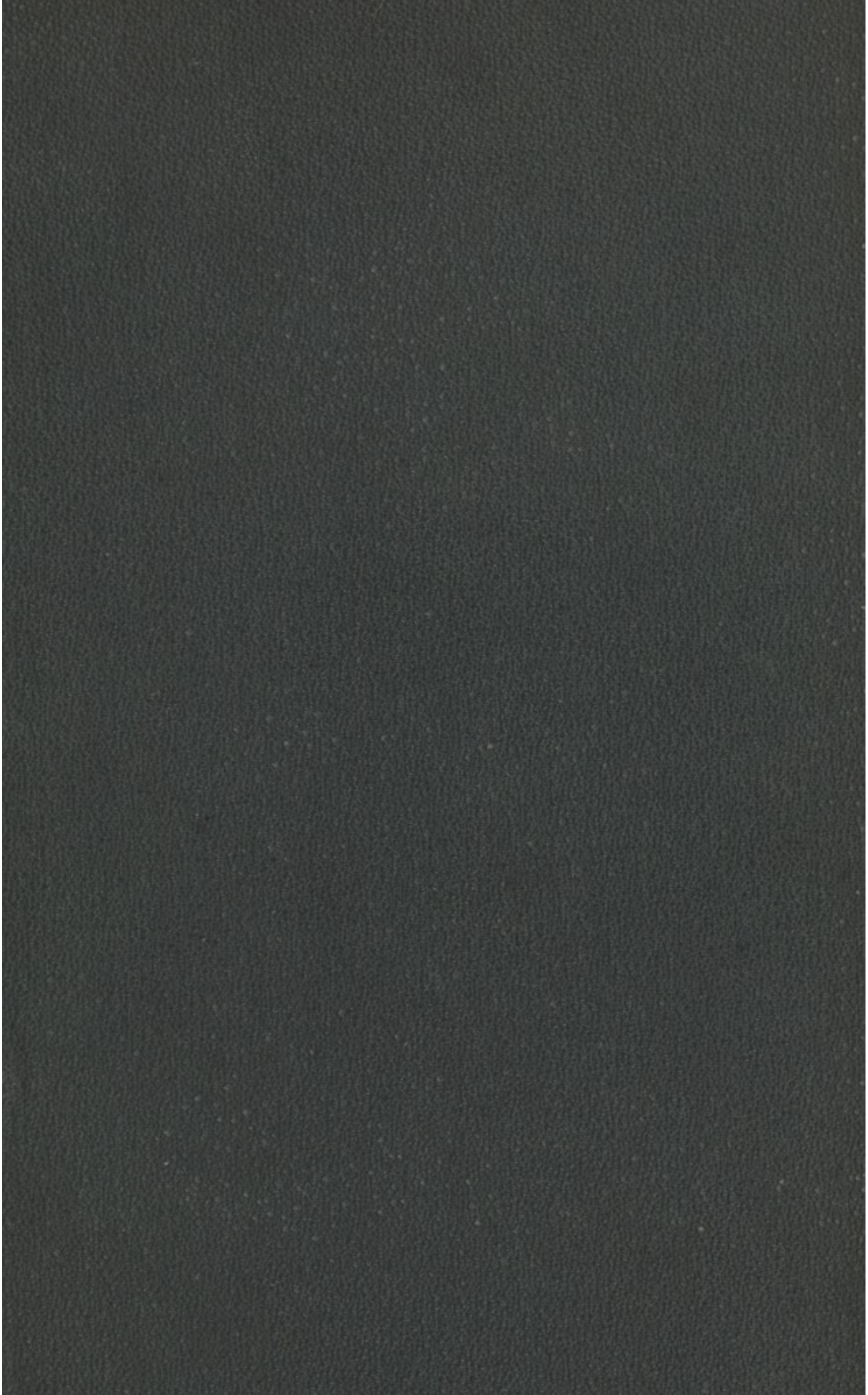
[Report of the Medical Officer of Health for Wandsworth District, The Board of Works (Clapham, Putney, Streatham, Tooting & Wandsworth)].

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



AC. ~~4386~~ 4388 WANDSWORTH

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 1881.

BY THE

MEDICAL OFFICERS OF HEALTH.

London:
LOVE BROS., PRINTERS, 13, COLEMAN ST., BANK, E.C.

1882.

REPORT,

1881.

To the Board of Works of the Wandsworth District.

GENTLEMEN,

In submitting to your notice this our twenty-sixth Annual Report, containing a review of the health and sanitary condition of the Wandsworth District, we have the very gratifying duty of recording the occurrence during the year 1881 of the lowest rate of mortality which has obtained since your Board first assumed jurisdiction of this extensive and important suburb. Such a satisfactory result is matter for unmixed congratulation, inasmuch as it has been attained in the presence of an epidemic of general prevalence and great severity, and in face of the sanitary disadvantages arising from a more condensed population. Trustworthy evidence of this successful issue of your sanitary supervision is herein presented, for the most part, in the form of statistics which are, as usual, tabulated as far as possible for the purpose of ensuring facility of reference and of comparison with those of former years.

We have the honour to remain,

GENTLEMEN,

Your obedient Servants,

The Medical Officers of Health of the Wandsworth District.

JUNE, 1882.

HEALTH AND SANITARY CONDITION OF THE ENTIRE DISTRICT.

During the greater part of the year 1881 this District was affected by the very fatal epidemic of Small-pox which prevailed generally throughout the whole Metropolis. Scarlatina, Whooping-cough, and Measles also were extensively prevalent, and the latter was attended with unusual fatality.

Notwithstanding these adverse influences, the sanitary bearing of the district in the presence of the epidemic was marked by much security, and, compared with the majority of the southern districts, by great immunity from the fatal effects of the disease. On examination of the following statistics, it will be found that the death-rate was unprecedentedly low, and that even after taking into calculation the Small-pox mortality in hospitals due to the district, it but slightly exceeded that of the healthiest of rural localities.

Vital Statistics.

Population.—The mean number of inhabitants of this district calculated to the middle of the past year, according to the method employed by the Registrar-General, amounted to 212,492. This estimate is based on the assumption that the population has increased since the period of the last census at the same rate as it had done during the ten preceding years. The recent date of the census admits of little possibility of error in the calculation.

Births—Birth-rate—Rate of Natural Increase.—The number of births registered during the year was 7,582—3,882 of males, and 3,700 of females, yielding according to the foregoing estimate of the population the high *birth-rate* of 35·68 per 1,000 persons of all ages. The average rate of the preceding ten years was 34·13 per 1,000. The births exceeded the deaths by 3,935, which number constitutes the *natural increase* of the population, and is unusually high, producing an annual rate of 18·51 per 1,000. The mean annual rate for the preceding ten years was 16·07.

Deaths—Death-rate.—The deaths registered during the year numbered 3,647; 1,802 were of males, and 1,845 of females. Determined in the preceding manner the death-rate was 17·16 per 1,000 persons living on an average during the year. The average annual rate of the ten years 1871–80 was 18·06 per 1,000.

Lest it might be assumed that the unusual lowness of the death-rate of the past year had been due to a diminution of the *registered* mortality by the circumstance that most of the deaths from Small-pox took place in hospitals which are located without this district (all deaths being registered in the district in which they occur), it should be justly stated that 63 inhabitants of this district died of that disease in the public hospitals. By adding the deaths of these persons to the registered deaths, the rate would still be 17·45 only per 1,000, or 0·45 only higher than the zero in Dr. Farr's health-scale, above which deaths are held to be preventible in urban districts; and it is 4·75 per 1,000 lower than the mean rate of the nineteen provincial towns recorded in the

Registrar General's weekly return, and 3·75 per 1,000 lower than the rate for all London (21·2), which was, with the exception of that of the year 1850, the lowest recorded within the annals of registration. A comparison of the foregoing rates with those of the preceding ten years, as shown in the following table, renders the extraordinary lowness of the death-rate of the past year strikingly apparent.

Birth-rates, Death-rates, and rates of Natural-Increase in the entire district during the eleven years 1871–81.

Years.	Births.	Birth-rate per 1000.	Deaths.	Death-rate per 1000.	Natural Increase.	Rate of Natural Increase per 1000.
1871	4380	34·5	2867	22·60	1513	11·9
1872	4540	34·4	2421	18·30	2119	16·1
1873	5053	36·4	2580	18·70	2473	18·0
1874	5221	36·5	2796	19·50	2425	16·9
1875	5529	37·3	3096	20·87	2433	16·4
1876	5999	39·04	3154	20·00	2845	18·51
1877	6159	38·6	2991	18·70	3168	20·0
1878	6508	39·4	3275	19·80	3233	19·8
1879	6833	39·7	3526	20·50	3307	19·23
1880	7038	34·2	3593	17·50	3445	16·8
Mean of Ten Years 1871—80	5726	34·13	3030	18·06	2696	16·07
1881	7582	35·68	3647	17·16	3935	18·51

The death-rates of the several sub-districts are exhibited in the subjoined table, together with the density of population and the relative number of the industrial to the other classes which each possesses :—

SUB-DISTRICTS.	Population in the middle of 1881	Per-centage of Total Population	Deaths	Death-rate per 1000	* Death-rate per 1000, Excluding Non-Parishioners who have Died in Public Institutions.	Density of Population—No. of Persons to Acre	Relative Number of Industrial and Other Classes.			
							Industrl. Classes	Per Cent.	Other Classes	Per Cent.
Battersea	108,548	51·1	2,161	19·90	18·72	46	91,268	84·0	17,280	16·0
Clapham	36,600	17·1	499	13·63	No appreciable difference	30	18,043	49·2	18,557	50·8
Putney	13,312	6·3	167	12·55		6	6,297	47·3	7,015	52·7
Streatham ...	25,830	12.2	313	12·11		7	12,543	48·5	13,287	51·5
Wandsworth	28,202	13·3	507	17·97	17·43	11	20,859	73·9	7,843	26·1

The difference between the several rates is seen to be exceedingly great. It is not exceptional as regards the year 1881, and its cause admits of ready explanation. In addition to the many conditions which in a greater or less degree directly or indirectly increase the mortality of a locality, and which admit of prevention or alleviation by sanitary operations, there are two important agents which directly and to a great extent influence its death-rate in a manner which is not amenable to sanitary control; these are the density of its population and the

---

* This correction is necessary in consequence of the undue exaltation of the death-rates of Battersea and Wandsworth by the mortality of the Union Infirmary in the former, and of the Surrey County Lunatic Asylum, St. Peter's Hospital, and the Hospital for Incurables, in the latter sub-district.

social position of its inhabitants. The figures placed under these heads in the foregoing table compared with those of the several death-rates indicate in a very marked manner the cause of the great disparity observable in the latter. Thus Battersea with a death-rate of 18·72 per 1,000 has a population with a density of 46 persons to the acre, and a labouring population of 84 per cent.; Clapham, with 30 persons to the acre, has a death-rate of 13·63 per 1,000, but a labouring population of only 49 per cent.; Putney and Streatham, with a rate somewhat more than 1 per 1,000 lower than Clapham, have 6 and 7 persons to the acre respectively, and a labouring population of 47 and 48 per cent, respectively; while Wandsworth, with a rate of 17·43 per 1,000, has 11 persons to the acre, but a labouring population of 74 per cent.; so that the sub-district with the greatest density, and the proportionally largest labouring population, as in Battersea, has the highest death-rate, and conversely, those with the smallest labouring population and the least density, as Putney and Streatham, have the lowest death-rate, while intermediate death-rates, but widely differing from each other, result in those sub-districts the population of which is modified by density on the one hand, as in Clapham, and by a large labouring element on the other, as in Wandsworth, the death-rate varying directly as the density of population, and inversely as the height of the social scale of the inhabitants. Under these circumstances it is evident, therefore, that in contrasting the death-rates of different localities it is essentially necessary to take into consideration the social status and density of the populations to which they relate.

Mortality—Causes of death.—Table No. II. Appendix records the total mortality registered in the district during the year. The several classes of disease and other causes of death are arranged according to the sex, age, and social position of the deceased, with the relative numbers in each sub-district. The several diseases of the Zymotic class are also enumerated. In Table No. III., Appendix, the total mortality of the past year, with the classes of disease and other causes from which it resulted, is exhibited in comparison with that of the ten years 1871–80. By means of the extended information conveyed by the statistics contained in these two tabular summaries, a comprehensive view is afforded of the nature and amount of the total mortality, as well as of the local distribution and comparative fatality of the diseases which have occurred throughout the district.

Infectious or Epidemic Diseases.—The class of diseases in these Tables claiming first attention as being the most important to the sanitarian is the epidemic or infectious class, the prevention and diminution of which is the principal aim of all sanitary proceedings.

The deaths which occurred from these diseases in the entire district, and in the several sub-districts, during the year are contained in Table IV. (Appendix). The latter may be consulted with advantage as an exponent of the then existing health, inasmuch as the death-rate is almost invariably found to fluctuate with the amount of epidemic disease which has prevailed. The total deaths from these diseases is seen to have formed 15 8 per cent. of the whole mortality; they were 102 less in number, or 3·4 per cent. less than the corrected average of the preceding ten years; and if the deaths, from Small-pox, of patients sent into the public hospitals, be added, as

they justly should be, the per-centage would still be but 17·6 per cent., or about 1 per cent. less than such average. This diminution of fatality from epidemic diseases, inasmuch as it took place, notwithstanding an extensive prevalence of Measles, Whooping-cough, Scarlatina and Small-pox, is as surprising to realise as it is gratifying to record. The deaths from Diarrhœa were the most numerous of the epidemic class, amounting to more than one fourth of the whole; although this disease was fatally present during the whole year, it can scarcely be said, except in the summer months, to have prevailed epidemically. Measles was the next most fatal of these diseases producing 23 per cent. of the deaths. Whooping-cough and Scarlet-fever caused 11 per cent. and 17 per cent. of the deaths, respectively. 37 deaths only were registered as having resulted from Small-pox, but 100 deaths occurred to persons suffering from that disease in the district, 63 of whom were removed to public hospitals. Although this disease was so generally prevalent during the greatest part of the year, it was not attended with so much fatality as either Whooping-cough or Measles, and only reached the same amount as Scarlatina. The deaths from Fever were one-third less than the decennial average. As regards the local distribution of the mortality from this class of diseases in proportion to population, Diarrhœa was slightly in excess in Clapham and Wandsworth, proportionally low in Streatham and Putney, and of due amount in Battersea; Scarlatina was slightly in excess in Clapham, Wandsworth and Putney, of due amount in Streatham, and proportionally low in Battersea; Diphtheria was of equal distribution; Fever was somewhat in excess in Battersea, and correspondingly low in the other parishes; Measles and Whooping-cough were greatly in

excess in Battersea,, and proportionally low in the other localities. The incidence of Small-pox it is difficult to determine in consequence of the great majority of cases having been removed to hospitals, but it appears to have disproportionately affected Battersea and Wandsworth.

The relative amount of epidemic mortality in the several sub-districts is shown in the following table.

SUB-DISTRICTS.	No. of Deaths from Epidemic Diseases per 1000 of the Estimated population	Ratio of Deaths from Epidemic Disease to every 100 of the total deaths.
Battersea	3·50	17·63
Clapham	1·93	14·22
Putney	1·65	13·17
Streatham	1·43	11·82
Wandsworth	2·44	13·60

The following are the measures which have been adopted for the prevention and suppression of the principal epidemic diseases, but more especially of the late outbreak of Small-pox, to which some of them were more immediately and successfully applicable:—viz.: The isolation of patients by the earliest possible removal to hospital, with the free use of disinfectants in the houses before and after removal; the destruction by fire of the bedding, clothes, &c., of the patients when necessary; the subjecting the infected rooms for several hours to the fumes of burning sulphur (the complete efficiency of which has been fully tested and confirmed, as shown in most of the "Local Summaries" contained in this Report), and the subsequent cleansing of them by lime-whiting and washing; and in addition, in Putney, the disinfection of bedding, clothes, &c., by means of a Hot-air Oven; the vaccination and re-vaccination of

any inmates of the house not already subjected to such protective influence. The last-named procedure of preventive medicine was energetically pursued; the public vaccinators, to meet the convenience of the working classes, attending at their stations of an evening for the purpose of re-vaccinating any person desirous of receiving the benefit of that operation. The extent to which primary vaccination was carried out in the district is fully shown by the following return, from which it appears that of 7,052 children registered, 6,045 were successfully vaccinated, and of the remainder 297 only, or a little over 4 per cent., are, in consequence of having been removed from the district or not having been found, unaccounted for.

Vaccination.—Return made February 7th, 1882, by the Vaccination Officers respecting the vaccination of children whose births were registered in the entire district, from 1st of January to December 31st, 1880, inclusive—

SUB-DISTRICTS.	Number of Births Returned from 1st January to 31st December, 1880.	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.
Battersea	4075	3449	11	...	407	24	...	184
Clapham	1091	972	5	...	70	3	...	41
Putney..	356	316	1	...	27	3	6	3
Streatham	703	579	1	...	58	13	11	41
Wandsworth ...	827	729	2	...	67	...	1	28
	7052	6045	20	...	629	43	18	297

Looking to the virulent nature of the epidemic, as evidenced by the fatality in other districts and in hospitals, it is but reasonable to suppose that the comparative immunity from the disease enjoyed by this district is attributable to the prompt and energetic measures which were employed to arrest and crush the pestilence.

Non-infectious Diseases.—In Table III., Appendix, the number of deaths resulting from each class of disease during the past year is compared with that of the ten preceding years. An analysis of the figures therein contained furnishes further detailed information, which is embodied in the following table, wherein the numbers of the several classes are contrasted with their respective decennial averages corrected for increase of population. Their rate of variation per cent. is also given, so that the increment or decrease of any particular class of diseases can be readily distinguished. For facility of reference they are arranged in consecutive order of fatality.

