	23	=	4·5 per cent.
Professional Class	60	=	11·8 ,,
Middle and Trading Class ..	192	=	37·8 ,,
Industrial and Labouring Class ..	234	=	45 9 ,,

In the absence of knowlege of the living population belonging to each class, the true death-rate for each separate class is unobtainable. By comparing the percentage of total deaths with the percentage of deaths from zymotic diseases in each class a further indication of value may however be obtained. The total deaths from zymotic diseases were 62, of which none occurred in the first class, 9·6 per cent. in the second, 32·2 per cent. in the third, and 58·2 in the fourth. It will be seen that the proportion of zymotic disease in the industrial class was excessive, a fact in accordance with general experience.

Zymotic Diseases.

The following table gives the number of deaths from specific febrile diseases, as compared with previous years, and a similar comparison of zymotic and general death-rates.

The zymotic death-rate was 1·49 per thousand of the population, a lower rate than has been previously recorded. If the ten deaths from infectious disease occurring in outlying institutions be included, the zymotic death-rate becomes 1·73 per thousand, which is still very much lower than that for the whole of London.

TABLE IV.

Zymotic Mortality in Clapham.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Small-pox ..	14	12	3	..	2	7	1	..	2	..
Measles ..	13	5	23	17	19	10	15	33	33	3
Scarlet Fever ..	13	4	12	12	21	15	26	8	3	..
Diphtheria ..	..	..	3	1	3	3	4	7	8	4
Enteric Fever..	5	4	5	9	4	3	7	3	4	8
Whooping-Cough ..	17	12	29	25	25	13	17	16	15	25
Epidemic Diarrhœa ..	24	18	26	17	36	20	4	19	18	16
Other Zymotic Diseases ..	16	9	9	21	9	7	7	26	12	5
Total deaths from Zymotic Diseases	102	64	110	102	119	78	81	112	95	61
Zymotic Death-rate ..	3·3	2·0	3·4	3·1	3·4	2·1	2·1	2·9	2·3	1·49
Death-rate from all Diseases..	17·7	14·8	18·1	17·0	14·9	13·5	14·5	15·1	13·7	12·4

An examination of the preceding table shews that no deaths occurred from *Small-pox* in the sub-district. Between January 30th 1885 and the end of the year, 21 cases of Small-pox were admitted into the Metropolitan Asylums Board Hospitals from this sub-district, of which 4 died.

Measles proved fatal only in 3 cases, as compared with 33 in the previous year; but *Whooping-cough* caused 25 deaths as compared with 15 in the previous year.

No death occurred from *Scarlet Fever*, and none in outlying institutions, though 18 cases were admitted into the Asylums Board Hospitals from Clapham. The persistent decline of Scarlet Fever in the Metropolis, which has continued for more than ten years, has been made the subject of remark by the Registrar General in his Annual Summary; and he suggests as a possible explanation the increasing use of hospitals for cases of this disease, involving as this does, improved isolation. During the year 1878 the proportion of the total deaths from Scarlet Fever which occurred in the Metropolitan Asylums Hospitals was 5 per cent.; in the three years 1879-81 from 7 to 8 per cent.; in 1882 it rose to 9·3, in 1883 to 11·4, in 1884 to 16·4, and finally in 1885 to 19·2 per cent. These figures indicate a steadily increasing use of the Asylums Board Hospitals by those suffering from Scarlet Fever; while at the same time there is a steady decrease of deaths from Scarlet Fever in London.

Diphtheria was the cause of 4 deaths in the sub-district, and 2 in outlying institutions; *Enteric Fever* of 8 in the sub-district, and 2 in outlying institutions. As these diseases appear to be more intimately connected with sanitary defects than others, a special investigation was made in each of the above cases. The result is shewn below.

Fatal Cases of Enteric Fever.

Place of Death.	Remarks.
South Side, Clapham Common.	Drains defective and partially choked. W.C. defective.
Union Street.	Numerous complaints of smell from street grating opposite the house. No defects of house drainage.
Chelsham Road.	Waste pipe of bath directly connected with soil-pipe. Kitchen sink untrapped.
Westbury Street.	No Sanitary defects. A doubtful case.
Queen's Place, Wandsworth Road.	Cause undetected. No sanitary defects in house.
Lysias Road.	Said by the medical attendant to be a doubtful case, and he subsequently stated it to be scarlet fever.
Clapham Park Road.	Origin could not be traced.
Union Road.	Worked at Bromley until taken ill, and died in Stockwell Hospital.
Pickett Street.	A doubtful case.
Peardon Street.	Certificate stated Gastric Fever and Pneumonia; and there is no reason to think the case was true Enteric Fever.

Fatal Cases of Diphtheria.

Place of Death.	Remarks.
Beaufoy Road, Wandsworth Road.	A doubtful case.
Avenue Road, Wandsworth Road.	In the scullery, which was used as a living-room, only a bell-trap separated the sink from the drain, and when the trap was removed, there was a powerful up-current and smell.
Peardon Street, Wandsworth Road.	Cause undetected.
Oldridge Road.	Cause undetected.
Rectory Grove.	Cause undetected.
Wirtemberg Street.	During 15 years in which the house had been occupied by the same family, 12 non-fatal and 1 fatal case of Scarlet Fever had occurred. Also 2 deaths from Diphtheria, and repeated attacks of sore throat. Over £200 had been paid to doctors. From a closet in back-yard ran a pipe drain under the house to sewer. Defective and open joints had already been discovered in this. The rain-water pipe entered it without trapping, and its defective joints ventilated into bedroom windows. On disconnecting the stack-pipe, a disused brick drain was discovered, one end of which was connected with the pipe drain and the other ended in a *cul-de-sac* close to kitchen door.

It is not pretended that in every instance where sanitary defects were detected, these were proved to cause the Enteric Fever or Diphtheria. It is usually most difficult to prove the relation of cause and effect. But in the last instance in the table, the prevalence at intervals for nearly fifteen years of Scarlet Fever, Diphtheria, Ulcerated Throats and general ill health, along with defective house drainage leaves little doubt as to the true relation between these.

Epidemic Diarrhœa caused 16 deaths as compared with 18 in the previous year.

Deaths from Non-zymotic Diseases.

The general table on page 59 details the causes of death and their relative numbers. Respiratory diseases stand at the head of the list, causing 23·6 per cent. of the total deaths (18 per cent. in the previous year); while Nervous diseases caused 15·7 per cent. (12·9 in previous year); Tubercular diseases 7·9 per cent.; and Digestive diseases, Developmental and other diseases smaller numbers of deaths.

Inquests.

Nineteen inquests were held during the year, and the following verdicts returned:—

1.	*From Natural Causes*			9
2.	*Accidental*—Suffocation by over-laying		1	
	Apoplexy from fall down stairs		2	
	Concussion from fall down stairs		2	— 5
3.	*Suicidal*—Cut-throat		1	
	Hanging		1	— 2
4.	*Homicidal*—Cut-throat		1	— 1
5.	*Open Verdicts*—Found drowned ..		1	
	Found drowned, probably suicide ..		1	— 2
		Total		19

No uncertified deaths occurred in the sub-district during the year.

Sanitary proceedings of the year.

During the past year 3,441 houses and premises have been inspected, as compared with 2,270 in the previous year. The thoroughness of this inspection may be gathered from the fact that in 1,517 instances notices required to be served to remedy sanitary defects. In nearly a thousand cases these notices were within a reasonable time complied with; but in 532 instances, second notices were required; and of these 21 were finally brought before the Magistrate to enforce the carrying out of the necessary work. The investigation of the result of first and second notices required frequent visits of the Inspectors, which are not included in the 3,441 total inspections standing at the head of Table IV. in Appendix.

A study of this Table (page 117) will bring out the detailed sanitary work which is being done in this sub-district. It will be seen that in 1,120 instances syphon traps were fixed to the drains of houses already occupied; 497 sinks and 135 bath and lavatory-wastes were altered to discharge over gullies; 184 rain-water pipes were disconnected from drains; 200 water-closets had a water-supply laid on to them; 261 yards were drained and paved; 203 leaky house-roofs and gutters were repaired; 548 water cisterns were covered and repaired; and 143 cistern overflow-pipes were disconnected from drains. Ten wells were closed, and attention is particularly called to Dr. Muter's weighty remarks at page 109 (which apply particularly to Clapham).

Two hundred and sixty-two "unclassified" nuisances were removed, which included 65 defective water-fittings, 10 closets ventilated or rebuilt, 78 water-closet air pipes removed from inside cisterns, 24 closet windows made to open, 37 ventilating-pipes altered or repaired, 24 new ventilating-pipes constructed to house-drains, &c., &c.

All the Bake-houses and Slaughter-houses have been inspected as usual during the past year and found in a good sanitary condition. I have also personally inspected all the Cowsheds in the sub-district, the condition in none of them being such as to justify withdrawal of their licenses. It cannot but be regarded as unfortunate that the Cow-houses and Dairies are supervised by Inspectors of the Metropolitan Board of Works and not of the Local Authority. It is generally acknowledged that Bakehouses have greatly improved in sanitary condition since their inspection was resumed by the Local Authority; and there can be little doubt that the same result would follow if Cowsheds were transferred to the control of the Local Authority. In one respect the change would be especially hopeful. The Inspectors of the Local Authority would be much more likely to know of the existence of Scarlet Fever or similar diseases in the family of those employed in the Dairy, and thus mysterious outbreaks of disease might be prevented.

I have in conclusion to congratulate the Clapham Committee on the efficiency of its staff of Inspectors, which leaves nothing to be desired in this respect. Mr. Southam has on all occasions most cordially co-operated with me; and the staff of Assistant-Inspectors has been greatly strengthened by the appointment of Mr. Dee, who holds honours certificates of competency from the Sanitary Institute and the City ot London Guilds. Mr. Fairchild, the Senior Assistant-Inspector, holds the highest honours and medals of the same Institutions; and I have proved in repeated instances his skill and technical knowledge, as well as his tact and urbanity in dealing with householders.

ARTHUR NEWSHOLME, M.D.,

Medical Officer of Health for Clapham.

PUTNEY AND ROEHAMPTON.

The very favourable report which I was able to present regarding the health of this sub-district during the year 1884, is excelled in the most unexpected manner by that which I am about to offer upon the public health during the year 1885. Indeed, I think it would be a very hard matter to find any urban or even rural district with so low a death-rate. We have of course the advantage of increasing knowledge of epidemic and other diseases and of the means and modes of meeting them, but on the other hand, we have to face increasing density of population and all the perils of a stupendous sewer system, of which we have the misfortune to be at the fountain-head. It speaks well for the care and energy of the sanitary authorities, as well as for the natural advantages of position, soil, and climate, that a report which can be described as the most favourable ever presented should be in my power to make.

Population. The growth of London suburbs is such, that the rate of increase which occurred during one decade (say 1871-81) cannot apply to that of the next decade (1881-91), yet for the sake of uniformity and in the absence of an annual census, we must suppose

that it does. The population in the middle of 1885 according to that estimate is 14,830. This is undoubtedly too low.

