Annual report for 1893 of the Medical Officer of Health.

Chelsea Vestry.

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For 1893,

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 AND MEMBER OF COUNCIL OF THE SOCIETY OF
MEDICAL OFFICERS OF HEALTH;
LECTURER ON HYGIENE AND PUBLIC HEALTH AT ST. GEORGE'S HOSPITAL
MEDICAL SCHOOL.

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 midddle of the year 1893 is 98,206. The estimated population of each sub-district is as follows :—

Chelsea North	...	...	...	41,430
Chelsea South	...	...	...	33,401
Kensal Town	...	...	...	23,375

Age and Sex Distribution.—The following Table shows the relative proportions of the two sexes—expressed as per centages of the total populations—in England, London, and Chelsea (1891 Census):—

TABLE I.

	Males.	Females.
England	48·45	51·55
London	47·27	52·73
Chelsea	47·39	52·61
Chelsea North	*44·32*	*55·68*
Chelsea South	*49·34*	*50·66*
Kensal Town	*50·14*	*49·86*

It will be seen from this Table that the excess of females over males in Chelsea, is due to the disproportionate number of the former in Chelsea North—a disproportion due, no doubt, to the large number of female domestic servants residing in this portion of the parish.

The age distribution of the population of England, London, and Chelsea, is given in Table II., which shows the percentage proportions of the respective populations living at seven age-periods (1891 Census).

TABLE II.—*Persons.*

	Under 5 years.	5—10	10—20	20—35	35—55	55—75	75 and upwards.
England	12·25	11·71	21·29	24·22	20·09	9·12	1·32
London	11·91	10·78	19·78	27·21	21·09	8·18	1·05
Chelsea	11·07	10·00	18·76	28·17	22·24	8·65	1·11

From this Table it appears that London and Chelsea have a somewhat smaller proportion of children under 5 years of age, and

also a somewhat smaller proportion of old people over 55 years, than is the case in all England. Table I. showed that the proportion of females to males is also a little greater in London and in Chelsea than in the whole of England.

These facts are of importance in their bearing upon death-rates. The death-rates of children under 5 years and of old people over 55 years, are very greatly in excess of the death-rate for all ages. The death-rates of females also are at all ages lower than the corresponding death-rates of males. Consequently no comparison ought to be instituted between the death-rates of different districts, unless the age and sex distribution of the populations is identical or very nearly so; or unless a correction has been made for differences of age and sex distribution.

The average death-rate of England and Wales during the 10 years 1881-90, was 19·149 per 1,000. If the death-rate of England and Wales for each sex at twelve different age-periods during this period is applied to the London population with age and sex distribution, as shown by the 1891 Census, a death-rate for all ages of 17·974 per 1,000 is obtained, which is 1·175 per 1,000 lower than that of all England—this difference being due to the proportional ages and sex of the population in London differing from those obtaining in the whole of England. Consequently, when comparing the death-rate of London with that of England and Wales, the former should be corrected by multiplying it by the factor 1·06537. The factor for correcting the Chelsea death-rate is 1·06555 which is so nearly identical with the London factor as to show that the death-rates of Chelsea and London are fairly comparable with each other without correction.

The death-rates of other parishes in London may have to be corrected for comparison with London. For instance, the correction factor of St. George's, Hanover-square, is 1·10547, showing that its age and sex distribution is favourable to a lower mortality than that of all London, whilst some East-End and working-class parishes must have their uncorrected death-rates multiplied by a factor which is less than unity, in order to make them fairly comparable with the death-rate of the metropolis.

BIRTHS AND BIRTH-RATE FOR 1893.

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

TABLE III.

	Number of Births.	Birth-rate per 1000.
Chelsea North	1,265	30·6
Chelsea South	863	25·9
Kensal Town	726	31·2
Whole Parish	2,854	29·2
London	132,965	31·0

DEATHS AND DEATH-RATE FOR 1893.

The total number of deaths registered in the parish was 2,125. Of this total, 412 were deaths, within the district, of non-parishioners —chiefly occurring in hospitals; and 245 deaths of parishioners of Chelsea occurred outside the district. There were, therefore, 1,958 deaths of parishioners of Chelsea. These 1958 deaths are equivalent to a death-rate for the year of **20·0 per 1,000.** The death-rate of all London for the year was 21·3 per 1,000.

The corrected death-rates of Chelsea and of London for the past ten years are as under:—

TABLE IV.

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

The increased death-rates in 1890, 1891, and 1892, as compared with 1888 and 1889, are attributable to the prevalence in each of the later years of epidemic influenza, which caused a heavy mortality, and largely increased the number of deaths amongst old people from diseases of the respiratory organs.

The corrected death-rate of Kensal Town for 1893 was 14·8 per 1,000, as against 17·2 per 1,000 in 1892. The corrected death-rate of the home district (Chelsea North and South) was 21·6 per 1,000, as against 21·9 per 1,000 in 1892.

Zymotic death-rate.—The death-rate in Chelsea from the seven principal zymotic diseases was 3·0 per 1,000 in 1893, as against 3·1 per 1,000 in London generally. In 1891, the zymotic death-rate in Chelsea was only 2·0 per 1,000; in 1892 it was 3·1 per 1,000. The increase in 1892 was largely due to the epidemic prevalence of measles in the spring of that year, whilst the continuing high rate in 1893 is due to larger mortalities from whooping cough, diarrhœa, diphtheria, and enteric fever, than occurred in 1892, measles being only slightly prevalent.

TABLE V.—*For the Year* 1893.

	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	29·2	20·0	3·0	0·34	2·0	0·68	4·3	160	35·4
London	31·0	21·3	3·1	0·35	1·9	0·79	4·6	164	38·5

The mortality from diphtheria was largely in excess of the average of the past 10 years (*see* Tables VI. and VII.), but even Chelsea's figure for the past year is greatly below Chelsea's proportion of the total diphtheria deaths in London, showing that there must have been many districts in London which suffered more severely from this disease in 1893 than did our own parish.

Scarlet fever was very prevalent from early in the summer of 1893 until the close of the year, but notwithstanding this prevalence, and the fact that very many cases had to be refused admission to the Metropolitan Asylums Board Fever Hospitals, thus multiplying centres for the diffusion of infection in the various quarters of the parish, the mortality from this disease has been quite moderate in amount.