CLASSES OF DISEASE, &c.	Number of deaths in 1881.	Average Annual number of deaths in the ten years 1871–80.	Same averages corrected for increase of population.	Number and per-centage more or less than the corrected averages (denoted by the signs + or −.)
5. Respiratory Organs.....	695	596	754	− 59 or 1 per cent.
1. Zymotic	642	588	744	− 102 or 3·2 „
2. Tubercular	557	501	634	− 77 or 2 „
3. Brain and Nerves	540	427	541	+ 1
4. Heart, &c.	245	172	212	+ 33 or 5·8 „
11. Premature Birth, &c. ...	232	182	145	+ 87 or 2·4 „
6. Digestive Organs.....	208	125	158	+ 50 or 1 „
13. Age	120	130	163	− 43 or 1·2 „
12. Uncertain Seat	118	100	126	− 8 or 0·2 „
14. Violence	113	78	98	+ 15 or 0·4 „
15. Not Specified	44	56	70	− 26 or 0·7 „
7. Urinary Organs	70	46	58	+ 12 or 0·32 „
8. Generative Organs	35	19	24	+ 11 or 0·30 „
9. Joints, Bones, &c.	25	11	13	+ 12 or 0·32 „
10. Skin, &c.	3	4	5	− 2

With the information thus conveyed it will be necessary only, therefore, to refer to such of the classes as present any unusual deviation from their average amount. Diseases of the respiratory organs (class 5) were the most numerous of all the causes of death, thus supplanting the zymotic diseases (class 1) from their accustomed position. They formed 19 per cent. of the total mortality, and their number, although somewhat less than the average, was greater by 38 than in the year preceding, the cause of which increase is doubtless associated with the ulterior consequences of the epidemics of Measles and Whooping-cough which prevailed. The *Tubercular Class* (class 2), which includes Scrofula and Consumption, formed 15 per cent. of all deaths, and was but slightly higher than the average. *Diseases of the Brain and Nerves* (class 3) formed upwards of 14 per cent., but the excessive and variable mortality of the Surrey County Lunatic Asylum which is derived from without the district invalidates any calculation of the relative position held by this class in the causation of mortality. *Diseases of the Heart, &c.* (class 4) exceeded the average by 5·8 per cent., the cause of which excess is not apparent. *Premature Birth, Low Vitality, &c.* (class 11) was higher than the average to the extent of 2·4 per cent.

The remaining classes do not present any variation of sufficient extent to require notice, the most noteworthy and satisfactory record in the table being that of the great diminution of epidemic diseases.

Age at Death—Infant Mortality.—As might be anticipated from the diminution of epidemic diseases the mortality of infants was correspondingly less. Upwards of 28·6 per cent. of all deaths occurred to infants during their first year of life; 45·7 per cent. to children under

5 years of age, and 49·4 per cent. to children under 10 years of age. This mortality of infants and young children, although high, is much less in comparison with that of the corrected average of the preceding ten years. Thus the deaths under 1 year of age were 1·1 per cent. less, all under 5 years of age were 1·8 per cent. less, and all under 10 years of age 1·9 per cent. less than their respective decennial averages.

Senile mortality.—20·5 per cent. of all deaths occurred to persons at and above the age of 60 years, and 19·8 per cent. during the year 1880. The deaths classed as to age for the ten years 1871–80 are compared with those of the past year in the subjoined table:—

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
1871	753	538	142	1517	380	411	441	118
1872	705	452	61	1297	282	394	354	94
1873	636	387	75	1285	326	394	448	127
1874	777	452	107	1438	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	947	682	102	1878	368	487	658	135
1880	1,136	600	140	2021	374	500	560	138
1881	**1,043**	**627**	**132**	**1938**	**410**	**548**	**599**	**152**

Social Position.—The rates per cent. of the deaths classified according to the social position of the deceased for the 5 years 1877-81 are exhibited in the following table, in which a considerable reduction of the relative

amount of mortality occurring amongst the industrial classes is seen to have taken place during the past year. This result forms a reliable indication of improvement effected amongst them.

	1877	1878	1879	1880	1881
Nobility and Gentry	2·5	1·62	3·3	3·4	2·71
Professional Class	6·2	5·08	5·9	5·5	5·12
Middle Class.....	18·2	18·10	17·4	16·9	19·00
Industrial Class	73·1	75·20	73·4	74·2	73·17
	100·0	100·0	100·0	100·0	100·00

Sickness and Mortality amongst the Parochial Poor.—The diminution in the amount of sickness and mortality amongst the parochial poor observable in 1880 continued to a greater extent during the past year. The total cases of sickness during the latter were 2,355, and the resulting deaths 100; in the preceding year the total cases of sickness were 2,681, and the deaths 131. The mortality of the past year was upwards of a fifth part below the average; the proportion of deaths to cases treated was 4·2 per cent., and in the year preceding 5·0 per cent. (nearly). The numbers relating to the several sub-districts are shown in Table V., Appendix. They fully corroborate the indications already set forth of the lowness of the amount of sickness and mortality of the district during the past year.

INQUESTS.—*Violent and Accidental Deaths.*—The unusually large number of 193 inquests were held during the year, the results of which are tabulated as follows:—

VERDICTS.	SUB-DISTRICTS.						
	Battersea.		Clapham.	Putney.	Streatham.	Wandsworth.	Total.
	East.	West.					
Deaths from Natural causes ...	17	21	10	3	4	21	76
Deaths from Violence :—							
Accidental—Drowning	10	10	...	5	1	4	30
Concussion	5	...	1	...	4	...	10
Compression	...	...	...	...	...	1	1
Killed on Railway	3	1	...	...	...	...	4
Suffocation	3	10	2	1	1	3	20
Wounds.....	...	...	1	...	...	2	3
Poisoning	1	...	...	...	...	...	1
Fractures	...	1	1	1	2	3	8
Burning.....	...	5	1	...	...	1	7
Scalding.....	...	...	...	...	...	2	2
Choking.....	...	1	...	...	...	...	1
Suicidal — Cut-throat	2	5	1	...	...	...	8
Hanging	...	2	...	...	...	3	5
Poison	...	1	...	...	1	...	2
Drowning	...	1	...	1	...	...	2
On Railway	...	1	...	...	...	...	1
Gunshot	...	...	...	...	...	1	1
Homicidal—Manslaughter ...	...	1	...	...	...	...	1
Murder	...	...	2	...	...	...	2
Found dead	...	1	...	...	...	...	1
Found drowned...	...	...	...	3	...	...	3
Not specified.....	...	2	...	...	...	2	4
Totals in Sub-Districts.	41	63	19	14	13	43	193
	104						

The number of deaths which formed the subjects of inquiry were 37, or 1 per cent. higher than the average. They formed 5·2 per cent. of all deaths. No less

than 117 of the whole number were found to have resulted from violence, which was accidental in 87 instances, suicidal in 19, homicidal in 3; and in 8 instances, the cause of death was not determined.

Uncertified deaths.—The deaths not certified by medical testimony, the number of which amounted to 125, or 3·3 per cent. of all deaths during the past year, continue to attract attention. Assuming the number in this district as indicative of the amount occurring throughout the country, it becomes at once manifest to what a great extent the Registrar-General's Returns, from which are derived Life Insurance Tables, &c., are invalidated; and, which is of far greater importance, seeing that in the absence of medical testimony any of these deaths *may* have resulted from other than natural causes, to what extent the claim of society for protection against the possible perpetration of secret crime remains passively unrecognized by the law. It is much to be regretted that so simple a remedy as the employment of medical investigation in all instances in which the cause of death has not been certified by a registered Medical Practitioner has not been long since provided against a continuance of this great and increasing laxity in the registration of deaths.

Sanitation.—Table VI. in the Appendix exhibits the nature and amount of the principal sanitary proceedings which were carried out during the year. As might be anticipated by a consideration of the condition arising out of a vastly and rapidly increasing population, the work is seen to have been of a more varied and extensive nature than heretofore; this is especially the case as regards the inspection and disinfection of houses and

the removal of nuisances necessitated by a prolonged prevalence of Small-pox throughout the district. As the various matters in the table will be found fully commented on in the several Local Summaries, it is unnecessary to supplement the details there given except by the gratifying observation that their accomplishment has been attended by a well-marked success.

The following important subjects of Sanitary Administration are referred to in the Lcoal Summaries, and from their general as well as local interest invite the serious consideration of the Board, viz. :—

The establishment of public "Abattoirs." The suppression of Piggeries in populous localities. The inspection of Bakehouses. (East Battersea Summary.)

A better and more expeditious method than that at present employed for the removal to hospital of patients suffering from infectious diseases. (West Battersea Summary.)

Remarks on the Water supply. (Clapham Summary.)

Remarks on loss of life by accidental drowning. The use of the Disinfecting-oven at Putney. (Putney Summary.)

The efficiency of the measures employed for the arrest of Small-pox. (Streatham Summary.)

Reiterated Vaccination as the most successful preventive of Small-pox. (Wandsworth Summary.)

The facts disclosed by the statistical information contained in this Report, whether considered in relation to the lowness of the death-rate, the high birth-rate, the diminution of the fatality from epidemic diseases, the resistance to the pressure of a severe epidemic or the other exponents of the state of the public health, lead to the irresistible conclusion that the Wandsworth District enjoyed a high sanitary status during the year 1881. It is hoped that the same measures which have been so successfully adopted in the repression of the outbreaks of contagious disease that occurred, especially those which relate to the disinfection of houses (and in which the greatest confidence is placed by the Medical Officers of Health) may be continued; for it is scarcely to be expected that, in a constantly increasing population, so low a rate of mortality as that which prevailed last year can be maintained without a persistent employment of such measures, together with a continuous and persevering application of all those minor details of preventive sanitation which, in the aggregate constitute the real sanitary defences of the public health.

LOCAL SUMMARIES.

BATTERSEA.

The revised census returns show that at the beginning of April, 1881, the number of persons resident in the Parish of Battersea was 107,262. The actual increase in population during the preceding ten years was 53,252, and the mean annual rate of increase 5,325.

To arrive at the mean population of the parish during the year 1881, it will be necessary to add one-fourth of the annual increase above mentioned, less three days, so as to bring up the estimate to the middle day of the year. This gives 108,548 as the number upon which the birth and death rates should be calculated.

The number of births registered during 1881 was 4,452, and the birth-rate for the year 40·99 per thousand.

The total number of deaths in the whole parish, deducting 128 cases dying in the Infirmary and belonging to other parishes was 2,033, and the death-rate for the year 1881, 18·72 per thousand. The mortality of all London for the like period was 21·2 per thousand. If the deaths of non-parishioners in public institutions are included, as they should not be, the death-rate would be raised to 19·9 per thousand.

BATTERSEA EAST.

The Eastern division of the parish of Battersea had, by calculations based upon the method employed by the Registrar-General, a mean population of 57,154 during the year 1881; which is the number assumed to exist on the middle day of the year in question, and is arrived at by adding to the number of persons returned by the census, 88 day's increase of population, computed by the rate of increase during the preceding decade.

Births.—The number of males registered as having been born in the sub-district during the year 1881, was 1,177; of females 1,172; and the total births recorded 2,349. This, in a mean population of 57,154, is equal to a birth-rate of 41·1 per thousand persons per annum.

Natural increase of population.—During the year 1881, 2,349 persons were born in the sub-district, and 966 deaths were registered. The difference between these numbers, 1,383, is termed the *natural increase*, and forms part of the average increase of 2,948 persons which has been found to exist during the past 10 years; supplemented annually by 1,565 persons or thereabouts, who have removed into the district, in other words, by an excess of immigration over emigration to that extent.

Mortality.—Annexed will be found the usual tabular statement of the deaths registered in the sub-district during 1881, arranged so as to exhibit the several causes of death, together with the sex, age, and social position of the deceased.

STATISTICS OF MORTALITY.

BATTERSEA EAST. — Official mean Population, June, 1880 ... 54,285; 1881 ... 57,154; Area in Acres, 1,235.	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.	All under 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.
Classes :—																
1. Zymotic — Smallpox ...	17	6	11	3	6	1	...	10	6	1	...	...	...	1	2	14
Measles.....	60	32	28	14	41	5	...	60	...	...	...	...	...	...	2	58
Scarlatina...	20	9	11	1	13	2	3	19	...	1	...	...	...	...	1	19
Diphtheria .	3	2	1	1	1	1	...	3	...	...	...	...	...	...	...	3
Croup	4	3	1	1	3	...	...	4	...	...	...	...	...	...	...	4
Whooping Cough ...	37	15	22	18	18	1	...	37	...	...	...	...	...	2	4	31
Typhus, &c.	17	9	8	...	..	6	3	9	5	3	...	...	...	1	1	15
Erysipelas ..	6	3	3	4	...	1	...	5	1	...	...	...	...	...	...	6
Metria, Childbirth	8	...	8	...	...	...	...	...	8	..	...	...	...	1	1	6
Carbuncle...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa & Cholera...	45	23	22	35	5	...	...	40	...	2	2	1	...	2	12	31
Totals of Zymotic Class	217	102	115	77	87	17	6	187	20	7	2	1	...	7	23	187
2. Tubercular.....	173	79	94	69	25	4	13	111	34	24	3	1	1	7	17	148
3. Of Brain, Nerves, &c.	128	68	60	50	28	4	4	86	7	12	18	5	1	3	23	101
4. Of the Heart, &c. ...	53	29	24	1	3	3	4	11	10	16	14	2	...	2	6	45
5. Of Respiratory Organs	188	97	91	61	61	4	2	128	16	20	24	...	...	4	14	170
6. Of Digestive Organs	39	14	25	15	2	...	...	17	7	8	7	...	1	4	4	30
7. Of Urinary Organs	12	6	6	1	...	1	1	3	3	5	1	...	...	...	2	10
8. Of Organs of Generation	7	...	7	...	1	...	...	1	2	3	1	...	...	...	...	7
9. Of Joints, Bones, &c	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Of Skin	1	...	1	1	...	...	...	1	...	...	...	...	...	...	...	1
11. Premature Birth, Low Vitality, Malformation, &c. ...	67	35	32	67	...	...	...	67	...	...	...	...	...	...	4	63
12. Of Uncertain Seat..	27	12	15	6	...	...	..	6	2	8	9	2	...	...	3	24
13. Age..... ..	14	2	12	...	...	...	..	...	...	...	8	6	...	1	5	8
14. Violence.....	24	20	4	3	...	1	4	8	4	9	2	1	...	2	1	21
15. Not Specified.....	16	12	4	1	...	...	2	3	3	4	3	3	...	...	1	15
Totals	966	476	490	352	207	34	36	629	108	116	92	21	3	30	103	830

The deaths registered during the year 1881 in the Eastern division of the parish of Battersea included those of 476 males and 490 females. The total number of deaths was 966, and the death-rate on the now accurately ascertained population afforded by the census, was 16·8 per thousand persons residing in the sub-district during the year. This is a very considerable reduction in the rate of mortality to that which prevailed in the year 1880, which was 18·9 per thousand.

It is a matter of much gratification to find that in spite of the rapidly increasing population, the mortality keeps down to that of a healthy rural district; this is due in all probability to the large open spaces, excellent sub-soil of sand or gravel, efficient drainage provided by the authorities, and last, but not least, to the untiring energy displayed by the Board and its officers in the removal of nuisances and the prevention of epidemic influences injurious to the health of the inhabitants. And indeed much assistance is now derived from the general public, who are more alive to the necessity of sanitary measures than at any previous period, and more ready to assist those charged with the care of the public health.

Ages at death.—The deaths of infants under one year of age were 352, equal to 36 per cent of the deaths at all ages. Under five years of age 559 deaths were recorded, or 57 per cent. of the total deaths; being 89 fewer in number, and 5 per cent. less in proportion to the total deaths, than during 1880.

Above 80 years of age 21 persons died. There is nothing remarkable except the usually large preponderance of females over males which is always found to exist in deaths at advanced ages.

Zymotic or Epidemic diseases.—The deaths from diseases of this, the so-called preventible class, decreased during the year under report. For purposes of comparison the table given below will be found useful.

	1881	1880	1879	1878	1877
Measles	60	22	47	6	47
Diarrhœa and Infantile Cholera	45	78	43	71	47
Whooping Cough	37	43	39	63	26
Scarlatina	20	63	44	19	18
Fevers (Typhoid 14, Typhus 2, Relapsing 1)	17	15	13	12	17
Small Pox	17	1	1	5	28
Metria (Childbirth)	8	5	12	2	8
Erysipelas	6	4	4	0	4
Croup	4	4	9	12	10
Diptheria	3	2	6	4	1
Total	217	237	218	194	206
Zymotic Death-rate per 1,000 per Annum	3·7	4·3	3·9	3·7	4·3

The large mortality from Measles, 60 deaths, is to be accounted for by the fact that an epidemic of this disease occurred, for the most part, during a period of low temperature, and generally inclement weather; with the consequently greater liability to Pneumonia and Bronchitis, which latter diseases were in nearly every case the complication that caused the fatal issue.

From the bowel affections grouped as Diarrhœa and Infantile Cholera 45 deaths were registered. These were, however, fewer by 33 than during the preceeding year.

From Whooping-cough 37 deaths arose, generally in combination with Pneumonia and Bronchitis, and the observations made with reference to Measles and lung affections, equally apply in the case of Whooping-cough

Scarlatina was the next most fatal disease of this class, ranking fourth in its mortality. Twenty deaths were

ascribed to this disease and its complications and *sequelæ* which, it will be observed, is a much smaller number than in previous years, and very small in so large a population.

From the specific Fevers; in which are included 14 cases of Enteric or Typhoid-fever, 2 cases of Typhus, and 1 case of Relapsing-fever; 17 deaths were registered. Again, the mortality is but small considering the population, but some cases were removed to the Fever Hospital, and may have there died. In the District Medical Officer's register 22 cases are recorded amongst the poor, most of which were removed.

From Small-pox, of which an epidemic of great severity occurred during 1881, 17 deaths occurred in the Eastern division of Battersea. In the case of this disease numerous fatal cases undoubtedly were sent to the various Small-pox hospitals of the Metropolitan Asylums Board. There has been, up to the present time, no available means of ascertaining accurately how many persons so sent from this sub-district died elsewhere, but steps are being taken, by communication with the Board of Guardians, to obtain this most necessary and desirable information.

That the epidemic of Small-pox was of severity there can be no doubt, 107 cases having occurred in public practice, many of which were removed to the special hospitals, while others from the overcrowded state of those institutions were compelled to remain at home to form centres of infection to their families and neighbours. Some patients refused by themselves or their parents to be removed, and it is frequently found that when people suffer from a disease themselves or in their families they become perfectly indifferent as to the welfare of others.

Some facts connected with the history of the recent outbreak of Small-pox in the sub-district are worthy of record. The first case occurred at Nine Elms in an unvaccinated child, whose parents constantly moved about to evade the vaccination officer, and who were

strong anti-vaccinationists. No medical man was called in until after death, and upon the Inspector of Nuisances calling the next day he found the room in which the body lay filled with the neighbours, amongst whom, in a fortnight, seven fresh cases broke out, all having had direct communication with the house in which the first case occurred. At this time another unvaccinated child, belonging to the family first mentioned, was brought from Lambeth with Small-pox, fully developed, this latter was sent to the hospital. This case was followed by four fatal cases in the locality, three being unvaccinated children and one an adult, vaccination unknown. All these cases were concealed from the Sanitary Authorities until death had occurred, and in the case of the adult a wake followed, with the result that two persons in the house took the disease, also two brothers-in-law and a sister-in-law, who died; and, in addition, the landlord of the neighbouring public-house, who supplied the spirituous consolations to the mourners. The latter also died, and communicated the disease to his wife, who was prematurely delivered of a stillborn child.