Births and Birth-rate. During the year 1885, 322 children were born in this sub-district, 169 boys and 153 girls. The birth-rate is 21·7 per 1,000 per annum. This rate is undoubtedly very low, being 10·9 under the birth-rate of London and 11·8 under that of the chief towns of England. In poorer neighbourhoods it is not uncommon to get a birth-rate twice as large, shewing that the better classes are either less prolific or more provident.

Deaths and Death-rate. The number of deaths known to have occurred during the year 1885 only reached the modest total of 167. Of these 93 were of males and 74 of females. The death-rate is only 11·2 per 1,000 per annum, 8·4 lower than that of London and 9·3 lower than that of the chief towns. In the table below (Table I.) will be found the births and deaths with their rates for the last ten years, and it will be seen how low the past year stands even compared with our small mortality rates. Only one year (1881) comes near it, the average death-rate being 14·2. There are no towns the death-rates of which are given in the Registrar-General's summary for 1885 with so low a rate. It is an interesting (and to residents or intending residents important) point how far the death-rate of a place may represent the amount of general illness among the population. Unless that death-rate is unduly exalted by the presence of some wide-spread disease (such as an epidemic) I feel sure for practical purposes that the fatal cases are a very fair means of estimating the state of the public health. This view is borne out by the very uniform number of fatal

cases among the non-epidemic and non-accidental classes of disease. As a semi-urban and river-side locality, we have a state of the public health more favourable than most rural and elevated districts, and I cannot but think this is partly due to increasing watchfulness on the part of the sanitary authorities over the details of sanitary work (see page 117, Appendix).

TABLE I.

Birth and Death Rates.

YEARS.	Births.	Birth-rate.	Deaths from all Causes.	Death-rate.	Rate of Natural Increase.
1876 ..	300	27·3	143	13·0	14·3
1877 ..	351	31·1	170	15·0	16·0
1878 ..	338	29·1	186	16·0	13·1
1879 ..	327	27·4	179	15·0	12·2
1680 ..	347	27·3	177	13·6	13·2
1881 ..	340	25·5	167	12·5	12·9
1882 ..	361	26·3	208	15·1	11·1
1883 ..	349	24·7	24	17·1	7·6
1884 ..	377	25·3	199	13·7	11·6
1885 ..	322	21·7	167	11·2	10·4

The rate of natural increase (excess of births over deaths) was 10·4 per 1,000.

The following table (II.) gives the deaths tabulated according to their causes, sex, age, and social position.

It follows the sy-tem of the Registrar-General and is almost identical with that which I have used for some years. Though much abridged from the Registrar's it represents all that is important in the mortality statistics with which we have to deal.

TABLE II.

PUTNEY AND ROEHAMPTON.

Population (Census) 1881 13,221.

Official Population in middle of the year 1885 14,830.

CAUSES OF DEATH.	Total Deaths from each Class of Disease, &c., in the Sub-District.	Sex.		Age.								Social Position.			
		Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Nobility and Gentry.	Professional Class, Merchants, Bankers, &c.	Middle & Trading Class, Shopmen, Clerks, &c.	Industrial and Labouring Classes.
I. Zymotic.															
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	4	3	1	..	3	1	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	5	3	2	..	..	..	1	3	..	1	..	1	1	1	2
Puerperal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	3	..	3	..	2	1	..	..	..	..	..	..	1	..	2
Whooping Cough	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa, Dysentery, and Cholera	4	4	..	4	..	..	..	..	..	..	..	..	1	..	3
Other Zymotic Diseases	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Totals of Zymotic Class	18	12	6	6	5	2	1	..	..	1	..	1	3	1	13
II. Constitutional.															
Gout and Rheumatism	1	1	..	..	..	..	..	..	..	1	..	..	1	..	..
Cancer & Other Tumours	8	4	4	..	..	..	..	1	1	6	..	..	5	1	2
Other Constitutional Diseases	2	..	2	1	.	..	..	..	..	..	1	..	..	..	2
Tubercular Phthisis	19	9	10	3	..	1	1	9	4	1	..	..	..	5	14
Tubercular Tabes Mesa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tubercular Hydrocephalus	6	2	4	2	3	..	1	..	..	..	..	..	1	3	2
Tubercular Scrofula	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III. LOCAL.															
Nervous	26	15	11	15	3	..	..	2	3	5	..	1	1	8	16
Circulatory	17	12	5	2	..	..	2	..	2	11	1	5	3	3	6
Respiratory	29	14	15	6	5	1	..	3	4	8	2	1	2	6	20
Digestive	13	7	6	1	..	1	..	2	5	4	..	1	1	4	7
Urinary	6	4	2	..	..	1	..	..	4	1	..	..	2	3	1
Generative	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..
Locomotory	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..
Integumentary	1	..	1	..	..	..	..	1	..	..	.	..	..	..	1
IV. Developmental.															
Premature Birth and Low Vitality	6	3	3	6	..	..	..	..	..	..	..	..	1	3	2
Congenial Defects	3	2	1	3	..	..	..	..	..	..	..	..	..	1	2
Old Age	7	4	3	..	..	..	..	..	..	4	3	2	1	1	3
V. Violence	4	4	..	..	..	..	..	2	2	..	..	..	..	2	2
VI. Illdefined and Not Specified — Illdefined	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
VI. Illdefined and Not Specified — Not Specified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	167	93	74	43	16	6	5	24	25	43	7	12	21	41	93

Zymotic or Epidemic Diseases.

The amount of epidemic disease which proved fatal in this sub-distaict du ing 1885 was very small. The proportion of deaths from these diseases was only 1·2 per 1,000. There is no single disease which we could say tended to become wide-spread in the community. Diphtheria which had been prevalent in some districts only appeared in isolated cases. Enteric fever was also restricted to the first sufferers. As a district, we are favourably situated to resist invasion of epidemic disease from neighbouring localities. We are isolated from all save Wandsworth, with which our point of contact is limited to one street. The river on the north (an excellent barrier) and open commons on the south and west afford great protection to us from aerial infection.

The table below (III.) gives a retrospect of the chief zymotic diseases during the last ten years (76-85). During the past year it will be seen that we have been happily fortunate.

TABLE III.

Zymotic Mortality in the Putney sub-district.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Small-pox ..	1	..	1	..	..	..	..	..	1	..
Measles	1	2	7	..	..	6	13	2	1	4
Scarlet Fever ..	3	6	..	3	1	8	4	7	..	..
Enteric Fever ..	..	4	1	2	4	1	4	2	10	3
Diphtheria ..	..	1	1	..	..	1	29	24	..	5
Whooping-cough	7	..	4	8	9	3	8	2	8	1
Epidemic Diarrhœa ..	7	7	10	7	10	3	5	5	8	4
Other Zymotic Diseases ..	3	2	12	7	1	5	6	2	..	1
Total Deaths from Zymotic Diseases	22	22	36	27	25	27	69	44	28	18
Zymotic Death-rate	1·9	1·8	2·9	2·1	1·9	2·0	5·0	3·1	1·9	1·2
Death-rate from all Diseases ..	13·0	15·0	16·0	15·0	13·6	12·5	15·1	17·1	13·7	11·2

Constitutional and Other Diseases.

There is nothing of note to mention regarding these classes. Tubercular and respiratory diseases as usual show the unvarying pre-eminence they have obtained in the English climate. They constitute one third of the total deaths from all causes. Many nervous (*e.g.*, convulsions) and other diseases bear a relation to the tubercular class not often noted, and go to show how important a part that deadly disease plays in cutting our lives prematurely short.

Table IV. gives the ten years retrospect of the diseases of these classes.

TABLE IV.

	Years.	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
C	Gout & Rheumatism	..	..	3	1	4	4	4	5	5	1
C	Cancer & Tumours	..	..	7	3	6	1	6	8	5	8
C	Tubercular	26	26	32	23	18	17	12	21	24	25
	Nervous	26	29	28	34	33	21	33	34	39	26
L	Circulatory	6	8	12	13	13	14	12	14	11	17
L	Respiratory ..	23	2)	37	42	27	24	29	30	31	29
L	Digestive	5	12	10	9	13	17	15	15	12	13
L	Urinary	7	11	2	4	6	2	6	6	10	6
L	Generative	1	2	..	1	..	2	2	4	1	1
L	Locomotory ..	1	2	..	..	..	..	..	..	..	..
L	Integumentary ..	..	1	..	2	1	1	1	..	2	1
D	Premature Birth, Atrophy, &c. ..	10	8	7	8	16	18	7	17	13	9
D	Old Age	8	8	7	5	9	6	5	10	7	7
V	—Violence	7	9	5	7	6	13	7	15	11	4
	(Other diseases) ..	1	3	..	..	..	..	..	..	..	2
	Totals ..	121	148	150	152	152	140	139	196	171	149

Ages of the Deceased.

Among young children the mortality of the year 1885 is not so high as in some years and some districts. This is due to the fact that greater care and better surroundings protect infantile life among the well-to-do from those dangers which ignorance, vice, and sometimes crime cause to

beset the children of the poor. Still it is too high, for 43 deaths or a per centage of 25·6 of the total deaths occurred among children under one year. Death at the other extreme of life was somewhat heavier still, for 50 persons upwards of 60 years died during the year. This yields a per centage of nearly 30 of the total mortality, of these 31 were 70 years and upwards, of which 15 were males and 16 females. There were 7 upwards of 80, 2 males and 5 females.

Social Position.

The social status of the deceased may be represented as follows:—

Nobility and Gentry	7·2
Professional and Merchant	12·6
Middle, Tradesmen, &c.	24·5
Industrial	55·7
	100·0

Inquests.

The number of inquests held in this sub-district during 1885 was unusually small, viz.:—eight. They may be classified according to the verdicts as follows:—

I. Natural.—Heart Disease, 1; Acute Peumonia, 1; Syncope, 1; and Convulsions, 1.
II. Accidental.—Drowning, 1.
III. Suicidal.—Hanging, 2; Shooting, 1.

It is a matter of much satisfaction that only one death from drowning should have occurred during an entire year in our popular stretch of river. It is not unusual to have six or even nine deaths from this cause in a year. From the bridge building and other causes the dangers of the river are at present increased, and so favorable a report would hardly have been expected.

Deaths in Public Institutions.

In 1885, 29 persons died in various public institutions, who claimed on more or less reliable data to belong to this sub-district. Some of these we of course admit as genuine parishioners, viz:—those resident or recently resident in the parish, but persons for years inmates of an infirmary or asylum, or those who have only a casual relation to the district can hardly be allowed to affect our mortality statistics. The following Table (V.) classifies these deaths under the more important causes of death. Three were cases

of infectious disease,—Small-pox, Scarlet Fever, and Diphtheria. The first two were removed to the Asylums Board Hospitals, and the last to one of the General Hospitals. The majority were cases of constitutional or local disease, and a large proportion died in the Union Infirmary, where presumably they had spent some time previous to their decease.

The total death-rate inclusive of these 29 deaths would be 13·2 per 1,000, and the zymotic mortality 1·4 per 1,000 per annum.

TABLE V.

Deaths at Outlying Institutions.