Diarrhœa mortality continues to be somewhat excessive in Chelsea as compared with all London. The hot, dry, summer of the past year was, however, favourable to acute summer diarrhœa and choleraic attacks, and the failure of Asiatic cholera to establish a hold in London during the past autumn is reassuring, considering the many conditions favouring its then introduction.

TABLE VI.—*Zymotic Disease Mortality in Chelsea in* 1893.

	Actual number of Deaths in Chelsea.	Chelsea's proportion of total London Deaths according to its population.
Small Pox	1	5
Measles	20	38
Scarlet Fever	32	36
Diphtheria	48	74
Whooping Cough	68	53
Fever (chiefly Typhoid)...	18	16
Diarrhœa	109	79
Influenza.....	33	35

Except for measles, the zymotic mortality of Chelsea in 1893 was in excess of the average of the preceding nine years (1884-92.)

TABLE VII.—*Chelsea.*

	Deaths in 1893.	Average number of Yearly Deaths in 1884-92.
Measles	20	66
Scarlet Fever	32	15
Dipththeria.....	48	28
Enteric Fever.....	17	14
Whooping Cough	68	62

Influenza.—The number of deaths referred to influenza, as a primary or secondary cause of death, amounted to 33 in 1894, as against 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 from June to November the mortality was very trifling. In the latter month, however, the weekly mortality figures again rose, indicating a renewed epidemic prevalence, the maximum figure of 164 deaths being reached in the week ending December 16th.

Respiratory Diseases.—The death-rate from diseases of the respiratory organs was 0·5 per 1,000 lower than in 1892, and was equal to the average rate of the years 1884-89, prior to the appearance of epidemic influenza. The fact of the respiratory disease death-rate in 1893 not being in excess of the average of the ante-influenza period, although influenza claimed its fair proportion of victims in Chelsea as compared with the whole of London, is no doubt to be attributed to the genial spring and warm summer of the year—climatic conditions not favourable to pulmonary disease mortality.

TABLE VIII.—*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

Tubercular Diseases.—The death-rate from phthisis and other tubercular diseases in 1893 in Chelsea, was 2·7 per 1,000—a rate identical with that of the metropolis generally. The average death-rate from these diseases in Chelsea during the nine years 1884-92 was 3·17 per 1,000.

Cancer.—Malignant cancerous diseases caused 71 deaths amongst Chelsea parishioners. The average of the nine years 1884-92 is 75 deaths annually from cancer in Chelsea.

TABLE OF DEATHS DURING THE YEAR 1893, 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	617	165	82	23	24	206	117	Under 5	...	4	4	2	...	...	...	...	...	...	...	14	18	39	...	...	20	49	...	8	89	247
								5 upwds.	...	2	11	2	...	4	1	...	5	...	2	...	4	4	2	...	62	87	45	8	131	370
Chelsea South, exclusive of Public Institutions	451	130	53	16	13	156	83	Under 5	...	...	3	1	...	...	...	...	...	...	...	1	22	24	...	...	16	43	1	6	66	183
								5 upwds.	...	...	1	...	...	2	...	...	1	...	1	...	3	6	4	1	30	73	23	12	111	268
Kensal Town	292	107	47	14	9	88	27	Under 5	...	1	...	2	...	...	...	...	...	...	...	5	14	23	...	...	15	36	...	4	54	154
								5 upwds.	1	...	1	1	...	3	...	...	1	...	2	...	1	...	3	...	24	32	8	6	55	138
Workhouse and Infirmary	266	24	6	3	7	122	104	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	3	7	...	...	1	3	...	...	16	30
								5 upwds.	...	...	..	...	...	...	...	...	1	...	3	...	...	1	1	...	46	44	32	4	104	236
Brompton Hospital	163	1	...	5	41	116	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	1	...	...	...	1
								5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	142	7	5	1	7	162
Cancer Hospital	97	...	...	...	2	86	9	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
								5 upwds.	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	2	1	2	...	92	97
Hospital for Women	36	1	...	...	...	34	1	Under 5	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
								5 upwds.	...	...	...	...	...	...	...	...	3	...	...	..	...	...	...	...	...	2	2	...	28	35
Royal Hospital for In-Pensioners	50	...	...	...	...	21	29	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
								5 upwds.	...	...	...	...	...	..	..	...	...	...	...	...	...	1	...	...	4	10	9	2	24	50
Victoria Hospital for Children	131	65	49	16	1	...	...	Under 5	...	...	2	...	...	...	...	...	...	...	3	2	2	13	...	...	15	35	2	5	35	114
								5 upwds.	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	3	1	8	17
Cheyne Hospital, St. Camillos' Hospital, Lying-in House, St. John's	22	5	...	10	1	3	3	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	5
								5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	15	17
Totals	2125	498	237	87	98	832	373	Under 5	...	5	9	5	...	...	...	...	...	...	3	22	59	106	...	...	67	167	3	23	266	735
								5 upwds.	1	2	14	3	...	9	1	...	11	...	8	...	8	12	10	1	313	259	129	34	575	1390

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	245	15	37	29	26	125	13	Under 5	...	17	20	...	...	..	...	...	...	...	...	...	1	2	...	...	...	3	...	1	8	52
								5 upwds.	...	8	8	1	...	8	...	...	...	...	1	...	1	...	1	...	29	26	22	12	76	193
Deaths occurring within the district among persons not belonging thereto	412	57	36	29	45	231	14	Under 5	...	...	2	...	...	...	...	...	...	...	3	2	1	11	...	...	10	24	2	3	35	93
								5 upwds.	...	...	1	...	...	...	...	...	3	...	...	...	...	...	...	...	146	12	10	3	144	319

