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Borough of Paddington.

REPORT

ON.

VITAL STATISTICS

AND

SANITARY WORK

FOR THE YEAR 1896,

BY

REGINALD DUDFIELD, M.A., M.B., D.P.H.,

Medical Officer of Health.



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TO THE CHAIRMAN & MEMBERS OF THE SANITARY COMMITTEE OF THE VESTRY OF PADDINGTON.

GENTLEMEN,

I have the honour to present to you my Third Annual Report, dealing with the Vital Statistics etc., of the Parish for the year 1896.

The present Report illustrates one of the drawbacks associated with the use of the week as a basis for statistics. There were 53 weeks in the last statistical year, as against an average of 52 weeks. The totals of the various returns for 1896 are therefore somewhat unsatisfactory for comparison with those of other years, but all rates have been corrected to 366 days—a task of some magnitude.

The feature of this year's statistics has been the epidemic of measles. At the present time no information of the presence of this disease is available except such as is afforded by the death returns. I have indicated in the Report the measures which I think would be productive of the most effect at a minimum cost, that is, systematic notification by the School Teachers, combined with supervision of the infected homes and exclusion from school. It may not be out of place here to commend to your notice the question of what appears to me to be a dangerous practice of overcrowding in schools. The undue aggregation of children in the schoolroom cannot fail to afford ever facility for the spread of disease.

Within a short time proposals to recast the legislation controlling vaccination may be expected to demand your attention. I have sketched out in the paragraphs dealing with the Report of the Royal Commission, what I think may be anticipated to be

the lines which such changes will follow, unless the Government decline to be guided by the recommendations of the Commissioners. It is unfortunate that the Report is still incomplete, although upwards of a year has elapsed since the "Final" Report was published.

I regret to be unable to record the initiation of the work of erection of the Disinfecting Station. The delay, over which the Vestry have no control, is costing the Parish between £500 and £700 per annum.

The need of better office accommodation becomes more urgent each year. The present offices render it very difficult to secure system and order, and thus the staff are unable to get through as much work as they might.

Having been able to recover certain statistics for the years immediately preceding 1894, when I was appointed, I propose to re-model the form of my Annual Report for the current year, and to simplify many of the tables to be included in it.

In conclusion, I desire to tender my thanks to the Committee for the kindness and support they have invariably accorded to me, and to express my satisfaction with the manner in which the Officials of the Department have discharged the duties of their respective offices.

I have the honour to be, GENTLEMEN,

Your most obedient servant,

REGINALD DUDFIELD,
M.A., M.B., D.P.H.,

Medical Officer of Health.

VESTRY HALL,
HARROW ROAD, W.

June, 1897.

POPULATION.

The Inhabitants of Paddington, according to the enumeration made in April, 1896, numbered 124,506, the estimated population, based on the Census of 1891, being at that date 124,450, or 56 below the ascertained total. The inhabitants of the Sub-District of St Mary, more commonly known as North Paddington, were found to number at the enumeration, 90,996, and those of the Sub-District of St. John, or South Paddington, 33,510. The estimated numbers, founded on the last Census Returns, were 92,449 and 32,001 respectively. During the ten years 1881 to 1891, the population of North Paddington increased at an average rate of 1,443 persons per annum, whilst that of South Paddington decreased at a rate of 364. In the five years between the Census of 1891 and the enumeration of 1896, the increase in North Paddington was at the rate of 1,367 persons per annum, and the decrease in South Paddington, at the rate of 35 persons. These facts are set out in tabular form below.

	North Paddington. 69,728 84,159	South Paddington. 37,330 33,687
Change during ten ye 1881-1891	ars, } 14,431 increase	3,643 decrease
Annual growth	1,443 ,,	364 ,,
TI 1 1000	84,159 90,996	33,687 33,510
Change during five ye 1891-1896	ears, 6,837 increase	177 decrease
Annual growth	1,367 ,,	35 ,,
Estimated Population, April 1896	} 92,449	32,001
Enumerated Population April 1896	n, } 90,996	33,510

One result of the enumeration of 1896 is the transference of some 1,500 individuals, included in the estimated population, from North to South Paddington.

The population of "Registration" London, the area included in the term "London" for statistical purposes, was found on enumeration to be 4,411,271, on which basis the estimate for the middle of 1896 is 4,421,492, as against an estimate of 4,435,955 based on the Census of 1891.

In estimating the population of the Parish at the middle of 1896, the changes indicated by the enumeration have been allowed for, and to obtain the numbers in each sex-age-group, the proportions ascertained at the Census of 1891 have been assumed to be unchanged. The results of the calculations for the Parish, as well as those for London, will be found in Table 1.

TABLE 1.
Sex-Age-Constitution of Populations estimated to middle of 1896.

	Age Groups.	Paddington.	St. Mary.	St. John.	London.
	All ages	124,850	91,350	33,500	4,421,492
o,	0-1	2,625	2,233	392	114,228
PERSONS.	1-5	9,203	7,619	1,584	412,718
0	5-15	20,691	16,666	4,025	913,766
2	15-25	26,725	18,426	8,299	887,427
E	25-65	59,735	42,185	17,550	1,918,092
P	65 and over	5,871	4,221	1,650	175,261
	0-5	11,828	9,852	1,976	526,946
	5-65	107,151	77,277	29,874	3,719,285
	5 and over	113,022	81,498	31,524	3,894,546
	All ages	51,603	39,669	11,934	2,090,039
	0-1	1,286	1,096	190	56,641
	1- 5	4,543	3,768	775	205,451
	5-15	9,981	8,113	1,868	453,538
20	15-25	10,262	7,585	2,677	411,111
Š	25-65	23,530	17,694	5,836	894,118
MALES	65 and over	2,001	1,413	588	69,180
	0- 5	5,829	4,864	965	262,092
	5-65	43,773	32,392	10,381	1,758,767
	5 and over	45,774	34,805	10,969	1,827,947
	All ages	73,247	51,681	21,566	2,331,453
	0-1	1,339	1,137	202	57,587
	1- 5	4,660	3,851	809	207,267
ó	5-15	10,710	8,553	2,157	460,228
H	15-25	16,463	10,841	5,622	476,316
T	25-65	36,205	24,491	11,714	1,023,974
FEMALES	65 and over	3,870	2,808	1,062	106,081
4	0-5	5,990	4,988	1,011	264,854
	5-65	63,387	43,885	19,493	1,960,518
	5 and over	67,257	46,693	20,555	2,066,599

No information was obtainable in addition to that contained in the published return, a bare statement of the figures for the two sub-districts and the wards.

DENSITY OF POPULATION.

At the Census of 1891, there were 95.1 persons to the acre in the whole Parish, which average had

increased at the middle of 1896 to 100·1. In North Paddington, the average last year was 114·9 as against 105·8 in 1891, and in South Paddington, 75·4 against 75·8.

· TABLE 2.

				Padding- ton.	St. Mary.	St. John.
Census Returns, 1891.	Area in acres (le	ess water)	1,239	795	444
urns,	Inhabited House	es		14,473	9,420	5,053
Retu	Houses per acre			11.6	11.8	11.3
sns	Persons enumer	ated		117,846	84,159	33,687
Cer	Persons per acre			95-1	105-8	75.8
	" " Ног	ıse		8-1	8.9	6.6
Year.	Persons per acre	, 1892		96-2	108-3	74.6
b Ye	,, ,,	1893		97-2	110.3	73.8
each	,, ,,	1894		98.0	112.5	73.3
lation of each Year.	,, ,,	1895		99-0	116.4	72.4
lation	,, ,,	1896		100.1	114-9	75.4

Instead of taking the number of persons to the acre, the density may be measured by the area of land occupied by the average individual. On this basis the density of the whole Parish was, in 1896, equivalent to an allowance of 0.009 of an acre per individual. The Supplement to the Fifty-fifth Annual Report of Registrar-General gives the density of the population of Paddington for each decennium since 1841, from which it appears that since that date

the density has increased fourfold. The actual figures are as follows:—

PADDINGTON.

BIRTHS.

During the statistical year of 1896, 53 weeks, 3,068 births were registered in the Parish, the largest number recorded in any of the eleven years 1886-1896, and 155 above the average for the decennium 1886-1895. The births included 1,661 of males and 1,407 of females. The birth-rate* for the year was 24·24 per 1,000 of the estimated population, a rate lower than that for any year since 1886, with the exception of 1894 when the birth-rate was 23·32. Last year's birth-rate for males (13·12) was the highest recorded in the period 1893-96, whilst that for females (11·11) was the lowest. (See Table 3.)

 $\mathbf{R} = \frac{\mathbf{N}}{\mathbf{P}} \times \frac{1000 \times 366}{371} \text{ or } f; \text{ or in logarithms,}$ log. $\mathbf{R} = \log. \ \mathbf{N} - \log. \ \mathbf{P} + \log. \ f$ where

N = total of 53 weeks' returns, and P = estimated population. R = rate required. $\log f = 2.99411.$

^{*}The year 1896 ended for statistical purposes on the second day of January, 1897, and contained 53 weeks, or 371 days. To correct the rates, based on the totals of the 53 weekly returns, a factor was necessary, to reduce the figures to 366-371ths of the whole. The following formula has been used throughout this report:—

TABLE 3.
Births registered in 1896.

	Pa	ddingt	on.	S	t. Mar	y.	St. John.			
Births registered during	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
1st Quarter 2nd ,, 3rd ,, 4th ,,	389 409 409 454	351 363 315 378	740 772 724 832	325 340 334 391	301 328 264 330	626 668 598 721	64 69 75 63	50 35 51 48	114 104 126 111	
Year 1896	1,661	1,407	3,068	1,390	1,223	2,613	271	184	455	
Birth Rates* { 1896 1895 1894 1893		11·11 11·92 11·36 12·49	24·24 24·26 23·32 24·96	15.01 14.01 13.94 14.41	13·20 13·87 13·29 14·85	28·21 27·88 27·23 29·26	7·98 7·64 6·54 7·29	5·41 6·43 6·08 6·16	13·39 14·07 12·62 13·45	

^{*} Per 1,000 persons estimated living (at all ages) in each district.

TABLE 4.
Births and Birth-rates, 1886-96.

the state of	Paddi	ngton.	St. M	dary.	St.	John.	Birth	Birth-rates.		
	Regd.	Rates.	Regd.	Rates.	Regd.	Rates.	England and Wales.	London		
1896 (53 weeks).	3,068	24.24	2,613	28.21	455	13:39	29.7	30.2		
1886 1887 1888 1889 1890 1891 1892 1893 1894	2,898 2,916 2,843 2,863 2,901 2,952 2,934 3,011 2,834 2,979	25·6 25·5 24·6 24·5 24·4 25·1 24·6 25·2 23·3 21·3	2,366 2,368 2,331 2,346 2,389 2,420 2,456 2,567 2,423 2,526	31·0 30·5 29·5 29·2 29·1 28·8 28·5 29·8 27·2 27·9	532 548 512 517 512 532 478 444 411 453	14·4 14·9 13·9 14·1 14·0 15·8 14·4 13·4 12·6 14·0	32·8 31·9 31·2 31·1 30·2 31·4 30·5 30·8 29·6 30·3	33·4 32·9 32·1 31·9 30·7 31·9 30·9 30·9 30·1 30·5		
Averages 1886-95.	2,913	24.71	2,419	29.15	493	14.15	30-98	31.53		

In North Paddington 2,613 births were registered, viz., 1,390 of males and 1,223 of females. The total number of births was 194 in excess of the decennial average for the district, but the birth-rate was the third lowest recorded during the eleven years, the rates for 1894 (27·2), and for 1895 (27·9), being the only two below that for 1896. Last year's rate for males (15·01) was higher than any of the rates prevailing during the three years 1893-95, whilst the rate for females (13·20) was lower.

In South Paddington, 455 births were registered during 1896, a number 38 below the decennial average, but above the totals recorded in any of the years 1892-95 (inclusive). Last year's rate (13·39) was 0·76 below the mean rate for the ten years 1886-95, and the second lowest recorded during the eleven years 1886-96, the rate for 1894 (12·6) being the only one below it. The birth-rate for males (7·98) was higher than the rate of any of the three years 1893-95, whilst that for females (5·41) was lower.

In London the birth-rate for 1896 was 30.2 per 1,000, 1.3 below the mean rate for the ten years 1886-95, and, with the exception of that of 1894(30.1), the lowest rate recorded in the eleven years 1886-96.

In England and Wales the birth-rate was 29.7 per1,000, approximately 1.3 per 1,000 below the mean rate for the preceding decennium, and, with the

exception of that for 1894 (29.6), the lowest rate recorded during the eleven years 1886-96.

BIRTHS OF ILLEGITIMATES.

During the year 119 births of illegitimate children were registered in Paddington, or 4.03 for each 100 legitimate births, and equal to a rate of 0.94 per 1,000 of the estimated population. Last year's total compares well with the decennial average, 146, as also does the illegitimate birth-rate (0.94) with the decennial mean rate (1.24). It will be seen on referring to Table 5 that the legitimate birth-rate for 1896 compares much better with the decennial mean (legitimate) rate, than does the total birth-rate for 1896 with the decennial mean (total) rate, as set forth in Table 4. Thus, the legitimate birth-rate for 1896, 23.3, is seventh in order in Table 5, having been exceeded in the years, 1886, 1887, 1889, 1891, 1892, and 1893, and equalled in 1888 and 1895, whilst it is in excess of the rates for 1890 and 1894.

The difference between last year's legitimate birth-rate (23·3) and the legitimate mean rate (23·5) is equivalent to a reduction of 1 per cent, whilst the corresponding shrinkage in the illegitimate rates, (from 1·24 to 0·94) is equivalent to a reduction of 25 per cent.

The fluctuations in the rate for illegitimates, in the absence of all information as to parentage, &c., is inexplicable, It must suffice for the present to remark that some, and apparently a no inconsiderable proportion of last year's diminution in the general birth-rate of the Parish, was due to the diminution in the rate from illegitimate births.

TABLE 5.
Illegitimate Births and Birth-rates.

Year.	Estimated	Birt	hs Regist	ered.		1,000 of s.	Illegitimate Births	
	Population.	Legi- timate.	Illegi- timate.	Total.	Legi- timate.	Illegi- timate.	Total.	per 100 Legitimate
1886	113,198	2,743	155	2,898	24.2	1.36	25.6	5.34
1887	114,462	2,735	181	2,916	23.9	1.58	25.5	6.20
1888	115,749	2,694	149	2,843	23.3	1.28	24.6	5.24
1889	117,060	2,729	134	2,863	23.4	1.14	24.5	4.68
1890	118,736	2,741	160	2,901	23.1	1.34	24.4	5.51
1891	117,838	2,807	145	2,952	23.9	1.23	25.1	4.91
1892	119,260	2,792	142	2,934	23.4	1.18	24.6	4.77
1893	120,480	2,885	126	3,011	24.1	1.04	25.2	4.18
1894	121,500	2,686	148	2,834	22.1	1.21	23.3	5.22
1895	122,750	2,854	125	2,979	23.3	1.01	24.3	4.19
Averages or 10 years 1886-95	} 117,974	2,767	146	2,913	23.5	1.24	24.7	5.27
1896	124,850	2,949	119	3,068	23.3	0.94	24.2	4.03

VACCINATION.

The proportion of children born in the Parish escaping vaccination continues to diminish in a very satisfactory manner. In 1881, 7.7 per cent. of such children were finally returned as unvaccinated, and

the percentage increased irregularly to 17.7 in 1891. Since the latter date the proportion remaining unvaccinated has diminished, and was 8.8 in 1895, the last year for which complete returns are available.

TABLE 6. Vaccination Returns 1881-1895.

Year.	Sar. Births.		Insusceptible of vaccination.	Had Small-pox.	Died unvaccinated.	Vaccination postponed.	Remaining (not traced, &c., &c.)* Children not accounted for (including post-		
1881	2,845	2,415	8		203	7	212	7.7	
1882	2,897	2,411	8		212	17	249	9.2	
1883	2,873	2,381	7		231	16	238	8.8	
1884	2,955	2,460	13		239	43	200	8.2	
1885	3,019	2,489	12	***	252	38	228	8.8	
1886	2,923	2,409	7	***	213	26	268	10.1	
1887	2,915	2,440	11	***	220	40	204	8.4	
1888	2,855	2,293	22	***	216	38	286	11.3	
1889	2,870	2,275	7 7	***	223	68 29	297	12.7	
1890	2,845	2,255	16	***	254 254	32	300 494	17.7	
1891 1892	2,968	2,172	7	***	202	16	358	12.6	
1002	2,957 3,015	2,374 2,421	27	***	265	10	292	10.0	
1904	2,853	2,369	24	***	203	21	236	8.2	
1895	2,986	2,378	24	***	302	21	261	8.8	
January to } June, 1896 }	1,512	1,207	16		134	20	115	7.6	

^{*} Gone away, false addresses, "unaccounted for."

ROYAL COMMISSION ON VACCINATION.

The Final Report of the Commission was published in August, 1896, but at the time of writing, the concluding Volume of Minutes of Evidence and the Appendices to the Report had not been issued.

The Commission commenced its work in May, 1887, and was engaged for a trifle over nine years in discussing the question of the utility of vaccination. By what may be termed the irony of fate, the English

Nation presented to the world a half-hearted vindication of the discovery of Jenner, one of the greatest benefactors of mankind, and an Englishman, at a time when nearly every other civilised nation was celebrating with *éclat* the centenary of the first operations of vaccination.

No charge of undue haste can be preferred against the Commission, which fact should lend additional weight to the verdict arrived at, that vaccination does materially reduce the liability to attack by, and mortality from smallpox. The two Members of the Commission who declined to sign the Report and issued a "Dissent" thereto, do not controvert this conclusion, which may therefore be held to be the ananimous decision of the Commission. The whole aim of the Dissent appears to be to show that other factors besides vaccination have been at work in the past to reduce the mortality from smallpox, and that there are means, other than vaccination, on which reliance may be placed to limit the spread of the disease.

It may at once be admitted that sanitation has had, and still has, a certain amount of influence in checking the mortality from smallpox. That influence, however, appears to be limited to the extent to which it can affect the fatality* of the disease, and not to its

^{*}By "mortality" is meant the ratio of deaths to population, and by "fatality," the ratio of deaths to attacks. The mortality might diminish by reason of the fewness of the attacks, although the fatality of the cases might

power to limit the spread of the infection. This is illustrated by the sequence of events at Gloucester during the past year. In the earlier stages of the epidemic, endeavours were made to check the disease by the ordinary methods of sanitation, but without effect, but as soon as strenuous efforts were made to secure the vaccination of the people, the plague was stayed. It was simply a repetition of what has been recorded on many previous occasions, references to which abound in the Evidence before the Commission. In any given series of towns the mortality in epidemics has varied inversely with the extent to which the inhabitants are protected by vaccination, the greater the protection, the less the mortality.

In the case of individuals of the same household, that is of persons under the same sanitary conditions, experience has shown, time after time, that the unvaccinated are attacked much more frequently, and more severely, than are the vaccinated. The military, the police, and the postal officials, all of whom are vaccinated on entering the various services, have escaped attack when living in the midst of infection. The experience of the smallpox hospitals, where the nurses are vaccinated, or re-vaccinated, before under-

be high. There might be an extensive epidemic of mild smallpox with but few deaths, giving a low mortality, or there might be but few cases with a large proportion of deaths, giving a high mortality. It is claimed for vaccination that it has reduced both the fatality of the disease by *mitigating* attacks, and the mortality from it by *diminishing the number* of attacks, as well as mitigating the fatality.

taking duty, is to the same effect. The efficiently vaccinated escape attack, the others, sooner or later, pay the penalty for their temerity.

If sanitation were the prime, or even an important factor in producing the diminished mortality from this disease, it would be reasonable to expect that the reduction would affect all ages equally, or nearly so. As a matter of fact, the change in the incidence of the mortality of smallpox is most striking and unparalleled in epidemiology. In the "good old days," smallpox was as much a disease of infancy as are measles or whooping-cough at the present time, and the mortality fell particularly on the earlier years of life. Now the disease is rare among the very young in well vaccinated communities, and the mortality falls chiefly on those at the more advanced ages of life.

In substitution for compulsory vaccination, the dissentient Members of the Commission recommend quarantine and hospital isolation, both to be of the most compulsory character possible. They do not suggest how the officials necessary for enforcing such measures are to be protected from themselves taking the disease, or from spreading the infection to others. It is to be presumed that only those who have had smallpox at some earlier age would be thus employed, and for the securing of such officials a most extravagant waste of life and the infliction of much unnecessary suffering would be inevitable. Compulsory quarantine

would involve deportation of whole families from their homes to the quarantine stations, and unless such stations were large enough to ensure each family being kept rigorously apart from others, all removed to the station would be exposed to a graver risk of taking the infection than they would be in their own homes. Disorganisation of commerce and of all the occupations of life would be inevitable, to say nothing of the expense involved therein, or of the ostracism which would be inflicted on the infected town or community. Gloucester experienced all these drawbacks during the recent epidemic.

To prevent infection spreading from the quarantine stations and hospitals, those in them would required to be treated in the same manner as are the lepers in the Sandwich Islands. No one could leave the infected area without going through an intermediate stage of quarantine, and all clothes, &c., would require to be changed, if not destroyed, at each stage. Much emphasis has been laid on the aërial spread of small-pox from hospitals. If this be a fact, it is difficult to imagine where, in this country, smallpox hospitals and quarantine stations could be located with safety in the absence of all protection by vaccination.

Vaccination as a voluntary procedure has been tried and found to be ineffectual as a sateguard against the spread of smallpox, and it follows from that experience, that if compulsion be abandoned, reliance would have to be placed on the alternatives proposed by the dissentient Members of the Commission. One of the references to the Commission was:—

(2) "What means, other than vaccination, can be used for diminishing the prevalence of smallpox; and how far such means could be relied on in place of vaccination.

To this the Commissioners in their Report reply, in terms admitting of no misconception :—

"We think that a complete system of notification of the disease, accompanied by an immediate hospital isolation of the persons attacked, together with a careful supervision, or, if possible, isolation for sixteen days of those who have been in immediate contact with them, could not but be of very high value in diminishing the prevalence of smallpox....." (Par. 499).

but they add

"We can see nothing . . . to warrant the conclusion that in this country vaccination might be safely abandoned, and replaced by a system of isolation. . . . " (Par. 503.)

If it be admitted that the evidence adduced before the Commission has proved (1) that vaccination diminishes the liability to attack by smallpox; (2) that it diminishes the fatality and mortality from that disease; (3) that the risks* attending the operation of

^{*} The evidence collected touching the cases of alleged harm from vaccination has not been published, but the conclusion of the majority of the Commissioners is as follows:—

[&]quot;A careful examination of the facts which have been brought under our notice has enabled us to arrive at the conclusion that, although some of the dangers said to attend vaccination are undoubtedly real and not inconsiderable in gross amount, yet, when considered in relation to the extent of vaccination work done, they are insignificant. There is reason further to believe that they are diminishing under the better precautions of the present day, and with the addition of further precautions which experience suggests will do so still more in the future. (Par. 434.)

vaccination, performed with all precautions are so slight as to be practically negligible; and (4) that by vaccination, and vaccination alone, can the smallpox be effectually controlled—the only logical conclusion possible is, that vaccination must be retained as a compulsory procedure. This is endorsed by the Commissioners, who state that, (Par. 509.)

"We are of opinion that the State ought to continue to promote the vaccination of the people. Nor are we prepared to recommend that the State should cease to require vaccination, and trust entirely to a voluntary adoption of the practice.

It may be said, therefore, that the deliberate opinion of the majority of those best fitted to express an opinion on the subject, is that vaccination ought to be retained as a compulsory measure. That being the case, it becomes the duty of the dissenting minority to submit themselves to the will of the majority, otherwise community life becomes an impossibility. At the same time, it is due to the minority to enquire whether it be possible, without abandoning the position taken up, to alter the rules and mode of enforcing vaccination, so as to minimise any hardship which the minority complain of. The recommendations of the Commission evidently drafted with this object in view are given in the replies to the 4th and 5th References, which, together with summaries of the recommendations, are here set out.

"(4.) Whether any, and, if so, what means should be adopted for preventing or lessening the ill effects, if any, resulting from vaccination; and whether, and, if so, by what means, vaccination with animal vaccine should be further facilitated as a part of public vaccination."

The Commissioners' suggestions are as follows:-

- (a.) To give the choice of calf and human lymphs to all;
- (b.) To postpone vaccination to the age of six months, except in the presence of an epidemic, when it should be three months as at present;
- (c.) To abolish station vaccination and inspection, performing these at the homes of the children, and to institute a second inspection in the third week after the operation;
- (d.) To abandon the "taking" of lymph from the vesicles, as a matter of routine;
- (e.) To store lymph in tubes only, each tube to contain sufficient lymph for a single operation;
- (f.) To sterilise all vaccination instruments, and to allow plenty of space between each insertion of the lancet;
- (g.) To allow greater freedom in the postponement of vaccination, taking into consideration not only the health of the subject, but also its hygienic surroundings, and if necessary to remove patient from its home to a place more suitable for the performance of vaccination;
- (h.) To instruct parents and others in the care of the vesicle, and to cause the vaccinator to be called in in the event of any untoward symptoms arising after vaccination. (See pars 435-450.)
- "(5.) Whether any alteration should be made in the arrangements and proceedings for securing the performance of vaccination, and, in particular, in the provisions of the Vaccination Acts with respect to the prosecutions for non-compliance with the Law."

The Commissioners' conclusions and recommendations may be summed up thus:-

"We are of opinion that the State ought to continue to promote the vaccination of the people. Nor are we prepared to recommend that the State should cease to require vaccination, and trust entirely to a voluntary adoption of the practice." (Par 509.)

After describing the present method of securing vaccination, and the machinery available for putting the same into effect, the impracticability of enforcing recalcitrant Boards to carry out the work is dealt with, and suggestions to place the work of vaccination in the hands of, or under the immediate control of, County Councils and (or) the Local Government Board are considered and rejected. Having pointed out that it is in England and Wales only that the practice of vaccination has declined, the Scotch system of securing vaccination is considered, and certain particulars deemed to be superior to the English practice are dwelt on. Emphasis is laid on the fact that the former system appears to discriminate between the "honest objectors" and "defaulters," and on the advantages of home vaccination and inspection. Desiring to differentiate between the objector and the defaulter, the Commissioners suggest that some system should be devised to relieve the former of further compulsion.

- "After careful consideration and much study of the subject, we have arrived at the conclusion that it would conduce to increased vaccination if a scheme could be devised which would preclude the attempt (so often a vain one) to compel those who are honestly opposed to the practice to submit their children to vaccination, and, at the same time, leave the law to operate, as at present, to prevent children remaining unvaccinated owing to the neglect or indifference of the parent. . . ." (Par 524.)
- "It must of course be a necessary condition of a scheme of this description that it should be such as would prevent an objection to the practice being alleged merely as an excuse to save the trouble connected with the vaccination of the child." (Par 525.)

The adoption of the Scotch system, on a wider basis, is recommended.