DISEASE.	Total.	Sex.		Age.			Institutions.		
		Male.	Female.	Under 1.	1 to 60.	60 and upwards.	Union Infirmary.	General & Special Hospitals.	Asylums Board Hospitals.
Small-pox ..	1	1	..	..	1	..	..	..	1
Scarlet Fever ..	1	..	1	..	1	..	..	..	1
Diphtheria ..	1	..	1	..	1	..	..	1	..
Enteric Fever ..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases ..	..	..	..	..	..	..	..	..	..
Tubercular Diseases ..	5	3	2	..	4	1	1	4	..
Cancer	2	1	1	..	2	..	..	2	..
Rheumatism ..	..	..	..	..	..	..	..	..	..
Respiratory Diseases ..	4	3	1	..	3	1	3	1	..
Circulatory Diseases ..	4	3	1	..	3	1	3	1	..
Nervous Disease	6	6	0	..	4	2	3	4	..
Other Diseases	5	1	4	1	2	2	2	3	..
Violence ..	..	..	..	..	..	..	..	..	..
Totals ..	29	18	11	1	22	6	11	16	2

Sanitary Proceedings.

A long and apparently crowded table will be found in the Appendix (page 117) of the Sanitary operations carried out under the Surveyor and Inspector of Nuisances during the year. In many instances the Medical Officer of Health is called upon to assist these officers in their labours and takes a continued and lively interest in their duties. The change of system recently inaugurated of having a personal inspection of the drains of all houses, especially the smaller and more quickly and frequently dilapidated property, has done much good and will do more. Four thousand houses have been inspected during the year,—a number in excess of our total of inhabited houses because several of them have been repeatedly examined—and a variety of defects more or less important revealed. As the wise saying "Take care of the pence and the pounds will take care of themselves" applies to money-getting and keeping; so "Take care of the small defects and the greater ones will find their own remedy" applies to Sanitary work. It is not pretended that this Sanitary inspection is *thorough*, and it is well the public should be guarded against supposing that any house is perfectly safe because no fault has been discovered. Neither the public purse nor the pockets of the residents are equal to a thorough testing examination (as it means taking up drains, flooring, &c.) but as far as they can be seen and examined without such expense, the sanitary arrangements of the house are examined and the owner or occupier advised upon them. This meets the case in the vast majority of instances, but on the occurrence of infectious disease a closer inspection is recommended. It is a matter of satisfaction to find that on the whole the inspection is not met in a hostile spirit as an infringement of private rights but is generally and

increasingly welcomed as an honest attempt to carry out the intention of all sanitary legislation—the protection of life and health.

In most cases the verbal suggestion or first written notice serves to have any defect remedied. First notices were issued to the number of 370, and in all but 15 no second notice was required. Only one case had to be brought to the notice of the magistrate and a compulsory order obtained and complied with. It is but right to say however that many glaring faults were found, which, though detrimental to health, could not be remedied owing to insufficient legislative power. I specially refer to overcrowding, to dilapidations (especially those causing damp), and to bad sanitary apparatus. Regarding the first mentioned, we can only interfere in the case of two families occupying one house and when the *total* air space of the house is deficient, regardless of the number of people occupying *one* room say at night or during the day. In the second the wall of a house may be streaming with moisture and the only remedy is to leave the house. In the third case we have no power to abolish pan-closets, D-traps, and bell-traps, though we are convinced that they are usually injurious to health.

The removal of Dust is a very important branch of sanitary work. I believe it will never be satisfactorily accomplished until it is done by the Sanitary Authorities themselves. I cannot see why the daily removal of house-refuse at an early hour in the morning could not be accomplished as done in Edinburgh and many other

cities and towns. We would not only get rid of the unsightly and often offensive dust cart at all hours of the day in our streets, but could forbid the accumulations of garbage now permitted in the immediate neighbourhood of our houses under the present system of removal.

ALEXANDER WALKER, M.D.,

Medical Officer of Health for Putney & Roehampton.

STREATHAM,

INCLUDING

BALHAM AND TOOTING.

It is with great satisfaction that I am enabled to give a very favourable report of the health of this sub-district during the year 1885.

The total mortality was considerably below that of the previous year, whilst the death-rate was below the average death-rate of the last ten years. The total mortality from Zymotic diseases was also below the average, and the death-rate from these diseases is only ·1·1 per thousand, the lowest recorded during the decade.

No death occurred from either Small-pox or Scarlet Fever, nor did any of the diseases in the Zymotic class become at any time epidemic. These facts alone point to a high standard of health, and are sufficient evidence of the care and vigilance of those entrusted with the direction and carrying out of sanitary measures.

The following statistics will, I believe, corroborate these observations and shew more fully the state of the public health in Streatham and Tooting during the year 1885.

Vital Statistics.

Population. According to the official estimate, which assumes an increase of population in the same ratio as obtained in the ten years previous to the last census—the population of Streatham and Tooting in the middle of the year 1885 would be 30,280. I have reason to believe that the population has increased in a higher ratio than prevailed in the decade ending 1881. A large number of new houses have been built since then, and the births have increased in such proportion as to show that there has been a very considerable accession to the population from immigration. This increase is not shown in the official mode of calculation, but it ought to be noticed, as the death-rate is unduly augmented in consequence.

Births and Birth-rate. The number of births registered during the year was 1,078; 525 were of males, and 553 of females.

The birth-rate calculated from the total number of births and the foregoing estimate of the population was 35·6 per thousand persons living during the year, as compared with 39·2 per thousand in the previous year.

Natural Increase. The excess of births over deaths represents the natural increase. The excess this year is 717, giving a ratio of 23·6 per thousand of the population.

Deaths and Death-rate.

The total number of deaths registered during the year was 423, a diminution of 22 on the number registered in 1884. Of these deaths 197 were those of males, and 226 those of females. The death-rate calculated from the total number of deaths, and the official estimate of the population, was 13·9 per thousand persons living during the year. This is below the decennial average, and when the increased density of the population is considered it is a very low one.

TABLE I.

Births and Death Rates.

YEARS.	Births.	Birth-rate.	Deaths from all Causes.	Death-rate.	Rate of Natural Increase.
1876 ..	536	32·0	260	15·5	16·4
1877 ..	585	34·0	244	12·5	20·0
1878 ..	609	34·4	284	16·7	18·0
1879 ..	636	34·3	290	15·6	18·7
1880 ..	703	28·1	348	13·9	14·2
1881 ..	830	32·1	313	12·1	20·0
1882 ..	891	33·0	341	12·6	20·4
1883 ..	1,027	36·9	419	14·9	21·5
1884 ..	1,138	39·2	445	15·3	23·9
1885 ..	1,078	35·6	423	13·9	23·6

Deaths in Outlying Institutions.

The above record of deaths does not include the mortality amongst those inhabitants of this sub-district who died in outlying institutions.

The subjoined Table gives the additional deaths, with the nature of the cause of death, the age and sex of the patients and the character of the Institution in which they died.

TABLE III.

Deaths in Outlying Institutions.

DISEASE.		Sex.		Age.			Institutions.		
	Total.	Male.	Female.	Under 1.	1 to 60.	60 and upwards.	Union Infirmary.	General & Special Hospitals.	Asylums Board Hospitals.
Small-pox	2	2	..	..	2	..	..	..	2
Scarlet Fever	..	..	..	..	..	..	..	..	..
Typhus Fever	..	..	..	..	..	..	..	..	..
Enteric Fever	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases ..	..	..	..	..	..	..	..	..	..
Tubercular Diseases	2	1	1	..	2	..	..	2	..
Cancer	4	2	2	..	4	..	..	4	..
Rheumatism	..	..	..	..	..	..	..	..	..
Respiratory Diseases	3	2	1	..	1	2	2	1	..
Circulatory Diseases	3	3	..	..	1	2	2	1	..
Nervous Diseases	8	6	2	..	3	5	4	4	..
Other Diseases	15	7	8	2	9	4	6	9	..
Violence	1	..	1	..	1	..	..	1	..
Totals ..	38	23	15	2	23	13	14	22	2

The total deaths in Outlying Institutions were 38. Of these 14 died in the Union Infirmary, 22 in General and Special Hospitals, and only 2 in the Asylums Board Hospitals. If these deaths were added to those actually occurring in the sub-district the death-rate would be increased a little over one (1·2) per thousand.

In strict fairness, we ought to be able to deduct from these figures the deaths of those who, although dying in the sub-district, do not properly belong to it. We have however, no means of estimating these deaths.

It ought moreover to be noticed that many of the deaths occurring in Public Outlying Institutions are those of persons long resident in such Institutions. These persons may therefore be regarded as non-residents of this sub-district. I am of opinion that, were we in a position to make these two deductions, we should reduce the deaths in Outlying Institutions to one-half.

Even under present circumstances our death-rate is a very low one, and compares favourably with that of the healthiest rural districts.

STATISTICS OF MORTALITY.

STREATHAM, INCLUDING TOOTING & BALHAM.

Population (Census) 1881 25,553
Official population in middle of 1885 30,280

CAUSES OF DEATH	Total deaths from each Class of Disease, &c., in the Sub-District.	Sex.		Age.								Social Position.			
		Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Nobility and Gentry.	Professional Class, Merchants, Bankers, &c.	Middle and Trading Class, Shopmen, Clerks, &c	Industrial and Labouring Class.
I. Zymotic. Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2	2	..	..	1	1	..	..	..	..	..	..	..	..	2
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	5	3	2	1	3	1	..	..	..	..	..	..	1	1	3
Enteric Fever	6	3	3	..	3	..	1	2	..	..	..	..	..	4	2
Puerperal Fever	2	..	2	..	..	..	..	2	..	..	..	..	..	1	1
Whooping Cough	7	4	3	3	4	..	..	..	..	..	..	..	..	5	2
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa, Dysentery, and Cholera	12	5	7	9	2	..	..	1	..	..	..	..	..	5	7
Other Zymotic Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals of Zymotic Class	34	17	17	13	13	2	1	5	..	..	..	..	1	16	17
II. Constitutional. Gout and Rheumatism	2	..	2	1	..	..	..	..	..	1	..	..	1	1	..
Cancer & other Tumours	11	2	9	..	..	..	..	..	3	7	1	3	1	3	4
Other Constitutional Diseases	4	2	2	3	..	..	..	..	..	1	..	..	1	..	3
Tubercular: Phthisis	43	14	29	4	3	4	4	21	7	..	..	3	6	10	24
Tubercular: Tabes Mesa	7	4	3	5	1	..	..	1	..	..	..	..	1	..	6
Tubercular: Hydrocephalus	9	7	2	3	2	3	1	..	..	..	..	..	3	1	5
Tubercular: Scrofula	2	2	..	..	..	..	1	..	..	1	..	..	..	1	1
III. Local. Nervous	61	28	33	17	10	4	1	3	10	14	2	6	8	14	33
Circulatory	26	17	9	1	..	1	1	5	7	10	1	6	2	8	10
Respiratory	102	49	53	24	17	3	2	7	16	23	10	8	12	31	51
Digestive	33	15	18	7	2	..	1	1	10	12	..	4	10	10	9
Urinary	11	7	4	..	..	2	1	3	2	3	..	..	1	5	5
Generative	5	..	5	..	..	..	..	3	2	..	..	..	1	2	2
Locomotory	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Integumentary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV. Developmental. Premature Birth & Low Vitality	37	16	21	37	..	..	..	..	..	..	..	..	6	11	20
Congenital Defects	3	..	3	3	..	..	..	..	..	..	..	..	1	2	..
Old Age	23	9	14	..	..	..	..	..	..	10	13	8	2	5	8
V. Violence	9	8	1	1	1	1	..	2	3	1	..	..	1	3	5
VI. Illdefined and Not Specified: Illdefined	1	..	1	..	1	..	..	..	..	..	..	..	..	1	..
Not Specified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	423	197	226	119	52	20	13	51	60	81	27	38	58	123	204

Zymotic Diseases—their Prevalence and Fatality.