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health during the year 1893, 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.	Ageel 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.												
					Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.					Cholera, English.	Erysipelas.			Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.					Cholera.	Erysipelas.		
									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.				
	Census 1891.	Estimated to middle of 1893.																											
(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	74,485	74,831	2128	Under 5	2	114	43	4	...	5	...	...	...	...	9	...	...	2	54	21	...	...	...	...	...	...	...	...	...	...
				5 upwds.	17	326	139	2	...	56	1	...	4	1	130	...	...	17	157	43	...	...	17	...	...	...	...	...	...	...
Public Institutions:—																													
Chelsea Infirmary	...	...	...	Under 5	...	3	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...
				5 upwds.	1	5	...	...	...	2	...	...	1	...	16	...	...	1	5	...	...	...	2	...	...	...	...	...	...	...
Chelsea Workhouse	...	...	...	Under 5	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
				5 upwds.	5	...	...	...	...	...	...	...	...	...	1	...	...	5	...	...	...	..	...	...	...	...	...	...	...	...
Chelsea Barracks	...	...	...	Under 5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
St. George's Infirmary	...	...	...	Under 5	...	1	1	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	
				5 upwds.	...	2	...	...	...	...	...	...	...	...	16	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
St. George's Workhouse	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	2	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Victoria Hospital	...	...	...	Under 5	...	7	2	...	...	...	...	...	...	...	2	...	...	...	7	2	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	7	3	...	...	4	...	...	...	...	3	...	...	...	7	3	...	...	4	...	...	...	...	...	...	...
Duke of York's School	...	...	...	Under 5	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	7	2	...	...	...	...	...	...	...	...	...	...	...	7	2	...	...	...	...	...	...	...	...	...	...
Cancer Hospital	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Women's Hospital	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Royal Hospital	...	...	...	Under 5	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				5 upwds.	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kensal Town	21,787	23,375	726	Under 5	...	30	12	1	...	1	...	...	...	...	6	...	...	...	11	8	...	...	1	...	...	...	...	...	...	...
				5 upwds.	18	87	26	...	...	9	...	...	...	...	27	...	...	17	35	12	...	...	4	...	...	...	...	...	...	...
Totals	96,272	98,206	2854	Under 5	2	162	61	5	...	6	...	...	...	...	19	...	...	2	82	35	...	...	1	...	...	...	...	...	...	...
				5 upwds.	41	441	170	2	...	71	1	...	5	1	194	...	...	40	217	60	...	...	27	...	...	...	...	...	...	...

SECTION II.

THE WATER SUPPLY OF LONDON.

The Report of the Royal Commission appointed to inquire into the water supply of the metropolis was presented during the past year. The report is very favourable to the continuance of the existing systems of supply from the rivers Thames and Lee.

As regards quantity of water, the Commissioners are satisfied that the resources of the two rivers, supplemented by deep wells in the chalk, may be rendered available to supply no less a quantity than 420 million gallons daily. This is a quantity sufficient to supply 35 gallons per head daily to a population of 12 million persons, which latter number is about three-quarters of a million in excess of what the total population of greater London, together with the outlying parts of "water London," will have become in 1931, even if the ratio of increase in the decennial period from 1881 to 1891 is fully maintained.

On the very interesting and much debated question of the quality of the water and its suitability for potable purposes, the Commissioners express themselves as strongly of opinion that the water as supplied to the consumer in London, is of a very high standard of excellence and of purity, and that it is suitable in quality for all household purposes. "Having regard," say the Commissioners, "to the experience of London during the past 30 years, and to the evidence given to us on the subject, we do not believe that any danger exists of the spread of disease by the use of this water, provided that there is adequate storage, and that the water is efficiently filtered before delivery to consumers."

It is a fitting commentary on the above quoted *dictum* of the Royal Commission, to refer to the fact quoted year after year in the reports of the Official Water Examiner (as mentioned in my former annual reports) that the storage capacity of some of the London water companies is very deficient—this deficiency obliging the water companies involved, to attempt, during prolonged floods, to filter a very turbid and polluted water—an attempt so unsuccessful as to result in the delivery to their consumers in London, of a water which has been at times officially condemned as unfit for human consumption.

The Commissioners recommend that the Thames and Lee Conservancy Boards should have larger powers entrusted to them to prevent pollution of the streams under their control, and that the powers of the former Board to prevent pollution, should be extended to the whole course of the tributaries into the main stream, and should not be limited to a distance of 10 miles from the main river, as at present. The staff engaged in inspection should be very largely increased, the necessary funds for this purpose being provided by the water companies. The Commissioners also recommend that the public water-examiner should be empowered to make

and impose regulations on the water companies, as to the capacity of storage reservoirs, proportionate area of filtering beds, depth of sand in same, frequency of its removal, and the rate at which the water may be allowed to percolate.

It is quite certain that in view of the constantly-increasing populations in the Thames and Lee valleys above the water companies intakes, if the quality of the water supplied by the companies to London is to maintain its "high standard of excellence and of purity," these recommendations of the Royal Commission must in every detail be carried into effect with as little delay as possible.

Quality of the Water Supply in Chelsea.—In the absence of snow, heavy rains, and floods in the Thames, the quality of the water supplied to Chelsea in 1893 was up to the average standard. It is in many respects extremely fortunate that the rains which succeeded the long summer drought were not sufficiently heavy and continuous to create floods in the Thames Valley, as at this period the failure by the water companies to supply an efficiently filtered water might have been productive of serious results to the consumers, in view of the dissemination of the poison of Asiatic cholera in various inland places, which was then taking place.

Constant Supply.—The Chelsea Water-works Company still holds a place at the bottom of the list of the London water companies in respect of the percentage of its house-supplies which are on the constant system. It is satisfactory, however, to note that the interposition of the London County Council has been effective in raising during the past year the percentage of houses with a constant supply from this Company from 40 to 45 per cent. A fresh area in Chelsea was scheduled last autumn for a constant supply, namely, the district bounded on the east by Marlborough-road and Lincoln-street, on the south by King's-road, and on the north by Fulham-road. The area now receiving, or which will shortly receive, a constant supply of water, is bounded on the north by Fulham-road, on the west by the parish boundary, on the south by the Thames, Beaufort-street, and King's-road, and on the east by Marlborough-road and Lincoln-street. Certain isolated portions of the east end of the parish have been given a constant supply voluntarily by the Water Company.

CHOLERA IN ENGLAND.