Altogether between 30 and 40 cases of Small-pox arose from this single wake, and stringent measures were taken to arrest the further spread of the disease.

By permission of the Vaccination Department I established a temporary station for re-vaccination in the middle of the infected locality, and re-vaccinated nearly the whole of the hitherto unaffected population. The outbreak of Small-pox ceased at once, and although it continued to affect other parts of the parish and the Metropolis generally, hardly another case occurred in this locality.

The report of the Inspector of Nuisances of houses disinfected after Small-pox and other infectious fevers, which here follows, illustrates the great success which has attended disinfection by the fumes of burning sulphur, causing an abundant evolution of sulphurous acid gas, which effectually destroys all organic germs, whether in the walls, ceilings, or floors of the rooms,

or in articles of furniture, but more especially in the beds. I have, in a handful of feathers taken from the centre of a large feather bed four months after disinfection, distinctly perceived the characteristic odour of the gas.

It will be perceived where recurrence of Small-pox had taken place after disinfection, that such further outbreaks took place within 14 days of the removal or death of the first case, or of some case in the immediate vicinity; showing that this disease, which has about 14 days' incubation, was in the system, and contracted from a former patient, and not from the apartment; indeed, further investigation proved this to have been the case, or that where the period exceeded 14 days, communication with some infected person in the locality had existed.

Number of Houses infected with Small Pox with date of Disinfection in Eastern Battersea during the year ending December 31st, 1881.

From January 1st to December 31st, 1881, 146 houses were infected with Small-pox in Eastern Battersea; and of this number 124 were disinfected and no further case occurred.

In 22 houses, second cases occurred, 12 of which took place where the patients remained at home.

In 8 houses, third cases occurred, 6 of which took place where the patients remained at home.

In 2 houses, fourth cases occurred, both of which followed other cases that were kept at home.

In the 12 houses where the patients remained at home, portions of the house were disinfected whilst other families in the same house had the disease; disinfection and cleansing in a thorough manner could not be carried out until the last date in the following returns—

Return of Houses infected with Small Pox, with date of disinfection in Eastern Battersea, during the Year ending December 31, 1881.

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	4th Do.	Remarks.
13, Currie Street	Jan. 27	Feb. 7	Feb. 8	Feb. 11	1st patient remained at home, 7 persons who visited this house took the disease (bedding burnt)
27, do.	Feb. 11				
12, Everett Street	" 11				
21, do.	" 12				
9, do.	" 12				
1, Currie Street	" 14				
2, Ponton Street	" 15				
8, Ponton Terrace	" 17	Feb. 19	Mar. 11	Mar. 12	1st and 2nd patients remained at home.
66, Everett Street	" 19				
2, Currie Street	" 21	Mar. 16	Mar. 19		1st patient remained at home & bedding burnt.
23, Ægis Grove	" 21	Mar. 10			Both cases removed to hospital.
27, Everett Street	" 24				
40, Motley Street.....	" 25				
163, Stewarts Road.....	" 26	Mar. 14			Both cases removed to hospital.
44, Dashwood Road	Mar. 1				
7, Everett Street	" 1				
3, Ponton Street	" 2				
54, Palmerston Street.....	" 3				
4, Morrison Street	" 4				
3, Currie Street	" 5				
36, Austin Road	" 5	Mar. 19			Both cases removed to hospital after considerable delay (there being no hospital accommodatn)
35, Everett Street	" 5				
17, Doddington Grove	" 11				
18, Savona Place	" 7				
26, Tipthorpe Road	Feb. 20	Mar. 7	Mar. 8		All remained at home.
37, Stanley Street	Mar. 8				
7, Cherwell Street	" 8	" 17			1st patient remained at home.
26, Currie Street	" 8	" 16	May 12		2nd patient remained at home (no hospital room.)
37, Stanley Street	" 10				
10, Currie Street	" 11	" 30			1st patient remained at home.
14, Lucy Terrace.....	" 12	" 14	Mar. 23		All removed to hospital.
4, Currie Street	" 14	Apr. 14			1st patient remained at home.
1, Heathfield Terrace	" 15				

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	4th Do.	Remarks.
82, Eversleigh Road	Mar. 17				
20, Everett Street	" 19				
34, Woodgate Street	" 21				
2, Harward Street	" 21				
37, Dashwood Road	" 21				
18, Culvert Road.....	" 21				
123, Eversleigh Road	" 21	Apr. 2			Both removed to hospital.
10, Knowsley Road.....	" 21				
53, Sterndale Road	" 22				
37, Dashwood Road	" 22				
49, Stewards Road	" 23				
44, Blondel Street	" 23				
67, do.	" 26				
16, Ponton Road.....	" 29				
4, Ponton Street	" 29	Apr. 14	Apr. 19		1st patient remained at home and died.
23, Currie Street	" 30				
8, Belfour Street	" 31				
2, St. Georges Road	Apr. 1				
7, Frere Street	" 2				
42, Culvert Road.....	" 2				
55, A Block, Victoria Dwlngs.	" 2				
88, Sabine Road	" 2				
43, Haines Street.....	" 7				
Steam Packet, Nine Elms ...	" 8				
4, Moat Street	" 9				
42, Currie Street	" 9				
19, Belfour Street.....	" 11	May 12			1st patient remained at home.
28, Ponton Road.....	" 11				
90, Elsley Road	" 12	Apr. 14	Apr. 26		All removed to the hospital.
8, Cherwell Street	" 12				
7, Parkside Street	" 14				
1, Gideon Road	" 18				
122, Elsley Road.....	" 18				
18, Ceylon Street.....	" 19				
23, Belfour Street	" 20				
8, Ponton Street	" 20				
25, Stanley Street	" 21				
22, Currie Street	" 23				
4, Austin Road	" 27				
10, Victoria Terrace	" 28				
33, Woodgate Street	" 28				
8, Corrunna Road	May 2	May 12			Both removed to hospital.
6, Lucy Terrace	" 3	June 10			1st patient returned from hospital a week before the 2nd one took disease.
14, Orkney Street	" 4				
12, Rollo Street	" 4				
28, Kennard Street	" 4				
5, Princes Terrace	" 3				
20, Currie Street	" 5				
11, Carpenter Street.....	" 6				

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	4th Do.	Remarks.
17, Belfour Street	May 7				1st patient remained at home.
32, Arthur Street.....	" 9				
37, Holden Street	" 10				
41, Everett Street	" 12				
41, Robertson Street, W.....	" 12				
9, London Terrace	" 13				
21, Currie Street	" 13				
60, A Block Victoria Dwellings	" 14				
87, Stewarts Road	" 16				
7, Ponton Street	" 16				
24, Currie Street	" 17				
5, Albert Terrace, Culvert Road.....	" 18				
67, Parkside Street	" 18				
19, Cross Street	" 23				
3, Dickens Street.....	" 24				
Cottage, Cross Street	" 25				
51, Henley Street.....	" 28				
9, Park Road	" 29				
3, Oulton Street	" 30				
30, Gonsalva Road	" 30				
20, St. Georges' Road.....	" 30	June 20			1st patient remained at home and died (bedding burnt).
23, Woodgate Street	" 30				
43, Culvert Road.....	" 30				
25, Millgrove Street	June 1				
58, Blondel Street	" 6				
47, Carpenter Street	" 9				
10, Ponton Terrace.....	" 9				
32, Gonsalva Road	" 10				
7, Birley Street	" 13				
58, Henley Street.....	" 14				
30, Etrina Street	" 15				
34, Acre Street.....	" 15				
24, Shirley Grove.....	" 16				
68, Motley Street.....	" 16				
15, Everett Street	" 16				
69, Stewarts' Road	" 18				
29, Chesney Street	" 23				
6, Sheepcote Lane	" 27				
37, Woodgate Street	" 28				
19, Robertson Street, W. ...	" 29				
11, Portslade Road	" 29				
42, Dashwood Road	" 29				
1, Grove Villa, Doddington Grove	July 1	July 13			Both cases removed to hospital.
6, Elsley Road.....	" 8				
26, Orkney Street	" 20				
13, Robertson Street	" 25				
61, Elsley Road	Aug. 15				
18, Tweed Street	" 29				

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	4th Do.	Remarks.
30, Russell Street	Aug. 30				
34, Elcho Street	Sep. 23				
23, Everett Street	" 27	Oct. 10			Both cases removed to hospital.
40, Corunna Road	" 28				
3, Leamington Terrace, Lindford Street	Oct. 10				
22, Gonsalva Road	" 17				
49, Basnet Grove	" 18				
9, Havelock Terrace	" 26				
3, Park Place, Gladstone Terrace	Nov. 8				
23, Haines Street	" 8				
4, Princes Terrace, Nine Elms	" 11				
10, St. Georges Road	" 24				
11, Wycliff Grove	Dec. 1				
19, St. Georges Road	" 20				
2, Warriner Gardens	" 28				
11, John Street	" 29				

Return of Houses in which Infectious Fevers, other than Small Pox, occurred, with date of disinfection, in Eastern Battersea, during the Year ending December 31, 1881.

Address.	1st Time disinfctd.	2nd Do.	3rd Do	4th Do.	Remarks.
51, Blondel Street	Jan. 21				
48, Rollo Street	" 26				
24, Savona Place	" 26				
18, Kilton Street	" 31				
4, Orkney Street	" 16				
26, Gladstone Street	Mar. 12				
8, Haines Street	" 21				
8, Ponton Terrace	" 26				
75, Sabine Road	Aprl. 30				
46, Rollo Street	May 11				
50, Culvert Road	" 19				
10, Brougham Street	" 23				
12, Carpenters Street	June 14				
4, Howie Street	" 28				
6, Elsley Road	July 14				
14, Arthur Street	" 19				
27, Cross Street	Aug. 5				
49, Alfred Street	" 16				

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	4th Do.	Remarks.
1, Latchmere Street.....	Sept. 1				
45, Henley Street	" 18				
119, Bridge Road	" 15				
153, do.	" 30				
30, Robertson Street, W. ...	Oct. 4				
46, Russell Street	" 6				
60, Parkside Street	" 10				
28, Warsill Street	" 18				
4, Carlton Grove	Nov. 8				
55, Robertson Street, W. ...	" 11	Nov. 12			
26, Spencer Street	" 14				
22, Arthur Street	" 24				
4a, Lindford Street	" 29				
151, Bridge Road	Dec. 2				
57, Henley Street.....	" 24				
58, Culvert Road.....	Aug. 18				
83, Bridge Road, W.	Oct. 8				
20, Austin Road	Nov. 9				

It will be observed that in no one case did fever recur after disinfection. The case at 55, Robertson Street, in which the eruption appeared the day following disinfection shows that the disease had been previously contracted as the incubation of all these diseases is of some days duration.

The other diseases of the zymotic class do not call for special reference, being but small in number, more especially in proportion to so large a population.

Other diseases.—From Tubercular diseases; Consumption or Phthisis, Water on the brain or Hydrocephalus, Infantile wasting or Atrophy, 173 deaths occurred, being 75 less than during the preceding year. Of these 69 were under one year of age, and were probably victims of hand feeding or improper food. More than one-half, 94, of the deaths from these diseases, died under five years of age. Since the sub-district has been thoroughly drained, the death-rate from tuberculous diseases has diminished greatly.

From diseases of the Respiratory system 188 persons died, being slightly fewer than in 1880, when 190 deaths so occurred.

Diseases of the Brain and Nerves caused death in 128 cases. Of these 78 occurred under five years.

From Heart diseases 53 deaths were registered.

From Premature birth 67 deaths took place, many surviving but a few moments or hours.

From diseases of the Digestive Organs 39 deaths occurred. The organs included are the stomach, liver, bowels, &c., and the greatly diminished number of deaths from this class of diseases during the last few years, which would include the majority of deaths caused by habitual intemperance, is somewhat remarkable, and affords evidence of the greatly improved habits of the people. It is, however, sad to find that while 14 males died, 25 females lost their lives from this class of diseases, a reversal of the proportion which formerly existed, when the deaths from this cause were nearly exclusively of the male sex.

Deaths not certified.—In the large number of 173 cases during the year 1881, the causes of death were not certified by a legally registered medical practitioner. In 41 cases the Coroner held legal inquiry, and in 21 other cases he decided that no investigation was necessary after the facts of the respective cases had been submitted to him. In the large number of 96 cases the cause of death was certified by a legally qualified medical practitioner, who was, however, not registered at the time, he having removed without giving notice to the Registrar of the General Medical Council, and his name consequently having been temporarily removed from the medical Register. He has since re-registered.

But five uncertified cases remain to be noticed; of these, three, aged seven hours, three days, and two days respectively, died from premature birth, certified by midwives; one six months old died before a medical man who had been sent for had arrived, and the last was an aged person of 71 years, who died unexpectedly without medical aid.

Inquests.—The Coroner held inquiry as to the cause of death in 41 instances, during the year, in this sub-district, with the following resulting verdicts.

From Natural causes			17
From Accidental causes—			
Drowned	10		
Concussion	5		
Killed on Railway	3		
Asphyxia (2 over-laid)	3		
Poison	1	—	22
Homicidal (Cut Throat—Suicides) ...			2
			41

Social position.—The social position of the persons deceased during 1881 was as follows:

		per cent.
Nobility and Gentry	3 =	·3
Professional Class	30 =	3·0
Middle and Trading Class	103 =	10·7
Industrial and Labouring Class ...	830 =	86·0
		100 0

Vaccination.—The register of public vaccination shows that the undermentioned vaccinations and revaccinations have been successfully performed during the year at the authorised station.—

Primary Vaccinations	1961
Revaccinations	766
	2727

The total births, as elsewhere shown were 2349, so that 83 per cent. or rather more than five-sixths of the children born were there vaccinated, which is evidence that arm-to-arm vaccination, the most reliable method, is preferred by parents in this sub-district.

The comparatively large number of persons re-vaccinated, was the result of the outbreak of Small-pox, and in some parts of the sub-district with the result of arresting the disease. But one, however, in 75 of the inhabitants took advantage of the protection afforded by the operation at the vaccination station.

Sanitation in the sub-district during 1881.—It would be impossible, in a tabular form, to present the whole of the sanitary work of the year in a report, as day by day, and at all periods of the day, it is necessary to concert and carry into effect measures to improve the sanitary condition of the sub-district, and to arrest the development of disease.

Much is due to the Surveyor, Mr. Pilditch, for the ready assistance which he has at all times cheerfully rendered, and I have to record my thanks to that gentleman for the same. The Inspector of Nuisances, Mr. Richards, and the Assistant Inspector, Mr. Barnes, have, during the year under report, carried out duties of a disagreeable and dangerous character, in disinfecting houses and otherwise arresting disease of the Zymotic type, more especially Small-pox. After the latter disease, 146 houses were disinfected, and after fever 36 other houses were similarly purified.

In addition 1,927 houses have been inspected, and notices to abate nuisances and remedy sanitary defects served in 197 cases. In 29 of these cases it was necessary to serve second notices. Eight summonses were eventually obtained, and orders made by the magistrates.

A glance at the following tabular statement will show the many and varied kinds of work performed by the sanitary officers.

Abstract of Sanitary Work carried out in East Battersea.

During the year ending December 31st, 1881.

No. of house inspected	1927
No. of 1st Notices served	197
No. of 2nd Notices served...	29
No. of Houses disinfected, and where necessary cleansed after Small Pox	146
No. of Houses disinfected and where necessary cleansed after various kinds of Fever	36
Defective drains cleansed and repaired	89
Cesspools abolished	1
Accumulations of Manure, &c., removed...	8
Dust Bins provided	54
Defective apparatus to water closets repaired	68
Water Supply added to Closets	10
Cisterns provided and repaired	21
Covers to cisterns provided	34
Dilapidated closets repaired	18
Foul and offensive closets cleansed	8
Water supply added to houses	10
Dilapidated houses cleansed and repaired	12
No. of houses where separate drainage has been enforced ...	34
Overcrowding abated	8
Pig nuisances removed	19
Orders of the Board obtained	17
Summonses obtained	8
Bad fish destroyed (100 bloaters, 32 quarts of shrimps, and 120 haddocks)	
Dangerous cellar covers repaired	4
Articles of Bedding burnt after infectious diseases	14

The pig nuisance, it is to be hoped, will entirely cease before many months elapse, the largest pig-keeper in the sub-district having already removed all his stock and pulled down his building. The population is far too dense for this offensive business to be longer carried on.

Slaughterhouses.—A pressing public need is the establishment of public abattoirs, where the whole of the butchers in the parish could slaughter at a nominal rate, and the offal, &c., be removed daily. The number of private licensed slaughterhouses is diminishing daily, and the time is arriving when they should be wholly abolished, not only for the purpose of removing a dangerous nuisance from our midst (which they become in warm weather from accumulations of offal, blood, &c.,) but also in order that all the trade should be upon the same equal footing as regards liberty to slaughter animals for food.

Bakehouses.—These premises should undoubtedly be periodically inspected, and subjected to a system of licensing similar to that which exists in the case of dairies and slaughterhouses. This would remove any doubts which may at present exist as to the sanitary condition of the places in which the staple food of the people is manufactured. This duty is at present cast upon a special inspector, and the sanitary authorities of districts have not, since 1878, been charged with such inspections.

In conclusion a hope may be expressed that the sub-district will continue to be an example of the possibility of a high birth-rate and low death-rate co-existing. The reason that this is so seldom found is that numerous deaths always occur amongst the very young, and a high death-rate is generally found wherever births are unusually numerous.

W. H. KEMPSTER,

Medical Officer of Health for Eastern Battersea.

BATTERSEA WEST.

