Annual report for 1894 of the Medical Officer of Health.

Chelsea Vestry.

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FOR 1894,

OF THE

Medical Officer of Health.

LOUIS C. PARKES,

M.D.; D.P.H. Lond. Univ.; M.R.C.S. Eng.

FELLOW OF THE SANITARY INSTITUTE AND MEMBER OF THE BOARD OF EXAMINERS;
FELLOW OF THE SOCIETY OF MEDICAL OFFICERS OF HEALTH;
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TOWN HALL, KING'S ROAD, CHELSEA.

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ANNUAL REPORT

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SECTION I.—STATISTICAL.

POPULATION OF CHELSEA.

The estimated population of Chelsea to the middle of the year 1894 is 99,052. The estimated population of each sub-district is as follows :—

Chelsea North	...	...	...	41,303
Chelsea South	...	...	...	33,661
Kensal Town	...	...	...	24,088

BIRTHS AND BIRTH-RATE FOR 1894.

Table I. gives the births and birth-rate per 1,000 per annum in each district of Chelsea, in the whole parish, and in London.

TABLE I.

	Number of Births.	Birth-rate per 1000.
Chelsea North	1,218	29·6
Chelsea South.....	810	24·2
Kensal Town	672	28·0
Whole Parish	2,700	27·4
London	130,553	30·2

In 1891 the birth-rate of Chelsea was 29·1 ; in 1892 it was 28·7 ; and in 1893 it was 29·2.

DEATHS AND DEATH-RATE FOR 1894.

The total number of deaths registered in the parish was 1,720. Of this total 332 were deaths, within the district, of non-parishioners —chiefly occurring in the hospitals in the parish ; and 229 deaths of parishioners of Chelsea occurred outside the district. There were, therefore, 1,617 deaths of parishioners of Chelsea. These 1,617 deaths are equivalent to a death-rate for the year of **16·4 per 1,000.** The death-rate of all London for the year was 17·8.

This death-rate of 16·4 per 1,000 is by far the lowest of any recorded in Chelsea for the past 11 years, as is shown by the following table, which gives the true corrected death-rates of Chelsea and of London (not corrected for age and sex distribution).

TABLE II.

Year.	Chelsea.	London.
	Death-rate per 1,000.	Death-rate per 1,000.
1884.....	21·4	20·8
1885.....	22·7	20·3
1886.....	21·6	20·5
1887.....	22·0	20·3
1888.....	19·6	19·3
1889.....	18·6	18·3
1890.....	20·4	21·5
1891.....	21·0	21·4
1892.....	20·8	20·4
1893.....	20·0	21·3
1894.....	16·4	17·8

The low death-rate of the past year is no doubt in part due to the comparative little prevalence of influenza, which directly and indirectly caused such heavy mortalities in the years 1890, 1891, and 1892; and in part to the coldness of the summer season in 1894. There is, however, ground for believing that the continually improving sanitary condition of the parish is accountable to some extent for the low death-rate of 1894, and that Chelsea is now reaping the benefit of those sanitary improvements which have been inaugurated in recent years.

The corrected death-rate of Kensal Town for 1894 was only 12·5 per 1,000, as against 14·8 per 1,000 in 1893. The corrected death-rate of the Home District (Chelsea North and South) was 17·6 per 1,000, as against 21·6 per 1,000 in 1893.

Zymotic death-rate.—The death-rate in Chelsea from the seven principal zymotic diseases was 2·5 per 1,000 in 1894, as against 2·66 per 1,000 in London generally. In 1891, the zymotic death-rate in Chelsea was 2·0 per 1,000; in 1892 it was 3·1 per 1,000; and in 1893 it was 3·0 per 1,000. The decrease in 1894 was chiefly due to diminished mortalities from scarlet fever, whooping-cough, and diarrhœa. Measles, however, was again prevalent last year, causing no fewer than 69 deaths.

TABLE III.—*For the Year* 1894.

	Birth-rate per 1,000.	Death-rate per 1,000.	Zymotic death-rate.	Influenza death-rate.	Phthisis death-rate.	Other Tubercular Diseases death-rate.	Respiratory diseases death-rate.	Deaths under 1 year, to 1,000 births.	Percentage of deaths under 5 to total deaths.
Chelsea	27·4	16·4	2.5	0·28	1·5	0·73	3·0	132	36·4
London	30·2	17·8	2.7	0·15	1·7	0·70	3·4	143	40·7

The mortality from *Diphtheria* was nearly identical with that of 1893, and was largely in excess of the average of the past 10 years (*see* Tables IV. and V.), but Chelsea's figure for the past year is again below Chelsea's proportion of the total diphtheria deaths in London, showing that many districts in London suffered more severely from this disease in 1894 than did our own parish.