During August and September Asiatic cholera was to a certain extent prevalent in Hull and Grimbsy. The infection was thence carried by persons incubating the disease, into certain towns and villages in Yorkshire, Lancashire, Derbyshire, and Lincolnshire. In none of these secondary centres was there, however, any notable spread of the disease; and it would appear, therefore, either that there was no general infection of water supply or of sewers in these places, such as would be capable of originating an extended epidemic, or else that the prompt precautions taken in dealing with these isolated cases was sufficient to arrest the spread of infection from them.

In London several sporadic cases of cholera were reported in various parishes, and in most of these cases the bacteriological examination of the contents of the small intestine, led Dr. Klein—who conducted the investigations on behalf of the Local Government Board and the London County Council—to assert positively that the results of his examinations showed that the cases were indistinguishable from true or Asiatic cholera. The difficulty in assuming the correctness of the view that these were true Asiatic cholera cases, lies in the fact, firstly, that in hardly any of them was there any history of exposure of the patient to the infection of cholera—on the contrary, the most diligent research failed to establish any connection between these cases, and undoubted cases of cholera in Grimbsy or elsewhere—and secondly, that there was a notable failure of the infection to spread from these cases, even under circumstances where the spread of cholera infection was exceedingly likely to happen.

Two severe cases of what was thought to be English cholera were reported to me in this parish in September, and I saw a third case in St. George's, Hanover-square. In all these cases the symptoms were of a severe type, closely simulating those of Asiatic cholera, and much graver than are generally seen in the choleraic attacks of adults in non-cholera seasons. The St. George's patient was subsequently removed to the St. George's Infirmary in Fulham-road, where I found him suffering from a well marked attack of Roseola —which was a notable complication of many of the undoubted cholera attacks in Grimbsy. In this case, however, as in the other ones, there was a history either of exposure to foul drain emanations, or of the consumption of tainted food, such as would account for a severe attack of simple cholera. There was no evidence in any of the cases of the patients having been in any cholera-infected district, or of having been in communication with any person or thing likely to carry true cholera poison. I did not think it necessary to report these cases to the Local Government Board, being satisfied in my own mind that they were not attacks of Asiatic cholera.

By kind permission of the Guardians, several unoccupied houses in Sydney-street were placed at my disposal for the reception of persons who might have to be removed from their homes in the event of true cholera appearing in the parish, until the houses attacked could be thoroughly cleansed and disinfected. These empty houses were cleaned and got ready for immediate occupancy, but fortunately their use has not been required. It will, I trust, be clearly understood that there was no intention to use these houses as hospitals for cholera patients, but merely to employ them for the temporary reception of the healthy inmates of houses invaded by cholera.

SMALL-POX IN CHELSEA.

Small-pox has been more prevalent in Chelsea during the past twelve months than for many years past. In 1892 only four cases were notified. In 1893, 29 cases in all were notified as occurring amongst Chelsea parishioners.

Several cases occurred in connection with the Chelsea Workhouse and Infirmary, the infection being introduced on Christmas Eve, 1892, by a tramp, who was received into the casual ward. During the following January, five other inmates of the Workhouse and three members of the Workhouse staff were removed to hospital suffering from small-pox.

During February and March no cases of small-pox were notified in the home district, possibly owing to the extreme care that was taken in dealing with tramps both at the workhouse and in the common lodging-houses, as there can be no doubt that at this period the infection was very widely spread amongst the tramp population in London and elsewhere. The disease re-appeared, however, in April, and during May, June, and July, scattered cases were brought to light amongst the general population. In no instance, however, was an initial case allowed to become a centre of infection, owing to the prompt measures of isolation, re-vaccination, and disinfection undertaken on the receipt of a notification of the disease.

Altogether in the Home district 18 cases have been notified, viz.: 5 cases of casuals from the Workhouse; 3 cases amongst the Workhouse staff; one case, a lunatic inmate of the Infirmary (September); 2 cases of inmates of a common lodging-house in Church-street; and 7 cases amongst the general population.

Four cases, notified as small-pox, were subsequently found to have been the subjects of a mistaken diagnosis. Two of them developed measles, and one was a case of chicken-pox.

In Kensal Town, the first case of the year—that of a tramp in a common lodging-house—was notified in March. Six cases amongst the general population were notified in April and in June—one of them being the Vestry's disinfector. During the following four months—July to October—Kensal Town remained free of the disease. In November, however, 10 cases were notified, these forming part of the North Kensington outbreak, on which I had the honour to present reports to the Vestry on November 14th and 28th. One case was notified late in December; its connection with the North Kensington outbreak being well established.

THE NOTIFICATION OF INFECTIOUS DISEASES.

Small-Pox.—In London during 1893, 2,933 cases of this disease were notified, as against only 436 cases in 1892. The greatest prevalence was, as usual, in the spring, the outbreak reaching its maximum in May, when some 500 cases were removed to the small-pox hospital ships. Not one of the London parishes escaped the disease altogether, which shows its wide diffusion over the whole area of the metropolis. In the early part of the year the epidemic was largely confined to the class of vagrants, casuals, and tramps. The difficulty—already sufficiently great—of dealing with infectious diseases occurring amongst this nomadic class of the population, is becoming enhanced in London by the increasing provision of huge charitable shelters, accommodating under the same roof many hundreds of homeless individuals. The introduction of

one person suffering from unrecognised small-pox into these caravanserais, may be the means of infecting numbers of the inmates, who carry, during their wanderings, the infection latent in the system into other districts of London, or into the surrounding country.

It is now becoming generally recognised that increased powers are required to deal with the spread of infection by the nomadic class ; and some authorities are of opinion that legislation is required to enable local sanitary authorities to inaugurate a system of ticket registration for the identification of individuals, together with compulsory medical examination in casual wards, common lodging-houses, and shelters, with the ability to detain without a justice's order, those who have been directly exposed in common dormitories to infection, temporary shelter during the period of incubation being accorded the detenus at the cost of the sanitary authority.

Scarlet Fever.—This disease began to assume an increased prevalence early in the summer, and continued to increase until October, when the maximum number of cases were notified. The fever hospitals of the Metropolitan Asylums Board became filled at the end of July as against September in 1892, with the result of a much larger number of cases being unable to obtain admission, either altogether, or until after a delay of a varying number of days.