"We think that where a certificate of successful vaccination is not received within the prescribed time, a notice should be served upon the parent that a public vaccinator will attend on a day named for the purpose of vaccinating the child, unless the operation has been already performed, and that the only offence rendering the parent liable to prosecution should be the refusal to permit the child to be vaccinated by the public vaccinator when he attends for that purpose." (Par 529.)

It is suggested that every medical practitioner should receive fees from the State for successful vaccinations performed according to the rule prescribed by the Local Government Board, subject to such official inspection of his patients as may be deemed necessary. In the course of discussing certain of the other references, suggestions are made for the compulsory extension of the notification act to the whole country, the more systematic supervision of tramps and the inhabitants of common lodging-houses, shelters, &c., the transference of the execution of the law of vaccination from the Poor Law to the Sanitary Authorities, and the abolition of repeated prosecutions for neglect or refusal to have children vaccinated. The Report draws attention to the desirability of securing the re-vaccination of young adults, but makes no recommendation for the enactment of the legislation necessary for securing the same.

Taken as a whole the suggestions made in the Report are somewhat remarkable and disappointing, having regard to the unequivocal expression of opinion given by the Commission as to the value of vaccination in the prevention of smallpox. It is advised on the one hand that the State should insist on the general vaccination of the community, but it is also suggested that any individual who has been once fined should be afterwards left to his own devices, and that others, professing to be "honestly opposed" to vaccination, should be enabled to make a declaration to that effect, and so put themselves beyond the reach of the law. There is no suggestion of any alternative measures by which the two classes might be brought into line at any future date. It may be, and very fairly, argued that the

alterations proposed have been suggested with a view to removing some of the prejudice which exists against vaccination, but it is scarcely prudent to trust to so optimistic a forecast. It is singular that England and Wales stand pre-eminent among the nations of Europe in the extent to which such prejudice exists and is allowed to have sway.

As the Commissioners report so strongly in favour of the efficiency of vaccination, and also point out the tendency of the protection afforded to die out in the individual, one would have expected that a strong recommendation would have been made in favour of the introduction of re-vaccination in early adult life. The success of such procedure in Germany has been most gratifying.

If the suggestions of the Commissioners be adopted, the future legislation would be somewhat on the following lines:—

Vaccination, as a part of preventive medicine, would be transferred to the sanitary authorities.

Home vaccination, as practised in Scotland, would be introduced as an auxiliary to, or in substitution for, station vaccination.*

Under these circumstances, the vaccinator would be enabled to take into consideration the home surroundings of the child, a point to which the Commissioners thought more attention ought to be given.

^{*} The procedure would be much as follows:—At the end of six months after the birth of each child, the vaccination officer, if he had not already received a certificate of efficient vaccination, postponement of same, or of death of the child, would notify the public vaccinator that the child required to be vaccinated. The latter officer would thereupon visit the last known address of the child and, if he found the child fit, would offer to vaccinate him, otherwise he would postpone the operation and notify the vaccination officer accordingly. After vaccination the child would be visited on the eighth and fifteenth days as a matter of routine, and more often should occasion arise.

The period of exemption for infants, except when smallpox was prevalent, would be extended to six months, and the vaccinators would be given greater powers of discretion to extend the period of exemption.

At every vaccination the choice between calf and humanised lymph would be given, each class of lymph having undergone a special treatment to exclude extraneous germs.

After vaccination at least two inspections would be made for the purpose of ascertaining whether the operation has been successful, and for any treatment which the case might require. In the event of any mischance, the necessary treatment, medicines, &c., would be given free of charge.

If a child were not vaccinated within the prescribed period, the parent, or guardian, would be proceeded against, and, if no declaration of objection were made, such person would be fined, the fine being presumably fixed at a minimum sufficient to be deterrent to the indifferent.

The form of certificate to be given after vaccination would be altered so as to show the quality of the result, and not be a simple statement of "success" which may depend on the whim of the certifier.

The notification of smallpox and the provision of hospital accommodation for that disease, would be compulsory throughout the country.

Large powers would be given to the sanitary authorities for the purpose of adequate supervision over common lodging-houses, charitable shelters, &c., including the medical examination of the habitues thereof, with, if thought necessary, powers of detention and vaccination. The guardians to have similar powers with respect to casuals.

Having regard to the loopholes allowed by the limit to prosecutions, and the proposed exemption to objectors, it seems desirable that some means should be provided to secure the vaccination of the children of such persons at some subsequent date. This might be done by requiring all children, on admission to the public elementary schools, to produce certificates of efficient vaccination, and to cause

the children to be medically inspected with a view to determining the amount of protection each enjoys. Re-vaccination at the age of (say) fourteen years might also be introduced in connection with school attendance, though to obtain the maximum of revaccinations a younger age might be necessary. In the event of an outbreak of smallpox, the sanitary authorities should be required to make a house-to-house visitation for the purpose of securing the vaccination of those who had previously escaped, and the re-vaccination, where necessary, of those who had been exposed to infection.

The foregoing suggestions imply a certain amount of interference with the "liberty of the subject." The interference is far less than that involved in the proposals foreshadowed in the Dissent to the Report, and the individuals affected are at ages when the State is entitled to act on their behalf, if such action is for the good of the community. The prime object of vaccination is to prevent the individual from taking smallpox, but even if any given individual take the disease after vaccination, the diminution in the risks of a severe attack and a fatal termination is so great, that it far outweighs the trivial inconvenience and suffering involved in the operation of vaccination under proper precautions:

The changes also imply a large increase in the work of vaccination officials, especially the public

vaccinator. There can be little doubt that the latter would necessarily have to devote himself exclusively, or almost so, to the work of vaccination. The general introduction of calf lymph would involve the formation of large government establishments for the preparation of the lymph, which would be issued under Government guarantee. Itwill thus be apparent that an increase in the expenditure on vaccination is inevitable, but there will, doubtless, be a proportionate saving directly due to the diminution in the prevalence of smallpox, and indirectly to the economy arising from the absence of individuals in the community who have been more or less damaged and incapacitated by attacks of the disease. The increased expenditure should fall on the imperial revenue, not on local taxation.

NOTIFICATIONS.

During the year 1,226 cases of infectious sickness were reported in the Parish, equivalent to a rate of 9.68 per 1,000 of the population. Last year's total was 379 in excess of the total for 1895, and has been exceeded once only, in 1893, when 1,473 cases were recorded. The corrected annual average of cases for the six years, 1890-95, was 924, a number exceeded last year by 302. The mean rate for the six years was 7.3 per 1,000, approximately 2.4 below the rate for last year.

TABLE 7.
Notifications during year 1896. (Corrected for duplicates only.)

					P	adding	ton.		St. Mary.					St. John.				
	Diseases Notified. Quarters.					Year.		Quarters.			Year.	Quarters				Year.		
	1000			1 2		3	4		1	2	3	4		1	2	3	4	2011
Sm	nallpox			2	1	1		4	2	1	1		4					
Cholera Diphtheria Membranous Croup Erysipelas																		
		52	64	45	73	234	43	53	36	55	187	9	11	9	18	47		
		4	3	1		8	4	3	1		8							
		22	35	30	30	117	20	27	24	26	97	2	8	6	4	20		
	Scarlet			148	155	268	219	790	118	124	233	189	664	30	31	35	30	126
Typhus	Typhus																	
ers.	Enteric			15	10	10	26	61	13	7	8	15	43	2	3	2	11	18
revers.	Relapsing														***			
	Continued			1				1	1				1					
-	Puerperal			3	2	5	1	11	3	- 2	5	1	11	·				
	Totals			247	270	360	349	1,226	204	217	308	286	1,015	43	53	52	63	211
		(189	96	7.95	8.69	11.59	10.44	9.68	8.99	9.56	13.57	11.70	10.97	5.16	6.36	6.24	7.02	6.21
	ickness rates per 1,000 of	7)5	3.46	6.24	8.46	9.50	6.89	3.71	6.50	10.31	11.20	7.91	2.74	5.48	3.24	4.73	4.04
populations. 1894.			7·26 7·09	8·22 12·08	6.80	7·41 15·51	7·38 12·22	8·29 8·27	9·37 13·03	8·07 16·46	8·07 17·42	8.43	4·43 3·91	5·05 9·54	3·32 8·68	5.30	4·51 8·11	

The cases of disease notified were 790 of scarlet fever, 234 of diphtheria, 117 of erysipelas, 61 of enteric (or typhoid) fever, 11 of puerperal fever, 8 of membranous croup, 4 of smallpox, and 1 of continued fever. From North Paddington, 1,015 cases were reported as against 211 from South. The sickness-rates were 10.97 for North, and 6.21 for South Paddington.

The rates for all the three districts,* were in the first quarter of last year the highest recorded in the four years, 1893-96, whilst those for the other three quarters, as well as for the year, were exceeded by the rates for 1893 only. Table 7 contains full information as to numbers of cases and rates in each quarter of last year, and of rates for each quarter of the three preceding years.

No official totals for London have, up to the time of writing, been published, and those used in this report have been obtained from the Local Government Board's weekly returns. They are, therefore, liable to revision, but the changes are not likely to affect the rates to any material extent. The cases reported in 1896 numbered 49,766, compared with an average for 1890-95 of 43,288. Last year's total has been exceeded once only, viz., in 1893, when 67,485 cases were reported. The rate for last year was 11·10, 1·4 above the mean for the preceding six years, and

^{* &}quot;Paddington," "North Paddington," and "South Paddington."

higher than the rate for any year, except 1893, when it was 15.6.

Last year's rate for the Parish (9.68) was 1.42 below that for London (11.10), all the diseases, except scarlet fever, showing lower rates in the Parish, than

TABLE 8.

Comparison of Returns for Paddington and London.

(Corrected for duplicates.)

Notifications Received. Notification Rates. + Paddington. London. 1896. Difference Difference Pad-1896. 1896. from London. from dington. Average.* Average.* Smallpox 4 -16 227 -7330.03 0.05 Cholera 13 -28... 0.00 ... Diphtheria 234 -17 13,373 +4,088 1.84 2.98 Membranous Croup ... 8 -116 +1 447 0.06 0.09 Erysipelas 117 -226,438 -470.92 1.43 Scarlet ... 25,676 +3,521790 +3596.24 5.72 Typhus ... -18... 0.00 Enteric ... 61 -108 3,200 0.48 0.71 Relapsing -8 0.00 ... Continued 1 -2 104 -69 0.00 0.23 Puerperal 11 +3 279 -4 0.08 0.06 Totals 1,226 +30249,766 +6,478 9.68 11.10

† Rates calculated per 1,000 of estimated living at all ages. 0.00 signifies a rate of less than 0.01. ... no cases recorded.

^{*}The signs + and - indicate excess or defect of the figures for 1896 in comparison with the averages for 1890-95.

in London. As regards scarlet fever, the local rate was 6.24 against one of 5.72 for the whole Metropolis. In these comparisons no allowances are made for the differences in age and sex constitutions of the populations. No information of a reliable nature is available for London.

In Table 8 the variations in the numbers of cases notified during last year in Paddington and London, from the six year averages, are set out, together with the sickness-rate for each disease for the last year. Corrected figures for each district in London were not obtainable last year.

SMALLPOX.—Of this disease only 4 cases, one of them doubtful, were reported during the year, the smallest number for any year since 1892. In London 227 cases were recorded, 733 less than the average, and the smallest total for any year since 1891, when 114 cases were reported. During the fourth quarter of the year only 5 cases were reported in the whole Metropolis.

DIPHTHERIA.—In dealing with the statistics of this disease, notifications of membranous croup are included, the two names representing merely different manifestations of the same disease. The cases notified under these terms numbered 242 in all, 234 of "diphtheria," and 8 of "membranous croup." This total was 5 in excess of that for 1895, 140 below that for 1894, and 52 below that for 1893. The average number for 1890-95 was 16 in excess of the total for 1896. In London the cases numbered 13,820, the highest total since the introduction of notification, and 3,972 in excess of the average. Last year's total was equal to an increase of 40 per cent. over the average, and one of 22 per cent. above the total for 1895. The diphtheria rate was 1.90 per 1,000 in Paddington, and 3.07 in London.

SCARLET FEVER.—Of this disease 790 cases were reported in the Parish, the largest number on record, and 14 in excess of the number for 1893, when the disease was last epidemic in the district. The number of cases in each quarter of last year were 148, 155, 268, and 219, and in the corresponding quarters of 1893, 108, 187, 264, and 217. Last year's total was 83.5 per cent. in excess of the six year average. In London, 25,676 cases were reported, a total 3,521 in excess of the average, and equal to an increase of 15.8 per cent. Last year's total for the Metropolis has been exceeded twice since the introduction of notification, viz. in 1892, when there were 27,095 cases, and in 1893, when there were 36,901.

PUERPERAL FEVER.—This was the only other disease showing an increase during the year, the total number of cases (11) being 3 in excess of the average. In London, 279 cases were reported, 4 less than the average. The rate from this disease was 0.08 per 1,000 in Paddington, as against one of 0.06 in the whole of London.

Attention has been directed just recently to the continued prevalence of this disease in the country generally. The matter was discussed very minutely in a Paper read before the Epidemiological Society in March, 1896, and more generally by Dr. Cullingworth in his Inaugural Address to the Obstetrical Society of London, in March, 1897. From Tables included in the latter communication it appears that during the five years 1891-95, 1,449 cases of this disease were reported in London, equivalent to a rate of 2:17 per 1,000 births registered, the highest rate for any district being that of Hampstead, 3:64, and the lowest, that of St. Martin-in-the-Fields, 0:00. According to the same Author, the rate for Paddington was 2:85, seventh in order of magnitude. Dr. Cullingworth's table is appended:—

PUERPERAL FEVER.

Based on Notifications of Puerperal Fever, and Births Registered during 1891-95.

District.			Noti	fications r 1,000 oirths.	District		pe	ifications er 1,000 births.
LONDON				2.17	Whitechapel			1.86
Hampstead				3.64	Woolwich		***	1.85
Islington				3.48	St. Saviour, Sout	hwark		1 71
Battersea				3.25	Holborn			1.62
Wandsworth				3.12	Marylebone	***		1.59
Lewisham				3.02	St. George-in-the	East		1.55
Fulham				2.86	Shoreditch	***		1.47
Paddington				2.85	Newington			1.47
Greenwich				2.77	Poplar			1.47
St. James'	***			2.71	St. George, Hano	ver Squa	ire	1.31
Bethnal Green				2.49	City of London		***	1.31
St. Paneras				2.48	Mile End Old To	own		1.31
Hammersmith				2.46	Rotherhithe			1.31
Lee and Plums	tead		+++	2.41	Clerkenwell			1.30
Stoke Newingto	on and	Hackn	ey	2.29	Bermondsey			1.07
Kensington				2.26	St. George, South	ıwark		1.02
Chelsea				2.23	St. Olave			0.93
Limehouse				2.14	St. Giles			0.89
Camberwell				2.09	Strand			0.67
Westminster				2.06	St. Luke			0.53
Lambeth				1.86	St. Martin-in-the-	Fields		0.00
		Tota	l No	otificatio	ns 1,449			
		,,	D	eaths	1,305			

The variations in this Table are at present inexplicable. From an examination of the incidence of mortality from this disease in the country generally, it has been thought that the employment of imperfectly trained midwives in lieu of skilled medical attendants, was responsible for the greater part of such mortality. This, however, could not be accepted in explanation of the unsatisfactory position of Hampstead, one of the healthiest and richest districts of London. It is true, however, that in this Parish, the majority of cases of this disease are not in the first instance under medical attendance. It would be desirable to have the death-rates from puerperal fever in each and all of the Parishes in the Metropolis, but such information is not at present obtainable.

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TABLE 9.

	313 60	6	Chall		MA	LES	3.		3 6		8	-	F	EMA	LES.			18 18	3 2	Both 8	Sexes.	
	Age-groups.	,x.	eria.	Croup.	das.		Fever			ox.	eria.	Croup.	las.		Fev		ral.		Totals	1,00	ness-rate 0 person group.	ns in
	olidan	Smallpox.	Diphtheria	Membr.	Erysipelas.	Scarlet.	Enterie.	Continued	Total.	Smallpox.	Diphtheria.	Membr.	Erysipelas.	Scarlet.	Enteric.	Continued	Puerperal.	Total.	1896.	1896.	1895.	1894.
PADDINGTON.	0- 1 1- 5 5-15 15-25 25-65 65 and over	 2 1	4 58 34 5 15	4	4 1 4 5 15 1	2 98 228 39 27	1 10 16 16 		10 162 276 67 74 1	 1 	3 41 33 14 27	4	2 8 11 52 12	1 100 240 29 26 	 8 5 5	 	 3 8	6 147 289 63 119 12	16 309 565 130 193 13	6:01 33:12 26:93 4:79 3:18 2:18	5.01 21.25 17.55 4.16 2.74 2.25	6·26 26·67 17·22 3·96 3·08 2·27
PAJ	All ages	3	116	4	30	394	43		590	1	118	4	87	396	13	1	11	636	1,226	9.68	6.89	7.38
ST. MARY.	0 1 1-5 5-15 15-25 25-65 65 and over	 2 1 	4 47 21 4 12 	4	4 1 3 4 11 1	2 86 188 31 23 	6 12 10 		10 138 218 53 57 1	··· i ··· 1	3 35 28 8 25 	4	2 7 8 43 11	88 209 20 17 	 7 3 5 	:::::::::::::::::::::::::::::::::::::::	 3 8 	5 129 251 43 99 11	15 267 469 96 156 12 1,015	6·62 34:57 27·76 5·13 3·64 2·80	5·87 22·63 18·21 4·65 3·20 2·86	6·89 29·24 19·04 3·95 3·11 2·43
ST. JOHN.	0- 1 1- 5 5-15 15-25 25-65 65 and over		11 13 1 3		 1 1 4 	12 40 8 4	1 4 4 6 		24 58 14 17		 6 5 6 2		 1 3 9 1	1 12 31 9 9	 1 2 			1 18 38 20 20 1	1 42 96 34 37 1	2·51 26·15 23·52 4·04 2·07 0·59	13·80 14·74 3·01 1·60 0·63	2·63 14·29 9·71 3·96 2·99 1·87
	All ages		28		6	64	15		113		19		14	62	3			98	211	6.21	4.04	4.51

TABLE 10.

Sickness-rates (based on notifications) calculated on estimated numbers living in each Age-Group.

Corrected for duplicates only.

	gavi	TB.		MA	LES.			idol		F	EMAL	ES.		
	1 00	tob'	and oup.		Fev	ers.			ria and Croup.	le ti	F	evers.	dT	
	Age-groups.	Smallpox.	Diphtheria and Mem. Croup.	Erysipelas.	Scarlet.	Enteric & Continued.	Totals.	Smallpox.	Diphtheria Men: Cro	Erysipelas.	Scarlet.	Enteric & Continued.	Puerperal.	TOTALS.
PADDINGTON.	0-1 1-5 5-15 15-25 25-65 65 & over	0·19 0·04	3·06 13·46 3·36 0·48 0·62	3·06 0·21 0·39 0·48 0·62 0·49	1·53 21·28 22·53 3·74 1·13	0·21 0·98 1·53 0·67	7·67 35·18 27·28 6·44 3·10 0·49	0.05	2·21 9·52 3·03 0·83 0·73	1:47 0:42 0:73 0:65 1:41 3:05	0·73 21·17 22·10 1·73 0·70	0·73 0·29 0·16	0·17 0·21	4·41 31·12 26·62 3·77 3·24 3·05
PADD	0 - 5 5 & over	0.06	11.17	0.84	16·92 6:33	0.16	29.11 9.00	0.01	7·90 1·08	0.65	16·63 4·32	0.27	0.16	25·19 7·08
	All ages	0.05	2.29	0.57	7.53	0.82	11.27	0.01	1.64	1.17	5.33	0.25	0.14	8.56
MARY.	0-1 1-5 5-15 15-25 25-65 65 & over	0·26 0·05	3·60 13·35 2·55 0·52 0·66	3·60 0·26 0·36 0·52 0·61 0·69	1·80 22·51 22·86 4·03 1·28	0.72 1.56 0.55	9.00 36·13 26·50 6·89 3·17 0·69	0.09	2·60 9·90 3·22 0·72 1·00	1·73 0·51 0·80 0·72 1·73 3·86	22·54 24·10 1·81 0·68	0.80 0.27 0.24	0.27 0.32	4·33 33·04 28·95 3·91 3·98 3·86
ST.	0-5 5 & over	0.08	11·15 1·04	1.01	17·84 6·85	0.79	30·01 9·32	0.02	8·30 1·28	0·79 1·45	17·40 4·12	0.33	0.23	26·50 8·53
*	All ages	0.07	2.28	0.59	8.20	0.69	11.86	0.01	1.96	1.39	6.37	0.30	0.20	10.27
JOHN.	0- 1 1- 5 5-15 15-25 25-65 65 & over		14·00 6·86 0·36 0·50	 0.52 0.36 0.67	15·27 21·12 2·94 0·67	1·27 2·11 1·47 1·01	30·55 30·63 5·15 2·87		7:31 2:28 1:05 0:16	 0·45 0·52 0·75 0·92	4·88 14·63 14·17 1·57 0·75	0 45 0·35		4·88 21·95 17·38 3·50 1·68 0·92
ST.	0-5 5 & over		11·24 1·52	0.53	12·26 4·67	1·02 1·25	24·53 8·00		5·85 0·62	0.67	12.68 2.35	0.14		18·54 3·79
	All ages	***	2.31	0.49	5.29	1.23	9.34	***	0.86	0.64	2.83	0.13		4.48

In Tables 9 and 10 will be found full particulars as to the sex and age incidence of the various diseases notified in the Parish and its two sub-divisions. As regards diphtheria, it will be noticed that the incidence, measured by the notifications, was greater among males at ages under 15 years than among females. This is contrary to the general experience, derived from the mortality recorded in epidemics prior to the introduction of notification. Among males, the rates from diphtheria at ages of 1-5 and 5-15, were greater in St. John's District than in St. Mary's, but among females, the rates for St. John, with the exception of the ages 15-25, were lower than those for St. Mary. Scarlet fever was more prevalent among males than among females, with however a few exceptions, such as the age-group 5-15 in St. Mary, and that of 0-1 in St. John. Enteric fever at all ages fell heavier on the males. The cases of puerperal fever were confined entirely to North Paddington.

A new table, Table 11, has been introduced to show the variations in incidence, at ages "0-5," "5 and over," and "all ages," in the Parish and its two districts, distinguishing the sexes. This table discloses an unexpected increase in the prevalence of diphtheria among males in South Paddington. Last year's rate for the group "0-5" years, was nearly double that for 1895, and almost three times that for 1894. The 1896 rate for the group "5 years and over," is also higher than the rates for 1894 and 1893.

TABLE 11.

A comparison of Sickness-rates in three Age-Groups for the years 1894-96. Corrected for duplicates only.

					MAI	LES.					FE	MAL	ES.		
				eria & Croup.	,	Fev		es.		& onb.]	Fevers		es.
			Smallpox.	Diphtheria & Memb. Croup.	Erysipelas.	Scarlet.	Enteric & Cont'd.	All Diseases.	Smallpox.	Diphtheria & Memb, Croup.	Erysipelas	Scarlet.	Enteric & Cont'd.	Puer- peral.	All Diseases.
ON.	0-5	1896 1895 1894	_ 0·5	11·1 7·4 12·6	0·8 0·6 1·2	16·9 11·3 8·6	0·1 0·1 0·8	29·1 19·6 23·9	0.3	7·9 5·7 12·8	0·6 0·1 0·5	16·6 9·8 6·5	_ 		25·1 15·7 20·3
PADDINGTON.	5 & over	1896 1895 1894	* 0·1 0·1	1·1 1·4 1·9	0·5 0·7 1·0	6·3 2·9 1·8	0·9 0·7 0·8	9·0 5·9 5·6	* * 0.2	1·0 1·4 2·2	1·2 0·9 1·0	4·3 2·4 1·8	0·2 ()·5 0·4	0.1	7·0 5·6 5·8
PAI	All ages	1896 1895 1894	* 0·1 0·2	2·2 2·1 3·1	0·5 0·7 1·0	7·5 3·8 2·6	0.8 0.6 0.8	11·2 7·5 7·9	* 0.2	1.6 1.8 3.0	1·1 0·9 0·9	5·3 3·0 2·1	0·2 0·4 0·4	0.1	8·5 6·4 7·0
Т.	0-5	1896 1895 1894	_ 0·6	11·1 7·6 14·3	1·0 0·8 1·4	17·8 12·2 8·6	0·2 0·6	30·0 20·9 25·7	_ 	8·3 6·4 14·4	0·7 0·2 0·6	17·4 10·3 7·2	_ 0·2		26·5 16·9 22·6
. MARY.	5 & over	1896 1895 1894	* 0·1 0·2	1·0 1·7 2·2	0·5 0·8 1·0	6·8 3·1 1·9	0·7 0·7 0·9	9·3 6·6 6·2	* 0.2	1·2 1·7 2·7	1·4 1·2 1·0	4·1 2·7 2·1	0·3 0·5 0·3	0·2 0·1 *	8·5 6·5 6·7
ST.	All ages	1896 1895 1894	* 0·1 0·2	2·2 2·4 3·7	0·5 0·8 1·0	8·2 4·2 2·7	0.6 0.6 0.8	11·8 8·4 8·6	* 0.2	1·9 2·1 3·9	1·3 1·1 1·0	6·3 3·4 2·6	0·3 0·5 0·3	0·2 0·1 *	10·2 7·5 8·2
N.	0-5	1896 1895 1894	==	11·2 6·4 4·2		12·2 6·4 8·5	1·0 - 2·1	24·5 12·8 14·9	<u>-</u>	5·8 2·0 5·0		12·6 7·2 3·0	=		18·5 9·2 9·1
JOHN,	5 & over	1896 1895 1894	-	1.5 0.3 1.2	0·5 0·2 0·9	4·6 2·0 1·7	1·2 0·8 0·7	8·0 3·6 4·8	* 0.1	0.6 0.8 1.0	0·6 0·4 0·9	2·3 1·8 1·2	0·1 0·4 0·5	-	3·7 3·6 3·9
ST.	All ages	1896 1895 1894	-	2·3 0·8 1·4	0·4 ,0·2 ,0·8	5·2 2·4 2·3	1·2 0·7 0·8	9·3 4·3 5·6	- * 0·1	0.8 0.8 1.2	0.6 0.4 0.8	2·8 2·0 1·1	0·1 0·3 0·5		4·4 3·8 3·9

Note. * Indicates a rate below 0.1 per 1,000.

In North Paddington, the 1896 rates for "0-5" years, males and females, whilst higher than those for 1895, are satisfactorily lower than those for 1893. The rates for the group "5 years and over," for 1896, both sexes, are the lowest for the three years. The 1896 rates for scarlet fever, males at "all ages," were approximately double the rates for 1895 in Paddington and St. Mary's, and three times those for 1893, whilst in St. John, the rate for 1896 was double the rates for both the preceding years. Among females at "all ages," the 1896 rates were rather less than double the rates for 1895, in Paddington and St. Mary, and a little more than double the rates for 1893. In St. John, the 1896 rate was double that for 1893, but only slightly above that for 1894. The rates from enteric fever at "all ages," showed satisfactory decreases in 1896, with the exception of that of males in St. John, which rate (1.2) was the highest of the three years. The table shows the exemption of South Paddington from puerperal fever.