TABLE IV.—*Zymotic Disease Mortality in Chelsea in* 1894.

	Actual number of Deaths in Chelsea.	Chelsea's proportion of total London Deaths according to its population.
Small Pox	0	2
Measles	69	75
Scarlet Fever	16	22
Diphtheria	49	61
Whooping Cough	38	48
Enteric Fever	14	14
Diarrhœa	52	41
Influenza	28	15

Scarlet Fever was much less prevalent in 1894 than in 1893, and the mortality from this cause was only half of that which prevailed in the latter year. The Metropolitan Asylums Board Fever Hospitals were at no time so full that admission had to be refused to cases of scarlet fever.

The *Diarrhœa* mortality in 1894 was less than half of that which occurred in 1893. This low mortality is chiefly attributable to the cold and wet summer of the past year. There was also a complete absence of any cases in any way resembling Asiatic cholera.

TABLE V.—*Zymotic Mortality in Chelsea.*

	Deaths in 1894.	Average number of Yearly Deaths in 1884–93.
Measles	69	61
Scarlet Fever	16	17
Diphtheria	49	30
Enteric Fever	14	14
Whooping Cough	38	63

Influenza.—The number of deaths referred to influenza, as a primary or secondary cause of death, amounted to 28 in 1894, as against 33 in 1893, 84 in 1892, 90 in 1891, and 18 in 1890. In London, deaths have been recorded from influenza in every week of the year, but, with the exception of the first six weeks of the year, the mortality was slight.

Respiratory Diseases.—The death-rate from diseases of the respiratory organs was 1·3 per 1,000 lower than in 1893, and was the lowest recorded during the past 10 years.

TABLE VI.—*Respiratory Diseases.*

DEATH-RATE PER 1,000 PER ANNUM.

Years.	Chelsea.	London.
1884-89 (inclusive).....	4·3	4·2
1890 (1st Influ. epidemic)	4·4	5·0
1891 (2nd " ")	5·5	5·3
1892 (3rd " ")	4·8	4·6
1893 (4th " ")	4·3	4·6
1894	3·0	3·4

Tubercular Diseases.—The death-rate from Phthisis and other tubercular diseases in Chelsea in 1894 was 2·23 per 1,000, as against 2·4 per 1,000 in London generally. The average death-rate from these diseases in Chelsea during the ten years 1884-93 was 3·12 per 1,000.

Cancer.—Malignant cancerous diseases caused 77 deaths amongst Chelsea parishioners. The average of the 10 years 1884-93 is 75 deaths annually from cancer in Chelsea.

Deaths in Public Institutions.—In 1894, 34·4 per cent. of the total deaths of parishioners of Chelsea occurred in public institutions, the average for the three years 1891-2-3 being 30·7 per cent. In the same period 14·9 per cent. of the total deaths of parishioners occurred in the Chelsea Workhouse and Infirmary, the average of the three years 1891-2-3 being 15·2 per cent.