The year under report has been marked by the unusual prevalence of three of the principal epidemic diseases, viz.: Small-pox, Scarlet-fever and Measles. The former, which first appeared in the district at the close of 1880, continued its ravages till the latter end of 1881. During that period 42 cases were removed to the special hospitals, and not always without considerable difficulty in finding accommodation, delay of some days oftentimes occurring, and necessitating several journeys to and from the hospital by the friends of the patient. This, however, lasted about two months only during the height of the epidemic, when so great a demand was made on the space at the disposal of the Asylums Board. I cannot help thinking it would save a vast amount of time, if, instead of the present troublesome method of removing a patient, it was arranged that on the occurrence of a case the relieving officer should telegraph to the hospital that a patient required admission, and that then the hospital authorities should send the ambulance direct to the patient's house for his removal. In times when too great a demand for space is made, it would do away with perhaps two visits daily to the hospital to ascertain if there is room, generally by persons who have been more or less in contact with the infected person. Apart from which, the circumstance of waiting for a death-vacancy becomes an unnecessary cause of repulsiveness and depression to the feelings of a patient requiring admission. The keeping of ambulances at the hospitals must recommend itself as being much

preferable to the present system of having them at the Union, inasmuch as it would tend to remove the taint of pauperism to which so many persons object.

Throughout the whole of the epidemic the protective power of vaccination has been strikingly demonstrated, nearly the whole of the persons attacked having been of adult age, whilst in those under 12 years, who had been vaccinated in infancy, the disease was of the most mild type. There are several instances in which the unvaccinated child in *a family* has been the only person affected.

Scarlet-fever and Measles give 75 deaths against 38 in the previous year. The former disease was not so severe in character as usual, whilst Measles, on the contrary, was unusually fatal; generally with some complication, such as lung disease. These diseases were distributed over the whole district, which may perhaps be accounted for by their highly infectious character, and the difficulty of properly isolating the infected person in a poor district, such as the greater part of this is. Another cause is that we abound in Board Schools, children return to them before being thoroughly convalescent, meet with others and so the disease is spread. Throughout these epidemics, especially in the neighbourhood of Winstanly Road and the newly formed streets I was struck with the low state of vitality of the people, and it was only with the greatest difficulty they could be raised from their beds of sickness; this fact was duly reported and a thorough examination of the whole system of sewers was made, with the result that the construction of a new-main sewer in Winstanly Road was found to be necessary.

In consequence of the increase in the deaths from diseases of the epidemic class, and from those of the respiratory organs and nervous system, the death-rate will be found to have been 2 per 1,000 more than that of the previous year.

Mortality.—The total number of deaths returned as having taken place in the sub-district was 1,195, 620 being males and 575 females, the former being 45 in excess of the latter; in 1880, 1,010 were returned, there is therefore an increase of 185 on that year. Of the total number 1,195, 216 occurred in the Union Infirmary, 88 of which belonged to Battersea as a whole, leaving 128 to be divided amongst the other parishes of the Union. The 216 deaths in the Infirmary are 28 in excess of those returned in the previous year, when 188 took place.

The 88 belonging to Battersea, as a whole, have been taken into account when calculating the death-rate for the whole parish.

Deducting the 216 Infirmary deaths 979 will be the correct number for the out-door sub-district of West Battersea.*

Death-rate.—The death-rate, calculated on the mean population, in June, 1881, was 19 per 1,000. This, as already explained, is 2 per 1,000 in excess of the previous year.

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

First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
307	240	317	331

* Out-door with reference to Infirmary.

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

1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
644	674	689	856	854	820	908	1002	1010	1195

The deaths in the Infirmary were 216.

The death-rates per 1,000 *excluding Infirmary deaths and its population, were—*

1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
17·0	17·6	17·2	20·2	19·5	17·1	18·5	20·0	16·8	19·0

Birth-rate.—The number of births registered was 2,103, 1,085 being males, and 1,018 females; this gives a rate of 40 per 1,000 or $2\frac{1}{2}$ above that of last year, when we had the actual population on which to calculate statistics. There were 265 more births than those of the previous year.

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

First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
541	485	522	555

Natural Increase.—The above number of births are 1,124 in excess of the deaths, and constitute the year's natural increase.

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

STATISTICS OF MORTALITY.

BATTERSEA WEST.	Total Deaths from each Class of Disease &c., in the Sub-District.	Sex.		Age.									Social Position.			
Official mean population, June, 1880—52 weeks) 48,981.		Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	All under 20 years.	At 20, and under 40 years.	At 40, and under 60 years.	At 60, and under 80 years.	80 years and upwards.	Nobility and Gentry.	Professional Class, Merchants, Bankers, &c.	Middle and Trading Class, Shopmen, Clerks, &c.	Industrial and Labouring Classes.
1881 51,394																
Area 1108 acres																
Classes :—																
1. Zymotic: Small Pox	4	3	1	1	...	...	...	1	1	2	...	...	...	...	1	3
Measles.....	50	25	25	9	34	7	...	50	...	...	...	...	...	...	3	47
Scarlatina ..	25	13	12	2	18	3	2	25	...	...	...	...	...	...	1	24
Diphtheria	9	8	1	...	7	2	...	9	...	...	...	...	...	...	3	6
Quinsy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	3	2	1	...	2	1	...	3	...	...	...	...	...	...	...	3
Whooping Cough ...	31	12	19	13	18	...	...	31	...	...	...	...	...	...	6	25
Typhus & other Fevers	10	7	3	...	1	2	3	6	4	...	...	...	...	...	...	10
Erysipelas...	7	5	2	1	...	...	...	1	1	2	3	...	...	...	...	7
Metria, Childbirth	6	...	6	...	...	...	...	...	5	1	...	...	...	...	2	4
Carbuncle ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Diarrhœa& Choleraic Disease	53	29	24	42	7	...	...	49	...	...	3	1	...	...	6	47
Totals of Zymotic Class	198	104	94	68	87	15	5	175	11	5	6	1	...	...	22	176
2. Tubercular	210	114	96	61	25	8	12	106	47	44	13	...	1	2	32	175
3. Of Brain, Nerves,&c.	147	83	64	34	29	5	3	71	5	23	42	6	4	1	23	119
4. Of the Heart, &c. ...	94	42	52	...	3	3	6	12	13	22	42	5	2	...	12	80
5. Of Respiratory Organs	266	142	124	65	76	4	3	148	14	38	55	11	4	...	44	218
6. Digestive Organs ...	59	26	33	8	3	2	3	16	5	16	20	2	...	2	12	45
7. Urinary Organs ...	26	12	14	...	1	...	...	1	5	8	11	1	...	...	7	19
8. Of Organs of Generation.....	14	...	14	...	...	...	...	...	3	7	4	..	...	...	4	10
9. Of Cancer, &c.	21	8	13	...	...	...	...	...	5	7	9	...	1	...	5	15
10. Syphilis	10	7	3	8	...	...	...	8	...	2	...	...	...	...	1	9
11. Premature Birth, Low Vitality, Malformation, &c	37	17	20	37	...	...	...	37	...	...	...	...	...	1	10	26
12. Of Uncertain Seat...	27	13	14	7	1	...		8	2	4	11	2	..	...	5	22
13. Age	31	15	16	...	...	..	...	...	...	...	11	20	2	...	4	25
14. Violence	40	28	12	9	5	3	3	20	8	11	1	...	...	...	5	35
15. Joints and Bones ...	15	9	6	2	2	...	2	6	1	4	4	...	...	...	2	13
TOTAL	1195	620	575	299	232	40	37	608	119	191	229	48	14	6	188	987

* This table includes all deaths in the Infirmary of the Union.

Zymotic Mortality.—The deaths from this class of disease were 198, being 52 above those of the previous year. The greatest fatality was from Measles, Scarlet Fever, Whooping-cough and Diarrhœa, the most noticeable being the first named disease, 50 deaths from which were returned against 8 in 1881. Diphtheria increased from 3 to 9, all the cases being in connection with Scarlet-fever.

Four deaths were returned from Small-pox, but it must not be forgotten that some of those removed to hospital succumbed, of which we have no return.

The fatal cases of Fevers were 10; just the same as last year, and were returned as follows: Typhoid 9, Fever 1, the former in some instances being registered as Typhoid Pneumonia.

Of the 198 deaths 104 were of males and 94 of females; 155 were under 5 years of age, 175 inclusive under 20, leaving but 23 from the age of 20 to 80 and upwards, bearing out previous experience that under 5 years of age is the most fatal period of this class of disease.

The death-rate from this class of disease was 3·6 per 1,000 of the population, being an increase of 0·7 per 1,000 on that of last year.

The following table contrasts all deaths from Zymotic causes during the past 10 years

	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
Small Pox	4	1	0	0	3	13	9	2	0	4
Measles	24	11	8	11	35	8	34	43	8	50
Scarlatina	3	3	5	48	20	8	4	55	30	25
Diphtheria	15	3	5	7	5	2	3	7	3	9
Quinsy	0	0	0	0	0	0	0	0	0	0
Croup	7	6	16	5	6	5	10	8	1	3
Whooping Cough	31	24	30	20	32	18	36	11	23	31
Typhus, &c.	13	22	15	14	19	25	15	27	10	10
Erysipelas	5	4	4	9	0	3	4	2	3	7
Metria.....	2	4	11	6	5	3	1	2	7	6
Carbuncle	1	0	0	0	0	0	0	0	0	0
Influenza	0	0	0	0	0	0	0	0	0	0
Diarrhœa and Cholera	32	37	43	35	43	22	41	17	61	53
Totals ...	137	115	137	155	168	107	157	174	146	198

Other Causes of Death.—These diseases collectively are 169 in excess of the previous year, and as stated, are one of the causes of the increased death-rate. In all 997 were returned, the principal factors being—diseases of the Respiratory Organs 266, viz :—Bronchitis 139, Pneumonia 76, and other diseases 51. Brain and Nerves 147, Heart 94, Digestive Organs 59, Cancer 21, Age 31, Violence 40, Premature Birth and Low Vitality 37.

From the Tubercular class 210 were returned. Phthisis 126, Atrophy 67, Scrofula 12, and Hydrocephalus 5; of the Phthisical cases 25 were under 20, 46 from 20 to 40, 44 from 40 to 60, and 13 from 60 to 80 years of age.

Of the 997 deaths, 516 were of males and 481 of females. 376 were under 5 years of age, 433 (inclusive) under 20, and the remainder from 20 and upwards, 4 being 91, 90, 90, and 91, the three former females and the latter a male.

The following Table contrasts all deaths from non-Zymotic causes during the past ten years.

	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
Tubercular, including Phthisis	106	106	113	148	149	172	143	165	196	210
Of Brain, Nerves &c.	76	100	115	130	119	148	137	136	117	147
Of the Heart, &c.	24	34	31	37	49	55	53	56	72	94
Of the Respiratory Organs, excluding Phthisis	105	156	151	197	160	124	204	260	215	266
Of Digestive Organs	18	11	23	27	19	37	27	27	47	59
Of Urinary Organs	4	4	6	10	13	14	10	20	15	26
Of Organs of Generation ...	2	6	3	7	8	8	3	9	9	14
Of Joints, Bones, &c.	0	0	4	8	4	1	2	2	3	15
Of Cancer	15	14	10	2	23	22	23	14	22	21
Premature Birth, Low Vitality, Malformation, &c.	22	23	26	37	30	30	31	36	70	37
Of Uncertain Seat	61	50	27	39	37	25	29	17	36	27
Age	46	51	22	39	53	47	58	57	35	31
Violence	28	4	15	15	18	23	20	13	23	40
Syphilis	0	0	6	6	4	7	11	16	4	10
Totals	507	559	552	702	686	713	751	828	864	997

If we take a retrospect for the past ten years, which the preceding tables will enable us to do, it will be seen that whilst the deaths from the ordinary classes of disease have increased in proportionate ratio to the population those from Zymotic causes have not done so, which fact we may take as evidence that the constant endeavours put forth by the Board and its Officers to improve the sanitary condition of the district have not been in vain.

Inquests.—During the year the large number of 63 inquests were held on the bodies of 38 males and 25 females, besides these 6 were submitted to the Coroner, who did not deem an inquiry necessary. The total number are 25 in excess of those of the previous year. The verdicts were as follows :—

From Accidental Causes	29
From Natural Causes...	21
Suicides	10
Fractured Skull	1
Found dead	1
Manslaughter	1
	63

Of the accidental causes 10 were by drowning, mostly of youths bathing in the Thames. 10 were of infants suffocated whilst in bed with their parents, the mother falling asleep with her infant at her breast, its powers being too feeble to wake her or extricate itself from its dangerous position,* 5 from burns, 1 killed on railway, 1 choked, and 2 not specified.

The suicides were respectively :

5 Cut Throats.
2 Hanging.
1 Poison—Laudanum.
1 Drowning.
1 On Railway.

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

Nobility and Gentry...	1 2
Professional	0·5
Middle and Training	15·7
Labouring	82 6
	100·0

* There was no evidence as to the mother being under the influence of drink in any of these cases.

Deaths not certified.—The number of persons dying whose deaths were not certified were 14; of this number 6 were submitted to the Coroner, who did not deem an enquiry necessary as to the cause of death. One was submitted to the Registrar-General and buried on his authority; the remaining 7 were consigned to the grave on information given to the Registrar. Three were attended by an unregistered practitioner; two were of infants but 12 hours old, one, 9 weeks, and one, 42 years of age.

Disease and Mortality amongst the Union poor.—The number of cases which came under treatment were 337, 150 being males, and 187 females. On reference to Table VI., Appendix, will be found the nature of the various diseases. The total cases are 67 in excess of the previous year, this being mainly attributable to the epidemic of small pox, which has been referred to in the earlier part of this report. Measles, Scarlet-fever, and Fever generally show an increase, whilst diarrhœa and lung diseases are not so numerous.

In the case of small pox the patients were not always those who would usually seek parish attendance but who applied for the purpose of being removed to Hospital; this was accomplished in some cases with delay, and 4 were unable to be received for want of room.

Disinfection and Recurring cases of Fever.—In accordance with instructions received from the Board in order to show the efficacy, or otherwise of the methods used for disinfection after infectious diseases, and the prevention of recurring cases, the following has been compiled from the Inspector's Register in which every case which came under notice during the year is entered.

Houses infected with Small Pox, with date of disinfection, during the Year 1881.

Showing also recurring cases.

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	Remarks.
81, Tugela Road	Feb. 7	Apr. 13		1st patient remained at home.
2, Lombard Street	" 27			
77, Ingrave Street	Mar. 10			
3, Maysoule Terrace	" 12			
15, Fords Place	" 17	" 12		1st patient remained at home.
3, Tugela Road	" 17			
Lodge Sisters House	" 20	" 2		
18, Fords Place	" 22			
32, Atherstone Street	" 30			
109, Meyrick Road	Apr. 7			
2, Europa Cottage	" 7			
1, Thibet Street	" 8	" 25		1st patient detained several days there being no hospital accommodation.
19, Pearson Street	" 11			
Falcon Laundry	" 11			
22, Weston Street	" 19			
113, Winstanley Road	" 27			
69, Tugela Road	" 27	" 29		
377, York Road	May 2			
52, Francis Street	" 14	May 16	May 17	All remained at home.
90, Gwynne Road	" 9	June 13		2nd patient took it a few days after the first came home from hosp.tal.
29, Speke Road	" 14			
7, Falcon Lane	" 14			
159, Ingrave Street	" 17			
18, Chatham Road	" 17			
117, Church Road	" 25			
40, Lothair Street	" 28			
16, Verona Street	" 28	June 15		Patients remained at home.
5, Verona Street	" 28			
Anglesea Villa	" 31			
53, Henry Street	June 4			
15, Stainforth Road	" 10			
29, Bridge Road West	" 13			
109, Church Road	" 14	July 5	July 6	Patients remained a home.
9, Mendip Road	" 15			
1, Church Road	" 17			
147, Church Road	" 20			

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	Remarks.
13, Alfred Place	June 21			
8, Home Road.....	" 21			
12, Henry Street	" 22			
50, Yelverton Road.....	" 23	July 4		
Ivy Villa, Northcote Road ...	" 23			
32, Winstanley Road	" 23			
42, Church Road.....	" 27	" 9		
18, Benham Street	July 5			
87, Church Road.....	" 5			
30, Francis Street	" 11			
121, Meyrick Road.....	" 11			
4, Europa Place	" 13			
36, Church Road.....	" 26			
5, Octavia Street.....	" 26			
2, Europa Place	" 26			
32, Wye Street.....	Aug. 1			
3, Europa Place	" 3	Aug. 29	Sept. 6	1st patient remained at home.
Norfolk Road, Mallinson Rd.	" 4			
33, Europa Place.....	" "			
71, High Street	" 16			
6, Europa Place	" 16			
1, do.	" 16			
1, do.	" 17	" 30		1st patient remained at home.
35, Europa Place.....	" 17			
164, Maysoule Road	Oct. 7			Bedding burnt.
154, do.	Nov. 9			
46, Balfern Street	" 19			
49, Maysoule Road.....	Dec. 8			
5, Garden Place	" 2			

From the foregoing statement it will be seen that 67 houses infected with Small-pox were disinfected a first time, and that in 54 no further case occurred.

That in 13 houses second cases occurred, the first patient being retained at home in every instance.

In three houses third cases occurred, all following patients remaining at home.

In the latter two classes of cases portions of the houses were disinfected whilst other patients in the house were suffering from the disease, so that it was Impossible to thoroughly disinfect and cleanse until the iast date given in the foregoing abstract.

Houses in which Infectious Fevers, other than Small Pox, occurred, with date of disinfection, during the Year 1881.

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	
46, Linda Street	Jan. 7			
1, Amies Street	Feb. 14			
6, Balfern Street	Mar. 9	Mar. 11		
16, Verona Street	" 12			
20, Simpson Street	" 15	April 2		
16, Lavender Road	" 22			
14, Chivalry Road	" 31			
2, Lyncombe Villa	April15			
5, Colestown Street	" 20			
117, Grant Road	May 26			
Norfolk House, Mallinson Rd.	June 3			
53, Henry Street	" 4			
6, Falcon Villas	" 20			
20, Freeland Street	July 21			
99, Speke Road	Aug. 8			
31, Speke Road	" 22			
22, Yelverton Road	" 23			
45, Verona Street	" 25			
24, Benfield Street	" 25			
7, Bolingbroke Road	" 29			
165, Lavender Road	" 30			
139, High Street	Sept. 8			
149, High Street	" 10			
48, Wye Street	" 10			
18, Patience Road	" 10			
167, Ingrave Street	" 12			
1, Musjid Road	" 14			
112, Winstanley Road	" 16			
2, Grove Place	" 20	Sept.23		
162, Bridge Road	" 20			
85, Bridge Road West	" 21			
83, Church Road	" 21			
65, York Road	" 21			
4, Wayland Road	" 27	Nov. 2		
44, Octavia Street	" 28			
13, Creek Street	" 30			
121, Church Road	Oct. 3			
12, Urswick Road	" 4	Oct. 27		
10, Randall Street	" 4			
19, Parkham Street	" 12			
123, Lavender Road	" 12			
85, Winstanley Road	" 15			
48, Wye Street	" 21			
20, Lindore Road	" 22			
52, Henry Street	Nov. 1			
3, Simpson Street	" 3			
10, Shillington Street	" 4			

Address.	1st Time disinfctd.	2nd Do.	3rd Do.	
10, Palk Road	Nov. 4			
93, Northcote Road	" 10			
Horrocks, St. John's Hill	" 10			
Harwick V., Bellvill Road	" 10			
20, Afghan Road	" 11			
8, Field Place	" 12	Dec. 7		
55, High Street	" 14			
26, Totteridge Road	" 17			
16, Goulden Street	" 18			
7, Surrey Lane	" 28			
10, Clarence Terrace	Dec. 2			
8A, Knox Road	" 6			
8, Knox Road	" 16			
21, Palk Road	" 27			
60, Speke Road	" 28			
4, Patience Road	" 28			
6, Stainforth Road	" 13			

Infectious Fevers other than Small Pox.—Sixty-four houses were disinfected after this class of disease, the majority having been after Scarlet-fever; six were disinfected a second time; in most cases this arose from a child dying some time after with complication and returned as Scarlet-fever in the first instance.