Appended is a list of the infectious cases (scarlet fever 71 cases, diphtheria 2 cases) which were delayed in removal to the fever hospitals. This list gives the initials and age of each person, the address (without the number of the house), the disease, the date of receipt of the notification, and the date at which the case was removed to the hospital, or in which permission was withdrawn for removal, the patient being recovered, or at any rate supposed to have recovered. Application had to be made by letter, telegram, or by personal visit to the ambulance station, or to the Asylums Board office, every morning for each one of the cases delayed in removal, otherwise they would have been passed over. In urgent cases, where the infection of a whole family of children was imminent, strenuous efforts by personal visits and exhortation at the chief office of the Asylums Board, had to be undertaken, and it is gratifying to know that in these cases the representations of the Public Health Department were usually well attended to.

HOME DISTRICT.

List of Infectious Cases delayed in removal to Fever Hospital.

Name.	Age.	Address.	Notification Received.	Case Removed.	Disease.
A. G.	15	Wellesley-grove.	July 31	Aug. 2	Scarlet Fever.
E. H.	10	Britten-street.	„ 29	„ 5	„ „
W. K.	13	Lots-road.	„ 31	„ 3	„ „
G. H. B.	6	Stadium-street.	Aug. 1	„ 7	„ „
E. H.	11	Ormond-row.	„ 3	„ 6	„ „
W. H.	2¼	„ „	„ 3	„ 6	„ „
B. B.	9	Chelsea-park-dwellngs.	„ 9	„ 11	„ „

Name.	Age.	Address.	Notification Received.	Case Removed.	Disease.
F. B.	5	Chelsea-park dwellings.	Aug. 9	Aug. 11	Scarlet Fever.
C. E. W.	11	Arthur-street.	,, 9	,, 18	,, ,,
D. H.	9	Guinness'-buildings.	,, 10	,, 14	,, ,,
M. H.	3	,, ,,	,, 10	,, 14	,, ,,
C. J.	$2\frac{5}{12}$	Leverett-street.	,, 12	,, 18	,, ,,
D. J.	4	,, ,,	,, 12	,, 18	,, ,,
L. G.	21	Arthur-street.	,, 10	,, 18	,, ,,
H. B.	16	Ovington-street.	,, 14	,, 17	,, ,,
B. W.	11	Marlborough-road.	,, 28	Sept. 1	,, ,,
W. C. W.	3	Hasker-street.	,, 30	,, 1	Diphtheria.
A. R.	7	King-street.	,, 30	,, 2	Scarlet Fever.
D. M.	6	Paradise-walk.	,, 31	,, 12	,, ,,
E. T.	4	Gillray-square.	Sept. 4	,, 12	,, ,,
C. D.	7	Burnaby-street.	,, 7	,, 17	,, ,,
K. T.	6	Upcerne-road.	,, 9	,, 20	,, ,,
M. S.	7	,, ,,	,, 9	,, 27	,, ,,
A. M.	8	D'Oyley-street.	,, 11	Oct. 1	,, ,,
W. J.	8	Upcerne-road.	,, 12	Sept. 14	Diphtheria.
A. A.	5	King's-road.	,, 12	,, 30	Scarlet Fever.
W. R. E.	6	Shawfield-street.	,, 13	,, 15	,, ,,
L. G.	8	Dartrey-road.	,, 15	,, 30	,, ,,
M. M.	9	Eden-place.	,, 15	Oct 10*	,, ,,
E. B.	37	Luna-street.	,, 16	Sept. 21	,, ,,
A. M. P.	8	Uverdale-road.	,, 18	,, 27*	,, ,,
A. B. G.	3	Tetcott-road.	,, 18	Oct. 3	,, ,,
C. F. L.	6	Redburn-street.	,, 18	,, 10*	,, ,,
R. A. H.	13	Upcerne-road.	,, 20	,, 10*	,, ,,
L. P.	$2\frac{9}{12}$	Lamont-road.	,, 25	,, 14	,, ,,
M. M.	7	Sun-court.	,, 25	,, 7	,, ,,
M. J. B.	5	Christchurch-street.	,, 25	,, 16	,, ,,
W. H.	9	Arthur-street.	,, 27	,, 9*	,, ,,
G. M.	4	Redburn-street.	,, 27	,, 19*	,, ,,
D. M.	9	,, ,,	,, 27	,, 19*	,, ,,
J. F.	8	Bywater-street.	,, 27	,, 12*	,, ,,
V. T.	18	Harriett-mews.	,, 27	,, 3*	,, ,,
H. L.	6	Redburn-street.	,, 29	,, 25*	,, ,,
M. U.	21	Paultons-square.	,, 30	,, 7	,, ,,
C. A.	11	Ives-street.	,, 30	,, 8	,, ,,
C. B.	2	Cheyne-row.	Oct. 3	,, 17*	,, ,,
L. J.	10	Markham-street.	,, 3	,, 23	,, ,,
F. J. A.	9	Jubilee-place.	,, 6	,, 12*	,, ,,
E. B.	7	Burnaby-street.	,, 7	,, 16	,, ,,
J. G.	9	Camera-square.	,, 8	,, 15	,, ,,
A. H.	20	Carlyle-square.	,, 16	,, 21	,, ,,
E. W.	19	Ovington-square.	,, 16	,, 23	,, ,,
G. G.	10	Pavilion-road.	,, 17	,, 26	,, ,,
W. S.	11	Walton-street.	,, 17	,, 26	,, ,,
E. W.	6	Flood-street.	,, 17	,, 19	,, ,,
W. P.	4	Meek-street.	,, 18	,, 26*	,, ,,
A. T.	12	Elm-park-road.	,, 24	,, 27	,, ,,

* Date of last application, case having recovered or consent for removal being withdrawn.