TABLE OF DEATHS DURING THE YEAR 1894, IN THE METROPOLITAN SANITARY DISTRICT OF CHELSEA; CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities.	Mortality from all causes at subjoined Ages.							Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																				
												Fevers.																
	At all ages.	Under 1 year	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa and Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All Other Diseases.	Total.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Chelsea North, exclusive of Public Institutions	458	123	53	21	9	160	92	Under 5	...	...	4	1	...	...	...	...	...	...	2	18	9	13	...	...	...	42	1	5	81	176
								5 upwds.	...	...	4	...	...	3	...	...	...	...	...	2	...	1	1	...	33	61	38	7	132	282
Chelsea South, exclusive of Public Institutions	369	105	58	16	13	111	66	Under 5	...	1	4	1	...	...	...	...	...	...	...	31	9	10	...	...	...	28	1	4	74	163
								5 upwds.	...	1	1	...	...	4	...	...	...	...	...	...	1	3	1	...	29	42	28	7	89	206
Kensal Town	235	82	42	7	9	66	29	Under 5	...	...	...	2	...	...	...	...	...	...	...	15	13	10	...	...	...	31	...	...	53	124
								5 upwds.	...	...	1	...	...	...	...	...	3	...	2	...	...	1	1	...	18	16	16	2	51	111
Workhouse and Infirmary	241	26	14	2	10	109	80	Under 5	...	...	1	1	...	...	...	...	...	...	...	...	4	5	...	...	...	5	...	...	24	40
								5 upwds.	...	...	..	...	...	1	...	...	...	...	1	...	...	3	1	...	44	43	22	5	81	201
Brompton Hospital	111	...	...	5	25	80	1	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
								5 upwds.	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	87	5	11	...	7	111
Cancer Hospital	93	...	...	...	3	83	7	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
								5 upwds.	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	1	...	...	...	92	93
Hospital for Women	4	...	...	...	...	4	...	Under 5	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
								5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4
Royal Hospital for In-Pensioners	53	1	1	....	..	12	39	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	2
								5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	13	14	...	21	51
Victoria Hospital for Children	144	54	76	14	...	...	...	Under 5	...	...	2	...	...	1	...	...	...	...	1	1	2	13	...	...	...	35	3	6	66	130
								5 upwds.	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	9	14
Cheyne Hospital, St. Camillo's Hospital	12	1	1	7	..	3	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
								5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	7	10
Totals	1720	392	245	72	69	628	314	Under 5	...	1	11	5	...	1	...	...	...	...	3	65	38	52	...	...	...	141	5	15	300	637
								5 upwds.	...	1	8	...	...	9	...	...	3	...	3	2	1	10	4	...	216	180	131	22	493	1083

The subjoined numbers have also to be taken into account in judging of the above Records of Mortality.

Deaths occurring outside the district among persons belonging thereto	229	10	44	29	18	110	18	Under 5	...	12	21	...	...	..	...	...	...	...	...	2	...	...	...	...	...	7	1	...	11	54
								5 upwds.	...	2	12	...	...	6	...	...	...	...	...	...	...	...	1	...	23	8	25	25	73	175
Deaths occurring within the district among persons not belonging thereto	332	46	57	19	28	170	12	Under 5	...	...	2	...	...	1	...	...	...	...	...	...	1	10	...	...	...	28	2	3	56	103
								5 upwds.	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	90	8	12	7	110	229

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH DURING THE YEAR 1894, IN THE METROPOLITAN SANITARY DISTRICT OF CHELSEA; CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.													Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospital.												
									Fevers.													Fevers.								
	Census 1891.	Estimated to middle of 1894.			Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.			Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.		
(a)	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
Chelsea Home District	74,466	74,964	2028	Under 5	...	70	51	3	...	5	...	...	...	...	4	...	...	...	50	20	..	...	1	...	...	...	...	...	...	...
				5 upwds.	6	149	109	1	...	72	1	...	6	...	92	...	...	6	101	59	...	...	44	...	...	...	...	...	...	...
Public Institutions:—																														
Chelsea Workhouse and Casual Ward	...	...	...	Under 5	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	3	...	...	...	1	...	...	...	...	2	...	...	...	3	...	...	...	1	...	...	...	...	...	...	...
Chelsea Infirmary	...	...	...	Under 5	...	2	5	...	...	1	...	...	...	...	1	...	...	...	2	5	.	...	1	...	...	...	...	...	...	...
				5 upwds.	...	3	2	...	...	3	...	...	...	...	4	...	...	...	3	2	...	..	3	...	...	...	...	...	...	...
Chelsea Barracks	...	...	...	Under 5	...	3	...	...	...	...	...	...	...	...	1	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
St. George's Infirmary	...	...	...	Under 5	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...
				5 upwds.	1	1	5	...	...	...	...	..	...	...	13	...	...	1	1	5	...	...	...	...	...	...	...	...	...	...
St. George's Workhouse	...	...	...	Under 5	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	...	2	...	...	...	...	...	...	...	6	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
Victoria Hospital	...	...	...	Under 5	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	2	11	...	...	1	...	...	...	...	...	...	...	...	2	11	...	...	1	...	...	...	...	...	...	...
Duke of York's School	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer Hospital	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Women's Hospital	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	2	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Consumption Hospital	...	..	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Kensal Town	21,787	24,088	672	Under 5	...	26	13	1	...	...	...	...	...	...	...	...	...	...	19	9	...	...	...	...	...	...	...	...	...	...
				5 upwds.	5	53	28	...	...	10	...	...	5	...	17	...	...	5	37	15	...	...	7	...	...	...	...	1	...	...
Totals				Under 5	...	102	85	4	...	6	...	...	...	...	7	...	...	...	75	49	...	...	2	...	...	...	...	...	...	...
				5 upwds.	12	214	158	1	...	89	1	...	11	...	137	...	...	12	150	91	...	..	58	...	...	...	...	1	...	...