In the case of Small-pox, where the patients are generally removed to hospital, we have an excellent opportunity of judging the efficacy of our means of disinfection. In not a single instance did a second case occur unless the patient was retained at home; persons have left the houses, others have entered and remained free from the disease. These facts are proof sufficient that the means we use are as perfect as they can well be.

With respect to Scarlet-fever we cannot arrive at such exact conclusions owing to the patients being kept at home.

Sanitary Matters.—As usual a large amount of sanitary work, as will be seen by reference to the abstract taken from the Inspector of Nuisances' book at the end of this report, has been carried out during the year. There is one fact which is particularly noticeable, that is during 1880 1,702 houses were inspected, and 271 notices were served, whilst in 1881 1,838 were inspected and 181 defects were found, being a considerable decrease on the previous year; from this it would appear that the inhabitants are becoming more alive to the necessity of good sanitary arrangements, and so keep their houses in better order. This house-to-house inspection is regularly carried out, and is, I think, one of the most important duties performed.

Complaints are frequently received of offensive smells in houses, which, on investigation, are nearly always found to proceed from a leakage or improper laying of the drain pipes; in some cases the pipes are simply placed together without any attempt at joining, in others the pipes are widely apart with a channel dug in the earth between them. Under such conditions it cannot be a matter of surprise that the inmates frequently suffer. 151 defective drains were cleansed and repaired.

The epidemics of Small-pox and Scarlet-fever have caused a large number of houses to be disinfected and cleansed. The means we used are complete destruction by burning when necessary, and by burning sulphur; by which, as will be seen by the special report the most favourable results are obtained.

The special measures adopted by the Board to prevent, as far as possible, the spread of these diseases are so recent as not to need recapitulation. I might remark they were most successful.

During the house to house inspection but two cases of overcrowding were found. Notices to abate were readily complied with.

Pig complaints have not been so numerous as in former year. Four piggeries have been removed.

There is no doubt that with the large increase in the number of houses and population, that pigs cannot be kept without being a nuisance, and it is impossible to say to what extent, by their emanations vitiating the atmosphere, they may lower the vitality of the people.

A quantity of meat was seized on the premises of a butcher in Winstanly Road, and was being used in the process of sausage-making. It had been put into strong brine, but was in such an advanced stage of decomposition that it would not take the salt. Proceedings were taken before the Magistrate who marked his sense of the gravity of the case by inflicting a penalty of £15. Nothing that can be said to condemn the practice of using putrid meat in the making of sausages is too strong, and especially in a neighbourhood such as that of Winstanly Road, where the majority of the people are of the poorer class, and no doubt tempted by a lower price eat largely of these mysterious combinations, and consequently suffer the evil effects of such unwholesome matter.

The Police Court was attended in reference to continued nuisance on land owned by Mr. Barber, in High Street, an order for its abatement was obtained, and a subsequent fine of £5 inflicted for wilfully disobeying it.

The cow and slaughterhouses were all inspected. Objection was made to premises in Usk Road, and the

licence refused. It is a question, now that the district is becoming so crowded, whether slaughterhouses should not be done away with entirely, and some system such as that adopted in Paris substituted.

Considering the disclosures recently made respecting some bakehouses, it would be well if they were placed under periodical inspection and annual licensing.

Abstract of Sanitary work carried out in Western Battersea.

During the year ending December 31st, 1881.

No. of houses inspected	1838
No. of 1st Notices served	181
No. of 2nd Notices served	34
No. of houses disinfected and where necessary, cleansed after Small Pox	67
No. of houses disinfected and where necessary, cleansed after various kinds of Fever	64
Defective drains cleaned and repaired	151
Cesspools abolished	3
Accumulations of manure, &c., removed	19
Dust bins provided...	51
Defective apparatus to water closets repaired	44
Water supply added to closets	10
Cisterns provided or repaired	5
Covers to cisterns provided	50
Dilapidated closets repaired	4
Foul and offensive closets cleansed	10
Water supply added to houses	14
Dilapidated houses cleansed and repaired	12
No. of houses where separate drainage has been enforced ...	17
Overcrowding abated	2
Pig nuisances removed	4
Obstructions on footpath removed (building materials)	6
Orders of Board obtained	16
Summons	5
Bad meat destroyed .. ..lbs.	140
Bad fish destroyed—60 bloaters and 120 kippers	
Dangerous steps or coal plates altered	45

The whole year has been one of unusual anxiety and a large amount of work, and I must express my appreciation of the services of Mr. Richards, the Inspector of Nuisances, whom I have had frequently to call out late at nights and on Sundays to perform some duty, and I think we may look back with much satisfaction at the result of our labours.

JOSEPH OAKMAN,

Medical Officer of Health, for West Battersea.

CLAPHAM.

The population of Clapham, as enumerated at the Census in April, 1881, was 36,380. If it be assumed, in accordance with the method of calculation adopted by the Registrar-General, that an increase has taken place to the same extent since that period as had occurred during the preceding ten years, the number of persons living in this sub-district at the middle of the past year amounted to 36,600. The numbers had increased therefore at a higher rate than that adopted in my reports for the last few years, and which I am pleased to find was not exaggerated.

According to my usual mode of procedure, the brief but comprehensive statistics contained in the following Table of births, deaths and marriages, together with such facts as are capable of being educed from parochial official and other available records, are used as a basis for my calculations in elucidating the health and sanitary condition of this sub-district.

Years.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
Marriages	249	236	257	284	243	313	319	282	303	329	349
Births ...	864	858	929	937	965	1029	1019	1095	1125	1082	1059
Deaths ...	604	482	475	528	548	545	467	580	561	544	499
Excess of Births over Deaths ...	260	376	454	409	417	484	552	515	564	538	560

In the preceding table it may be seen that the number of marriages solemnized in this parish is far in excess of any previous year,—a sure indication of the prosperity of the people.

The births, it is not so satisfactory to observe, do not keep pace with the marriages, a fact that cannot be readily accounted for. The excess of births, however, over deaths is by far greater than in any previous year, except 1879.

Birth-rate.—The Births registered during the year were 23 less than in the preceding year; they numbered 1,059, of which 551 were males, and 508 females. Calculated from the foregoing estimate of the population they yield a birth-rate equal to 28·93 per 1,000 persons living of all ages. The excess of births over deaths was 560 (See Table No. I.), and constitutes our natural increase.

Death-rate.—The total number of deaths registered during the year 1881 was 499, of which number 210 were of males and 289 of females. The deaths, calculated from the population estimated to the middle of the year, give Clapham the highly favourable death-rate of 13·50 per 1,000 of the inhabitants. The average of the preceding ten years were 16·74 per 1000, a low rate compared with those of most of the London Suburbs.

I here set forth the usual mortality table, which contains all the deaths which took place in this parish during the year 1881—male and female—also their ages, their social position, and the registered cause of each person's death.

STATISTICS OF MORTALITY.

(52 WEEKS.)

CLAPHAM. Population in 1881, 36,380. Official Population in middle of year 1881 ... ... 36,600. Area in Acres, 1,233. DISEASES And other Causes of Death.	Total Deaths from each Class of Disease, &c., in the Sub-District.	SEX. Males.	SEX. Females.	AGE. Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	From 10 to 20 years.	All under 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 Classes.
Classes :—																
1. Zymotic — Smallpox ...	7	2	5	...	...	...	2	2	3	2	...	...	1	...	3	3
Measles ...	10	5	5	3	3	4	...	10	...	...	...	...	...	2	2	6
Scarlatina...	15	4	11	1	6	6	2	15	...	...	...	...	...	2	7	6
Diphtheria .	3	1	2	...	...	2	1	3	...	...	...	...	...	1	1	1
Croup	3	1	2	1	2	...	...	3	...	...	...	...	...	...	2	1
Whooping Cough ...	13	6	7	4	7	1	1	13	...	...	...	...	...	...	1	12
Typhus, &c.	3	1	2	...	...	1	1	2	1	...	...	...	...	...	1	2
Erysipelas ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Metria, Childbirth	4	...	4	...	...	...	...	...	4	...	...	...	...	...	2	2
Carbuncle...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa ..	20	12	8	12	8	...	...	20	...	...	...	...	...	1	4	15
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals of Zymotic Class	78	32	46	21	26	14	7	68	8	2	...	...	1	6	23	48
2. Tubercular.....	68	27	41	12	10	3	8	33	21	10	4	...	3	8	22	35
3. Of Brain, Nerves, &c.	82	35	47	30	7	5	3	45	2	12	20	3	5	10	33	34
4. Of the Heart, &c. ...	30	14	16	...	1	1	2	4	3	8	15	...	3	6	13	8
5. Of Respiratory Organs	79	35	44	19	10	2	2	33	8	12	21	5	5	11	25	38
6. Of Digestive Organs	32	14	18	1	...	2	...	3	1	9	15	4	1	4	12	15
7. Of Urinary Organs .	16	11	5	...	...	...	1	1	3	9	3	...	2	3	4	7
8. Of Organs of Generation	4	...	4	...	...	...	...	...	...	3	1	...	1	...	1	2
9. Of Joints, Bones, &c.	6	1	5	...	...	...	2	2	2	...	2	...	...	...	1	5
10. Of Skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Premature Birth, Low Vitality, Malformation, &c.....	44	16	28	42	2	...	...	44	...	...	...	...	2	3	10	29
12. Of Uncertain Seat .	10	6	4	3	2	...	...	5	1	2	2	...	1	3	4	2
13. Age....	22	5	17	...	...	...	...	...	...	...	5	17	2	8	7	5
14. Violence	7	3	4	2	2	...	...	4	...	1	2	...	...	...	1	6
15. Not Specified.....	21	11	10	7	4	...	1	12	...	1	8	...	...	3	6	12
TOTALS	499	210	289	137	64	27	26	254	49	69	98	29	26	65	162	246

Epidemic Death-rate.—In the following table the deaths of the seven principal epidemic diseases are contrasted with those of the preceding ten years. The deaths from these diseases during the past year were 71, being in the proportion of 1.93 per 1,000 of the population, and 14·2 per cent. of all deaths.

Years.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
Small-pox	94	14	—	—	2	14	12	3	—	2	7
Measles ...	2	30	11	20	3	13	5	23	17	19	10
Scarlatina	20	6	2	33	22	13	4	12	12	21	15
Diphtheria	3	3	3	4	6	—	—	3	1	3	3
Whooping-cough ...	18	25	14	15	17	17	12	29	25	25	13
Typhus,&c.	10	11	10	6	2	5	4	5	9	4	3
Diarrhœa & Cholera	31 —	39 —	25 —	27 —	22 —	24 —	18 —	26 2	17 —	36 2	20 —
Totals ...	178	128	65	105	74	86	55	103	81	112	71

The year 1881 therefore compares most favourably with the ten preceding years; and, indeed, the lowness of the mortality in these cases, coupled with the increasing knowledge of their nature and the determined perseverance to exterminate them which exists at the present day, lead me to hope that, in course of time, a contagious disease will become a thing of the past.

Ages of deceased persons.—The mortality occurring at the two extremes of life amongst all classes of persons is a subject so interesting as to engage my serious attention, and has been referred to in mostly all my former reports. The deaths of infants under one year of age

amounted to 137, of children from one to five years of age to 64, and of children from five to ten years of age to 27, forming a total of 228 deaths, or a little under 46 per cent. of the total deaths and 0·6 per cent. of the total population. This is a far less mortality than in my former reports. At the other extreme of life no less than 127 persons died at ages ranging from 60 to 90 years, forming 25.4 per cent. of the total deaths.

This diminution of infant mortality and increase in the number of persons dying at high ages, are very favourable indications of the healthy condition of this sub-district.

Social position of the deceased.—The proportional numbers per cent. of the deceased peasons in relation to their social position are shewn in the following table:—

Nobility and Gentry	26 ...	5·21 per cent.
Professional Class	65 ...	13·02 „
Middle and Trading Class ...	162 ...	32·46 „
Industrial and Labouring Class	246 ...	49·31 „
Total number of deaths ...	499...	100·00 „

Inquests and Uncertified Deaths.—Nineteen inquests were held in this sub-district during the past year, and verdicts given as follows:—In six instances the deceased persons came by their deaths from some accidental cause, in two of the cases the verdict given was wilful murder, and in eleven the verdict given was natural, the deceased persons having, or supposed to have had, some disease, but dying suddenly and without due medical attendance, an inquest was considered necessary. Six persons died, the cause of whose deaths, up to the present time, no one knows; this is a grievous blot on our civilisation, and should be remedied; they were registered as uncertified deaths.

Disease and Mortality amongst the Union poor.—In Table V., Appendix, it may be seen that as many as 459 new cases of illness amongst the Union or out-door poor were duly attended to. Many of them were of a severe type. In the first place there were 25 new cases of small pox, but no deaths in the patients' homes; several died in the hospitals to which they were taken, but the exact number I cannot ascertain owing to the circumstance that when one hospital was full they had to be taken to another, and no record was kept of the parish from which they came. Also it may be seen that there was no death from Measles, Scarlatina, Diphtheria or from Whooping-cough, and but two from diarrhœa; there were 48 new cases of remittent or low fever but no deaths in the patients' homes,—a circumstance to which I attach great importance.

Density of Population.—That we are daily increasing in population, while we do not, of course, increase in area, furnishes unpleasant reflections concerning our future sanitary welfare, for density of population has a powerful effect in the promotion of disease, and in increasing the death-rate of a locality. The density in this parish is about 30 persons to an acre; and there are 5,612 inhabited houses, divided by which the population gives 6·5 persons to each inhabited house. It is extremely satisfactory, however, to know that, with a greatly increased density of population, we are still in the enjoyment of a low rate of mortality.

Sanitation during the past year.—In Table VI. in the Appendix can be seen the amount of sanitary work done by the Surveyor and his most diligent assistants, who deserve great praise for their prompt and careful attention to every case as it occurred. Eighty-three houses in which contagious or infecticus diseases occurred were fumigated and disinfected, and their

unsanitary defects remedied; in four of the above number, the disease recurred, and in six the bedding was burnt and new supplied. 1,250 houses also were duly inspected by myself, the surveyor and his assistants with the view of detecting any sanitary defects and remedying them.

For further information I beg to refer the reader to the table, which contains a detailed account of mostly all the sanitary work done in this sub-district during the year.

Cow and Slaughterhouses.—All the Cowhouses and Slaughterhouses in this sub-district were duly examined by myself, and repeatedly by the Surveyor and by the Inspector of Nuisances. This being a very important part of our duties, our inspections were made with due regard to the sanitary appliances so necessary, as well as the regulations ordered by the Metropolitan Board of Works. They were all found in such good working order that I did not find it necessary to oppose the granting of licenses to the owners.

Water Supply.—The water companies one and all spare no expense or trouble in their endeavours to purify the Thames water. But they cannot do what is impossible; they cannot make it fit for human beings to drink, for it contains the products of sewage in solution, and microscopically examined, it is often found to be crowded with the germs of organic life, both animal and vegetable.

The water from the chalk hills in the county of Kent is pure, cool, and refreshing, and so abundant that it would supply the needs of South London for all drinking and dietetic purposes. The Thames water may be used for various industrial purposes, and will save us

from a water famine, which is almost certain to come in the event of a dry season. We have had three or four such seasons within the last twenty years, when the companies refused to supply water for watering the roads.

With reference to water supply also, it may be a matter for great consideration whether our water-closet system is not a great mistake, for by it we lose most valuable property in quantity as much as would enrich a large province yearly. For this reason it may be doubted whether we should permit any of this valuable property to enter the sewers. There are many practical and experienced men, who can devise a means of taking it away and utilising it in a satisfactory and profitable manner.

In concluding this report, I have much pleasure in congratulating the inhabitants of Clapham on the attainment by this sub-district of a high condition of health during the past year.

JOHN MAC DONOGH,

Medical Officer of Health for Clapham.

PUTNEY AND ROEHAMPTON.

The Census of the year 1881 was made on the 4th April, and it is therefore necessary in giving the mean population of the year to increase it by such a number as may be supposed to have been added to that population up to June 30th. The Census gave a population of 13,221, and to this we add 91 as the average rate of increase during nearly the quarter of a year elapsing between April 4th and June 30th. The population of this sub-district may therefore be put down at 13,312 in the middle of the year 1881.

Births and Birth-rate.—During the year 1881 340 births were registered; of these 185 were of males, and 155 of females. It is somewhat curious that this proportion between males and females is usually reversed, more females being born than males. Last year (1880) 348 children were born, of whom 163 were males, and 185 females. There is, therefore, a slight falling off in the number of births. The Birth-rate is only 25·5 per 1,000 of the population, or 1 in 39, as compared with 27·3 per 1,000, or 1 in 37 of last year. The very low birth-rate of this sub-district is very significant of the fact that the better classes do not multiply so rapidly as the poorer.

Deaths and Death-rate.—We have reason to congratulate the inhabitants of this sub-district upon the exceedingly low death-rate of the year 1881. Only 167 deaths, 10 fewer than 1880, 12 fewer than 1879, and no less than 19 fewer than 1878, were registered. Of these 92 were of males and 75 of females. In this case also

the usual proportion of the sexes has been reversed. The death rate was only 12·5. A glance at the table below will show that this is the lowest death-rate in this sub-district for 11 years. Indeed, it is probable that in no year, even in the days when a very sparse population occupied the area now covered with inhabited houses, was the rate of mortality so low. This is not the result of mere accident or absence of special forms of disease, for Measles and Scarlatina, both occurred almost epidemically during the year.