The total number of deaths in this class was 34, as against 53 in 1884,—17 of these were of males, and 17 of females. They yield a percentage of 12·4 upon the deaths from all causes during the year; and give a rate of 1·1 per thousand of the population. This is the lowest death-rate from Zymotic Diseases during the decennium. The death-rate from the principal epidemic diseases for the whole of London was 2·78 per thousand for the year 1885.

The following Table contrasts all Zymotic deaths, with the death-rate therefrom, as well as the death-rate from all diseases during the last ten years.

TABLE IV.

Zymotic Mortality in the Streatham & Tooting Sub-district.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Small-pox ..	..	4	1	..	..	..	..	..	..	..
Measles	2	2	11	2	1	3	5	7	8	2
Scarlet Fever ..	4	1	2	5	31	13	9	2	8	..
Diphtheria ..	7	3	3	2	7	1	4	13	3	5
Enteric Fever ..	5	5	1	3	5	2	1	8	4	6
Whooping-Cough	7	6	11	21	8	9	9	11	9	7
Epidemic Diarrhœa ..	6	4	13	3	6	9	3	9	11	12
Other Zymotic Diseases ..	..	4	..	10	10	9	10	15	11	2
Total deaths from Zymotic Diseases	..	29	42	41	68	44	41	65	53	34
Zymotic Death-rate	..	1 7	2·3	2·2	2·7	1·7	1·6	2·3	1 8	1.1
Death-rate from all Diseases ..	..	12 5	16·7	15·6	13·9	12·1	12 6	14·9	15·3	13·9

This Table shews that the mortality from epidemic diseases was far below the decennial average. In a largely increased population this is very significant, and

affords convincing proof of the value of our present mode of isolation and disinfection, in the more formidable diseases of this class. It will be seen from the Table that there was no death from either Small-pox or Scarlet Fever. These are two of the diseases in which such sustained efforts are made to prevent their occurrence and extension. We owe much to isolation in these cases, and the rapid and well-arranged manner in which patients are transferred to Special Hospitals, has proved of signal service, and has, I believe, prevented an epidemic outbreak of Small-pox in this sub-district. This will be very apparent in view of the fact that 20 cases of this disease were sent into Hospital during the year. In saying this, I do not ignore the value of other measures, indeed I place the greatest reliance on the protective influence of vaccination against Small-pox. In this, as in all other infectious diseases, isolation is of the first importance. Moreover the disinfection and fumigation of rooms, clothes, and bedding with sulphurous acid, and the occasional burning of infected clothes and bedding, cannot be too highly rated as preventive measures.

Referring again to the Table it shows that there was no death from Scarlet Fever; and only 4 cases were sent into Hospital during the year. Diphtheria had 5 deaths, Enteric Fever 6, Whooping-cough 7, and Diarrhœa 12.

None of these diseases compare unfavourably with former years, due allowance being made for altered population.

Other Diseases. These diseases are grouped in the Mortality Table under six heads, viz:—

Constitutional, Local, Developmental, Violence and Illdefined.

These diseases in the aggregate shew a diminution on the number recorded in 1884. Separately considered they do not differ very materially from former years.

The mortality from Respiratory diseases was high and formed 24 per cent. of all causes of death, as against 15·1 last year.

Phthisis Pulmonalis was also unusually fatal, and more deaths took place from old age.

The mortality shewed a diminution in circulatory and digestive diseases, as well as in premature births and low vitality. The latter formed 11· per cent. of all causes of death as against 12·5 in 1884.

On the whole there is a remarkable correspondence in the number of deaths resulting from the majority of these diseases in the several years of the decade.

Age at Death—Infant Mortality.

The mortality in early life was slightly below that of 1884,—204 of all deaths occurred before the age of 20.

There were 37 deaths from premature birth and low vitality, as against 55 in the previous year. There were but 29 deaths in the Zymotic class as against 41 in 1884.

It is very satisfactory to have to record a decided decrease in infant mortality from these diseases, as both classes are largely preventible.

Diseases of the organs of respiration and Tubercular affections caused a large proportion of the deaths in early life. 48·2 per cent. of all deaths occurred before the age of 20. 25·7 per cent. were under one year, 40·4 per cent. under five years of age.

The infantile death-rate was 110 per thousand.

Senile Mortality.

Twenty-three deaths arose from old age alone, but 108 persons died at 60 and upwards. Of these, 38 were between 70 and 80, 24 were over 80, 4 were 90, and one reached the age of 93. They form 25·5 per cent of all deaths. Of the persons who died at and upwards of 70, 23 were males and 38 females.

Sickness and Mortality amongst the out-door poor of the Parish.

The number of persons who were under treatment, together with the nature and extent of the sickness that prevailed, and the deaths that occurred among the out-door poor of the parish will be found in Table V. of the Appendix. Two hundred and fifty-four new cases came under treatment during the year. Of these, 32 were in the Zymotic class, as against 56 in the previous year. They include 4 cases of Small-pox, 2 of Scarlatina, 2 of Measles, 14 of Whooping-cough, 8 of Diarrhœa, 1 of Fever, and 1 of Erysipelas, with 1 death from Diarrhœa. The cases of Small-pox and Scarlatina were sent into Hospital. In the other classes there were six deaths.

The ratio of deaths to cases treated was 2·7 per cent.

Social Position.

The following Table gives the percentage of deaths in the various classes during the year.

Nobility and Gentry	38	= 9 90 per cent.
Professional Class	58	= 13·70 ,,
Middle and Trading Class	123	= 29 98 ,,
Industrial and Labouring Class ..	204	= 48·22 ,,
		100·00
Total deaths in 1885	423	

The Zymotic death-rate was all but *nil* in the higher classes. In the trading class it formed 37·8 per cent.; and 40·2 in the labouring classes.

Inquests.

Violent Deaths.

Twelve Inquests were held with the following results:—

I.	Natural ..	Apoplectic Fit	2
		Pulmonary Embolism	1—3
II.	Accidental ..	Overdose of laudanum	1
		Knocked down by engine on line ..	1
		Suffocated in bed	1
		Run over by van	1
		Odema of glottis from swallowing carbolic acid	1
		Injuries in fall from van	1—6
III.	Suicide ..	By shooting	1
		By drowning	1—2
IV.	Homicide ..	Fracture of skull from fall in road having been knocked down	1
			12

Uncertified Deaths.

Fourteen deaths were uncertified, they were all submitted to the Coroner before being registered as having probably died from the following causes:—

Convulsions	7
Heart Disease	4
Hæmoptysis	1
Senile Decay	1
Premature Birth	1
	12

Sanitary Proceedings.

A summary of the Sanitary operations of the year will be found in Table IV. of the Appendix.

Reference to the Table shews that the systematic house to house visitation of the last few years has been fully maintained in the one under review. Over 5,000 houses and premises were inspected, and 616 first notices were served on owners and occupiers to remedy sanitary defects. Only 15 second notices were required to ensure

compliance. In no case was it necessary to appeal to the law. The above notices do not nearly represent all the defects discovered on inspection as in a great number of instances they were remedied on requisition.

Thirty-two houses were disinfected after infectious diseases by fumigation with sulphurous acid gas, in three instances the clothes and bedding were also burnt. This latter measure is now seldom required and is only resorted to when the bedding, &c., is much soiled and infected. I am glad to report that there has been no recurrence of disease after disinfection in the manner so often described in these annual reports.

Eighty-four dilapidated, dirty and unwholesome houses were repaired and cleansed, 508 new drains were laid, 262 untrapped drains had syphon traps affixed, 200 new dust-bins were supplied, and 17 pig nuisances removed. For the figures in respect of new sewers, branch drains, &c., and other sanitary works the reader is referred to the Table.

There are 33 bakehouses in the sub-district, they have all been inspected and found in good condition.

The cow-sheds and slaughter-houses, 13 of the former and 8 of the latter, have been regularly inspected and are in a satisfactory condition.

In May last an important decision was given by Mr. Justice Cave in the case of Ceely & Dunsden *v.* Neal. The Plaintiffs brought an action to stop brick burning at Park Hill brickfield, Streatham. The Surveyor, the Inspector of Nuisances and myself inspected and reported to the Board on this matter. Mr. Justice Cave in delivering judgment said the evidence satisfied him that so far as the brick burning went there was no nuisance to health

in the sense of causing disease or illness, but his Lordship said he was satisfied that there was a nuisance which could be perceived at the plaintiffs' premises and to such an extent as to render the occupation of their houses uncomfortable and unenjoyable. His Lordship therefore directed judgment for the plaintiffs, with an injunction to restrain the burning of bricks in a such a way as to interfere with the comfort of the plaintiffs.

My thanks are especially due to Mr. Barber for his unvarying courtesy and ready co-operation on any question affecting the health of the sub-district.

Mr. Phimister, Inspector of Nuisances, and Mr. Jones the Assistant Inspector have carried out their duties in a very satisfactory manner.

F. F. SUTTON, M.D.,

Medical Officer of Health for Streatham & Tooting.

WANDSWORTH.

The health of this sub-district during the year 1885 declined considerably from its usually high status. A greater mortality occurred generally from all classes of disease, with few exceptions; diseases of the organs of respiration, including Consumption, and the epidemics, Measles, Whooping Cough, and Diarrhœa, having chiefly contributed to that result. The following statistics, derived from an analysis of the Registrar-General's Returns and of the parochial Records of Sickness and Mortality, will be found on examination to furnish evidence of the foregoing conditions.

Vital Statistics.

Population. Determined by the official method of calculation (which assumes the same rate of increase to have occurred during the year under review as that which prevailed during the preceeding ten years), the population of this sub-district at the middle of the year 1885 numbered 31,497. The disproportionately great increase, however, in the number of births that has taken place during the past three years, and especially during

the past year (as will be subsequently seen), and the great increase in the number of houses that have been erected during the same period, lead to the conclusion that the foregoing estimate of the population, which does not sufficiently take into account the variable results of immigration, is considerably understated. If such understatement, as may be reasonably inferred, is the case, it should be recognized in the calculation of the death-rate, which by its operation will be correspondingly and unduly raised. Estimated from the proportion which the mean birth-rate bears to the mean population of the decennium 1871—81 (when the population was accurately known), the mean population of 1885 would be about 1,000 higher than the number officially determined. With reference to this subject will be found, in the subjoined footnote, an extract from my annual Report for 1868 (page 14).*

Mortality. The number of deaths registered during the past year amounted to 628,—330 of males and 298 of females. The average number of the preceding ten years, raised in proportion to the estimated increase of the population, is 560, and therefore exceeded by 68 in the past year.