SECTION II.

THE WATER SUPPLY OF CHELSEA.

The quality of the water supplied to Chelsea in 1894 was up to the average standard. The examinations of the official analyst for the Local Government Board—Dr. E. Frankland—show that about 99 per cent. of the bacteria present in the unfiltered Thames water at Hampton are removed by the processes of subsidence and filtration carried out by the Chelsea Water Works Company. The largest number of microbes present in a cubic centimete of the Chelsea water was 64 (in January), and the smallest number 6 (in May). Professor Koch has laid down the rule that good drinking water should not contain more than 100 microbes per cubic centimetre, so that, if this dictum is accepted, the Chelsea water supply in 1894 was satisfactory from a biological standpoint.

The unsatisfactory character of the Thames at Hampton as a source of supply to London, and the absolute necessity for continual care and watchfulness in conducting the filtration, by which alone the water is rendered fit for human consumption, are shown by the descriptions of the Thames water as it flows along the river at Hampton. In every month of the year it is described as turbid and yellow in colour, whilst in January it was "very turbid and pale brown," and in November it could only be described as "extremely bad." It cannot be doubted that at times the raw material on which the Water Companies are required to operate is of a highly polluted character.

Constant Supply.—The percentage of house supplies on the constant system in the Chelsea Company's district was 63 at the end of the year 1894, as against 51 at the end of the year 1893. Before the end of the present year (1895) the whole of the parish (home district) should be receiving a constant supply of water, the London County Council having required the Chelsea Water Works Company to afford a constant supply of water upon and from the 1st day of March, 1895, to the north-eastern portion of the parish —the only part of the parish now remaining on the intermittent service.

THE NOTIFICATION OF INFECTIOUS DISEASES.

Small-pox.—In Chelsea, 12 cases of this disease were notified in 1894 as occurring amongst Chelsea parishioners. Seven of these cases occurred in the home district, and five in Kensal Town, but of these latter one was a case of mistaken diagnosis, the patient suffering from blood-poisoning, and not from small-pox. In 1893 there were 29 cases of small-pox in Chelsea, and in 1892 four cases. During the past year, with one exception—that of an inmate of the St. George's Workhouse—all the cases occurred amongst the general

population; and the Chelsea Workhouse, Casual Wards, and Common Lodging Houses were free from small-pox infection.

In London during 1894, 1,391 cases of small-pox were notified, as against 2,933 cases in 1893, and 436 cases in 1892. The parish of Marylebone suffered far more severely than any other London parish, 417 cases of small-pox being notified during the year. The Portland Town epidemic, which occurred in July and August, and which was a distinct menace to the health of London, accounts for the excessive prevalence of small-pox in Marylebone.

SCARLET FEVER, DIPHTHERIA, & ENTERIC FEVER.

Table VII. shows the comparative prevalence of these diseases in London, and in the western districts of London, during 1893 and 1894.

TABLE VII.—*Notifications in* 1893 *and in* 1894 *per* 10,000 *of Population* (1891 *Census*).

	Small-pox.		Scarlet Fever.		Diphtheria.		Enteric Fever.	
	1893	1894	1893	1894	1893	1894	1893	1894
*LONDON..... ..	6·96	3·30	90·0	45·0	31·9	26·4	8·90	8.41
Chelsea	4·78	1·25	62·6	32·8	24·5	25·2	8·30	9·87
Kensington	5·77	1·08	57·5	23·4	22·1	16·1	6·10	5·41
*Fulham	3·38	5·02	78·7	59·7	26·2	36·3	6·70	4·58
*Hammersmith	1·85	0·82	70·6	34·7	28·6	19·1	7·00	5·86
*Paddington	6·11	2·55	69·8	25·6	24·7	33·4	6·00	6·36
*St. George's, Hvr. Sq	3·06	1·53	80·4	34·3	15·6	14·8	9·20	9·44
*Westminster	8·79	0·18	76·7	26·6	15·2	14·6	8·10	8·46
*St. James's.....	22·41	1·60	50·4	26·0	19·6	15·2	8·80	10·00

.* Uncorrected for dual notification.