Name.	Age.	Address.	Notification Received.	Case Removed.	Disease.
F. C.	12	Onslow-dwellings.	Oct. 25	Oct. 27	Scarlet Fever.
E. B.	7	Coulson-street.	,, 28	Nov. 1	,, ,,
C. B.	28	Little College-street.	,, 31	,, 3	,, ,,
G. W.	12	Godfrey-street.	Nov. 2	,, 4	,, ,,
B. S.	11	Benson-terrace.	,, 3	,, 7	,, ,,
A. S.	7	,, ,,	,, 3	,, 7	,, ,,
E. S.	11	,, ,,	,, 3	,, 7	,, ,,
H. J.	10	Meek-street.	,, 3	,, 8	,, ,,
T. G.	23	Markham-terrace.	,, 3	,, 8	,, ,,
W. W.	17	Godfrey-street.	,, 6	,, 15	,, ,,
E. W.	6	,, ,,	,, 7	,, 15	,, ,,
R. W.	13	Sydney-street.	,, 6	,, 10	,, ,,
S. W.	16	,, ,,	,, 6	,, 10	,, ,,
A. S.	5	Benson-terrace.	,, 6	,, 8	,, ,,
E. A.	6	Limerston-street.	,, 9	,, 13	,, ,,
S. G.	10	Meek-street.	,, 9	,, 14	,, ,,

KENSAL TOWN.

List of Infectious Cases delayed in removal to Fever Hospital.

Name.	Age.	Address.	Notification Received.	Case Removed.	Disease.
E. N.	9	Ilbert-street.	June 4	June 10	Scarlet Fever.
E. M.	7	Sixth-avenue.	,, 5	,, 10	,, ,,
E. B.	12	Herries-street.	,, 12	,, 16	,, ,,
F. P.	8	Sixth-avenue.	,, 21	,, 29	,, ,,
T. M.	2	,, ,,	,, 22	,, 26	,, ,,
G. B.	6	Lancefield-street.	,, 22	,, 26	,, ,,
J. O.	5	Kensal-road.	Aug. 1	Aug. 3	,, ,,
C. B.	35	Fourth-avenue.	,, 24	,, 26	,, ,,
L. M.	12	Harrow-road.	Sept. 5	Sept. 7	,, ,,
G. G.	25	Fourth-avenue.	,, 8	,, 9	,, ,,
M. F.	4	Droop-street.	,, 18	,, 22	,, ,,
I. B.	17	South Block, St. John's-buildings.	Oct. 17	Oct. 18	,, ,,
R. C.	4	Marne-street.	,, 23	,, 27	,, ,,
H. M.	6	Huxley-street.	,, 28	Nov. 24	,, ,,
W. C.	10	,, ,,	Nov. 6	,, 27	,, ,,
F. W.	20	Marne-street.	,, 17	Dec. 4	,, ,,

Cases not removed, though applied for, and subsequently isolated at home.

E. C.	18	Harrow-road.	July 20	.....	Scarlet Fever.
E. W.	12	Kilravock-street.	,, 27	.....	,, ,,
E. B.	3	Herries-street.	Sept. 30	.....	,, ,,
C. H.	8	Droop-street.	Oct. 6	.....	,, ,,
E. H.	10	,, ,,	,, 6	.....	,, ,,
H. H.	6	,, ,,	,, 10	.....	,, ,,
E. M.	6	Marne-street.	,, 20	.....	,, ,,

TABLE IX.—*Notifications in* 1892 *and in* 1893 *per* 10,000 *of Population* (1891 *Census*).

	Small-pox.	Scarlet Fever.		Diphtheria.		Enteric Fever.	
	1893	1892	1893	1892	1893	1892	1893
LONDON	6·96	66·3	90·0	19·1	31·9	6·0	8·9
Chelsea	4·78	56·3	62·6	18·3	24·5	5·3	8·3
Kensington	5·77	43·2	57·5	10·8	22·1	3·4	6·1
Fulham	3·38	59·1	78·7	10·7	26·2	4·6	6·7
Hammersmith.....	1·85	47·8	70·6	32·8	28·6	4·7	7·0
Paddington	6·11	47·2	69·8	14·6	24·7	4·0	6·0
St. George's, Hanover Sq	3·06	47·6	80·4	17·1	15·6	6·0	9·2
Westminster	8·79	55·6	76·7	25·8	15·2	4·3	8·1
St. James's	22·41	32·8	50·4	10 8	19·6	5·2	8·8
Marylebone	13·06	52·3	66·6	16·2	27·6	5·3	6·9

Table IX. shows the increased prevalence of scarlet fever and diphtheria in London and in the western districts of London in 1893, as compared with 1892. It is satisfactory to find that the increase of these diseases in Chelsea in 1893 is proportionally very much less than in London as a whole; also that Chelsea takes a better position amongst the western districts than it did in the year previous.

Marylebone—one of the northern districts—has been introduced into the table, owing to the fact of the Vestry of this parish having established during the past two years a fever hospital of its own for the reception of cases during the periods when the Metropolitan Asylums Board's hospitals were not adequately available. It will be seen that no very striking results, in comparative paucity of fever and diphtheria cases, were attained by the establishment of this experimental hospital. The 1893 increases in notifications were very considerably greater in Marylebone than in Chelsea. This result is not surprising when one considers how a metropolitan parish like Marylebone is hedged in by surrounding populous districts, and that the same schools are attended by children from different parishes, so that the risks of exposure to infection are but slightly affected by the better isolation of fever cases practised by one parish only out of the many contributing their quota to a common centre, such as is a large school. I think the general opinion will be that isolated action in this respect on the part of any London parish is unproductive of results proportionate to the expense and trouble incurred.

The extreme incidence of small-pox on the parish of St. James's, Westminster, is worthy of note. The large number of business establishments in this quarter, employing a great many hands, may

afford an indication as to one of the causes contributing to this result.

Enteric fever was more prevalent in 1893 than in 1892. As regards Chelsea, the majority of cases occurring in the year contracted the infection outside the parish—usually in the country—and not within its boundaries.

DISINFECTION.

At the close of the year the gas disinfecting stove at the station at Wharf No. 2, Lots-road, was replaced by a Washington Lyon's steam disinfecting apparatus. The process of disinfection by dry, hot air in the gas stove was very tedious, and by no means reliable in the case of bedding and bulky articles. In the new apparatus the articles are disinfected by dry or super-heated steam at an average pressure of 15 lbs. to the square inch (equivalent to a temperature of 250°F.), and by means of an exhaust apparatus which can create a partial vacuum in the chamber (5 inches of mercury pressure), the penetration of the steam into the interiors of articles placed in the chamber is rendered so rapid that the disinfection of bedding and clothing can be effectually carried out within the space of an hour. A hot-air injection apparatus is also used in connection with the chamber. By this means the disinfected goods are submitted to a current of dry, hot air, before being removed from the chamber, so that there is no risk of their being returned to the houses from which they came in a damp condition.