Of the total deaths 132 took place in the following public institutions, viz.:—in the Surrey County Lunatic Asylum, 105; in the Hospital for Incurables, 7; in

* "Looking to the great value which belongs to an accurate determination of Vital Statistics as the first trustworthy step in the projection of Sanitary Science to the prevention of disease, it seems proper to mention that in the Metropolitar. suburbs and in large towns known to be greatly increasing by immigration, a more frequent Census of the population is imperatively needed. In such localities, under such conditions, an interval of ten years, it need scarcely be observed, renders calculation unsound and more or less conjectural. A quinquennial census, with an extended scope of inquiry, might be made the means of conveying most important information alike to the sanitarian and to the political economist.

St. Peter's Hospital, 5; in the Prison, 14; and in the Royal Patriotic Asylum for Girls, 1. In addition to the foregoing that took place within the sub-district, 78 deaths of Wandsworth parishioners occurred in outlying institutions, viz.:—54 in the Infirmary of the Union and 24 in the Asylum Board and various Metropolitan Hospitals. These are shewn in the following table:—

TABLE I.

Deaths in Outlying Institutions.

DISEASE.	Total.	Sex.		Age.			Institutions.		
		Male.	Female.	Under 1.	1 to 60.	60 and upwards.	Union Infirmary.	General and Special Hospitals.	Asylums Board Hospitals.
Small Pox	3	2	1	..	3	..	..	..	3
Measles	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..
Whooping Cough ..	1	..	1	..	1	..	1	..	..
Typhus Fever	..	..	..	..	..	..	..	..	..
Enteric Fever	1	..	1	..	1	..	..	..	1
Diarrhœa	..	..	..	..	..	..	..	..	..
Other Zymotic Diseases .	1	1	..	..	1	..	1	..	..
Total Zymotic Diseases	6	3	3	..	6	..	2	..	4
Tubercular Diseases ..	11	7	4	1	10	..	8	3	..
Cancer	5	1	4	..	4	1	2	3	..
Rheumatism	1	..	1	..	1	..	..	1	..
Respiratory Diseases ..	19	15	4	3	11	5	15	4	..
Circulatory Diseases ..	6	3	3	..	2	4	6	..	..
Nervous Diseases ..	11	5	6	..	6	5	7	2	2
Other Diseases	17	4	13	1	6	10	14	3	..
Violence	2	2	..	..	2	..	..	2	..
TOTAL	78	40	38	5	48	25	54	18	6

Death-rate. Calculated from the registered mortality and the estimated population, the death-rate of the past year was 19·93 per 1,000 persons living; and, inclusive of the deaths that occurred in institutions without the sub-district, 22·41 per 1,000. Determined, however, in this manner, neither of these deductions can be accepted as representing the natural death-rate of this sub-district, in consequence of the disturbing influence of certain public institutions by the mortality of which the death-rate is unduly raised. These are the Hospital for Incurables, St. Peter's Hospital, and the Surrey County Lunatic Asylum, the inmates of which are, with a fractional exception, derived from without the sub-district, undergo no natural increase, and are subject to a high mortality, which on an average forms about one-fifth of the total deaths registered—an amount that renders any deduction of the death-rate from the death register, without correction for the conditions referred to, entirely valueless. In consequence of the foregoing circumstances, it becomes necessary therefore to deviate from the ordinary method of calculation, and to correct the latter by withdrawing from it the population and mortality of the above-named institutions, and adding to it the deaths of Wandsworth inhabitants that have taken place in hospitals and other institutions located without the sub-district. Calculated in accordance with these conditions, the death-rate of the past year was 19·62 per 1,000. Exclusive of the 24 deaths that took place in the Metropolitan and other hospitals, the rate was 18·82 per 1,000, and admits of more just comparison with the recorded death-rates of former years, which until two years ago did not include those deaths, the latter having always been held to be fully compensated by the deaths of persons who come into the sub-district during the year.

Births. Birth-rate. Rate of Natural Increase.

The number of births registered during the year was 1,122,—571 of males and 551 of females, and was no less than 171, or more than 15 per cent., in excess of the average of the preceding ten years. Such a large increase in the number of births clearly indicates a correspondingly large accession to the population by immigration, to which reference has been already made. Calculated from the official estimate of the population, the birth-rate was 37·37, and the rate of natural increase 18·55 per 1,000 persons of all ages.

The birth and death rates for ten years are exhibited in the subjoined table:—

TABLE II.

Birth and Death Rates.

Years.	Births.	Birth-rate.	*Deaths from all Causes.	Death-rate.		Rate of Natural Increase.
				Corrected.	Uncorrected.	
1876 ..	679	30·53	461	16·73	19·89	13·80
1877 ..	684	29·90	384	12·59	16·13	17·31
1878 ..	718	30·53	422	14·41	17·26	16·12
1879 ..	744	37·97	516	18·04	20·56	19·93
1880 ..	810	30·53	484	15·45	17·67	15·08
1881 ..	901	33·70	507	17·43	17 97	16·61
1882 ..	972	35·28	544	17·49	18·70	17·79
1883 ..	907	32 07	499	16·17	16·71	15 90
1884 ..	1,072	36·72	576	17·23	18·77	18·84
1885 ..	1,122	37·37	628	18·82	19·93	18·55

* Deaths in Outlying Institutions not included.

Causes of Death.

The following table contains a nosological classification of all the causes of death, distinguishing the several diseases of the Zymotic class, and shewing the sex, age at death at eight periods, and the social position of the deceased persons:—

TABLE III.

STATISTICS OF MORTALITY.

WANDSWORTH. — Population (Census) 1881 ... ... 28,004. Official Population in middle of 1885 31,497		Total Deaths from each class of Disease, &c., in the Sub-District.	Sex.		Age.								Social Position.			
CAUSES OF DEATH.			Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Nobility and Gentry.	Professional Class Merchants, Bankers, &c.	Middle and Trading Class, Shopmen, Clerks, &c.	Industrial and Labouring Classes.
I. Zymotic.	Small-pox	3	..	3	1	1	..	..	1	..	..	..	..	..	1	2
	Measles	19	13	6	1	17	1	..	..	..	..	..	..	1	1	17
	Scarlet Fever	3	2	1	..	1	1	..	1	..	..	..	..	..	1	2
	Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Enteric Fever	4	2	2	..	2	..	..	2	..	..	..	..	..	..	4
	Puerperal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria	6	4	2	1	2	2	..	..	1	..	..	..	..	2	4
	Whooping Cough	24	11	13	10	13	1	..	..	..	..	..	..	1	4	19
	Erysipelas	3	1	2	1	..	..	..	..	..	2	..	..	..	2	1
	Diarrhœa, Dysentery, and Cholera	35	18	17	29	4	..	..	.	..	2	..	1	2	6	26
	Other Zymotic Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Totals of Zymotic Class	97	51	46	43	40	5	..	4	1	4	..	1	4	17	75
II. Constitutional.	Gout, and Rheumatism	6	3	3	..	..	..	1	2	2	1	..	..	1	2	3
	Cancer & other Tumours	21	7	14	..	1	..	..	4	13	3	..	2	2	4	13
	Other Constitutional Diseases	1	..	1	..	..	..	..	..	1	..	..	..	..	1	..
	Tubercular Phthisis	67	36	31	2	6	1	9	27	15	7	..	3	6	17	41
	Tubercular Tabes Mesa	12	7	5	10	2	..	..	..	..	..	..	..	1	5	6
	Tubercular Hydrocephalus	8	3	5	3	3	1	1	..	..	..	..	..	1	2	5
	Tubercular Scrofula	3	3	..	1	..	..	1	..	1	..	..	..	..	1	2
III. Local.	Nervous	145	79	66	19	15	..	2	25	48	34	2	1	6	46	92
	Circulatory	36	12	24	..	..	..	2	7	7	19	1	4	2	13	17
	Respiratory	101	57	44	26	27	2	1	7	16	20	2	1	2	24	74
	Digestive	22	8	14	3	..	1	1	3	7	7	..	3	..	7	12
	Urinary	12	9	3	..	1	..	..	1	4	6	..	3	..	4	5
	Generative	6	1	5	..	..	..	1	2	3	..	..	..	..	2	4
	Locomotory	2	..	2	..	..	..	..	..	1	1	..	1	..	1	..
	Integumentary	3	2	1	2	1	..	..	..	..	..	..	..	..	..	3
IV. Developmental.	Premature Birth and Low Vitality	34	22	12	34	..	..	..	..	..	..	..	..	..	6	28
	Congenital Defects	3	2	1	3	..	..	..	..	..	..	..	..	..	..	3
	Old Age	34	15	19	..	..	..	..	..	..	20	14	1	1	7	25
V. Violence		15	13	2	2	3	..	1	5	3	1	..	..	..	1	14
VI. Ill-defined and Not specified	Ill-defined	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Not specified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals		628	330	298	148	99	10	20	87	122	123	19	20	26	160	422

Diseases of the Brain and Nervous System caused, as usual, by far the largest number of deaths registered, amounting to 145, or upwards of 23 per cent. of the whole; but more than 72 per cent. of these deaths occurred in the Surrey County Lunatic Asylum, and, except from the circumstance of being registered in Wandsworth, do not properly belong to this sub-district. Excluding this class of diseases for the reasons already given in reference to the determination of the death-rate, the following are the numerical proportions borne by the several classes of disease in the causation of mortality. Diseases of the Organs of Respiration contributed the largest number, amounting to 16 per cent. of the whole; diseases of the Zymotic class formed the next largest number of 15 per cent.; following in numerical order of fatality, the Tubercular class of diseases (three-fourths of which where due to Consumption) formed 14 per cent.; other Constitutional diseases of this class (which in former reports were grouped under the head of Cancer, Dropsy, and of uncertain seat), 4·4 per cent.; diseases of the Organs of Circulation (Heart, &c.), 5·7 per cent.; Premature birth, &c., 5·4 per cent.; Old age, 5·4 per cent.; diseases of the Digestive Organs, 3·5 per cent.; Violence, 2·4 per cent.; Urinary diseases, 1·9 per cent. The most fatal single disease was, as usual, Consumption, which formed 10·6 per cent., and was closely approached by Bronchitis. The greater or less fatality that resulted from the several classes of diseases during the past year in comparison with that of the preceding ten years and their averages, is shewn in the two following tables, the first of which compares the Non-zymotic and the second the Zymotic Diseases. Although the essential fluctuations both in number and kind, will be found to be presented, as is invariably the case, by diseases of the Zymotic class, a greater variation than usual is observable in the table

of general or non-zymotic diseases, all the causes of death, except diseases of the Digestive and Urinary Organs and Violence, being greatly in excess.

TABLE IV.

Non-zymotic Mortality.