SCHOOLS AND INFECTIOUS DISEASE.

On the receipt of a notification of any of the infectious diseases, except erysipelas, enquiries are made at the house of the patient as to the school, or schools, attended by the children resident in the house. In accordance with the 55th Section of the Public Health (London) Act, 1891, each Head Teacher is

TABLE 12.
School Attendance and Infectious Disease.

	No.	Provided.	Attendance.		among pils.	dr (not pa	Chil- cen atients) ding.
contaide this Rinrish,		Pl.ces Pr	Average At	Scarlet Fever.	Diphtheria.	Scarlet Fever.	Diphtheria.
Amberley Road Campbell Street Harrow Road		993 802 1,607	887 739 1,452	32 29 32	1 1 17	33 24 24	9 2 18
Totals		3,402	3,078	93	19	81	29
All Saints' Bayswater Jewish Cirencester R.C Holy Trinity St. Augustine's St. James' Training St. Luke's, Kilburn Westbourne Park * St. Mary's " of the Angel's " Magdalene's St. Michael St. Paul St. Paul St. Paul St. Saviour St. Saviour St. Stephen Saltram Crescent Westbourne Wilberforce		300 340 185 549 1,264 495 650 796 545 125 628 263 1,149 541 710 558 763 554 470 1,208 1,100 1,060	225 215 148 530 959 301 388 695 543 88 442 ? 250 959 498 507 497 743 470 375 460 696 741	4 3 10 21 11 4 10 - 9 2 30 3 33 12 15 43 13 16 17 5 4	- 1 2 1 2 2 - 4 1 1 1 7 - 4 1 1 4 1 1 4 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	9 5 10 16 12 4 5 7 1 17 4 56 5 5 28 22 15 10 11 2 5	4 1 5 5 3 2 1 - 8 1 13 2 3 8 7 4 3 20 2 3
Totals		14,373	10,730	266	50	249	97

* Return applies to Boys' School only.

notified of the presence of infectious illness in the homes of children attending his school. Various attempts have been made to tabulate the information as to school incidence, and the results of the enquiries made last year are tentatively put forward but only the "public elementary" schools in Paddington are included. The return is also incomplete inasmuch as certain of the schools included in the list are attended by children resident outside this Parish. Since March of last year, a system of interchange of information as to school attendance has been inaugurated between this Parish and the Parishes in immediate contiguity with it. Information has by this means been received of 53 cases* of illness among non-parishioners attending Paddington schools, but these cases have not been included in the Table as they cannot be grouped under their proper columns.

In dealing with the question of school attendance and occurrence of infectious disease, distinction has to be made between the cases in which the persons affected are actually in attendance at school, and those in which children, not being the patients, attend. These classes are indicated under the columns "cases among pupils," and "other children (not patient) attending school respectively." As regards the Board Schools, the information as to places provided, i.e., total accommodation, and average attendance, was taken from the Board's Report for the year ending March, 1895, whilst the particulars for Voluntary

[•] From Willesden, 37 cases were reported, from Kensington 13, and from Marylebone, 3. The diseases were, Scarlet Fever, 38 cases, Diphtheria, 10, and Enteric Fever, 5.

Schools were obtained by circular letter to the head teachers in February, 1896. According to present information, it appears that in the Board Schools in Paddington, 3,402 places are available, with 3,078 children in attendance. Among such of the children as reside in Paddington, 93 cases of scarlet fever, and 19 cases of diphtheria, were recorded during the year, which figures are equal to rates of 31 and 6 per 1,000 children respectively. The Voluntary Schools provide some 14,373 places, and are attended by (say) 10,730 children. Among these, or such of them as reside in Paddington, 266 cases of scarlet fever, and 50 cases of diphtheria, were recorded, equal to rates of 24 and 4 per 1,000 children respectively. In the second category, i.e., in cases where children not being the patient attend these schools, the rates for scarlet fever were 27 per 1,000 children in Board Schools, and 22 per 1,000 in Voluntary Schools, those for diphtheria being 9 in the former class and 8 in the latter. It would appear, therefore, that there was, during the past year, a somewhat greater incidence of these diseases among the Board School children than among those attending Voluntary Schools. This does not imply that all the cases were due to infection spread through the schools. It is impossible to define exactly the source of infection in most cases.

In the foregoing Table (Table 12), it will be noticed that three schools, namely, St. Mary Magdalene's, St. Paul's, and the Saltram Crescent High

Schools, had unduly large numbers of cases, the two first of scarlet fever, and the last of diphtheria. It was necessary to close St. Paul's School, and the Saltram Crescent High School (Infants' Department), by Order of the Sanitary Authority. St Mary Magdalene's School became infected just before the summer holidays, and the school was voluntarily closed a few days earlier than usual in consequence. In all three instances, marked benefit was derived from the closure of the school. The Reports to the Sanitary Committee, on which the two closing orders were based, are given in Appendix B., together with certain observations made subsequent to the closing of the schools. (See page 139).

The past year has emphasized the need of definite instructions to school teachers to keep Medical Officers of Health informed of the existence of infectious disease among their pupils. Measles is not a notifiable disease, and the only information available at present as to its prevalence in the district is the record of deaths, which is too late to be of service. From the number of deaths recorded, it is surmised that there were upwards of 2,000 cases during the earlier months of the year. It was afterwards learned that the schools were very much affected but no information of the fact was given at the time, and it seems probable that many cases, if not deaths, occurred which might otherwise have been prevented.

The Education Code contains no regulation

dealing with the notification of disease by teachers, but the matter is referred to in the Memorandum of the Local Government Board on Infectious Diseases, a document addressed to local authorities, which is bound up with the annotated edition of the Code which is used by most teachers.* The Code issued by the London School Board, 1897 edition, contains the following useful regulation, Article 148:—

(ii). Any child showing symptoms of an infectious disease, or any child coming from a house where an infectious disease exists, must be sent home AT ONCE, and the Superintendent of Visitors must be immediately informed of the case, in order that inquiries may at once be made with a view to proper steps being taken to prevent the children living in the same house or tenement from attending School. The Medical Officer of Health for the District must also at the same time be informed of the child's exclusion, and furnished with the name and address of the child and the reason for its exclusion, on a form with which the teachers will be supplied by the Head Office.

In another paragraph of the same Article, the term "infectious disease" is defined to mean any of the diseases mentioned in the schedule of notification; and it is added, that "there are other diseases which are infectious, such as mumps, measles, chicken pox, whooping cough, and ring worm," which are not notified. Were the instructions conveyed in the Article acted on, much information of very great value would be given. No certificate, as therein provided, has been received by the Department within the past four years.

The Education Code prescribes a fixed amount of cubic space for each child, but it has been recently

^{*} The "N.U.T. Edition" is here referred to.

ascertained that the standard is only too often departed from. The origin of this practice will be best understood by a perusal of the following extracts from a Report to the Sanitary Committee dealing with the question.

The "places provided" in any school are determined in accordance with Article 85 (a) of the Code, the portions of that Article pertinent to the present case being as follows :-

relating to (a) premises, staff, furni-ture, and

Conditions 85 .- The Department must be satisfied :-

(a) that the school premises are healthy, are properly constructed and arranged for teaching, lighted, warmed, cleaned apparatus drained, and ventilated, are supplied with suitable offices, and contain sufficient accommodation for the scholars attending the school, and that the school has a sufficient staff (Art. 73), and is properly provided with furniture, books, maps, and other apparatus of elementary instruction.

> N.B .-. . . . Subject to the conditions laid down in the body of this Article (85 (a)) schools already receiving annual grants will be regarded as accommodating the number of scholars for which they have been hitherto recognised by the Department, provided that in no case there shall be less than 80 cubic feet of internal space, and 8 square feet of internal area for each unit of average attendance.

> No room may be habitually used for a larger number of scholars than that for which it is passed by the Department.

But for the concluding paragraph of the above extract, the matter would be very simple and clear. In elucidation of the last paragraph reference may be made to the 73rd Article of the Code, in which permission is given to have an excess attendance of scholars to an extent of not more than 15 per cent. above the number for which the Teaching Staff is deemed to be adequate. The Article is as follows :--

school staff

73.—In determining what is the minimum school staff required, the Department consider the principal certificated teacher to be sufficient for an average attendance of 60, each additional certificated teacher for an average attendance of 70, each assistant teacher for an average attendance of 50, each additional teacher approved under Article 68, and each pupil teacher employed during the whole of the school hours in the general instruction, for an average attendance of 30, and each probationer for an average attendance of 20.

In order that a school may be properly organised it should be arranged that the number of children habitually present at any one time under the instruction of any teacher or teachers should not exceed by more than 15 per cent, the number for which such teacher or teachers is or are considered sufficient.

In this Article there are two phrases which require explanation: "average attendance" and "habitually present."

The average attendance is obtained by totalling up the numbers of pupils scoring attendances in accordance with the Regulations of the Education Department, and dividing the total attendances thus arrived at by the number of times that the School Register has been opened. Thus it is easy to see that by fluctuation of numbers the excess of scholars at any given attendance, or class meeting, may be considerably in excess of the 15 per cent. laid down in this Article.

The phrase "habitually present," will be best explained by quoting the explanation given by Mr. Acland in the House of Commons in 1894 and 1895, and also an excerpt from the Instructions to School Inspectors issued by the Education Department:—

"The intention of the words 'habitually present' was to enable Her Majesty's Inspectors to take cognisance of periods of congested attendance, though the average attendance for the year may be within the limit allowed. The expression was, therefore, stronger than that of 'average attendance.' The general object of the Article was to discourage the continuance of overcrowded rooms and congested classes." (Mr. Acland, House of Commons, 24th May, 1894.)

"HABITUALLY PRESENT"—In the House of Commons, on the 8th March, 1895, Mr. Acland stated that the meaning of the words 'habitually present' was, that if the the Inspector should find that during a given number of weeks there was an additional increase beyond what was ordinarily reasonable taking the year all round, he would call attention to it.

Extract from Instructions to H.M. Inspectors. SCHOOL PREMISES AND FITTINGS.

Experience has shown that increased attention is needed to the structure and material equipment of school-rooms, and to those conditions which effect the health, comfort, and cheerfulness of the children under instruction.

- * may be properly organised it should be arranged that the number of children habitually present at any one time, under the instructions of any teacher or teachers, should not exceed, by more than 15 per cent. the number for which such teacher or teachers is or are
- * considered to be sufficient"; and Article 85 states "no room may be habitually used for a larger number of scholars than that for which it is passed by the Department." You will observe that the term "habitually" is used in both cases; in the latter case the
- * sanitary condition of the premises is the point to be guarded, in the former efficiency of teaching. So elastic a term is employed in view of the possibility of any sudden influx of numbers, which may require a short time for judicious distribution of the scholars and some re-organisation of classes. As regards the insanitary overcrowding of a room, the term "habitual" should be held to include any unnecessary delay in such re-organisation. As regards the efficiency of the teaching, much will depend upon the skill, health, and energy of the teacher, and upon the nature of the class, and you will judge according to the circumstances of the case.

It is manifest, therefore, that for a certain indeterminate, fraction of the school year the number of scholars in attendance may be in excess of the accommodation provided. If, however, the average attendance for the year exceed the certified accommodation, the school will be liable to be fined.

The reasons for the elasticity allowed in respect of attendance in excess of accommodation, is the desire to prevent the exclusion of scholars, simply on the ground that any given class-room, or class is full. Under Article 78 it is prescribed that a child shall be refused admission to a school on "reasonable grounds" only, and it appears that the Education Department does not consider the fact of a given class or class-room being fully occupied as a "reasonable ground" for refusal. They hold that the child should be admitted, and the temporary over-crowding be abated by means of re-arrangement of classes. The elasticity is permitted also as a temporary measure to supply a sudden demand for extra school accommodation in a given district, but the overcrowding is not to be permitted to persist for more than the shortest possible period. The following extract from a letter addressed to the London School Board expresses the views of the Education Department

as to the exclusion of scholars simply because a class, or class-room,

happens to be full.

"Their Lordships are of opinion that a child should not be refused admission on the ground that the room containing the standard in which the child should be taught was full, so long as the total number of children does not exceed the total accommodation under the Article 85a of the code; and that the teacher should not place a child in a particular room if the accommodation of that room is habitually exceeded; but that will not relieve the Board from making such changes (if necessary) in the organisation of the school as will enable the child to be admitted and placed in his proper standard; and the same principle applies with regard to the school staff (Art 73)." (Letter to L.S.B., reported 28-9-94).

School teachers appear to think that they are allowed under the Articles quoted above to have attendances in excess of their certified accommodation not exceeding 15 per cent. of such accommodation. It is, however, questionable whether the Code warrants such a reading. The excess allowable appears to be one not exceeding 15 per cent. of the numbers for which the teaching staff is certified as sufficient, not of the accommodation of the buildings. The standard allowances are 8 sq. ft. of floor space and 80 cu. ft. of air space, and an overcrowding to the extent of 15 per cent. of the certified accommodation would reduce these quantities to 6.9 sq. ft. and 69 cu. ft. respectively. Even the full standard of 80 cu. ft. makes the work of efficiently ventilating the rooms very difficult, and the aggregation implied by that standard, and still more by the reduced allowance, greatly favours the spread of infectious diseases of all kinds. The question is one of very great importance from a hygienic point of view, but having regard to the fact that the school grant depends on the average attendance, the prevention of overcrowding would appear to involve a radical change in the system of awarding the grant.

TABLE 13.
Incidence of Infectious Disease in Special Areas.

			ted 1896.	Notification of.		Rates pe 1,000 of Populatio	
			Estimated Popula ion 1896.	Diphth ria.	Scarlet Fever.	Diphtheria.	Scarlet Fever,
North Paddington, whole of			91,350	195	664	2.1	7.2
St. Peter's Park *			27,619	95	168	3.4	6.0
Cirencester Area †	***		12,722	20	168	1.5	13.2
Hall Park	***	***	5,372	5	30	0.9	5.5
North Wharf Area			2,912	5	40	1.6	14.0
Rest of North Paddington			42,725	70	258	1.6	6.0

For Lists of Streets included in these Areas, refer to Appendix C.

* Includes Saltram Crescent High School, part closed for Diphtheria.

† Includes St. Paul's and St. Mary Magdalene's Schools, closed for Scarlet Fever.

DISTRICT NOTIFICATION RATES.

The localities most affected with infectious disease are best shown by the use of "spot" maps. Such maps have been prepared for the past year, but there are difficulties in the way of reproducing them here. An attempt has been made to express the same facts statistically, the results being given in Table 13. The streets included in each of the four areas mentioned will be found set out in Appendix C (page 142). The statistics contained in Table 13 are in part based on the results of the Census of 1891. Unfortunately the enumeration districts of the Census were so arranged as to be unsuited for obtaining full information as to the areas most suspected of undue prevalence of disease, and the areas given had to be fixed to suit the enumeration districts, rather than the needs of the present case. The Census figures have been supplemented by the use of information obtained from the rate books and from the inquiries made after each notification. The balance of probabilities is in favour of the populations in the special areas being overestimated, from which it will result that the rates given in relation thereto will be too low, and the rates for the rest of North Paddington, too high. Having regard to the fact that the chief incidence of the infectious diseases dealt with is on children, it would have been better to have calculated the rates on the numbers of individuals at ages under 10 years, but such numbers are unobtainable. It appears to be more desirable to defer the consideration of the results until further information has been obtained.

The results of the inquiries made as to the housing of families among which cases of infectious disease occurred during 1896, are set out in Table 14.

TABLE 14.

	Inhabi- tants,	All di	seases.	Dipt theria.		Scarlet Fever.	
	Census 1891.	Cases.	Rates.*	Cases.	Rates.	Cases.	Rates.
Tenements of ONE room :-							
Totals	9,676	- 75	7.64	11	1.12	61	6.21
Inhabitants not exceeding 2 per room	5,040	14	2.74	1	0.19	11	2.15
" exceeding 2 ",	4,636	61	12.98	10	2.12	50	10.64
Tenements of TWO rooms :-							
Totals	19,589	346	17.42	62	3.12	262	13-19
Inhabitants not exceeding 2 per room	9,992	117	11.55	19	1.87	88	8.68
,, exceeding 2 ,,	9,597	229	23.54	43	4.41	174	17.47
Tenements of THREE rooms:—							
Totals	19,009	297	15.41	73	3.78	209	10.84
Inhabitants not exceeding 2 per room	14,817	224	14.91	61	4.06	152	10.11
,, exceeding 2 ,,	4,192	73	17-17	12	2.82	57	13.41
Tenements of FOUR rooms :							
Totals	9,824	117	11.74	18	1.80	94	9-43
Inhabitants not exceeding 2 per room	8,429	99	11.58	18	2.10	76	8-89
" exceeding 2 "	1,395	18	12.72	-	-	18	12.72
Tenements of FOUR rooms or less:							
Totals	58,098	835	14.17	164	2.78	626	10.63
Inhabitants not exceeding 2 per room	38,278	454	11.70	99	2.55	327	8.42
" exceeding 2 "	19,820	381	18.96	65	3.23	299	14.88
In tenements of FIVE rooms or more	59,748	265	4.37	76	1.25	140	2.31

^{*} Per 1,000 inhabitants in each group.

They show that on the whole families living in tenements with accommodation to the extent of 2 persons per room, or less, suffer to a slighter degree than do families with averages of more than two persons per room. The rate from "all diseases" among families occupying tenements of four rooms or less, was rather more than three times that of among those in five or more rooms; while the rates from scarlet fever and diphtheria, were respectively two and five fold of the rates in the households of five or more rooms.

HOSPITAL ISOLATION.

The cases of smallpox (4), of diphtheria and membranous croup (242), of scarlet fever (790) and of enteric fever (62) made up a total of 1,098 in all, of which 778 were removed to hospital, equal to 70.8 per cent., as compared with 51.1 per cent. in 1895. Of the cases of these diseases in North Paddington, 70.3 per cent. were removed in 1896, and in South Paddington, 68.0 per cent. The proportions of cases of each disease removed from their homes in each of the last three years are set out below:

PADDINGTON	1896	1895	1894
Smallpox	75.0	100.0	92.9
Scarlet fever	76.8	65.3	82.3
Diphtheria	50.0	53.0	56.2
Enteric fever	51.6	37.1	43.8

Bearing in mind the fact that there were, during the greater part of the year, considerably more applications for beds for scarlet fever and diphtheria patients than the Metropolitan Asylums Board could provide, the proportions removed may be deemed, by those believing in the utility of hospitals in limiting the spread of infection, as satisfactory.

The demand for accommodation for scarlet fever patients became so pressing in September that the Asylums Board on the 12th of that month, adopted the following resolution, on the motion of the Chairman of the Board;

"That it be an instruction to the several Hospital Committees to at once confer specially with their respective Medical Superintendents, with a view to increasing temporarily during the existing pressure, the accommodation in the several hospitals, so far and to such an extent, as the Medical Superintendents feel they can do so without undue risks. . . ."

Under ordinary circumstances such a decision would imply a reduction in the allowance of cubic space per patient, likely to prove prejudicial to his recovery. Inquiry, however, showed that the normal allowances in the Board's hospitals were so ample that a considerable increase might take place in the number of patients in most wards without "undue risks." It appears that the rule of the Board is to provide 156 sq. ft. of floor space, and 2,028 cu. ft. of air space for each scarlet fever patient, irrespective of age. The standards laid down in the text books are (for adults) from 100 to 120 sq. ft. of floor space, and from 1,500 to 2,000 cu. ft. of air space, with a height of ceiling of 12 ft. The larger allowance per patient renders ventilation easier, and at the same time

permits of an expansion of the numbers accommodated such as took place last year. The close aggregation of patients on a given floor space makes the work of nursing heavier and would be prejudicial to the patients, even if the cubic space be up to the best standard.

The numbers of cases under treatment on the last day of each week ranged during the past year from a minimum of 2,523 to a maximum of 4,164 scarlet fever cases, and from 658 to 845 of diphtheria.

Table 15 shows that, on the whole, the cases removed were from families and tenements most entitled to priority of claim.

The work of removing all classes of cases, but more especially those of scarlet fever, has gone on with much greater smoothness during the last year than in 1895. A system has been introduced by the Asylums Board whereby the accommodation of each patient is reported when applying for removal together with the number of persons in the house. When the patient is not removed on the day of application, a return is sent to the Board by late post containing this information. The returns from all the districts of the Metropolis are gone through next day, and those appearing most urgent receive earliest attention. If the medical officer of health indicates on his return the cases he considers most urgent, such cases receive prior attention, supposing the beds available to be suitable for their reception, having regard to the sex

TABLE 15.

To show sell, spins	Al	l Dise	ases.	Sca	rlet F	ever.	Diphtheria (Memb. Croup).		
	A	В	C	A	В	C	A	В	С
Tenements of ONE room:-		1	No.						
Totals	75	68	90.6	61	56	91.8	11	10	90.9
Inhabitants not exceeding 2 per room	14	8	57.1	11	6	54.5	1	1	100.0
" exceeding 2 "	61	60	98-3	50	50	100-0	10	9	90.0
Tenements of TWO rooms:-		100		THE	13		1000		
Totals	346	290	83.8	262	235	89.6	62	44	70.9
Inhabitants not exceeding 2 per room	117	79	67.5	88	68	77.2	19	9	47.3
,, exceeding 2 ,,	229	211	92.1	174	167	95.9	43	35	81.3
Tenements of THREE rooms:-			T TO		No.				
Totals	297	212	71.3	209	169	80.8	73	36	49.3
Inhabitants not exceeding 2 per room	224	143	63-8	152	113	74.3	61	27	44.2
" exceeding 2 ",	73	69	94.5	57	56	98-2	12	9	75.0
Tenements of FOUR rooms:-									
Totals	117	73	62.3	94	64	68.0	18	7	38.8
Inhabitants not exceeding 2 per room	99	60	60-6	76	51	67.1	18	7	38.8
,, exceeding 2 ,,	18	13	72.2	18	13	72.2	-	-	_
Tenements of FOUR rooms or less:-					103	11311			
Totals	835	643	77.0	626	524	83.7	164	97	59.1
Inhabitants not exceeding 2 per room	454	290	63-8	327	238	72.7	99	44	44.4
" exceeding 2 "	381	353	92.6	299	286	95.6	65	53	81.5
Tenements of FIVE rooms or more:—						GAT.			
Totals	265	125	47.1	140	81	57.8	76	29	38.1

<sup>A. No. of Cases reported from each class of tenement.
B. No. of Cases removed to Hospital.
C. Percentage of Cases removed to Hospital.</sup>

and age of the patients. The system as nearly as possible leaves it to the medical officer of health to say who shall be removed from his district, a right which is claimed by all medical officers. Some amount of selection must rest with the Board's Officers, as they have to decide between the claims of the most urgent cases from, may be, several districts. Speaking generally no really urgent case was kept at home more than a day after the first application for removal. Certain patients, for whom hospital isolation was desired but not urgent, had to wait some days, but none had to wait for the long periods which occasionally prevailed in 1895. In times of pressure removal to the Board's Hospitals has been effected on the application of the Sanitary Officials only.

During 1896 the Board's accommodation was increased by the opening of the Brook Hospital in August, when, however, only a portion of the hospital (built for 500 beds) was ready. A site for the Southern Convalescent Hospital has been secured at Carshalton, on which a hospital for 700 patients will be erected. The building of a permanent small-pox hospital at Joyce Green, Darenth, was commenced during last year. It is expected that when this hospital is completed, the Hospital Ships will be abandoned.

The existing hospitals contain 3,462 beds for acute cases of "fever" and diphtheria, and 955 beds

for convalescent cases. The beds are allotted as follows*:—

Acute Cases—	CONVALESCENT CASES—
Scarlet Fever 2,283	Scarlet Fever 809
Diphtheria 614	Diphtheria 76
Enteric Fever 195	Temporarily unavailable 70
Temporarily unavailable of for various reasons 370	955
3,462	The season before the same of

The provision for smallpox cases includes 300 beds on the Ships and 1,192 beds at Gore Farm. Of the latter some 752 are (or were) used for scarlet fever convalescents. The hospitals now either in course of erection or decided upon, will provide additional accommodation to the extent of 2,168 beds, distributed as follows:—

For Acute Cases-"fever" and diphtheria-

Park Hospital, Hither Green (to be opened this Summer)... 548 beds
Grove Hospital, Tooting (now in course of erection) ... 520 ,,

For Convalescent Cases—"fever" and diphtheria—
Southern Hospital, Carshalton (not yet commenced) ... 700 ,,

For Smallpox Patients—
Joyce Green Hospital, site will) (now in course of erection) 400

Joyce Green Hospital, site will) (now in course of erection) 400 ,,

Hitherto there has not been any system of varying the allocation of beds to meet emergencies, and it has happened (as in March last) that over 1,000 scarlet fever beds were standing empty although the urgent demand for beds for diphtheria could not be met. Now the Board have decided to vary, from time to time, the number of beds set apart for each disease—other than smallpox—so as to endeavour to meet all demands.

^{*} From Minutes of Meeting of Asylums Board on March 27th, 1897.

RETURN CASES.

During 1896, 5 instances have been noted in which scarlet fever has followed the return of patients from hospitals under circumstances which made it appear that the discharged patient was the cause of the further case or cases. Brief notes of these cases will be found in Appendix D. The Asylums Board has been notified of all, or almost all, the cases, and on one occasion one of the Medical Superintendents has made enquiries on behalf of the Board. There will always be a suspicion that "return cases" may be due to imperfect disinfection, until such time as the Vestry has this work under its immediate supervision.

DEATHS.

During the 53 weeks of 1896, 2,098 deaths were registered in the Parish, equal to an uncorrected deathrate of 16.57 per 1,000 persons, as compared with rates of 18.32 and 15.78 in 1895 and 1894 respectively. By the exclusion of the deaths of non-parishioners dying within the Parish, and the inclusion of the deaths of parishioners registered in other parts of the Metropolis, a total of 1,942 is obtained, equal to a rate of 15.34 per 1,000, the corresponding rates for the three years 1895, 1894, and 1893 having been 17.09, 15.06, and 17.86 respectively. These rates are what are commonly termed "corrected," but that term would be more appropriately applied to the rate obtained by the use of the "factor," as will be explained later on (page 62).

Throughout this Report the deaths of parishioners alone are dealt with, except where otherwise stated.

TABLE 16.

Deaths of Parishioners in 1896. "Corrected."