The most noticeable feature of the past year is the greatly diminished prevalence of *scarlet-fever* as compared with 1893. The diminution in Chelsea corresponds fairly closely with the diminution in London generally.

The presence of *diphtheria* in Chelsea was very slightly in excess of that in 1893. There was, however, a slight diminution in the prevalence of this disease in the metropolis as a whole.

The influence of the aggregation of children in schools upon the prevalence of diphtheria has been studied by Mr. Shirley Murphy and other observers; and prominence has been given to the fact that since the passing of the Elementary Education Act in 1870, and the commencement of the Board School system, diphtheria has steadily and greatly increased in London and other urban centres. It is also somewhat remarkable that in certain years recently, the

notifications of diphtheria occurring in children of school-age (3 to 13 years) have suddenly undergone a very considerable reduction during the period of the summer holidays, when the schools have been closed, but have increased again very largely in the week following the re-opening of the schools—the incidence of the disease upon children under 3 years, and upon persons over 13 years being comparatively unaffected by school closure.

Recent research has shown that the specific organism of diphtheria—the Loeffler bacillus—may be found in the throat secretions of patients convalescent from this disease for very considerable periods after the disappearance of all symptoms, and at a time when the patient is to all appearances completely recovered. The specific organism has also been found in the throats of those who are apparently suffering from simple tonsillar inflammation, without any diagnostic sign of diphtheria being present. It is highly probable that wherever the virulent organism is present, there is a real danger of infection being imparted; and such facts as these show that the problem of the prevention of diphtheria is one attended with many grave difficulties.

It is understood that the method of bacteriological diagnosis of cases admitted as diphtheria is now being extensively employed at the Metropolitan Asylums Board Fever Hospitals, and that convalescents from this disease are not permitted to return to their homes until a bacteriological examination has shown that the diphtheria bacillus is no longer to be found in the secretions of the patient. Such a precaution as this was urgently necessary, and is likely to be productive of much good. The larger question of the establishment by municipal means of a system of gratuitous bacteriological examination in aid of the diagnosis of medical practitioners throughout London is still under consideration.

Typhoid Fever showed a slight increase in 1894 over that observed in 1893. As usual, the greatest prevalence was in the last four months of the year, 43 out of the total of 85 cases occurring in the home district having been notified in these months. Only two cases of this disease were notified in August, whereas twelve were brought to the knowledge of the department in September. It is probable that a considerable percentage of the September cases contracted the infection outside Chelsea, when away for their annual holidays.

In *Kensal Town* in 1894 there were 79 notifications of scarlet fever, 41 of diphtheria, and 10 of enteric fever. In proportion to its population Kensal Town's share of the total Chelsea notifications was, scarlet fever 77, diphtheria 59, and enteric fever 23; thus showing that whilst scarlet fever prevailed relatively to the same extent in Kensal Town as in the home district, the former district suffered less from diphtheria, and very much less from enteric fever than the home district.

The following Table IX. shows the case mortality, or percentage of deaths to notifications, of scarlet fever, diphtheria, and enteric fever in Chelsea and in London for each of the five years 1890-4.

TABLE IX.—*Case Mortality in Chelsea and in London*, 1890–94.

	Scarlet Fever.		Diphtheria.		Enteric Fever.	
	Chelsea.	London.	Chelsea.	London.	Chelsea.	London.
1890	7·0	5·7	20·1	24·1	17·4	23·0
1891	3·6	5·1	9·6	22·5	17·4	15·6
1892	5·3	4·3	22·2	23·9	13·6	17·2
1893	5·3	4·3	20·8	24·5	22·1	18·4
1894	5·1	5·1	20·2	24·0	14·7	17·9

These figures show that the type of these three diseases, as regards severity and fatal terminations, corresponds in Chelsea fairly closely with that common to the Metropolis as a whole; except in respect of diphtheria in the year 1891, when either the type of this disease in Chelsea was most unusually mild—the case mortality being less than half that of London—or else there was a considerable amount of notification under the head of diphtheria of illnesses which had little in common with that disease—a conclusion somewhat strengthened by the fact that in this year only 15 per cent. of the notified diphtheria cases were removed to hospital (*see* Table X.).