	Causes of Death.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1885. No. above corrected average.	1885. No. below corrected average.
Constitutional	Tubercular ..	64	54	60	62	60	51	69	64	85	90	15	..
	Other Constitutional	18	17	14	12	17	19	19	20	18	28	8	..
Local.	Nervous	125	111	111	96	106	121	106	116	128	145	16	..
	Circulatory ..	26	21	19	20	23	28	28	25	22	36	7	..
	Respiratory ..	58	42	86	125	89	90	87	69	70	101	13	..
	Digestive.. ..	29	18	29	21	21	28	28	35	47	22	..	9
	Urinary	6	9	4	10	11	4	20	13	15	12	..	1
	Generative ..	2	3	4	10	1	..	4	..	3	6	3	..
	Locomotory ..	..	..	1	..	3	2	1	..	2	2	1	..
	Integumentary	..	..	..	..	..	..	1	..	..	3	3	..
Developmental.	Premature Birth .. Malformation Low Vitality	22	19	18	18	27	37	27	23	40	37	5	..
	Age	16	13	14	26	23	27	27	33	42	34	6	..
	Violence	14	11	13	11	11	20	18	32	21	15	..	3
	Not specified ..	1	3	1	1	..	4	1	..	..	..	..	1

Zymotic Mortality. Epidemic Diseases, their prevalence and fatality.

The following table exhibits the total deaths that occurred from Zymotic Diseases, specifying those that resulted from the seven principal Epidemic Diseases during the past and ten preceding years, and the relative proportion which they bore to the deaths from all causes :—

TABLE V.

Diseases.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883	1884.	1885.	1885. No. above corrected average.	1885. No. below corrected average.
Seven principal Epidemic Diseases. Small Pox	1	1	..	..	1	..	9	..	..	1	3	2	..
Measles ..	2	17	..	4	16	9	5	18	14	6	19	9	..
Scarlet Fever ..	5	12	21	2	15	24	19	9	5	5	3	..	11
Diphtheria .	2	1	..	4	1	4	1	3	11	4	6	3	..
Fever (Typhus / Enteric)	5	12	9	3	8	6	4	9	12	4	4	..	4
Whooping Cough ..	14	10	11	6	44	15	12	26	5	17	24	6	..
Diarrhœa	17	16	16	19	7	20	19	29	10	27	35	14	..
Cholera	..	2	..	..	..	..	..	..	..	..	..	..	..
Total Deaths from above Epidemic Diseases	46	71	57	38	92	78	69	94	57	64	94	16	..
Other Zymotic Diseases	10	9	6	10	12	14	7	14	20	19	3	..	12
Total Deaths from Zymotic Diseases	56	80	63	48	104	92	76	108	77	83	97	..	..
Zymotic Death-rate per 1,000 ..	2.48	3·45	2·64	1·96	4·14	3·35	2·71	3·72	2·57	2·70	3·07		
Total Deaths from all causes	420	461	384	422	516	484	507	544	499	576	628	68	..
Per centage of Deaths from Epidemics to Deaths from all causes ..	10·9	15·4	14·8	9·0	17·8	16·1	13·6	17·2	11·4	11·1	14·9		

Of the 97 deaths that resulted from the above diseases, 94 were of the epidemic (or infectious) kind, and exceeded the average of the preceding ten years corrected for increase of population by upwards of a fifth part. This excess was principally due to Measles, Diarrhœa, and Whooping Cough, the two first of which diseases exceeded their average fatality by one-half, and the third by a third part. Diphtheria was in excess by one-half, but Scarlatina shewed a diminution of three-fourths, and

Fever of one-half of their respective averages. There were three deaths only registered from Small Pox, but three more occurred in hospital, the average being exceeded by two. In the calculation of the foregoing averages the deaths in hospitals have been included.

The propagation of infective diseases by the return to school of children during convalescence from these diseases, with the remedies suggested for its prevention, has been so recently explained as to require no further comment here, than that the evil is one of great extent and importance, and therefore deserving serious attention. (See Report 1884, page 92.)

The months in which the deaths from Epidemic Diseases occurred, with the mean temperature of each quarter of the year, are shewn in the subjoined table. The bulk of these deaths will be seen to have occurred in the Spring and Autumn quarters, the amount in each of which was more than twice as great as in the Summer quarter, and more than five times as great as in the Winter quarter. The cause of such difference is not apparent by a consideration of the climatic conditions of the year.

TABLE VI.

DISEASE.	January	February	March	April	May	June	July	August	September	October	November	December
	Mean Temp. 40·3			Mean Temp. 52·4			Mean Temp. 59·1			Mean Temp. 42·8		
Small Pox	2	..	..	..	1	.	..	..	..	..	..	..
Measles	2	2	6	2	4	..	..	..	1	..	1	1
Scarlatina	..	2	..	..	..	..	..	..	..	..	1	..
Diphtheria	1	..	..	1	..	..	1	1	1	1	..	..
Whooping Cough	4	2	7	5	3	..	..	2	..	..	..	1
Diarrhœa	2	..	2	..	..	..	5	19	5	1	1	..
Fever	..	1	1	1	..	..	..	1	..	..	..	..
TOTALS	11	7	16	9	8	..	6	23	7	2	3	2
	34			17			36			7		

Deaths in relation to Social Position.

The following table represents the relative proportions of the total deaths, as well as of the deaths from Zymotic Diseases, borne by the several classes of the inhabitants:—

TABLE VII.

Social Position.	Total Deaths.		Deaths from Zymotic Diseases.	
	1885.	Decennial Average.	1885.	Decennial Average.
Nobility and Gentry.. ..	3·18	3·53	1·03	1·13
Professional Class, Merchants, Bankers, &c. ..	4·14	5.19	4·12	4·37
Middle & Trading Classes, Clerks, &c.	25·48	20·60	17·53	19·25
Industrial and Labouring Classes	67·20	70·68	77·32	74·75
	100·00	100·00	100·00	100·00

The gradual reduction in the relative amount of mortality borne by the labouring classes, which has been noticeable for many years, is seen to have continued in the past year, as regards the total amount, to the extent of 3·48 per cent.; but, as might be anticipated from the greater fatality that occurred from infective diseases, which are always found to afflict those classes with greatest severity, the amount of Zymotic mortality suffered by them exceeded the average by 2·57 per cent.

Vaccination.

In the annual Return of the Vaccination Officer to the Local Government Board respecting the vaccination of children whose births occurred in 1884, it appears that of 1,063 children born 939 were successfully vaccinated, 3 were returned as "insusceptible," 67 died unvaccinated, and 3 were postponed on account of sickness, leaving 51, or 4·7 per cent., who had removed to places unknown or which could not be reached.

This result, compared with that of the whole Metropolis, in which (according to the last Return) the residue of children unaccounted for was 6·6 per cent., is very satisfactory.

Age at Death.—Infant Mortality.

As a consequence of the greater fatality from diseases of the Epidemic kind during the past year, the deaths of children shew a considerable increase. The deaths of infants under one year of age formed 23·5 per cent of all deaths, the decennial average having been 22·4 per cent.; of children under 5 years of age, 39·3 per cent., the average having been 35·5 per cent.; while the total deaths under 20 years of age were of average amount. Calculated from the number of registered births, the rate of mortality of infants under one year of age was 13·1 per cent., and agreed almost exactly with the average.

Senile Mortality.

The number of deaths at high ages was eight less than in the year preceding. Seventy-one were registered at 70 years of age and upwards, 34 of which were recorded as having resulted from old age unconnected with disease. The great majority consisted as usual of females. The number, age, and sex of the deceased are subjoined:—

TABLE VIII.

Age.	Males.	Females.	Total.
70 — 75	12	24	36
75 — 80	6	12	18
80 — 85	4	5	9
85 — 90	3	3	6
94	..	1	1
96	1	..	1
	26	45	71

Sickness and Mortality of the Parochial Poor.

Table III. in the Appendix contains the amount, nature, and fatality of the sickness that occurred amongst the parochial poor during the year. It will be there seen that 643 fresh cases of disease came under treatment, resulting in 32 deaths, or a little less than 5 per cent.; and 94 cases of infectious disease, 9 of which terminated fatally. Measles, Diarrhœa, Scarlatina, and Small-pox were the most prevalent Epidemics; of the last named disease there were 28 cases, all of which were removed to the Asylums Board Hospitals, where 3 ended fatally. There were 8 cases only of Whooping Cough, and 2 of Fever. While the total sickness and mortality was of average amount, that portion attributable to Zymotic disease considerably exceeded the average, thus corroborating the figures in Table VII. (page 101), which shews the relative mortality of the several classes of the inhabitants.

Inquests.

Violent Deaths.

Uncertified Deaths.

Thirty-five inquests were held during the year, or three more than in the year preceding; the deaths from violence were 17, or two less. The number of uncertified deaths was 8 only, and although 9 less than in the previous year, were still so many cases in which, in the absence of skilled testimony, death *may* have resulted from other than natural causes. As has been repeatedly urged in these Reports (see that for 1865 and following), it is imperatively necessary, in the interests of society, that there should be a medical investigation in every case in which the cause of death has not been duly attested by a registered medical practitioner.

The number and sex of the persons that formed the subjects of inquiry, with the result of the latter, are summarised in the following table:—

TABLE IX.

		Males.	Females.	Total.
Deaths from natural causes		15	3	18
Deaths from violence, viz.:—				
Accidental	Wound of Wrist	—	1	11
	Choked by Food	1	1	
	Drowning	3	—	
	Knocked down by Locomotive	1	—	
	Hemorrhage	1	—	
	Suffocation	2	—	
	Run over by Horse & Cart	—	1	
Suicidal	Drowning	1	—	3
	Cut-throat	2	—	
Homicidal	Manslaughter	1	—	2
	Execution	1	—	
Not specified	Found dead in Thames	1	—	1
		29	6	35

Sanitation.

All the usual sanitary operations (the most important of which will be found enumerated in Table IV. in the Appendix) were carried out with unabated activity. In addition to ascertaining the existence of nuisances, and the investigation of such as formed the subjects of complaint, the inspecting of houses (all classes) and recording their sanitary condition, with the removal of ascertained defects, have been systematically pursued as a daily routine; by a reference to the table it will be seen that no less than 4,350 houses have been so dealt with during the year. As an indication of the extent of these inspections, it may be observed that at the census of 1881 the number of inhabited houses (although they have considerably increased since that period) was 4,255. The process of disinfection and purification of houses after Epidemic diseases have been perseveringly employed,—immediately in the case of a

patient removed to hospital, or, if not removed, as promptly as the condition of the patient or other circumstances allowed. It was employed in 112 houses, and in 5 only, which were infected by Small-pox, was there what is termed in the table a recurrence of the disease. Such a designation of subsequent cases, however, is scarcely correct, inasmuch as the interval between the period of disinfection and the occurrence of another attack in the same house, in every instance except one, was less than 12 days—the period of incubation, or that within which the patients could have been affected before disinfection was first employed; and in the excepted case the interval was four months and a half—a length of time which would make the probability of recurrence extremely doubtful. Judged by the results recorded for several years, disinfection, as carried out in this sub-district, must be admitted to have been attended with marked success.