Deaths of Pa ioners.	rish-	P	addingt	on.		St. Mar	y.	St. John.			
During	E Se	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	
1st Quarter		265	249	514	211	206	417	54	43	97	
2nd ,,		229	269	498	185	223	408	44	46	90	
3rd ,,		214	221	435	184	181	365	30	40	70	
4th ,, (14	wks.)	264	231	495	217	176	393	47	55	102	
Year		972	970	1,942	797	786	1,583	175	184	359	
· Secretary Sec	1896	18.58	13.06	15:34	19.82	15.00	17:09	14.46	8.41	10.57	
Dut	1895	19.58	15.34	17:09	20.26	17.05	18.44	17.27	11.10	13:30	
Death-rates-	1894	17.22	13.55	15.06	17.73	15.18	16.29	15:52	9.63	11.73	
THE THE	1893	19.87	16.44	17.86	19.87	18.58	19.14	19.87	11.42	14.43	

The 1,942 deaths of parishioners comprised 972 of males and 970 of females, the death-rates therefrom being 18:58 and 13:06 per 1,000 individuals of each sex. The death-rate among males during 1896 was below the rates for 1895 and 1893 but above that for 1894, whilst the rate for females was the lowest for the four years 1893-96. (See Table 16).

The death-rate (both sexes) in North Paddington was 17:09 and that in South Paddington, 10:57 per

1,000 individuals in each District. The rate in the Northern District was below the rates for 1895 and 1893, but above that for 1894, whilst that in the Southern was the lowest for the four years. The rates among females in both Districts, and that for males in the Southern District, were the lowest for the four years, whilst the rate for males in the Northern was in excess of the rate for 1894, but below the rates for 1893 and 1895.

TABLE 17.

Deaths and Death-rates, 1886-96.

		Paddi	ngton.	St. 3	dary.	St.	John.	Death	-rates.
Year.		Regd.	Rates.	Regd.	Rates.	Regd.	Rates.	England and Wales.	London.
1896 .		1,942	15.34	1,583	17.09	359	10.57	17.1	18.6
1887 . 1888 . 1889 . 1890 . 1891 . 1892 . 1893 . 1894 .		1,909 1,785 1,916 1,664 2,104 2,110 2,142 2,153 1,831 2,099	16·86 15·59 16·55 14·21 17·71 17·90 17·96 17·87 15·06 17·09	1,468 1,346 1,472 1,266 1,602 1,590 1,632 1,680 1,449 1,671	19·25 17·35 18·64 15·76 19·51 18·89 18·95 19·16 16·29 18·44	441 439 444 398 502 520 510 473 382 428	11·93 11·90 12·06 10·83 13·69 15·43 15·38 14·43 11·73 13·30	19·5 19·1 18·1 18·2 19·5 20·2 19·0 19·2 16·6 18·7	20·6 20·3 19·3 18·4 21·4 21·5 20·7 21·3 17·8 19·9
Decennial Averages	2	1,971	16.68	1,517	18:42	454	13.06	18.8	20.0

^{*} The local figures are corrected for non-parishioners and deaths of parishioners in outlying institutions. The figures for London are not so corrected.

In comparison with the figures for the preceding ten years, the deaths of parishioners in 1896 were below the average in the whole Parish and in St. John's Sub-District, but above the average in St. Mary's Sub-District. In the whole Parish, the decennial average number of deaths was 1,971, 29 in excess of the number for 1896, when there were 53 weeks, and the decennial mean rate was 16.68 as compared with a rate of 15.34 for last year, showing a reduction of 1.34 per 1,000 inhabitants, equal to 167 lives. In St. Mary's Sub-District the deaths in 1896 numbered 1,583 as compared with a decennial average of 1,517, an increase of 63, whilst the death-rate for the year was 17.09 or 1.33 below the decennial mean rate. In St. John's Sub-District the deaths during the year numbered 359, and were 95 below the decennial average, whilst the deathrate was 2.49 per 1,000 below the decennial mean rate (13.06). If the death-rate for the whole Parish had been reduced to the same extent as that for the southern half, the lives of 311 individuals would have been saved during the year. In England and Wales the death-rate in 1896 was 17.1 per 1,000,* 1.7 below the decennial mean rate, whilst the rate for last year in the Metropolis (18.6) was 1.4 below the decennial mean rate (20.0).

All the rates mentioned in the preceding paragraphs are calculated on the total populations at all ages, and no allowances have been made for the differences in the constitutions of the populations quâ sex and age. To correct the rates to one uniform standard, namely that of England and Wales, factors calculated from the sex-age constitutions of the different populations must be employed. The death-rates in the following Table are corrected by such factors.

^{*} The final returns (1896) for England have not been yet issued and all figures quoted here are liable to revision.

TABLE 18.
Comparison of "Corrected" Death-rates, 1896.

		pu	ate.	50.:	Rates i	or 1896.	Middle of	1896.
		Standa	Death-rate.	Sex-age Factor.	Record.	Correc- ted.	Population.	Acres per Person
England and Wales			15	1.06626	17·1 18·2	17·1 19·40	_	_
West-			-			HW.	3000	
Paddington			72	1.08070	153	16.53	124,838	0.010
Kensington	***		38	1.10184	16.8	18.51	170,660	0.012
Hammersmith		10.	05	1.0494	17.2	18:24	104,551	0.021
Fulham	***	18		1.04817	17.6	18.44	115,008	0.014
Chelsea St. George, Hanov	ron Samo		95	1.06685	13.6	20.05	96,657 80,041	0.008
St. George, Hano	ver squa	11	9.4	1 10400	100	10.01	00,041	0016
		_						
NORTH-					hand the			
Marylebone		17	82	1.07464	19.9	21.38	141,114	0.010
Hampstead		16	63	1.15153	11.9	13.70	75,812	0.029
St. Pancras	***		89	1.07043	18.1	19.37	241,066	0.011
Islington	***	17		1.06983	17.1	18 29	337,639	0.008
Hackney		18	23	1 05047	15.7	16.49	213,774	0 018
East—				Wales to the				
Shoreditch		18	45	1 03794	21.4	22.21	122,265	0.005
Bethnal Green	***	18		1.04133	22.1	23 01	129,151	0.009
Whitechapel	***	17		1 07948	20.6	22.23	78,886	0 004
St. George in the		18	200	1.03907	24.5	25.45	47,589	0.009
Mile End, Old To	own	18		1.03068	19.9	20.61	111,226	0.006
Poplar		18	49	1.03569	20 6	21.33	169,379	0.013
South-								
Newington		18		1.04531	20 5	21.42	121,191	0.003
Lambeth		18	9.00	1.04989	16.9	17.74	296,036	0.013
Battersea		17		1.07584	37.7	19.04	165,864	0.013
Wandsworth	74	17		1.06804	14.3	15:27	158,908	0.049
Camberwell	***	18	10	1.05801	17.8	18.83	253,975	0.017

^{*} The Death-rates have been taken from the Registrar General's Annual Summary for 1896.

The corrected death-rate for Paddington obtained by this method was 16.63 per 1,000, 1.4 below the rate for England and Wales (17.1), and 2.67 below that for London (19.30). Of the districts included in Table 18, St. George's, Hanover Square (15.01), Hampstead (13.70), Hackney (16.49), and Wandsworth (15.27), had rates below that for Paddington, whilst the highest rate was that for St. George-in-the-East (25.45), and the lowest that for Hampstead (13.70). In Whitechapel, the most densely populated of all the districts mentioned (each person has on average 0.004 acre of land), the rate was 22.23 per 1,000, whilst in Wandsworth, the least densely populated (each person has on average 0.049 acre of land), the rate was 15.27.

The "natural increment," i.e., the excess of births over deaths, of the population of Paddington during 1896 amounted to 1,126 lives, as compared with an annual average of 1,042 during the decennium 1886-95. In London the increment during 1896 was 52,285 lives, and the decennial average 48,029, whilst in England and Wales, the increment for the year was 389,272, against an average of 350,737. Last year's increments were equal to 0.90 per cent. of the population of the Parish, 1.18 per cent. of that of London, and 1.26 per cent. of that of England and Wales. In 1895 the percentages were 0.71, 1.06, and 1.16 respectively, and in 1894, 0.81, 1.23, and 1.29. In each case the percentage is calculated on the estimate of the population for the middle of the year dealt with.

AGE-GROUP DEATH-RATES.

Tables 19 and 20 continue the series of sex-age-group death-rates for the Parish and its two sub-divisions, with the addition of the rates for 1893, which have been calculated during the past twelvementh. It is intended to carry the series back to 1891, so as to have a complete set of tables for the intercensal period 1891 to 1901.

Among males the mortality at ages 0-5 years in 1896 was the highest recorded during the four years 1893-96, both in Paddington and in the two sub-divisions. The greater part of this increase appears to have fallen on children at ages of one to five years, among whom the death-rate was 31.92 for the whole Parish, 33.51 in St. Mary and 24.18 in St. John. In the last-named area, last year's rate was exactly three times that of 1895 (8.06). The rates at ages 5-65 years were the lowest recorded in the four years in Paddington (8.67), and St. John (7.12), that in St. Mary (9.44), being, however, practically equal to the rate for 1893 (9.45), the second highest of the four years. At ages above 65 years, the rates for 1896 were below those for 1895, but did not fall to the comparatively low rates which prevailed in 1894. The rates at all ages, were for the whole Parish, 18.58, for St. Mary 19.82, and for St. John 14:46. Attention may be called to the singularly low rate which prevailed in St. John among males aged 15-25, viz. 1.84 per 1,000 at these ages, less than half

TABLE 19.

MALES.

				1896	6.			Dea	ath-rates	per 1,00	0 in			
Age Groups.		ated g.		Quai	rters.			each group.						
A		Estimated living.	1	2	3	4	Year.	1896.	1895.	1894.	1893.			
St. Mary.	0-1 1-5 5-15 15-25 25-65 65 & over All ages	1,286 4,543 9,981 10,262 23,530 2,001 51,603	66 47 7 9 90 46 265	56 57 12 7 66 31 229	98 21 6 3 53 33 214	61 22 8 11 113 49 264	281 147 33 30 322 159 972	215·57 31·92 3·26 2·88 13·50 78·39 18·58	211·18 21·42 2·64 3·86 16·32 95·62 19·58	173:32 28:26 3:60 4:70 13:75 64:66 17:22	190·47 28·80 3·95 3·63 16·08 97·30 19·87			
	0-5 5-65 5 & over	5,829 43,773 45,774	113 106 152	113 85 116	119 62 95	83 132 181	428 385 544	72·43 8·67 11·72	63:31 10:28 14:00	60·27 9·31 11·74	64·48 10·39 14·20			
St. Mary.	0-1 1-5 5-15 15-25 25-65 65 & over All ages	1,096 3,768 8,113 7,585 17,694 1,413 39,669	50 43 5 7 69 37 211	50 51 11 6 49 18 185	87 16 5 3 47 26 184	53 18 8 9 91 38 217	240 128 29 25 256 119 797	216·03 33·51 3·52 3·25 14·27 83·08 19·82	211·59 24·08 2·73 3·72 16·47 98·50 20·26	182·58 29·98 3·03 4·73 13·34 63·95 17·73	205·12 28·75 3·59 3·56 14·65 98·74 19·87			
51	0-5 5-65 5 & over	4,864 32,302 34,805	93 81 118	101 66 84	103 55 81	71 108 146	368 310 429	74·64 9·44 12·16	66:34 10:23 13:82	64·39 8·98 11·21	68·52 9·45 13·07			
St. John.	0-1 1-5 5-15 15-25 25-65 65 & over All ages	190 775 1,868 2,677 5,836 588 11,934	16 4 2 2 21 9 54	6 6 1 1 17 13 44	11 5 1 6 7 30	8 4 2 22 11 47	41 19 4 5 66 40 175	212:88 24:18 2:11 1:84 10:90 67:11 14:46	208·79 8·06 2·22 4·27 15·87 88·49 17·27	119·56 19·92 5·50 4·61 14·63 66·54 15·52	107·52 29·02 5·47 3·81 20·31 93·91 19·87			
	0-5 5-65 5 & over	965 10,381 10,969	20 25 34	12 19 32	16 7 14	12 24 35	60 75 115	61·33 7·12 10·34	47.51 10.43 14.61	39·38 10·40 13·41	44·49 13·39 17·70			

TABLE 19A.

FEMALES.

				1896.				Des	th-rates	per 1.00	0 in			
A	age Groups.	ated g.		Qua	rter.			Death-rates per 1,000 in each group.						
		Estimated living.	1	2	3	4	Year.	1896.	1895.	1894.	1893.			
Paddington.	0-1	1,339	41	47	69	39	196	144·41	168·05	128·93	166·79			
	1-5	4,660	39	60	25	16	140	29·63	23·49	29·32	25·83			
	5-15	10,710	12	15	9	8	44	4·05	3·31	4·68	4·06			
	15-25	16,463	12	11	8	6	37	2·21	2·47	2·49	3·01			
	25-65	36,205	82	90	65	86	323	8·80	9·99	9·48	11·78			
	65 & over	3,870	63	46	45	76	230	58·63	90·43	64·25	88·62			
	All ages	73,247	249	269	221	231	970	13·06	15·34	13·55	16·45			
Pa	0-5 5-65 5 & over		80 106 169	107 116 162	94 82 127	55 100 176	336 404 634	55:33 6:28 9:29	55·77 8·51 13·23	51.54 6.85 10.16	57·27 8·20 12·82			
St. Mary.	0-1	1,137	39	42	62	32	175	151·84	173·91	136·40	173·99			
	1-5	3,851	35	54	21	12	122	31·25	25·92	30·40	27·58			
	5-15	8,553	8	12	5	6	31	3·57	3·53	5·04	4·26			
	15-25	10,841	10	9	6	4	29	2·63	2·97	2·65	3·74			
	25-65	24,491	65	74	54	72	265	10·67	11·03	10·56	13·14			
	65 & over	2,808	49	32	33	50	164	57·61	89·43	64·74	91·98			
	All ages	51,681	206	223	181	176	786	15·00	17·05	15·18	18·60			
	0-5	4,988	74	96	83	44	297	58.74	59.62	54·56	60·96			
	5-65	43,885	83	95	65	82	325	7.30	7.58	7·53	9·08			
	5 & over	46,693	132	127	98	132	489	10.33	12.50	10·97	14·07			
St. John.	0-1	202	2	5	7	7	21	102·56	134·02	86·73	126·90			
	1-5	809	4	6	4	4	18	21·95	11·58	24·16	17·67			
	5-15	2,157	4	3	4	2	13	5·94	2·41	3·33	3·31			
	15-25	5.622	2	2	2	2	8	1·04	1·48	2·19	1·63			
	25-65	11,714	17	16	11	14	58	4.88	7·73	7·20	8·98			
	65 & over	1,062	14	14	12	26	66	61·31	93·13	63·08	79·88			
	All ages	21,566	43	46	40	55	184	8·41	11·10	9·64	11·42			
02	0-5	1,011	6	11	11	11	39	38·05	36·04	36·65	39·43			
	5-65	19,493	23	21	17	18	79	3·99	5·34	5·33	6·24			
	5 & over	20,555	37	35	29	44	145	6·95	9·87	8·31	10·04			

the rate for 1893 (3.81), which was the lowest recorded in the three preceding years.

Among females, last year's rates, at ages 0-5 years, were below those for 1895 in Paddington (55.33 against 55.77) and St. Mary (58.74 against 59.62), whilst that for St. John was above (38.05 against 36.04). In this group the highest rates for the four years were recorded in 1893. Among children at ages from 1 to 5 years the mortality showed an increase, as it did among the males. In comparison with 1895 the mortality in St. John (21.95) showed the greatest increase, 10.37 per 1,000 at these ages. At ages over 65 years the rates were throughout the lowest recorded during the four years. At all ages the rates were, for Paddington 13.06, St. Mary, 15.00, and St. John, 8.41. Among females aged 15-25 the mortality (1.04) was very low, but did not display the same disparity as pointed out for males.

INFANTILE MORTALITY.

The rates for children under one year given in Tables 19 and 19A are based upon the estimated numbers living, but it is more instructive to consider rates based on the number of births registered during the year. Table II. in the Appendix (page 118) gives the total mortality in each of the eleven years 1886-96, from which it appears that last year's rate (155) was 11 above the average (144), and the third highest recorded in the eleven years,

being exceeded only by the rates for 1895 (164) and 1890 (157). Among male infants the mortality was 169 per 1,000 male births registered, and among females 139 per 1,000 female births. The mortality in St. Mary was 172 for boys, 143 for girls, and 158 for the two sexes, the corresponding mortalities for St. John being 151, 114, and 136 respectively. In London the infantile mortality in 1896 was 161 per 1,000 births registered, compared with a decennial average of 155, and in England and Wales, 148, the same as the decennial average. (See Table 23, infra.) The infantile mortality for Paddington was 5 per 1,000 below the rate for Lordon and 7 per 1,000 above that for England and Wales. In Tables 20 and 20A will be found the numbers of deaths registered at various ages under one year and between one and five years.

CAUSES OF DEATH.

In Table 21 will be found the death-rates at all ages for each and both sexes in Paddington and the two sub-districts during 1896, to which are added the rates for all persons in the whole Parish for the three years 1893-95. The actual numbers of deaths recorded during 1896, in Paddington as a whole, distributed into twelve age-groups for each sex, will be found in Table III in the Appendix (page 120).

TABLE 20.

MALES.

Deaths at ages under 5 years.

		ST. MARY.							Joi	HN.			PAI	DING	PADDINGTON.				
		Quarters.				(Quar	ters				Qua	rters.						
		1	2	3	4	Year.	1	2	3	4	Year.	1	2	3	4	Year	1895	1894	1893
Days.	Under 1 day 1 2 3 4 5 6	-	3 2 1	9 1	8 1 1 3	22 5 2 3 1 1	2 2	 1 1 		1	3 2 1 1	4 3 1 	3 2 1 1 1	9 1 1	9 1 1 3	25 7 3 3 1 2	25 8 8 7 1 2	18 5 6 3 1 2 1	22 7 6 1 3 2 4
Weeks.	1 2 3	 8 4	4 4 1	4 1 5	3 3 2	11 16 12	2 2	1 1	1 2	1	4 5 1	2 10 4	5 4 2	5 3 5	3 4 2	15 21 11	12 14 7	9 10 9	9 10 9
Months.	1 2 3 4 5 6 7 8 9 10 11	3 1 1 4 6 3 7	8 1 2 1 2 5 5 1 2 8	12 4 14 4 8 4 5 5 5 2 4 4	5 5 7 1 6 2 2 1 1 2	29 13 21 8 16 10 18 15 11 8 18	2 3 1 1		2 1 1 1 1 1	1 1 2 1 1	3 3 1 2 6 2 1 1 2 3	4 5 1 4 4 7 4 7 1 5	8 1 2 1 2 5 5 5 1 3 9	14 4 15 5 9 4 6 5 2 5 5	6 6 7 2 8 2 2 2 1 2	32 16 22 10 22 10 20 16 12 10 21	39 19 21 16 15 17 12 12 18 8 7	19 24 15 10 14 12 15 17 10 9 8	26 23 17 9 15 18 15 11 13 9 7
Ur	nder lyear	50	50	87	53	240	16	6	11	8	41	66	56	98	61	281	268	217	236
Years.	1 2 3 4	-	27 8 8 8	8 4 3 1	9 3 4 2	65 29 16 18	2 1	3 1 2	2 2 1	1 3	8 2 5 4	23 14 2 8	30 8 9 10	10 6 3 2	10 3 7 2	73 31 21 22	59) 15 16 6	61 31 16 7	54 32 25 15
	ged 1—) years	43	51	16	18	128	4	6	5	4	19	47	57	21	22	147	96	125	126
	nder 5) years	93	101	103	71	368	20	12	16	12	60	113	113	119	83	428	364	342	362

TABLE 20A.
Deaths at ages under 5 years.

FEMALES.

			ST.	MAI	RY.			ST.	Joi	HN.			PAI	DING	PADDINGTON.				
		Quarters.				(Quarters.					Quai	rters.						
		1	2	3	4	Year	1	2	3	4	Year.	1	2	3	4	Year	1895	1894	1893
Days.	Under 1 day 1 2 3 4 5 6	2	3 1 1 2 	2 4 3	2 2	9 2 1 1 6 3		2	1 1	2	5 1	2	5 1 1 2	3 1 4 3	4 2	14 2 1 2 6 3 	22 7 4 2 3 1 2	13 5 2 5 2 1 2	14 2 7 1 1 4 2
Weeks.	1 2 3	3 3 3	4 2	2 6 4	3	12 9 9			1	ī 1	1 1	3 3 3	4 2	3 6 4	3 1	13 10 9	15 10 6	3 4 6	8 13 9
Months.	1 2 3 4 5 6 7 8 9 10 11	3 5 3 2 3 1 2 3 3 3 3	3 1 5 3 2 2 2 1 2 3 3 4	2 5 6 5 5 3 4 3 2 2 4	8 2 3 3 1 1 2 2 1 2	16 13 17 13 11 7 7 9 9 8 13	2	1 1 1	1 1 1 1	 2 1 1 	2 1 2 4 1 	3 5 3 2 3 3 2 3 3 3 3 3	4 1 5 3 3 3 1 2 3 3 4	3 5 6 6 6 3 4 4 2 2 4	8 2 5 3 1 2 2 2 1 1 2	18 13 19 14 13 11 7 10 9 9 13	31 20 20 16 12 8 14 9 7 7 6	15 20 15 11 9 10 7 7 11 8 12	22 17 21 25 11 15 7 10 11 6 8
Ur	nder 1 year	39	42	62	32	175	2	5	7	7	21	41	47	69	39	196	222	168	215
Years.	1 2 3 4	11 10 9 5	29 12 7 6	13 3 2 3	6 2 2 2	59 27 20 16	2 1 1 	1 2 2 1	2 1 1	1 1 1 1 1	6 5 5 2	13 11 10 5	30 14 9 7	15 4 3 3	7 3 3 3 3	65 32 25 18	58 26 9 15	53 32 28 20	48 28 25 15
	ged 1 to) 5 years	35	54	21	12	122	4	6	4	4	18	39	60	25	16	140	108	133	116
	nder 5 years}	74	96	83	44	297	6	11	11	11	39	80	107	94	55	336	330	301	331

TABLE 21.

Death-rates, at all ages, from groups of diseases.

			18	96.			Name of Street	P	ADDI	NGTON	v.	
	ST	. Mai	RY.	ST	. Јон	IN.	189	6.		Pers	ons.	
	М.	F.	P.	М.	F.	P.	м.	F.	1896.	1895.	1894.	1893
I.—Specific Febrile, or Zy- motic Diseases		3.14	3.53	2.56	1.05	1.59	3.68	2.53	3.01	2.91	2.79	3.3
1. Miasmatic Diseases 2. Diarrhoeal ,, 3. Malarial ,, 4. Zoogenous ,,	0.82	2·42 0·47		0.49				1.95 0.37	2·24 0·52	1·89 0·74 *		
5. Venereal ,, 6. Septic ,,	0·12 0·17		0.10	0.08 0.08		0.02	0·11 0·15		0·08 0·14			
II.—Parasitic Diseases	-	-	-	-		-	-	-	-	0.04	0.04	-
III.—DIETIC DISEASES	0.09	0.15	0.12	0 33	0.04	0.14	0.15	0.12	0.13	0.10	0.11	0.0
IV.—CONSTITUTIONAL DIS- EASES	3.65	2.80	3.17	2.67	1.64	2.00	3.42	2.46	2.86	2.99	3.10	3.2
V —DEVELOPMENTAL DIS- EASES	1.69	1.25	1.44	1.07	0.91	0.97	1.54	1.15	1.31	1.35	1.09	1.0
VILOCAL DISEASES	8.80	6.87	7.71	6.36	4.48	5.15	8.23	6.16	7.02	8.35	6.82	8.8
1. Nervous System 2. Organs of Special Sense 3. Circulatory System 4. Respiratory System 5. Digestive System 6. Lymphatic System	1.06 3.33 1.36	1·18 2·46 1·12	1·13 2·83 1·23	1.57 1.65 1.15	0.77 1.37 0.86	1.06 1.47 0.97	1.98 - 1.18 2.94 1.31 0.01	1:06 2:14 1:05	1·11 2·47	1·38 3·65 1·09	0.03 1.18 2.60 0.97	0·0 0·1 4·1
7. Gland-like Organs of Uncertain Use 8. Urinary System 9. Reproductive System (a) Organs of Genera-	0.02	0·41 0·26	0.16	0.41	0.32	0.35	0·01 0·64 0·03	0.39	0.49	0.42	0.45	0.4
(b) Parturition 10. Bones and Joints 11. Integumentary System	0.07		0.00	0.08	- 0·04 - -	0·05 - -	- 0.03 0.05 0.01	0.14	0.03 0.10 0.03 0.02	0.06	0.09	0.0
VII.—VIOLENCE	0.69	0.26	0.45	1.15	0.13	0.50	0.82	0-22	0.46	0.62	0.64	0.5
1. Accident or Negligence 2. Homicide 3. Suicide 4. Execution	-	0·22 - 0·03 -	-	-	+	-	0.66 - 0.13	-	0.38	0.03	-	0.0
VIII.—ILL-DEFINED & NOT SPECIFIED CAUSES	0.84	0.49	0.64	0.33	0.13	0.20	0.72	0.39	0.52	0.48	0.45	0.6

Note. - indicates no deaths recorded. * indicates rates under 0.01 per 1,000. (P. columns only). M., males. F., females. P., persons of both sexes.

Comparing 1896 with 1895, and using for this purpose the rates for "persons" in the whole Parish, it will be found that, with the exception of those from the "miasmatic" (2.24) and "ill-defined" (0.52), the rates for 1896 were lower than the corresponding rates for 1895. The rates just mentioned were not, however, so high in 1896 as in 1893.

In Table 22 the quarterly statistics for certain diseases are given, most of the diseases selected being those over which sanitary work is deemed to have more immediate control. In this Table the two sub-divisions of the Parish are considered separately.

PRINCIPAL ZYMOTIC DISEASES.

During the 53 weeks, 281 deaths in St. Mary were attributed to the "Principal Zymotic Diseases," as compared with 41 in St. John. These totals are equivalent to rates of 3.03 and 1.20 per 1,000 respectively. In 1895 the rates for the districts were 1.90 and 0.87 per 1,000. The Zymotic Death-Rate for the whole Parish in 1896 was 2.54 per 1,000, as against rates of 1.68 and 2.25 in 1895 and 1894 respectively. Table V. in the Appendix (page 130) gives the corrected averages from each disease for the whole Parish and the death-rates for 1896, and in Table 23 will be found a comparative statement of the death-rates from each disease in 1896 in comparison with the mean rates for the decennium 1886-95. In Paddington the mortalities from measles,

TABLE 22.