YEARS.	Births.	Birth-rate.	Number of Deaths from all Causes.	Death-rate.	Rate of Natural Increase.
1871	275	28·9	151	15·8	13·0
1872	279	28·4	144	14·6	14·0
1873	320	30·6	125	13·3	18·3
1874	290	27·8	156	15·0	12·8
1875	292	27·3	167	15·7	11·6
1876	300	27·3	143	13 0	14·3
1877	351	31·1	170	15·0	16·0
1878	338	29·1	186	·0	13·1
1879	327	27·4	179	15·0	12·2
1880	348	27·3	177	13·6	13·2
1881	340	25·5	167	12·5	12·9

The births exceeded the deaths by 173; this gives a natural increase of the population of 12·9 per 1,000.

The table which follows is, in an abridged form, the same as that employed by the Registrar-General, and also arranged according to the classification of diseases drawn up by the College of Physicians of London, for use in certifying the causes of death. Some sub-classes, which appeared to me unnecessary, have been omitted, and others which I deemed useful in classifying the causes of death, adopted.

STATISTICS OF MORTALITY.

PUTNEY AND ROEHAMPTON. Population (Census) 1881 13,221. Official Population in middle of the year 1881. 13,312. Area in Statute Acres-2,176.		Total Deaths from each Class of Disease, &c., in the Sub-District.	Sex		Age								Social Position			
DISEASES, And other Causes of Death.			Males.	Females.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	At 10 and under 20 years of age.	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 & Labouring Classes.
Classes :— I. Zymotic	Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	6	4	2	1	5	...	...	...	...	...	...	...	...	1	5
	Scarlatina	8	2	6	1	2	3	...	1	1	...	...	...	...	1	7
	Diptheria	1	...	1	...	1	...	...	...	...	...	...	...	...	1	...
	Typhoid & Typhus Fever	1	1	...	...	...	...	...	1	...	...	...	...	...	...	1
	Remittent and other Fevers	...	...	...	...	...	...	...	...	...	. .	...	...	...	...	...
	Puerperal Diseases	3	...	3	...	...	...	...	3	...	...	...	...	...	1	2
	Croup	2	1	1	1	...	1	...	...	...	...	...	...	...	1	1
	Whooping Cough	3	2	1	2	...	1	...	...	...	...	...	...	...	1	2
	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diarrhœa, Dysentery, & Cholera	3	2	1	1	2	...	...	...	...	...	...	...	1	1	1
	Other Zymotic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals of Zymotic Class		27	12	15	6	10	5	...	5	1	...	...	...	1	7	19
II. Constitutional	Gout, and Rheumatism	4	3	1	...	...	...	1	2	...	1	...	...	1	1	2
	Cancer & other Tumours	1	1	...	...	...	...	...	...	...	1	...	...	1	...	...
	Tubercular	17	7	10	3	1	...	1	10	2	...	...	...	2	8	7
III. Local	Nervous	21	12	9	9	3	1	1	...	4	2	1	...	3	8	10
	Circulatory	14	7	7	2	...	...	...	2	2	8	...	...	3	8	3
	Respiratory	24	13	11	7	3	1	...	2	1	7	3	1	8	5	10
	Digestive	17	8	9	2	4	...	...	...	2	6	3	1	4	5	7
	Urinary	2	2	...	...	...	1	...	...	1	...	...	2	...	...	...
	Generative	2	1	1	...	...	...	...	...	...	2	...	1	...	...	1
	Locomotory	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Integumentary	1	1	...	...	...	...	...	...	...	1	...	...	...	1	...
IV. Developmental	Premature Birth, Atrophy, &c.	18	12	6	18	...	...	...	...	...	...	...	1	4	5	8
	Old Age	6	3	3	...	...	...	...	...	...	2	4	...	3	...	3
V.	Violence	13	10	3	1	...	...	2	5	3	2	...	...	...	4	9
	TOTALS	167	92	75	48	21	8	5	26	16	32	11	6	30	52	79

Zymotic Diseases.—This group of diseases is, of course, from a sanitary point of view by far the most important. In the following table a glance may be taken at the past in reference to these diseases and our present position noted for evil or good.

Years.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
Small-pox	1	...	...	...	...	1	...	1	...	..	...
Measles ...	1	...	2	3	...	1	2	7	...	...	6
Scarlatina	21	7	...	...	...	3	6	...	3	1	8
Diphtheria	1	1	...	1	4	...	1	1	...	...	1
Whooping-cough ...	1	6	1	...	9	7	...	4	8	9	3
Typhoid&c.	1	...	2	...	...	...	4	3	2	4	1
Diarrhœa & Cholera	6	5	1	6	7	5	7	10	7	10	3
Totals ...	32	19	6	10	20	17	20	26	20	24	22
Percentage of Deaths from Epidemics to deaths from all causes.	21·4	13·1	4·8	6·4	11·9	13·2	13·0	13·8	11·2	13·5	13·17

It will be seen that the total number of cases (in the 7 chief epidemic diseases) has not increased from the average of those years included in the table. It has decreased from that of the later years with the exception of 1879. In individual diseases Measles and Scarlatina give the largest totals. With the exception of the severe epidemic of 1871 Scarlatina has not been so severe in any year of the series. The most of the fatal cases occurred at Roehampton, where the epidemic was almost alarming, the school having to be closed for some weeks in consequence of its prevalence among the pupils. It was

undoubtedly spread by the contact of children in the school, but the source of the first cases remains undiscovered. Diarrhœa was very mild, as might be expected, since the year 1881 was much cooler, and the rainfall considerably less than its predecessor. The epidemic diseases are arranged below according to the time of year in which they occurred. Scarlet-fever may be said to have prevailed in the third quarter, and Measles in the second and fourth.

DISEASE.	1881			
	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Mean Temperature...	37°3	52°9	60°0	44°6
Small Pox	...	..	...	...
Measles	...	3	...	3
Scarlatina	1	...	6	1
Diphtheria	...	1	...	...
Whooping Cough.....	1	...	...	2
Diarrhœa	1	...	1	1
Fever	...	...	...	1
TOTAL... .	3	4	7	8

Constitutional and Local Diseases, &c.—The table which follows will save much labour in explaining the relations of these diseases. It is most satisfactory to find that tubercular diseases continue to decrease. This also called forth the same remark last year. Respiratory diseases, and also nervous, are below the average. The deaths of children from the dangers of birth and the earliest period of life seem rather to be increasing.

The mortality from drowning has caused the deaths classified under the head of violence to be greatly in excess of any past year on the table. The matter will be referred to afterwards.

	Years.	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
C	Gout and Rheumatism	...	...	...	...	...	...	...	3	1	4	4
C	Cancer and Tumours	...	...	...	...	...	...	...	7	3	6	1
C	Tubercular	22	24	19	24	26	26	26	32	23	18	17
L	Nervous	19	20	26	39	23	26	29	28	34	33	21
L	Circulatory	9	14	13	8	13	6	8	12	13	13	14
L	Respiratory	29	26	21	30	36	23	29	37	42	27	24
L	Digestive	8	7	12	11	7	5	12	10	9	13	17
L	Urinary	1	5	4	3	8	7	11	2	4	6	2
L	Generative	1	...	2	...	1	1	2	...	1	...	2
L	Locomotory	...	1	1	...	1	1	2	...	...	...	...
L	Integumentary	...	...	...	...	...	...	1	...	2	1	1
D	Premature Birth, Atrophy, &c.	11	5	7	7	16	10	8	7	8	16	18
D	Old Age	7	3	3	6	11	8	8	7	5	9	6
V	—Violence	4	6	5	6	4	7	9	5	7	6	13
	(Other diseases)	7	13	3	12	1	1	3	...	...	...	...
	Totals	118	124	116	146	147	121	148	150	152	152	140

Ages of the Deceased.—Infants under 1 year still continue to furnish a heavy mortality, although the fatal cases among them have decreased by 5 from those of last year. The number of deaths under that age was 48, or 28·7 per cent, of the total deaths. Last year the per-centage was 30·0, and in 1879 24·5.

The mortality among aged persons was not so high as last year. 43 persons died upwards of 60 years, or a percentage of 25·7. In 1880 there were 55 deaths, and a per-centage of 31·0. Thus the difference in the number of deaths arose from diminished mortality amongst the aged. At the intermediate ages the deaths of the present year are rather more numerous than the last.

Social position.—The following is the relative proportion of the classes in the mortality table.

Nobility and Gentry	3·5
Professional Classes &c.	18·0
Middle Class	31 0
Industrial Class	47·5
	100 0

Inquests, &c.—Fourteen inquests were held during the year 1881. The verdicts were as follows :—

I. Accident—Drowning, 5 ; Suffocation, 1 ; Fracture of Neck, 1.
II. Natural—Heart Disease, 2 ; Meningitis, 1.
III. Suicide—Drowning, 1.
IV. Found Drowned, 3.

It is lamentable to find that nine deaths were due to drowning on our short stretch of the river. Several of them would clearly have been prevented if a knowledge of swimming were more common, and if greater care were exercised in hiring out and managing boats.

Sanitary proceedings, &c.—The usual summary of these proceedings will be found in Table VI. in the Appendix. A special return has been asked in regard to the disinfection of houses, bedding, &c., with special reference to the use of the disinfecting oven in this sub-district. Though not expected, and perhaps hardly so complete as such a return will be for 1882, the present return has

shown that the method of disinfection adopted in this sub-district has been perfectly satisfactory. The following is the analysis of the cases which occurred. (I refrain from publishing the addresses, &c., for obvious reasons).

Houses disinfected			44
Bedding, &c., disinfected in oven			46 times
,, ,,	after Small Pox*		9
,, ,,	after Scarlet Fever		34
,, ,,	after Typhoid Fever		1
Bedding destroyed			1

* This does not give the number of patients.

In three cases the disease reappeared in the same house—in one 2 days, in another 3 days, and in the third 14 days after disinfection. It is needless to point out that the period of incubation extends over a time frequently as long as the last mentioned, and therefore none of these cases can be said to affect the question of the value of the process of disinfection adopted. It may therefore fairly be said that in no instance during the year 1881 has the method of disinfection pursued in this sub-district been proved to have failed to prevent a recurrence of the disease.

I am of opinion that the use of a disinfecting oven is the best method of disinfecting bedding, &c., except destroying articles, often of too much value to allow of destruction. Fumigation with chlorine or sulphur is used for the rooms, and the floors, furniture, &c., washed with disinfecting fluid.

ALEXANDER WALKER, M.D.

Medical Officer of Health for Putney and Roehampton.

STREATHAM,

INCLUDING

BALHAM AND TOOTING.

It is very satisfactory to be able to give again a favourable report of the health of this sub-district. During the year 1881, the low death-rate, the high rate of natural increase, and the decrease of mortality from the zymotic class of diseases, clearly show that the past year has been exceptionally healthy.

The following statistics, derived chiefly from an analysis of the Registrar General's returns, will be found to fully corroborate this statement.

Vital Statistics.

Population.—The Census taken in April, last year, determined the population of Streatham and Tooting to be 25,553 persons living of all ages; the Census of 1871 fixed the population at 14,475, there was, therefore, an

increase of 11,078 in ten years to our population; doubtless the chief increase being in the later years of the decade. According to the official method of calculation, the mean population of this sub-district would be 25,830 living in the middle of the year 1881.

Birth-rate.—The births registered during the year were 830, 429 were of males, and 401 of females; the birth-rate being 32·1 per 1,000 of the population. The excess of births over deaths was 517, giving the large rate of natural increase of 20 per 1,000.

Deaths and Death-rate.—The total number of deaths registered in the year was 313, showing a decrease of 35 on the number recorded in 1880; of these deaths 150 were of males, and 163 of females.

The death-rate, calculated from the whole of the deaths registered, and the foregoing estimate of the population was 12·1 per 1,000 persons living during the year.

The following table shows clearly the cause of death, sex, age, and social position of all persons whose deaths were registered during the year.

STATISTICS OF MORTALITY.

STREATHAM. INCLUDING TOOTING & BALHAM. Population in 1871—14,475. Population middle of 1881–25,830. Area in Statute Acres–3465. DISEASES. And other Causes of Death.	Total Deaths from each Class of Disease, &c., in the Sub-District.	Sex. Males.	Sex. Females.	Age. Under 1 year.	Age. From 1 to 5 years.	Age. From 5 to 10 years.	Age. Under 20 years, including all under 10 years.	Age. At 20 and under 40 years of age.	Age. At 40 and under 60 years of age.	Age. At 60 and under 80 years of age.	Age. 80 years and upwards.	Social Position. Nobility and Gentry.	Social Position. Professional Class, Merchants, Bankers, &c.	Social Position. Middle & Trading Class, Shopmen, Clerks, &c.	Social Position. Industrial and Laboring Classes.
Classes :—															
1. Zymotic — Small Pox	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
1. Zymotic — Measles	3	2	1	...	3	...	3	...	...	...	...	...	...	...	3
1. Zymotic — Scarlatina	13	9	4	...	9	3	13	...	...	...	...	1	1	6	5
1. Zymotic — Diptheria	1	...	1	...	...	...	...	1	...	...	...	1	...	...	...
1. Zymotic — Quinsy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1. Zymotic — Croup	4	2	2	1	3	...	4	...	...	...	...	...	...	1	3
1. Zymotic — Whooping Cough	9	3	6	5	3	1	9	...	...	...	...	...	...	3	6
1. Zymotic — Typhus and other Fevers	2	1	1	...	1	...	1	...	1	...	...	...	...	2	...
1. Zymotic — Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1. Zymotic — Metria, Childbirth	5	...	5	...	...	...	1	4	...	...	...	...	1	2	2
1. Zymotic — Carbuncle	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1. Zymotic — Influenza	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
1. Zymotic — Diarrhœa & Choleraic Disease	9	7	2	8	...	1	9	...	...	...	...	...	2	3	4
Totals of Zymotic Class	46	24	22	14	19	5	40	5	1	...	...	2	4	17	23
2. Tubercular	38	20	18	6	5	1	15	22	1	...	...	2	8	13	15
3. Of Brain, Nerves, &c	41	18	23	15	5	1	22	1	8	6	4	5	5	7	24
4. Of the Heart, &c.	26	10	16	1	...	...	2	4	8	12	...	5	2	6	13
5. Of Respiratory Organs	48	25	23	7	10	...	17	6	7	14	4	4	2	17	25
6. Of Digestive Organs	33	14	19	3	...	1	7	3	11	10	2	7	6	8	12
7. Of Urinary Organs	10	6	4	2	...	...	2	1	...	7	...	3	3	1	3
8. Of Organs of Generation	8	...	8	...	...	...	...	...	4	3	1	1	2	4	1
9. Of Joints, Bones, &c.	2	1	1	...	...	...	...	...	1	1	...	...	..	1	1
10. Of Skin	1	1	...	...	...	...	...	...	1	...	...	...	...	...	1
11. Premature Birth, Low Vitality, Malformation, &c.	29	19	10	28	...	...	29	...	...	...	...	...	1	9	19
12. Of Uncertain Seat	2	1	1	...	...	...	1	...	...	1	...	1	...	...	1
13. Age	20	5	15	...	...	...	...	...	...	10	10	5	5	2	8
14. Violence	9	6	3	1	1	...	4	2	1	2	...	...	1	2	6
15. Not Specified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	313	150	163	77	40	8	139	44	43	66	21	35	39	87	152

Zymotic Diseases—their prevalence and mortality.

The following Table contrasts all the deaths which resulted from the seven principal epidemic diseases during the past and eight preceding years :—

DISEASE.		1873	1874	1875	1876	1877	1878	1879	1880	1881
Seven principal Epidemics.	Small Pox	...	2	...	...	4	1	...	...	...
	Measles	3	9	2	2	2	11	2	1	3
	Scarlatina	1	3	4	4	1	2	5	34	13
	Diphtheria	...	1	3	7	3	3	2	7	1
	Whooping Cough	8	3	5	7	6	11	21	8	9
	Typhus, &c.	7	2	2	5	5	1	3	5	2
	Diarrhœa and Choleraic Disease ...	10	6	9	6	4	13	3	6	9
	Totals ...	29	26	25	31	25	42	36	61	37

This table shows that there were 37 deaths from the seven principal diseases of the zymotic class, as against 61 in the previous year, and allowing for the difference in the population this number is below the average of the eight preceding years.

Examined more in detail, it will be observed that no death from Small-pox was registered in this sub-district, but 14 cases were sent into hospital from various parts of the parish, and I believe, but for the prompt removal of all these cases to hospital, and the other measures taken to arrest the spread of the disease, viz. : the fumigation, disinfection, and cleansing of infected houses and premises, clothing and bedding, and where necessary burning the latter, with re-vaccination in case of need of the other occupants of infected houses, there would have been a much more extensive epidemic

of this fatal disease. I am glad to say that no fresh case occurred after these vigorous measures had been used to arrest the disease.

There were 3 deaths from Measles, and only 13 from Scarlet-fever, as against 34 in the previous year.

The deaths from Whooping-cough were below the average, as was the mortality from other diseases in this class.

The mortality from Zymotic diseases yields a percentage of 14·6 upon the number of deaths from all causes during the year.

Other Diseases.—The table given below contrasts all these deaths, and it will be seen that the figures of several of the classes correspond very closely with those of former years. They were, however, below the average, as a whole, allowing for difference in population.

The Tubercular, Class 2, had 38 deaths, the same as last year, 22 of which number are attributed to Phthisis Pulmonalis. The diseases in this class caused 12·1 per cent of all deaths.

The diseases in the Classes 3, 4, 5, 6, 11, and 13 cause respectively, and in order, 13·4, 15·3, 10·5, 9·2, 6·3, and 8·3 per cent. of all causes of death; only Class 4 Diseases of the Heart, and Class 11, Premature Birth, were above, the rest were below the average.

The following Table contrasts all deaths from non-Zymotic diseases during the past eight years:—

Years	1874	1875	1876	1877	1878	1879	1880	1881
Tubercular	35	34	31	23	30	32	38	38
Of Brain, Nerves, &c.	42	41	39	33	57	41	54	41
Of the Heart, &c.	17	20	18	33	31	34	17	26
Of Respiratory Organs	19	34	52	36	44	64	52	48
Of Digestive Organs	17	21	22	25	29	16	25	33
Of Urinary Organs	3	6	6	7	7	10	5	10
Of Organs of Generation	2	...	6	11	2	1	5	8
Of Joints, Bones, &c.	1	1	2	7	2	...	3	2
Of Skin	...	1	...	2	...	1	...	1
Premature Birth, Low Vitality, Malformation, &c.	12	14	14	15	17	19	37	29
Of Uncertain Seat	4	8	2	4	3	6	9	2
Age	8	20	23	14	17	12	25	20
Violence	6	6	9	5	3	13	11	9
Not Specified	1	2	1	...	...	...	...	...
Totals.	167	208	225	215	242	249	281	267

Age at Death.—Infant Mortality.—The mortality in early life is below that of 1880, 24·7 per cent. of all deaths occurred during the first year of life, upwards of 37 per cent. to children under five years of age, as against 38 per cent in 1880, and 44 per cent. to persons under 20 as against 47; collectively, these ages give a lower percentage of deaths than obtained in the previous year.