Nevertheless, doubts have been expressed as to the propriety of employing disinfection after Measles and Whooping Cough, in consequence of the circumstance that such procedure has not been generally adopted in other Sanitary Districts. I would therefore beg to point to the great infectiveness of these diseases, particularly of Measles, and their great destructiveness of infant life, as well as to the general principle involved in the duty of preventing the spread of infective diseases of employing all reasonable measures for the attainment of that end, as a sufficient justification for my recommendation of the adoption of disinfection after those diseases. "The mortality of Measles," as stated in one of my fortnightly reports, "is twice as great, and that of "Whooping Cough three times as great, as that resulting "from Small-pox." By a reference to the Registrar-General's "Annual Summary" for 1885, page 24, it will

be seen that the annual average number of deaths in the Metropolis during the ten years 1875—84, from Small-pox was 1,038, from Measles, 2,236, and from Whooping Cough, 3,260.

In support of the procedure adopted in this sub-district I would refer to the opinion of that eminent authority, Dr. Buchanan, the Medical Adviser to the Local Government Board, thus expressed: "I should unquestionably "rank Measles among the diseases that people should "strive to control by the use of atmospheric disinfectants "as well as by ordinary methods of ventilation and "cleansing. The disease is indeed one that is particularly "apt to spread through the air from person to person, "and any measures for destroying its infectiveness should "certainly be applied, among other ways, to the atmo-"sphere of infected houses."

The simple, cheap, and effective application of sulphur fumigation against the spread of infective diseases, is, without doubt, one of the most successful of all the sanitary operations of the Board, and cannot, it is submitted, be dispensed with in reference to Measles without disregarding the security of infant life.

In addition to the proceedings set forth in the table, all the bakehouses in the sub-district have been periodically inspected, and the slaughter-houses and cow-houses, as usual, examined and their condition reported as satisfactory previous to the granting or renewal of their owners' licenses. Many serious nuisances, also, that formed the subjects of special Reports, were dealt with, the details of which occupied much time and attention in their disposal, such as the pollution of the River Wandle and Boundary ditch by the sewage from the farm of the Croydon Rural Sanitary Authority; the

introduction into the main sewer of the products of gas manufacture; the fur-dyeing factory nuisance; brick-burning and other causes of nuisance at the Osiers, Riverbank; several piggeries, &c., &c.

Altogether, the accomplishment of a vast amount of sanitary work has been effected during the past year by the Sanitary Inspectors, whose zeal and assiduity in the performance of their important duties are deserving of highly favorable comment. The result of such work has been productive of a great amelioration in the sanitary condition of the sub-district, and such improvement would be greatly extended by the accomplishment, *inter alia*, of the suppression of piggeries within the precincts of the town; the prevention of aerial pollution from sewer-gases by the employment of an abundant supply of water for drainage purposes; and by the prompt and systematic removal of house refuse (by means of portable utensils),—measures long advocated in these Reports. (See Reports, 1878, page 66; 1866, page 17; and 1856, page 24.)

GEORGE EDWARD NICHOLAS, M.D.,

Medical Officer of Health for Wandsworth.

ANALYST'S REPORT.

To the Wandsworth Board of Works.

Gentlemen,

For the purposes of incorporating a record of the work done in your District under the "Sale of Food and Drugs Act" with the annual statement of the Medical Officers of Health, I beg to report as follows:—

(1) *As to the Food supply.*—During the year ending April 1st, 1886, I have received from the Inspector 400 samples for analysis. The articles were various and well selected, and covered all the chief substances commonly sold by the purveyors of the District. It is a satisfactory circumstance to record that, of all these articles, I could only charge 11 as being below the recognized limits of commercial purity. These 11 articles were made up as follows:—

Milk	9
Gin	1
Butter	1
	11

The excellent effect of your policy of continuous special inspection is therefore strongly evident in the above recorded state of the food supply, which maintains, as heretofore, its high state of purity.

(2) *As to the Water supply.*—Some few of the residents in the District still obstinately stick to the use of wells instead of laying on the Company's water, and, during the year, I have received and analysed 34 samples from local pumps. All have been found to be questionable and some actively dangerous. On this point the public cannot be too strongly warned that water drawn from a town soil, perforated in every direction with sewers and gas pipes, and long since denuded of the bulk of its natural carbonate of lime, is continually altering in its nature for the worse, and is a most undesirable source of

domestic supply. Although a Medical Officer, on considering the Analyst's results, very often cannot put his hand down and assert that a certain water is, at the moment, actively dangerous to health, yet he can see that it is merely surface water, and that it only requires a start to become at once a focus for the dissemination of disease. Here your Officers are often placed in a delicate position, because, although they may perfectly clearly see that such water should be shunned, yet they cannot go into Court on a theory of what might happen, but only on what is actually present at the moment, and thus some obstinate people may go on daily courting danger. The residents should be made aware that *all* the well waters of the District are more or less undesirable, and that it is exactly the refreshing flavour they so much admire which is one of the danger signals. The local wells are mostly practically charged only with sulphates and nitrates, and the latter, while giving the cooling taste so relished by the owners, are (except in Artesian wells) nothing more than the representatives of previous contamination, and the indication that what has occurred before may very readily do so again. If this plain warning, from a perfectly unprejudiced person, be taken by some of the persons who at present continue to nurse the serpent likely to bite them in the future, it will be a considerable aid to the exertions so ably made by your Medical Officers to secure a high standard of health in your District.

(3) *Use of the Act by the Public.*—During the year two persons have taken advantage of the provisions of the Act by obtaining analyses of milk at the statutory fee.

I have the honor to be, Gentlemen,

Your obedient servant,

JOHN MUTER, Ph.D., F.I.C., F.C.S.,

Public Analyst.

APPENDIX OF STATISTICAL TABLES.

TABLE I.

Summary of Deaths and their Causes, registered in the entire District during 1885, classified according to Sex, Age, and Social Position, and showing also the relative numbers in each Sub-district.

POPULATION of entire District, (Census) 1881, 210,434. — Official Population in middle of 1885, 248,410. Area in Statute Acres, 11,695. — CAUSES OF DEATH.	Total Deaths from each class of Disease in the entire District.	Sub-Districts. East Battersea—Population, 66,654. Area in acres, 947.	West Battersea—Population, 64,317. Area in acres, 1,396.	Clapham—Population, 40,832. Area in acres, 1,233.	Putney—Population, 14,830. Area in acres. 2,176.	Streatham, Tooting and Balham—Population, 30,280. Area in acres, 3,465.	Wandsworth—Population, 31,567. Area in acres, 2,478.	Sex. Males.	Females.	Age. Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	At 20 and under 40 years of age.	At 40 and under 60 years of age.	At 60 and under 80 years of age.	80 years and upwards.	Social Position. Nobility and Gentry.	Professional Class, Merchants, Bankers, &c	Middle & Trading Class, Shopmen, Clerks, &c	Industrial and Laboring Class.
I. Zymotic. Small Pox	5	1	1	...	...	...	3	1	4	1	1	..	2	1	...	...	...	...	...	1	4
I. Zymotic. Measles	140	49	63	3	4	2	19	72	68	18	108	13	1	...	...	...	...	...	1	10	129
I. Zymotic. Scarlet Fever	11	3	5	...	...	...	3	6	5	...	7	2	1	1	...	...	...	...	...	3	8
I. Zymotic. Typhus Fever	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
I. Zymotic. Enteric Fever	41	9	9	8	5	6	4	21	20	1	11	...	11	16	1	1	...	1	5	10	25
I. Zymotic. Puerperal Fever	23	8	10	3	...	2	...	...	23	...	...	...	2	21	...	...	...	...	...	4	19
I. Zymotic. Diphtheria	28	8	2	4	3	5	6	12	16	3	18	6	...	...	1	...	...	..	3	6	19
I. Zymotic. Whooping Cough	178	47	74	25	1	7	24	85	93	82	91	4	1	...	..	..	..	...	4	23	151
I. Zymotic. Erysipelas	17	5	7	2	...	..	3	9	8	4	...	...	1	3	3	6	...	...	...	3	14
I. Zymotic. Diarrhœa, Dysentery, & Cholera	193	63	63	16	4	12	35	106	87	161	15	...	3	2	5	7	...	1	5	31	156
I. Zymotic. Other Zymotic Diseases	1	...	...	..	1	...	...	1	...	1	...	..	..	...	...	...	...	..	..	..	1
Totals of Zymotic Class	637	193	234	62	18	34	97	313	324	271	251	25	22	44	10	14	...	2	19	93	533
II. Constitutional. Gout, and Rheumatism	32	11	9	3	1	2	6	17	15	1	..	..	3	10	7	11	..	1	4	12	15
II. Constitutional. Cancer and other Tumours	105	18	31	16	8	11	21	31	74	..	3	...	...	9	49	41	3	7	11	18	69
II. Constitutional. Other Constitutional Diseases	23	7	8	1	2	4	1	11	12	11	2	..	1	3	2	3	1	..	3	2	18
II. Constitutional. Tubercular. Phthisis	406	91	138	48	19	43	67	196	210	18	17	11	50	174	124	12	..	12	22	78	294
II. Constitutional. Tubercular. Tabes Mesa	159	62	71	7	...	7	12	90	69	131	21	1	1	3	1	1	..	1	3	22	133
II. Constitutional. Tubercular. Hydrocephalus	69	27	9	10	6	9	8	30	39	26	31	9	3	..	...	...	..	...	7	10	52
II. Constitutional. Tubercular. Scrofula	30	1	21	3	...	2	3	10	20	12	10	1	3	2	1	1	...	1	1	6	22
III. Local. Nervous	594	104	178	80	26	61	145	310	284	154	72	16	16	50	120	146	20	17	29	145	403
III. Local. Circulatory	278	51	108	40	17	26	36	130	148	11	1	4	14	39	78	121	11	25	17	67	169
III. Local. Respiratory	982	303	327	120	29	102	101	504	478	293	226	16	8	62	152	199	26	17	32	155	778
III. Local. Digestive	186	36	52	30	13	33	22	82	104	31	7	3	4	19	60	59	3	12	19	58	97
III. Local. Urinary	81	16	30	6	6	11	12	50	31	2	2	4	1	8	32	30	2	6	5	24	46
III. Local. Generative	42	7	16	7	1	5	6	2	40	1	...	...	2	21	13	4	1	1	2	10	29
III. Local. Locomotory	11	3	5	1	...	...	2	3	8	2	2	1	...	...	2	4	...	1	...	2	8
III. Local. Integumentary	9	1	4	...	1	..	3	3	6	4	1	1	...	2	1	..	...	...	...	...	9
IV. Developmental. Premature Birth, Low Vitality and Congenital Defects	259	82	55	36	9	40	37	148	111	257	2	...	...	...	...	..	...	...	12	48	199
IV. Developmental. Old Age	171	22	54	31	7	23	34	63	108	...	...	...	...	...	2	85	84	13	11	33	114
V. Violence	97	32	29	8	4	9	15	64	33	39	8	2	3	16	22	6	1	...	1	16	80
VI. Illdefined & not specified — Illdefined	20	4	15	...	...	1	...	12	8	4	1	..	...	4	7	4	...	...	...	3	17
VI. Illdefined & not specified — not sp'fd.	1	...	1	..	...	...	...	...	1	...	...	...	...	...	...	1	...	...	..	...	1
Totals	4192	1071	1395	50	167	423	628	2069	2123	1268	659	94	131	467	683	740	150	116	196	302	3078

TABLE II.