					ST. I	MAR	Y'S.								ST.	ЈОН	N'S.			
41114				Quar	ters.				The	Quarters.						The Year.				
	M.	1 F.		F.	м.		M.	F.	M.	F.	M.	1 F.	M.	2 F.		3 F.	1000	4 F.	M.	F.
Smallpox	21 2 5 9 3 1	5 6 9 8 1	30 1 4 8 2 4	1 29 1 16 9 2 5	3 2 2 3 24	5 1 5 6 1 20	 2 2 7 4 3	 3 1 5 	54 7 13 27 9 32	1 39 11 31 28 4 25	1 1 2 2 	··· 2 ··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	 2 1 1 2 1	 2 1 1 1 1	3 1 5	 1 2 2	 1 1	 1 3 	 6 1 2 6 3 6	 4 3 1 6 3
Totals	41	29	49	63	34	38	18	9	142	139	6	2	7	6	9	5	2	4	24	17
Puerperal Fever Other Septic Diseases Influenza Alcoholism Malignant Disease Phthisis Other Tubercular Diseases Premature Birth Bronchitis Pneumenia Violence of all kinds (including accidents)	12 13 8 6 26 16	2 2 5. 14 13 6 7 26 11	2 2 4 19 41 8 19 11	1 1 5 1 14 21 8 6 11 11	3 9 14 12 11 8 4	10 13 5 7 7 7	 4 1 5 22 5 8 25 13	1 2 3 18 15 5 2 28 14	7 5 3 30 68 36 33 78 44 58	4 4 12 4 56 62 24 22 72 43	 1 2 1 3 3 2 2	 1 2 1 3 3 1 7 5	 1 1 3 3 1 1 4	 8 3 2 1 2 	1 2 1 1 1 	 1 6 3 1	 1 3 8 2 4 2 8	 1 1 4 1 9 1	1 5 4 8 14 2 5 9 8	2 4 1 21 7 6 1 19 6 3

TABLE 23.

						De	eath-rat	tes* fro	m				ity 000 d.
		Birth-rate *	All Causes.	Principal Zymotic Diseases.	Small-Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever. +	Diarrhœa.	Phthisis.	Infantile Mortality (0-1 year) per 1,000 births registered.
England & Wales (1896		 29.7	17.1	2.18	0.02	0.56	0.18	0.29	0.41	0.17	0.55	?	148
1886-95		30.9	18.8	2.13	0.01	0.43	0.21	0.21	0.42	0.19	0.64	1.54	148
33 Great Towns { 1896		 30.7	18.9	2.86	0.00	0.71	0.22	0.38	0.57	0.19	0.79	2	167
1 1996 05		 ?	20.9	2.81	0.02	0.60	0.27	0.27	0.55	0.21	0.88	5	167
7 Large Towns 1896		 30.1	17:3	2.52	0.12	0.74	0.50	0.25	0.43	0.20	0.68	?	161
Rest of England & Wales 189)6 .	 ?	15.8	1.60	0.00	0.43	0.14	0.23	0.30	0.14	0.36	?	130
registration)		 30.2	18-2	3.11	0.00	0.82	0.21	0.59	0.65	0.14	0.71	1.68	160
London 1000 05		 31.5	18.6	2.73	0.01	0.61	0.24	0.41	0.60	0.15	0.70	1.90	155
(1896		 24.2	15.3	2.54	0.00	0.81	0.17	0.52	0.37	0.12	0.52	1.18	155
PADDINGTON { 1886-95		 24.6	16.6	2.04	0.00	0.38	0.13	0.40	0.40	0.12	0.57	1.37	144

^{*} All rates per 1,000 living.

⁺ Includes Typhus, Enteric or Typhoid, and Simple Continued Fevers, 0.00 Indicates a rate of less than 0.01 per 1,000,

scarlet fever, and diphtheria were above the average; in London, those from measles, diphtheria, whooping cough, and diarrhœa; in the "33 Great Towns," those from measles, diphtheria, and whooping cough; and in England and Wales, those from smallpox,* measles and diphtheria. The feature of the year was the widespread epidemic of measles.

Measles.—In North Paddington there were 93 deaths from this disease, and in South Paddington 10. The corresponding death-rates were 1.00 and 0.29 per 1,000 persons. In the whole Parish the deaths numbered 103, more than double the decennial average (49), and equal to a rate of 0.81 per 1,000 persons at all ages. The disease is one which is almost confined to children, only 12 of the 103 deaths occurring at ages over 5 years, whilst 71 were of children aged from 1 to 5 years, and 20 of children under one. The deaths of males (at all ages) numbered 60, in comparison with 43 of females.

Last year's death-rate in Paddington (0.81) from this cause was above that for England and Wales (0.56), and that for the "33 Great Towns" (0.71), but below that for London (0.82). In England and Wales last year's rate was in excess of the rate for any one of the previous ten years, with the exception of that for 1887 (0.60), whilst the 1896 rates both for London and

^{*} This was mainly due to the epidemic at Gloucester, where the year's mortality from this disease alone was 10.37 per 1,000 inhabitants.

Paddington were the highest recorded in the eleven years 1886-96. Both in London, and in Paddington, the rates recorded in 1892, viz.: 0.80 and 0.68, respectively, approximated most nearly to the rates for 1896.

This disease is epidemic practically every second year, and the question of the best means of checking its ravages is at the present time engaging much attention. Proposals to include it in the schedule of notification have been objected to on the score of expense, and the slight effect which such course is expected to have. There is little doubt that the mortality would greatly diminish if parents would give up regarding the disease as trivial and inevitable, would take precautions to prevent their children from acquiring the infection, instead of, as at present, wilfully exposing them to it, and would do their best to guard against chills during convalescence. What the sanitary authority requires to be in a position to cope with the disease, is a knowledge of the first case in each house or family, so that the children may be excluded from the schools, the families kept under observation, and the necessary disinfection carried out. Notifications of the first case in the family by the medical practitioner, when called in, and systematic reports of absentees by school teachers, are the most promising methods of keeping the sanitary authority in touch with the disease. Hospital isolation would, except under special circumstances, appear to be unnecessary. Having regard to the highly infectious condition of the patient from the first onset of symptoms, before even a diagnosis can be made, removal to hospital does not afford much promise of effect towards limiting the spread of infection.

That there is need of some new procedure to check mortality from this cause is apparent when the import of last year's mortality is considered. As already mentioned, there were 103 deaths attributed directly to measles during the year. The experience of Edinburgh, where notification of measles has been in force for some years, makes the average fatality to be about 5 per cent of attacks, and on such a fatality the 103 deaths would indicate 2,060 cases. There remains, moreover, the mortality from this disease which has been classified under other headings, such as bronchitis, &c. Of this no estimate can be formed, and some account must be taken of the children who do not die, but recover more or less damaged in constitution for the remainder of their lives.

Scarlet fever.—The 22 deaths from this disease recorded in the year were equivalent to a rate of 0·17 per 1,000 persons, the deaths being 6 in excess of the decennial average (16), and the death-rate 0·04 above the mean rate. Eighteen of the deceased persons were residents in North Paddington, equal to a mortality of 0·19 per 1,000, and four, of South Paddington, mortality 0·11. Last year's total from this cause was exceeded in 1887, when the deaths numbered 35 (death-rate, 0·31), and in 1893, 30 deaths (death-rate, 0·24).

In London the death-rate from scarlet fever was 0.21 per 1,000 persons, or 0.03 below the decennial mean rate. The rate for England and Wales (0.18) showed the same reduction.

The fatality of the disease during the year was 2.7 per cent. of the cases notified (790), 7.4 among children under five years of age and 1.1 among patients at ages exceeding 5 years. The fatality in 1895 was 3.3 per cent., and 5.0 in 1894. Of the patients aged 0.5 years, the fatality was 7.8 per cent. among those removed to hospital, and 16.6 among those treated at home; of the patients aged 5 years and upwards, the fatality at home amounted to 2.9 per cent., and 0.6 per cent. in hospital.

Diphtheria.—The 67 deaths from this disease during 1896 were 16 in excess of the decennial average, while the death-rate from this cause (0.52) was 0.12 above the mean rate. In 1888, 75 deaths were recorded (death-rate 0.65), in 1893, 69 (death-rate 0.57), and in 1894, 92 (death-rate 0.75). Last year's records were fourth in order of magnitude during the eleven years, 1886-96.

During the quinquennium 1886-90, the deaths in Paddington from this cause averaged (after correcting for the increase in population) 46, and the death-rate 0.37, whilst in the quinquennium 1891-95, the average annual number of deaths was 55.7 (56) and the mean death-rate 0.44. Last year's death-rate showed an

increase of 49.0 per cent. above the mean rate for the five years 1886-90, and one of 18.1 per cent above that for the years 1891-95.

The deaths of residents of North Paddington numbered 55, equal to a death-rate of 0.59 per 1,000 of all ages, whilst the deaths of residents of South Paddington numbered 12, equal to a rate of 0.35. The mortalities prevailing in the three age-groups 0-1, 1-5, and 5-15 during the four years 1893-96 are given in Table 24.

TABLE 24.

Death-rates from Diphtheria, 1893-1896,
at ages under 15 years.

	Age-Gr	oup.	Paddi	ngton.	St. 1	Mary.	St. J	John.
			М.	F.	M.	F.	M.	F.
	1896		 2.30	2.21	2.70	2.60	-	-
0.1	1895		 1.57	-	1.83	-	-	-
0-1	1894		 2.39	-	2.80	-	-	1
	1893		 3.22	1.55	3.79	1.84	_	-
	1896		 5.64	4.44	5.75	4.86	5.09	2.43
1 5	1895		 3.57	3.04	3.74	3.66	2.68	-
1-5	1894		 4.97	7.05	5.72	8.26	1.32	1.27
	1893		 4.34	4.23	3.59	4.32	7.91	3.78
112	1896		 0.29	0.64	0.24	0.57	0.52	0.91
5-15	1895		 0.60	0.94	0.74	0.94	-	0.96
0-10	1894		 0.72	2:30	0.63	2.30	1.10	1.90
	1893		 0.83	1.16	0.89	1.21	0.54	0.94

Per 1,000 estimated living in each age-sex-group. 1896—4 deaths at ages over 15 years. 1895—1 death

1894—3 deaths

22

The death-rate from this disease was 0.29 per 1,000 in England, 0.23 in Rural England ("Rest of England and Wales"), 0.25 in the 67 Large Towns, and 0.38 in the "33 Great Towns," thus showing an increase which apparently follows the density of population. (See Table 23.)

The cases of diphtheria notified numbered 242, and the deaths registered 67, giving a fatality of 27.6 per cent. Half the patients were treated at home, and the fatality among them was 27.2, as against one of 27.6 among hospital cases. Of patients under five years of age, the fatality at home was 56, and in hospital 39.0 per cent.; and of patients aged five years and upwards, the home fatality was 7.0, and the hospital, 15.7 per cent. The fatality was on the whole greater in 1896 than in either of the two preceding years.

Whooping-cough.—The deaths from whooping-cough numbered 47, 3 less than the corrected decennial average, the death-rate from this cause, 0.37, being 0.03 below the mean rate. Last year's rate in Paddington was below all the rates mentioned in Table 23, except that fer "Rest of England and Wales."

Of the 47 deaths, 44 were registered in North Paddington and 3 in South, giving rates of 0.47 and 0.08 per 1,000 respectively.

Enteric fever.—The 14 deaths from this disease, equivalent to a rate of 0.11 per 1,000, were 2 below the decennial average 15.5 (16), whilst the rate was

0.01 below the mean rate. In Table 23, typhus, enteric, and continued fevers are grouped together under the one head "fever," the rate for which in Paddington was 0.12 in 1896, the same as the decennial mean rate. Both the decennial mean rate and the rate for last year in Paddington are lower than any of the rates for the other areas mentioned in Table 23.

In Table 22 the deaths from continued fever are included under enteric fever. There were 13 deaths recorded in North Paddington from these causes, equal to a rate of 0.14 per 1,000, whilst in South Paddington there were 3 deaths, and the rate was 0.08.

The cases of enteric and continued fevers notified during the year numbered 62 in all, and the deaths registered 16, giving a fatality of 25.8 per cent. Among the patients treated at home (all ages) the fatality was 38.4 per cent., and among those removed to hospital, 16.6. There was only one case notified at ages under 5 years, which was removed to hospital and terminated fatally. At ages over five years, the home fatality was 38.4 per cent., and the hospital, 14.2. In 1895 the total fatality was 21.4 per cent., 19.2 among the patients removed to hospital, and 22.7 among those kept at home.

Diarrhæa.—The 66 deaths attributed to diarrhæa were 6 below the average 71.6 (72). The corresponding death-rate was 0.52, 0.05 below the mean rate. Of the 66 deaths, 5 took place at ages exceeding 65 years, 7 at ages between one and five years, and 54 at under

one year. The deaths were distributed in the proportion of 57 to 9 between the Northern and Southern divisions of the Parish, the corresponding rates being 0.61 and 0.26.

The foregoing diseases may be divided into two groups, namely, those which are notified and rigorously watched, including smallpox, scarlet fever, diphtheria, and enteric fever, and those which, up to the present time, have received but scant supervision, including measles, whooping-cough, and diarrhea. In the whole Parish, the former diseases caused a death-rate of 0.837 per 1,000, the latter, one of 1.706. The disparity between these rates will be perceived if the former be taken as unity, the latter then becoming 2.037. In North Paddington, the rate from the former group was 0.939, and from the latter, 2.095, or as 1 is to 2.231. In South Paddington the rates were 0.559 and 0.647, or as 1 is to 1.57. Attention may be directed to the serious demand which such figures indicate for more restrictive regulation of the diseases included in the second group, and also to the difference between the rates for the two sub-divisions of the Parish.

The mortality records for the year from the other diseases present no features of interest, the changes being but slight. In Table 25 the numbers of deaths from the more important causes, other than the Principal Zymotic, are contrasted with the corrected

averages for the decennium 1886-95, and the two quinquennia included therein. There were slight increases in the deaths from Cancer in North Paddington, and from Intemperance in both North and South Paddington. The reductions in the number of deaths from Bronchitis and Pneumonia were very considerable.

TABLE 25.

Deaths in the Two Divisions of the Parish.

Hospital Cases distributed.

		St. M	IARY.			St. John.				
Diseases.	Recorded in 1896.	Corre	cted Ave	rages.	Recorded in 1896.	Corrected Averages.				
	Reco in 1	1886-90	1891-95	1886-95	Rec	1886-90	1891-95	1886-95		
Puerperal Fever	4	6	4	5	-	2	1	1		
Other Septic Diseases	11	12	9	11	3	3	3	3		
Alcoholism	7	5	7	6	5	2	2	2		
Malignant Diseases (Cancer)	86	78	78	78	29	26	35	31		
Phthisis	130	153	135	144	21	31	29	30		
Other Tubercular Diseases	60	59	62	60	8	11	13	12		
Apoplexy	64	86	71	78	17	23	25	24		
Bronchitis	150	184	209	197	28	45	59	52		
Pneumonia	87	135	135	134	14	34	46	40		
Cirrhosis of Liver	11	8	12	10	9	5	5	5		
Diseases of Parturition	1	7	8	7	1	1	2	1		
Aecidents	36	35	45	40	13	16	16	16		
Suic des	6	11	11	11	4	3	4	4		

INQUEST CASES.

During the year, 133 deaths were registered on the Coroner's certificate after inquest. The deaths included 71 from "natural causes," 1 "by misadventure," 48 from accidents, 10 from suicide, and with respect to 3 the findings were "open." (See Table 26.)

TABLE 26.
Inquests on Parishioners, 1896.

Finding	of Ju	ry.	1	Paddington.	St. Mary.	St. John
Natural Causes				71	63	8
By Misadventure				1	1	_
Accidental Death				48	36	12
Manslaughter				_	-	_
Wilful Murder				_	_	-
Suicide				10	6	4
Open				3	1	2
Totals				133	107	26

The accidental deaths were attributed to the following causes:—

0			
Vehicular Traffic	9	Falls, not exactly specified	13
Machinery	-1	Overlaid in bed	11
Building operations	4	Wound in hand by fishbone	1
Fires, not conflagrations	4	Choked by vomit	1
Explosion, methylated spirit	1	Scalded in bath	1
Window cleaning	2		

The death by misadventure was that of a woman who probably died from a fit, and the "open" verdicts

were returned in the cases of a new-born infant who "died of suffocation, how caused not known," of a boy aged 8 who died of diarrhœa and collapse probably due to ptomaines in his food, and of an unidentified woman found drowned in the Grand Junction Canal.

DEATHS IN INSTITUTIONS.

In the local institutions there were 573 deaths, including 295 of non-parishioners, and in institutions beyond the limits of the Parish, 160 deaths of parishioners occurred. In all, 278 deaths of parishioners took place during the year in public institutions, equal to 22.5 per cent. of all deaths.

Local Institutions.			
Paddington Workhouse & I	Infirmary	. 188, including 11 non-	parishioners.
Lock Hospital			,,
Children's Hospital, Paddir			"
St. Mary's Hospital		. 334 , 240	"
Warrington Lodge		1, ,, 1	"
OUTLYING INSTITUTIONS.			
Hospitals of the Metropolit	an Asylum	Board, 42:	
smallpox	1	diphtheria	24
scarlet fever	14	enteric fever	2
	other dise	ases 1.	
General Hospitals, 32:			
diphtheria	3	enteric fever	1
cancer	5	tubercular diseases	6
	other dises	ses 17.	
Special Hospitals, 17:			
scarlet fever		diphtheria	1
cancer			7
	other dise	ases 6.	
"Homes," 4:	or ogradies	White the Assessment	
cancer	1		1
	other dise	ases 2.	

Lunatic Asylums, 54: erysipelas tubercular diseases	1 5 other d	cancer respiratory diseases	1 2
Poor Law Institutions, 3. syphilis "Elsewhere," 8:	2	tubercular diseases	1

Of the 160 deceased persons, 26 were residents of South Paddington.

DEATHS OF ILLEGITIMATES.

The deaths of 49 illegitimate children were registered during the year, 42 under one year of age, 6 at ages between one and five years, and one at ages exceeding five years. Of the 49 deaths, 44 were registered in North Paddington and five in South. The mortality among illegitimate children under one year was at the rate of 352 per 1,000 illegitimate births, as compared with a rate of 147 among legitimate children.

In speaking of the causes of death among illegitimate children, attention may be directed to the heavy proportion of deaths from improper feeding. Thus the deaths of illegitimates at ages under one year, due to diarrhœa, gastro-enteritis, and "atrophy and debility" numbered 15, or 35.6 per cent. of the deaths at these ages, whilst among legitimate children, these causes were responsible for 119 deaths out of 435, or 27.3 per cent. The appended statement shows the numbers of deaths due to certain causes, and the occupations of the mothers of the children.

TABLE 27.—Deaths of Illegitimate Children.

			Paddington.								
			0-	-1	1-	5	5 & or				
			М.	F.	М.	F.	M.	F.			
Quarter	1st	 	 4	2							
"	2nd	 	 6	6	2	1	1				
"	3rd	 	 11	7		2					
"	4th	 	 3	3	1						
Year		 	 24	18	3	3	1				

Causes of Death.

			0-	-1.	1-	-5.	5 % 0	er
			м.	F.	М.	F.	M.	ъ.
Zymotic Diseases	Measles		0	1	0	1	0	0
	Whooping cough		1	0	0	0	0	0
	Diarrhœa		3	3	0	0	0	0
	Syphilis		1	2	0	0	0	0
Constitutional Dis	Tuberculosis		1	2	0	1	0	0
Developmental "	Premature birth		4	2	0	0	0	0
	Atelectasis		2	2	0	0	0	0
Local Diseases	Convulsions		2	0	0	0	0	0
	Bronchitis		5	0	2	0	0	0
	Gastro-enteritis		2	3	0	0	0	0
	Other intestinal complain	nts	0	1	1	1	0	0
Accident & Violence .	Fractures & Contusions		0	0	0	0	1	0
	Suffocation		0	1	0	0	0	0
Ill-defined Causes	Atrophy & debility		3	1	0	0	0	0
	Totals	.,,	24	18	3	3	1	0

Occupations of Mothers.

Domestic Servants			***			33
"Servant"	12	"Ge	neral Ser	vant"	5	
"Cook"	9	"Ho	use-mai	1"	4	
"Parlourmaid"	1	"Но	usekeep	er"	2	
Laundry Workers						6
"Ironer"	2	"La	undress'		4	
Commercial Employées	***					4
Tailoress	1	Milli	iner		1	
Dressmaker	1	Need	llewoman	n	1	
Theatrical Profession						1
No occupation, or occupa	tion not	stated				5

METEOROLOGY.

The results of the observations taken at Greenwich, as recorded week by week in the Registrar-General's Weekly Returns, are summarised in Table VII. in the Appendix, last year's figures being there compared with those for the two years immediately preceding from the same source. Two other Tables have been prepared giving the quarterly and annual totals and means. The first (Table 28) is based on the observations made at Greenwich, and the second (Table 29) on observations taken at Camden Square.

The latter Table has been compiled to ascertain the differences, if any, between observations made at Greenwich, which is several miles from Paddington, and those at the nearest known station. It will be noticed that the barometric readings vary to an insignificant extent, and that the mean temperature for the year was the same at both stations, but the

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TABLE 28.
From observations taken at Greenwich.

		8		T	empera	ture,	Degre	es Fal	hrenhe	eit.	Hum	idity									Hou	-1
		Baro	meter.	Of	Air.	Da			rass, l			Air.	Rair	nfall.	Sunshi	ne.	Rel	ative p		tion	Veloc	
1896.		Mean (Corrected)	Diff. from Average (55).	Mean.	Diff. from Average (55).	Mean.	Diff. from Average (55).	30° or less.	3°0 to 40°.	40° or over.	Mean.	Diff. from Average (55.)	Total amount measured (inches).†	Diff. from Average (81).	Total recorded (hours).	Diff.from Average (10).	N.	E.	ŝ.	w.	Mean.	Diff. from Average
		-	Н	1	-	-	-	60	00	4	4	1	1 8 1	н	10	-						П
January February March	***	30.152	3 +·413 2 +·349 -·109	40.3	+2·3 +1·1 +4·1	10.3	-0.8	15	21 11 18	1 3 7	90 86 82	+3 +2 +1	0.35	-1·22 -1·19 +1·48	111.7	3	8 4 6	7 10 3	7 7 9	9 8 13	} 11.9	1
April May June	***	30.046	+·229 +·259 -·048	54.8	+1.6 +2.1 +4.4	21.6	+1.0	1	22 13 1	6 17 29	74 66 68	-5 -12 -6	0.27	-1:14 -1:75 0:00	427.9	?	11 15 7	4 10 6	4 3 7	11 3 10	} 10.4	1
July August Septembe		29-848	3 +·054 +·068 -·218	59.2	+3·2 -2·2 -0·4	17.3	-2.5	0	0 0 1	31 31 29	62 76 85	-13 -1 +4	2 06	-1.53 -0.32 +3.24	337.0	1	7 13 3	3 3 4	10 5 10	11 10 13	} 10.6	1
October November December	r	29.958	+.215	40.6	-3·2 -3·0 +0·5	9.8	-1·7 -1·5 -1·2	10	17 17 20	12 3 3	87 84 89	-2 -7 0	1.19	-0.01 -1.16 +1.04	141.8	ş	9 9 7	3 9 3	8 5 10	11 7 10	} 12.2	1
Year		29.847	+.073	50.1	+0.9	14.7	-1.2	53	141	172	79	-3	22.42	-2.56	1018**	-216	99	65	85	117	11.2	11

+ Rain fell on 161 days.

* From Weekly Returns.

** From Annual Summary, 1896.

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TABLE 29.
Observations taken at Camden Square.

			Baron	meter.		Temperature.					Wi	Rainfall.			
	1896.		Mean of Readings (inc	Range.	Mean of Air.	Mean Daily Range.	Highest Reading.	Lowest Reading.	Mean degree of Humidity, Saturation=100.	Rel	ative pr	s.	on of w.		Amount collected (inches).
Winter.	January February March		30·229 30·200 29·680	1·415 0·986 1·494	41.0 40.1 46.2	8·9 11·5 13·3	52·7 56·4 65·2	28·0 23·2 29·4	89 88 83	18 12 10	3 5 1	3 2 6	7 10 14	9 8 25	0.78 0.30 3.20
Spring.	April May June		30·026 30·101 29·816	0·784 0·592 0·772	49·2 54·6 62·8	17·1 22·0 21·2	68·4 78·9 85·1	33·7 36·1 41·1	71 66 71	14 22 16	2 5 4	1 1 3	13 3 7	11 3 11	0·55 0·14 2·27
Summer.	July August September		29·894 29·900 29·642	0.552 0.620 1.782	64·5 59·5 57·2	22·3 18·3 13·4	88·7 77·1 71·9	47·7 45·4 39·6	65 83 82	17 21 9	2 1 3	5 1 8	7 8 10	7 14 22	1.03 1.92 5.51
Autumn.	October November December		29·599 30·000 29·653	1·290 1·371 1·781	46·4 40·5 40·1	13·1 11·1 10·2	62·9 50·3 51·8	29·2 25·4 26·6	84 85 87	13 16 10	2 5 5	6 0 7	10 9 9	18 10 21	3·05 1·17 3·61
	Year		29.895	1	50.1	15.2	88.7	23.2	79	178	38	43	107	159	23.53

"mean daily range" at Camden Square was greater than that at Greenwich. The observed maximum temperature was nearly 4° lower at Camden Square (88°·7), than at Greenwich (91°·1). The lowest readings for the year were 23°·2 and 24°·3 respectively. As regards the prevalence of wind, there was a considerably greater preponderance of wind from the North at Camden Square than at Greenwich. The sums of the observations for the year are as follows:

Year, 1896.	North	East	South	West
Camden Square	178	38	43	107
Greenwich	99	65	85	117

More rain was measured at Camden Square (23.53-in.) than at Greenwich (22.42-in.). In one important particular information for comparison is wanting, viz., the amount of bright sunshine. It was noticed during the year that very little bright sunshine was reported from Greenwich on certain days, when the weather in the Parish was particularly bright.

Comparing 1896 with previous years, it appears that the temperature was slightly (0.9°) above the average for 55 years (49.2°), and that the mean daily range was a little (1.2°) below the average (15.9°). Other things being equal a moderate and equable temperature with only slight daily variations is conducive to the preservation of life, especially at the extremes of age. The total rainfall of the year

was 2.56 in. below the average of 81 years, and the amount of bright sunshine recorded (1,018 hours), 216 hours below the average of the ten preceding years, and equivalent to 22.6 per cent. of the number of hours during which the sun was above the horizon.

The connection, if any, between the meteorological conditions and the amount of disease and death in the community is an interesting subject, but one which is, as yet, in too nebulous a state for discussion here. As a slight contribution to the evidence on the point, the following tabular statement of certain meteoroligical elements and rates is appended. (Table 30.)

WATER SUPPLY.*

The Grand Junction and West Middlesex Waterworks Companies provide the Parish with water, which is almost exclusively derived from the River Thames, the intakes being situated just above Hampton Court. Prof. Frankland states that the condition of the river, as a source of supply for dietic purposes, was not so good in 1896 as in 1895. The deterioration was due to the many and severe floods.

The raw water from the Thames is purified by settlement and filtration, and the efficiency of such

^{*} From the Report on the Chemical, Physical, and Bacteriological Examination of the Water supplied by the Metropolitan Water Companies during the year 1896, by Prof. E. Frankland, D.C.L., &c. The full Report is given in the Registrar-General's Annual Summary.

measures will be best indicated by the reduction effected in the amounts of organic pollution present in the raw supply, and the number and characters of the micro-organism present in the purified water.