With this new apparatus it is possible to remove the bedding and clothing for steam disinfection in all cases of small-pox, fever, and diphtheria, and to return the goods promptly. With the old gas apparatus this was not possible; and the clothing and bedding were formerly only submitted to a nominal disinfection by being sulphur fumigated in the closed rooms of the houses. The advantage to the parish in the more complete destruction of infection, which has now commenced, will be very great.

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 24th.—The Adulteration of Cows' Milk; Discharge of Sewage into the Thames at Chelsea.

February 7th.—Disinfection of Clothing and Bedding; Order under Section 27 of the Factory and Workshop Act, 1891; the Prevention of Small-pox; Discharge of Sewage into the Thames.

March 7th.—Sloane-square Railway Station; Card of Precautions to be taken in the event of Infectious Diseases.

May 16th.—Emerton's Yard, Church-street; *Re* Letter from the Belgravia Dairy Company.

May 30th.—Court Theatre; Scarlet Fever Cases at Kensal Town; Arnold and Stone's Wharf.

June 13th.—Disinfection.
July 11th.—Chelsea Electricity Supply Company.
September 19th.—Cow-houses and Slaughter-houses; the Thames Foreshore from Battersea Bridge to the "Cremorne Tap."
October 3rd.—Chelsea Park Dwellings.
October 31st.—Onslow Dwellings.
November 14th.—Small-pox in North Kensington; Registration of Milk-sellers.
November 28th.—Small-pox in North Kensington.
December 12th.—The Ventilation of Sewers.

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 1893.

I am, my Lords and Gentlemen,

Your obedient servant,

LOUIS C. PARKES, M.D., D.P.H. (Lond.),
Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT.

Summary of Nuisances and other matters reported on and work done during the year 1893.

HOUSES AND PREMISES :—	Home District.	Kensal Town.	Total.
*Reported on respecting nuisances complained of	1244	329	1573
Reported on with reference to infectious cases	963	221	1184
Cleansed and whitewashed	453	169	622
Defective roofs repaired	29	24	53
Disinfected, cleansed and purified after zymotic diseases	543	175	718
Cases of overcrowding abated	21	2	23
Dust-bins, new, provided	58	22	80
„ repaired	10	57	67
Underground rooms reported as occupied contrary to Act	16	—	16
Houses closed as unfit for human habitation...	8	—	8
DRAINAGE :—			
Drains opened, cleansed and made sound ... „ trapped with stoneware gullies ...	184	122	306
Water-closets cleansed and repaired	189	30	219
„ new pans and traps provided ...	183	20	203
Spout drains cleansed or repaired	40	34	74
Sink, bath, and lavatory waste pipes disconnected	86	39	125
Soil pipes ventilated or repaired	134	17	151
„ new, provided	65	4	69
New drains laid, in accordance with Vestry's regulations	106	5	111
WATER SUPPLY :—			
For domestic purposes, provided where cut off by Water Company	51	13	64
For water-closets, by providing check cisterns	208	69	277
Main cisterns cleansed or repaired	30	34	64
„ new, provided	10	3	13
NUISANCES ABATED ARISING FROM—			
Keeping of animals	14	3	17
Accumulations of manure and other filth ...	49	13	62
Yards cleansed, paved, or drained	37	101	138
Smoke	4	—	4

* 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	3	2	5
Goods disinfected after infectious cases at station	1285	131	1416
Goods destroyed after infectious cases ...	17	—	17
Number of samples taken for analysis (Food and Drugs Act)	108	43	151
Unsound food. Number of boxes of fish, &c., condemned and destroyed	12	—	12
PROCEEDINGS TAKEN :—			
Notices issued for sanitary works, &c., including infectious diseases notices ...	1518	264	1782
Legal proceedings in respect of defective sanitary arrangements, nuisances, &c. ...	18	—	18
Legal proceedings in respect of food adulteration	18	3	21
CORRESPONDENCE :—			
Number of letters written in connection with sanitary matters, including those of Medical Officer of Health	547	207	754
Daily returns of infectious cases sent to Metropolitan Asylums Board	282	—	282
Notification of infectious cases sent to School Board authorities and Public Libraries ...	395	201	596
Entries in Inspectors' Report Books... ...	1195	241	1436
„ Inhabitants' Complaint Book ...	139	—	139

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.
24, Cheyne-row.	Dogs and other animals kept in such a state as to be a nuisance.	Mar. 3rd.	For non-compliance with magistrate's order, penalties £18, and 23s. costs.
1 to 6, Garden-row.	Foul and defective w.c.'s and drains.	„ „ „ 10th.	Adjourned to March 10th. Fined £3, and £2 2s. costs. Work done at date of hearing adjourned summons.
40, College-place.	Do. do. do.	„ 3rd.	Withdrawn, on payment of 6s. costs, owing to work being done at date of hearing.
"Black Lion," Oakham-street.	Want of proper supply of water to the premises.	„ 29th.	Closing order made. Fined 1s. and 23s. costs.
88, Leader street.	Foul and defective w.c. and drains, defective water butt, &c., &c.	Apr. 28th.	Order for works to be done in 7 days, and 23s. costs.
27, Pond-place.	Foul and obstructed drains, and dirty state of the premises.	May 26th.	Order for works to be done in 7 days, and 3s. costs.
3, Marlborough-street	Foul and defective w.c., &c., &c., &c.	„ „	Order for works to be done in 7 days, and 23s. costs.
4, Cross-street.	Foul and defective w.c., &c.	June 2nd.	House closed as unfit for human habitation, and 23s. costs.
490, King's-road.	Foul and defective drains, &c.	„ 30th.	Order for works to be done in 7 days, and 23s. costs.
3, Marlborough-street	Do. do. do.	„ „	For non-compliance with magistrate's order, fined £10 and 23s. costs.
9, Church-street.	Foul and defective w.c. and drains.	July 3rd.	Order for works, and 23s. costs.
„ „ „	Do. do. do.	„ 10th.	Withdrawn, as work was done at date of hearing.
3, Marlborough-street	Foul and defective drains, &c.	„ 21st.	Summons for penalties adjourned *sine die*.
56, Rawlings-street.	Foul and defective w.c. and drains.	„ „	Order for work to be done in 7 days, and 23s. costs.