Table X. exhibits the removals of patients suffering from scarlet fever, diphtheria, and enteric fever from their homes to hospitals, in each of the five years 1890-4, expressed as percentages of the total numbers of cases notified.

TABLE X.—*Percentage Removals to Hospitals.*

	Scarlet Fever.	Diphtheria.	Enteric Fever.
	Per cent.	Per cent.	Per cent.
1890	37	20	29
1891	40	15	22
1892	48	27	32
1893	50	41	38
1894	71	58	63

It is very satisfactory to find so large an increase in the percentage of removals to hospital in the past year, and that this increase has been a steadily progressive one since 1890, the year following the introduction of compulsory notification. There can be no doubt that the public are beginning to appreciate at their true value the immense advantages offered to them for the isolation and treatment of their infectious sick by the hospitals of the Metropolitan

Asylums Board. It is pleasant also to be able to report that the ambulance arrangements of the Board for the conveyance of patients continue to give every satisfaction.

SPECIAL REPORTS.

During the past year I have had the honour to present special reports on the under-mentioned subjects for the consideration of the Vestry :—

January 9th.—The utilisation of Unemployed Labour in relation to the work of the Public Health Department.
February 6th.—Chelsea Hospital for Women.
February 20th.—Chelsea Hospital for Women.
March 6th.—Deaths consequent upon Surgical Operations.
March 20th.—Chelsea Hospital for Women.
April 3rd.—Urinal in Moore Street.
April 17th.—No. 9, Regent Place.
May 22nd.—Notification of Typhus at 11, Ellis Street.
June 19th.—Inspection of Bakehouses.
July 17th.—Grand Junction Canal, Kensal Town.
July 24th.—Report by Committee of Inquiry in regard to statements made by Dr. Parkes as to the Chelsea Hospital for Women.
July 31st.—Thames Foreshore.
September 25th.—Cow-houses and Slaughter-houses.
October 9th.—Fourth Avenue, Kensal Town.
October 23rd.—The Vestry *v.* Richardson (*re* 32, Francis Street).
November 6th.—Fourth Avenue, Kensal Town : Milk Adulteration (*re* Defiance Farm Dairy).
December 18th.—The Vestry *v.* Stevens (Defiance Dairy).

WORK OF THE PUBLIC HEALTH DEPARTMENT.

Appended are tabular statements, which give full information as to the detailed work of the department during the year 1894.

I am, my Lords and Gentlemen,

Your obedient servant,

LOUIS C. PARKES,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT.

Summary of Nuisances and other matters reported on and work done during the year 1894.

HOUSES AND PREMISES :—	Home District.	Kensal Town.	Total.
*Reported on respecting nuisances complained of	1201	301	1502
Reported on with reference to infectious cases	669	158	827
Cleansed and whitewashed	410	146	556
Defective roofs repaired	71	23	94
Disinfected, cleansed and purified after zymotic diseases	411	149	560
Cases of overcrowding abated	20	5	25
Dust-bins, new, provided	142	19	161
„ repaired	11	38	49
Underground rooms reported as occupied contrary to Act	3	—	3
Houses closed as unfit for human habitation...	18	—	18
DRAINAGE :—			
Drains opened, cleansed and made sound ... „ trapped with stoneware gullies ...	227	104	331
Water-closets cleansed and repaired	208	39	247
„ new pans and traps provided ...	233	27	260
Spout drains cleansed, repaired, or renewed...	131	86	217
Sink, bath, and lavatory waste pipes disconnected	204	21	225
Soil pipes ventilated or repaired	112	10	122
„ new, provided	35	—	35
New drains laid, in accordance with Vestry's regulations	144	6	150
WATER SUPPLY :—			
For domestic purposes, provided where cut off by Water Company	25	4	29
For water-closets, by providing check cisterns	265	51	316
Main cisterns cleansed or repaired	50	41	91
„ new, provided	11	1	12
NUISANCES ABATED ARISING FROM—			
Keeping of animals	9	1	10
Accumulations of manure and other filth ...	24	17	41
Yards cleansed, paved, or drained	83	110	193
Smoke	4	1	5

* This does not include re-visits to premises to ascertain works in progress, or premises visited where no nuisances were found to exist, which, if added, would at least treble the number of visits made.