When the Thames is in flood, much pollution (sand, excrement, &c.) is washed into the stream from the adjacent lands. At such times the water is unfit to be taken into the supply mains at all, and therefore the Water Companies having the largest amount of storage room, are best able to maintain the purity of their supply. Of all the Metropolitan Water Companies, the East London has the largest storage, viz., 15.0 days, that of the West Middlesex being 5.6, and that of the Grand Junction, 3.3. During 1896 the West Middlesex Company completed a series of storage tanks, covering several acres, at Barnes.

The amount of purification effected by filtration &c., is indicated in Table 31, which gives the mean results with the limits of variations during 1896. In Table 32, the mean results for 1896 are compared with those for 1895 and 1894. The most important element in considering the work of purification is the extent and frequency of the maxima of the organic constituents in the water distributed, they indicating the risks of any untoward chances from the consumption of impure water.

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TABLE 30.

Meteorology and Vital Statistics in 1896.

			Quarters.											Years.		
		First.		Second.		Third.		Fourth.			Tears.					
		1894.	1895.	1896.	1894.	1895.	1896.	1894.	1895.	1896.	1894.	1895.	1896.	1894	1895	1896.
Mean Temperature (F°)		41.2	35.2	42.4	53.2	54.8	54.8	55.5	62.3	60.0	46.7	45.9	42.7	49.1	49.5	49.8
" Daily Range "		12.9	11.5	10.4	19.4	20.8	19.7	16.5	20.5	17.9	10.4	11.8	10.6	14.8	161	14.6
" Humidity (Saturation = 100)		82	79	85	76	72	71	81	73	74	86	85	86	81	77	79
Total Rainfall (inches)		5.38	3.21	4.28	4.57	2.01	2.74	7.56	6.50	8.60	8.93	7.76	7.15	26.44	19.48	22.77
Percentage of Bright Sunshine		26.6	15.7	12.4	27.7	32.9	31.0	23.5	30.6	25.4	14:3	14.5	15.7	23.6	27.5	22 6
Mean Hourly Velocity of Wind (n	niles)	15.4	12:3	11.9	11.4	10.2	10.4	10.3	11.0	10.6	12.1	13.4	12.2	12.3	11.7	11 2
Sickness Rate *		7.26	3.46	8.00	8.25	6.24	8.59	6.79	8.46	11.59	7.41	9.50	10.44	7:38	6.89	9.68
* (All Causes		17:29	24.34	16.66	14.85	14.98	16.04	14.62	15.78	14.01	14.09	14.50	14.80	15.06	17.09	15:34
Seven principal Zymotic Diseases		1.74	1.01	2.49	2.24	0.58	4.02	3.46	3.36	2.77	1.35	1.53	0.98	2.35	1.68	2.54
Tubercular ,,		1.71	2.31	1.52	1.88	1.99	2.19	1.98	1.50	1.58	1.81	1.69	1.67	1.20	1.88	1.4
Bronchitis and Pneumonia		4.72	7.71	3.11	1.94	2.25	1.90	1.05	1.63	0.90	2.37	2 31	2.87	2.46	3.41	2.20
Infantile Mortality +		135	163	144	122	127	133	174	209	234	111	157	120	135	164	155

^{*} Per 1,000 of estimated population.

[†] Per 1,000 Births registered.

TABLE 31.

Comparison of Analyses of Water Supplied to Paddington.

(Compiled from Registrar-General's Annual Summary.)

			From M	lains of
	1896.	THAMES (unfiltered water.)	WEST MIDDLESEX Co.	GRAND JUNCTION Co.
	mean	11.9	11.1	12.7
	Temperature (degrees Centi- \langle max.	18.3(6)(8)	18.6(7)	20.3(6)
	grade) (min.	4.2(1)	5.3(1)	5.9(1)
	(mean	29.93	28.45	28.46
	Total Solids max.	39.00(11)	33.80(1)	33.80(1)
1	min.	25.76(8)	23.64(8)	23.66(8)
	(mean	0.286	0.161	0.163
er.	Organic Carbon max.	0.718(12)	0.263(10)	0.278(12)
Parts per 100,000 of water.	min.	0.175(3)	0.101(8)	0.103(6)
10 01	(mean	0.048	0.024	0.022
30,00	Organic Nitrogen max.	0.097(12)	0.045(10)	0.030(12)
er 1	min.	0.023(6)	0.013(2)	0.013(2)
rts p	(mean	0.009	-	-
Fa	Ammonia max.	0.018(2)	_	-
	min.	0.002(7)	-	-
	(mean	0.209	0.205	0.217
	Nitrogen as Nitrites and Nitrates	0.314(1)	0.296(1)	0.311(1)
	min.	0.127(8)(9)	0.110(7)	0.122(7)
	(mean	1.9	1.9	1.9
	Chlorine max.	2.2(10)	2.0 (10) (12)	2.1(10)
	min.	1.7(5)	1.8(1-7)	1.8 (1,2,5-7
	Degrees of Hard- (mean	20.2	19.8	19.8
	ness (1°=1 pt. Ca CO ₃ n ax.	23.6(1)	23.6(1)	23.9(1)
	per 100,000 pts. of min.	17.1(9)	15.7(8)	16.0(8)

The figures shown () indicate the months when the respective maxima and minima were observed.

TABLE 32.
Comparison of mean results, 1894-96.

		ature	Parts per 100,000 pts. of Water. (Means of all Analyses.)										
		Mean Temperature C*.	Total	Orga	anic.	Ammonia.	Nitrogen as Nitrites and Nitrates.	rine.	Hardness 1 degree=1 pt. Oa CO3.				
		Mean	Solids.	Carbon.	Nit'g'n.	Amm	Nitrit Nitrit	Chlorine	Hard I degr				
	(1896	11.1	28.45	0.161	0.024	0.000	0.205	1.9	19.8				
West Middlesex Water Co	1895	9.8	28.57	0.159	0.021	0.000	0.233	1.8	19.3				
	(1894	10.9	28.12	0.207	0.024	0.000	0.216	1.9	18.4				
	1896	12.7	28.46	0.163	0.022	0.000	0.217	1.9	19.8				
Grand Junction Water Co	1895	11.8	28.74	0.147	0.019	0.000	0.239	1.8	19.6				
	(1894	12.3	28:96	0.202	0.024	0 000	0.226	1.9	18.9				

The results contained in these Tables are based on analyses of samples taken from the mains at points recommended by the Companies' Officials, and they practically represent the supply as sent out by the Companies, not as consumed, which may mean a very different thing. The risks of pollution after leaving the reservoirs are considerable, beginning with leaky water mains in the neighbourhood of defective sewers and drains, and ending in the cisterns of the houses. Much attention is given to certain of these risks, but to the possible pollution from leaky sewers and drains very little heed appears to be paid. The Companies are always on the watch for leaky mains, but unless the waste be considerable, it is possible for a defect to remain undetected for a considerable time. Should such defective water-pipe be emptied, sewage and filth would be liable to be sucked in from the surrounding ground.

TABLE, 33.

	1896	January 1,152·5		February 948-4		March 1,672.6		741·9		May 374.6		June 421	
sured Weir	e of Thames mea- l at Teddington , in Millions of us per day												
		To	В	To	В	To	В	To	В	To	В	To	В
	es Water unfil-	4.2	11,560	6.4	26,800	8.7	18,000	11-4	7,520	17-2	2,060	18:3	6,760
Co.	After Storage days	4.0	3,460	5.8	1,820	7.9	2,340	11.0	720	14.7	280	(18·5 20·5	640 1,360
1004	After Filtration .	4.0	44	5.8	16	7.7	24	11.4	20	14.8	4	{17·7 19·7	576 26
S A	fter preliminary	4-9	280	7.0	480	9.5	460	11.6	1,240	15.8	700	18.6	520
19461	filtration	4.8	300	7.0	320	9.0	300	11.6	980	16.2	380	{19·3 20·5	460 720
A A	fter filtration— Hampton	4.4	48	5.8	124	7.8	240	11.3	68	16.3	32	18.4	56
and our	Kew Bridge, General Well	4.4	28	6.4	24	9.3	28	11.6	260	15.4	80	{18:4 20:2	1,080 352
OIL OIL	Kew Bridge, } South Well	5.3	8	7:3	100	9.7	24	11.6	8			19:0	16

Year. Mean	cember	De	ember	Nov	tober	Oc	ember	Sept	igust	Au	July	
	839-9	3,	29.7	9:	2,624.5		30-8	4	16-4	21	61.8	261.8
Microbe per CC,	В	To	В	To	В	To	В	To	To B		В	To
24,10	160,000	5.0	8,560	5.8	39,760	12.6	4,300	18-0	1,740	18:3	2,220	17;2
4,882	41,600	4.9	5,520	5.4	740	12:5	120	17:3	300	18-4	680	19.1
51	120	4:3	25	5.2	30	12.5	14	17.6	6	18.4	8	17:5
5,110	53,200	6.3	2,440	7.2	880	13-2	260	18.0	520	19.3	340	18-1
2,369	22,800	5.8	720	7.2	600	13.0	460	17.9	500	19:3	480	18-7
346	3,034	5.5	244	5.8	126	12.7	120	17.8	24	18.4	38	17:2
116	118	5.3	70	6.0	12	12-7	6	17.6	30	18.7	26	18-1
40	168	5.3	16	6.6	8	13.0			8	19.3		

No information is available as to the nature of the micro-organisms to be found in the water from the filter beds. Table 33 shows the numbers present in the raw river water and in the filtered supply. Prof. Frankland adopts as a standard of pure water, one containing not more than 100 microbes per c.c., and he remarks of the supply of the West Middlesex Co. that excepting in June and December, the supply was "of most excellent bacterial quality, not unfrequently rivalling or excelling, in this respect, the deep-well water of the Kent Company"; and of that of the Grand Junction Co., "the small amount of storage possessed by this Company renders it difficult at all times to maintain efficient bacterial filtration, and 6 out of the 12 samples collected at the Hampton Works during the year contained an excess of microbes or their spores over 100 per c.c., whilst 5 out of the 22 samples collected at the Kew works also contained an abnormal number."

The West Middlesex Company filter through 2.75 feet of sand at an average rate of 1.25 gallons per sq. ft, per hour. On an average 99.79 per cent of the microbes present in the raw river water are removed by such filtration, ranging from a maximum of 99.94 to a minimum of 91.48.

A very interesting note is included in the Report as to the superior efficiency of the finer varieties of

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TABLE 34.
Efficiency of filteration, and fineness of sand.

		Amount of Storage (days' supply).	Average Rate of Filtration gal, per hour per sq. ft.	Average Thickness of Sand on Filters.	Percentage of Sand, "fine."	Percentage of Organisms not removed.*
Chelsea	 	12.0	1.75	4.00	26.10	6.0
West Middlesex	 	5.6	1.25	2.75	78.19	2.5
Grand Junction	 	3.3	1.63	2.25	28.70	8.9
New River	 	4.4	2.29	1.80	60.26	2.2
East London	 	15.0	1.33	2.00	33.12	3.1

* Organisms in raw supply=100.

sand for filtration. The "fine" sand passed through a sieve of copper gauze with 1,600 meshes to the sq. in., and the measure of its efficiency was the number of organisms removed in filtration. It appears that the Chelsea Company's 4 ft of sand, 26·10 per cent. of which was "fine" sand, allowed 6·0 per cent. of the microbes to pass through, whilst the 1·8 ft. of sand of the New River Company's filters, 60·26 of the sand being "fine," allowed only 2·2 per cent. to get through.

During June all the filters of all the Companies were deranged, and the numbers of microbes in the filtered waters were considerably in excess of the standard. No cause for the derangement had been discovered.

Mention may perhaps be made here of two Reports which have been issued by the London

County Council during the year, with reference to the existing supply to the Metropolis. The "Analytical Investigation of London Water Supply," issued by the Parliamentary Committee in May, 1896, was of interest, as it contained information as to the amounts and character of the suspended matters in the water, the examinations being extended over the year 1895. Whilst admitting that it is desirable that there should be no such suspended matters in water intended for drinking purposes, yet when such matters amount to 0.0614 grs. per gal. of "volatile and organic matters" (the inorganic may be neglected), it does appear to be a very insignificant affair. The results of Mr. Dibdin's examinations for the determination of the number of bacteria &c. present in filtered water are very different from those obtained by Prof. Frankland. Mr. Dibdin's samples were "collected from standpipes in various parts of the respective Companies' districts," and that being so, his results are not comparable with those of Prof. Frankland, which are based on the examination of samples collected at the waterworks, i.e., immediately after leaving the filter. The true interpretation to be placed on Mr. Dibdin's results is that need exists for more supervision over the water in the course of distribution. Prof. Klein's observations on the bacteria present in the London Water Supply, are unfortunately rendered less valuable by the absence, in the published Report, of any information as to the

sources from which the samples were taken, and of the dates of such taking. His examinations appear to have been made during the closing weeks of 1894, and the early weeks of 1895, a time when the phenomenal frost deranged the working of the filter beds. Prof. Klein lays considerable stress on the presence of the bacillus coli communis, but this organism is practically universally present, and although its name would imply a close connection with fæcal pollution, yet there are good grounds for believing that it may be independent of any such origin.

The other Report is the Memorandum of the Medical Officer of Health to the London County Council, dated 8th July, 1895, contained in his Annual Report for that year. In this he drew attention to the fact that, during the 49th-51st weeks of 1894, the notifications of enteric fever increased in number in lieu of decreasing, as they did in each of the four preceding years in which notification was in force. From an examination of all the ascertainable facts, he was led to conclude that the increase was to be best explained by attributing it to the water supply, the Thames being at that time in flood.

The River Thames, receiving as it still unfortunately does, the sewage of the majority of the towns and villages on its banks, and of the boats and shipping on its waters, may not be, and is not, an

ideal source from which to derive the domestic water supply of London. There are, however, two facts worth remembering, which cannot be explained away. The first is that no micro-organism known to be the cause of disease has ever been found in the filtered water drawn from the Thames; and the second, tnat there has been a steady diminution in water-borne disease since efficiently filtered Thames water has been substituted for the numerous wells and pumps of former days. Hamburg has often been quoted as an example of a city which, relying on sand filtration of water from a polluted river for its supplies for dietic purposes, suffered in consequence from a disastrous epidemic of cholera. As a matter of fact Hamburg itself was before the epidemic supplied with practically unfiltered Elbe water, but Altona, one of its suburbs, had efficiently filtered water from the same river, taken lower down stream where the water was more polluted. Hamburg had the epidemic and Altona practically escaped.

ADMINISTRATIVE WORK.

In so far as statistics can indicate the work accomplished by the Department, the year's record will be found in Table VI in Appendix A (page 131).

Infectious Disease.—During the year, 1,496 visits of inquiry have been made with respect to infectious diseases, 1,007 rooms have been disinfected, and 50

tons 16 cwt., of bedding, &c., removed for steam disinfection and purification.

In accordance with the provisions of the 60th Section of the Public Health (London) Act, 1891, the Vestry has provided temporary accommodation for persons excluded from the use of their homes during the processes of disinfection. The "Family Shelter" has been opened since September, 1895, and has been most useful. During 1896, 150 individuals were accommodated, comprising 77 adults and 73 children, in 43 families. The stay in each instance has ranged from one night to five days. The house has on more than one occasion been used to receive members of families of patients without isolation, but for whom hospital accommodation could not be immediately obtained. The expenditure for the year has been very trifling, under £50.

Messrs. Armfield, the Contractors for the disinfection of bedding, &c., have done their work satisfactorily, but there can be no doubt that the work ought to be in the hands of the Vestry. During the year a total of £1,284 was paid for this work, and the amount tends to increase rather than decrease. If the work were done by the Vestry the annual charge would be approximately uniform, and well below the average expenditure of the present system. There would be the further advantage that the fact of a fixed annual charge would be an inducement to a freer use of

such processes under circumstances where expense is at present avoided.

The expenditure for "disinfectants" amounted to close on £110, including £45 for sulphur and carbon bisulphide, and £65 (about) for soap, and disinfecting powders and fluids. Hitherto there has been no contract for these materials. It seems probable that a saving might be effected by purchase under contract, and there would be the very great advantage of disclosure of composition of the materials bought and periodical analysis.

The fumigation of rooms is still effected with sulphur di-oxide gas, evolved from the combustion of cake sulphur or (occasionally) of carbon bisulphide. Many profess to suspect the efficiency of such process, but no definite proof of inefficiency has ever been adduced. Spraying with corrosive sublimate solution, as is done in Paris, would involve a heavy expenditure, because an increased staff of men would be required, besides trucks for carriage of apparatus, &c. It would appear, moreover, as if a special cleansing of a room would be necessary after such process. Within the last few months, formic aldehyde gas has been brought forward as a fumigator in substitution for sulphur di-oxide. This gas can be obtained either by heating under pressure, an aqueous solution of calcium chloride saturated with formic aldehyde, or by volatilisation of "paraform" in a special lamp, constructed to regulate the amount of air admitted. The former

method necessitates the use of an "autoclave," which is a sort of digester fitted with a pressure gauge but (at present) no safety valve. The machine is cumbersome and heavy, not to say dangerous, and requires to be closely watched to prevent explosions. If such apparatus were used, over an hour would be spent in disinfecting a room, subsequent to the completion of the sealing up, instead of five or ten minutes as at present. The use of "paraform" appears to be far more promising if further experiments confirm the satisfactory reports already published. The lamp has not been put on the market in a final form, but the patterns which have been shown are simple, light, and (apparently) safe. The penetrating power and diffusibility of formic aldehyde gas, are said to be much greater than those of sulphur di-oxide. The new process will be watched and brought with more detail before the Vestry should future experience be favourable.

On several occasions it has been necessary to remove the bodies of persons dying of infectious disease to the mortuary. There is great need of a mortuary chapel, which should be of a quasi-ecclesiastical and attractive appearance, one to which relatives could not object to remove their dead on the score of repulsiveness. It is essential to have the infectious dead removed from tenement dwellings immediately after death, and this could be done with more freedom from opposition, if there were a suitable chapel. It is the

custom of the Department to undertake the removal to the existing mortuary free of charge to the poorer classes, the funeral starting from the mortuary, and the body not being allowed to enter the house after its first removal.

Trade Supervision.—All the cowsheds, slaughter-houses, and bake-houses in the Parish have been systematically inspected at the end of each half year and at such other times as appeared necessary. As complete a list (see Appendix A, page 137), as possible of the milk vendors in the Parish has been compiled and verified during the year. All are supposed to be registered with the London County Council, but several were found to be unregistered, and many persons whose names appeared on the Council's lists were found to have gone out of the business from various causes. The premises of these vendors will be systematically inspected, and a register compiled during the current year.

One cow-house has been abandoned during the year, and now there are but two in the Parish. There appears to be but very little to be gained by keeping cows in London, and, having regard to the well known prevalence of tuberculosis among cows kept in confinement, there seems to be good reason to discourage the practice. Properly regulated farms in the country, where the cows are kept in the fields, and frequently tested for tuberculosis, where the milk is taken with every precaution against pollution, and whence rapid

transport can be obtained, afford the most healthy and safest supply.

As regards the slaughter-houses, it is, perhaps, fortunate that only a small proportion of the meat supply is prepared in them. With a number of private houses, where killing is done at such times as may be most convenient to the proprietors, an efficient supervision is impossible. London is in this respect far behind many of the provincial towns, where all slaughtering is done in municipal abattoirs, and the whole process of dressing takes place under the supervision of municipal officers properly qualified for the work. Doubtless the need of an efficient supervision of the meat supply will be one of the matters reported on by the Royal Commission on Tuberculosis now sitting.

Under the 26th Section of the Factory and Workshop Act, 1891, the District Inspector of Factories forwards to the Sanitary Authority notices of new workshops opened in the Parish. During the year 16 such notices have been received, the work-rooms being duly inspected and entered on the register, which at the end of the year contained particulars of 46 work-places. When inspected, the rooms are measured up, and cards are issued to the proprietors indicating how many persons may be employed in each room, each card being hung in its proper room. It has been found that the proprietors appreciate the issue of such cards, as they are thereby in a position to know the limits of

their accommodation, and so avoid worry through overcrowding complaints. During the year, 9 complaints were received from the District Inspector of insanitary conditions in work-rooms, including two cases of overcrowding, three of dirty conditions, two of defects to sanitary conveniences, and one of want of ventilation to bake-house, &c.

There have been fewer complaints of nuisance from the dust and manure wharves, which have been inspected almost daily. Where complaints have been made respecting manure wharves, they have been due to the removal of "peat moss litter," which is most objectionable when in the course of removal, but almost free from odour when down in the stable.

There has been some difficulty in securing the regular clearance of manure from stables, chiefly in the summer months, when its removal is most required. The ultimate disposal of manure is becoming every year a more difficult problem. Farmers will not trouble themselves about it except at such times as may be convenient to themselves, and the extension of the suburbs renders it necessary to remove the refuse farther afield. The sanitary authorities are awaking to the nuisance arising from heaps of refuse in their districts, and have obtained injunctions in certain cases, and in others have made bye-laws imposing restrictions on contractors. Under Section 38 of the Public Health (London) Act, 1891, the Vestry are empowered to agree with horse owners to undertake the removal

of manure. Such procedure would insure regular collection from the mews and stables, but what the Vestry would do with the collected manure it is difficult to say. The section mentioned is, however, incomplete, as it does not empower the Vestry to levy any special charge or rate for such removal.

The collection of house refuse is not within the jurisdiction of the Department, and is only under its notice when complaint is made of non-removal. Such complaints have been rarer during the past year, showing that the system of house-to-house collection recently inaugurated has been successful. As to the final disposal of the collected refuse, no changes have been introduced. During the year a Special Committee had the subject of the erection of a dust destructor under its consideration. A very complete report was issued in December last strongly recommending that the refuse of the Parish should be cremated, but the proposal was rejected by the Vestry. The present system of 'manufacturing' cannot persist much longer, as the markets for the sundries salvaged are shrinking, and land for shoots becoming every year more difficult to secure. The extra-metropolitan authorities object to the deposit of house refuse equally with that of manure. An injunction was recently obtained against a (late) contractor to the Vestry, and the Vestry of Kensington were compelled during the past year to cease from depositing refuse on their own land on the Essex Marshes. The chief objections put forward

against the Committee's proposals were the loss of return for sundries obtained from the manufacturing, and the nuisance likely to be created in the process of burning. As to the former the present return is likely to be a vanishing quantity, and what now brings in a set off against the cost of collection may be expected to become an additional expense. The fear of nuisance from the process of burning is not supported by the experience of other towns. Leicester began with one destructor and now has three; Leeds has upwards of a dozen destructors; and generally the story from the provinces is that where one destructor has had a fair trial, others are subsequently erected. At Leicester, a large Board School has been erected within some 100 feet of the destructor building. It may be remarked in conclusion that there are now two private destructors in the Parish, neither of which can be said to come up to the standard of any apparatus which the Vestry would erect. No one seems to scriously object to the rudimentary patterns referred to.

House Drainage.—In November of last year the question of preparing rules and regulations as to house drainage was referred to the Joint Sanitary and Works Committee, but at the present time, no result has been obtained. The lack of such regulations makes the work of securing good drainage difficult, inasmuch as owners do not know what they have to do, and are inclined to think that the proposals of the Vestry's Officers are in excess of their legal powers. The

London County Council have drafted Bye-laws to be framed under the 202nd Section of the Metropolis Local Management Act, 1855, which, when enacted, will be of considerable use, but additional regulations, to be made by the Vestry, will still be necessary. It is to be hoped that steps will be taken to supply this defect. During the year several systems of combined drainage have been dealt with. In three instances the systems were relaid by the Vestry, in four others orders were made under Section 74 of the Metropolis Local Management Act, 1855, and in certain others, the systems have been broken up, new independent connections being made to the sewers, towards the expense of which the Vestry contributed.

In November last the Vestry determined to make a complete examination of the building plans in the care of the London County Council, as successors to the Metropolitan Commissioners of Sewers. Several cases of combined drainage have been found, and the records will help to put the responsibility on the proper parties, who in the majority of cases would, or ought to be, the owners of the property.

During the summer months there were many complaints of smells from the ventilators of the Ranelagh Sewer. A Deputation from the Vestry waited on the Main Drainage Committee of the London County Council in November last, and laid before the Committee a full statement of the complaints. Much of the nuisance is caused by the insufficiency of the

Ranelagh Sewer, which was originally constructed to take surface water from open lands, and now drains a densely populated area. Beyond this there is the question of the sufficiency and efficiency of the existing road gratings. There can be but little doubt that these should be supplemented by a number of high columns to act as outlets, the surface gratings being inlets. It is now becoming common to light the streets by electric lamps on high standards in the middle of the roadway, and it does not appear to be impracticable to suggest that such standards might be used as upcast shafts for sewer ventilation.

Vagrancy.—It has been recently suggested that the duty of supervising common lodging-houses should be transferred from the London County Council to the Local Authorities, the Council to remain as a central licensing authority with power to enact bye-laws, &c., for their good governance. The suggestion would appear to indicate that the substitution of the Council for the Police had not been a success. The proposed transference means increased work for the Department. The Guardians have not yet erected new Casual Wards. The old set were re-opened for the winter, after being closed throughout the summer.

The Final Report of the Royal Commission on Vaccination contains suggestions for the more systematic supervision of vagrants, whether in common lodging houses or in casual wards. In the latter case, the Poor Law Officials would be charged with the

duty, but in the former the Sanitary Officials. It is to be presumed that the Medical Officer of Health would be the officer to make the medical inspections required, and secure such vaccination as might be necessary.

Legal Proceedings.—During the year seven summonses were taken out under the Public Health (London) Act, 1891, such number not, however, representing the total number of instances in which legal proceedings were authorised. In all cases, other than the seven in question, the works necessary were carried out without going into Court. The cases heard before the Magistrate were:—

Accumulation of manure, 10/- and 2/- costs.

Non-compliance with notices to abate nuisances, 8/- costs and 23/-costs (2 summonses).

do. £1 11 6 costs.

Unsound meat, 40/- and 23/- costs.

Non-compliance with notice to abate nuisance, 31/6 costs.

In the other case the work was done without an appearance before the Magistrate.