HOME DISTRICT.

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

Address of Premises.	Nature of Nuisance or Complaint.	Date of Hearing.	Result.
3, Marlborough-street	Foul and defective drains.	Sept. 7th.	Withdrawn; owner in prison.
74, Leader-street.	Foul and defective w.c., and dilapidated state of premises.	Oct. 9th.	Order for work to be done in 7 days, and 13s. costs.
2, Moore-street.	Defective soil pipe, and defective bell traps.	,, 31st.	Withdrawn, on payment of 23s. costs. Work done at date of hearing.
"Queen's Elm," Church-street.	Foul and defective drains.	,, ,,	Adjourned *sine die*. 23s. costs, and undertaking given to complete work in 21 days.

Total of Penalties and Costs (Home District), £47 8s.

KENSAL TOWN.

MAGISTERIAL PROCEEDINGS UNDER SALE OF FOOD AND DRUGS ACTS.

1893.

Kilburn-lane.	Milk adulteration.	May 12th.	Vendor fined 60s. and 12s. 6d. costs.
Kensal-road.	do. do.	Nov. 10th.	Do. 60s. ,, 12s. 6d. ,,
Portobello-road.	do. do.	Do.	Do. 20s. ,, 12s. 6d. ,,

HOME DISTRICT.

MAGISTERIAL PROCEEDINGS DURING 1893, UNDER THE SALE OF FOOD AND DRUGS ACTS.

Streets were purchased.	Article.	Extent of Adulteration.	Date of Hearing.	Result.
Uverdale-road.	Milk.	10% added water.	Feb. 10th.	Vendor fined £5 and 23s. costs.
Cale-street.	,,	61% fat abstracted.	,, 17th.	,, £10.
Marlborough-square.	,,	25% ,,	,, ,,	,, £10.
,, ,,	,,	6½% added water.	,, ,,	Withdrawn.
Blenheim-street.	,,	30% fat abstracted.	,, ,, Mar. 10th.	Sample sent to Somerset House, and vendor fined on March 10th £5, analyst's fee 10s. 6d., and costs 23s.
Cadogan-street.	,,	6% added water.	Feb. 17th.	Vendor fined £5.
Blantyre-street.	,,	11% ,,	,, 24th.	,, £5, and costs 23s.
Sloane-square.	,,	14% fat abstracted.	April 28th.	,, £5 ,, ,, 23s.
Redesdale-street.	,,	30% ,,	,, ,,	,, £5 ,, ,, 23s.
Christchurch-street.	,,	22% added water.	,, ,,	,, £1 ,, ,, 12s. 6d.
Keppel-street.	,,	16% fat abstracted.	,, ,,	Withdrawn, on technical error in summons.
Marlborough-road.	,,	14% ,,	May 5th. ,, 12th.	Adjourned to May 12th, and vendor fined £3 3s., and £2 2s. costs.
Raasay-street.	,,	11% added water.	June 30th July 7th.	Adjourned to July 7th, and dismissed on technical error in summons.
Leader-street.	,,	20% fat abstracted.	June 30th.	Vendor fined £10 and costs 23s.
College-place.	,,	10% added water.	,, ,,	,, £15.

Total of Penalties and Costs (Home District), £89 6s.

LIST OF BAKEHOUSES UNDER INSPECTION IN CHELSEA, 1893.

145, King's-road
83, "
488, "
47, "
88, "
134, "
517, "
502, "
399, "
414, "
351, "
302, "
1, Cadogan-street
3, Dartrey-terrace
395, Fulham-road
323, "
187, "
153, "
313, "
110, Marlborough-road
100, "
62, "
17, Coulson-street
53, Godfrey-street
48, Lots-road
77, Cheyne-walk
20, Church-street
114, Pimlico-road
95, Flood-street
67, "
15, Manor-street
43, "
67, "
1, Smith-street
14, Riley-street
26, Blantyre-street
4, Arthur-street
74, "
15, Exeter-street
25, Walton-street
46, "
58, Rawlings-street
22, Sloane-terrace
23, Queen's-road
83, Lower Sloane-street
2, Cale-street
117, Sydney-street
7, Exeter-street
102, Keppel-street
60, College-street
1, Leader-street
15, Green-street
150, Sloane-street
93, Beaufort-street
55, Burnaby-street
43, Stayton-street
18, Queen's-road
2, South-row
1, Manchester-terrace
19, Harrow-road
2, Church-place
236, Kilburn-lane
83, Herries-street
62, "
12, Mozart-street
193, Kensal-road
254, "
300, "

LIST OF SLAUGHTER-HOUSES LICENSED BY THE LONDON COUNTY COUNCIL IN OCTOBER, 1893.

Name.	Situation of Slaughter-house.
Clayton, F.	2, Little Smith-street.
Cobb, George A.	rear of 52, King's-road.
Cridlan, Philip and James William	Crooked Usage.
Cowlin, F.	128, Marlborough-road.
Foyer, Walter	341, Fulham-road.
Iggulden, Frederick	82, Marlborough-road.
Do. do.	90, do. do.
Miles, Abraham	273, Kensal-road.
Pettitt, Harry Samuel	413, King's-road.
Philip, James	169, Fulham-road.

LIST OF COW-HOUSES LICENSED BY THE LONDON COUNTY COUNCIL IN OCTOBER, 1893.

Name.	Situation of Cow-house.
Emerton, Joseph	rear of 74 to 102, Church-street.
Hughes, Robert	10, Stayton-street.
Jennings, John	rear of 54, Arthur-street.
Jordan, George	406, King's-road.
Robinson, Francis	3A, Leverett-street.

SHIELD, Printer, Leete Street, Chelsea, & Lancelot Place, Brompton Road.