MISCELLANEOUS :—	Home District.	Kensal Town.	Total
Dead bodies removed to Public Mortuary for sanitary reasons	7	—	7
Goods disinfected after infectious cases at station	5613	175	5788
Goods destroyed after infectious cases ...	62	—	62
Number of samples taken for analysis (Food and Drugs Act)	108	41	149
Unsound Food. Number of boxes of fish, &c., condemned and destroyed	27	—	27
PROCEEDINGS TAKEN :—			
Notices issued for sanitary works, &c., including infectious diseases notices ...	1602	229	1831
Legal proceedings in respect of defective sanitary arrangements, nuisances, &c. ...	8	—	8
Legal proceedings in respect of food adulteration	6	1	7
CORRESPONDENCE :—			
Number of letters written in connection with sanitary matters, including those of Medical Officer of Health	589	181	770
Daily returns of infectious cases sent to Metropolitan Asylums Board	250	—	250
Notification of infectious cases sent to School authorities	279	153	432
Entries in Inspectors' Report Books	1164	229	1393
„ Inhabitants' Complaint Book ...	105	—	105
Certificates of Disinfection given	126	—	126

The cow-houses and slaughter-houses were inspected by a Sub-Committee of the Works and General Purposes Committee and Medical Officer of Health prior to licenses being renewed in October last, and a list of the retail bakehouses under inspection in Chelsea forms a separate Appendix.

Sanitary Inspectors.

ALEXANDER GRANT, } Home
WILLIAM CHAS. LIGHTFOOT, } District.
JAMES JOHN MACKAY, Kensal Town.

HOME DISTRICT.

MAGISTERIAL PROCEEDINGS UNDER THE PUBLIC HEALTH (LONDON) ACT, 1891.

Address of Premises.	Nature of Nuisance or Complaint.	Date of Hearing.	Result.
437A, King's-road. (Archway.)	Want of proper supply of water to the premises.	Mar. 5th. / „ 7th.	Adjourned to March 7th. Order for water to be put on in 4 days, and 23s. costs.
20, Poulton-square.	Want of proper supply of water to the premises.	„ 14th.	Order for water to be put on in 48 hours, and 23s. costs.
42, Poulton-square.	Want of proper supply of water to the premises.	„ „	Adjourned *sine die*. House vacated previous to hearing.
9, Regent's-place.	Defective drains.	Apr. 5th.	Order for work to be done in 3 weeks, and 23s. costs.
Cheyne-walk.	Selling unsound fruit in Cheyne-walk.	July 27th.	Fine, £3.
23 & 25, North-street.	Defective drains, delapidated premises, &c.	Sept. 6th.	Closing order, and £3 3s. costs.
22, Beaufort-street.	Want of water to premises.	Oct. 12th.	Adjourned *sine die*. House vacated previous to date of hearing.
32, Francis-street.	Filthy and delapidated premises, and defective yard surface.	„ 19th.	Summons dismissed as regards whitewashing, &c. Order for yard to be paved.

Total of Penalties and Costs (Home District), £10 12s.

HOME DISTRICT.

MAGISTERIAL PROCEEDINGS DURING 1894, UNDER THE SALE OF FOOD AND DRUGS ACTS.

Streets were purchased.	Article.	Extent of Adulteration.	Date of Hearing.	Result.
Edith-grove.	Milk.	83% fat abstracted, and assault	Jan. 16th.	Defendant did not appear. Warrant granted for the assault; fined 20s., and 2s. costs. Fresh summons for adulteration.
			,, 29th	Fined 40s. and 3s. costs.
Robertson-street.	,,	16% fat abstracted.	,, 16th	Withdrawn on liquidation of the Company. Fresh summons granted against D. H., the then owner.
			,, 26th	Fined £5, and £2 2s. costs.
King's-road.	,,	50% fat abstracted.	,, 26th	Fined £2, and 3s. costs.
Marlborough-road.	,,	7% added water.	Feb. 7th	,, £3, and 23s. costs.
Sydney-street.	,,	7% ,,	,, 10th	,, £2, and 23s. costs.
Smith-terrace.	,,	90% fat abstracted.	Nov. 27th	,, £10, and 11s. 6d. costs.

KENSAL TOWN.

Mozart-street	Milk.	50% fat abstracted.	Feb. 23rd	Fined £2, and 12s. 6d.

Total of Penalties and Costs, £34.


BRITISH MUSEUM
28
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FEB