Showing the total number of deaths and their causes registered in the entire District, during the eleven years 1875-85, with the relative numbers of each class of disease.

DISEASES, And other causes of Death		1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
Classes: 1 Zymotic	Small Pox ..	3	26	57	19	4	3	37	1	..	9	5
	Measles	27	88	64	84	125	59	134	115	133	182	140
	Scarlatina ..	134	86	58	39	134	173	100	119	65	47	11
	Diphtheria ..	28	15	7	19	17	19	18	51	63	43	29
	Whooping Cough ..	107	126	73	149	148	123	105	163	133	145	178
	Typhus and other fevers	39	47	64	39	62	44	37	49	52	58	41
	Diarrhœa & Choleraic Disease..	134	159	114	182	94	213	149	117	158	239	193
	Erysipelas ..	24	13	13	5	13	10	15	18	10	28	17
	Metria, Childbirth	15	26	20	7	28	23	29	19	25	24	23
	Carbuncle ..	..	..	..	..	..	..	..	3	..	..	..
	Influenza	..	..	1	..	..	..	..	..	..	..	..
	Quinsy	..	..	..	1	..	1	..	1	..	..	..
	Croup	26	27	20	39	40	19	18	31	60	38	..
Other Zymotic Diseases..		..	..	..	..	..	..	..	..	..	..	1
Totals of Zymotic Class..		537	613	491	583	665	687	642	687	699	817	638
2. Gout and Rheumatism		11	14	13	15	8	15	25	25	25	24	32
3. Cancer & other Tumors		105	97	101	106	91	110	118	144	114	148	105
4. Other Constitutional Diseases		..	..	..	..	..	..	..	..	..	..	23
5. Tubercular Diseases..		565	555	514	501	513	625	557	521	654	715	664
6. Nervous		455	316	450	503	474	464	540	539	574	602	594
7. Circulatory		176	170	204	212	203	193	245	251	255	269	278
8. Respiratory		630	561	519	694	891	657	695	850	829	758	982
9. Digestive		136	126	155	150	117	155	208	195	234	227	186
10. Urinary		55	62	63	42	74	66	70	89	99	80	81
11. Generative.....		13	23	29	19	25	20	35	32	30	35	42
12. Locomotory		..	..	..	..	..	..	..	..	..	..	11
13. Integumentary		4	5	6	1	3	8	3	9	10	3	9
14 Premature Birth, Low Vitality, Malformation, &c. ..		177	226	212	177	170	266	232	234	241	304	259
15. Old Age		130	150	126	141	141	136	120	153	185	154	171
16. Violence.....		68	90	82	75	83	96	113	104	94	111	97
17. Ill Defined and Not Specified		34	46	26	56	68	95	44	18	40	19	21
TOTALS		3096	3154	2931	3275	3526	3593	3647	3851	4083	4266	4193

TABLE III.

Cases of Sickness amongst the Poor under the treatment of the Union Medical Officers, with the Deaths from each class of Disease, during the year ended 31st December, 1885. Compiled from the District Medical Relief Books.

SUB-DISTRICTS.	Total Cases of Sickness treated in each Sub-District.	Total Deaths in each Sub-District.	1—Small Pox.		2—Measles.		3—Scarlatina.		4—Diphtheria.		5—Whooping Cough.		6—Diarrhœa and Dysentery.		7—Cholera.		8—Fever.		9—Erysipelas.		10—Puerperal Fever.		11—Lung Disease except Phthisis.		12—Phthisis.		13—Hydrocephalus, Atrophy, Scrofula and Infantile Convulsions		14—Violence, Privation, and Premature Birth		16—Other Diseases.	
			Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Battersea .. East ..	1008	28	103	..	23	..	12	1	1	..	5	..	19	2	..	..	8	1	4	..	..	..	153	12	24	4	3	1	13	..	640	7
Battersea .. West ..	609	29	44	..	18	1	7	..	15	1	11	..	..	..	..	..	7	..	9	..	..	..	153	13	7	6	7	3	18	..	313	5
Clapham	537	19	12	..	5	1	11	..	..	..	8	..	20	2	..	..	2	..	3	..	..	..	142	10	23	4	..	..	20	..	341	2
Putney and Roehampton	117	5	..	..	10	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	24	1	6	2	..	..	4	..	65	2
Streatham including Tooting and Balham ..	254	7	4	..	2	..	2	..	..	..	14	..	7	..	..	..	1	..	1	..	..	..	35	1	3	2	1	..	3	3	184	..
Wandsworth	643	32	28	..	22	3	13	2	..	..	8	..	27	3	..	..	2	..	5	1	..	..	166	9	2	2	6	2	..	..	339	9
Totals	3218	120	191	..	80	5	35	3	16	1	46	..	73	7	..	..	21	1	22	1	..	..	673	46	65	20	17	6	58	3	1882	25

*** The ratio of deaths in cases treated is 3·7 per cent.

TABLE IV.

Summary of Sanitary Operations in the entire District during the year 1885.

	East Battersea.	West Battersea.	Clapham.	Putney.	Streatham.	Wandsworth	Total.
Number of Houses & Premises inspected	8111	8460	3441	3997	5055	4350	33414
1st Notices served	617	1000	1517	370	616	608	4728
2nd Notices served	188	203	532	15	15	58	1011
Number of houses disinfected after infectious diseases	257	169	52	13	32	112	635
Number of houses in which infectious disease recurred after disinfection	..	..	..	..	..	5	5
Number of houses from which bedding, &c., was burnt	..	3	33	..	3	2	41
Disinfecting apparatus at Putney, number of times used	..	..	..	8	..	..	8
Overcrowding abated	11	3	5	3	3	..	25
Rooms cleansed and repaired	65	8	376	17	39	24	529
Staircases & passages cleansed and repaired	25	2	63	4	..	9	103
New drains and drains relaid	626		327	141	508	84	1686
Number of feet of new sewers and branch drains	21933		2516	3326	15967	7576	51318
Drains cleansed and repaired	596	188	214	92	153	97	1340
Syphon traps fixed to drains	107	155	1120	..	262	1	1645
Sinks altered to discharge outside over gullies	39	34	497	10	37	5	622
Bath and lavatory wastes altered to discharge outside over gullies	..	..	135	2	..	..	137
Rain water pipes disconnected from drains	..	16	184	..	..	..	200
Water-closets cleansed and repaired	92	114	461	98	132	67	964
Water-closets, supply of water laid on to	404	307	200	60	112	146	1231
Urinals cleansed, repaired or water laid on	2	2	31	1	..	2	38
Accumulation of manure, &c., removed	8	14	29	4	18	11	84
Cesspools abolished	1	1	12	9	5	2	30
Dust-bins provided	268	232	161	24	200	260	1345
Stables drained or paved and cleansed	..	1	32	4	3	1	41
Yards drained and paved	25	15	261	8	11	5	325
Unwholsome or dilapidated houses cleansed & repaired	89	123	19	..	32	3	266
Leaky house-roofs and gutters repaired	131	85	203	29	13	133	594
Houses supplied with water	4	22	17	6	11	28	88
Water-cisterns covered and repaired	336	300	548	39	51	183	1457
Cistern overflow pipes disconnected from drains	..	10	143	..	23	..	176
Wells closed	..	..	10	..	..	..	10
Pig nuisances removed	5	2	7	1	17	5	37
Unclassified nuisances	10	13	262	9	34	..	328
Cases investigated by Magistrates	3	6	21	1	..	3	34
Compulsory Orders obtained	3	5	15	1	..	3	27
Compulsory works executed	3	5	15	1	..	3	27

TABLE V.

METEOROLOGICAL TABLE FOR LONDON, 1885.

Deduced from Observations, at Greenwich, under the Superintendence of the Astronomer Royal, and compiled from Quarterly Tables, furnished to the Registrar-General by James Glaisher, Esq., F.R.S.

Winter ... Jan., Feb., March. Spring ... April, May, June. Summer ... July, Aug., Sept. Autumn .. Oct., Nov., Dec.	Temperature of Air. Mean.	Temperature of Air. Diff. from Average of 113 Years.	Temperature of Air. Diff. from Average of 43 Years.	Temperature of Evaporation. Mean.	Temperature of Evaporation. Diff. from Average of 43 Years.	Temperature of Dew Point. Mean.	Temperature of Dew Point. Diff. from Average of 43 Years.	Temperature of Air—Daily Range. Mean.	Temperature of Air—Daily Range. Diff. from Average of 43 Years.	Elastic Force of Vapour. Mean.	Elastic Force of Vapour. Diff. from Average of 43 Years.	Weight of Vapour in a Cubic Foot of Air. Mean.	Weight of Vapour in a Cubic Foot of Air. Diff. from Average of 43 Years.	Degree of Humidity. Mean (Sats=100).	Degree of Humidity. Diff. from Average of 43 Years.	Reading of Barometer. Mean.	Reading of Barometer. Diff. from Average of 43 Years.	Weight of a Cubic Foot of Air. Mean.	Weight of a Cubic Foot of Air. Diff. from Average of 43 Years.	Rain. Amount.	Rain. Diff. from Average of 70 Years.	Reading of Thermometer on Grass. Number of Nights it was At or below 30	Between 30° & 40°.	Above 40°.	Lowest Reading at Night.	Highest Reading at Night.
1884.	°	°	°	°	°	°	°	°	°	in.	in.	grs.	gr.			in.	in.	grs.	grs.	Sums. in.	in.	Sums.				°	°
YEAR.	48·6	−0·1	−0·8	45·5	−0·8	42·6	−1·0	15·7	−0·1	·281	−·014	3·2	−0·2	81	−2	29·754	−·019	542	0	24·00	−1·28	100	165	100		16·9	57·8
First Quarter...	40·3	+1·5	+0·3	38·3	+0·2	35·8	+0·3	11·7	−0·1	·211	+·002	2·5	+0·1	83	−0	29·719	−·047	551	−2	5·26	+0·26	46	37	7		16·9	47·5
Second do. ...	52·4	+0·1	−0·5	48·4	−0·7	44·4	−1·1	19·8	−0·1	·296	−·012	3·3	0·2	75	−3	29·700	−·082	537	−1	5·82	+0·01	18	47	26		22·9	54·3
Third do. ...	59·1	−0·6	−1·1	55·0	−1·4	51·3	−1·7	20·7	+1·0	·379	−·027	4·2	−0·3	76	−2	29·835	+·043	532	+2	5·55	−1·80	3	31	58		22·3	57·8
Fourth do. ..	42·8	−1·0	−1·7	41·1	−1·4	39·1	−1·6	10·5	−1·3	240	−·018	2·8	−0·3	87	−1	29·761	+·012	549	+2	7·37	+0·25	33	50	9		18·8	44·1

In this Table, + and − respectively signify that the number in the *preceding* column are *above* or *below* the average to the extent of the quantities to which these signs are prefixed.