At the other extreme of life the mortality was also below that of the previous year; 87 persons died at and over 60, 20 solely of old age, 56 were 70 and upwards, 12 were over 80, and two died at 90.

Sickness and mortality amongst the out-door poor of the parish.

Table V. in the Appendix gives the number of persons who were under treatment, the nature and extent of the sickness that prevailed, as well as the deaths that took place among the out-door poor of the parish. 121 new cases came under treatment during the year, but these do not fully represent the amount of

work done, as there are in Streatham and Tooting about 100 permanent paupers who require visiting periodically, and can obtain medical advice at any time without a fresh order.

In the Zymotic class were 30 cases, including 14 of Small-pox, 2 of Measles, 7 of Scarlatina, 1 of Whooping-cough, 4 of Diarrhœa, and 2 of Fever, without any deaths.

In the other classes were 7 deaths, including 2 from Phthisis.

The ratio of deaths to cases treated was upwards of 5 per cent.

Social Position.—The following Table gives the per-centage of deaths in the various classes during the year.

Nobility and Gentry...	35 =	11·18	Per cent.
Professional Class	39 =	12·46	„
Middle and Trading Class	87 =	27·80	„
Industrial and Labouring Class ...	152 =	48·56	„
Total deaths in 1881	313	100·00	

Inquests, Violent Deaths, &c.—Thirteen inquests were held with the following results :—

I.	Natural	Heart Disease	1	
		Apoplexy	1	
		Syncope	1	
		Convulsions	1	— 4
II.	Accidental	Kicked on Head by Horse ...	1	
		Asphyxia	1	
		Injury to Head and Fracture of Leg	1	
		Drowned Bathing	1	
		Concussion of Brain	1	
		Fracture to Arm, fall	1	
		Injuries to Head	1	
		Congestion of Brain	1	— 8
III.	Suicidal	Poison	1	— 1
				13

There were only two uncertified deaths.

Sanitary Proceedings.—Table VI. in the Appendix contains a summary of the principal sanitary works that have been carried out during the past year. It will be seen that over 1,800 houses and premises were inspected, and as each one of these inspections is a work of considerable time, labour, and patient investigation it follows, that the large total of 1,808 inspections represents a great amount of work done.

Forty-one houses with their contents were fumigated, disinfected, and cleansed throughout, and in 11 the clothing and bedding were burnt, after the occurrence of contagious diseases; 18 houses were so treated after Small-pox, 20 after Scarlet-fever, and 3 after Typhoid, and with such success that there was a recurrence of the disease in 3 instances only, and these declared themselves within one week after disinfection, showing that the disease was contracted before the employment of preventive measures. We may therefore conclude that the means taken to arrest the spread of these infectious diseases was completely successful.

Subjoined is a table showing the number of houses disinfected, &c. I may here say that I am much indebted to Mr. Phimister, our Inspector of Nuisances, for having so carefully carried out my instructions concerning the preventive measures already referred to.

No. of Houses Disinfected.	No. of instances in which Infectious Diseases Recurred in the same House.	No. of Houses from which Bedding and Clothing were Burnt.
41	3	11

Referring again to Table VI. it will be seen that 40,940 feet, or nearly eight miles, of new sewers and branch drains were constructed during the year. Many

new houses have been supplied with water and water-closets; drains have been trapped, and pig and other nuisances removed. The figures in respect of these and other particulars will be found in the table, to which I beg to refer the reader.

The slaughter-houses and cow sheds underwent the usual annual inspection. They were, with one exception, found in a satisfactory condition; the one objected to was defective in the water supply, and had no proper drainage, in consequence of which the renewal of the owner's licence was opposed at the Sessions, and refused by the magistrates in attendance.

F. F. SUTTON, M.D.,

Medical Officer of Health for Streatham and Tooting.

WANDSWORTH.

The health of this sub-district during the year 1881 suffered in common with the rest of the Wandsworth district from a severe epidemic of Small-pox; notwithstanding which, the rate of mortality was very considerably below the average of the preceding ten years. Evidence of this gratifying result is furnished by an examination of the following statistics which have been derived, as usual, from an analysis of the Registrar General's returns, and from the parochial records of sickness and mortality.

Vital Statistics.

Population.—According to the official method of calculation, which assumes that the population has increased since the period of the last census at the same rate as it had done during the ten preceding years, the mean number of inhabitants of this parish during the year 1881 amounted to 28,202. This number, owing to the very recent date of the census, is doubtless accurate.

Birth-rate.—Natural increase.—The number of births registered during the year amounted to 901; 455 were of males, and 446 of females, yielding a birth-rate, according to the foregoing estimate of the population, of 33.70 per 1,000 persons of all ages, and as will be seen an excess over the deaths—the *natural increase*—of 16·61 per 1,000.

Mortality.—The total number of deaths amounted to 507, 254 of males, and 253 of females; 105 occurred in the following public institutions, viz., in the Surrey County Lunatic Asylum, 80; in the Royal Hospital for Incurables, 9; in St. Peter's Hospital, 2; in the Prison, 9; in the Patriotic Asylum for Girls, 3; and in the Boys' Reformatory, 2. Of the deaths of Wandsworth parishioners not registered in this parish, 41 took place in the Infirmary of the Union, and 9 in the Metropolitan Asylum District Hospitals.

Death-rate.—In the determination of the death-rate of this sub-district, the usual mode of calculation from the number of the population and the number of deaths registered cannot be satisfactorily employed without taking into consideration certain conditions which exert a disturbing influence on the death register, and which are of such extent as to entirely vitiate any calculation derived directly from that source. Thus the register is unduly raised by the mortality of the Surrey County Lunatic Asylum, St. Peter's Hospital, and the Hospital for Incurables, the inmates of which institutions are, with a fractional exception, derived from without the parish, undergo no natural increase, and are necessarily subject to a very high mortality. The latter during the past year formed nearly 18 per cent. of all deaths registered, and has occasionally amounted to one-third of all deaths. On the other hand, as has been stated, 41 deaths

of Wandsworth parishioners took place in the Infirmary of the Union, and were registered in Battersea, the Infirmary being situated in that parish; while 9 deaths occurred amongst the patients who were sent from this parish to the Asylum District Hospitals. In order, therefore, to arrive at the natural death-rate of this parish with any degree of accuracy, it is found necessary to make correction for the foregoing sources of error by withdrawing the mortality of the above institutions, together with their population, from the calculation, and by adding to the latter the deaths of Wandsworth inhabitants who went into the Infirmary and the Hospitals during the year and died there. After correction in the manner indicated, the death-rate for the past year was 17·43 per 1,000 persons living, or ·43 per 1,000 only above the healthiest of the rural districts: without such correction it was 17.97 per 1,000, which is a low rate compared with those of other suburban localities, and is considerably less than the average of the past ten years.

The following table contains, as usual, a summary of all the causes of death arranged in accordance with the classification of the Registrar-General, showing the sex, social position, and ages at death at different periods, and particularizing the several diseases of the Zymotic class:—

STATISTICS OF MORTALITY.

WANDSWORTH. Population in 1871—19,783. Population in 1881—28,005. Official Population in middle of 1881—28,210. Area in Acres—2,478. DISEASES, And other causes of Death. Diseases Classified.	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.	Under 20 years, including all under 10 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 Laboring Classes.
Classes :—															
1. Zymotic — Smallpox ...	9	5	4	1	2	...	5	3	1	...	...	...	...	1	8
Measles ...	5	3	2	1	4	...	5	...	...	...	...	...	1	...	4
Scarlatina...	19	9	10	2	8	6	18	1	...	...	...	...	2	1	16
Diphtheria .	1	1	...	...	...	...	1	...	...	...	...	...	1	...	...
Quinsy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	2	1	1	...	2	...	2	...	...	...	...	...	...	...	2
Whooping Cough ...	12	5	7	7	5	...	12	...	...	...	...	...	...	3	9
Fever	4	3	1	...	...	1	3	...	1	...	...	...	...	...	4
Erysipelas ..	2	1	1	...	...	...	...	...	1	1	...	...	...	1	1
Childbirth ..	3	...	3	...	...	...	...	3	...	...	...	...	...	...	3
Carbuncle ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa & Dysentery	19	15	4	11	1	1	14	1	4	...	...	...	1	2	16
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals of Zymotic Class	76	43	33	22	22	8	60	8	7	1	...	...	5	8	63
2. Tubercular.....	51	27	24	10	5	1	19	17	12	3	...	1	1	14	35
3. Of Brain, Nerves, &c.	121	62	59	29	13	1	44	17	35	23	2	6	3	24	88
4. Of the Heart, &c. ...	28	13	15	...	...	...	1	4	15	8	...	1	1	4	22
5. Of Respiratory Organs	90	43	47	23	18	1	45	6	14	19	6	3	3	13	71
6. Digestive Organs ...	28	7	21	7	...	3	11	3	8	6	...	...	...	9	19
7. Urinary Organs ...	4	1	3	...	...	...	...	1	3	...	...	1	...	1	2
8. Of Organs of Generation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Of Joints, Bones, &c.	2	...	2	...	...	...	1	...	1	...	...	...	...	1	1
10. Of Skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Premature Birth, Low Vitality, Malformation, &c. ...	37	20	17	37	...	...	37	...	...	...	...	...	...	6	31
12. Of Uncertain Seat...	19	8	11	...	1	1	3	1	7	7	1	1	...	6	12
13. Age	27	11	16	...	...	...	...	...	...	14	13	2	3	5	17
14. Violence.....	20	16	4	1	2	...	4	7	8	1	...	...	...	9	11
15. Not Specified.....	4	3	1	1	...	...	1	...	3	...	...	...	...	1	3
Totals	507	254	253	130	61	15	226	64	113	82	22	15	16	101	375

On examination of the foregoing table it is seen that Class 3 (diseases of the Brain and Nervous System) contributed as usual the largest number of deaths of any class; but, as it fails to represent the amount of such diseases proper to this sub-district, in consequence of its undue exaltation by the mortality of the County Lunatic Asylum, which alone formed more than 15 per cent. of all deaths registered, it cannot be taken into consideration in estimating the relative proportion borne by the several classes of disease. Excluding this class, therefore, the most fatal was Class 5 (diseases of the Organs of Respiration), one-third nearly of which was contributed by Bronchitis, the most fatal of all diseases during the year. This class formed 17 per cent. of all deaths, and took the place usually held by Class 1 (the Zymotic, including Epidemic or Contagious diseases), which formed 15 per cent. only. Next in order of fatality was Class No. 2 (the tubercular, which includes Scrofula and Consumption), forming 10 per cent., and was considerably below the average. The next class was No. 11 (Premature Birth, Low Vitality, Malformation, &c.), forming upwards of 7 per cent., and exceeded the corrected average by one-third. Class 4 (Disease of Heart) and Class 6 (Diseases of the Digestive Organs) were of equal amount, each contributing 5·5 per cent.; the former was of average amount, the latter somewhat below it. Class 13 (Age), of almost the same amount, was nearly one-third above the average, and Class 14 (Violence) was nearly twice the average amount. The remaining classes correspond nearly with their respective averages. The most noteworthy record in the table, as in the two preceding years, is the numerical preponderance of diseases of the Organs of Respiration, which exceeded the corrected average by about a sixth part.

Age at Death.—Upwards of one-fourth (25·6 per cent.) of all deaths occurred to infants during their first year of existence. Upwards of 37 per cent. to children

under 5 years of age; and upwards of 44·5 per cent. to persons under 20 years of age. 27 deaths were registered as having occurred from old age unassociated with disease, but no less than 63, or upwards of 12 per cent. of all deaths, were recorded at 70 years of age and upwards; viz., from 70–75, twenty-nine; 75–80, seventeen; 80–85, twelve; 85–90, four; and one attained the age of 92.

Social Position in relation to Deaths.—The proportion per cent. of deaths from general, as well as from epidemic disease in relation to the social position of the deceased is shown in the subjoined table :—

SOCIAL POSITION.	General Disease.	Epidemic Disease.
Nobility and Gentry	2·96	0·00
Professional Class, Merchants, &c.	3·16	6·58
Middle and Trading Classes, Clerks, &c.	19·92	10·53
Industrial and Labouring Classes	73·96	82·89
	100·00	100·00

The per-centage of deaths from general disease ocurring amongst the labouring classes was about the average amount, but that from epidemic disease, as might be expected from the prevalence of Small-pox, the fatality from which, like that of other diseases of the kind, falls with greatest severity upon the working classes, was very considerably above the average.

Epidemic Diseases—their prevalence and fatality.—The following table shows the deaths which have resulted from the seven principal Epidemic Diseases during the past and ten preceding years, and the relation which they bore to the deaths from all causes :—

Years.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough	Cholera.	Diarrhœa.	Fever—Typhus and Typhoid.	Total Deaths from Epidemics.	Total Deaths from all causes.	Per centage of deaths from Epidemics to deaths from all causes.
1871	14	31	23	...	11	...	21	3	103	453	22·7
1872	1	5	1	3	13	...	20	4	47	365	12·8
1873	...	4	...	3	8	...	22	7	44	433	10·1
1874	...	14	2	...	19	...	12	5	52	453	11·5
1875	1	2	5	2	14	...	17	5	46	420	10·9
1876	1	17	12	1	10	2	16	12	71	461	15·4
1877	...	...	21	...	11	...	16	9	57	384	14·8
1878	...	4	2	4	6	...	19	3	38	422	9·0
1879	1	16	15	1	44	...	7	8	92	516	17·8
1880	...	9	24	4	15	...	20	6	78	484	16·1
1881	**9**	**5**	**19**	**1**	**12**	...	**19**	**4**	**69**	**507**	**13·6**

Notwithstanding the extensive prevalence of Small-pox and Scarlet-fever, the number of deaths from the entire class of these diseases was less by nearly a tenth part than the average number of the past ten years corrected for increase of population.

Small-pox.—Small-pox, which prevailed extensively during the first nine months of the year, was the most prevalent and the most fatal of the class; although 9 deaths only are recorded in the Table, 8 deaths occurred in the Metropolitan Asylum District Hospitals amongst the patients (39), sent there from this parish for treatment. But for the prompt isolation of patients by removal to hospital, the disinfection of houses by sulphur fumigation, and especially re-vaccination, which was extensively resorted to by all classes, it would be a

matter for surprise, looking to the extensive prevalence of Small-pox throughout the Metropolis, that a much larger fatality from this disease was not experienced in this sub-district. With reference to Re-vaccination, it may be here remarked, in accordance with the dictates of experience, that, were vaccination pursued to its ultimate issue—by reiteration until no effect be produced—Small-pox, in the form of an epidemic, would become a thing of the past.

The deaths from Scarlatina and Diarrhœa were of equal amount (the former exceeding the average by one-third), and were within one death as numerous as those of Small-pox. The former disease prevailed mostly during the last nine months, and the latter, as usual, generally throughout the year, but mostly in July and August. Whooping-cough, the fatality from which was nearly one-third less than the average, was prevalent during the last nine months of the year, Measles prevailed but slightly with a fatality of half the average only.

The months in which the deaths from these diseases occurred, and the mean temperature of each quarter are shown in the following table.

DISEASE.	January	February	March	April	May	June	July	August	September	October	November	December
	Mean Temp. 37·3			Mean Temp. 52·9			Mean Temp. 60·0			Mean Temp. 44·6		
Small Pox	...	...	...	1	1	2	4	...	...	1	...	...
Measles	...	...	...	1	...	...	1	...	...	...	1	2
Scarlatina	...	...	...	...	2	1	2	5	1	3	4	1
Diphtheria	...	...	...	1	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	1	1	1	3	1	1	3	1
Diarrhœa	2	1	...	2	1	...	7	3	...	2	...	1
Fever	...	...	2	...	...	...	1	...	...	...	...	1
TOTALS	2	1	2	5	5	4	16	11	2	7	8	6

Sickness and Mortality amongst the Parochial Poor.—In Table V. in the Appendix is contained, as usual, the amount and fatality of all cases of sickness which came under treatment amongst the parochial poor during the year. The total amount of general sickness was one-seventh less than the average, and its resulting mortality one-fourth (nearly) less than the average; while the amount of epidemic diseases was only slightly under the average, its fatality was nearly one-half less. The ratio of total deaths to total cases of sickness was 4·46 per cent. The prevailing epidemic was Small-pox. 51 cases of this disease occurred, 39 of which were sent to hospital, where 8 died, the remaining 12 having been too ill or otherwise unfit for removal, were treated at their own homes, and 2 of these died. This record accurately ascertained to have occurred in a given portion of the population, upon which disease falls with the greatest intensity, becomes valuable for the purpose of indicating the amount and intensity of the sickness which has prevailed generally throughout the parish as well as of corroborating the evidence deducible from the death register.

Violent Deaths, Inquests, Uncertified Deaths.—There were 43 inquests held during the year the verdicts of which are enumerated in the following tabular form, viz.:—

Deaths from natural Causes				21
Deaths from violence, viz.:—				
Accidental	Wounds	2	— 16	
	Drowning ...	4		
	Suffocation ...	3		
	Burning	1		
	Scalding	2		
	Fracture ...	3		
	Compression ...	1		
Suicidal	Hanging	3	— 4	
	Gunshot	1		
Not specified				2
				43

Uncertified deaths.—There were 5 only—a small number compared with that of former years. Nevertheless, if it be only in one instance, the law is still required to recognise the necessity which exists for an investigation into the circumstances of every death, the cause of which has not been certified by a registered Medical Practitioner. For security of life, and, indeed, for every interest of society such necessity cannot be too strongly insisted upon. (See Report for 1865 and following Reports).