Under the Sale of Food and Drugs Acts, 23 summonses were taken out, the results of the same, with the legal expenses incurred, being set out below:—

Sampl Adultera	Extent of Adulteration.		It	Fine	-	I	Cost			Cost			pect	
			£	8.	d.	£	8.	d.	£	8.	d.	£	8.	d.
Butter	 80% Margarine		0	10	0	0	12	6	2	14	2	0	5	8
Milk	 40% Cream abstract	ted	0	10	0	1	3	0	2	17	8	0	0	2
do.	 8% added Water.		2	0	0	0	12	6	2	14	2	0	0	2
Butter	 75% Margarine		1	0	0	0	12	6	3	2	4	0	0	7
do.	 40% do.		5	0	0	0	12	6	3	2	4	0	5	34
Milk	 20% Cream abstract	ted	5	0	0	2	2	0	5	1	0	1	1	0
do.	 8% added Water		1	0	0	0	12	6	3	0	2			
do.	 7% do.		1	0	0	10	12	6	3	2	8			

Sample Adulterated.	Extent of Adulteration.	1	Fin Impos			Cost			Cost	or's	Exp	spect pend.	
		£	. 8.	d	£	8.	d.	£	8.	d.	£	S.	d.
Butter	90% Margarine	4	0	0	0	12	6	2	14	2	0	5	6
do	80% do	0	10	0	0	12	6	2	7	6	0	0	6
Milk	8% added Water	0	10	0	0	2	0	2	16	6	1	11	2
Skim Milk	17% do	1	0	0	1	3	0	2	16	6	0	0	1
Butter	88% Margarine	2	0	0	0	12	6	2	14	2	0	0	6
do	65% do	2	0 9	0	0	17	6	2	14	2	0	5	6
Milk	9% added Water	1 1	0	0	0	12	6	2	14	2	0	0	11
do	11% do	1	0	0	0	12	6	2	6	6	0	0	2
do	12% do	D)ismi	ssed				9	3	4			
do	28% Cream abstracted	1 3	3 0	0	0	12	6	2	14	2	0	0	14
do	18% added Water	2	2 10	0	0	12	6	2	6	6	0	0	14
do	17% Cream abstracted		10	0	0	12	6	2	6	6	0	0	2
do	10% added Water	I)ismi	issed				2	13	4	0	0	11/2
Skim Milk	25% do	. 1	5 0	0	0	12	6	2	14	2	0	10	1
Butter		10	0 0	0	2	2	0	2	14	2	0	0	6
	Totals	45	9 0	0	16	17	0	71	10	4	4	7	6

TABLE I.

Year.		Estimated P Middle of	opulations at each Year.	Births Re	gistered.	Deaths of I	Parishioners.
		St. Mary.	St. John.	St. Mary.	St. John.	St. Mary.	St. John.
1896		91,350	33,500	2,613	455	1,583	359
1895		90,577	32,173	2,526	453	1,671	428
1894		88,949	32,551	2,423	411	1,449	382
1893		87,708	32,772	2,567	444	1,680	473
1892		86,111	33,149	2,456	478	1,632	510
1891		84,156	33,682	2,420	532	1,590	520
1890		82,091	36,645	2,389	512	1,602	502
1889		80,324	36,736	2,346	517	1,266	398
1888		78,939	36,810	2,331	512	1,472	444
1887		77,578	36,884	2,368	548	1,346	439
1886		76,240	36,958	2,366	532	1,468	441
verages fe 1886-95	or }	83,408	34,565	2,419	494	1,517	454

TABLE II.

	Per 1,000 of Popul		Deaths of under		Deaths of Children		Deaths in	Public In	stitutions.	
Year,	Birth-rates.	Corrected Death- rates.	Per 1,000 Births Registered.	Per 1,000 Deaths at all ages.	aged under 5 years per 1,000 Deaths at all ages.	Paddington Workhouse and Infirmary.	St. Mary's Hospital.	Lock Hospital.	Children's Hospital, Paddington Green.	Outlying Institu- tions.
1896	 24.24	15:34	155	245	398	188	334	2	48	160
1895	 24.3	17:1	164	233	330	204	332	1	17*	156
1894	 23.3	15.0	135	210	351	165	347	3	**	193
1893	 25.2	17.9	148	209	321	204	399	3	**	172
1892	 24.2	18.0	148	203	319	236	355	7	12	120
1891	 25.1	17.9	148	207	298	257	371	5	62	105
1890	 24.4	17.7	157	216	347	172	358	3	57	100
1889	 24.5	14.2	138	238	333	172	344	2	70	70
1888	 24.6	16.6	133	193	343	207	334	5	64	78
1887	 25.5	15.6	122	200	316	181	347	6	50	67
1886	 25.6	16.9	148	225	354	161	250	5	53	81
verages f 886-189	24.7	16.7	144	213	331	196	344	4	48 (8 years)	114

^{*} Hospital recommenced work in 3rd quarter of the year.

^{**} Closed during re-construction.

TABLE IV.

Showing the Number of Deaths at all ages in 1896, from certain groups of Diseases, and proportions to 1,000 of Population, and to 1,000 Deaths from all causes; also the Number of Deaths of Infants under one year of age from other groups of Diseases, and proportions to 1,000 Births and to 1,000 Deaths from all causes under one year.

Division I. (all ages).	Total Deaths registered in 371 days.	Deaths per 1,000 of Population, at all ages.*	Deaths per 1,000 of Total Deaths, at all ages.
•			
1. Principal Zymotic Diseases	322	2:54	165.8
2. Pulmonary Diseases	313	2.47	161.1
3. Principal Tubercular Diseases	187	1.47	96.2
Division II. (Infants under One Year).	Total Deaths.	Deaths per 1,000 of Births.	Deaths per 1,000 of Total Deaths under One Year.
4. Wasting Diseases	121	39•4	253.6
5. Convulsive Diseases	56	18.2	117.4

^{*} Corrected to 366 days.

NOTICE.

- Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Typhus, Enteric (or Typhoid), and Simple Continued Fevers, and Diarrhœa. 47 of the deaths occurred in Hospitals situated beyond the limits of the District.
- 3. Includes Phthisis, Scrofula, Tuberculosis, Rickets, and Tabes.
- 4. Includes Marasmus, Atrophy, Debility, Want of Breast Milk, and Premature Birth.
- 5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

TABLE III.

MALES.

WHOLE PARISH.

Deaths Registered from all Causes during the Year 1896.

(53 weeks ended January 2nd, 1897.)

Note.—The Deaths of Non-Residents occurring in Public Institutions situated in the District are excluded, and the Deaths of Residents occurring in Public Institutions situated beyond the limits of the District are included.

						A	GES	3.					ges.
CAUSE OF DEATH.		0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages.
CLASSES.													
I. Specific Febrile, or Zymotic II. Parasitic Diseases III. Dietic Diseases IV. Constitutional Diseases V. Developmental Diseases VI. Local Diseases	DISEASES	61 1 16 55 107	85 11 45	14 8 8	4 14 8	7 1 29 22	5 22 32	6 32 54	2 20 1 60	3 22 4 57	4 4 13 34	2 1 8 4	19 17 8 43
VII. DEATHS FROM VIOLENCE VIII. DEATHS FROM ILL-DEFINED a Specified Causes		8 33	3	3	4	5	10	3 2	3	2	1		4 9
TOTALS		281	147	33	30	64	74	98	86	88	56	15	97
I.—SPECIFIC FEBRILE,									983				
I.—SPECIFIC FEBRILE, ZYMOTIC DISEASE. 1.—Miasmatic Diseases													
ZYMOTIC DISEASE. 1.—MIASMATIC DISEASES [a. Vaccinated Smallpox b. Unvaccinated		1										:::	
ZYMOTIC DISEASE. 1.—Miasmatic Diseases Smallpox 4. Vaccinated Unvaccinated c. No Statement Measles Scarlet Fever									1000				
ZYMOTIC DISEASE. 1.—MIASMATIC DISEASES a. Vaccinated b. Unvaccinated c. No Statement Measles Scarlet Fever Typhus Epidemic Influenza Whooping Cough Diphtheria		15	 38 5	7 3									(
ZYMOTIC DISEASES 1.—MIASMATIC DISEASES a. Vaccinated b. Unvaccinated c. No Statement Measles Scarlet Fever Typhus Epidemic Influenza Whooping Cough Diphtheria Simple Continued and Ill-defined Fenteric or Typhoid Fever		15 1 8 3	38 5 7	7 3		1	2		2	2	2		
ZYMOTIC DISEASE. 1.—MIASMATIC DISEASES a. Vaccinated b. Unvaccinated c. No Statement Measles Scarlet Fever Typhus Epidemic Influenza Whooping Cough Diphtheria Simple Continued and Ill-defined F	ever	15 1 8 3	38 5 7	7 3 3 3]		1 3	2	1 2	2	2	2		1

TABLE III.

WHOLE PARISH. FEMALES.

Deaths Registered from all Causes during the Year 1896.

(53 weeks ended January 2nd, 1897.)

Note.—The Deaths of Non-Residents occurring in Public Institutions situated in the District are excluded, and the Deaths of Residents occurring in Public Institutions situated beyond the limits of the District are included.

	AGES.													es.
			0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages.
I. Specific Febrile, or II. Parasitic Diseases III. Dietic Diseases IV. Constitutional Dise V. Developmental Dise VI. Local Diseases VII. Deaths from Violen VIII. Deaths from Ill-De Specified Causes	ASES	Not	52 4 7 33 70 6 24	85 12 1 36 2 4	16 12 15 	15	8 2 13 36 1	***	7 41 .55 2		5 1 20 5 79 	26	1 1 21 7 1	188 183 86 458 17
Totals			 196	140	44	37	60	73	105	85	110	89	31	970
ZYMOTIC DISI	THOLD.													
1 MIASMATIC D	ISEASES.													
Smallpox (a. Vaccinated b. Unvaccinated c. No Statem	ted					ï								1
Smallpox (a. Vaccinated b. Unvaccinated c. No Statem Scarlet Fever	ted ent		5		4 2		1	1	1					1 43 14
Smallpox { a. Vaccinated b. Unvaccinated c. No Statem Measies Scarlet Fever Typhus Epidemic Iufluenza Whooping Cough	ted ent		5 1 13	33 10 1 18	4	2	1 1	1 1	1	1	3	3		14 16 32
Smallpox \{ a. Vaccinated b. Unvaccinated c. No Statem Measles Scarlet Fever Epidemic Iufluenza Whooping Cough Diphtheria Simple Continued and Ill-d Enteric or Typhoid Fever	ted ent		5 1	33 10 1 18	1 7	2	1 2	1	3 1 1 1	1	3	3	:::::::::::::::::::::::::::::::::::::::	14 16 32 34 1 3
Smallpox { a. Vaccinated b. Unvaccinated c. No Statem Measles Scarlet Fever Typhus Epidemic Iufluenza Whooping Cough Simple Continued and Ill-d	ent		5 1 13 3 	33 10 1 1 18 21	1 7	2	1 2	1	3 1	1	3	3		14 16 32 34 1 3

					A	GE	S.					ges.
CAUSE OF DEATH.	0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages.
SPECIAL FEBRILE, OR ZYMOTIC DISEASE (continued).								577		811		
3.—MALARIAL DISEASES.												
Remittent Fever					1	***						···
4.—Zoogenous Diseases.												
Other Diseases (e.g., Hydrophobia, Glanders, (
Splenic Fever) (***					***	***		
5.—VENEREAL DISEASES.					-							
Syphilis	3				1		1		1	***		5
6.—Septic Diseases.												
Erysipelas	2			1		1	1			1		6
Pyæmia, Septicæmia Puerperal Fever		1			•••	1						2
II.—PARASITIC DISEASES.												
Thrush, and other Vegetable Parasitic						100						
Diseases				***			***	***	•••	***	**	
Parasitic Diseases		57.0										
III.—DIETIC DISEASES.	100				120	133						
Want of Breast Milk, Starvation								***				1
Scurvy					1	2	1				***	4
Delirium Tremens	***				***	3	***					3
IV.—CONSTITUTIONAL DISEASES.					1	19.9	1					
Rheumatic Fever, Rheumatism of the Heart			1			2	2		2			7
Rheumatism	10073							-	1		9.00	2
Gout	1 1	1			***	1	***			***	***	3
Rickets	1				1	3	9	9		3	1	38
Tabes Mesenterica	7	1	1000									8
Tubercular Meningitis, Hydrocephalus			5				10					16
Phthisis	0		1	12	27	11 4	19	8		1		82 14
Purpura, Hæmorrhagic Diathesis									9		***	1
Anæmia, Chlorosis, Leucocythæmia						1	1					2
Glycosuria, Diabetes Mellitus			***	2	1	138		2				4
Other Constitutional Diseases	1		***			***	***	***		***	***	

2004					A	GES						YOR
CAUSE OF DEATH.	0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages
SPECIAL FEBRILE, OR ZYMOTIC DISEASES (continued).		333	13.7					Ma		I VI		
3MALARIAL DISEASES.											lan.	
gue												
4.—Zoogenous Diseases.												
owpox and effects of Vaccination ther Diseases (e.g., Hydrophobia, Glanders,)					la ser	a Robert		1				
Splenic Fever)				-				1				ı
5.—VENEREAL DISEASES.	5			***								
onorrhœa, Stricture of Urethra								•••				
6.—Septic Diseases.						1	1	100	,	1	1	
rysipelas yæmia, Septicæmia	***			1 33			1					ı
uerperal Fever	***		***	***	4							
II.—PARASITIC DISEASES.		-										
hrush, and other Vegetable Parasitic Diseases Torms, Hydatids, and other Animal Parasitic Diseases												
												l
III.—DIETIC DISEASES.	4					1						ı
ant of Breast Milk, Starvation		1 30		100				100				ı
hronic Alcoholism elirium Tremens					2	1						ı
											-	l
V.—CONSTITUTIONAL DISEASES.						1		1		1		ı
heumatic Fever, Rheumatism of the Heart,							1			1		l
out	***				1	1 9 30	***	1 - 3				ı
ancer, Malignant Disease				1		1 7	25			900	1	ı
abes Mesenterica	3											
ubercular Meningitis, Hydrocephalus	2	9					1.5					
ther forms of Tuberculosis, Scrofula	0		2			0	15	4				-
urpura, Hæmorrhagic Diathesis											1	-
næmia, Chlorosis, Leucocythæmia			***								***	-
lycosuria, Diabetes Mellitus	***		***	1		1	***	1			***	
ther Constitutional Diseases	***	1	***		***	1	1000		1	1	1	l

						A	GE	S.					ges.
CAUSE OF DEATH.		0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages.
VDEVELOPMENTAL DIS	EASES.												
Premature Birth		0.0											38
Atelectasis	*** . ***	0			100		1000						8
Congenital Malformations		9		***			***						9
Old Age						•••		***	1	4	13	8	26
VILOCAL DISEASE	S.				78								
1.—Diseases of Nervous Sy											17		
Inflammation of Brain or Membrai		2		1		1	1	1					6
Apoplexy, Softening of Brain, Hen					1	1	9	5	11	11	8	1	40
Brain Paralysis					1							170	
Insanity, General Paralysis of the			***						4		140		18
Epilepsy Convulsions		00				***							23
Laryngismus Stridulus (Spasm of			4										1
Disease of Spinal Cord, Par					837		2	2	1				!
Paralysis Agitans	[***	***	***	***	***	2	2	1		***		
Other Diseases of Nervous System							***	1		***		***	1
D Ong . we on Congr	- Cowon						3 3				17.79	TH	
2.—Diseases of Organs of Special (e.g., of Ear, Eye, Nose)	AL SENSE.		1			600							
(e.g., of Ear, Eye, Nose)			-			***	333		***		***		
3.—DISEASES OF CIRCULATORY	SYSTEM.		100				100						
Pericarditis				***	***	***						***	***
Acute Endocarditis													1
Valvular Diseases of Heart			***		1	2	4	6	12			1	39
Other Diseases of Heart			***	1	***		1		- 65				1
Aneurism Embolism, Thrombosis			***						ĩ	1	1		
Other Diseases of Blood Vessels									1	3	1		1
4.—DISEASES OF RESPIRATORY	SYSTEM.		-										
Laryngitis		. 4	1					1					(
Croup			1			***	***						1
Emphysema, Asthma			10000			.,.			2			-	4
Bronchitis				***		1	1	3 4		11 2	7	1 1	87
Pneumonia		7	12			1	3	4	7			1	55
Pleurisy	em		1	***	***		***	***	1				1
Other Diseases of Respiratory Syst	tem			,									
5.—DISEASES OF DIGESTIVE S	YSTEM.	1											-
Dentition		2	2		***	100000				3.53	125		4
Sore Throat, Quinsy			***	1.10000	100	4						***	
Diseases of Stomach		7.4			:	-	1		-				20
Enteritis		14			***		1						10
Obstructive Diseases of theestille	***	7 4					-	-	1				

					A	GES	3.					ges.
CAUSE OF DEATH.	0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages
V.—DEVELOPMENTAL DISEASES.							34					
Premature Birth	. 23											23
Atelectasis	0							111111111111111111111111111111111111111		1		0
Congenital Malformations	1 00				***							3
Old Age			***	***				***	5	26	21	52
VILOCAL DISEASES.						77.50				100	Pille I H	
1.—Diseases of Nervous System.	1											
Inflammation of Brain or Membranes	. 1			1		1						3
Apoplexy, Softening of Brain, Hemiplegia, I				1		2	12	7			1	
Brain Paralysis		***	***	1								
Insanity, General Paralysis of the Insane						1	4		***			
Epilepsy			1 7 7	1000				100		1117	100	10
Convulsions		-			7000	0.000	***		***	1 177.78	***	
Laryngismus Stridulus (Spasm of Glottis) Disease of Spinal Cord, Paraplegia,			***	***		1979					1000	
Paralysis Agitans					1		1	1	3			(
Other Diseases of Nervous System	. 2	1		1	1		1	1		1		8
		123	La de	1		1515		PIE		118		
2.—DISEASES OF ORGANS OF SPECIAL SENSE								1	1			
(e.g., of Ear, Eye, Nose)												
			999		13.0	401		1 14		1		
3.—DISEASES OF CIRCULATORY SYSTEM.			0		0.11	7 15						0
Pericarditis	1	***	1	***	***	***		***		1	***	-
Acute Endocarditis Valvular Diseases of Heart	1		1	1	2	4	4		4 500			23
Other Diseases of Heart		1000						3 20		6		
Aneurism										2		
Embolism, Thrombosis												
Other Diseases of Blood Vessels					1	***	1		1	1		4
4.—DISEASES OF RESPIRATORY SYSTEM.			600					100	1			
Laryngitis	. 3					1,12						1
Croup		1	1			***	***			10000		
Emphysema, Asthma	7 77						12					91
Broncuitis	0		1				2					49
Pneumonia	-	10			1 3			1000	1	100	LINE	
Other Diseases of Respiratory System	1 10 2		1					-		-		
5.—Diseases of Digestive System.				11111		7	111111	1 9	1	1		1
Dentition	. 3	3										1
Sore Throat, Quiusy		0						-				
Diseases of Stomach	0			1				-				20
Enteritis	11	2					2		1		***	17
Obstructive Diseases of Intestine	. 3				1	1	1		2	1		9

SHOA	-					A	GES	3.					ges.
CAUSE OF DEATH.		0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages
LOCAL DISEASES.—Continued.				100	300				MA				
5.—Diseases of the Digestive System. (Continued.)													
Peritonitis			***	3		1	1	2		,			7
					***	***				***			***
					***	1	3	3	2				9
	***	2	1	1			1	1		2		***	8
Other Diseases of Digestive System		1		***	***		***	***		***	1	***	2
6.—Diseases of Lymphatic System.													
(e.g., of Lymphatics and of Spleen)									1	***			1
									100				
7.—DISEASES OF GLAND-LIKE ORGANS OF	P			-									
Uncertain Use.												100	
(e.g., Bronchocele, Addison's Disease)						***		1					1
(1.9.)			2000										
8.—Diseases of Urinary System.		3											
Nephritis		1				***		1				•••	2
The state of the s					1	1	3	9	2	4	1	***	21
Disease of Bladder or of Prostate		***	***	***		1	1	1	1	4	3	***	11
Other Diseases of the Urinary System	***			***	***			1		*	0	***	11
9.—Diseases of Reproductive System												100	
						141							
Male Organs													333
Famula Organa													
B. Of Parturition.						-						1	
Abortion, Miscarriage				***	***		***	***					***
				***	***	***		***	***	***			***
Other Assidents of Child Dieth		2	***	***	***	***	**-	***	***	***	***		2
Other Accidents of Child-Dirth	***	2		***		***	***	***				***	2
The second secon													
10.—DISEASES OF BONES AND JOINTS.												100/	
O-1- N!-							***	1	2				3
Arthritis, Ostitis, Periostitis		***	***							***	***		***
Other Diseases of Bones and Joints					***	***	***						***
The second secon							71.53			-			
11.—DISEASES OF INTEGUMENTARY													
System.										1	The state of		
Carbuncle, Phlegmon Other Diseases of Integumentary System	***				***			***	1				1
Other Diseases of Integumentary System													

					A	GE	S.					ges.
CAUSE OF DEATH.	0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages.
LOCAL DISEASES.—Continued.							73	188	30			
5.—Diseases of the Digestive System. (Continued.)						100						
Peritonitis		1	2	1	2							6
Ascites	***	1										2
Cirrhosis of Liver			***	***			4		3			11
Jaundice and other Diseases of Liver	-	1	***		2		2	1				8
Other Diseases of Digestive System	1	1	***	***	1	***		***	1	•••		4
6.—Diseases of Lymphatic System.											999	
(e.g., of Lymphatics and of Spleen)				1					1			2
7.—DISEASES OF GLAND-LIKE ORGANS OF	118											
Uncertain Use.						1000		1				
(e.g., Bronchocele, Addison's Disease)										1		1
		1			-							
2 D			118		13							
8.—Diseases of Urinary System.					1	2	1			1		5
Nephritis Bright's Disease, Albuminuria	1000		- TOUR	0	1						1	24
Disease of Bladder or of Prostate	100										1	
Other Diseases of the Urinary System	1939								***	***		
			. 14				-				1000	-
9.—Diseases of Reproductive System.			1			1						
A. Of Organs of Generation.	1.1		1			1.5						
Male Organs					***							
Female Organs				1	1	2					***	4
B. Of Parturition.						2						
Abortion, Miscarriage											l	
Puerperal Convulsions			1	10000	1 3 3 3	1833	-		2000		10000	1
Placenta prævia, Flooding						2				***		2
Other Accidents of Child-Birth	1			1	4	2		***				8
			130	lib in							18	
10.—DISEASES OF BONES AND JOINTS.								1007	long!		1	
Caries, Necrosis			1									1
Arthritis, Ostitis, Periostitis												
Other Diseases of Bones and Joints	***	***						***	**	***	***	
							-					
11.—DISEASES OF INTEGUMENTARY												
SYSTEM.	-						1					
Carbuncle, Phlegmon				***	***	***		1				1
Other Diseases of Integumentary System											+++	

										A	GE	S.					ges.
C	AUSI	S OF DEA	TH.			0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	All Ages.
VIIDEA	THS	S FROM	I VI	OLEN	CE.												
1.—Acc	IDEN	T OR NE	GLIG	ENCE.													
Fractures and	Con	tusions				1		3	3	5	6	2	2	2	***		24
Gunshot Wou																	
Cut, Stab										***							
Burn, Scald		***					3					1	***	***			4
Poison						***				***					***		
Drowning								***				***		***			
Suffocation						7	***						***				7
Otherwise																	
	2 -	Homicid	P		1												
Manslaughter																	
Murder																	
									- 10								
		-SUICIDE															
Gunshot Wou	nds	***	***		***	***			1	***	***	***	***	***	***		1
Cut, Stab		***	***		***	***		***	***		2	***	1	***	**	***	3
Poison					***	***			***		1			**	***	***	1
Drowning	***			***		***			***			***	***	***	***		***
Hanging	**				***		***	***		•••	1		***	***	**		1
Otherwise				***	***		***					***		***	1		1
	4	EXECUTION	N.														
Hanging														•••	***		
VIII.—DEAT																	
AND NOT	SP	ECIFIE	D CA	AUSES	5.												
Dropsy		***		***				***			***	**-					
Debility, Atro	phy,	Inanition	1	***		32	3					1			***	***	36
Mortification				***										***			
Tumour				***							***				***		***
Abscess				***		1	***			***	***			***			1
Hæmorrhage						***					***	***	**		***		***
Sudden Death	(car	ase not as	scertai	ned)	***				***		**			***	***	***	***
Causes not Sp	ecifie	ed or Ill-	lefine	d		***	***	***	***	***	**		***	***	***	***	***
Uncertified De	eath		***	***	***	+ + + +	***	***	***	***	***	1	***	***	***	***	1
									HIN								
																	_

										A	GE	3.					-
C	AUSE	OF DEAT	гн.			0-	1-	5-	15-	25-	35-	45-	55-	65-	75-	85-	A 11 A man
VII.—DEA	THS	FROM	VIO	LEN	CE												
		T OR NE			UD.												
Fractures and				NCE.			7					1	1		1	1	
Gunshot Wou		usions	***	***					**		***						
Cut, Stab																	
Burn, Scald							1						1				
Poison																	
Drowning											1						
Suffocation					***	6								***		***	
Otherwise						***							***		***	***	
	21	HOMICIDI	R.														
Manslaughter					***	**	***		***	***			***	***	***	***	
Murder							***	***		***	***		***	***		***	
	-	0											1-25			-	
C b - t 337		-SUICIDE															
Gunshot Wou	nds		***		***	***	***	***	***	***	***	***	***	***		***	P
Cut, Stab	***	***	***	***	***	***	***		***	1	***	1	***		1	***	
Poison						***			***	1	***		***	***		***	
Drowning Hanging		***		***	***	***	***		***	***							
Otherwise					***	***	***	***					***				
Oviici wiso			***	***		***	**	***	***	***	***	***			***		
	4.—H	EXECUTIO	N.											18			
Hanging							***										
														18	199		
													23		18		
III.—DEAT	THS	FROM	LL-D	EFI.	NED									1 3	100		
AND NOT	SP	ECIFIE	D CA	USE	S.									1 3			
														N PH			
Dropsy	-1	T!4!	***			23	4	1	***	***	***		***	***	***	**	
Debility, Atro Mortification		manition			***		*	1			***		***	***	***	***	I.
Tumour				***			***		***	***	***	***	***				
Abscess		***		***	***	***		***		***		***					1
Hæmorrhage				***	***		***			**			1				
Sudden Death		se not as	certain	ed)			-									1	
Causes not Sp							-										
Uncertified D			Donned			1											
OHOU WHOU D	OLE VIIO	***				-		1						1		1	

TABLE V.

Table showing the Number of Deaths from the principal Zymotic Diseases in the Ten Years 1886 to 1895, and in the Year 1896.

	DISEASE.												verages, *3-95.	Total Deaths	Death rates,
	DISEASE.	1886.	1887.	1888.	1889.	1890.	90. 1891. 1892.	1893.	1894.	1895.	Uncorrected.	Corrected.	in 1896. (53 wks.)	1896.	
Sn	nallpox			1					4	3		0.8	0.8	1	0.00
Μe	easles	66	33	66	11	77	7	81	30	66	18	45.5	48.1	103	0.81
Sc	arlet Fever	11	35	14	8	6	7	17	30	13	14	15.5	16.3	22	0.17
Di	phtheria	28	27	75	39	45	27	- 32	69	92	49	48.3	51.0	67	0.52
W	hooping Cough	55	19	74	26	82	67	29	59	44	20	47.5	50.0	47	0.37
- 1	Typhus														
7	Enteric	15	10	15	16	10	17	7	19	23	15	14.7	15.5	14	0.11
-	Simple Con- tinued	1				1						0.5	0.5	2	0.01
Di	arrhœa	92	63	38	63	62	76	82	65	45	91	67.7	71.6	66	0.55
	TOTALS	268	187	283	163	283	201	248	276	286	207	240.2	254.1	322	2.54

^{*} The decennial mean rates for these diseases are given in Table 23 (page 75).