Sanitary Proceedings.—A summary of the principal sanitary proceedings which were carried out during the year is as usual contained in Table VI., Appendix. They were much more extensive than in previous years, especially in the number of inspections of houses and the rectification of their sanitary defects, and in the removal of nuisances generally. The disinfection of houses, directed principally against the progress of the epidemic of Small-pox, and which was effected by the process of sulphur-fumigation, represented a large amount of valuable, because successful, work. The total number of houses disinfected was 88. The number disinfected by sulphur-fumigation in consequence of the presence of Small-pox was 49, and the number treated by the same process for Scarlet-fever was 32. In two instances only did the necessity for a second fumigation arise; and in one instance only was there a recurrence of the disease after fumigation, in which case the recurrence was traceable to a well-ascertained fresh exposure of the patient to contagion. The above numbers are best shown in a tabular form :—

Number of houses disinfected by sulphur fumigation after Small-pox	49
Number of houses disinfected by sulphur-fumigation after Scarlatina and other fevers	32
Number of houses disinfected by sulphur-fumigation a second time	2
Number of houses in which there was a recurrence of contagious disease after disinfection	1

The circumstances relating to the two houses in which fumigation was had recourse to a second time may be briefly stated:—No. 1. Man, wife, and 5 children; 4 of the children were suffering at the same time, but in different stages of the disease, together with a young man, a member of another family. Two of the children and the adult were sent to hospital on the 28th July, and the rooms were disinfected the next day. Two of the children who were then approaching convalescence remained at home, and after their recovery the whole house was completely fumigated on September 5th. No other attack amongst the remaining five persons occurred. No. 2. Man, wife, and 4 children. Son was sent to hospital on July 31st, and the room disinfected the next day. The father subsequently went to the hospital to see his son, who was dying; he attended his son's funeral, and soon after sickened, and on the eruption of the disease on August 24th, was sent to hospital. The house was fumigated again the next day, and the remaining members of the family were unaffected. Looking to the results above recorded, the process of disinfection of houses by means of fumes of burning sulphur must be held to be a complete success. In addition to the proceedings indicated in the table, all the slaughterhouses and cowhouses were examined and duly reported on, and, in consequence of their satisfactory condition, their owners' licenses were wholly unopposed. There were many other proceedings which formed the subjects of special reports, as those relating to the "Waterside houses," "Infected milk supply," "Reception by the Wimbledon Local Board of Small-pox patients," "The transmission of patients convalescent from Small-pox directly to the convalescent hospitals," &c., which do not admit of being tabulated. It is satisfactory to find that they were all conducted without the necessity of any application for the assistance of the law.

In congratulating the inhabitants of Wandsworth upon the comparative immunity from Small-pox enjoyed by this sub-district during the past year, it is to be hoped that they will assist (each in his own household) in the execution of the same preventive measures, in the absence of danger, as those which were successfully employed in combating the late virulent epidemic; for it is not by fitful efforts, however energetic, but by continuous, well sustained endeavours that the permanent prevention of epidemic disease can be attempted with success, and for this reason that the conditions which predispose to its occurrence are daily renewed, and require to be counteracted by daily sanitary administration.

GEORGE EDWARD NICHOLAS, M.D.,

Medical Officer of Health for Wandsworth.

June, 1882.

APPENDIX OF STATISTICAL TABLES.

TABLE I.

BIRTHS and DEATHS registered during the year 1881.

BIRTHS.

SUB-DISTRICTS.	Males.	Females.	Total.
Battersea { East—Males, 1177; Females, 1172 / West—Males, 1085; Females, 1018	2,262	2,190	4,452
Clapham	551	508	1,059
Putney and Roehampton	185	155	340
Streatham, including Tooting and Balham	429	401	830
Wandsworth	455	446	901
TOTAL	3,882	3,700	7,582

DEATHS.

SUB-DISTRICTS.	Males.	Females.	Total.
Battersea { East—Males, 476; Females, 490 / West—Males, 620; Females, 575	1,096	1,065	2,161
Clapham	210	289	499
Putney and Roehampton	92	75	167
Streatham, including Tooting and Balham ...	150	163	313
Wandsworth	254	253	507
TOTAL	1,802	1,845	3,647

*** The excess of Births over Deaths in the entire District is 3,935.

TABLE II.

Summary of Deaths and their Causes registered in the entire District during 1881, classified according to Sex, Age, and Social Position, and showing also the relative Numbers in each Sub-District.

POPULATION OF ENTIRE DISTRICT, As corrected by the Registrar General. Census 1881. 210,434. Official Population for middle of year, 1881. 212,492. Area in Statute Acres, 11,740. Density 18 persons to an Acre. DISEASES, And other Causes of Death.	Total Deaths from each class of Disease, &c., in the entire District.	Sub-Districts. Battersea—Population 108,548, area in acres, 2,343.	Clapham—Population 36,600, area in acres, 1,233.	Putney—Population 13,312, area in acres, 2,176.	Streatham, Tooting and Balham—Population 25,830, area in acres, 3,465.	Wandsworth—Population 28,202, area in acres, 2,473.	Sex. Males.	Females.	Age. Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	Under 20 years, including all under 10 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 and Trading Class, Shopmen, Clerks, &c.	Industrial and Labouring Classes.
Classes :—																				
1. Zymotic — Small Pox	37	21	7	...	...	9	16	21	5	8	1	18	13	6	...	...	1	1	7	28
Measles	134	110	10	6	3	5	71	63	28	90	16	134	...	...	...	...	...	3	8	123
Scarlatina	100	45	15	8	13	19	46	54	7	56	23	96	2	2	...	...	1	5	17	77
Diphtheria	18	12	3	1	1	1	12	6	1	9	5	17	1	...	...	...	1	2	5	10
Whooping Cough	105	68	13	3	9	12	43	62	49	51	4	105	...	...	...	...	...	2	18	85
Typhus & other Fevers	37	27	3	1	2	4	22	15	...	2	10	21	11	5	...	...	...	1	4	32
Diarrhœa & Choleraic Disease	149	98	20	3	9	19	88	61	109	23	2	135	1	6	5	2	...	7	28	114
Erysipelas	15	13	...	...	...	2	9	6	5	...	1	6	2	3	4	...	...	...	1	14
Metria, Childbirth	29	14	4	3	5	3	...	29	...	...	...	1	27	1	...	...	...	2	8	19
Carbuncle	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	18	7	3	2	4	2	10	8	4	12	2	18	...	...	...	...	...	...	4	14
Quinsy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals of Zymotic Class	642	415	78	27	46	76	317	325	208	251	64	551	57	23	9	2	3	23	100	516
2. Tubercular	557	383	68	17	38	51	274	283	161	71	17	289	151	93	23	1	8	28	106	415
3. Of Brain and Nerves	540	275	82	21	41	121	278	262	167	85	17	282	32	94	111	21	21	25	118	376
4. Of the Heart	245	147	30	14	26	28	115	130	4	7	7	32	36	71	99	7	11	14	49	171
5. Of Respiratory Organs	695	454	79	24	48	90	355	340	182	178	12	382	52	92	140	29	17	28	118	532
6. Of Digestive Organs	208	98	32	17	33	28	83	125	36	11	8	60	19	54	64	11	10	20	50	128
7. Of Urinary Organs	70	38	16	2	10	4	38	32	3	1	2	8	13	26	22	1	8	6	15	41
8. Of Organs of Generation	35	21	4	2	8	...	1	34	...	1	...	1	5	17	11	1	3	2	9	21
9. Of Joints, Bones, &c.	25	15	6	...	2	2	11	14	2	2	...	9	3	6	7	...	...	...	5	20
10. Of Skin	3	1	...	1	1	...	2	1	1	...	...	1	...	1	1	...	...	...	1	2
11. Premature Birth, Low Vitality, Malformation, &c.	232	104	44	18	29	37	119	113	229	2	...	232	...	...	...	...	3	9	44	176
12. Of Uncertain Seat	118	85	10	2	2	19	57	61	24	4	1	31	12	30	40	5	4	4	24	86
13. Age	120	45	22	6	20	27	41	79	...	...	...	...	...	...	50	70	11	20	23	66
14. Violence	113	64	7	13	9	20	83	30	17	10	4	43	26	33	10	1	...	3	22	88
15. Not Specified	44	16	21	3	...	4	28	16	9	4	...	17	4	8	12	3	...	4	9	31
Totals	3647	2161	499	167	313	507	1802	1845	1043	627	132	1938	410	548	599	152	99	186	693	2669

TABLE III.

Showing the total number of deaths and their causes registered in the entire District, during the eleven years 1871–81, with the relative numbers of each class of disease.

DISEASES, And other causes of Death		1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881
Classes;—												
1. Zymotic	Small Pox ...	377	26	9	5	3	26	57	19	4	3	37
	Measles	52	86	55	66	27	88	64	84	125	59	134
	Scarlatina ...	126	26	9	94	134	86	58	39	134	173	100
	Diphtheria ...	6	26	11	12	28	15	7	19	17	19	18
	Whooping Cough ...	52	108	74	89	107	126	73	149	148	123	105
	Typhus and other Fevers	54	52	65	48	39	47	64	39	62	44	37
	Diarrhœa & Choleraic Disease ...	140	140	126	117	134	159	114	182	94	213	149
	Erysipelas .	22	13	12	20	24	13	13	5	13	10	15
	Metria, Childbirth	13	15	28	34	15	26	20	7	28	23	29
	Carbuncle ...	2	1	...	1	...	...	..	...	...	...	...
	Influenza.....	...	...	...	...	...	...	1	...	...	...	...
	Quinsy	1	2	1	2	...	...	...	1	..	1	...
	Croup	13	18	21	40	26	27	20	39	40	19	18
Totals of Zymotic Class...		858	513	411	528	537	613	491	583	665	687	642
2. Tubercular.....		423	419	426	469	565	555	514	501	513	625	557
3. Of Brain, Nerves, &c...		371	341	370	426	455	416	450	503	474	464	540
4. Of the Heart, &c.		152	127	139	146	176	170	204	212	203	193	245
5. Of Respiratory Organs		431	400	543	541	630	561	519	694	891	657	695
6. Digestive Organs		118	87	96	111	136	126	155	150	117	155	208
7. Urinary Organs.....		20	27	34	26	55	62	63	42	74	66	70
8. Of Organs of Generation		16	9	17	21	13	23	29	19	25	20	35
9. Of Joints, Bones, &c...		5	7	10	14	11	14	13	15	8	15	25
10. Of Skin		2	3	4	9	4	5	6	1	3	8	3
11. Premature Birth, Low Vitality, Malformation, &c.....		145	143	143	168	177	226	212	177	170	266	232
12. Uncertain Seat		69	118	126	77	105	97	101	106	91	110	118
13. Age		125	105	144	106	130	150	126	141	141	136	120
14. Violence		56	87	70	75	68	90	82	75	83	96	113
15. Not Specified		76	35	47	79	34	46	26	56	68	95	44
TOTALS		2867	2421	2580	2796	3096	3154	2991	3275	3526	3593	3647

TABLE IV.

Showing the total Deaths from the seven principal Epidemic Diseases registered in each Sub-District, and in the entire District, and the relation which they bore to the total Mortality in the several years 1871-81.

Years.	Deaths from the seven principal Epidemics in each Sub-District.					Entire District.		
	Battersea.	Clapham.	Putney.	Streatham.	Wandsworth.	Total Deaths from the Seven Epidemics.	Total Deaths Registered from all causes.	Percentage of Deaths from the Seven Epidemics to Total Deaths.
1871	463	178	32	31	103	807	2867	28·8
1872	220	128	20	31	47	446	2421	18·4
1873	205	65	6	32	43	351	2580	13·6
1874	238	114	10	26	52	440	2796	15·7
1875	307	74	20	25	46	472	3096	15·2
1876	340	86	19	31	71	547	3154	17·4
1877	280	55	22	25	57	439	2991	14·2
1878	322	103	26	42	38	531	3275	16·9
1879	355	81	20	36	92	584	3526	16·9
1880	383	112	25	61	78	659	3593	18·3
1881	**381**	**71**	**22**	**37**	**69**	**580**	**3647**	**15·8**

*** The Diseases included in the above Table constitute, as in the Registrar-General's Returns, the principal maladies only of the Zymotic class—viz.: Small Pox, Measles, Scarlatina, Diphtheria, Whooping Cough, Diarrhœa and Cholera, and Fever.

TABLE V.

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, 1881. Compiled from the District Medical Relief Books.

SUB-DISTRICTS.	Total Cases of Sickness treated in each Sub-District.	1—Small Pox.		2—Measles.		3—Scarlatina and Diphtheria		4—Whooping Cough.		5—Diarrhœa and Dysentery.		6—Cholera.		7—Fever.		8—Erysipelas.		9—Puerperal Fever.		10—Lung Diseases, except Phthisis.		11—Phthisis.		12—Hydrocephalus, Atrophy, Scrofula, and Convulsions of Children.		13—Other Diseases.		14—Violence, Privation, and Premature Birth.		Total Deaths in each Sub-District.
		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 ...	681	107	...	11	...	13	1	4	1	18	1	...	...	22	...	13	...	..	...	113	8	12	5	5	...	357	13	6	2	31
Battersea... West ...	337	57	...	9	...	10	...	5	...	1	...	...	...	12	...	3	...	...	...	51	4	3	1	3	...	174	6	9	...	11
Clapham	459	25	...	8	...	16	...	3	...	25	2	...	...	52	...	...	...	...	...	52	1	6	...	5	5	239	11	28	1	20
Putney and Roehampton	152	...	...	...	...	2	...	...	...	5	...	...	...	...	...	3	...	...	...	30	2	3	...	...	...	101	2	8	...	4
Streatham, including Tooting and Balham	121	14	...	2	...	7	...	1	...	4	...	...	...	2	..	...	...	...	...	29	...	3	2	...	...	59	5	...	...	7
Wandsworth	605	51	2	4	..	4	1	12	1	20	...	...	...	1	...	4	...	...	...	126	7	7	2	5	1	331	12	40	1	27
Totals	2355	254	2	34	...	52	2	25	2	73	3	...	...	89	...	23	...	...	...	401	22	34	10	18	6	1261	49	91	4	100

*** The ratio of deaths to cases treated is 4·2 per cent.

TABLE VI.

SUMMARY of the Sanitary Operations in the entire District during the year 1881.

	Battersea.	Clapham.	Putney and Roehampton.	Streatham, including Tooting and Balham.	Wandsworth.	TOTALS.
Number of Houses & Premises inspected	3,765	1,250	1,498	1,808	1,199	9,520
1st Notices served	3,78	211	167	51	142	949
2nd Notices served	63	32	5	3	8	111
Number of Houses disinfected after contagious diseases ...	313	83	44	41	88	569
Number of Houses in which contagious disease occurred after disinfection	42	4	3	3	1	54
Number of Houses from which bedding, &c., was burnt ...	14	6	1	11	3	35
Overcrowding abated	10	...	...	...	2	12
Disinfecting apparatus at Putney number of times used ...	...	...	46	...	...	46
Cesspools emptied and cleansed	18	...	...	...	...	18
Cesspools abolished...	4	1	3	2	1	11
Waterclosets constructed or repaired	172	53	13	36	2	216
Houses supplied with water ...	24	4	14	20	2	64
Drains constructed or connected with Sewer...	1,038	98	29	749	15	1,929
No. of feet of New Sewers and Branch Drains	44,512	7,630	6,149	40,940	5,136	104,367
Drains repaired or trapped, or obstructions removed ...	250	81	44	23	28	426
Open Ditches, Ponds, &c., cleansed	...	1	...	...	4	5
Dust-bins provided...	105	12	43	13	31	204
Pig Nuisances removed	23	6	...	3	15	47
Accumulations of Offal, Manure, &c., removed	27	11	7	8	9	62
Unwholesome and dilapidated Houses cleansed or repaired	387	87	4	49	4	531
Cases investigated by Magistrates	13	4	5	...	...	22
Compulsory Orders obtained...	12	4	3	...	...	19
Compulsory works executed ...	12	4	3	...	...	19
Works remaining in abeyance from various causes	...	...	...	...	4	4

TABLE VII.

METEOROLOGICAL TABLE FOR LONDON, 1881.

(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 110 years.	Temperature of Air. Diff. from Average of 40 years.	Temperature of Evaporation. Mean.	Temperature of Evaporation. Diff. from Average of 40 years.	Temperature of Dew Point. Mean.	Temperature of Dew Point. Diff. from Average of 40 years.	Temperature of Air—Daily Range. Mean.	Temperature of Air—Daily Range. Diff. from Average of 40 years.	Elastic Force of Vapour. Mean.	Elastic Force of Vapour. Diff. from Average of 40 years.	Weight of Vapour in a Cubic Foot of Air. Mean.	Weight of Vapour in a Cubic Foot of Air. Diff. from Average of 40 years.	Degree of Humidity. Mean (Sat.=100).	Degree of Humidity. Diff. from Average of 40 years.	Reading of Barometer. Mean.	Reading of Barometer. Diff. from Average of 40 years.	Weight of a Cubic Foot of Air. Mean.	Weight of a Cubic Foot of Air. Diff. from Average of 40 years.	Rain. Mean.	Rain. Diff. from Average of 40 years.	Reading of Thermometer on Grass. Number of Nights it was: At or below 30°.	Between 30° and 40°.	Above 40°.	Lowest Reading at Night.	Highest Reading at Night.
1881.	°	°	°	°	°	°	°	°	°	in.	in.	grs.	gr.			in.	in.	grs.	grs.	Sum in.	in.	Sums.			°	°
YEAR. .	48·7	+0·2	—0·7	46·0	—0·6	43·0	—0·6	15·4	—0·5	0.291	—0·004	3·3	—0·05	81	—1	29·778	+0·005	543	+1	25·24	—0·02	116	111	138	10·2	58·1
First Quarter .	37·3	—1·4	—2·6	35·6	—2·4	33·0	—2·4	11·1	—0·7	0·170	—0·018	2·2	—0·2	84	—1	29·700	—0·067	554	+2	5·43	+0·42	60	25	5	10·2	47·2
Second do. .	52·9	+0·6	0·0	48·5	—0·6	44·1	—1·3	20·3	+0·4	0·294	—0·013	3·3	—0·1	72	—4	29·836	+0·053	539	+1	4·10	—1·64	20	32	39	21·9	55·3
Third do. .	60·0	+0·3	—0·3	57·0	+0·3	53·8	+0·8	18·9	—0·8	0·419	+0·013	4·6	+0·1	79	+2	29·767	—0·028	530	+1	8·19	+0·75	1	13	78	31·7	58·1
Fourth do. .	44·6	+1·2	+0·1	43·0	+0·4	41·0	+0.4	11·2	—0·7	0·260	+0·001	3·0	0·0	88	0	29·811	+0·062	547	+1	7·52	+0·3	35	41	16	17·2	47·8

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