TABLE VI.

Report of the Works of the Sanitary Department completed during the Year 1896.

		,	1	Inspec	etion	8	Ho	nses					Sani	tary 1	Works	s com	plete	i in D	wellin	ng Ho	uses.						Regu			1	-		-		Co	nal	
		ved.	Dw	elling	Hor	1808.	Let	in ings.	-	I	rains	ge, å	te.			Wate	er St	pply.			nst epta- es.	N	fiscell	aneou	18.	Ke A	eping	of ls.	Tra	de Su	pervis	sion.	Fo	ods.		oats.	
		No. of Complaints received.	"House-to-House."	On Complaint or after illness.	Cellar Dwellings.	Re-inspections of all kinds.	Houses placed on Register.	Registered Houses Inspected.	Entire Reconstruction.	Drains trapped and (or) ventilated.	Waste-pipes disconnected.	Rain-water-pipes disconnected.	W.C. New provided, repaired, &c.	Soil pipes ventilated.	Services Separated.	Supplies Reinstated.	Cisterns New provided.	Cisterns cleansed, ropaired, &c.	Cisterns overflow dis-	New provided.	Repaired, &c.	Houses cleansed.	Cases of overcrowding abated.	Cellar-dwellings closed.	Yards and Areas Paved and Drained.	Manure Receptacles Reconstructed, &c.	Accumulations Removed.	Improperly kept Removed.	Slaughterhouses.	Cowhouses.	Bakehouses.	Offensive Trades.	Seizure of Unsound Food.	Samples taken for Analysis.	Registered.	Inspected.	1
-	1	227	50	676		3038	1		105	33	15	18	51	21	14	8	5	17		3	2	21	5		17	7	13	2	1	1	15		1	110	2	49	131
ters.	2	270		701		2460			84	34	18	24	68	31	12	8	2	1		4		5			16	2	20		2	1	42	63		94			
Quarters.	3	300	12	836	2	2211			81	32	15	21	47	31	11	3	6	3		4		6	2		9	8	11	5	8	2	44	113		86	1	57	
	4	168	39	810		2739		. 100	93	24	15	21	86	32	9	10	3	4	1	11		8	1		16	4	18	1	8	3	71	247	this on to	94	1	85	
Ye	ar	965	101	3023	2	10448		Total State	363	123	63	84	252	115	46	29	16	25	1	22	2	40	8		58	21	62	8	19	7	172	423	1	384	4	191	

TABLE VII.

Meteorological Observations at Greenwich. From the Weekly Returns of the Registrar-General.

			Quar	ters.			Years.	
		1	2	3	4	1896.	1895.	1894.
BAROMETER Mean		29.979	29.929	29.754	29.684	29.836	29.745	29.796
Total Oscillation		17.08	12.05	16.25	27.58	72.96	71.58	73.05
THERMOMETER-Mean		42.4	54.8	60.0	42.7	49.79	49.5	49.1
Absolute Maximum		67.7	86.7	91.1	65.0	91.1	87.3	86.0
" Minimum		24.3	33.2	40.3	26.5	24:3	6.9	12.8
Mean Daily Range		10.4	19.7	17.9	10.6	14.6	16.1	14.8
SUNSHINE.—Hours recorded		111.7	427.9	337.0	141.8	1,018.4	1,225.4	1,051
" Possible " Record		899.8	1,380.3	1,325.5	898.4	4,504.0	4,447.2	4,446
Per cent. of "Possible" recorded	.}	12.4	31.0	25.4	15.7	22.6	27.5	23.6
No. of days of record .		49	79	80	56	264	275	268
HUMIDITYMean		85	71	74	86	79	77	81
RAINFALL, &C Total		4.28	2.74	8.60	7.15	22.77	19.48	26.44
No. of days of fall		37	29	46	51	163	156	194
" " Snow		2	-	-	5	7	28	5
" " with Fog		15	4	1	23	43	52	55
,, ,, Thunder		3	5	7	2	17	15	19
" " Lightning		1	4	11	-	16	17	9
,, ,, Hail		-	2	1	1	4	4	7
Hoar frost observed		11	5	-	24	40	29	23
WIND.—Mean direction		s.w.	N.E.	W.N.W.	s.w.	s.w.	s.w.	S.W.
Mean Hourly Velocity		11.9	10.4	10.6	12.2	11.2	11.7	12.3
	of)	8	9	7	12	36	39	1

Extract from Return of Registered Common Lodging Houses within the Jurisdiction of the London County Council.

d No.		Name and Resid	ence of	Keeper.		Sit	tuation of Commo House.	n Lodging	d No. of	Particulars as to	ars of Inspection to Fitness.	
Registered No.	Date when Registered.	Name.	No. of House.	Street or Place.	Parish.	No. of House.	Street or Place.	Sanitary District.	Authorized Lodgers.	Approved or not.	Date of Approval.	
6130	23 Oct., 1894	Frank Steve s	48	Cirencester-st.	Paddington	46	Cirencester-st.	Paddington	21	Approved	18 Oct., 1894	133
5958	19 Oct., 1888	Raisbeck Chapman	212	Harrow-road	,,	357	Edgware-road	"	34	,,	8 Oct., 1888	
4384	9 Nov., 1888	Enoch Levell	4	Carlton-bridge	,,	13	Kensal-road	,	11	"	29 Oct., 1888	

SLAUGHTER-HOUSES.

NORTH.

		m. o me m mms	
Wm. Spink			14 Celbridge Mews.
George James Ariss			275 Edgware Road.
Joseph Hall Hagger			Hero Place, Edgware Road.
Alfred Stanbridge Gin	ger		Portsdown Mews.
Henry Anness			18 Chippenham Mews.
Wm. J. Sack			Jonson's Mews.
Lewis Eleazor White			125 Harrow Road.
John Joseph Cridlan			Bishop's Mews.
		SOUTH	A CONTRACTOR OF THE PARTY OF TH
Frank Pain			15 Southwick Mews.
Henry Thomas Matthe	ws		6 Upper Brook Mews.

COW-HOUSES.

NORTH.

John Smith	 		7-8 Chichester Mews.
_ No. of the last		SOUTH.	
Jane Spring	 		39 Star Street.

BAKEHOUSES.

District No. 1.

Underground Bakehouses in use:

27 Amberley Road	8 Bristol Gardens
60 Carlton Vale	17 Clifton Road
237 Elgin Avenue	14 Formosa Street
37 Kilburn Park Road	227 Maida Vale
57 Shirland Road	125 Shirland Road
195	

District No. 2.

Underground Bakehouses in use:

102 Church Street	7 Praed Street
72 Hall Place	53 ,,
189 Edgware Road	17-19 Chilworth Street
319 "	9 London Street
3 Spring Street	86 Praed Street
90 Harrow Road	47 Cambridge Street
349 Edgware Road	57
401 ,,	91 Star Street
29 Harrow Road	

Underground Bakehouses not in use:

77 Harrow Road

46 Connaught Street

Above-ground Bakehouses in use:

377 Edgware Road

143 Harrow Road

District No. 3.

Underground Bakehouses in use:

94 Bishop's Road
16 Craven Terrace
5 Norfolk Road
67 Moscow Road
70 Queen's Road
24 Porchester Road
80 Queen's Road
24 Hereford Road
80 Chilworth Street
10 Righmond Road

32 Chilworth Street 10 Richmond Road 56 Westbourne Grove 76

72 Princes Square 34-35 Alexander Street

157 Queen's Road

Underground Bakehouses not in use:

3 Coburg Place

8 Coburg Place

Above-ground Bakehouse in use:

75 Queen's Road

District No. 4.

Underground Bakehouses in use:

23 Chichester Street
23 Westbourne Terr. North
113 Cirencester Street
37 ,,
52 Clarendon Street
43 Waverley Road

67 Cornwall Road 62 Alfred Road

241 Harrow Road 20 Woodchester Street 265 ... 135 Westbourne Park Road

265 ,, 135 Westbourne Park Road 292 ,, 99 ,, Villas

Underground Bakehouses not in use:

14 Cirencester Street

43 Ranelagh Road

Above-ground Bakehouse in use:

41 Tavistock Crescent

District No. 5.

Underground Bakehouses in use:

27 Kensal Road	365 Harrow Road
55 Elgin Avenue	360 ,,
4 Carlton Bridge	500 ,,
1 Chippenham Road	560 ,,
41 ,,	534 "
99 ,,	436 ,,
59A Fernhead Road	117 Walterton Road
75 ,,	The state of the s

Underground Bakehouse not in use: 303 Harrow Road

Above-ground Bakehouses in use:

339 Harrow Road

2 Mozart Street

19 Kensal Road

MILK VENDORS IN PADDINGTON.

Corrected to March 31st, 1897.

District No. 1.

Bell, Richard, 24, Amberley Road Robinson, James, 28, Manners, John, 74, Do. Wharf, Mrs. Harriett, 10, Carlton Place Welford & Sons, 29, Clifton Road Express Dairy Co., 1 Young, Edward, 16, Clarendon Terrace Welford & Sons, 290, Elgin Avenue Nott, George, 253 Do. Edis, James Ward, 48, Formosa Street Jones, Martha, 42A Edwards, William, 6 Do. Little, Frederick, 6, Foscote Mews (Dairy Washhouse) Evans, D. M., 2, Kilburn Park Road Hart, Ernest, 39, Wood, William, 2, Netley Street Oxenham, Jas., 185 Shirland Road Price, Isaac, 61, Little, Fredk., 5, Sutherland Avenue Welford & Sons, 4, Warwick Place

District No. 2.

Brumbridge, P., 2, Bathurst Street Thomas, J., 5, Bouverie Street Stacey, Elizabeth, 18, Do. Jones, J. H., 5, Cambridge Place Orchard, J., 16, Campbell Street Ramsay, Fredk., 20, Chilworth Street Belgravia Dairy Co., 36, Connaught Street Darch, Adolph., 104, Church Street Toy, C., 46, Connaught Street Richards, J., 3, Cuthbert Street Chambers, J. H., 29, Woodbridge, R, 107, Edgware Road Reid, Thos. & Eliz., 443, Security Co., 403, Wells, Fredk., 53, Hall Place Hoare, Ellen, 35, Moreton, Arthur, 65, Do. Darch, Adolph., 5, Carrington, Charles, 23, Do.

District No. 2 .- Continued.

Toy, C., 77, Harrow Road

Furness, Annie, 53, Do. Gt. Western Dairy Co, 9, Do. Chilton, J., 3, Lower Porchester Street Belgravia Co., 15, London Street Gt. Western Co., 42, Market Street Keates, Frances, 13, Do. Chamberlain, James, 22A, North Wharf Road Hawes, B., 19, Barnes, R., 21, Do. Stephenson, R., 10, Do. Davies, J., 72, Praed Street Skuse, J., 14, Sale Street Brown, J., 19, Sheldon Street Jenkins, J., 7, Do. Williams, G., 30, St. Mary's Terrace Goodwin, Rebecca, 7, South Wharf Road Burton, Jno., 28, Spring, Jane, 39 Star Street Hubbard, James, 70, Do. Smith, William, 101, Do. Crocker, A. J., 19, Spring Street West London Co., 6, Do. Brumbridge, P., 38, Southwick Street Godfrey, John, 19, Titchborne Street Davies, David, 12, Upper Porchester Street Ramsay, Fredk., 1c, Arch, Eastbourne

District No. 3.

Keen, A., 157, Church Street

Smith, John, 29, Alexander Street
Ramsey, Fredk., 21, Chilworth Street
Balls, Wm., 6, Coburg Place
Chilton. Jas, 36, Craven Road
Brumbridge, John P., 23 Craven Terrace
Hughes & Chiverton, 36 Hereford Road
Smith, Wm., 26, Do.
Guernsey Dairy Co., 7, Do.
Wicks, G. & H., 83, Ledbury Road
Stoate, Wm. & Sons, 2, Leinster Place

District No. 3 .- Continued.

Jordan, Samuel, 30, Leinster Street Ramsey, Fredk., 20, Leinster Terrace Green, George, 63, Moscow Road Wills, Elizabeth, 7, Norfolk Road Belgravia Dairy Co., 46, Porchester Road Mott, Jonah, 21, Whiteley, Wm., 157, Queen's Road Welford & Sons, 78, Skinner, Robert, 19, Fuller & Watts, 9, Do. Smith, John, 74, Richmond Road Aylesbury Dairy Co., St. Petersburgh Place Baynes, Wm., Hy., 1, Evan, James, 101, Talbot Road Smith, John, 86,

District No. 4.

Horniman, J., 20, Westbourne Grove

Bayford, Edwd. Alf., 2, Brindley Street Ballard, Thomas, 62, Do. Smith, John, 10, Chichester Street Smith, John, 7 & 8, Chichester Mews Handover, R., 105 Cirencester Street Gitgos, Mary A., 78, Do. Cox, Job, 16, Do. Love, George L., 14, Do. Do. Ewings, Bartholomew 2, Wilcox, Harriett, 6 Clarendon Street Lansdowne, Jane, 23, Morris, Bros., 54, Do. Keeber, John, 67, Do. Norfolk, Alice, 85, Do. Lloyd, Hannah Mary, 34, Delamere Cres-Phillips, Frances Elizh., 52, Hampden Street Haile, Hy., 288, Harrow Road

District No. 4.—Continued.

Sell, George 7, Hasborough Street
Humphreys, Wm., 73, Richmond Road
Wiskard, Wm., 34, Senior Street
Barrett, John Richard, 35, Do.
Jones, J., 28, Waverley Road
Hall, G., 45, Do.
Cole, Mrs. L. M., 129, Westbourne Park
Road (not Registered)
Higgins, Wm., 79, Do.
Poole, Peter, 34, Westbourne Terrace
North
Little, Alfred, 46, Do.
Lewis, Edwd., 13 Woodchester Street
Elson, Wm., 93, Do.

District No. 5.

Issacs, - , 2A, Ashmore Road Pink, G., 52, Chippenham Mews Munden, A., 63, Fernhead Road Lloyd, J. M., 75A, Norman, - , 2A, Bravington Road Jones, R., 52, Elgin Avenue Roland, E., 57 Johnson, —, 34, Kensal Road Humphreys, -, 57, Goldney Road White, E., 295, Harrow Road Bradley, S., 417, Do. Davis, G., 482, Do. Morgan, F., 538, Dunham, Elijah, 326, Do. Goodenough, Louisa, 6, Marylands Road Humphreys, -, 187, Saltram Crescent Wells, Robert Bubitt, 148, Shirland Road Maurice, J., 176, Jones, R., 6, Woodfield Crescent Day, S., 42, Woodfield Place Kitchinside, Wm., 29, Woodfield Road Barton, George, 44, Do.

APPENDIX B.

SALTRAM CRESCENT HIGH SCHOOL. (INFANTS' DIVISION).

Since the commencement of May last there have been 9 cases of diphtheria, with 4 deaths, among the members of the "baby" class of the Infant School, Saltram Crescent High School. From the 9 "primary" cases there have been 7 "secondary" cases, among the members of the families of these infants. All these 16 patients are Parishioners. I have also received information of 4 other cases, with two deaths, among children resident in Willesden, attending the same School and Class. The average number of children in the "baby" class is stated to be about 45. Tables showing the succession of cases with the dates of sickening (as far as known) and notification are appended to this Report, separate tables being given (a) for primary cases among Paddington children, (b) secondary cases among residents in this Parish, and (c) cases, not distinguishing primary and secondary, among residents of Willesden. (Not reprinted here).

It will be noticed that there were only two cases between May 1st and 8th, after which date a week elapsed without further cases, when the first of the cases in Willesden was reported. A week later, i.e., during the Whitsun Holidays, which extended from May 22nd to June 1st, a series of five cases were reported. It was hoped that the holidays would have sufficed to clear off the infection, but on the 6th inst. a further case occurred, followed by a second and a third on the 12th and 14th (?) of this month.

I have been in frequent communication with the Head Teacher of the Infants' Class since the re-opening of the School on June 1st. The attendance in the School generally is very low, due, as far as I can ascertain, to measles and whooping cough, and exclusion of children by reason of the diphtheria cases now dealt with. This morning only 7 babies attended School.

There have been no cases of diphtheria among the elder children of the School, except such as are secondary to cases of the baby class.

17th June, 1896.

Order made by the Sanitary Committee on 18th June, for the closure of the Infants' Class until the 10th day of August next.

During the summer holidays following the closing order, the drainage of the school was thoroughly examined and reconstructed. The old drain was found to be laid in without jointing material, and with a most erratic course, not following the lines shown on the plans in the keeping of the Vestry. There were a number of square junctions with nothing connected to them, their open ends being closed up with bricks. The ventilation of the drainage system was inadequate, and the soil-pipes, which were also drain ventilators, were defective in their joints. The surface water was received in brick catch pits of improper construction containing much deposit, and all the gulleys were foul. The water closets were in good condition and working order. There was one cistern for drinking water which was dirty.

One of the defective soil-pipes was in an angle of the building quite close to a window of the infants' room. The upper set of closets on this soil-pipe was not in use.

It should be added that one of the teachers at the school had been nursing a niece ill with diphtheria some few weeks before the outbreak in the school, and that the teacher herself had had a sore throat. Inquiries were made of the teacher's medical attendant, who expressed himself satisfied that the teacher had not had diphtheria. No bacteriological examination was made in connection with the teacher's case of sore throat.

ST. PAUL'S CHURCH SCHOOLS.

Ever since the beginning of the current school term it has seemed to me that there has been an unduly large number of cases of scarlet fever among the scholars of this school. In the five weeks already completed there have been 11 cases with an average number of 656 scholars on the rolls. The Amberley Road Board School has had the next highest number of cases, 7, the average number of scholars (according to the last Report of the School Board) being 993.

During the month of October, 8 scholars were reported to me to have the fever, and during the first four days of this month, 5 scholars have been so reported. A complete list of the scholars, with ages, addresses, and dates of attack, is appended hereto. (Not reprinted).

I ought to point out that there are, according to the information given to me by the School Teachers, 656 scholars on the roll, whilst, according to the same authority, the school has "places" for 558, i.e., there are close on 100 scholars in the school in excess of the accommodation. Judging simply by the number of cases reported, scarlet fever is more prevalent in the district around the school than in other parts of the Parish. It is worthy of note that the average attendance at the school is better this year than it was in the autumn of 1895.

4th November, 1896.

Order made by the Sanitary Committee on 5th November, for the closure of the whole school for three weeks.

In consequence of a letter as to the closure of this school, addressed by the Local Government Board to the Vestry, the incidence of scarlet fever on the Streets in the immediate neighbourhood of the school was gone into, and the following statement shows the excellent result following such closure.

WEEKLY NUMBERS OF CASES OF SCARLET FEVER IN SELECTED AREA.

The "Selected Area" embraces-

Brindley Street,
Alfred Road,
Waverley Road
Hampden Street,
Marlborough Street,

and the smaller streets and passages intercommunicating between these.

Repo	f Cases orted.	Week et	nding.			
				No. of Cases Reported.		
***	1	October	17th.		***	4
***	3	10	24th.		***	1
	2	",	31st.	***	***	7
١	1	Novembe	er 7th.	***	***	5
***	5	,,	14th.		***	2
	0	,,	21st.		***	1
	4	,,	28th.		***	0
	1					
		3 2 1 5 0 4	3 ,, 2 ,, 1 November ,, 5 ,, 0 ,, 4 ,,	3 , 24th 2 ,, 31st 1 November 7th 5 ,, 14th 0 ,, 21st 4 ,, 28th.	3 , 24th 2 ,, 31st November 7th 5 ,, 14th 0 ,, 21st 4 ,, 28th	3 , 24th

The School was closed on November 5th.

Taking the above 15 weeks in 5 three-week periods, the total for each period is:—

6, 6, 9, 13 (School closed), 3.

APPENDIX C.

ST. PETER'S PARK.

Houses,	Diph- Scarlet theria, Fever.	H	louses.		Scarlet Fever.
Ashmore road 246	5 16	Macroom road	21		2
Barnsdale road 75	2 8	Marylands road	87		2
Barnsdale yard 12		Marban place	15		
Bradiston road 22	1	Mozart street (3-7;			
Bravington road 227	13 24	2-12)	9		
Bravington yard 9		Oakington road	49	1	3
Chippenham mews. 71	3	Offenham terrace	18	5	1
Chippenham road . 110	3 3	Portnall road (3-			
Coomassie road 2		127; 2-106)	118	6	18
Croxley road (none	AL SECTION AND ADDRESS OF THE PARTY OF THE P	Rodborough mews.	12		
in 1891) 48	2 2	Rundell road	22		
Denholme road (2-		St. Luke's terrace	27		
34; 1-25) 30	1 2	St. Luke's yard			
Edbrooke road 59	6	Saltram crescent	150	9	5
72 1 1 10	1	Sevington street	16	2	1
Errington road 16 Elgin avenue (4-128;	1	Shirland mews	27	3	
	2 1	Shirland road (52-	~1		
77.1		010	179	8	16
T 1 1 -1 -009	13 12	Surrendale place	13		
The second secon		Sutherland avenue	10		***
	1 2	(2-84; 5-101)	91		3
T O' CLEAN TO THE TOTAL		PTS 3.1	14	***	1
	1 9		50	***	1
	0	Thorngate road			9
Grittleton road 21	2	Walterton road	107	6	3
Harrow road (pt. of,		Warlock road	73	2	
324- ; 219-319;	0 0	Windsor gardens	14	***	
353-421) 173	3 8	Windsor place	13		
Kennett road 36	1	Windsor street	17	***	
Lanhill road 35		Woodfield crescent	28	***	4
Lydford road 65	5				
Total	No. of houses	2,877			
	Diphtheria	95			
	Scarlet Fever	168			
		The second second			
	HALL	PARK.			
Adpar street 11	1 8	Hall place	117	3	6
Campbell street 26	2	Hall place West	9		
Church street 33		Hethpool street	47	1	10
G to to 1 99	1	Howell street	18		1
Cuthbert street 33	9				
	No. of houses	316			
	Diphtheria	5			
	Scarlet Fever	30			

CIRENCESTER AREA.

Houses. Diph- Scarlet theria. Fever.	Houses.	Diph- Scheria. F	
Alfred place 5 Jo	onson's mews 19		1
	arlborough street 49	2	16
	arlborough place	4	10
	liver mews 15		
	rchard street 8	1	2
Oli Chicocox present	hilip terrace 12		2
	anelagh road 42		***
Città Ciliatori Caraca III	anelagh mews		
AD THE VELLE VOICE VOICE VOICE	enior street 37	i	1
A CHAINCIC ICITACO	talham street 15		2
	Vaverley road 70	1	19
SEPTEMBER 1 DON'TOO 111	Vaverley terrace 5		
AATEMI DOLOGO III IO	Vestbourne terrace		
281; 264-322) 76 1 4	north (1-45) 46		
TT 1 19 1 W	Toodchester street 98	4	22
Hasboro street 13 1 1	oddonosti stron		
Total No. of houses	1,026		
Cases Diphtheria	20		
Scarlet Fever	169		
NORTH WHAT	RF AREA.		
Albert street 22 K	Tent's place 10		3
CI 1 1 N	orth wharf road 47	3	7
Church place	ictoria street 25		5
G 1 1 10 9 W	Vellings place 13	1	3
	Vharves north side 14		
Hermitage street 26 5 V	That too hotel blue 22	200	
Total No. of houses	224		
Cases Diphtheria	5		
	0		

"RETURN CASES," 1896.

Initials.	Sex & Age.	Disease.	Removed to Hospital.	Returned Home.	Notes, &c.
G. S. H. S.	F., 7 yrs. M., 4 yrs.	S. F.	Feb. 17th) ,, 25th)	May 16th	 E. S. (f., 9 years) taken ill with S. F. on the 21st May, 5 days after return of G. and H. S. *G. and H. S. seen 29th May; presented no symptoms. Apparently no failure in processes of disinfection.
Н. Р.	M., 4 yrs.	S.F.	June 13th	Sept. 19th	 R. P. (f., 3 years) taken ill with S. F. on 23rd Sept. H. P. and R. P. slept together night of 19th. H. P. then some inflammation of gums. H. P. seen 25th Sept., all clear. No evidence of failure of disinfection.
T. W.	M. 11 yrs.	S. F.	Aug. 24th	Nov. 4th	 E. W. (f., 2 years) ill with S. F. on 8th Nov., A. W. (f., 8 years) on 9th Nov. E. W. had been confined to house for 3 weeks prior to 8th Nov., with whooping cough. T. W., seen on 12th Nov., had scaly patches on chest and back, dry eczema, otherwise clear. T. W. slept with A. W. on night of 4th Nov. Street and school free from infection. No evidence of failure in disinfection.
F. S. W. S. M. S.	F., 10 yrs. M., 4 yrs. F., 9 yrs.	S. F.	Sept. 18th) Oct. 2nd	Nov. 25th	 M. S. (f, 12 years) sickened with S. F. on 29th Nov. F., W., and M. S. seen on 1st Dec. F. and W. quite clear, M. desquamating slightly on toes, and had some herpes at angle of mouth. M. seen next day by Dr. Bruce (for M. A. B.) and re-admitted to hospital. No evidence of failure of disinfection.
A. C.	F., 7 yrs.	S. F.	Oct. 15th	Dec. 4th	 J. C. (m., 4 years) sickened with S. F. 7th Dec. A. C. seen 11th Dec., free from desquamation, but some discharge from the nose, with crusts in nostrils, and fissure under lobes of ears. No evidence of failure of disinfection.

^{*} The children were in each instance examined by the Medical Officer of Health, after their return from Hospital.

TABULATED LIST OF ARTICLES ANALYSED

During the Year ended March 31st, 1897.

Art	lcle anal	ysed.	Total number.		Number adulterated.	Percentage adulterated.
Milk			 202		14	 60
Butter			 69		7	 10
Lard			 17		0	 0
Coffee			 23	***	3	 13
Bottled	Fruits		 10		0	 0
Mustard	l		 10		0	 0
Pepper			 9		0	 0
Brandy			 9		1	 11
Whiske	y		 4		0	 0
Gin			 4		0	 0
Rum			 2		0	 0
Ginger			 2		0	 0
Cocoa			 2		0	 0
Sauce			 2		0	 0
Boracic	Acid		 1	***	0	 0
Opium '	Tinetur	е	 1		0	 - 0
			366		25	6.8

Total of fines imposed, £54.

ALF. W. STOKES, F.C.S., F.I.C., (Public Analyst.)

LABORATORY,

VESTRY HALL,

PADDINGTON GREEN, W.

G2 FEB 062

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